



# Alligator Road Widening

## Appendices

### Florence County, South Carolina



November  
2016

Prepared by:



## APPENDICES



APPENDIX A  
Traffic Analysis Report

Alligator Road Widening (S-21-107)



South Carolina  
Department of Transportation

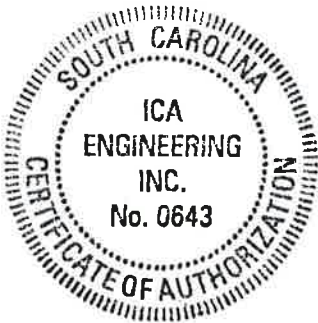
# Traffic Analysis Report

Alligator Road Widening (S-21-107)

Florence County, South Carolina



Prepared by:



Mohammed Saddiul Ula

6/23/15

Revised June 2015



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## **1.0 PROJECT DESCRIPTION AND BACKGROUND**

This study assesses the operational impacts for the proposed improvements to Alligator Road (S-21-107) in Florence, SC. The purpose of the proposed Alligator Road project is to improve the operational efficiency of the roadway to accommodate existing and future traffic conditions. The secondary purpose is to enhance local connectivity around the City of Florence. Florence County voters recognized the need for the project when they approved the One-Cent Capital Project Sales Tax referendum in November 2006. This project is the sixth priority project listed in the FLATS 2014-2019 draft TIP financial statement and is funded entirely by the One Cent Capital Project Sales Tax revenues. Specifically, the section of Alligator Road proposed for improvement extends from the intersection US 76 to the intersection of US 52, a distance of approximately 7.5 miles. **Figure 1** depicts the project location. The SCDOT is developing the proposed improvements at the request of Florence County. This report will analyze the existing traffic operating conditions as well as the Build and No-Build conditions for the 2020 opening year and the 2040 design year.

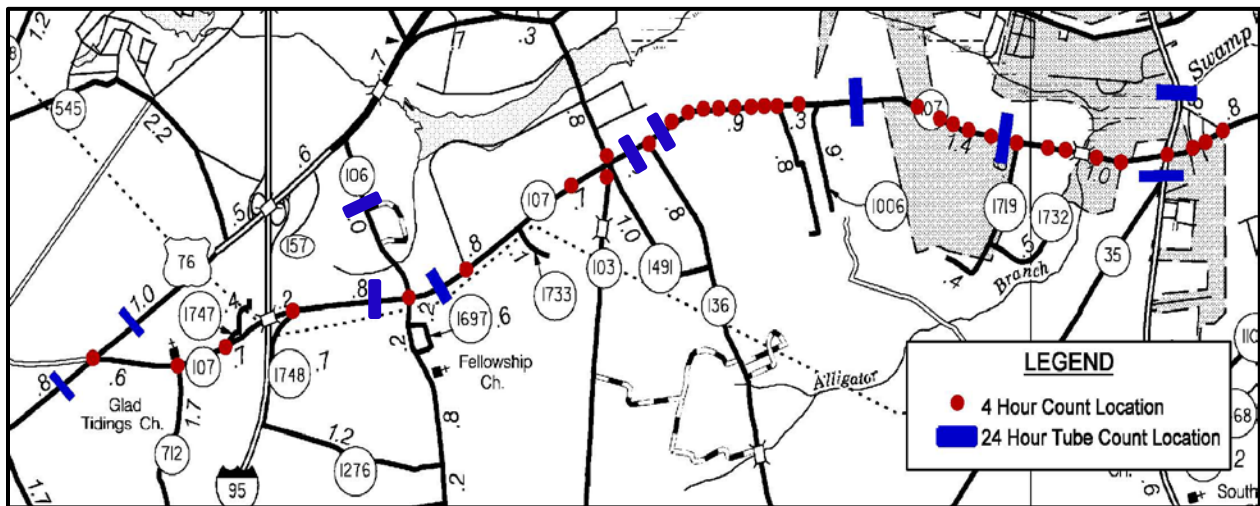
## **2.0 EXISTING CONDITIONS**

Currently Alligator Road is classified as a collector that is made up of a two-lane ditch section and includes dedicated turn lanes at selected intersections. There are numerous crossroads, side streets, and access cuts along the corridor. The land uses within the immediate vicinity of the project area include; light commercial/industrial development, residential development, undeveloped agricultural lands, open forested land; and open water associated with Alligator Swamp.

## **3.0 TRAFFIC DATA**

### **DATA COLLECTION**

Both 24-hour tube counts and peak hours turning movement counts were conducted along the study corridor on Tuesday, May 21, 2013. Additional traffic counts were also conducted on March 5, 10, and 11, 2015. The location of each count location is shown on **Figure 2**.



**FIGURE 2 - TRAFFIC COUNT LOCATION MAP**



# Alligator Road (S-107) Widening

City of Florence  
Florence County, S.C.

Shaded Area Indicates  
County Location in SC



Approximate Location of Project is:

Longitude 79° 50' 09"

Latitude 34° 08' 58"

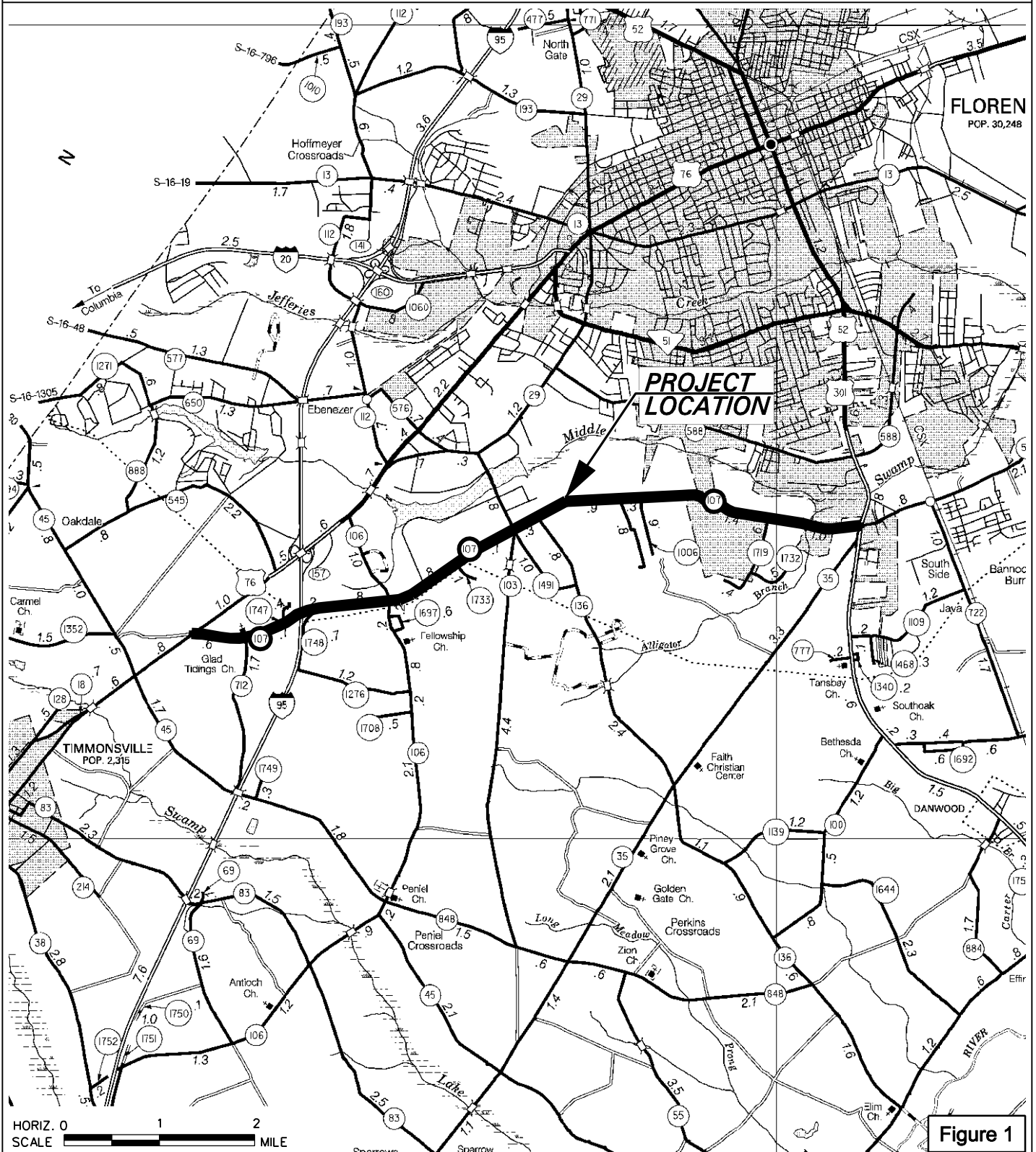
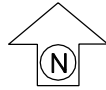


Figure 1

**Alligator Road Traffic Study  
Florence, South Carolina**

**24 Hour Tube Counts**

The 24-hour bi-directional tube counts were conducted at the seven (7) locations listed below to determine the present day Average Daily Traffic along the project corridor. The tube counts were conducted in a manner to collect the passenger car, single axle trucks, and multi-axle trucks.

**24 Hour Tube Count Locations**

- A. 800' South of Alligator Road on US 76 (W. Palmetto Street)
- B. 800' North of Alligator Road on US 76 (W. Palmetto Street)
- C. 500' West of Twin Church Road
- D. 500' East of Twin Church Road
- E. 500' South of US 76 on Twin Church Road
- F. 800' East of Knoll Wood Road/Walker Swinton Road
- G. 600' East of Savannah Grove Road
- H. 1000' East of Ashford Road
- I. 300' west of James Turner Road on Alligator Road
- J. 1200' North of Alligator Road on US 52/301 (S. Irby Street)
- K. 200' South of Alligator Road on US 52/301 (S. Irby Street)

**TURNING MOVEMENT COUNTS**

Turning movement counts were collected for the thirty-four (34) intersections listed below to determine AM and PM peak hour turning movement volumes. The counts were conducted from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM for most intersections. 12 hour turning movement counts were conducted at the intersection of Alligator Road at Twin Church Road. To account for the school dismissal traffic 2:00 PM to 4:00 PM turning movement counts were also considered for the intersection of Alligator Road at US 52/301 (S. Irby St). Separate car and truck volumes were collected to determine the truck percentages for each of the approaches at the intersection.

**Turning Movement Count Locations**

- |   |   |
|---|---|
| 1. Alligator Road @ US 76 (W. Palmetto St)      | 17. Alligator Road @ Whippoorwill Rd        |
| 2. Alligator Road @ Southern Air Road           | 18. Alligator Road @ McElveen Ln            |
| 3. Alligator Road @ Lichfield Road              | 19. Alligator Road @ Ashford Dr             |
| 4. Alligator Road @ Bridle Path Ln              | 20. Alligator Road @ Pleasant Valley Cir    |
| 5. Alligator Road @ Twin Churh Road             | 21. Alligator Road @ Red Berry Cir (1)      |
| 6. Alligator Road @ McLaurin Dr                 | 22. Alligator Road @ Red Berry Cir (2)      |
| 7. Alligator Road @ Lunn Dr                     | 23. Alligator Road @ Red Hawk Rd            |
| 8. Alligator Road @ Knollwood/Walker Swinton Rd | 24. Alligator Road @ S Wild Turkey Dr       |
| 9. Walker Swinton Rd @ Oliver Rd                | 25. Alligator Road @ James Turner Rd        |
| 10. Alligator Road @ Savannah Grove Rd          | 26. Alligator Road @ Briargate Dr           |
| 11. Alligator Road @ Garden Gate Way            | 27. Alligator Road @ Woodstream Rd          |
| 12. Alligator Road @ Womak Garden Road          | 28. Alligator Road @ Woodside Dr            |
| 13. Alligator Road @ Community Ln               | 29. Alligator Road @ Brookstone Dr          |
| 14. Alligator Road @ Doric Rd                   | 30. US 52/301 (S. Irby St) @ E. Redbud Ln   |
| 15. Alligator Road @ Sunset Memory Gardens      | 31. Alligator Road @ US 52/301 (S. Irby St) |
| 16. Alligator Road @ Willis Place               | 32. Alligator Road @ S. Bruins Ln           |



**Alligator Road Traffic Study  
Florence, South Carolina**

33. Alligator Road @ Cherry Ln

34. Alligator Road @ E. Redbud Ln

The raw tube counts and turning movement counts collected for this project can be found in the **Appendix**.

## 4.0 CRASH ANALYSIS

To assess the current safety conditions within the study area, crash data was obtained from SCDOT for the most recent three-year period available. The data includes crash data recorded from January 2011 through April 2014. Crash data summary sheets were prepared for the analysis area and are summarized in the following sections. The roadway segments and four major intersections within the study area were analyzed. For the purpose of the study, Alligator Road is divided into two roadway segments based on the range of average daily traffic volumes: Alligator Road from US 76 to Knollwood/Walker Swinton Rd (AADT ranges from 2300 – 3800) and from Knollwood/Walker Swinton Rd to US 52/301 (AADT ranges from 7900 – 10,500). Collision diagrams were developed for the study intersections and are attached in the **Appendix**. Crash analysis includes the total number of crashes, the crash rate, the types of crashes at each location, and a severity summary.

**Table 4.1 and 4.2** show the total crashes for the study area roadway segments and intersection locations. Crash rates were then calculated which show the crashes as a proportion of the traffic volume of the roadway segments or total traffic volume entering at that intersection. The following equations were used to determine the crash rates for the roadway segments and intersections.

$$CR_{sec} = C \times 10^8 / (365 \times T \times V \times L)$$

$$CR_{spot} = C \times 10^6 / (365 \times T \times V)$$

Where:

$CR_{sec}$  = Crash Rate for the roadway section per 100 million vehicle miles of travel (100 MVM)

$CR_{spot}$  = Crash Rate for the spot (intersection) per 100 million entering vehicles

C = Number of reported crashes

T = Time period of the analysis (years)

V = Annual average daily traffic

L = Length of the segment (miles)

**Table 4.1 – Roadway Segment Crash Data Summary**

Roadway Segments	AADT (vpd)	Segment Length (miles)	Total Crashes	Crash Rate ( per 100MVM)
Alligator Road – US 76 (W. Palmetto St) to Knollwood/Walker Swinton Rd	3100	3.71	48	346.5
Alligator Road – Knollwood/Walker Swinton Rd to US 52/301	9300	3.75	98	233.3

**Alligator Road Traffic Study  
Florence, South Carolina**

**Table 4.2 – Intersection Crash Data Summary**

<b>Intersections</b>	<b>Estimated AADT (vpd)</b>	<b>Total Crashes</b>	<b>Crash Rate (per MEV)</b>
Alligator Road (S-107) @ Twin Church Road	4800	11	1.90
Alligator Road (S-107) @ Knollwood/Walker Swinton Road	12,500	21	1.39
Alligator Road (S-107) @ Savannah Grove Road	9300	16	1.43
Alligator Road (S-107) @ US 52/301 (S. Irby St)	28,800	54	1.56

Note: AADT were estimated based on AM and PM peak hour entering volumes, k factor and AADT adjustment factor. The methodology is shown in **Appendix**.

**Table 4.3 and Table 4.4** summarize the severity of crashes per roadway segments and intersections. There have been reported two fatalities due to crashes within the study corridor. One fatality was related to a head-on crash and the other fatality was related to a pedestrian. For the corridor, there were 50 crashes with injuries (an average rate of approximately 15 injuries per year). A total of 94 crashes resulted in property damage only (an average rate of approximately 28 property damage only crashes per year). For the intersections, there were 34 crashes with injuries (an average rate of approximately 10 injuries per year). A total of 89 crashes resulted in property damage only (an average rate of approximately 27 property damage only crashes per year).

**Table 4.3 – Roadway Segment Crash Data by Severity**

<b>Roadway Segments</b>		<b>Total Crashes</b>	<b>Fatal</b>	<b>Injury</b>	<b>Property Damage Only</b>
Alligator Road – US 76 (W. Palmetto St) to Knollwood/Walker Swinton Rd	<b>Total</b>	48	0	15	33
	<b>Avg.</b>	14.5	0	4.5	10
Alligator Road – Knollwood/Walker Swinton Rd to US 52/301	<b>Total</b>	98	2	35	61
	<b>Avg.</b>	29.7	0.6	10.6	18.5
<b>Entire Corridor</b>	<b>Total</b>	<b>146</b>	<b>2</b>	<b>50</b>	<b>94</b>
	<b>Avg.</b>	<b>44.2</b>	<b>0.6</b>	<b>15.2</b>	<b>28.5</b>



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**Table 4.4 – Intersection Crash Data by Severity**

Intersections		Total Crashes	Fatal	Injury	Property Damage Only
Alligator Road (S-107) @ Twin Church Road	Total	16	0	4	12
	Avg.	4.8	0	1.2	3.6
Queens Way and US 278 Alligator Road (S-107) @ Knollwood/Walker Swinton Road	Total	25	0	7	18
	Avg.	7.6	0	2.1	5.5
Alligator Road (S-107) @ Savannah Grove Road	Total	19	0	8	11
	Avg.	5.8	0	2.4	3.3
Alligator Road (S-107) @ US 52/301 (S. Irby St)	Total	63	0	15	48
	Avg.	19.1	0	4.5	14.5
<b>Total</b>	<b>Total</b>	<b>123</b>	<b>0</b>	<b>34</b>	<b>89</b>
	<b>Avg.</b>	<b>37.3</b>	<b>0</b>	<b>10.3</b>	<b>26.9</b>

**Table 4.5 and 4.6** is a breakdown of each type of crashes by roadway segments and intersections. According to the data, the majority of recorded crashes in segment 1 are run off types. The contributing factors may include: excessive speed, inadequate roadway pavement width, inadequate shoulder, and roadside clearance distance. The majority of the crashes in segment 2 are rear end types. The contributing factors may include: inadequate roadway capacity, large turn volume, inadequate signing, signal visibility and signal timings. The majority of the crashes at signalized intersections are rear end and angle types. The contributing factors may include: large turn volumes, inadequate capacity, inadequate signing, signal visibility and signal timings.

**Table 4.5 – Roadway Segment Crash Data by Types**

Roadway Segments	Rear End	Angle	Head On	Side Swipe	Run Off	Other	Total Crashes
Alligator Road – US 76 (W. Palmetto St) to Knollwood/Walker Swinton Rd	2	18	0	1	25	2	48
Alligator Road – Knollwood/Walker Swinton Rd. to US 52/301	60	15	2	5	10	6	98

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Florence, South Carolina**

**Table 4.6 – Intersection Crash Data by Types**

Intersection	Rear End	Angle	Head On	Side Swipe	Run Off	Other	Total Crashes
Alligator Road (S-107) @ Twin Church Road	1	5	0	2	6	2	16
Queens Way and US 278 Alligator Road (S-107) @ Knollwood/Walker Swinton Road	2	11	2	3	6	1	25
Alligator Road (S-107) @ Savannah Grove Road	11	4	-	-	-	4	18
Alligator Road (S-107) @ US 52/301 (S. Irby St)	35	16	2	7	-	3	63

## 5.0 TRAFFIC PROJECTION

### GROWTH RATE

The 24-hour tube count data was analyzed along with historical Average Annual Daily Traffic (AADT) volumes from SCDOT's Traffic Count Data. The stations selected were all located within the project corridor. For each count station location, historic traffic data was used to formulate a linear trend line which utilized the least squares method. The trend line was applied to the year range of the traffic data and an average growth rate for the location was calculated. From the regression analysis, at count stations 267 and 275, the R-squared value was low, indicating a lower confidence in the actual trend line; however their growth rates were lower than 1% each and the overall effect of these stations on total growth would have a mitigating effect on the growth of count station 265. The average calculated growth rate for traffic data obtained at the four count station locations is 2.0%. Taking into consideration additional count stations located near the project area, it was determined that a 2% growth rate was excessive. Based on the historical data analysis and discussion with SCDOT, the calculated growth rate was determined to be **0.8% per year**. The detailed growth rate calculations for each of the count stations used and documentation of discussions with SCDOT are provided in the **Appendix**. The count station location ID, count station location, and the year range of available traffic data used is shown in **Table 5.1**.

**Table 5.1 – Utilized SCDOT Count Stations**

Count Station Location ID	Location		Year Range
	Route	Location Description	
123	Alligator Road (S-21-107)	west of US 52	2006-2012
265	Alligator Road (S-21-107)	just east of South Point Rd	2006-2012
267	Alligator Road (S-21-107)	east of I-95	2006-2012
275	Alligator Road (S-21-107)	just east of Red Bud Ln	2006-2012

**TRIP GENERATION – PROPOSED SOCCER COMPLEX**

The City of Florence has recently approved a soccer complex at the intersection of US 76 and Twin Church Road. The site plan of the proposed soccer complex is attached in the **Appendix**. The expected trips as generated by the proposed soccer complex were considered in development of future traffic volumes.

Trip generation can be defined as the estimation of the number of vehicular traffic (entering and exiting) from a site as a result of the development of the site. Trip generation for the proposed City of Florence soccer complex was estimated based on the guidelines and methodology published in the *Institute of Transportation Engineer’s (ITE’s) “Trip Generation Manual” Ninth Edition* and *“Trip Generation Handbook”*. Trip generation was calculated using the trip generation rates developed for a Soccer Complex (ITE Land Use Code 488). **Table 5.2** shows the summary of the trips.

**Table 5.2 – Trip Generation Summary**

Land Use (ITE Code)	Unit	Amount	Daily Trips			AM Peak			PM Peak		
			Total	In	Out	Total	In	Out	Total	Out	Exit
Soccer Complex (488)	Fields	8	570	285	285	9	5	4	142	95	47
		15	1070	535	535	17	10	7	266	178	88

Based on the land use, existing traffic flow patterns and surrounding roadway network trip distribution is estimated for the proposed soccer complex. It is estimated that:

- 50% of trips generated by soccer complex will travel to/from the west on US 76.
- 35% of trips generated by soccer complex will travel to/from the east on US 76.
- 15% of trips generated by soccer complex will travel to/from the south on Twin Church Road.

It was assumed that the first eight (8) soccer fields will be completed by the opening year (2020) traffic condition and total development (15 soccer fields) will be completed by the design year (2040) traffic condition. Based on the above trip distribution, the estimated trips were assigned to Twin Church Road and Alligator Road.

The calculated growth rate was applied to the SCDOT approved AADT's at each tube count station to establish the future year projections. The additional trip generated by the proposed soccer complex was also included. The AADT for Alligator Road's existing year (2013 or 2015), opening year (2020) and design year (2040) traffic are shown in **Table 5.3**.

**Table 5.3 – Average Annual Daily Traffic Volumes on Alligator Road**

24-hour Tube Count Station	Existing Year (2013 or 2015)	Opening Year (2020)	Design Year (2040)
A	8,300 (2013)	8,800	10,300
B	6,900 (2013)	7,310	8,550
C	2,300 (2015)	2,400	2,810
D	3,800 (2013)	4,110	4,880



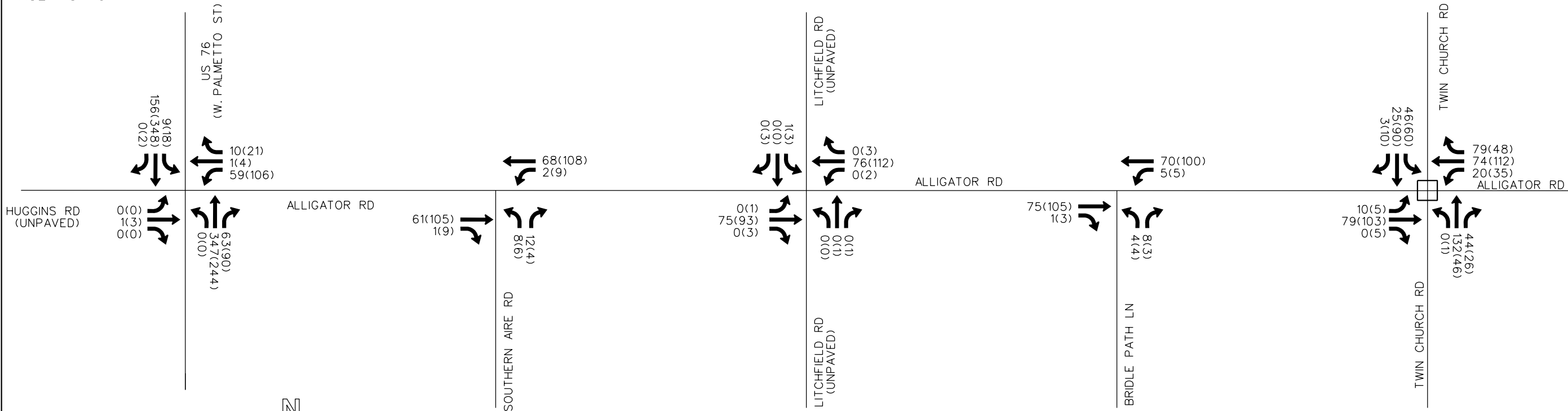
**Alligator Road Traffic Study  
Florence, South Carolina**

E	3,400 (2015)	3,620	4,310
F	10,200 (2015)	10,610	12,450
G	10,500 (2015)	10,920	12,810
H	8,500 (2013)	9,010	10,540
I	7,900 (2013)	8,370	9,790
J	23,000 (2013)	24,380	28,520
K	21,000 (2013)	22,260	26,040

For each intersection's design hour volume (DHV), an overall peak hour of traffic was determined for the morning and afternoon based on a statistical analysis of the time periods of each intersection's peak hour of generation. The data determined that the peak hour of generation for the corridor was from 7:15 AM to 8:15 AM in the morning and from 5:00 PM to 6:00 PM in the afternoon. These turning movement counts, along with the calculated growth rate, were used to develop the 2020 opening year and 2040 design year traffic volumes. The sixteen (16) intersections with the highest traffic volumes were analyzed for the Levels of Service (LOS). It was determined that the relatively low volume intersections would be unnecessary to analyze, as they would not require any additional design efforts to maintain an acceptable LOS.




The actual turning movement volumes at each intersection during the AM and PM peak hour were used to develop the existing year DHV. The existing year's AM and PM turning movement traffic volumes for each intersection are shown in **Figure 3**. The projected 2020 and 2040 turning movement traffic volumes for the fifteen (15) highest volume intersections are shown in **Figures 4 and 5**, respectively.

The traffic count data for each intersection collected during the corridor's peak hour of generation is provided in the **Appendix**.

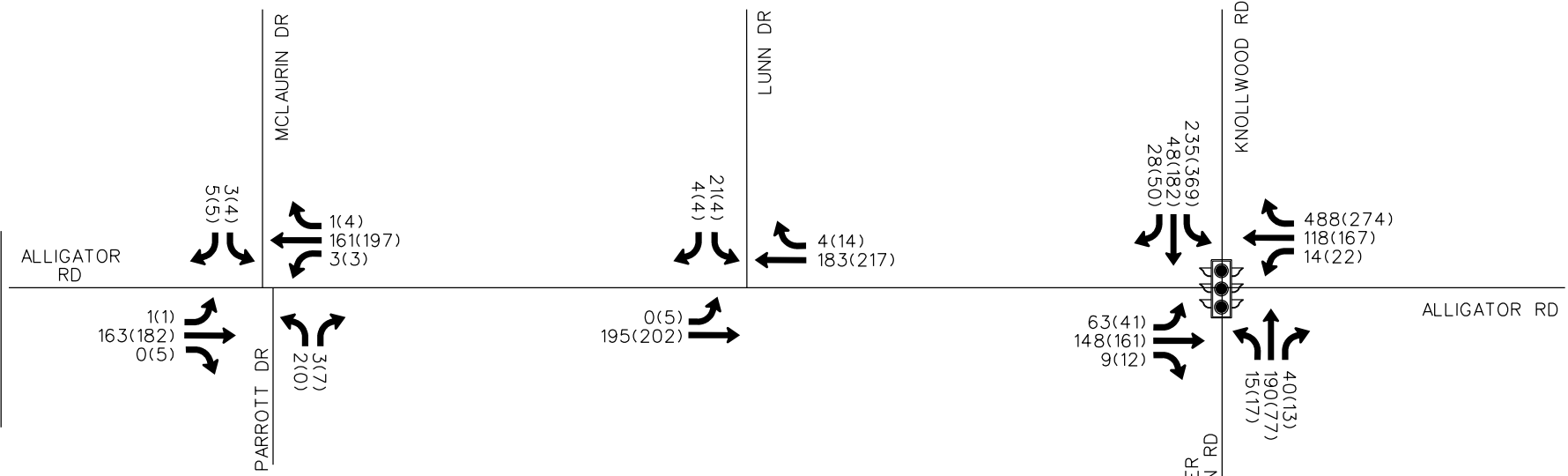


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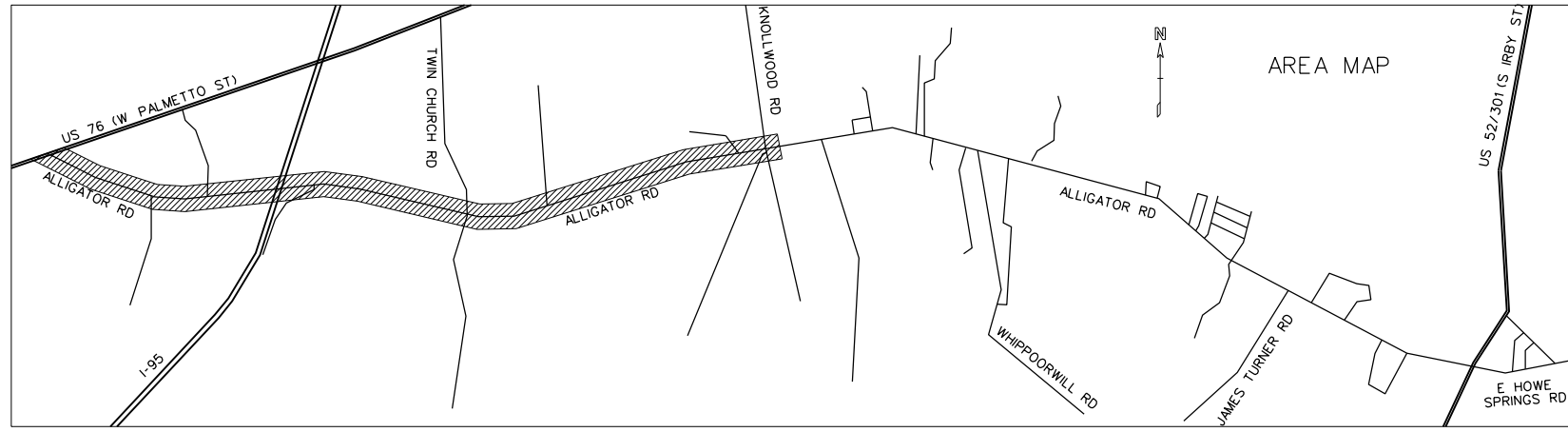
EXISTING ALL WAY STOP   
 EXISTING TRAFFIC SIGNAL CONTROL   
 TURNING MOVEMENTS 

MATCH LINE A  
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MATCH LINE C  
SEE SHEET 2

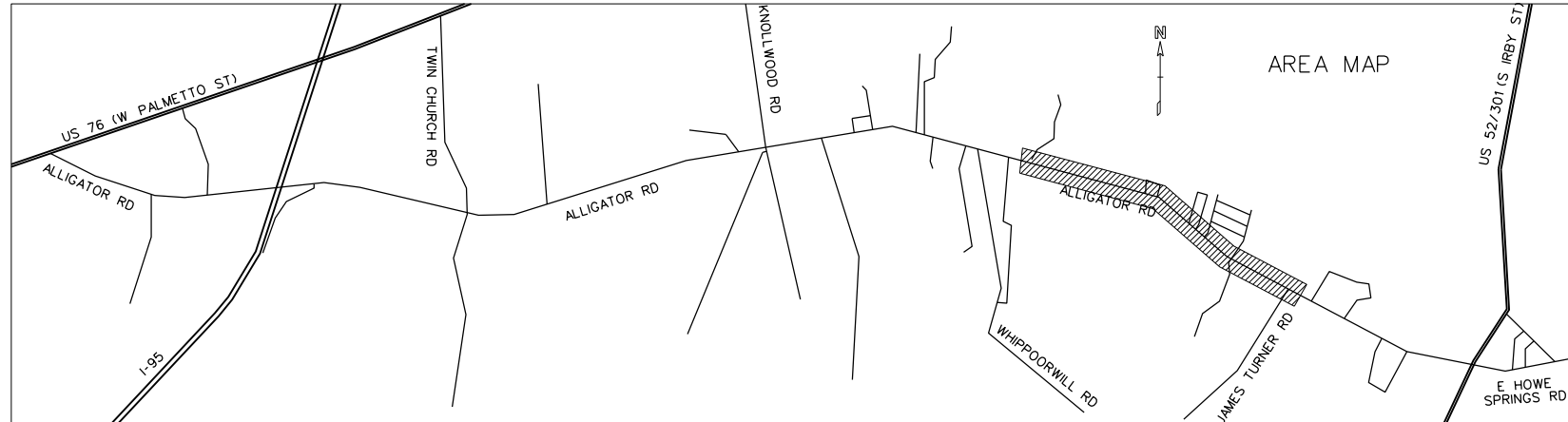
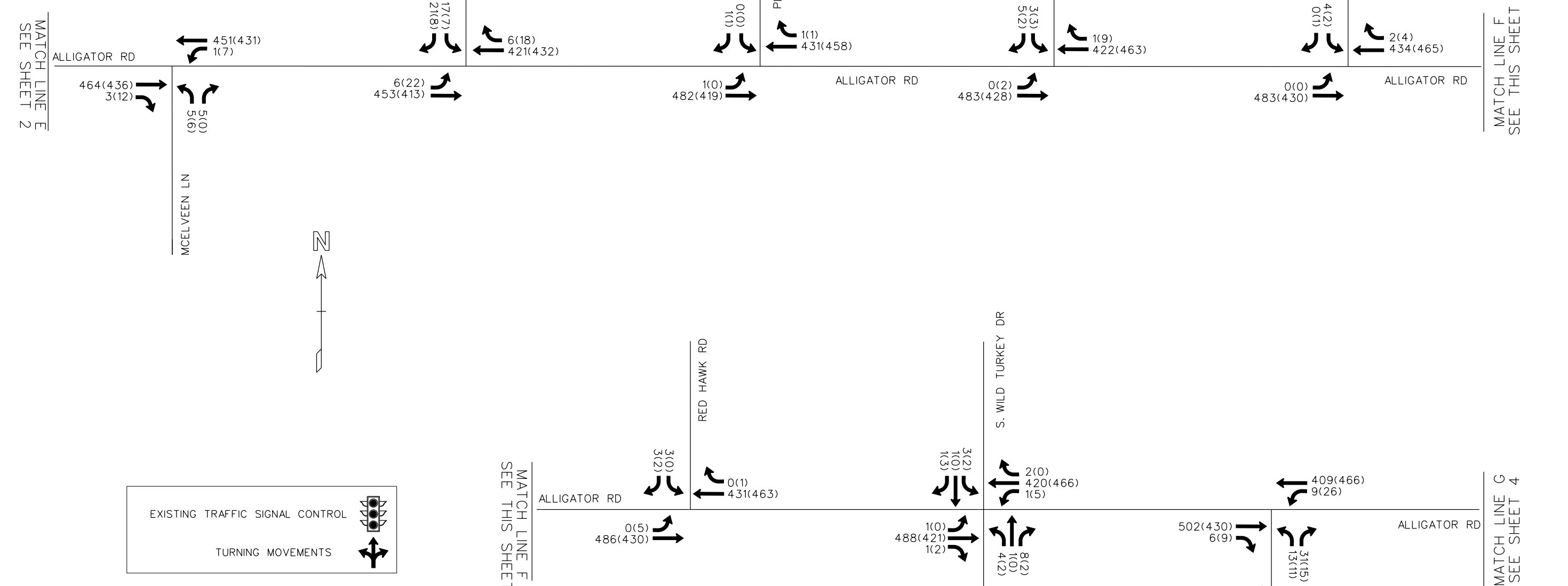
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**FIGURE 3**

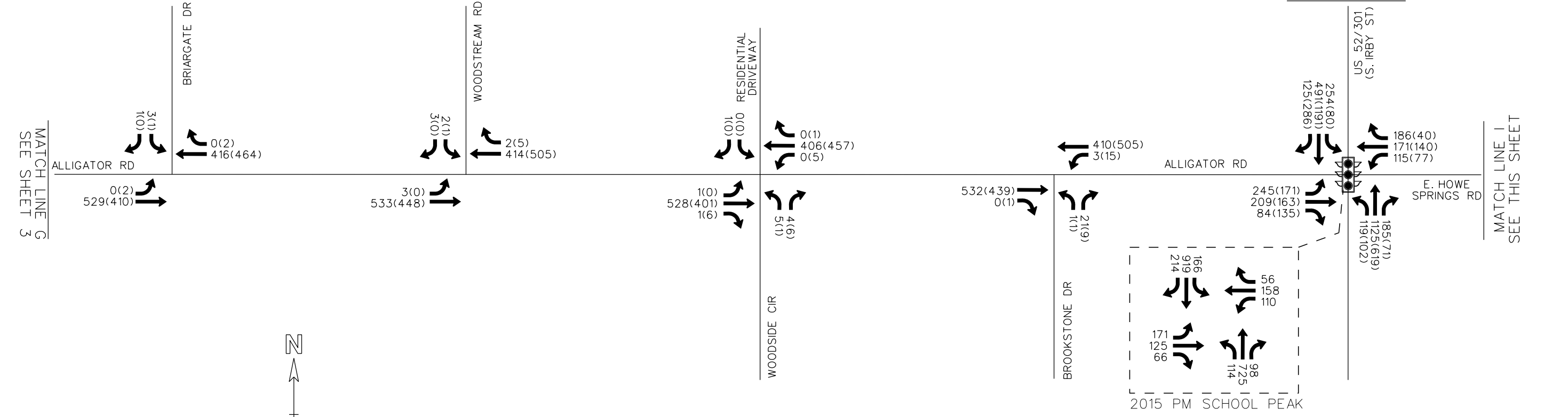
ALLIGATOR ROAD  
EXISTING YEAR 2013  
TRAFFIC VOLUMES  
AM PEAK(PM PEAK)





**FIGURE 3**

ALLIGATOR ROAD  
EXISTING YEAR 2013  
TRAFFIC VOLUMES  
AM PEAK(PM PEAK)



MATCH LINE G  
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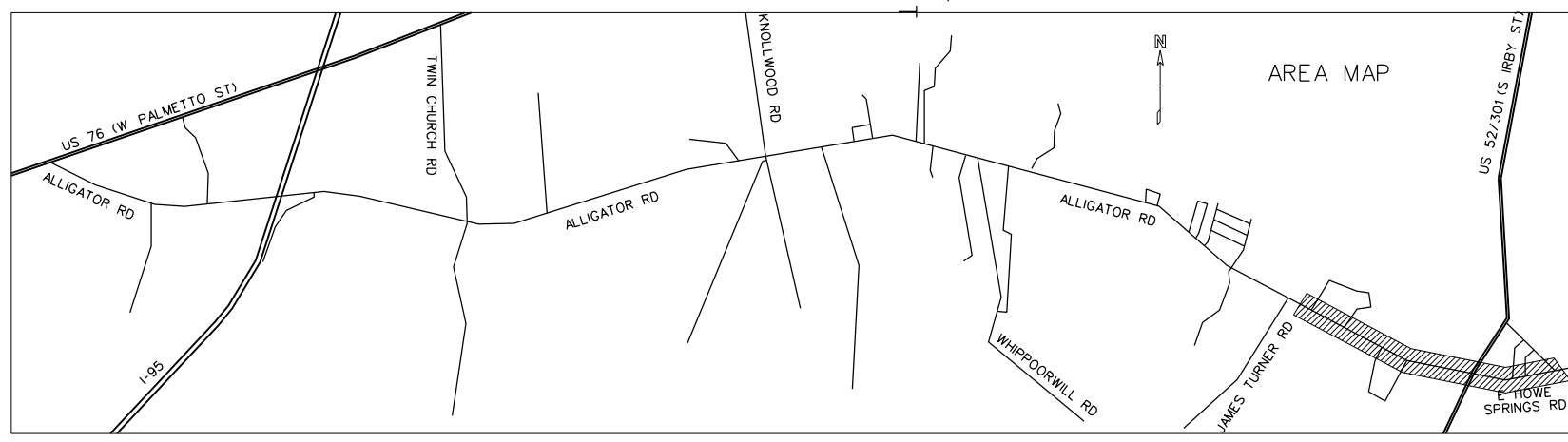
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EXISTING TRAFFIC SIGNAL CONTROL

TURNING MOVEMENTS

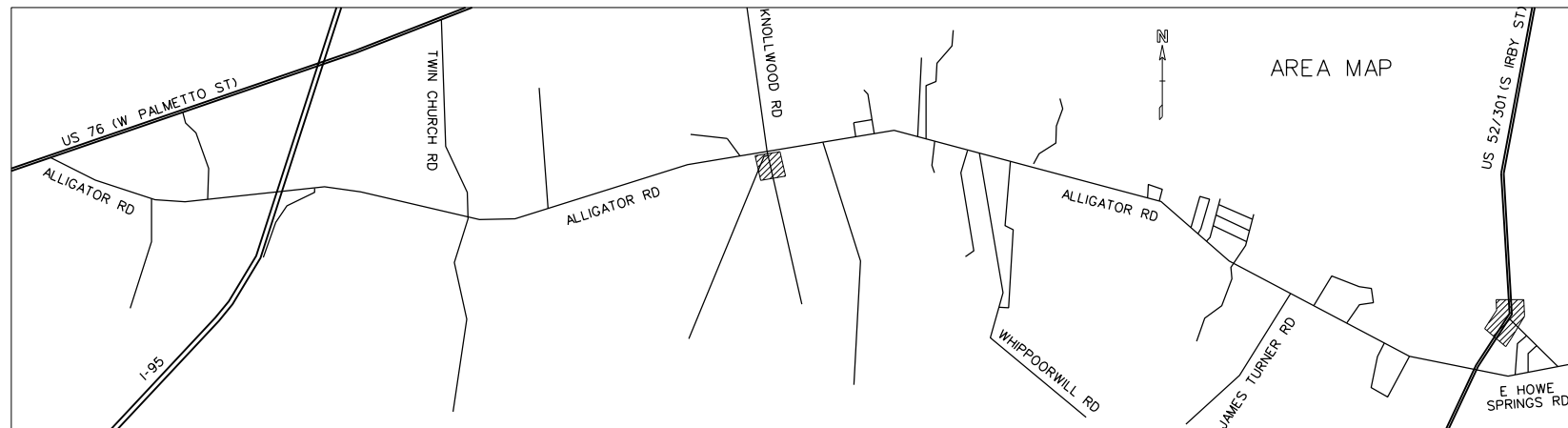
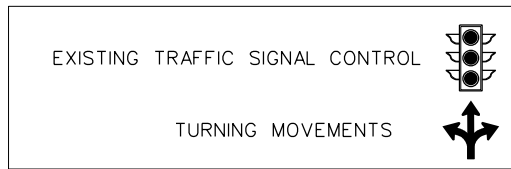
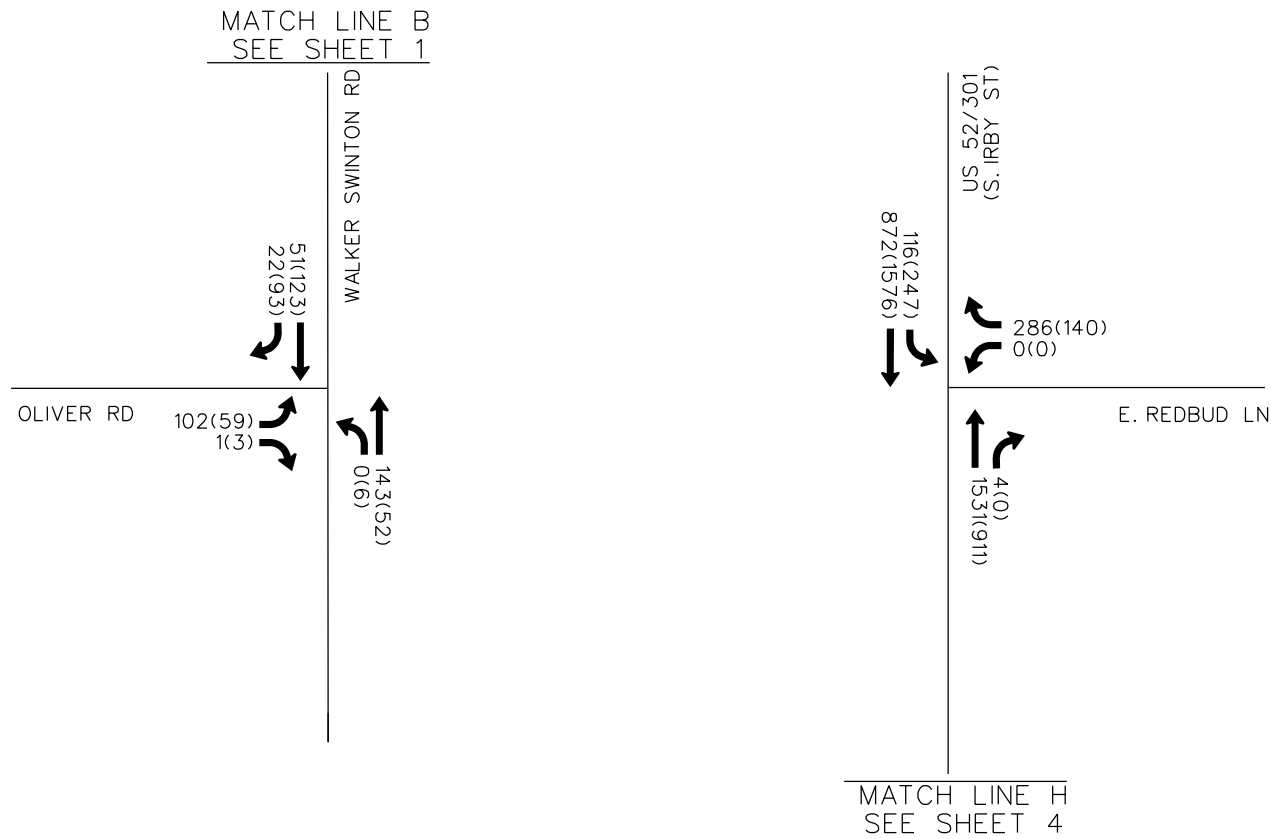
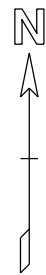
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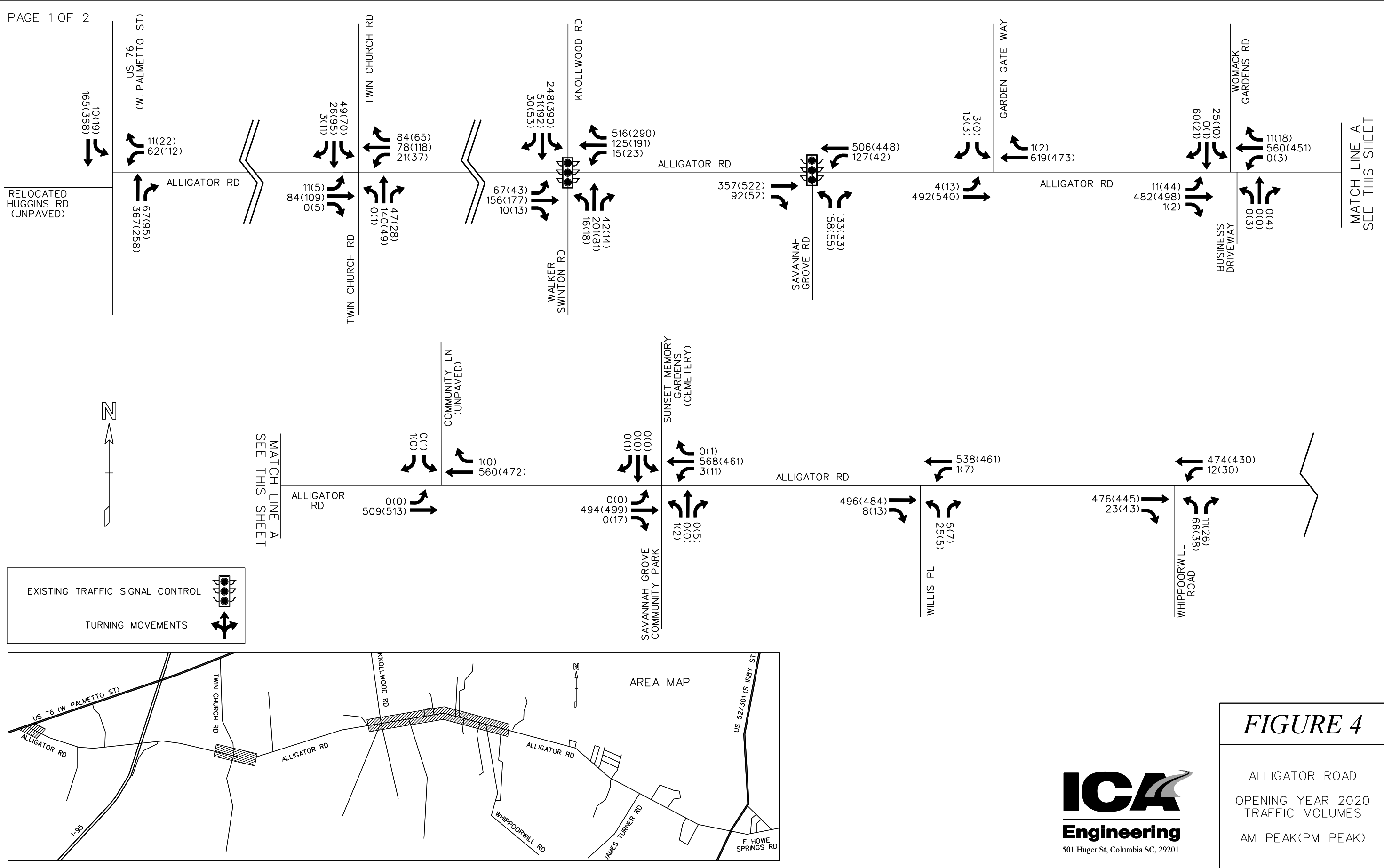
**FIGURE 3**

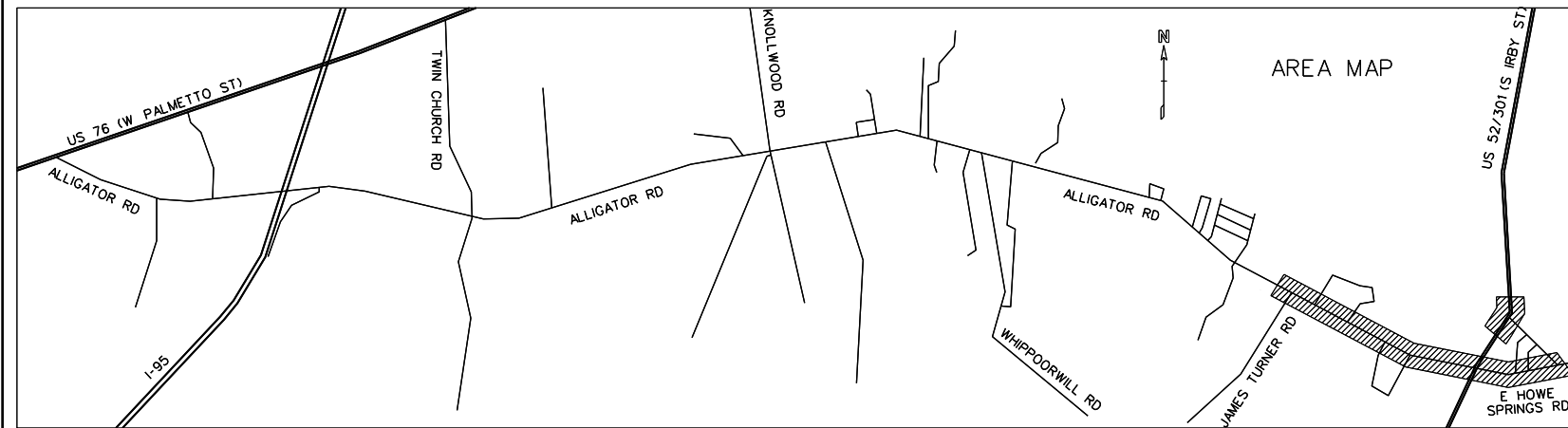
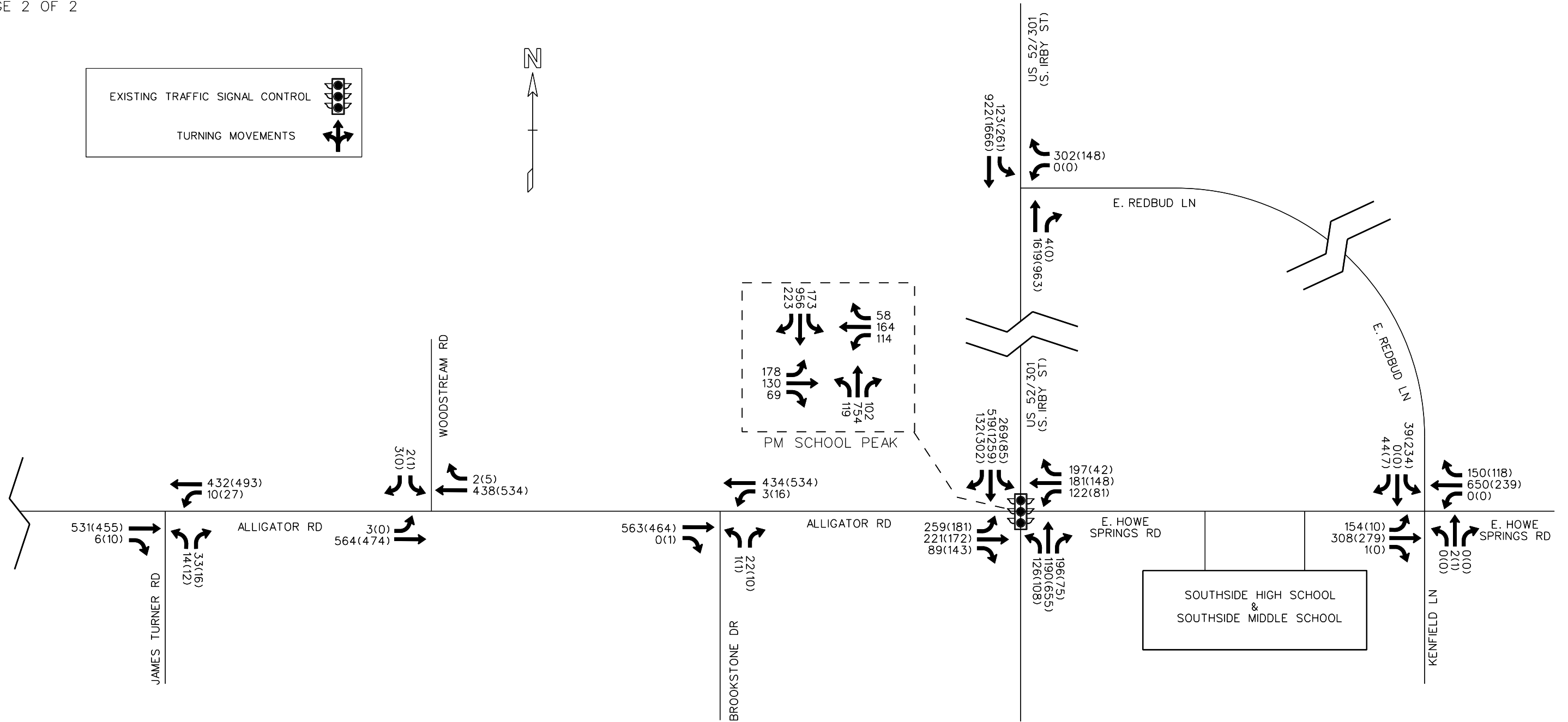
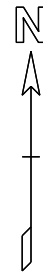
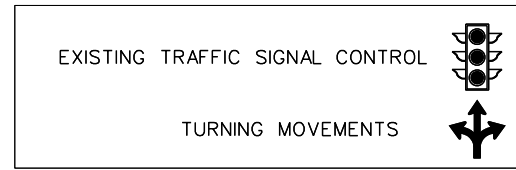
ALLIGATOR ROAD  
EXISTING YEAR 2013  
TRAFFIC VOLUMES  
AM PEAK(PM PEAK)





**FIGURE 3**  
 ALLIGATOR ROAD  
 EXISTING YEAR 2013  
 TRAFFIC VOLUMES  
 AM PEAK(PM PEAK)



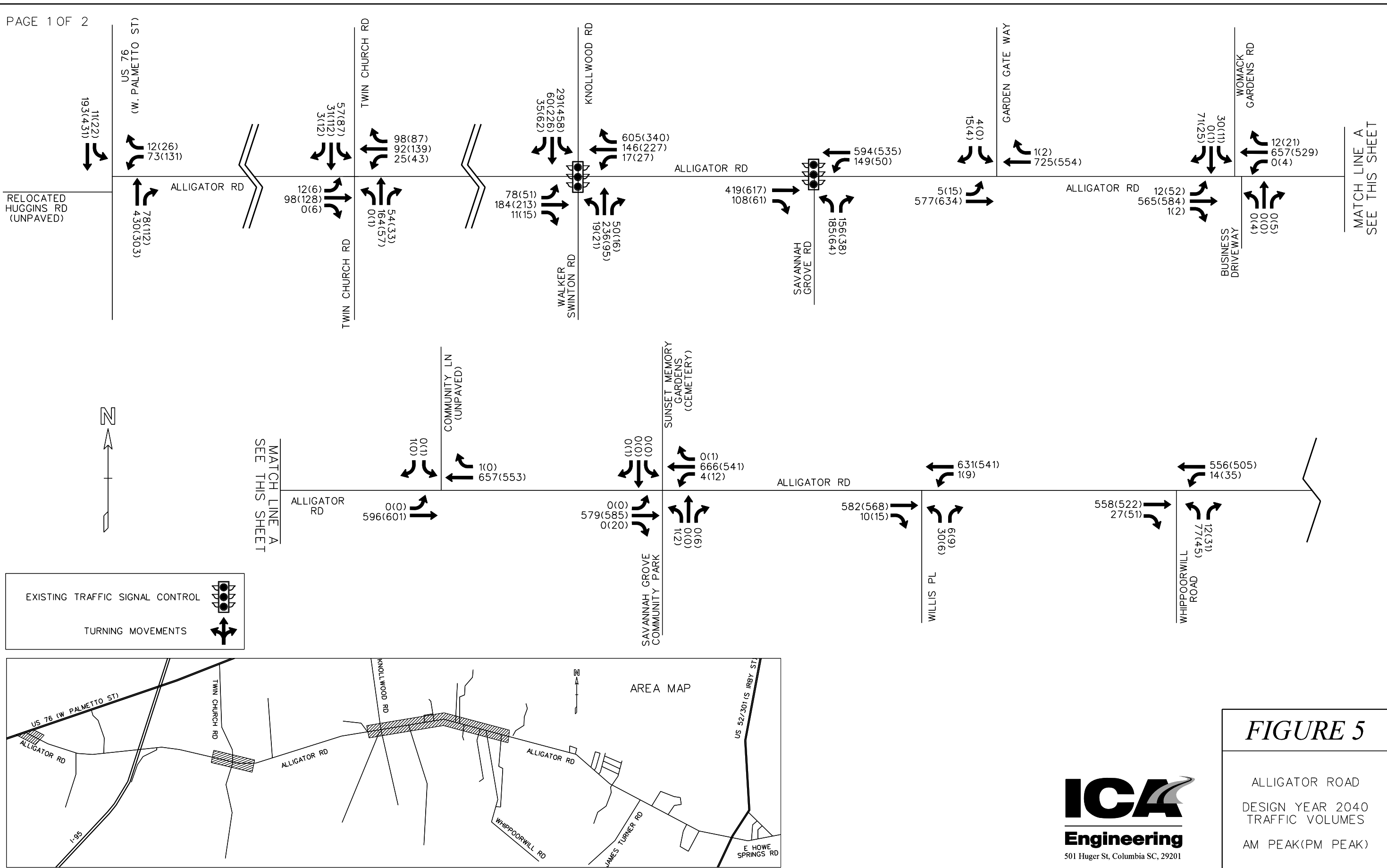


SOUTHSIDE HIGH SCHOOL & SOUTHSIDE MIDDLE SCHOOL

**FIGURE 4**

ALLIGATOR ROAD  
 OPENING YEAR 2020  
 TRAFFIC VOLUMES  
 AM PEAK (PM PEAK)

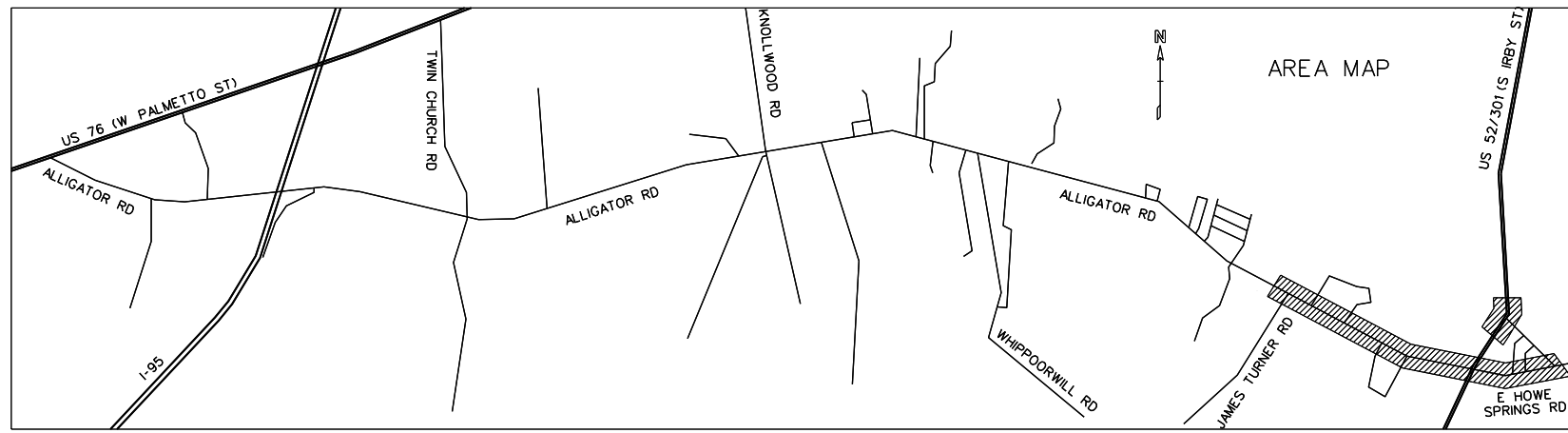
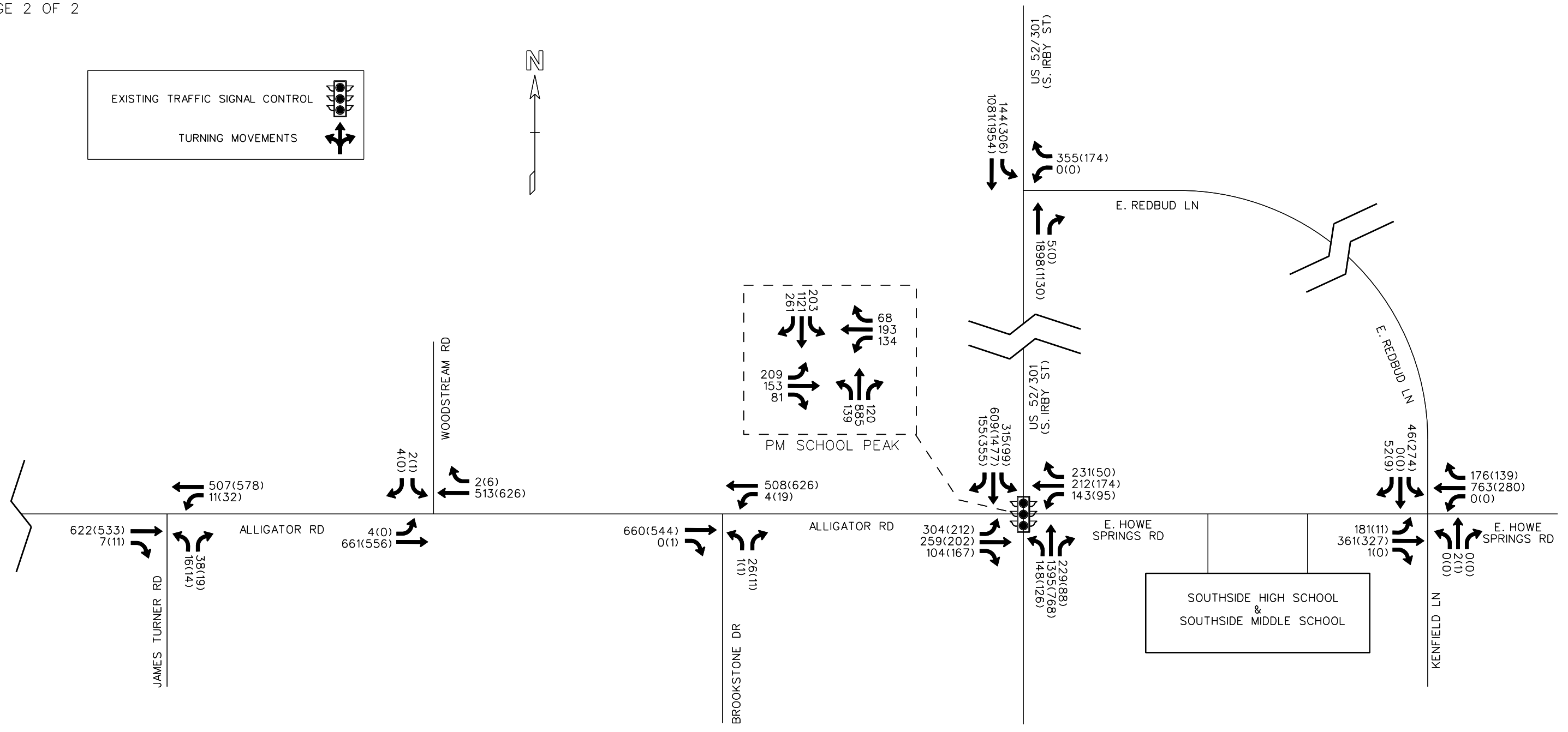
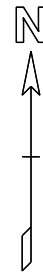
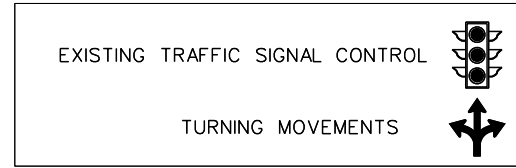




**FIGURE 5**

ALLIGATOR ROAD  
 DESIGN YEAR 2040  
 TRAFFIC VOLUMES  
 AM PEAK(PM PEAK)





**FIGURE 5**

ALLIGATOR ROAD  
DESIGN YEAR 2040  
TRAFFIC VOLUMES  
AM PEAK (PM PEAK)



## 6.0 PROPOSED IMPROVEMENTS

The proposed improvement project consists of widening the existing two-lane section of Alligator Road between US 76 and US 52, approximately 7.5 miles, to a five-lane curb and gutter section with a 15-foot striped median. Improvements will include replacing the existing bridges over I-95 and Alligator Branch with new reinforced concrete bridges. The intersection improvements on US 76 with Alligator Road, per SCDOT File No. 21.037239, will also be included in the analysis. Implementation of the widened US 76 and relocated intersections of the unpaved Huggins Road and Alligator Road will be included with the 2020 and 2040 No-Build and Build analyses. Additionally, the LOS analysis will be used to determine other feasible improvements that can be implemented along the project corridor.

## 7.0 ROADWAY SEGMENT ANALYSIS

Corridor or roadway segment analyses were performed for Alligator Road and Twin Church Road. Based on average daily traffic volume (ADT), Alligator Road was divided into five segments: US 76 to Twin Church Road, Twin Church Road to Knoll Wood Road, Knoll Wood Road to Savannah Grove Road, Savannah Grove Road to Ashford Road, and Ashford Road to US 52/301. The segment of the Twin Church Road between US 76 and Alligator Road was also evaluated. Highway Capacity Software (HCS 2010) was used to evaluate the capacity of the roadway segments. First, the capacity of the roadway segments was analyzed considering a two or three lane cross section. **Table 7.1** summarizes the results of the capacity analysis for the two or three lane cross sections.

**Table 7.1 – Roadway Segments - Levels of Service Summary – Two/Three Lane Section**

Roadway Segment	Opening Year 2020		Design Year 2040	
	AM	PM	AM	PM
Twin Church Rd from US 76 to Alligator Rd				
Northbound	B	C	B	C
Southbound	B	B	B	C
Alligator Road from US 76 to Twin Church Rd				
Eastbound	B	B	B	B
Westbound	B	B	B	B
Alligator Road from Twin Church Rd to Knoll Wood Rd				
Eastbound	B	C	C	C
Westbound	B	C	C	C
Alligator Road from Knoll Wood Rd to Savannah Grove Rd				
Eastbound	D	D	D	D
Westbound	D	D	D	D
Alligator Road from Savannah Grove Rd to Ashford Dr				
Eastbound	D	D	D	D
Westbound	D	D	D	D
Alligator Road from Ashford Dr to US 52/301				
Eastbound	D	D	D	D
Westbound	D	D	D	D

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The capacity analyses were performed for both the 2020 opening year and the 2040 design year traffic volumes. Based on the results of the capacity analysis, it is expected that the segment of Alligator Road from US 76 to Knoll Wood Road would operate at LOS C or better for the 2020 opening year and 2040 design year traffic volumes. The segment of Alligator Road from Knoll Wood Road to US 52/301 is expected to operate at LOS D for the 2020 opening year and 2040 design year traffic volumes. The segment of Twin Church Road between US 76 and Alligator Road is expected to operate at LOS C or better for the 2020 opening year and 2040 design year traffic volumes.

Next, the segments of Alligator Road between Knoll Wood Road and US 52/301 were analyzed considering a five lane cross section. **Table 7.2** summarizes the results of the capacity analysis for five lane cross section.

**Table 7.2 – Roadway Segments - Levels of Service Summary – Five Lane Section**

Roadway Segment	Opening Year 2020		Design Year 2040	
	AM	PM	AM	PM
Alligator Road from Knoll Wood Rd to Savannah Grove Rd				
Eastbound	A	A	A	A
Westbound	A	A	A	A
Alligator Road from Savannah Grove Rd to Ashford Dr				
Eastbound	A	A	A	A
Westbound	A	A	A	A
Alligator Road from Ashford Dr to US 52/301				
Eastbound	A	A	A	A
Westbound	A	A	A	A

Based on the results of the capacity analysis, all the roadway segments of Alligator Road between Knoll Wood Road and US 52/301 are expected to operate at LOS A for the 2020 opening and 2040 design year traffic volumes.

Based on capacity analysis of the roadway segments, a three-lane roadway section is recommended for Alligator Road from US 76 to Knoll Wood Road and a five-lane roadway section is recommended from Knoll Wood Road to US 52/301. A three-lane roadway section can also be provided on Twin Church Road between US 76 and Alligator Road.

**8.0 INTERSECTION LEVELS OF SERVICE (LOS) ANALYSIS**

LOS analysis were performed during the AM and PM peak hours for the existing year (2013) conditions at the fifteen (15) study intersections that had the highest overall volumes utilizing Synchro 8 software. The LOS rating considered acceptable varies by community, facility type, and traffic control devices. A LOS D is usually considered an acceptable level of service at signalized intersections with high traffic volumes. At unsignalized intersections, a LOS D is the desirable goal, but a LOS E or F is often accepted for low to moderate traffic volumes where the installation of a traffic signal is not warranted or is deemed undesirable for signalization for other reasons. Per SCDOT’s Highway Design Manual, a 2-lane rural collector’s desired Level of

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Service is a C; however a LOS D seems to be justifiable for the low turning volumes present on the side roads of the project corridor. The results of the analyses for 2013 are presented in **Table 8.1**:

**Table 8.1 – Existing Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ US 76 (W. Palmetto St)	Free	NB (L)	A	0.0	A	0.0
	Free	SB (L)	A	8.3	A	8.1
	Stop	EB (LTR)	B	14.4	C	16.8
	Stop	WB (LTR)	C	16.2	C	24.3
Alligator Road @ Twin Church Rd	All Way Stop	EB	A	8.7	A	8.9
		WB	A	9.0	A	9.5
		NB	A	9.2	A	8.4
		SB	A	8.7	A	9.5
Alligator Road @ Knollwood/Walker Swinton Rd	Signal	Overall	B	17.3	B	14.0
Alligator Road @ Savannah Grove Rd	Signal	Overall	B	15.9	B	15.3
Alligator Road @ Garden Gate Way	Free	EB (L)	A	9.2	A	8.4
	Stop	SB (LTR)	C	16.5	B	11.2
Alligator Road @ Womack Gardens Road	Free	EB (L)	A	9.0	A	8.5
	Free	WB (L)	A	0.0	A	8.4
	Stop	NB (LTR)	A	0.0	C	18.4
	Stop	SB (LTR)	C	22.5	C	17.5
Alligator Road @ Community Ln	Free	EB (L)	A	0.0	A	0.0
	Stop	SB (LR)	B	13.0	C	18.2
Alligator Road @ Sunset Memory Gardens	Free	EB (L)	A	0.0	A	0.0
	Free	WB (L)	A	8.4	A	8.5
	Stop	NB (LTR)	D	28.2	B	14.9
	Stop	SB (LTR)	A	0.0	B	11.1
Alligator Road @ Willis Pl	Free	WB (L)	A	8.5	A	8.4
	Stop	NB (LR)	C	22.4	B	14.4
Alligator Road @ Whippoorwill Rd	Free	WB (L)	A	8.5	A	8.5
	Stop	NB (LR)	D	28.9	C	18.2
Alligator Road @ James Turner Rd	Free	WB (L)	A	8.7	A	8.5
	Stop	NB (LR)	C	17.5	C	16.0
Alligator Road @ Woodstream Rd	Free	EB (L)	A	8.6	A	0.0
	Stop	SB (LR)	C	16.0	C	19.2
Alligator Road @ Brookstone Dr	Free	WB (L)	A	8.6	A	8.3
	Stop	NB (LR)	B	12.7	B	12.0
US 52/301 (S. Irby St) @ E. Redbud Ln	Stop	WB (LR)	F	147.1	C	15.8
	Free	SB (L)	C	23.6	B	13.6
Alligator Road @ US 52/301 (S. Irby St)	Signal	Overall	F	91.3	C	28.8
			<b>PM School Peak</b>		C	28.9
Alligator Road @ E. Redbud Ln	Free	EB (L)	B	10.2	A	7.8
	Stop	SB (LR)	E	47.3	C	16.3

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As shown in Table 8.1, five of the fifteen study intersections are currently operating with a turning movement at a LOS D or worse during the AM Peak hour. One of these intersections is signalized and the other four have the substandard service movement located on the side roads. During the PM peak hour each of the intersections are operating at a LOS C or better.

LOS analyses were performed during the AM and PM peak hours for the 2020 opening year No-Build (without improvements) conditions at the study intersections. As previously stated, all improvements under the US 76 widening project (File No. 21.037239) were taken into account during the No-Build analyses. The results of the analysis for the 2020 No-Build condition are presented in **Table 8.2**:

**Table 8.2 – 2020 No-Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ US 76 (W. Palmetto St)	Free	NB (L)	A	0.0	A	0.0
	Free	SB (L)	A	8.2	A	7.9
	Stop	WB (LR)	B	12.8	C	13.5
Alligator Road @ Twin Church Rd	All Way Stop	EB	A	8.8	A	9.0
		WB	A	9.2	A	9.7
		NB	A	9.4	A	8.6
		SB	A	8.8	A	9.8
Alligator Road @ Knollwood/Walker Swinton Rd	Signal	Overall	B	18.1	B	14.8
Alligator Road @ Savannah Grove Rd	Signal	Overall	B	16.4	B	15.8
Alligator Road @ Garden Gate Way	Free	EB (L)	A	9.4	A	8.5
	Stop	SB (LTR)	C	17.3	B	11.4
Alligator Road @ Womack Gardens Road	Free	EB (L)	A	9.1	A	8.6
	Free	WB (L)	A	0.0	A	8.5
	Stop	NB (LTR)	A	0.0	C	19.8
	Stop	SB (LTR)	D	25.0	C	19.2
Alligator Road @ Community Ln	Free	EB (L)	A	0.0	A	0.0
	Stop	SB (LR)	B	13.4	C	19.3
Alligator Road @ Sunset Memory Gardens	Free	EB (L)	A	0.0	A	0.0
	Free	WB (L)	A	8.5	A	8.6
	Stop	NB (LTR)	D	30.9	C	15.7
	Stop	SB (LTR)	A	0.0	B	11.3
Alligator Road @ Willis Pl	Free	WB (L)	A	8.5	A	8.5
	Stop	NB (LR)	C	24.5	C	15.0
Alligator Road @ Whippoorwill Rd	Free	WB (L)	A	8.6	A	8.5
	Stop	NB (LR)	D	33.9	C	19.7
Alligator Road @ James Turner Rd	Free	WB (L)	A	8.8	A	8.6
	Stop	NB (LR)	C	18.9	C	17.0
Alligator Road @ Woodstream Rd	Free	EB (L)	A	8.7	A	0.0
	Stop	SB (LR)	C	16.8	C	20.4
Alligator Road @ Brookstone Dr	Free	WB (L)	A	8.7	A	8.4
	Stop	NB (LR)	B	13.1	B	12.3
US 52/301 (S. Irby St) @ E. Redbud Ln	Stop	WB (LR)	F	213.6	C	16.9
	Free	SB (L)	D	28.1	B	14.7

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Alligator Road @ US 52/301 (S. Irby St)	Signal	Overall	F	85.8	C	31.4
			<b>PM School Peak</b>		C	28.9
Alligator Road @ E. Redbud Ln	Free	EB (L)	B	10.6	A	7.9
	Stop	SB (LR)	F	65.0	C	17.7

Per Table 8.2, six of the fifteen intersections are expected to have turning movements that operate at a LOS D or lower during the 2020 AM peak hour. Again, one of the failing intersections is signalized and the other five are stop controlled with the substandard movement occurring on the side road. No substandard LOS are present during the PM peak hour.

LOS were performed during the AM and PM peak hours for the 2040 design year No-Build (without improvements) conditions at the study intersections. The results of the analyses for the 2040 No-Build condition are presented in **Table 8.3**:

**Table 8.3 – 2040 No-Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ US 76 (W. Palmetto St)	Free	NB (L)	A	0.0	A	0.0
	Free	SB (L)	A	8.4	A	8.0
	Stop	WB (LR)	B	14.0	C	15.2
Alligator Road @ Twin Church Rd	All Way Stop	EB	A	9.3	A	9.7
		WB	A	10.0	B	10.7
		NB	B	10.2	A	9.1
		SB	A	9.3	B	10.6
Alligator Road @ Knollwood/Walker Swinton Rd	Signal	Overall	C	20.9	B	15.6
Alligator Road @ Savannah Grove Rd	Signal	Overall	B	18.4	B	17.3
Alligator Road @ Garden Gate Way	Free	EB (L)	A	10.0	A	8.7
	Stop	SB (LTR)	C	21.6	B	12.2
Alligator Road @ Womack Gardens Road	Free	EB (L)	A	9.6	A	9.0
	Free	WB (L)	A	0.0	A	8.8
	Stop	NB (LTR)	A	0.0	D	26.4
	Stop	SB (LTR)	E	41.4	C	24.7
Alligator Road @ Community Ln	Free	EB (L)	A	0.0	A	0.0
	Stop	SB (LR)	B	14.9	C	23.5
Alligator Road @ Sunset Memory Gardens	Free	EB (L)	A	0.0	A	0.0
	Free	WB (L)	A	8.8	A	8.9
	Stop	NB (LTR)	E	42.5	C	17.8
	Stop	SB (LTR)	A	0.0	B	12.0
Alligator Road @ Willis Pl	Free	WB (L)	B	13.1	A	8.8
	Stop	NB (LR)	E	43.1	C	17.4
Alligator Road @ Whippoorwill Rd	Free	WB (L)	A	8.9	A	8.9
	Stop	NB (LR)	F	66.0	D	26.8
Alligator Road @ James Turner Rd	Free	WB (L)	A	9.2	A	8.9
	Stop	NB (LR)	C	24.6	C	20.9
Alligator Road @ Woodstream Rd	Free	EB (L)	A	9.0	A	0.0
	Stop	SB (LR)	C	19.2	D	25.1



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Alligator Road @ Brookstone Dr	Free	WB (L)	A	9.0	A	8.7
	Stop	NB (LR)	B	14.5	B	13.4
US 52/301 (S. Irby St) @ E. Redbud Ln	Stop	WB (LR)	F	509.0	C	22.4
	Free	SB (L)	F	65.0	C	20.7
Alligator Road @ US 52/301 (S. Irby St)	Signal	Overall	F	106.9	D	43.1
			<b>PM School Peak</b>	<b>D</b>	36.4	
Alligator Road @ E. Redbud Ln	Free	EB (L)	B	11.9	A	8.0
	Stop	SB (LR)	F	245.1	C	24.3

As shown in Table 8.3, in 2040 it is expected that seven of the fifteen study intersections will operate at a LOS E or worse during the AM peak hour. One of the substandard intersections is signalized and the other six unsignalized intersections have the substandard turning movement on the side road; with the exception of S. Irby Street at E Redbud Lane where the entire intersection fails. The PM peak hour contains four intersections that operate at a LOS D, one of which is signalized. Each substandard movement takes place on the side road at the unsignalized intersections; the entire intersection is substandard at Alligator Road and S. Irby Street.

LOS analyses were performed for the proposed 3 and 5-lane widening for the 2020 opening year and 2040 design Build conditions. The results of the analyses for the 2020 and 2040 Build conditions are presented in **Tables 8.4 and 8.5**, respectively:

**Table 8.4 – 2020 Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ US 76 (W. Palmetto St)	Free	SB (L)	A	8.2	A	7.9
	Stop	WB (L)	B	13.0	B	13.6
	Stop	WB (R)	A	9.7	A	9.2
Alligator Road @ Twin Church Rd	All Way Stop	EB	A	8.8	A	9.0
		WB	A	9.2	A	9.7
		NB	A	9.4	A	8.6
		SB	A	8.8	A	9.8
Alligator Road @ Knollwood/Walker Swinton Rd	Signal	Overall	B	17.2	B	13.9
Alligator Road @ Savannah Grove Rd	Signal	Overall	B	14.5	B	14.2
Alligator Road @ Garden Gate Way	Free	EB (L)	A	9.4	A	8.5
	Stop	SB (LTR)	B	12.1	A	9.8
Alligator Road @ Womack Gardens Road	Free	EB (L)	A	9.1	A	8.7
	Free	WB (L)	A	0.0	A	8.5
	Stop	NB (LTR)	A	0.0	C	15.3
	Stop	SB (LTR)	C	17.6	C	15.0
Alligator Road @ Community Ln	Free	EB (L)	A	0.0	A	0.0
	Stop	SB (LR)	B	10.6	B	13.1
Alligator Road @ Sunset Memory Gardens	Free	EB (L)	A	0.0	A	0.0
	Free	WB (L)	A	8.5	A	8.6
	Stop	NB (LTR)	C	20.9	B	12.8
Alligator Road @ Willis Pl	Free	WB (L)	A	8.6	A	8.5
		SB (L)	A	8.6	A	8.5

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	Stop	NB (LR)	B	13.9	B	11.4
Alligator Road @ Whippoorwill Rd	Free	WB (L)	A	8.6	A	8.6
	Stop	NB (LR)	C	16.0	B	13.3
Alligator Road @ James Turner Rd	Free	WB (L)	A	8.8	A	8.6
	Stop	NB (LR)	B	12.6	B	12.1
Alligator Road @ Woodstream Rd	Free	EB (L)	A	8.7	A	0.0
	Stop	SB (LR)	B	11.9	B	13.6
Alligator Road @ Brookstone Dr	Free	WB (L)	A	8.7	A	8.4
	Stop	NB (LR)	B	10.5	B	10.2
US 52/301 (S. Irby St) @ E. Redbud Ln	Stop	WB (LR)	F	213.6	C	16.9
	Free	SB (L)	D	28.1	B	14.7
Alligator Road @ US 52/301 (S. Irby St)	Signal	Overall	D	38.7	D	40.5
			<b>PM School Peak</b>		C	28.5
Alligator Road @ E. Redbud Ln	Free	EB (L)	B	10.6	A	7.9
	Stop	SB (LR)	F	65.0	C	17.7

**Table 8.5 – 2040 Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ US 76 (W. Palmetto St)	Free	SB (L)	A	8.4	A	8.0
	Stop	WB (L)	B	14.3	B	15.4
	Stop	WB (R)	B	10.0	A	9.4
Alligator Road @ Twin Church Rd	All Way Stop	EB	A	9.3	A	9.7
		WB	A	10.0	B	10.7
		NB	B	10.2	A	9.1
		SB	A	9.3	B	10.6
Alligator Road @ Knollwood/Walker Swinton Rd	Signal	Overall	C	21.8	B	15.9
Alligator Road @ Savannah Grove Rd	Signal	Overall	A	14.7	B	13.8
Alligator Road @ Garden Gate Way	Free	EB (L)	B	10.0	A	8.8
	Stop	SB (LTR)	B	13.3	B	10.2
Alligator Road @ Womack Gardens Road	Free	EB (L)	A	9.6	A	9.0
	Free	WB (L)	A	0.0	A	8.8
	Stop	NB (LTR)	A	0.0	C	18.6
	Stop	SB (LTR)	C	23.6	C	17.5
Alligator Road @ Community Ln	Free	EB (L)	A	0.0	A	0.0
	Stop	SB (LR)	B	11.2	B	14.1
Alligator Road @ Sunset Memory Gardens	Free	EB (L)	A	0.0	A	0.0
	Free	WB (L)	A	8.8	A	8.9
	Stop	NB (LTR)	D	25.9	B	13.8
	Stop	SB (LTR)	A	0.0	B	10.1
Alligator Road @ Willis Pl	Free	WB (L)	B	13.2	A	8.8
	Stop	NB (LR)	C	20.5	B	12.2
Alligator Road @ Whippoorwill Rd	Free	WB (L)	A	8.9	A	8.9
	Stop	NB (LR)	C	19.0	B	14.8
Alligator Road @ James Turner Rd	Free	WB (L)	A	9.2	A	8.9
	Stop	NB (LR)	B	13.8	B	13.0

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Alligator Road @ Woodstream Rd	Free	EB (L)	A	9.0	A	0.0
	Stop	SB (LR)	B	12.4	B	14.8
Alligator Road @ Brookstone Dr	Free	WB (L)	A	9.0	A	8.7
	Stop	NB (LR)	B	11.1	B	10.5
US 52/301 (S. Irby St) @ E. Redbud Ln	Stop	WB (LR)	F	509.0	C	22.4
	Free	SB (L)	F	65.0	C	20.7
Alligator Road @ US 52/301 (S. Irby St)	Signal	Overall	D	50.8	D	52.0
			<b>PM School Peak</b>	<b>D</b>	40.1	
Alligator Road @ E. Redbud Ln	Free	EB (L)	B	11.9	A	8.0
	Stop	SB (LR)	F	245.1	C	24.3

The capacity analysis indicates that during the 2040 design year, under the Build scenario, the following intersections are expected to have at least one peak hour operate at a LOS D or worse:

- Alligator Road at Sunset Memory Gardens [side road turning movement is substandard during the AM peak hour]
- US 52/301 (S. Irby Street) at E Redbud Lane [both roadway turning movements fail in the AM peak hour]
- Alligator Road at US 52/301 (S. Irby Street) [signalized intersection, substandard in both AM and PM peak hours]
- Alligator Road at E Redbud Lane [side road turning movements fails during the AM peak hour]

In taking a closer look at the intersection of Alligator Road at Sunset Memory Gardens, the resulting LOS D is the northbound movement out of the Savannah Grove Community Park. Only one vehicle is projected during the AM peak hour, but the volume of the thru movement on Alligator road creates the delay. Since the delay is less than thirty seconds long and is only projected to impact one vehicle during that peak hour, this delay appears to be tolerable.

Signalization was considered for the two unsignalized intersections with E Redbud Lane to remediate their failing AM peak hour LOS results. A full signal warrant analysis was not performed due to the lack of 12-hour counts and will be necessary for final design considerations. A signal at US 52/301 (S. Irby Street) and E Redbud Lane would result in an AM peak hour LOS D with a 44.5 second delay and a PM peak hour LOS B with a 16.7 second delay. At Alligator Road and E Redbud Lane, a signal would result in an AM peak hour LOS C with a 22.9 second delay and a PM peak hour LOS B with a 15.0 second delay. Specifics about the timing used for these signals can be found in the Appendix.

The intersection of US 52/301 (S. Irby Street) and Alligator Road is resulting in a LOS D for both the AM and PM peak hours. As previously stated, a LOS D is acceptable at high volume intersections. Timing changes for the signal were explored, but created more of a delay and are therefore more harmful than helpful to the intersection. Comparing the 2040 No-Build analysis with the 2040 Build analysis, the AM peak LOS is reduced from an F to a D and the PM peak LOS is a D for both scenarios. Therefore, the Build alternative is an improvement to the intersection operations.

From the 2040 Build conditions analysis the reported queue lengths were analyzed to determine necessary turn lane lengths along the project corridor. The recommended minimum turn lane lengths are shown in **Table 8.6**. A minimum striped turn lane length of 200' is utilized because of the roadway's rural classification, so small queue lengths will be facilitated within the 15-foot

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two-way left turn lane provided along the corridor and would not require the dedicated turn lane. Roadways with queues of less than one foot were not included in this table for ease of interpretation.

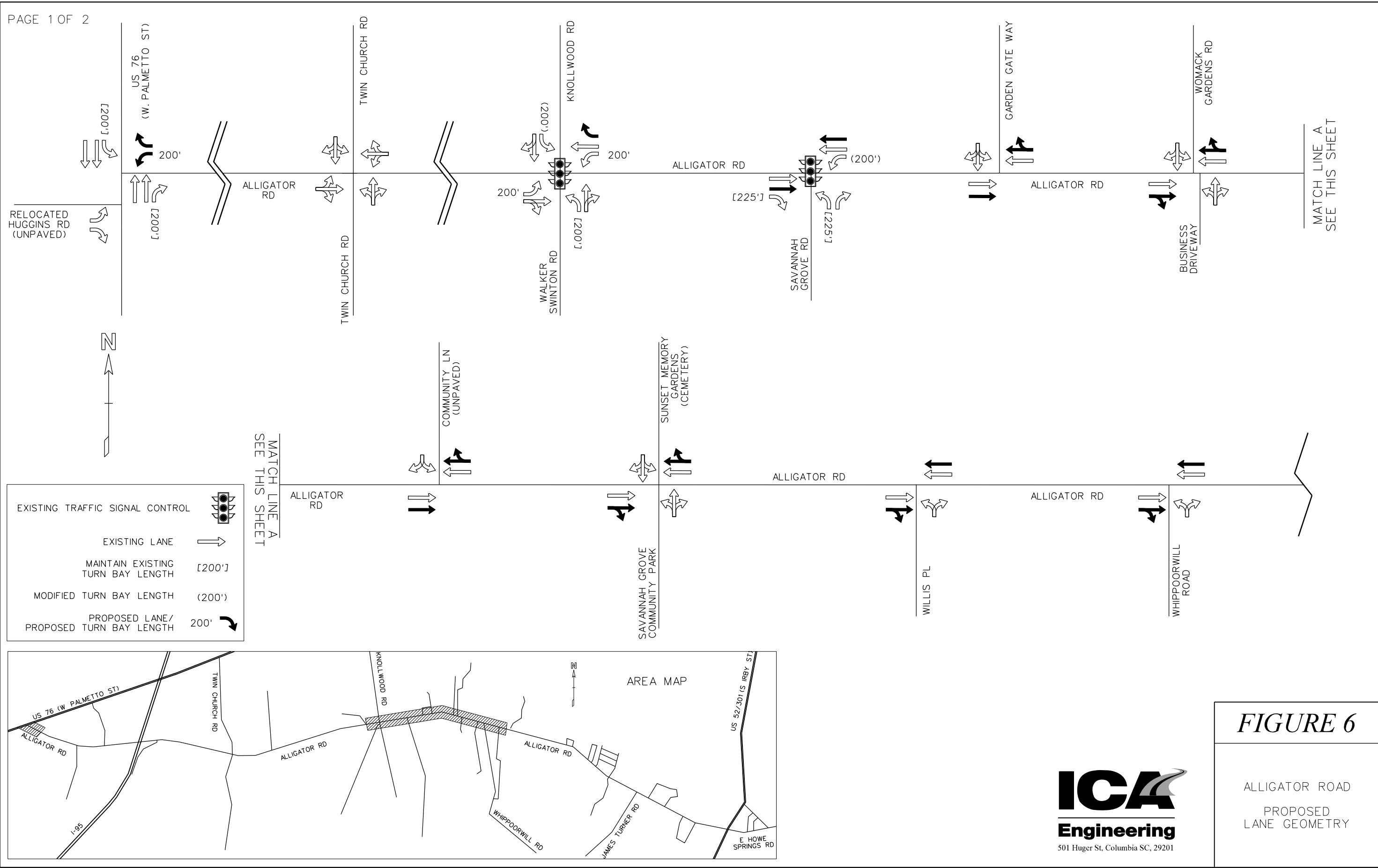
**Table 8.6 – Recommended Dedicated Turnbay Lengths**

Intersection	Movement	Reported Queues (ft)			Recommended Turn Lane Length
		AM Peak	PM Peak	Max	
Alligator Rd @ US 76 (W. Palmetto St)	WBL	14	28	28	200' <sup>1</sup>
	WBR	2	2	2	n/a
Alligator Rd @ Knollwood Rd/Walker Swinton Rd	EBL	76	70	76	200' <sup>1</sup>
	WBL	30	42	42	200' <sup>1</sup>
	WBR	359	95	359	n/a
	NBL	44	36	44	maintain exist. [200'] <sup>2</sup>
	SBL	175	200	200	200'
Alligator Rd @ Savannah Grove Rd	EBL	n/a	n/a	n/a	not recommended
	EBR	20	41	41	maintain exist. [225'] <sup>2</sup>
	WBL	55	50	55	200'
	NBL	30	48	48	maintain exist. [225'] <sup>2</sup>
Alligator Rd @ Garden Gate Way	EBL	1	1	1	not recommended
Alligator Rd @ Womack Gardens Rd	EBL	1	5	5	not recommended
Alligator Rd @ Sunset Memory Gardens	WBL	0	1	1	not recommended
Alligator Rd @ Willis Pl	WBL	0	1	1	not recommended
Alligator Rd @ Whippoorwill Rd	WBL	1	3	3	not recommended
Alligator Rd @ James Turner Rd	WBL	1	3	3	not recommended
Alligator Rd @ Brookstone Dr	WBL	0	2	2	not recommended
Alligator Rd @ US 52/301 (S. Irby St)	EBL	239	181	239	Dual 250'
	WBL	153	128	153	200'
	WBR	0	0	0	200'
	NBL	309	201	309	300'
	NBR	328	57	328	350'
	SBL	192	106	192	Dual 200'
	SBR	52	338	338	350'
Alligator Rd @ E. Redbud Ln	EBL	46	1	46	200'
US 52/301 (S. Irby St) @ E Redbud Ln	SBL	160	86	160	maintain exist. [200'] <sup>2</sup>

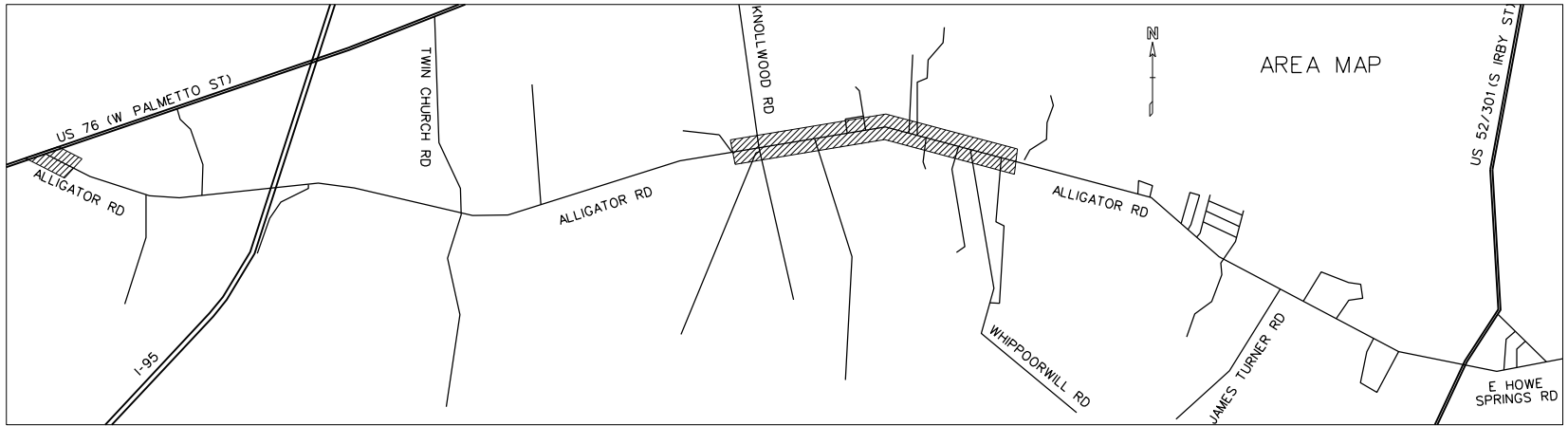
<sup>1</sup>Dedicated 200' turn lane provided at each signalized intersection, regardless of operational need

<sup>2</sup>Existing turn lane lengths measured from Google Earth and should be verified for final design

**Figure 6** shows graphically the proposed lane geometry and turn bay lengths for the study intersections.



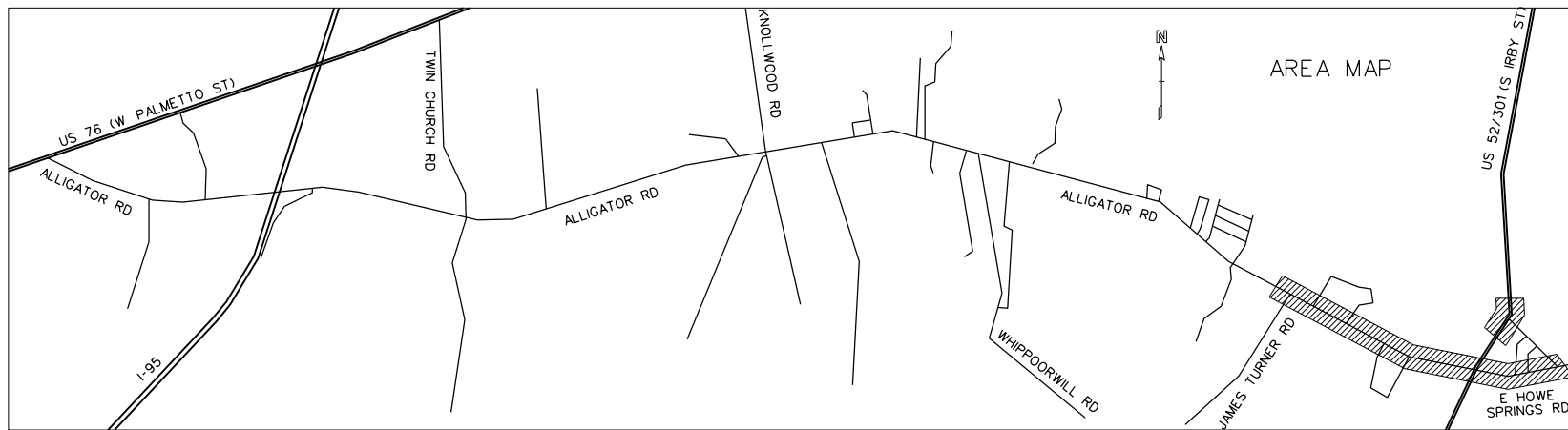
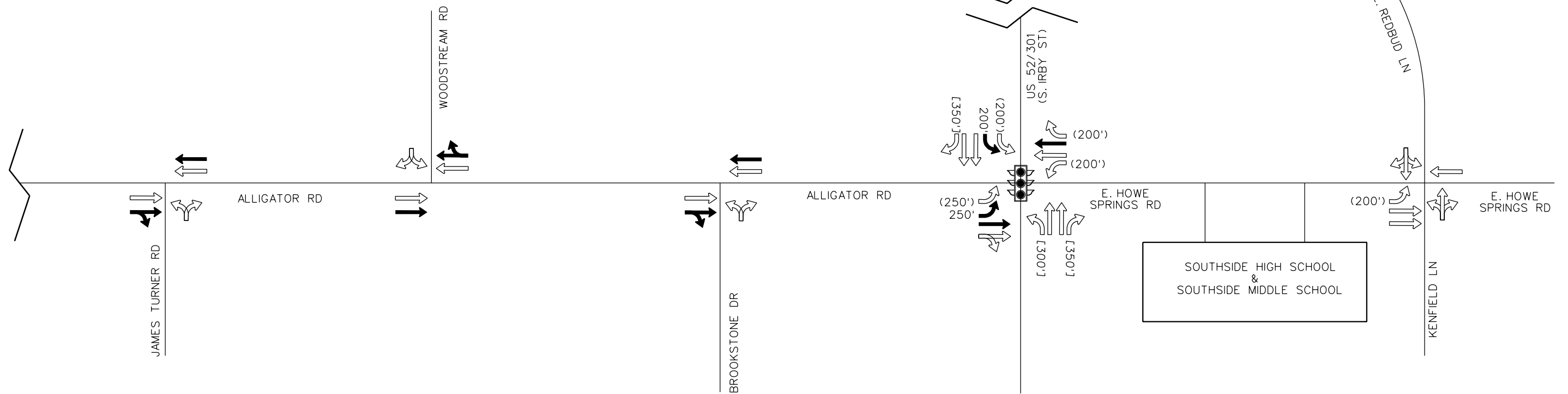
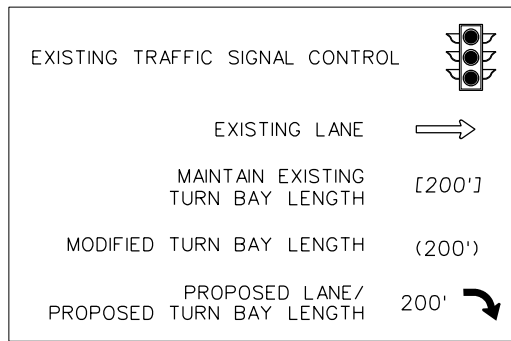
EXISTING TRAFFIC SIGNAL CONTROL	
EXISTING LANE	
MAINTAIN EXISTING TURN BAY LENGTH	[200']
MODIFIED TURN BAY LENGTH	(200')
PROPOSED LANE/ PROPOSED TURN BAY LENGTH	200'



**FIGURE 6**

ALLIGATOR ROAD  
PROPOSED  
LANE GEOMETRY





**FIGURE 6**

ALLIGATOR ROAD  
PROPOSED  
LANE GEOMETRY





## 9.0 ALTERNATIVE DESIGN ANALYSIS

Due to the sensitive nature of widening projects and to enable future flexibility during the roadway design phase of the project, a study was done to consider the elimination of dedicated right turn lanes along Alligator Road at the three signalized intersections within the project corridor. Based on roadway segment analysis, a three-lane section was considered to the west and a five-lane section was considered to the east of the intersection of Alligator Road at Walker Swinton/Knollwood Road. The intersection of Alligator Road at Walker Swinton/Knollwood Road was modeled to have one dedicated left turn lane and one combination thru/right turn lane for the eastbound approach. The westbound approach was modeled to have one dedicated left-turn lane, one through lane, and the westbound outside lane was considered to drop as a right turn onto Knollwood Road. Thus, no additional alternative analysis to eliminate the right-turn lane was required for this intersection. Alligator Road at Savannah Grove Road was modeled to have one thru lane and one combination thru/right turn lane for the eastbound approach and a dedicated left with two thru lanes on the westbound approach. For Alligator Road at S. Irby Street, the eastbound leg was modeled to contain the dual left turn with one thru lane and one combination thru/right turn lane. The westbound leg was modeled to contain a dedicated left turn lane with one thru lane and one combination thru/right lane. **Table 9.1** contains the results of the analyses.

**Table 9.1 – 2040 Build LOS (Eliminating Dedicated Right Turn Lanes)**

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	Delay (sec)	Δ	LOS	Delay (sec)	Δ
Alligator Road @ Savannah Grove Rd	Overall	B	15.3	-0.6	B	14.6	-0.8
Alligator Road @ US 52/301 (S. Irby St)	Overall	D	50.8	0.0	D	52.0	0.0
		<b>PM School Peak</b>			D	40.1	0.0

Per the results of the operational analysis, the removal of dedicated right turn lanes at each of these intersections would have a minimal impact to traffic delays. These turn lanes would need to be considered if there are existing or predicted safety issues within the area, but from an operational standpoint they are not a requirement. The Synchro reports for all scenarios can be found in the **Appendix**.

The intersection of Twin Church Road at Alligator Road is currently operating under All-Way Stop Control operation. First, this intersection was evaluated for signal installation. Based on existing 2015 traffic volumes this intersection does not meet any of the signal warrant requirements as identified in MUTCD. SCDOT signal warrant analysis sheets are attached in the **Appendix**. Based on traffic growth in this area, this intersection is not expected to meet signal warrants in future years. Next, the intersection was analyzed considering a single lane roundabout. SIDRA software was used to analyze the intersection for the opening 2020 and design year 2040 traffic volumes. Table 9.2 and Table 9.3 contain the summary of the analyses. The output files are attached in the **Appendix**.

**Alligator Road Traffic Study  
Florence, South Carolina**

**Table 9.2 – 2020 Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ Twin Church Rd	Roundabout	EB	A	4.6	A	5.5
		WB	A	6.0	A	5.7
		NB	A	6.0	A	4.9
		SB	A	4.4	A	5.9

**Table 9.3 – 2040 Build Conditions Levels of Service**

Intersection	Control	Movement	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec)	LOS	Delay (sec)
Alligator Road @ Twin Church Rd	Roundabout	EB	A	4.9	A	6.1
		WB	A	6.7	A	6.4
		NB	A	6.7	A	5.3
		SB	A	4.7	A	6.7

Based on the roundabout operational analysis, the intersection of Twin Church Road at Alligator Road is expected to operate at LOS A during both AM and PM peak periods for the 2020 opening and 2040 design year traffic volumes.

## 10.0 SUMMARY

Using the existing traffic counts collected and the historical data provided by SCDOT, the traffic volumes for the 2020 opening year and the 2040 design year were developed.

Based on capacity analysis of the roadway segments, a three-lane roadway section is recommended for Alligator Road from US 76 to Knoll Wood Road and a five-lane roadway section is recommended from Knoll Wood Road to US 52/301. A three-lane roadway section can also be provided on Twin Church Road between US 76 and Alligator Road.

As shown by the LOS analysis, in the 2040 No-Build conditions, eight of the fifteen study intersections are expected to operate at undesirable Levels of Service. However, with the proposed widening, recommended improvements shown in Figure 6, and the additional remediation items presented, the majority of the intersections are expected to operate at acceptable traffic operating conditions in the 2040 Build conditions.

A single lane roundabout can be considered as a feasible alternative for the intersection of Twin Church Road at Alligator Road. Compared to the existing all-way stop control, it would provide operational and safety benefits at this intersection.

If a reduced footprint is necessary at the existing signalized intersections, the elimination of a dedicated right turn lane (eastbound right-turn at Savannah Grove Rd and westbound right-turn on US 52/301) is feasible from an operations standpoint.

# **APPENDIX**

## TUBE COUNTS

Location: US 76 SOUTH OF ALLIGATOR ROAD - A  
 Count Date: 5/21/2013  
 Roadway Funct. Class:  
 Day of the Week: Tuesday

Peak Hours: AM 7:15-8:15  
 PM 16:30-17:30

Time	Northbound					Southbound					Two Way	
	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Interval	Hourly
0:00	7	0	0	7		7	1	0	8		15	
0:15	7	0	0	7		13	0	0	13		20	
0:30	3	0	0	3		8	1	0	9		12	
0:45	5	0	0	5	22	7	0	0	7	37	12	59
1:00	5	0	0	5	20	7	0	0	7	36	12	56
1:15	1	0	0	1	14	4	0	0	4	27	5	41
1:30	3	0	0	3	14	2	0	0	2	20	5	34
1:45	0	1	0	1	10	4	0	0	4	17	5	27
2:00	2	0	0	2	7	4	1	0	5	15	7	22
2:15	4	1	0	5	11	7	0	1	8	19	13	30
2:30	2	0	0	2	10	3	0	0	3	20	5	30
2:45	2	0	0	2	11	2	2	0	4	20	6	31
3:00	0	0	0	0	9	1	1	0	2	17	2	26
3:15	3	0	0	3	7	4	0	0	4	13	7	20
3:30	4	2	0	6	11	0	1	0	1	11	7	22
3:45	2	0	1	3	12	7	0	0	7	14	10	26
4:00	5	0	0	5	17	4	0	0	4	16	9	33
4:15	7	1	0	8	22	7	1	1	9	21	17	43
4:30	8	0	0	8	24	1	1	0	2	22	10	46
4:45	7	0	0	7	28	4	1	0	5	20	12	48
5:00	17	0	0	17	40	5	3	0	8	24	25	64
5:15	23	1	0	24	56	9	1	0	10	25	34	81
5:30	29	1	0	30	78	14	3	1	18	41	48	119
5:45	23	2	0	25	96	24	5	0	29	65	54	161
6:00	42	0	0	42	121	16	2	0	18	75	60	196
6:15	52	1	1	54	151	20	5	1	26	91	80	242
6:30	83	2	1	86	207	27	3	1	31	104	117	311
6:45	71	2	0	73	255	44	3	2	49	124	122	379
7:00	77	1	2	80	293	42	4	0	46	152	126	445
7:15	89	0	2	91	330	38	12	1	51	177	142	507
7:30	116	1	1	118	362	42	5	2	49	195	167	557
7:45	108	4	1	113	402	48	8	2	58	204	171	606
8:00	82	1	2	85	407	52	4	4	60	218	145	625
8:15	74	4	0	78	394	44	9	1	54	221	132	615
8:30	55	1	1	57	333	36	4	1	41	213	98	546
8:45	62	4	2	68	388	52	7	1	60	215	128	503
9:00	61	5	2	68	271	37	11	1	49	204	117	475
9:15	62	4	1	67	260	34	8	1	43	193	110	453
9:30	56	1	2	59	262	51	9	1	61	213	120	475
9:45	65	3	3	71	265	32	7	1	40	193	111	458
10:00	62	2	0	64	261	56	10	0	66	210	130	471
10:15	63	3	4	70	264	36	8	2	46	213	116	477
10:30	61	7	2	70	275	43	13	1	57	209	127	484
10:45	64	3	1	68	272	48	14	3	65	234	133	506
11:00	63	4	1	68	276	32	6	0	38	206	106	482
11:15	51	2	3	56	262	49	6	0	55	215	111	477
11:30	61	2	1	64	256	58	4	2	64	222	128	478
11:45	47	3	3	53	241	59	8	1	68	225	121	466
12:00	57	1	0	58	231	47	12	0	59	246	117	477
12:15	54	2	1	57	232	57	12	0	69	260	126	492
12:30	59	1	3	63	231	59	8	2	69	265	132	496
12:45	74	2	2	78	256	58	8	2	68	265	146	521
13:00	54	5	3	62	260	64	11	5	80	286	142	546
13:15	61	5	1	67	270	60	5	2	67	284	134	554
13:30	72	1	3	76	283	74	6	2	82	297	158	580
13:45	61	4	0	65	270	63	5	2	70	299	135	569
14:00	79	2	1	82	290	66	8	2	76	295	158	585
14:15	78	1	1	80	303	62	6	1	69	297	149	600
14:30	64	3	2	69	296	64	14	0	78	293	147	589
14:45	69	0	1	70	301	65	14	3	82	305	152	606
15:00	59	1	1	61	280	84	14	4	102	331	163	611
15:15	73	1	1	75	275	67	9	2	78	340	153	615
15:30	69	3	2	74	280	88	9	0	97	359	171	639
15:45	65	3	2	70	280	84	7	1	92	369	162	649
16:00	72	6	3	81	300	74	11	0	85	352	166	652
16:15	72	2	1	75	300	67	11	0	78	352	153	652
16:30	85	1	2	88	314	97	11	2	110	365	198	679
16:45	67	5	4	76	320	100	14	0	114	387	190	707
17:00	100	1	2	103	342	95	7	1	103	405	206	747
17:15	87	4	2	93	360	99	19	2	120	447	213	807
17:30	75	1	1	77	349	95	12	1	108	445	185	794
17:45	68	3	0	71	344	99	14	1	114	445	185	789
18:00	58	0	2	60	301	116	11	1	128	470	188	771
18:15	53	2	3	58	266	97	18	4	119	469	177	735
18:30	65	1	2	68	257	88	12	0	100	461	168	718
18:45	66	0	1	67	253	79	9	1	89	436	156	689
19:00	41	0	0	41	234	90	1	1	92	400	133	634
19:15	47	0	1	48	224	58	4	0	62	343	110	567
19:30	44	0	0	44	200	54	5	1	60	303	104	503
19:45	32	0	1	33	166	57	7	0	64	278	97	444
20:00	38	2	1	41	166	37	7	1	45	231	86	397
20:15	47	1	0	48	166	52	3	0	55	224	103	390
20:30	38	0	0	38	160	38	3	0	41	205	79	365
20:45	45	1	0	46	173	44	2	0	46	187	92	360
21:00	46	3	0	49	181	40	1	0	41	183	90	364
21:15	38	0	1	39	172	36	6	0	42	170	81	342
21:30	31	0	0	31	165	30	2	1	33	162	64	327
21:45	29	1	0	30	149	26	1	0	27	143	57	292
22:00	19	0	0	19	119	32	6	0	38	140	57	259
22:15	23	0	0	23	103	29	2	0	31	129	54	232
22:30	24	1	0	25	97	19	3	0	22	118	47	215
22:45	19	1	1	21	88	32	3	0	35	126	56	214
23:00	17	0	0	17	86	21	3	0	24	112	41	198
23:15	7	0	0	7	70	12	0	0	12	93	19	163
23:30	12	0	0	12	57	15	0	0	15	86	27	143
23:45	11	0	0	11	47	8	1	0	9	60	20	107
Subtotal	4320	140	89			4042	549	77				
% of Approach Total	94.97%	3.08%	1.96%			86.59%	11.76%	1.65%				
Approach Total	4549					4668						
Directional Distribution:	49%					51%						
ADT:					9217							
Adj. Approach Totals:	4100					4200						
AADT <sup>4</sup> :					8300							

<sup>1</sup> Value is the sum of Cars and 2 Axle Long Vehicles from raw tube count.

<sup>2</sup> Value is the sum of Buses, 2 Axle 6 Tire, 3 Axle Single, and 4 Axle Single vehicles counted.

<sup>3</sup> Value is the sum of the remaining double and multi axle counted vehicles.

<sup>4</sup> Value was provided by SCDOT.

Location: US 76 NORTH OF ALLIGATOR ROAD - B  
 Count Date: 5/21/2013  
 Roadway Funct. Class:  
 Day of the Week: Tuesday

Peak Hours: AM 7:15-8:15  
 PM 16:45-17:45

Time	Northbound					Southbound					Two Way	
	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Interval	Hourly
0:00	4	0	0	4		6	0	0	6		10	
0:15	5	1	0	6		12	0	0	12		18	
0:30	3	0	0	3		6	0	0	6		9	
0:45	6	0	0	6	19	7	0	0	7	31	13	50
1:00	3	0	0	3	18	6	0	0	6	31	9	49
1:15	2	0	0	2	14	2	0	0	2	21	4	35
1:30	0	1	0	1	12	1	0	0	1	16	2	28
1:45	0	0	0	0	6	3	0	0	3	12	3	18
2:00	1	0	0	1	4	6	0	0	6	12	7	16
2:15	5	1	0	6	8	6	0	0	6	16	12	24
2:30	2	0	0	2	9	3	0	0	3	18	5	27
2:45	0	0	0	0	9	4	0	0	4	19	4	28
3:00	1	0	0	1	9	1	0	0	1	14	2	23
3:15	2	0	0	2	5	3	0	0	3	11	5	16
3:30	2	2	0	4	7	1	0	0	1	9	5	16
3:45	3	0	1	4	11	6	0	0	6	11	10	22
4:00	5	0	0	5	15	3	0	0	3	13	8	28
4:15	6	1	0	7	20	4	0	0	4	14	11	34
4:30	6	0	0	6	22	1	0	0	1	14	7	36
4:45	5	0	0	5	23	3	0	0	3	11	8	34
5:00	16	1	0	17	35	3	1	0	4	12	21	47
5:15	16	3	0	19	47	5	0	0	5	13	24	60
5:30	26	3	0	29	70	9	1	1	11	23	40	93
5:45	18	2	0	20	85	17	0	0	17	37	37	122
6:00	32	2	0	34	102	12	0	0	12	45	46	147
6:15	45	0	0	45	128	14	4	0	18	58	63	186
6:30	67	5	1	73	172	18	1	0	19	66	92	238
6:45	53	3	0	56	208	36	0	0	36	85	92	293
7:00	65	5	1	71	245	34	1	0	35	108	106	353
7:15	68	5	1	74	274	33	5	0	38	128	112	402
7:30	97	4	0	101	302	36	1	1	38	147	139	449
7:45	101	6	0	107	353	40	1	1	42	153	149	506
8:00	66	4	1	71	353	44	0	0	44	162	115	515
8:15	64	5	0	69	348	36	1	2	39	163	108	511
8:30	41	2	2	45	292	38	0	0	38	163	83	455
8:45	53	2	2	57	242	41	2	1	44	165	101	407
9:00	63	5	0	68	239	39	0	1	40	161	108	400
9:15	49	2	2	53	223	35	0	1	36	158	89	381
9:30	48	5	0	53	231	42	3	2	45	165	98	396
9:45	51	8	2	61	235	36	2	0	40	161	101	396
10:00	52	6	1	59	226	50	5	0	55	176	114	402
10:15	47	6	2	55	228	36	1	0	37	177	92	405
10:30	50	7	1	58	233	36	6	2	44	176	102	409
10:45	51	6	0	57	229	59	2	1	62	198	119	427
11:00	53	5	1	59	229	29	3	0	32	175	91	404
11:15	40	7	2	49	223	47	2	1	50	188	99	411
11:30	49	4	1	54	219	46	2	2	50	194	104	413
11:45	47	4	2	53	215	51	3	0	54	186	107	401
12:00	44	4	0	48	204	50	2	0	52	206	100	410
12:15	38	8	0	46	201	54	5	0	59	215	105	416
12:30	41	3	1	45	192	59	2	2	63	228	108	420
12:45	66	3	0	69	208	61	2	0	63	237	132	445
13:00	44	3	2	49	209	64	2	0	66	251	115	460
13:15	43	5	0	48	211	51	0	2	53	245	101	456
13:30	58	3	2	63	229	71	2	0	73	255	136	484
13:45	48	6	0	54	214	55	1	1	57	249	111	463
14:00	57	11	0	68	233	65	1	2	68	251	136	484
14:15	67	4	1	72	257	62	1	0	63	261	135	518
14:30	51	3	1	55	249	61	1	0	62	250	117	499
14:45	61	6	0	67	262	62	6	1	69	262	136	524
15:00	49	4	1	54	248	86	0	2	88	282	142	530
15:15	58	4	1	63	239	67	1	0	68	287	131	526
15:30	52	9	1	62	246	75	3	1	79	304	141	550
15:45	47	8	2	57	236	80	0	0	80	315	137	551
16:00	48	6	1	55	237	76	2	0	78	305	133	542
16:15	61	4	1	66	240	66	0	1	67	304	133	544
16:30	59	2	1	62	240	87	3	2	92	317	154	557
16:45	52	4	2	58	241	95	4	0	99	336	157	577
17:00	77	5	0	82	268	82	1	0	83	341	165	609
17:15	55	3	0	58	260	91	5	0	96	370	154	630
17:30	60	8	0	68	266	86	3	0	89	367	157	633
17:45	50	3	0	53	261	96	4	0	100	368	153	629
18:00	44	2	0	46	225	111	1	0	112	397	158	622
18:15	34	6	1	41	208	101	2	1	104	405	145	613
18:30	43	3	0	46	186	85	1	0	86	402	132	588
18:45	43	3	0	46	179	76	2	1	79	381	125	560
19:00	31	3	0	34	167	86	0	0	86	355	120	522
19:15	36	2	0	38	164	48	0	0	48	299	86	463
19:30	33	1	0	34	152	50	1	1	52	265	86	417
19:45	25	0	0	25	131	51	3	1	55	241	80	372
20:00	30	3	1	34	131	32	1	0	33	188	67	319
20:15	31	2	0	33	126	47	0	0	47	187	80	313
20:30	25	0	0	25	117	37	1	0	38	173	63	290
20:45	27	3	0	30	122	40	0	0	40	158	70	280
21:00	38	4	0	42	130	38	0	0	38	163	80	293
21:15	28	0	1	29	126	35	0	0	35	151	64	277
21:30	25	1	0	26	127	29	0	0	29	142	55	269
21:45	23	1	0	24	121	19	1	0	20	122	44	243
22:00	12	1	0	13	92	27	0	0	27	111	40	203
22:15	21	1	0	22	85	24	1	0	25	101	47	186
22:30	17	2	0	19	78	19	0	0	19	91	38	169
22:45	15	0	0	15	68	27	1	1	28	99	43	168
23:00	14	0	0	14	70	22	0	1	23	95	37	165
23:15	6	0	0	6	54	0	0	0	11	81	17	135
23:30	5	1	0	6	41	11	0	0	11	73	17	114
23:45	9	0	0	9	35	6	0	0	6	51	15	86
Subtotal	3390	281	43			3740	113	35				
% of Approach Total	91.28%	7.57%	1.16%			96.19%	2.91%	0.90%				
Approach Total	3714					3888						
Directional Distribution:	49%					51%						
ADT:				7602								
Adj. Approach Totals:	3350						3500					
AADT <sup>4</sup> :				6900								

<sup>1</sup> Value is the sum of Cars and 2 Axle Long Vehicles from raw tube count.

<sup>2</sup> Value is the sum of Buses and 2 Axle 6 Tire vehicles counted.

<sup>3</sup> Value is the sum of the remaining eight (8) vehicle categories counted, all with 3 axles or greater.

<sup>4</sup> Value was provided by SCDOT.

Location: ALLIGATOR ROAD EAST OF TWIN CHURCH ROAD - C  
 Count Date: 5/21/2013  
 Roadway Funct. Class:  
 Day of the Week: Tuesday

Peak Hours: AM 7:15-8:15  
 PM 17:00-18:00

Time	Eastbound					Westbound					Two Way	
	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Interval	Hourly
0:00	1	0	0	1		5	0	0	5			6
0:15	3	0	0	3		4	0	0	4			7
0:30	1	0	0	1		5	0	0	5			6
0:45	2	0	0	2	7	5	0	0	5	19	7	26
1:00	0	0	0	0	6	3	0	0	3	17	3	23
1:15	0	0	0	0	3	3	0	0	3	16	3	19
1:30	4	0	0	4	6	1	0	0	1	12	5	18
1:45	0	0	0	0	4	3	0	0	3	10	3	14
2:00	1	1	0	2	6	1	0	0	1	8	3	14
2:15	0	0	0	0	6	1	0	0	1	6	1	12
2:30	0	0	0	0	2	1	0	0	1	6	1	8
2:45	0	0	0	0	2	1	0	0	1	4	1	6
3:00	1	0	0	1	1	2	0	0	2	5	3	6
3:15	1	0	0	1	2	1	0	0	1	5	2	7
3:30	1	1	0	2	4	3	0	0	3	7	5	11
3:45	1	0	0	1	5	1	1	0	2	8	3	13
4:00	0	0	0	0	4	4	0	0	4	10	4	14
4:15	1	0	0	1	4	1	0	2	3	12	4	16
4:30	1	0	0	1	3	1	0	0	1	10	2	13
4:45	4	1	0	5	7	4	0	0	4	12	9	19
5:00	6	0	0	6	13	10	0	0	10	18	16	31
5:15	7	0	0	7	19	12	0	1	13	28	20	47
5:30	4	0	0	4	22	17	1	0	18	45	22	67
5:45	9	1	0	10	27	29	0	1	30	71	40	98
6:00	12	0	0	12	33	30	1	1	32	93	44	126
6:15	18	0	0	18	44	24	0	1	25	105	43	149
6:30	27	1	2	30	70	29	4	1	34	121	64	191
6:45	24	2	0	26	86	40	3	2	45	136	71	222
7:00	32	2	0	34	108	30	0	1	31	135	65	243
7:15	41	3	3	47	137	38	2	3	43	153	90	290
7:30	39	0	1	40	147	33	4	2	39	158	79	305
7:45	42	1	0	43	164	45	1	3	49	162	92	326
8:00	34	0	0	34	164	37	2	2	41	172	75	336
8:15	25	3	0	28	145	25	1	0	26	155	54	300
8:30	22	2	0	24	129	20	3	1	24	140	48	269
8:45	21	2	0	23	109	26	2	0	28	119	51	228
9:00	20	3	0	23	98	23	2	0	25	103	48	201
9:15	15	1	0	16	86	19	4	0	23	100	39	186
9:30	16	2	0	18	80	19	2	0	21	97	39	177
9:45	22	1	1	24	81	20	1	0	21	90	45	171
10:00	25	0	0	25	83	18	2	0	20	85	45	168
10:15	23	3	1	27	94	21	4	2	27	89	54	183
10:30	20	4	1	25	101	19	1	0	20	88	45	189
10:45	17	2	0	19	96	18	3	0	21	88	40	184
11:00	23	2	2	27	98	14	0	0	14	82	41	180
11:15	21	2	1	24	95	17	0	0	17	72	41	167
11:30	22	3	1	26	96	21	2	0	23	75	49	171
11:45	13	0	0	13	90	20	4	0	24	78	37	168
12:00	20	0	2	22	85	23	0	0	23	87	45	172
12:15	24	2	0	26	87	21	0	0	21	91	47	178
12:30	19	1	2	22	83	17	1	1	19	87	41	170
12:45	20	2	2	24	94	21	2	1	24	87	48	181
13:00	20	2	1	23	95	19	3	1	23	87	46	182
13:15	28	0	1	29	98	22	0	1	23	89	52	187
13:30	35	2	3	40	116	11	1	0	12	82	52	198
13:45	29	3	0	32	124	22	0	1	23	81	55	205
14:00	22	1	0	23	124	19	3	0	22	80	45	204
14:15	23	1	0	24	119	33	1	1	35	92	59	211
14:30	22	3	2	27	106	39	2	1	42	122	69	228
14:45	18	0	2	20	94	34	4	0	38	137	58	231
15:00	29	1	0	30	101	33	3	1	37	152	67	253
15:15	47	2	0	49	126	31	1	0	32	149	81	275
15:30	28	3	1	32	131	37	1	1	39	146	71	277
15:45	31	1	2	34	145	35	1	0	36	144	70	289
16:00	36	6	1	43	158	30	3	0	33	140	76	298
16:15	32	3	0	35	144	33	5	1	39	147	74	291
16:30	36	3	1	40	152	37	1	0	38	146	78	298
16:45	40	3	3	46	164	37	2	0	39	149	85	313
17:00	33	3	1	37	158	49	1	0	50	166	87	324
17:15	56	3	2	61	184	56	0	1	57	184	118	368
17:30	43	4	1	48	192	45	3	1	49	195	97	387
17:45	44	1	1	46	192	40	1	0	41	197	87	389
18:00	31	0	2	33	188	41	1	0	42	189	75	377
18:15	29	0	2	31	158	42	2	0	44	176	75	334
18:30	22	2	3	27	137	35	1	1	37	164	64	301
18:45	29	4	1	34	125	32	1	0	33	156	67	281
19:00	29	0	0	29	121	24	2	1	27	141	56	262
19:15	23	0	0	23	113	30	1	0	31	128	54	241
19:30	28	1	0	29	115	15	1	0	16	107	45	222
19:45	20	0	0	20	101	23	0	0	23	97	43	198
20:00	18	1	1	20	92	22	0	0	22	92	42	184
20:15	29	0	0	29	98	18	1	0	19	80	48	178
20:30	19	1	0	20	89	15	0	0	15	79	35	168
20:45	18	0	0	18	87	14	0	0	14	70	32	157
21:00	23	1	0	24	91	19	0	0	19	67	43	158
21:15	15	1	0	16	78	14	0	0	14	62	30	140
21:30	12	0	0	12	70	15	0	0	15	62	27	132
21:45	20	0	0	20	72	22	0	0	22	70	42	142
22:00	13	0	0	13	61	19	1	0	20	71	33	132
22:15	9	0	0	9	54	13	0	0	13	70	22	124
22:30	10	0	0	10	52	12	0	0	12	67	22	119
22:45	10	0	1	11	43	17	0	0	17	62	28	105
23:00	8	0	0	8	38	6	0	0	6	48	14	86
23:15	7	0	0	7	36	4	0	0	5	40	12	76
23:30	6	0	0	6	32	7	0	0	7	35	13	67
23:45	6	0	0	6	27	7	0	0	7	25	13	52
<b>Subtotal</b>	<b>1791</b>	<b>104</b>	<b>51</b>			<b>1934</b>	<b>100</b>	<b>38</b>				
<b>% of Approach Total</b>	<b>92.03%</b>	<b>5.34%</b>	<b>2.62%</b>			<b>93.34%</b>	<b>4.83%</b>	<b>1.83%</b>				
<b>Approach Total</b>	<b>1946</b>					<b>2072</b>						
<b>Directional Distribution:</b>	<b>48%</b>					<b>52%</b>						
<b>ADT:</b>						<b>4018</b>						
<b>Adj. Approach Totals:</b>	<b>1800</b>					<b>1925</b>						
<b>AADT<sup>4</sup>:</b>						<b>3800</b>						

<sup>1</sup> Value is the sum of Cars and 2 Axle Long Vehicles from raw tube count.  
<sup>2</sup> Value is the sum of Buses and 2 Axle 6 Tire vehicles counted.  
<sup>3</sup> Value is the sum of the remaining eight (8) vehicle categories counted, all with 3 axles or greater.  
<sup>4</sup> Value was provided by SCDOT.

Location: ALLIGATOR ROAD EAST OF ASHFORD ROAD - D  
 Count Date: 5/21/2013  
 Roadway Funct. Class:  
 Day of the Week: Tuesday

Peak Hours: AM 6:15-7:15  
 PM 16:00-17:00

Time	Eastbound					Westbound					Two Way	
	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Interval	Hourly
0:00	3	0	0	3		3	0	0	3			6
0:15	9	0	0	9		4	1	0	5			14
0:30	6	0	0	6		2	0	0	2			8
0:45	4	0	0	4	22	2	0	1	3	13	7	35
1:00	0	1	0	1	20	0	0	0	0	10	1	30
1:15	4	0	0	4	15	2	0	0	2	7	6	22
1:30	3	0	0	3	12	2	0	0	2	7	5	19
1:45	0	0	0	0	8	1	0	0	1	5	1	13
2:00	2	0	0	2	9	7	1	0	8	13	10	22
2:15	2	0	0	2	7	2	0	0	2	13	4	20
2:30	3	1	1	5	9	3	0	0	3	14	8	23
2:45	2	0	0	2	11	6	0	0	6	19	8	30
3:00	4	0	0	4	13	5	0	0	5	16	9	29
3:15	3	0	0	3	14	2	0	1	3	17	6	31
3:30	5	0	0	5	14	3	0	0	3	17	8	31
3:45	6	1	0	7	19	10	1	0	11	22	18	41
4:00	6	0	0	6	21	5	3	0	8	25	14	46
4:15	12	0	0	12	30	7	6	0	13	35	25	65
4:30	9	0	1	10	35	16	8	0	24	56	34	91
4:45	30	1	0	31	59	30	5	0	35	80	66	139
5:00	19	3	0	22	75	32	8	0	40	112	62	187
5:15	39	2	0	41	104	32	4	0	36	135	77	239
5:30	58	0	1	59	153	34	5	1	40	151	99	304
5:45	65	1	1	67	189	55	7	0	62	178	129	367
6:00	81	2	0	83	250	44	8	1	53	191	136	441
6:15	111	4	1	116	325	97	11	1	109	264	225	589
6:30	121	2	2	125	391	96	10	1	107	331	232	722
6:45	123	2	0	125	449	122	16	1	139	408	264	857
7:00	104	0	2	106	472	65	8	0	73	428	179	900
7:15	88	4	0	92	448	76	9	2	87	406	179	854
7:30	40	3	0	43	366	67	13	2	82	381	125	747
7:45	51	4	1	56	297	43	8	0	51	293	107	590
8:00	44	1	0	45	236	38	9	0	47	267	92	503
8:15	33	4	0	37	181	31	9	0	40	220	77	401
8:30	53	2	0	55	193	39	6	1	46	184	101	377
8:45	38	2	0	40	177	25	6	1	32	165	72	342
9:00	38	2	1	41	173	32	9	0	41	159	82	332
9:15	44	1	2	47	183	40	14	0	54	173	101	356
9:30	45	2	0	47	175	33	8	0	41	168	88	343
9:45	45	4	1	50	185	28	9	1	38	174	88	359
10:00	38	5	2	45	189	44	10	0	54	187	99	376
10:15	52	3	2	57	199	31	8	2	41	174	98	373
10:30	36	1	2	39	191	42	7	1	50	183	89	374
10:45	46	2	0	48	189	44	7	2	53	198	101	387
11:00	29	3	0	32	176	46	8	0	54	198	86	374
11:15	49	2	1	52	171	43	10	1	54	211	106	382
11:30	46	4	1	51	183	43	7	2	52	213	103	396
11:45	52	0	1	53	188	36	16	1	53	213	106	401
12:00	44	0	2	46	202	34	9	2	45	204	91	406
12:15	41	1	1	43	193	51	12	1	64	214	107	407
12:30	50	4	1	55	197	37	10	0	47	209	102	406
12:45	44	4	4	52	196	41	11	2	54	210	106	406
13:00	44	3	0	47	197	45	11	0	56	221	103	418
13:15	77	3	1	81	235	69	7	1	77	234	158	469
13:30	61	3	0	64	244	67	13	2	82	269	146	513
13:45	59	1	2	62	254	64	13	0	77	292	139	546
14:00	68	3	0	71	278	54	11	1	66	302	137	580
14:15	73	2	0	75	272	59	11	2	72	297	147	569
14:30	74	2	0	76	284	61	7	1	69	284	145	568
14:45	68	4	2	74	296	89	11	1	101	308	175	604
15:00	68	4	1	73	298	68	11	0	79	321	152	619
15:15	78	3	0	81	304	75	10	1	86	335	167	639
15:30	75	1	1	77	305	68	11	0	79	345	156	650
15:45	96	5	1	102	333	77	11	0	88	332	190	665
16:00	92	5	4	101	361	88	14	1	103	356	204	717
16:15	92	0	0	92	372	94	10	4	108	378	200	750
16:30	111	1	3	115	410	111	9	3	123	422	238	832
16:45	114	3	1	118	426	93	15	0	108	442	226	868
17:00	71	0	1	72	397	91	13	2	106	445	178	842
17:15	82	2	3	87	392	89	10	1	100	437	187	829
17:30	81	1	0	82	359	67	6	3	76	390	158	749
17:45	78	3	3	84	325	65	8	1	74	356	158	681
18:00	74	2	0	76	329	51	7	1	59	309	135	638
18:15	77	0	0	77	319	59	6	3	68	277	145	596
18:30	47	2	0	49	286	38	5	2	45	246	94	532
18:45	57	0	0	57	259	52	9	3	64	236	121	495
19:00	44	2	0	46	229	40	7	0	47	224	93	453
19:15	45	2	0	47	199	62	8	1	71	227	118	426
19:30	51	0	0	51	201	35	3	1	39	221	90	422
19:45	47	0	1	48	192	38	7	0	45	202	93	394
20:00	48	0	0	48	194	35	5	0	40	195	88	389
20:15	43	1	0	44	191	38	5	0	43	167	87	358
20:30	27	0	0	27	167	45	7	0	52	180	79	347
20:45	29	0	0	29	148	36	3	1	40	175	69	323
21:00	23	1	0	24	124	27	7	0	34	169	58	293
21:15	31	0	0	31	111	24	5	0	29	155	60	266
21:30	16	0	0	16	100	21	1	0	22	125	38	225
21:45	25	0	0	25	96	27	1	0	28	113	53	209
22:00	8	0	0	8	80	14	1	0	15	94	23	174
22:15	17	0	0	17	66	15	3	0	18	83	35	149
22:30	7	0	0	7	57	9	2	0	11	72	18	129
22:45	11	0	0	11	43	13	0	0	13	57	24	100
23:00	14	0	1	15	50	9	0	0	9	51	24	101
23:15	15	0	0	15	48	8	1	0	9	42	24	90
23:30	8	0	0	8	49	9	1	0	10	41	18	90
23:45	6	0	0	6	44	2	0	0	2	30	8	74
Subtotal	4212	137	56			3834	623	64				
% of Approach Total	95.62%	3.11%	1.27%			84.80%	13.78%	1.42%				
Approach Total	4405					4521						
Directional Distribution:	49%					51%						
ADT:	8926											
Adj. Approach Totals:	4100					4200						
AADT <sup>4</sup> :	8500											

<sup>1</sup> Value is the sum of Cars and 2 Axle Long Vehicles from raw tube count.  
<sup>2</sup> Value is the sum of Buses and 2 Axle 6 Tire vehicles counted.  
<sup>3</sup> Value is the sum of the remaining eight (8) vehicle categories counted, all with 3 axles or greater.  
<sup>4</sup> Value was provided by SCDOT.



Location: ALLIGATOR ROAD WEST OF JAMES TURNER ROAD - E  
 Count Date: 5/21/2013  
 Roadway Funct. Class:  
 Day of the Week: Tuesday

Peak Hours: AM 7:00-8:00  
 PM 17:00-18:00

Time	Eastbound					Westbound					Two Way	
	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Cars <sup>1</sup>	Trucks <sup>2</sup>	Comb. <sup>3</sup>	Interval	Hourly	Interval	Hourly
0:00	10	0	0	10	10	8	0	0	8	18		
0:15	8	0	0	8		11	0	0	11	19		
0:30	6	0	0	6		10	0	0	10	16		
0:45	2	0	0	2	26	3	0	0	3	32	5	58
1:00	6	0	0	6	22	4	0	0	4	28	10	50
1:15	7	0	0	7	21	5	0	0	5	22	12	43
1:30	7	0	0	7	22	2	0	1	3	15	10	37
1:45	3	0	0	3	23	1	0	0	1	13	4	36
2:00	1	1	0	2	19	2	0	0	2	11	4	30
2:15	4	0	0	4	16	1	0	0	1	7	5	23
2:30	2	1	0	3	12	1	0	0	1	5	4	17
2:45	1	0	0	1	10	6	0	0	6	10	7	20
3:00	1	0	0	1	9	4	0	0	4	12	5	21
3:15	3	0	0	3	8	3	0	0	3	14	6	22
3:30	2	1	1	4	9	6	0	0	6	19	10	28
3:45	4	0	0	4	12	3	0	0	3	16	7	28
4:00	3	0	0	3	14	3	0	1	4	16	7	30
4:15	5	1	0	6	17	2	0	0	2	15	8	32
4:30	4	0	0	4	17	7	0	0	7	16	11	33
4:45	7	1	0	8	21	8	1	0	9	22	17	43
5:00	10	0	0	10	28	10	0	0	10	28	20	56
5:15	11	0	0	11	33	12	2	0	14	40	25	73
5:30	18	1	1	20	49	29	1	0	30	63	50	112
5:45	26	1	0	27	68	34	3	0	37	91	64	159
6:00	26	4	0	30	88	34	2	0	36	117	66	205
6:15	47	3	0	50	127	33	0	0	33	136	83	263
6:30	52	1	1	54	161	45	3	2	50	156	104	317
6:45	62	3	1	66	200	54	1	0	55	174	121	374
7:00	99	4	0	103	273	77	5	3	85	223	188	496
7:15	115	6	1	122	345	91	0	0	91	281	213	626
7:30	116	3	2	121	412	144	2	2	148	379	269	791
7:45	142	5	0	147	493	88	2	4	94	418	241	911
8:00	96	3	3	102	492	79	1	0	80	413	182	905
8:15	65	3	2	70	440	75	3	2	80	402	150	842
8:30	44	4	0	48	367	61	3	0	64	318	112	685
8:45	46	4	0	50	270	55	3	0	58	282	108	552
9:00	50	1	0	51	219	39	2	0	41	243	92	462
9:15	31	4	0	35	184	43	4	0	47	210	82	394
9:30	50	4	0	54	190	38	1	1	40	186	94	376
9:45	41	3	1	45	185	36	5	0	41	169	86	354
10:00	44	1	1	46	180	46	6	0	52	180	98	360
10:15	43	2	1	46	191	47	1	0	48	181	94	372
10:30	39	3	0	42	179	35	0	0	35	176	77	355
10:45	47	7	1	55	189	37	4	1	42	177	97	366
11:00	40	8	2	50	193	59	1	0	60	185	110	378
11:15	51	3	1	55	202	33	2	0	35	172	90	374
11:30	38	3	2	43	203	55	3	1	59	196	102	399
11:45	44	4	0	48	196	53	3	0	56	210	104	406
12:00	30	3	2	35	181	53	2	1	56	206	91	387
12:15	52	7	0	59	185	49	0	1	50	221	109	406
12:30	51	2	1	54	196	48	4	1	53	215	107	411
12:45	43	2	1	46	194	51	4	1	56	215	102	409
13:00	50	1	3	54	213	46	4	0	50	209	104	422
13:15	38	2	1	41	195	57	4	1	62	221	103	416
13:30	59	6	1	66	207	44	4	0	48	216	114	423
13:45	42	7	2	51	212	42	8	1	51	211	102	423
14:00	54	3	1	58	216	72	3	1	76	237	134	453
14:15	74	6	1	81	256	81	1	1	83	258	164	514
14:30	52	6	1	59	249	77	3	2	82	292	141	541
14:45	60	5	2	67	265	74	2	1	77	318	144	583
15:00	61	3	0	64	271	67	2	0	69	311	133	582
15:15	72	2	0	74	264	69	3	2	72	300	146	564
15:30	87	3	0	90	295	94	2	2	98	316	188	611
15:45	55	6	1	62	290	90	3	0	93	322	155	622
16:00	73	4	2	79	305	87	1	1	89	352	168	657
16:15	75	4	0	79	310	83	1	0	84	364	163	674
16:30	95	4	1	100	320	78	0	0	78	344	178	664
16:45	77	3	4	84	342	93	5	0	98	349	182	691
17:00	94	7	2	103	366	116	3	1	120	380	223	746
17:15	99	3	1	103	390	109	1	4	114	410	217	800
17:30	96	3	1	100	390	112	2	0	114	446	214	836
17:45	118	5	1	124	430	110	6	1	117	465	241	895
18:00	78	3	1	82	409	108	1	0	109	454	191	863
18:15	77	2	1	80	386	95	0	1	96	436	176	822
18:30	88	1	3	92	378	83	0	0	83	405	175	783
18:45	70	2	1	73	327	70	0	0	70	358	143	685
19:00	68	1	0	69	314	81	0	0	81	330	150	644
19:15	58	1	0	59	293	80	2	0	82	316	141	609
19:30	46	3	0	49	250	56	0	2	58	291	107	541
19:45	58	0	0	58	235	60	0	1	61	282	119	517
20:00	44	3	0	47	213	59	0	1	60	261	107	474
20:15	48	2	1	51	205	44	1	0	45	224	96	429
20:30	47	2	0	49	205	46	0	0	46	212	95	417
20:45	46	0	1	47	194	53	0	0	53	204	100	398
21:00	48	2	0	50	197	32	1	0	33	177	83	374
21:15	60	1	1	62	208	46	0	0	46	178	108	386
21:30	30	0	0	30	189	44	0	0	44	176	74	365
21:45	38	1	0	39	181	30	1	1	32	155	71	336
22:00	24	1	0	25	156	36	0	0	36	158	61	314
22:15	29	1	0	30	124	22	0	0	22	134	52	258
22:30	17	0	0	17	111	30	0	0	30	120	47	231
22:45	20	0	0	20	92	16	0	0	16	104	36	196
23:00	11	0	1	12	79	19	0	0	19	87	31	166
23:15	12	0	0	12	61	11	0	0	11	76	23	137
23:30	11	0	0	11	55	14	1	0	15	61	26	116
23:45	9	0	0	9	44	13	0	0	13	58	22	102
<b>Subtotal</b>	<b>4223</b>	<b>216</b>	<b>60</b>			<b>4482</b>	<b>139</b>	<b>44</b>				
<b>% of Approach Total</b>	<b>93.87%</b>	<b>4.80%</b>	<b>1.33%</b>			<b>96.08%</b>	<b>2.98%</b>	<b>0.94%</b>				
<b>Approach Total</b>	<b>4499</b>					<b>4665</b>						
<b>Directional Distribution:</b>	<b>49%</b>					<b>51%</b>						
<b>ADT:</b>	<b>9164</b>											
<b>Adj. Approach Totals:</b>	<b>4050</b>					<b>4200</b>						
<b>AADT<sup>4</sup>:</b>	<b>7900</b>											

<sup>1</sup> Value is the sum of Cars and 2 Axle Long Vehicles from raw tube count.  
<sup>2</sup> Value is the sum of Buses and 2 Axle 6 Tire vehicles counted.  
<sup>3</sup> Value is the sum of the remaining eight (8) vehicle categories counted, all with 3 axles or greater.  
<sup>4</sup> Value was provided by SCDDOT.





## Barbian, Maddy

---

**From:** Goette, Matthew  
**Sent:** Wednesday, February 26, 2014 11:16 AM  
**To:** Barbian, Maddy  
**Subject:** FW: Raw Counts  
**Attachments:** Alligator 24 Hour Compiled Tube Count Data.xlsx

Maddy,

See below for the AADT for the count stations... For our purposes, we will get rid of/leave blank the calculation portion of the AADT spreadsheet and include a clean copy of this email in the Appendix for support of our values...

**Matthew Goette, PE**

**Project Engineer**

**ICA Engineering, Inc.**

750 Old Hickory Blvd., Building One Suite 200 Nashville, TN 37027

T 615.690.7113 | M 615.557.8507 | F 615.377.4745

[mgoette@icaeng.com](mailto:mgoette@icaeng.com) | [www.icaeng.com](http://www.icaeng.com)



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---

**From:** Stoneburner, Tammy H [<mailto:StoneburTH@scdot.org>]  
**Sent:** Wednesday, February 26, 2014 9:01 AM  
**To:** Goette, Matthew  
**Cc:** Eargle, Stacy A; Hance, Angela  
**Subject:** FW: Raw Counts

Good morning, Matthew,

Our calculated AADTs for the locations in your attached spreadsheet are as follows:

Location A: 8,300  
Location B: 6,900  
Location C: 3,800  
Location D: 8,500  
Location E: 7,900  
Location F: 23,000  
Location G: 21,000

Tammy H. Stoneburner  
SCDOT Road Data Services  
Traffic Counts  
803-737-1674

---

**From:** Eargle, Stacy A  
**Sent:** Tuesday, February 25, 2014 2:58 PM  
**To:** Stoneburner, Tammy H  
**Subject:** FW: Raw Counts

Tammy,  
Please calculate AADTs for the locations in the attached spreadsheet. Will forward the email with the map in a second.

Thanks,  
Stacy

---

**From:** Hance, Angela  
**Sent:** Tuesday, February 25, 2014 2:43 PM  
**To:** Eargle, Stacy A  
**Cc:** Hance, Angela  
**Subject:** FW: Raw Counts

Stacy,  
Attached is the raw data for the AADT calculations.  
Thanks,  
Angela

---

**From:** Goette, Matthew <[mgoette@icaeng.com](mailto:mgoette@icaeng.com)>  
**Sent:** Tuesday, February 25, 2014 2:00 PM  
**To:** Hance, Angela  
**Subject:** Raw Counts

Sent as per your request.

**Matthew Goette, PE**  
**Project Engineer**  
**ICA Engineering, Inc.**  
750 Old Hickory Blvd., Building One Suite 200 Nashville, TN 37027  
T 615.690.7113 | M 615.557.8507 | F 615.377.4745  
[mgoette@icaeng.com](mailto:mgoette@icaeng.com) | [www.icaeng.com](http://www.icaeng.com)



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# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: A  
 Station ID: A  
 US76 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	6	1	0	0	0	0	0	0	0	0	0	0	7
	00:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
	00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	00:45	0	2	3	0	0	0	0	0	0	0	0	0	0	5
	01:00	0	16	6	0	0	0	0	0	0	0	0	0	0	22
	01:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	01:30	1	2	1	0	0	0	0	0	0	0	0	0	0	4
	01:45	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	02:00	1	7	2	1	0	0	0	0	0	0	0	0	0	11
	02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	02:15	0	4	0	0	0	1	0	0	0	0	0	0	0	5
	02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	03:00	0	10	0	0	0	1	0	0	0	0	0	0	0	11
	03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	03:30	0	3	1	1	1	0	0	0	0	0	0	0	0	6
	03:45	0	1	1	0	0	0	0	0	1	0	0	0	0	3
	04:00	0	7	2	1	1	0	0	0	1	0	0	0	0	12
	04:15	0	2	3	0	0	0	0	0	0	0	0	0	0	5
	04:15	0	7	0	0	1	0	0	0	0	0	0	0	0	8
	04:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
	04:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
	05:00	0	23	4	0	1	0	0	0	0	0	0	0	0	28
	05:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
	05:15	0	16	7	0	1	0	0	0	0	0	0	0	0	24
	05:30	0	22	7	0	1	0	0	0	0	0	0	0	0	30
	05:45	0	18	5	0	2	0	0	0	0	0	0	0	0	25
	06:00	0	70	22	0	4	0	0	0	0	0	0	0	0	96
	06:00	0	30	12	0	0	0	0	0	0	0	0	0	0	42
	06:15	1	38	14	0	1	0	0	0	1	0	0	0	0	55
	06:30	0	65	18	0	2	0	0	0	1	0	0	0	0	86
	06:45	0	55	16	0	2	0	0	0	0	0	0	0	0	73
	07:00	1	188	60	0	5	0	0	0	2	0	0	0	0	256
	07:00	0	55	22	0	1	0	0	1	1	0	0	0	0	80
	07:15	0	69	20	0	0	0	0	0	2	0	0	0	0	91
	07:30	0	85	31	0	1	0	0	0	1	0	0	0	0	118
	07:45	0	86	22	0	4	0	0	1	0	0	0	0	0	113
	08:00	0	295	95	0	6	0	0	2	4	0	0	0	0	402
	08:00	0	64	18	0	1	0	0	1	1	0	0	0	0	85
	08:15	0	59	15	1	2	1	0	0	0	0	0	0	0	78
	08:30	1	39	16	1	0	0	0	0	1	0	0	0	0	58
	08:45	0	47	15	0	3	1	0	0	1	1	0	0	0	68
	09:00	1	209	64	2	6	2	0	1	3	1	0	0	0	289
	09:00	0	45	16	0	3	1	1	2	0	0	0	0	0	68
	09:15	1	44	18	1	3	0	0	1	0	0	0	0	0	68
	09:30	0	42	14	0	1	0	0	1	1	0	0	0	0	59
	09:45	0	47	18	0	3	0	0	0	3	0	0	0	0	71
	10:00	1	178	66	1	10	1	1	4	4	0	0	0	0	266
	10:00	0	40	22	0	1	1	0	0	0	0	0	0	0	64
	10:15	0	39	24	0	2	1	0	2	2	0	0	0	0	70
	10:30	1	52	9	0	7	0	0	1	1	0	0	0	0	71
	10:45	1	47	17	0	3	0	0	0	1	0	0	0	0	69
	11:00	2	178	72	0	13	2	0	3	4	0	0	0	0	274
	11:00	0	40	23	1	1	1	1	0	1	0	0	0	0	68
	11:15	0	35	16	0	1	1	0	1	2	0	0	0	0	56
	11:30	0	45	16	2	0	0	0	0	1	0	0	0	0	64
	11:45	0	32	15	1	2	0	0	3	0	0	0	0	0	53
	Total	6	1333	463	9	50	8	2	14	22	1	0	0	0	1908
	Percent	0.3%	69.9%	24.3%	0.5%	2.6%	0.4%	0.1%	0.7%	1.2%	0.1%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: A  
 Station ID: A  
 US76 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	40	17	0	1	0	0	0	0	0	0	0	0	58
12:15	0	31	23	0	2	0	0	0	1	0	0	0	0	57
12:30	0	46	13	0	1	0	0	2	1	0	0	0	0	63
12:45	0	57	17	0	2	0	0	0	2	0	0	0	0	78
13:00	0	174	70	0	6	0	0	2	4	0	0	0	0	256
13:00	1	37	17	0	2	2	1	3	0	0	0	0	0	63
13:15	0	42	19	0	4	1	0	1	0	0	0	0	0	67
13:30	0	54	18	0	1	0	0	1	2	0	0	0	0	76
13:45	0	49	12	0	2	2	0	0	0	0	0	0	0	65
14:00	1	182	66	0	9	5	1	5	2	0	0	0	0	271
14:00	1	56	23	0	2	0	0	0	1	0	0	0	0	83
14:15	1	57	21	0	1	0	0	1	0	0	0	0	0	81
14:30	0	50	14	0	2	1	0	0	2	0	0	0	0	69
14:45	0	53	16	0	0	0	0	0	1	0	0	0	0	70
15:00	2	216	74	0	5	1	0	1	4	0	0	0	0	303
15:00	1	43	16	0	1	0	0	1	0	0	0	0	0	62
15:15	0	57	16	0	0	1	0	0	1	0	0	0	0	75
15:30	1	51	18	0	2	1	0	1	1	0	0	0	0	75
15:45	0	46	19	0	2	1	0	2	0	0	0	0	0	70
16:00	2	197	69	0	5	3	0	4	2	0	0	0	0	282
16:00	1	57	15	1	4	1	0	2	1	0	0	0	0	82
16:15	1	48	24	0	2	0	0	0	1	0	0	0	0	76
16:30	0	65	20	0	1	0	0	2	0	0	0	0	0	88
16:45	1	53	14	0	4	1	0	1	3	0	0	0	0	77
17:00	3	223	73	1	11	2	0	5	5	0	0	0	0	323
17:00	1	74	26	0	0	1	0	1	1	0	0	0	0	104
17:15	0	63	24	0	3	0	1	0	2	0	0	0	0	93
17:30	0	49	26	0	1	0	0	1	0	0	0	0	0	77
17:45	0	48	20	0	2	1	0	0	0	0	0	0	0	71
18:00	1	234	96	0	6	2	1	2	3	0	0	0	0	345
18:00	1	47	11	0	0	0	0	0	2	0	0	0	0	61
18:15	0	30	23	0	1	1	0	2	1	0	0	0	0	58
18:30	0	49	16	0	1	0	0	1	1	0	0	0	0	68
18:45	0	51	15	0	0	0	0	1	0	0	0	0	0	67
19:00	1	177	65	0	2	1	0	4	4	0	0	0	0	254
19:00	2	31	10	0	0	0	0	0	0	0	0	0	0	43
19:15	0	40	7	0	0	0	0	1	0	0	0	0	0	48
19:30	0	35	9	0	0	0	0	0	0	0	0	0	0	44
19:45	1	25	7	0	0	0	0	1	0	0	0	0	0	34
20:00	3	131	33	0	0	0	0	2	0	0	0	0	0	169
20:00	1	27	11	0	1	1	0	1	0	0	0	0	0	42
20:15	0	39	8	0	1	0	0	0	0	0	0	0	0	48
20:30	0	31	7	0	0	0	0	0	0	0	0	0	0	38
20:45	0	38	7	0	1	0	0	0	0	0	0	0	0	46
21:00	1	135	33	0	3	1	0	1	0	0	0	0	0	174
21:00	1	36	10	0	3	0	0	0	0	0	0	0	0	50
21:15	0	28	10	0	0	0	0	0	1	0	0	0	0	39
21:30	0	26	5	0	0	0	0	0	0	0	0	0	0	31
21:45	0	23	6	0	0	1	0	0	0	0	0	0	0	30
22:00	1	113	31	0	3	1	0	0	1	0	0	0	0	150
22:00	0	14	5	0	0	0	0	0	0	0	0	0	0	19
22:15	0	20	3	0	0	0	0	0	0	0	0	0	0	23
22:30	0	18	6	0	0	1	0	0	0	0	0	0	0	25
22:45	0	16	3	0	0	1	0	1	0	0	0	0	0	21
23:00	0	68	17	0	0	2	0	1	0	0	0	0	0	88
23:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
23:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
23:30	0	9	3	0	0	0	0	0	0	0	0	0	0	12
23:45	0	8	3	0	0	0	0	0	0	0	0	0	0	11
Total	15	1886	638	1	50	18	2	27	25	0	0	0	0	2662
Percent	0.6%	70.8%	24.0%	0.0%	1.9%	0.7%	0.1%	1.0%	0.9%	0.0%	0.0%	0.0%	0.0%	
Grand Total	21	3219	1101	10	100	26	4	41	47	1	0	0	0	4570
Percent	0.5%	70.4%	24.1%	0.2%	2.2%	0.6%	0.1%	0.9%	1.0%	0.0%	0.0%	0.0%	0.0%	

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SB

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05/21/13	0	5	2	0	1	0	0	0	0	0	0	0	0	8
00:15	0	9	4	0	0	0	0	0	0	0	0	0	0	13
00:30	0	5	3	0	1	0	0	0	0	0	0	0	0	9
00:45	0	4	3	0	0	0	0	0	0	0	0	0	0	7
01:00	0	23	12	0	2	0	0	0	0	0	0	0	0	37
01:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
01:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:45	0	0	2	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
02:15	0	10	7	0	0	0	0	0	0	0	0	0	0	17
02:30	0	2	2	0	1	0	0	0	0	0	0	0	0	5
02:45	0	3	4	0	0	0	0	1	0	0	0	0	0	8
03:00	0	0	3	0	0	0	0	0	0	0	0	0	0	3
03:15	0	0	2	0	2	0	0	0	0	0	0	0	0	4
03:30	0	5	11	0	3	0	0	1	0	0	0	0	0	20
03:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2
04:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
04:15	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:30	0	2	5	0	0	0	0	0	0	0	0	0	0	7
04:45	0	5	7	0	2	0	0	0	0	0	0	0	0	14
05:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
05:15	0	3	4	0	0	1	0	1	0	0	0	0	0	9
05:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2
05:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5
06:00	0	8	8	0	2	1	0	1	0	0	0	0	0	20
06:15	0	4	1	1	1	1	0	0	0	0	0	0	0	8
06:30	0	6	3	0	0	1	0	0	0	0	0	0	0	10
06:45	0	6	8	0	3	0	0	1	0	0	0	0	0	18
07:00	0	8	16	1	4	0	0	0	0	0	0	0	0	29
07:15	0	24	28	2	8	2	0	1	0	0	0	0	0	65
07:30	0	6	10	0	2	0	0	0	0	0	0	0	0	18
07:45	0	14	6	0	5	0	0	1	0	0	0	0	0	26
08:00	0	14	13	0	3	0	0	1	0	0	0	0	0	31
08:15	1	27	17	0	3	0	0	1	1	0	0	0	0	50
08:30	1	61	46	0	13	0	0	3	1	0	0	0	0	125
08:45	0	23	19	0	4	0	0	0	0	0	0	0	0	46
09:00	0	28	10	1	11	0	0	0	1	0	0	0	0	51
09:15	0	24	18	1	4	0	0	2	0	0	0	0	0	49
09:30	0	33	15	0	8	0	0	1	1	0	0	0	0	58
09:45	0	108	62	2	27	0	0	3	2	0	0	0	0	204
10:00	1	33	19	0	4	0	0	3	1	0	0	0	0	61
10:15	0	23	21	0	9	0	0	1	0	0	0	0	0	54
10:30	1	20	16	0	4	0	0	1	0	0	0	0	0	42
10:45	0	31	21	0	7	0	0	1	0	0	0	0	0	60
11:00	2	107	77	0	24	0	0	6	1	0	0	0	0	217
11:15	0	20	17	0	11	0	0	1	0	0	0	0	0	49
11:30	1	12	22	0	6	2	0	1	0	0	0	0	0	44
11:45	0	27	24	0	9	0	0	0	1	0	0	0	0	61
12:00	0	19	13	0	7	0	0	1	0	0	0	0	0	40
12:15	1	78	76	0	33	2	0	3	1	0	0	0	0	194
12:30	0	24	32	0	10	0	0	0	0	0	0	0	0	66
12:45	0	19	17	1	7	0	0	2	0	0	0	0	0	46
13:00	0	24	19	1	12	0	0	1	0	0	0	0	0	57
13:15	1	30	18	1	13	0	0	2	1	0	0	0	0	66
13:30	1	97	86	3	42	0	0	5	1	0	0	0	0	235
13:45	0	23	9	1	5	0	0	0	0	0	0	0	0	38
14:00	1	33	16	1	5	0	0	0	0	0	0	0	0	56
14:15	0	24	34	0	4	0	0	2	0	0	0	0	0	64
14:30	0	35	24	0	8	0	0	1	0	0	0	0	0	68
14:45	1	115	83	2	22	0	0	3	0	0	0	0	0	226
Total	6	641	503	9	178	5	0	26	6	0	0	0	0	1374
Percent	0.4%	46.7%	36.6%	0.7%	13.0%	0.4%	0.0%	1.9%	0.4%	0.0%	0.0%	0.0%	0.0%	



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: A  
 Station ID: A  
 US76 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	16	31	0	12	0	0	0	0	0	0	0	0	59
12:15	0	35	22	1	11	0	0	0	0	0	0	0	0	69
12:30	1	29	30	0	8	0	0	2	0	0	0	0	0	70
12:45	0	36	22	0	8	0	0	2	0	0	0	0	0	68
	1	116	105	1	39	0	0	4	0	0	0	0	0	266
13:00	0	37	27	1	10	0	0	4	1	0	0	0	0	80
13:15	1	38	22	0	5	0	0	1	1	0	0	0	0	68
13:30	0	44	30	1	5	0	0	2	0	0	0	0	0	82
13:45	0	37	26	0	5	0	0	2	0	0	0	0	0	70
	1	156	105	2	25	0	0	9	2	0	0	0	0	300
14:00	0	39	27	0	8	0	0	2	0	0	0	0	0	76
14:15	1	30	32	0	5	0	1	1	0	0	0	0	0	70
14:30	0	22	42	0	14	0	0	0	0	0	0	0	0	78
14:45	0	43	22	1	13	0	0	3	0	0	0	0	0	82
	1	134	123	1	40	0	1	6	0	0	0	0	0	306
15:00	1	45	39	0	14	0	0	3	1	0	0	0	0	103
15:15	1	35	32	1	8	0	0	2	0	0	0	0	0	79
15:30	1	47	41	1	8	0	0	0	0	0	0	0	0	98
15:45	0	48	36	0	7	0	0	1	0	0	0	0	0	92
	3	175	148	2	37	0	0	6	1	0	0	0	0	372
16:00	1	35	39	0	11	0	0	0	0	0	0	0	0	86
16:15	1	30	37	0	11	0	0	0	0	0	0	0	0	79
16:30	1	61	36	0	11	0	0	2	0	0	0	0	0	111
16:45	1	47	53	0	14	0	0	0	0	0	0	0	0	115
	4	173	165	0	47	0	0	2	0	0	0	0	0	391
17:00	0	55	40	0	7	0	0	1	0	0	0	0	0	103
17:15	0	57	42	1	18	0	0	1	1	0	0	0	0	120
17:30	0	44	51	0	12	0	0	1	0	0	0	0	0	108
17:45	1	47	52	0	14	0	0	1	0	0	0	0	0	115
	1	203	185	1	51	0	0	4	1	0	0	0	0	446
18:00	0	61	55	0	11	0	0	1	0	0	0	0	0	128
18:15	1	55	42	1	17	0	0	4	0	0	0	0	0	120
18:30	0	49	39	0	12	0	0	0	0	0	0	0	0	100
18:45	0	41	38	0	9	0	0	1	0	0	0	0	0	89
	1	206	174	1	49	0	0	6	0	0	0	0	0	437
19:00	2	56	34	0	1	0	0	1	0	0	0	0	0	94
19:15	0	31	27	0	4	0	0	0	0	0	0	0	0	62
19:30	0	30	24	0	5	0	0	1	0	0	0	0	0	60
19:45	2	34	23	1	6	0	0	0	0	0	0	0	0	66
	4	151	108	1	16	0	0	2	0	0	0	0	0	282
20:00	1	24	13	0	7	0	0	1	0	0	0	0	0	46
20:15	0	28	24	0	3	0	0	0	0	0	0	0	0	55
20:30	0	20	18	0	3	0	0	0	0	0	0	0	0	41
20:45	0	27	17	0	2	0	0	0	0	0	0	0	0	46
	1	99	72	0	15	0	0	1	0	0	0	0	0	188
21:00	0	23	17	0	1	0	0	0	0	0	0	0	0	41
21:15	0	20	16	0	6	0	0	0	0	0	0	0	0	42
21:30	0	18	12	0	2	0	0	1	0	0	0	0	0	33
21:45	0	16	10	1	0	0	0	0	0	0	0	0	0	27
	0	77	55	1	9	0	0	1	0	0	0	0	0	143
22:00	0	22	10	0	6	0	0	0	0	0	0	0	0	38
22:15	0	19	10	0	2	0	0	0	0	0	0	0	0	31
22:30	0	9	10	0	3	0	0	0	0	0	0	0	0	22
22:45	1	19	13	0	3	0	0	0	0	0	0	0	0	36
	1	69	43	0	14	0	0	0	0	0	0	0	0	127
23:00	0	9	12	0	3	0	0	0	0	0	0	0	0	24
23:15	0	8	4	0	0	0	0	0	0	0	0	0	0	12
23:30	0	6	9	0	0	0	0	0	0	0	0	0	0	15
23:45	0	5	3	0	1	0	0	0	0	0	0	0	0	9
	0	28	28	0	4	0	0	0	0	0	0	0	0	60
Total	18	1587	1311	10	346	0	1	41	4	0	0	0	0	3318
Percent	0.5%	47.8%	39.5%	0.3%	10.4%	0.0%	0.0%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
Grand Total	24	2228	1814	19	524	5	1	67	10	0	0	0	0	4692
Percent	0.5%	47.5%	38.7%	0.4%	11.2%	0.1%	0.0%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: B  
 Station ID: B  
 US76 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	00:15	0	3	2	0	1	0	0	0	0	0	0	0	0	6
	00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	00:45	0	2	4	0	0	0	0	0	0	0	0	0	0	6
	01:00	0	11	7	0	1	0	0	0	0	0	0	0	0	19
	01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	01:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	01:45	1	0	0	0	1	0	0	0	0	0	0	0	0	2
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:15	1	4	1	0	1	0	0	0	0	0	0	0	0	7
	02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:45	0	3	2	0	1	0	0	0	0	0	0	0	0	6
	03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	03:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	03:30	0	1	1	0	2	0	0	0	0	0	0	0	0	4
	03:45	0	2	1	0	0	0	0	1	0	0	0	0	0	4
	04:00	0	5	3	0	2	0	0	1	0	0	0	0	0	11
	04:15	0	2	3	0	0	0	0	0	0	0	0	0	0	5
	04:30	0	5	1	0	1	0	0	0	0	0	0	0	0	7
	04:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	05:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
	05:15	0	14	8	0	1	0	0	0	0	0	0	0	0	23
	05:30	0	12	4	0	1	0	0	0	0	0	0	0	0	17
	05:45	0	12	4	0	3	0	0	0	0	0	0	0	0	19
	06:00	0	19	7	0	3	0	0	0	0	0	0	0	0	29
	06:15	0	11	7	0	2	0	0	0	0	0	0	0	0	20
	06:30	0	54	22	0	9	0	0	0	0	0	0	0	0	85
	06:45	0	18	14	0	2	0	0	0	0	0	0	0	0	34
	07:00	0	29	16	0	0	0	0	0	0	0	0	0	0	45
	07:15	0	45	22	1	4	0	0	0	1	0	0	0	0	73
	07:30	1	37	16	0	3	0	0	0	0	0	0	0	0	57
	07:45	1	129	68	1	9	0	0	0	1	0	0	0	0	209
	08:00	0	47	18	0	5	0	0	0	1	0	0	0	0	71
	08:15	0	49	19	0	5	0	0	1	0	0	0	0	0	74
	08:30	0	68	29	0	4	0	0	0	0	0	0	0	0	101
	08:45	0	73	28	1	5	0	0	0	0	0	0	0	0	107
	09:00	0	237	94	1	19	0	0	1	1	0	0	0	0	353
	09:15	0	45	21	0	4	0	0	0	1	0	0	0	0	71
	09:30	0	44	20	1	3	1	0	0	0	0	0	0	0	69
	09:45	0	27	14	1	1	0	0	2	0	0	0	0	0	45
	10:00	0	36	17	0	2	0	0	0	2	0	0	0	0	57
	10:15	0	152	72	2	10	1	0	2	3	0	0	0	0	242
	10:30	0	43	20	1	4	0	0	0	0	0	0	0	0	68
	10:45	0	30	19	1	1	0	0	1	0	0	1	0	0	53
	11:00	0	36	12	0	5	0	0	0	0	0	0	0	0	53
	11:15	0	32	19	1	7	0	0	0	2	0	0	0	0	61
	11:30	0	141	70	3	17	0	0	1	2	0	1	0	0	235
	11:45	0	33	19	0	6	0	0	0	1	0	0	0	0	59
	12:00	0	27	20	1	5	0	0	2	0	0	0	0	0	55
	12:15	0	38	12	0	7	0	0	0	1	0	0	0	0	58
	12:30	0	36	15	0	6	0	0	0	0	0	0	0	0	57
	12:45	0	134	66	1	24	0	0	2	2	0	0	0	0	229
	13:00	0	31	22	1	4	0	0	1	0	0	0	0	0	59
	13:15	0	28	12	0	6	1	0	2	0	0	0	0	0	49
	13:30	0	37	12	1	3	0	0	1	0	0	0	0	0	54
	13:45	0	32	15	1	3	0	0	2	0	0	0	0	0	53
	14:00	0	128	61	3	16	1	0	6	0	0	0	0	0	215
Total		2	1014	475	11	110	2	0	13	9	0	1	0	0	1637
Percent		0.1%	61.9%	29.0%	0.7%	6.7%	0.1%	0.0%	0.8%	0.5%	0.0%	0.1%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: B  
 Station ID: B  
 US76 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	0	32	12	0	4	0	0	0	0	0	0	0	0	48
	12:15	0	19	19	0	8	0	0	0	0	0	0	0	0	46
	12:30	0	25	16	0	3	0	0	1	0	0	0	0	0	45
	12:45	0	45	21	0	3	0	0	0	0	0	0	0	0	69
	13:00	0	121	68	0	18	0	0	1	0	0	0	0	0	208
	13:15	1	29	15	0	2	1	0	1	0	0	0	0	1	50
	13:30	0	26	17	0	5	0	0	0	0	0	0	0	0	48
	13:45	0	42	16	0	3	0	0	2	0	0	0	0	0	63
	14:00	0	34	14	1	5	0	0	0	0	0	0	0	0	54
	14:15	1	131	62	1	15	1	0	3	0	0	0	0	1	215
	14:30	1	38	19	0	11	0	0	0	0	0	0	0	0	69
	14:45	0	46	21	0	4	0	0	1	0	0	0	0	0	72
	15:00	0	33	18	0	3	0	0	1	0	0	0	0	0	55
	15:15	1	45	16	0	6	0	0	0	0	0	0	0	0	68
	15:30	2	162	74	0	24	0	0	2	0	0	0	0	0	264
	15:45	1	29	20	0	4	0	0	1	0	0	0	0	0	55
	16:00	0	40	18	1	3	0	0	1	0	0	0	0	0	63
	16:15	0	36	16	0	9	0	0	1	0	0	0	0	0	62
	16:30	0	32	15	0	7	1	0	2	0	0	0	0	0	57
	16:45	1	137	69	1	23	1	0	5	0	0	0	0	0	237
	17:00	0	34	14	0	6	0	0	1	0	0	0	0	0	55
	17:15	0	39	22	0	4	0	0	0	1	0	0	0	0	66
	17:30	1	42	17	0	2	0	0	1	0	0	0	0	0	63
	17:45	1	39	13	0	4	0	0	2	0	0	0	0	0	59
	18:00	2	154	66	0	16	0	0	4	1	0	0	0	0	243
	18:15	1	54	23	0	5	0	0	0	0	0	0	0	0	83
	18:30	0	37	18	0	3	0	0	0	0	0	0	0	0	58
	18:45	0	44	16	0	8	0	0	0	0	0	0	0	0	68
	19:00	1	35	15	0	3	0	0	0	0	0	0	0	0	54
	19:15	2	170	72	0	19	0	0	0	0	0	0	0	0	263
	19:30	1	27	17	0	2	0	0	0	0	0	0	0	0	47
	19:45	1	21	13	1	5	0	0	1	0	0	0	0	0	42
	20:00	0	27	16	0	3	0	0	0	0	0	0	0	0	46
	20:15	0	34	9	0	3	0	0	0	0	0	0	0	0	46
	20:30	2	109	55	1	13	0	0	1	0	0	0	0	0	181
	20:45	3	22	9	0	2	1	0	0	0	0	0	0	0	37
	21:00	0	30	6	0	2	0	0	0	0	0	0	0	0	38
	21:15	1	26	7	0	1	0	0	0	0	0	0	0	0	35
	21:30	0	19	6	0	0	0	0	0	0	0	0	0	0	25
	21:45	4	97	28	0	5	1	0	0	0	0	0	0	0	135
	22:00	2	19	11	0	3	0	0	1	0	0	0	0	0	36
	22:15	0	23	8	0	2	0	0	0	0	0	0	0	0	33
	22:30	0	19	6	0	0	0	0	0	0	0	0	0	0	25
	22:45	0	20	7	0	3	0	0	0	0	0	0	0	0	30
	23:00	2	81	32	0	8	0	0	1	0	0	0	0	0	124
	23:15	0	28	10	0	4	0	0	0	0	0	0	0	0	42
	23:30	0	18	10	0	0	0	0	0	1	0	0	0	0	29
	23:45	1	20	5	0	1	0	0	0	0	0	0	0	0	27
	24:00	0	16	7	0	1	0	0	0	0	0	0	0	0	24
	24:15	1	82	32	0	6	0	0	0	1	0	0	0	0	122
	24:30	0	7	5	0	1	0	0	0	0	0	0	0	0	13
	24:45	0	19	2	0	1	0	0	0	0	0	0	0	0	22
	25:00	0	13	4	0	2	0	0	0	0	0	0	0	0	19
	25:15	0	12	3	0	0	0	0	0	0	0	0	0	0	15
	25:30	0	51	14	0	4	0	0	0	0	0	0	0	0	69
	25:45	0	11	3	0	0	0	0	0	0	0	0	0	0	14
	26:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
	26:15	0	5	0	0	1	0	0	0	0	0	0	0	0	6
	26:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9
	26:45	0	27	7	0	1	0	0	0	0	0	0	0	0	35
Total		17	1322	579	3	152	3	0	17	2	0	0	0	1	2096
Percent		0.8%	63.1%	27.6%	0.1%	7.3%	0.1%	0.0%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	
Grand Total		19	2336	1054	14	262	5	0	30	11	0	1	0	1	3733
Percent		0.5%	62.6%	28.2%	0.4%	7.0%	0.1%	0.0%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: B  
 Station ID: B  
 US76 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	4	2	0	0	0	0	0	0	0	0	0	0	6
00:15	0	9	3	0	0	0	0	0	0	0	0	0	0	12
00:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
00:45	0	5	2	0	0	0	0	0	0	0	0	0	0	7
01:00	0	23	8	0	0	0	0	0	0	0	0	0	0	31
01:15	1	5	1	0	0	0	0	0	0	0	0	0	0	7
01:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:15	1	10	2	0	0	0	0	0	0	0	0	0	0	13
02:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
02:45	0	3	3	0	0	0	0	0	0	0	0	0	0	6
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4
03:30	0	12	7	0	0	0	0	0	0	0	0	0	0	19
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
05:00	0	6	5	0	0	0	0	0	0	0	0	0	0	11
05:15	0	2	1	0	1	0	0	0	0	0	0	0	0	4
05:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:45	0	6	3	0	0	1	0	0	1	0	0	0	0	11
06:00	0	11	6	0	0	0	0	0	0	0	0	0	0	17
06:15	0	24	10	0	1	1	0	0	1	0	0	0	0	37
06:30	0	9	3	0	0	0	0	0	0	0	0	0	0	12
06:45	0	11	3	1	3	0	0	0	0	0	0	0	0	18
07:00	2	12	6	1	0	0	0	0	0	0	0	0	0	19
07:15	2	25	11	0	0	0	0	0	0	0	0	0	0	38
07:30	2	57	23	2	3	0	0	0	0	0	0	0	0	87
07:45	0	26	8	0	1	0	0	0	0	0	0	0	0	35
08:00	0	27	6	0	5	0	0	0	0	0	0	0	0	38
08:15	0	23	13	0	1	0	0	1	0	0	0	0	0	38
08:30	0	28	12	0	1	0	0	0	1	0	0	0	0	42
08:45	0	104	39	0	8	0	0	1	1	0	0	0	0	153
09:00	0	36	8	0	0	0	0	0	0	0	0	0	0	44
09:15	0	24	12	0	1	0	0	1	1	0	0	0	0	39
09:30	0	26	12	0	0	0	0	0	0	0	0	0	0	38
09:45	0	32	9	1	1	0	0	1	0	0	0	0	0	44
10:00	0	118	41	1	2	0	0	2	1	0	0	0	0	165
10:15	0	23	16	0	0	0	0	1	0	0	0	0	0	40
10:30	0	18	17	0	0	0	0	0	1	0	0	0	0	36
10:45	0	25	17	0	2	1	0	0	0	0	0	0	0	45
11:00	0	21	15	0	2	0	0	1	1	0	0	0	0	40
11:15	0	87	65	0	4	1	0	2	2	0	0	0	0	161
11:30	0	33	17	0	5	0	0	0	0	0	0	0	0	55
11:45	0	20	16	0	1	0	0	0	0	0	0	0	0	37
Total	3	687	319	6	36	5	0	10	6	0	0	0	0	1072
Percent	0.3%	64.1%	29.8%	0.6%	3.4%	0.5%	0.0%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: B  
Station ID: B  
US76 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	31	19	0	2	0	0	0	0	0	0	0	0	52
12:15	0	38	16	0	5	0	0	0	0	0	0	0	0	59
12:30	0	48	11	0	2	0	0	2	0	0	0	0	0	63
12:45	0	42	19	1	1	0	0	0	0	0	0	0	0	63
13:00	0	159	65	1	10	0	0	2	0	0	0	0	0	237
13:15	1	46	18	1	0	1	0	0	0	0	0	0	0	67
13:30	0	43	8	0	0	0	0	1	1	0	0	0	0	53
13:30	1	58	13	0	0	2	0	0	0	0	0	0	0	74
13:45	0	35	20	0	1	0	0	0	1	0	0	0	0	57
14:00	2	182	59	1	1	3	0	1	2	0	0	0	0	251
14:15	0	50	15	0	1	0	0	1	1	0	0	0	0	68
14:15	0	47	15	0	1	0	0	0	0	0	0	0	0	63
14:30	0	37	24	0	1	0	0	0	0	0	0	0	0	62
14:45	0	45	17	2	4	0	0	1	0	0	0	0	0	69
15:00	0	179	71	2	7	0	0	2	1	0	0	0	0	262
15:15	1	61	25	0	0	0	0	1	1	0	0	0	0	89
15:15	1	40	27	0	1	0	0	0	0	0	0	0	0	69
15:30	0	54	21	0	3	0	0	0	1	0	0	0	0	79
15:45	0	60	20	0	0	0	0	0	0	0	0	0	0	80
16:00	2	215	93	0	4	0	0	1	2	0	0	0	0	317
16:00	0	47	29	0	2	0	0	0	0	0	0	0	0	78
16:15	0	49	17	0	0	0	0	1	0	0	0	0	0	67
16:30	1	65	22	1	2	0	0	1	1	0	0	0	0	93
16:45	0	65	30	0	4	0	0	0	0	0	0	0	0	99
17:00	1	226	98	1	8	0	0	2	1	0	0	0	0	337
17:00	0	66	16	0	1	0	0	0	0	0	0	0	0	83
17:15	0	62	29	1	3	1	0	0	0	0	0	0	0	96
17:30	0	60	26	0	2	1	0	0	0	0	0	0	0	89
17:45	1	78	18	0	3	1	0	0	0	0	0	0	0	101
18:00	1	266	89	1	9	3	0	0	0	0	0	0	0	369
18:00	0	81	30	0	1	0	0	0	0	0	0	0	0	112
18:15	0	77	24	0	2	0	0	1	0	0	0	0	0	104
18:30	0	64	21	0	1	0	0	0	0	0	0	0	0	86
18:45	0	53	23	0	2	0	0	0	1	0	0	0	0	79
19:00	0	275	98	0	6	0	0	1	1	0	0	0	0	381
19:00	0	65	21	0	0	0	0	0	0	0	0	0	0	86
19:15	0	39	9	0	0	0	0	0	0	0	0	0	0	48
19:30	0	36	14	0	0	1	0	1	0	0	0	0	0	52
19:45	0	43	8	1	1	1	0	1	0	0	0	0	0	55
20:00	0	183	52	1	1	2	0	2	0	0	0	0	0	241
20:00	0	22	10	0	0	1	0	0	0	0	0	0	0	33
20:15	1	44	3	0	0	0	0	0	0	0	0	0	0	48
20:30	0	27	10	0	1	0	0	0	0	0	0	0	0	38
20:45	0	34	6	0	0	0	0	0	0	0	0	0	0	40
21:00	1	127	29	0	1	1	0	0	0	0	0	0	0	159
21:00	0	34	4	0	0	0	0	0	0	0	0	0	0	38
21:15	0	25	10	0	0	0	0	0	0	0	0	0	0	35
21:30	1	20	9	0	0	0	0	0	0	0	0	0	0	30
21:45	0	19	0	1	0	0	0	0	0	0	0	0	0	20
22:00	1	98	23	1	0	0	0	0	0	0	0	0	0	123
22:00	0	18	9	0	0	0	0	0	0	0	0	0	0	27
22:15	0	21	3	0	0	1	0	0	0	0	0	0	0	25
22:30	0	15	4	0	0	0	0	0	0	0	0	0	0	19
22:45	0	22	5	0	1	0	0	0	0	0	0	0	0	28
23:00	0	76	21	0	1	1	0	0	0	0	0	0	0	99
23:00	0	15	7	0	0	0	0	1	0	0	0	0	0	23
23:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11
23:30	0	8	3	0	0	0	0	0	0	0	0	0	0	11
23:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Total	8	2025	709	8	48	10	0	12	7	0	0	0	0	2827
Percent	0.3%	71.6%	25.1%	0.3%	1.7%	0.4%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	
Grand Total	11	2712	1028	14	84	15	0	22	13	0	0	0	0	3899
Percent	0.3%	69.6%	26.4%	0.4%	2.2%	0.4%	0.0%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: C  
 Station ID: C

ALIGATOR ROAD EAST OF TWIN CHURCH ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:15	0	1	0	1	0	0	0	0	0	0	0	0	0	2
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
05:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
05:30	0	5	1	0	1	0	0	0	0	0	0	0	0	6
05:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
06:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
06:15	0	7	2	0	1	0	0	0	0	0	0	0	0	10
06:30	0	21	5	0	1	0	0	0	0	0	0	0	0	27
06:45	0	10	2	0	0	0	0	0	0	0	0	0	0	12
07:00	0	14	4	0	0	0	0	0	0	0	0	0	0	18
07:15	1	22	5	1	0	0	0	0	2	0	0	0	0	31
07:30	0	20	4	0	2	0	0	0	0	0	0	0	0	26
07:45	1	66	15	1	2	0	0	0	2	0	0	0	0	87
08:00	0	25	7	0	1	1	0	0	0	0	0	0	0	34
08:15	1	34	7	0	2	1	0	1	2	0	0	0	0	48
08:30	0	31	8	0	0	0	0	0	0	0	0	0	1	40
08:45	0	34	8	0	0	1	0	0	0	0	0	0	0	43
09:00	1	124	30	0	3	3	0	1	2	0	0	0	1	165
09:15	0	31	3	0	0	0	0	0	0	0	0	0	0	34
09:30	0	19	6	0	3	0	0	0	0	0	0	0	0	28
09:45	0	15	7	0	2	0	0	0	0	0	0	0	0	24
10:00	0	16	5	1	1	0	0	0	0	0	0	0	0	23
10:15	0	81	21	1	6	0	0	0	0	0	0	0	0	109
10:30	0	11	9	1	1	0	1	0	0	0	0	0	0	23
10:45	0	9	6	0	1	0	0	0	0	0	0	0	0	16
11:00	0	11	5	1	1	0	0	0	0	0	0	0	0	18
11:15	0	20	2	0	0	1	0	1	0	0	0	0	0	24
11:30	0	51	22	2	3	1	1	1	0	0	0	0	0	81
11:45	0	16	9	0	0	0	0	0	0	0	0	0	0	25
Total	2	480	142	6	26	9	2	3	9	0	0	0	1	680
Percent	0.3%	70.6%	20.9%	0.9%	3.8%	1.3%	0.3%	0.4%	1.3%	0.0%	0.0%	0.0%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: C  
 Station ID: C

ALIGATOR ROAD EAST OF TWIN CHURCH ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	15	5	0	0	0	0	1	1	0	0	0	0	22
12:15	0	19	5	0	1	1	0	0	0	0	0	0	0	26
12:30	0	12	7	1	0	0	0	0	2	0	0	0	0	22
12:45	1	14	6	0	1	1	0	1	1	0	0	0	0	25
	1	60	23	1	2	2	0	2	4	0	0	0	0	95
13:00	0	17	3	0	2	0	0	0	1	0	0	0	0	23
13:15	0	25	3	0	0	0	0	0	1	0	0	0	0	29
13:30	0	27	8	0	1	1	0	0	3	0	0	0	0	40
13:45	0	24	5	0	2	1	0	0	0	0	0	0	0	32
	0	93	19	0	5	2	0	0	5	0	0	0	0	124
14:00	0	17	5	0	1	0	0	0	0	0	0	0	0	23
14:15	1	20	3	0	0	1	0	0	0	0	0	0	0	25
14:30	0	19	3	0	2	1	0	0	2	0	0	0	0	27
14:45	0	17	1	0	0	0	0	1	1	0	0	0	0	20
	1	73	12	0	3	2	0	1	3	0	0	0	0	95
15:00	0	25	4	0	0	1	0	0	0	0	0	0	0	30
15:15	0	33	14	1	1	0	0	0	0	0	0	0	0	49
15:30	0	16	12	0	2	1	0	0	1	0	0	0	0	32
15:45	0	25	6	0	1	0	0	1	1	0	0	0	0	34
	0	99	36	1	4	2	0	1	2	0	0	0	0	145
16:00	1	29	7	0	4	2	0	1	0	0	0	0	0	44
16:15	2	23	9	0	2	1	0	0	0	0	0	0	0	37
16:30	0	26	10	0	2	1	0	0	1	0	0	0	0	40
16:45	1	29	11	1	1	1	0	0	3	0	0	0	0	47
	4	107	37	1	9	5	0	1	4	0	0	0	0	168
17:00	0	23	10	1	2	0	0	0	1	0	0	0	0	37
17:15	0	42	14	0	3	0	0	1	1	0	0	0	0	61
17:30	0	29	14	0	3	0	1	0	1	0	0	0	0	48
17:45	0	32	12	0	1	0	0	0	1	0	0	0	0	46
	0	126	50	1	9	0	1	1	4	0	0	0	0	192
18:00	0	26	5	0	0	0	0	0	2	0	0	0	0	33
18:15	1	22	7	0	0	0	0	1	1	0	0	0	0	32
18:30	0	18	4	0	0	2	0	1	1	1	0	0	0	27
18:45	1	24	5	0	3	1	0	1	0	0	0	0	0	35
	2	90	21	0	3	3	0	3	4	1	0	0	0	127
19:00	0	21	8	0	0	0	0	0	0	0	0	0	0	29
19:15	0	21	2	0	0	0	0	0	0	0	0	0	0	23
19:30	0	22	6	0	1	0	0	0	0	0	0	0	0	29
19:45	0	16	4	0	0	0	0	0	0	0	0	0	0	20
	0	80	20	0	1	0	0	0	0	0	0	0	0	101
20:00	0	15	3	0	1	0	0	1	0	0	0	0	0	20
20:15	0	20	9	0	0	0	0	0	0	0	0	0	0	29
20:30	0	16	3	0	1	0	0	0	0	0	0	0	0	20
20:45	0	16	2	0	0	0	0	0	0	0	0	0	0	18
	0	67	17	0	2	0	0	1	0	0	0	0	0	87
21:00	0	18	5	0	1	0	0	0	0	0	0	0	0	24
21:15	0	13	2	0	1	0	0	0	0	0	0	0	0	16
21:30	0	11	1	0	0	0	0	0	0	0	0	0	0	12
21:45	0	18	2	0	0	0	0	0	0	0	0	0	0	20
	0	60	10	0	2	0	0	0	0	0	0	0	0	72
22:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
22:15	1	8	1	0	0	0	0	0	0	0	0	0	0	10
22:30	0	7	3	0	0	0	0	0	0	0	0	0	0	10
22:45	0	10	0	0	0	0	0	1	0	0	0	0	0	11
	1	36	6	0	0	0	0	1	0	0	0	0	0	44
23:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
23:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
23:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Total	9	915	254	4	40	16	1	11	26	1	0	0	0	1277
Percent	0.7%	71.7%	19.9%	0.3%	3.1%	1.3%	0.1%	0.9%	2.0%	0.1%	0.0%	0.0%	0.0%	
Grand Total	11	1395	396	10	66	25	3	14	35	1	0	0	1	1957
Percent	0.6%	71.3%	20.2%	0.5%	3.4%	1.3%	0.2%	0.7%	1.8%	0.1%	0.0%	0.0%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: C  
Station ID: C

ALIGATOR ROAD EAST OF TWIN CHURCH ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	00:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	00:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	00:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5
	01:00	0	15	4	0	0	0	0	0	0	0	0	0	0	19
	01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	01:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	02:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
	02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	03:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	03:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2
	04:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
	04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	04:15	0	1	0	0	0	0	0	0	2	0	0	0	0	3
	04:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	04:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	05:00	0	9	1	0	0	0	0	0	2	0	0	0	0	12
	05:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
	05:15	0	8	4	0	0	0	0	0	1	0	0	0	0	13
	05:30	0	10	7	0	0	1	0	0	0	0	0	0	0	18
	05:45	1	22	7	0	0	0	0	1	0	0	0	0	0	31
	06:00	1	48	20	0	0	1	0	1	1	0	0	0	0	72
	06:00	0	25	5	0	1	0	0	1	0	0	0	0	0	32
	06:15	0	19	5	0	0	0	0	1	0	0	0	0	0	25
	06:30	0	26	3	1	3	0	0	0	0	1	0	0	0	34
	06:45	1	33	7	1	1	1	0	0	2	0	0	0	0	46
	07:00	1	103	20	2	5	1	0	2	2	1	0	0	0	137
	07:00	1	27	3	0	0	0	0	1	0	0	0	0	0	32
	07:15	0	30	8	0	2	0	0	2	1	0	0	0	0	43
	07:30	0	30	3	0	4	0	0	1	1	0	0	0	0	39
	07:45	0	38	7	0	1	0	0	0	2	1	0	0	0	49
	08:00	1	125	21	0	7	0	0	4	4	1	0	0	0	163
	08:00	0	28	9	0	2	0	0	1	1	0	0	0	0	41
	08:15	0	19	6	0	1	0	0	0	0	0	0	0	0	26
	08:30	0	16	4	0	3	0	0	1	0	0	0	0	0	24
	08:45	0	17	9	0	2	0	0	0	0	0	0	0	0	28
	09:00	0	80	28	0	8	0	0	2	1	0	0	0	0	119
	09:00	0	16	7	0	2	0	0	0	0	0	0	0	0	25
	09:15	0	13	6	0	1	3	0	0	0	0	0	0	0	23
	09:30	0	13	6	0	2	0	0	0	0	0	0	0	0	21
	09:45	0	18	2	1	0	0	0	0	0	0	0	0	0	21
	10:00	0	60	21	1	5	3	0	0	0	0	0	0	0	90
	10:00	0	15	3	0	2	0	0	0	0	0	0	0	0	20
	10:15	0	16	5	1	1	2	0	2	0	0	0	0	0	27
	10:30	1	8	11	0	0	1	0	0	0	0	0	0	0	21
	10:45	0	14	4	0	2	1	0	0	0	0	0	0	0	21
	11:00	1	53	23	1	5	4	0	2	0	0	0	0	0	89
	11:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14
	11:15	0	10	7	0	0	0	0	0	0	0	0	0	0	17
	11:30	0	13	8	0	2	0	0	0	0	0	0	0	0	23
	11:45	0	16	4	0	3	1	0	0	0	0	0	0	0	24
	Total	4	560	164	4	36	10	0	11	10	2	0	0	0	801
	Percent	0.5%	69.9%	20.5%	0.5%	4.5%	1.2%	0.0%	1.4%	1.2%	0.2%	0.0%	0.0%	0.0%	



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: C  
 Station ID: C

ALIGATOR ROAD EAST OF TWIN CHURCH ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	0	16	7	0	0	0	0	0	0	0	0	0	0	23
	12:15	0	17	4	0	0	0	0	0	0	0	0	0	0	21
	12:30	1	12	5	0	1	0	0	0	1	0	0	0	0	20
	12:45	0	14	7	0	2	0	0	0	1	0	0	0	0	24
		1	59	23	0	3	0	0	0	2	0	0	0	0	88
	13:00	0	14	5	1	0	2	0	0	1	0	0	0	0	23
	13:15	0	17	5	0	0	0	0	1	0	0	0	0	0	23
	13:30	0	9	2	1	0	0	0	0	0	0	0	0	0	12
	13:45	0	17	5	0	0	0	0	1	0	0	0	0	0	23
		0	57	17	2	0	2	0	2	1	0	0	0	0	81
	14:00	0	15	4	0	1	2	0	0	0	0	0	0	0	22
	14:15	0	21	12	0	0	0	1	1	0	0	0	0	0	35
	14:30	0	31	8	0	2	0	0	0	1	0	0	0	0	42
	14:45	0	22	12	0	3	1	0	0	0	0	0	0	0	38
		0	89	36	0	6	3	1	1	1	0	0	0	0	137
	15:00	0	28	5	1	2	0	0	0	1	0	0	0	0	37
	15:15	0	25	6	0	1	0	0	0	0	0	0	0	0	32
	15:30	1	28	9	0	0	1	0	1	0	0	0	0	0	40
	15:45	2	28	7	0	1	0	0	0	0	0	0	0	0	38
		3	109	27	1	4	1	0	1	1	0	0	0	0	147
	16:00	1	21	9	0	2	1	0	0	0	0	0	0	0	34
	16:15	1	30	3	0	4	1	0	0	1	0	0	0	0	40
	16:30	2	26	11	0	1	0	0	0	0	0	0	0	0	40
	16:45	0	33	4	0	2	0	0	0	0	0	0	0	0	39
		4	110	27	0	9	2	0	0	1	0	0	0	0	153
	17:00	0	34	15	0	1	0	0	0	0	0	0	0	0	50
	17:15	0	46	10	0	0	0	0	1	0	0	0	0	0	57
	17:30	0	36	9	0	3	0	0	1	0	0	0	0	0	49
	17:45	1	28	12	0	1	0	0	0	0	0	0	0	0	42
		1	144	46	0	5	0	0	2	0	0	0	0	0	198
	18:00	0	31	10	0	1	0	0	0	0	0	0	0	0	42
	18:15	0	38	4	0	2	0	0	0	0	0	0	0	0	44
	18:30	0	27	8	0	1	0	0	0	0	1	0	0	0	37
	18:45	1	27	5	0	1	0	0	0	0	0	0	0	0	34
		1	123	27	0	5	0	0	0	0	1	0	0	0	157
	19:00	0	20	4	1	1	0	0	1	0	0	0	0	0	27
	19:15	0	23	7	0	0	1	0	0	0	0	0	0	0	31
	19:30	0	11	4	0	1	0	0	0	0	0	0	0	0	16
	19:45	0	18	5	0	0	0	0	0	0	0	0	0	0	23
		0	72	20	1	2	1	0	1	0	0	0	0	0	97
	20:00	0	16	6	0	0	0	0	0	0	0	0	0	0	22
	20:15	0	18	0	0	1	0	0	0	0	0	0	0	0	19
	20:30	0	13	2	0	0	0	0	0	0	0	0	0	0	15
	20:45	0	9	5	0	0	0	0	0	0	0	0	0	0	14
		0	56	13	0	1	0	0	0	0	0	0	0	0	70
	21:00	0	17	2	0	0	0	0	0	0	0	0	0	0	19
	21:15	0	11	3	0	0	0	0	0	0	0	0	0	0	14
	21:30	0	14	1	0	0	0	0	0	0	0	0	0	0	15
	21:45	0	18	4	0	0	0	0	0	0	0	0	0	0	22
		0	60	10	0	0	0	0	0	0	0	0	0	0	70
	22:00	0	17	2	0	1	0	0	0	0	0	0	0	0	20
	22:15	1	11	2	0	0	0	0	0	0	0	0	0	0	14
	22:30	0	9	3	0	0	0	0	0	0	0	0	0	0	12
	22:45	0	15	2	0	0	0	0	0	0	0	0	0	0	17
		1	52	9	0	1	0	0	0	0	0	0	0	0	63
	23:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	23:15	0	3	1	0	0	0	0	0	1	0	0	0	0	5
	23:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
	23:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
		0	20	4	0	0	0	0	0	1	0	0	0	0	25
	Total	11	951	259	4	36	9	1	7	7	1	0	0	0	1286
	Percent	0.9%	74.0%	20.1%	0.3%	2.8%	0.7%	0.1%	0.5%	0.5%	0.1%	0.0%	0.0%	0.0%	
	Grand Total	15	1511	423	8	72	19	1	18	17	3	0	0	0	2087
	Percent	0.7%	72.4%	20.3%	0.4%	3.4%	0.9%	0.0%	0.9%	0.8%	0.1%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: D  
 Station ID: D  
 ALLIGATOR ROAD EAST OF ASHFORD ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
00:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
00:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	21	1	0	0	0	0	0	0	0	0	0	0	22
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	1
01:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	6	1	1	0	0	0	0	0	0	0	0	0	8
02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	3	0	1	0	0	0	0	1	0	0	0	0	5
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:15	0	9	0	1	0	0	0	0	1	0	0	0	0	11
03:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
03:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:15	0	5	1	0	1	0	0	0	0	0	0	0	0	7
04:30	0	15	3	0	1	0	0	0	0	0	0	0	0	19
04:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
05:15	0	8	1	0	0	0	0	0	1	0	0	0	0	10
05:30	0	25	5	0	0	1	0	0	0	0	0	0	0	31
05:45	0	49	8	0	0	1	0	0	1	0	0	0	0	59
06:00	0	17	2	1	2	0	0	0	0	0	0	0	0	22
06:15	0	35	4	0	2	0	0	0	0	0	0	0	0	41
06:30	0	50	8	0	0	0	0	0	1	0	0	0	0	59
06:45	0	54	11	0	1	0	0	0	1	0	0	0	0	67
07:00	0	156	25	1	5	0	0	0	2	0	0	0	0	189
07:15	0	72	9	0	2	0	0	0	0	0	0	0	0	83
07:30	0	92	19	0	4	0	0	0	1	0	0	0	0	116
07:45	1	110	11	0	1	1	0	0	2	0	0	0	0	126
08:00	6	105	18	1	1	0	0	0	0	0	0	0	0	130
08:15	2	379	57	1	8	1	0	0	3	0	0	0	0	455
08:30	0	89	15	0	0	0	0	2	0	0	0	0	0	108
08:45	0	78	10	0	3	1	0	0	0	0	0	0	0	92
09:00	0	29	11	0	3	0	0	0	0	0	0	0	0	43
09:15	0	40	11	0	4	0	0	1	0	0	0	0	0	56
09:30	2	236	47	0	10	1	0	3	0	0	0	0	0	299
09:45	0	31	13	0	1	0	0	0	0	0	0	0	0	45
10:00	0	26	7	0	3	1	0	0	0	0	0	0	0	37
10:15	0	44	9	0	2	0	0	0	0	0	0	0	0	55
10:30	0	29	9	0	2	0	0	0	0	0	0	0	0	40
10:45	0	130	38	0	8	1	0	0	0	0	0	0	0	177
11:00	0	32	6	0	1	1	0	1	0	0	0	0	0	41
11:15	0	33	11	0	0	1	0	1	1	0	0	0	0	47
11:30	0	39	6	0	1	1	0	0	0	0	0	0	0	47
11:45	0	39	6	0	3	1	0	1	0	0	0	0	0	50
12:00	0	143	29	0	5	4	0	3	1	0	0	0	0	185
12:15	0	27	11	1	3	1	0	0	2	0	0	0	0	45
12:30	0	42	10	0	1	2	0	0	2	0	0	0	0	57
12:45	0	29	7	0	0	1	0	1	1	0	0	0	0	39
13:00	0	33	13	0	1	1	0	0	0	0	0	0	0	48
13:15	0	131	41	1	5	5	0	1	5	0	0	0	0	189
13:30	0	20	9	0	3	0	0	0	0	0	0	0	0	32
13:45	0	43	6	0	2	0	0	0	1	0	0	0	0	52
14:00	0	38	8	0	2	2	0	0	1	0	0	0	0	51
14:15	0	40	12	0	0	0	0	0	1	0	0	0	0	53
14:30	0	141	35	0	7	2	0	0	3	0	0	0	0	188
Total	8	1416	285	5	49	15	0	7	16	0	0	0	0	1801
Percent	0.4%	78.6%	15.8%	0.3%	2.7%	0.8%	0.0%	0.4%	0.9%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: D  
 Station ID: D  
 ALLIGATOR ROAD EAST OF ASHFORD ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	1	33	11	0	0	0	0	0	2	0	0	0	0	47
12:15	0	36	5	0	1	0	0	0	1	0	0	0	0	43
12:30	1	43	7	1	3	0	0	1	0	0	0	0	0	56
12:45	1	36	8	0	3	1	0	2	2	0	0	0	0	53
	3	148	31	1	7	1	0	3	5	0	0	0	0	199
13:00	0	38	6	0	2	1	0	0	0	0	0	0	0	47
13:15	0	68	9	2	0	1	0	0	1	0	0	0	0	81
13:30	0	53	8	0	3	0	0	0	0	0	0	0	0	64
13:45	1	45	14	0	0	1	0	0	2	0	0	0	0	63
	1	204	37	2	5	3	0	0	3	0	0	0	0	255
14:00	0	58	10	1	0	2	0	0	0	0	0	0	0	71
14:15	2	60	13	0	1	1	0	0	0	0	0	0	0	77
14:30	3	61	13	0	2	0	0	0	0	0	0	0	0	79
14:45	1	54	14	0	1	3	0	0	2	0	0	0	0	75
	6	233	50	1	4	6	0	0	2	0	0	0	0	302
15:00	1	53	15	1	2	1	0	1	0	0	0	0	0	74
15:15	2	70	8	0	2	1	0	0	0	0	0	0	0	83
15:30	1	60	15	1	0	0	0	0	1	0	0	0	0	78
15:45	0	79	17	0	4	1	0	1	0	0	0	0	0	102
	4	262	55	2	8	3	0	2	1	0	0	0	0	337
16:00	3	75	17	1	3	1	0	0	4	0	0	0	0	104
16:15	2	76	16	0	0	0	0	0	0	0	0	0	0	94
16:30	1	88	23	0	1	0	0	1	2	0	0	0	0	116
16:45	1	96	18	0	2	1	0	0	1	0	0	0	0	119
	7	335	74	1	6	2	0	1	7	0	0	0	0	433
17:00	0	65	6	0	0	0	0	0	1	0	0	0	0	72
17:15	1	73	9	0	1	1	0	1	2	0	0	0	0	88
17:30	1	67	14	0	1	0	0	0	0	0	0	0	0	83
17:45	0	70	8	0	0	2	1	3	0	0	0	0	0	84
	2	275	37	0	2	3	1	4	3	0	0	0	0	327
18:00	2	64	10	0	1	1	0	0	0	0	0	0	0	78
18:15	0	67	10	0	0	0	0	0	0	0	0	0	0	77
18:30	0	37	10	0	2	0	0	0	0	0	0	0	0	49
18:45	0	47	10	0	0	0	0	0	0	0	0	0	0	57
	2	215	40	0	3	1	0	0	0	0	0	0	0	261
19:00	0	40	4	0	1	1	0	0	0	0	0	0	0	46
19:15	0	40	5	0	2	0	0	0	0	0	0	0	0	47
19:30	1	44	7	0	0	0	0	0	0	0	0	0	0	52
19:45	0	41	6	0	0	0	0	1	0	0	0	0	0	48
	1	165	22	0	3	1	0	1	0	0	0	0	0	193
20:00	0	38	10	0	0	0	0	0	0	0	0	0	0	48
20:15	0	40	3	0	1	0	0	0	0	0	0	0	0	44
20:30	1	24	3	0	0	0	0	0	0	0	0	0	0	28
20:45	0	23	6	0	0	0	0	0	0	0	0	0	0	29
	1	125	22	0	1	0	0	0	0	0	0	0	0	149
21:00	0	20	3	0	1	0	0	0	0	0	0	0	0	24
21:15	1	27	4	0	0	0	0	0	0	0	0	0	0	32
21:30	0	14	2	0	0	0	0	0	0	0	0	0	0	16
21:45	0	21	4	0	0	0	0	0	0	0	0	0	0	25
	1	82	13	0	1	0	0	0	0	0	0	0	0	97
22:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
22:15	0	15	2	0	0	0	0	0	0	0	0	0	0	17
22:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
22:45	0	11	0	0	0	0	0	0	0	0	0	0	0	11
	0	38	5	0	0	0	0	0	0	0	0	0	0	43
23:00	0	13	1	0	0	0	0	1	0	0	0	0	0	15
23:15	0	12	3	0	0	0	0	0	0	0	0	0	0	15
23:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
23:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	0	38	5	0	0	0	0	1	0	0	0	0	0	44
Total	28	2120	391	7	40	20	1	12	21	0	0	0	0	2640
Percent	1.1%	80.3%	14.8%	0.3%	1.5%	0.8%	0.0%	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	
Grand Total	36	3536	676	12	89	35	1	19	37	0	0	0	0	4441
Percent	0.8%	79.6%	15.2%	0.3%	2.0%	0.8%	0.0%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: D  
Station ID: D  
ALLIGATOR ROAD EAST OF ASHFORD ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	1	2	0	0	0	0	0	0	0	0	0	0	3
	00:15	0	2	2	0	1	0	0	0	0	0	0	0	0	5
	00:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	00:45	0	1	1	0	0	0	0	1	0	0	0	0	0	3
	01:00	0	5	6	0	1	0	0	1	0	0	0	0	0	13
	01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	01:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	01:30	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	01:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
	02:15	0	2	5	0	1	0	0	0	0	0	0	0	0	8
	02:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	02:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	02:45	0	2	4	0	0	0	0	0	0	0	0	0	0	6
	03:00	0	7	11	0	1	0	0	0	0	0	0	0	0	19
	03:00	0	0	5	0	0	0	0	0	0	0	0	0	0	5
	03:15	0	2	0	0	0	0	0	0	1	0	0	0	0	3
	03:30	0	0	3	0	0	0	0	0	0	0	0	0	0	3
	03:45	0	3	7	0	1	0	0	0	0	0	0	0	0	11
	04:00	0	5	15	0	1	0	0	0	1	0	0	0	0	22
	04:15	0	3	2	0	3	0	0	0	0	0	0	0	0	8
	04:15	0	1	6	0	5	1	0	0	0	0	0	0	0	13
	04:30	0	4	12	1	7	0	0	0	0	0	0	0	0	24
	04:45	0	15	15	0	5	0	0	0	0	0	0	0	0	35
	05:00	0	23	35	1	20	1	0	0	0	0	0	0	0	80
	05:00	0	13	19	3	4	1	0	0	0	0	0	0	0	40
	05:15	0	19	13	0	4	0	0	0	0	0	0	0	0	36
	05:30	0	13	21	1	4	0	0	0	1	0	0	0	0	40
	05:45	1	18	37	0	6	1	0	0	0	0	0	0	0	63
	06:00	1	63	90	4	18	2	0	0	1	0	0	0	0	179
	06:00	0	12	32	0	8	0	0	1	0	0	0	0	0	53
	06:15	0	35	62	1	10	0	0	1	0	0	0	0	0	109
	06:30	1	34	62	0	9	1	0	0	1	0	0	0	0	108
	06:45	3	65	57	0	13	2	1	1	0	0	0	0	0	142
	07:00	4	146	213	1	40	3	1	3	1	0	0	0	0	412
	07:00	2	29	36	0	6	2	0	0	0	0	0	0	0	75
	07:15	0	33	43	1	8	0	0	2	0	0	0	0	0	87
	07:30	0	29	38	1	12	0	0	2	0	0	0	0	0	82
	07:45	0	17	26	0	8	0	0	0	0	0	0	0	0	51
	08:00	2	108	143	2	34	2	0	4	0	0	0	0	0	295
	08:00	0	13	25	0	9	0	0	0	0	0	0	0	0	47
	08:15	1	12	19	0	7	2	0	0	0	0	0	0	0	41
	08:30	1	17	22	0	6	0	0	1	0	0	0	0	0	47
	08:45	0	9	16	0	6	0	0	0	1	0	0	0	0	32
	09:00	2	51	82	0	28	2	0	1	1	0	0	0	0	167
	09:00	0	12	20	0	8	1	0	0	0	0	0	0	0	41
	09:15	0	19	21	1	11	2	0	0	0	0	0	0	0	54
	09:30	0	15	18	0	8	0	0	0	0	0	0	0	0	41
	09:45	0	12	16	0	8	1	0	0	1	0	0	0	0	38
	10:00	0	58	75	1	35	4	0	0	1	0	0	0	0	174
	10:00	0	17	27	0	10	0	0	0	0	0	0	0	0	54
	10:15	1	12	19	0	8	0	0	2	0	0	0	0	0	42
	10:30	0	11	31	0	7	0	0	1	0	0	0	0	0	50
	10:45	0	14	30	0	7	0	0	2	0	0	0	0	0	53
	11:00	1	54	107	0	32	0	0	5	0	0	0	0	0	199
	11:00	0	14	32	0	8	0	0	0	0	0	0	0	0	54
	11:15	0	12	31	0	10	0	0	1	0	0	0	0	0	54
	11:30	1	21	22	0	6	1	0	1	1	0	0	0	0	53
	11:45	0	14	22	0	16	0	0	1	0	0	0	0	0	53
	11:45	1	61	107	0	40	1	0	3	1	0	0	0	0	214
	Total	11	584	886	9	250	15	1	17	6	0	0	0	0	1779
	Percent	0.6%	32.8%	49.8%	0.5%	14.1%	0.8%	0.1%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: D  
 Station ID: D  
 ALLIGATOR ROAD EAST OF ASHFORD ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	1	8	26	1	6	2	0	1	1	0	0	0	0	46
	12:15	0	16	35	0	12	0	0	1	0	0	0	0	0	64
	12:30	0	17	20	2	8	0	0	0	0	0	0	0	0	47
	12:45	2	17	24	5	6	0	0	2	0	0	0	0	0	56
		3	58	105	8	32	2	0	4	1	0	0	0	0	213
	13:00	0	17	28	3	6	2	0	0	0	0	0	0	0	56
	13:15	1	31	38	0	5	1	1	1	0	0	0	0	0	78
	13:30	1	37	30	2	11	0	0	1	0	0	0	1	0	83
	13:45	1	25	39	0	12	1	0	0	0	0	0	0	0	78
		3	110	135	5	34	4	1	2	0	0	0	1	0	295
	14:00	2	28	26	0	11	0	0	0	1	0	0	0	0	68
	14:15	2	22	37	0	11	0	0	2	0	0	0	0	0	74
	14:30	2	22	39	0	7	0	0	1	0	0	0	0	0	71
	14:45	3	35	54	0	11	0	0	0	1	0	0	0	0	104
		9	107	156	0	40	0	0	3	2	0	0	0	0	317
	15:00	0	24	44	0	10	1	0	0	0	0	0	0	0	79
	15:15	1	37	38	1	9	0	0	1	0	0	0	0	0	87
	15:30	2	31	37	0	11	0	0	0	0	0	0	0	0	81
	15:45	1	39	38	0	11	0	0	0	0	0	0	0	0	89
		4	131	157	1	41	1	0	1	0	0	0	0	0	336
	16:00	2	38	50	1	11	2	0	1	0	0	0	0	0	105
	16:15	1	38	56	0	10	0	0	2	2	0	0	0	0	109
	16:30	3	48	63	0	9	0	0	3	0	0	0	0	0	126
	16:45	1	35	58	0	14	1	0	0	0	0	0	0	0	109
		7	159	227	1	44	3	0	6	2	0	0	0	0	449
	17:00	3	32	59	0	13	0	0	2	0	0	0	0	0	109
	17:15	2	35	54	0	10	0	0	1	0	0	0	0	0	102
	17:30	0	26	41	0	6	0	0	2	1	0	0	0	0	76
	17:45	2	30	35	0	8	0	0	1	0	0	0	0	0	76
		7	123	189	0	37	0	0	6	1	0	0	0	0	363
	18:00	1	23	28	1	5	1	0	1	0	0	0	0	0	60
	18:15	1	23	36	0	6	0	0	3	0	0	0	0	0	69
	18:30	2	16	22	1	4	0	0	2	0	0	0	0	0	47
	18:45	0	28	24	0	9	0	0	2	0	0	1	0	0	64
		4	90	110	2	24	1	0	8	0	0	1	0	0	240
	19:00	0	16	24	0	7	0	0	0	0	0	0	0	0	47
	19:15	0	32	30	0	8	0	0	0	1	0	0	0	0	71
	19:30	0	10	25	0	3	0	0	1	0	0	0	0	0	39
	19:45	0	17	21	1	6	0	0	0	0	0	0	0	0	45
		0	75	100	1	24	0	0	1	1	0	0	0	0	202
	20:00	0	13	22	0	5	0	0	0	0	0	0	0	0	40
	20:15	1	14	24	0	5	0	0	0	0	0	0	0	0	44
	20:30	1	18	27	0	7	0	0	0	0	0	0	0	0	53
	20:45	0	11	25	0	3	0	0	0	1	0	0	0	0	40
		2	56	98	0	20	0	0	0	1	0	0	0	0	177
	21:00	0	14	13	0	7	0	0	0	0	0	0	0	0	34
	21:15	1	8	16	0	5	0	0	0	0	0	0	0	0	30
	21:30	0	4	17	0	1	0	0	0	0	0	0	0	0	22
	21:45	0	10	17	0	1	0	0	0	0	0	0	0	0	28
		1	36	63	0	14	0	0	0	0	0	0	0	0	114
	22:00	0	8	6	0	1	0	0	0	0	0	0	0	0	15
	22:15	0	4	11	0	3	0	0	0	0	0	0	0	0	18
	22:30	0	4	5	1	1	0	0	0	0	0	0	0	0	11
	22:45	0	6	7	0	0	0	0	0	0	0	0	0	0	13
		0	22	29	1	5	0	0	0	0	0	0	0	0	57
	23:00	0	2	7	0	0	0	0	0	0	0	0	0	0	9
	23:15	0	2	6	0	0	1	0	0	0	0	0	0	0	9
	23:30	0	2	7	0	1	0	0	0	0	0	0	0	0	10
	23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
		0	8	20	0	1	1	0	0	0	0	0	0	0	30
	Total	40	975	1389	19	316	12	1	31	8	0	1	1	0	2793
	Percent	1.4%	34.9%	49.7%	0.7%	11.3%	0.4%	0.0%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	
	Grand Total	51	1559	2275	28	566	27	2	48	14	0	1	1	0	4572
	Percent	1.1%	34.1%	49.8%	0.6%	12.4%	0.6%	0.0%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E  
 Station ID: E

ALLIGATOR ROAD WEST OF JAMES TURNER ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	8	2	0	0	0	0	0	0	0	0	0	0	10
00:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8
00:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	24	2	0	0	0	0	0	0	0	0	0	0	26
01:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:15	0	4	3	0	0	0	0	0	0	0	0	0	0	7
01:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
01:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	19	4	0	0	0	0	0	0	0	0	0	0	23
02:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
02:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:30	0	1	1	0	1	0	0	0	0	0	0	0	0	3
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	7	1	1	1	0	0	0	0	0	0	0	0	10
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:30	0	2	0	1	0	0	0	0	1	0	0	0	0	4
03:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	10	0	1	0	0	0	0	1	0	0	0	0	12
04:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
04:15	0	4	1	0	1	0	0	0	0	0	0	0	0	6
04:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:45	0	6	1	0	1	0	0	0	0	0	0	0	0	8
05:00	0	15	4	0	2	0	0	0	0	0	0	0	0	21
05:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10
05:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11
05:30	0	11	7	0	1	0	0	0	1	0	0	0	0	20
05:45	0	15	11	1	0	0	0	0	0	0	0	0	0	27
06:00	0	43	22	1	1	0	0	0	1	0	0	0	0	68
06:00	0	23	3	1	3	0	0	0	0	0	0	0	0	30
06:15	0	29	18	1	2	0	0	0	0	0	0	0	0	50
06:30	2	44	8	0	0	1	0	0	1	0	0	0	0	56
06:45	0	39	23	0	3	0	0	0	1	0	0	0	0	66
07:00	2	135	52	2	8	1	0	0	2	0	0	0	0	202
07:00	0	82	17	2	2	0	0	0	0	0	0	0	0	103
07:15	0	82	33	0	6	0	0	0	1	0	0	0	0	122
07:30	1	89	27	0	2	1	0	0	2	0	0	0	0	122
07:45	2	102	40	1	3	1	0	0	0	0	0	0	0	149
08:00	3	355	117	3	13	2	0	0	3	0	0	0	0	496
08:00	2	66	30	0	3	0	0	3	0	0	0	0	0	104
08:15	1	47	18	0	3	0	0	2	0	0	0	0	0	71
08:30	1	23	21	0	4	0	0	0	0	0	0	0	0	49
08:45	0	33	13	0	4	0	0	0	0	0	0	0	0	50
09:00	4	169	82	0	14	0	0	5	0	0	0	0	0	274
09:00	0	31	19	0	1	0	0	0	0	0	0	0	0	51
09:15	0	23	8	0	4	0	0	0	0	0	0	0	0	35
09:30	1	35	15	0	4	0	0	0	0	0	0	0	0	55
09:45	0	35	6	0	2	1	0	1	0	0	0	0	0	45
10:00	1	124	48	0	11	1	0	1	0	0	0	0	0	186
10:00	1	26	18	0	1	0	0	1	0	0	0	0	0	47
10:15	0	32	11	0	1	1	0	0	1	0	0	0	0	46
10:30	0	24	15	0	2	1	0	0	0	0	0	0	0	42
10:45	0	33	14	0	4	3	0	1	0	0	0	0	0	55
11:00	1	115	58	0	8	5	0	2	1	0	0	0	0	190
11:00	0	25	15	2	4	2	0	0	2	0	0	0	0	50
11:15	0	38	13	0	1	2	0	0	1	0	0	0	0	55
11:30	1	19	19	0	2	1	0	1	1	0	0	0	0	44
11:45	1	28	16	0	3	1	0	0	0	0	0	0	0	49
Total	13	1126	453	10	68	15	0	9	12	0	0	0	0	1706
Percent	0.8%	66.0%	26.6%	0.6%	4.0%	0.9%	0.0%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E  
 Station ID: E

ALLIGATOR ROAD WEST OF JAMES TURNER ROAD

Latitude: 0' 0.000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	17	13	0	3	0	0	2	0	0	0	0	0	35
12:15	0	40	12	0	5	2	0	0	0	0	0	0	0	59
12:30	0	39	12	0	1	1	0	0	1	0	0	0	0	54
12:45	0	27	16	1	1	0	0	1	0	0	0	0	0	46
13:00	0	123	53	1	10	3	0	3	1	0	0	0	0	194
13:15	1	34	16	0	1	0	0	1	2	0	0	0	0	55
13:30	1	32	6	0	2	0	0	0	1	0	0	0	0	42
13:30	1	43	16	1	2	3	0	0	1	0	0	0	0	67
13:45	1	33	9	1	5	1	0	1	1	0	0	0	0	52
14:00	4	142	47	2	10	4	0	2	5	0	0	0	0	216
14:15	1	39	15	0	2	1	0	0	1	0	0	0	0	59
14:15	0	55	19	2	3	1	0	0	1	0	0	0	0	81
14:30	1	36	16	0	6	0	0	0	1	0	0	0	0	60
14:45	0	41	19	1	1	3	0	0	2	0	0	0	0	67
15:00	2	171	69	3	12	5	0	0	5	0	0	0	0	267
15:15	0	46	15	0	2	1	0	0	0	0	0	0	0	64
15:15	0	47	25	1	1	0	0	0	0	0	0	0	0	74
15:30	0	62	25	0	3	0	0	0	0	0	0	0	0	90
15:45	1	39	16	1	4	1	0	0	1	0	0	0	0	63
16:00	1	194	81	2	10	2	0	0	1	0	0	0	0	291
16:15	1	53	20	1	2	1	0	2	0	0	0	0	0	80
16:15	1	51	24	1	3	0	0	0	0	0	0	0	0	80
16:30	0	70	25	0	4	0	0	0	1	0	0	0	0	100
16:45	0	54	23	2	0	1	0	2	2	0	0	0	0	84
17:00	2	228	92	4	9	2	0	4	3	0	0	0	0	344
17:00	1	69	25	3	4	0	0	0	2	0	0	0	0	104
17:15	0	69	30	0	1	2	0	0	1	0	0	0	0	103
17:30	1	68	28	0	2	0	1	0	1	0	0	0	0	101
17:45	0	87	31	0	4	1	0	0	1	0	0	0	0	124
18:00	2	293	114	3	11	3	1	0	5	0	0	0	0	432
18:15	0	61	17	0	3	0	0	0	1	0	0	0	0	82
18:15	0	56	21	0	2	0	0	0	1	0	0	0	0	80
18:30	1	66	22	0	0	1	0	2	1	0	0	0	0	93
18:45	1	49	21	0	2	0	0	1	0	0	0	0	0	74
19:00	2	232	81	0	7	1	0	3	3	0	0	0	0	329
19:00	0	51	17	0	0	1	0	0	0	0	0	0	0	69
19:15	0	42	16	0	0	1	0	0	0	0	0	0	0	59
19:30	0	35	11	0	3	0	0	0	0	0	0	0	0	49
19:45	0	41	17	0	0	0	0	0	0	0	0	0	0	58
20:00	0	169	61	0	3	2	0	0	0	0	0	0	0	235
20:00	0	34	10	0	2	1	0	0	0	0	0	0	0	47
20:15	0	34	14	0	2	0	0	1	0	0	0	0	0	51
20:30	1	34	13	0	2	0	0	0	0	0	0	0	0	50
20:45	0	35	11	0	0	0	0	1	0	0	0	0	0	47
21:00	1	137	48	0	6	1	0	2	0	0	0	0	0	195
21:00	1	42	6	0	1	1	0	0	0	0	0	0	0	51
21:15	0	46	14	0	1	0	0	1	0	0	0	0	0	62
21:30	0	25	5	0	0	0	0	0	0	0	0	0	0	30
21:45	0	26	12	0	1	0	0	0	0	0	0	0	0	39
22:00	1	139	37	0	3	1	0	1	0	0	0	0	0	182
22:00	0	19	5	1	0	0	0	0	0	0	0	0	0	25
22:15	1	24	5	0	1	0	0	0	0	0	0	0	0	31
22:30	0	11	6	0	0	0	0	0	0	0	0	0	0	17
22:45	0	17	3	0	0	0	0	0	0	0	0	0	0	20
23:00	1	71	19	1	1	0	0	0	0	0	0	0	0	93
23:00	0	10	1	0	0	0	0	1	0	0	0	0	0	12
23:15	0	9	3	0	0	0	0	0	0	0	0	0	0	12
23:30	0	8	3	0	0	0	0	0	0	0	0	0	0	11
23:45	0	8	1	0	0	0	0	0	0	0	0	0	0	9
Total	16	1934	710	16	82	24	1	16	23	0	0	0	0	2822
Percent	0.6%	68.5%	25.2%	0.6%	2.9%	0.9%	0.0%	0.6%	0.8%	0.0%	0.0%	0.0%	0.0%	
Grand Total	29	3060	1163	26	150	39	1	25	35	0	0	0	0	4528
Percent	0.6%	67.6%	25.7%	0.6%	3.3%	0.9%	0.0%	0.6%	0.8%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E  
 Station ID: E

ALLIGATOR ROAD WEST OF JAMES TURNER ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	8	0	0	0	0	0	0	0	0	0	0	0	8
	00:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11
	00:30	0	8	2	0	0	0	0	0	0	0	0	0	0	10
	00:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	01:00	0	29	3	0	0	0	0	0	0	0	0	0	0	32
	01:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	01:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	01:45	0	2	0	0	0	0	0	1	0	0	0	0	0	3
	02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	02:15	0	11	1	0	0	0	0	1	0	0	0	0	0	13
	02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	03:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10
	03:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	03:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	04:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
	04:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	04:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
	04:45	0	6	2	0	1	0	0	0	0	0	0	0	0	9
	05:00	0	18	2	0	1	0	0	0	1	0	0	0	0	22
	05:15	0	6	4	0	0	0	0	0	0	0	0	0	0	10
	05:30	0	6	6	0	1	1	0	0	0	0	0	0	0	14
	05:45	0	20	9	0	0	1	0	0	0	0	0	0	0	30
	06:00	1	29	5	0	1	2	0	0	0	0	0	0	0	38
	06:15	1	61	24	0	2	4	0	0	0	0	0	0	0	92
	06:30	0	27	7	0	2	0	0	0	0	0	0	0	0	36
	06:45	0	28	5	0	0	0	0	0	0	0	0	0	0	33
	07:00	4	36	9	1	2	0	0	0	2	0	0	0	0	54
	07:15	0	46	8	0	1	0	0	0	0	0	0	0	0	55
	07:30	4	137	29	1	5	0	0	0	2	0	0	0	0	178
	07:45	1	65	12	1	4	0	0	2	1	0	0	0	0	86
	08:00	0	76	15	0	0	0	0	0	0	0	0	0	0	91
	08:15	3	131	13	0	2	0	0	0	2	0	0	0	0	151
	08:30	3	77	11	0	1	1	0	2	2	0	0	0	0	97
	08:45	7	349	51	1	7	1	0	4	5	0	0	0	0	425
	09:00	2	65	14	0	1	0	0	0	0	0	0	0	0	82
	09:15	0	63	12	0	3	0	0	2	0	0	0	0	0	80
	09:30	0	47	14	0	3	0	0	0	0	0	0	0	0	64
	09:45	0	44	11	0	3	0	0	0	0	0	0	0	0	58
	10:00	2	219	51	0	10	0	0	2	0	0	0	0	0	284
	10:15	0	31	8	0	2	0	0	0	0	0	0	0	0	41
	10:30	0	32	11	0	2	2	0	0	0	0	0	0	0	47
	10:45	0	34	4	0	1	0	0	0	1	0	0	0	0	40
	11:00	0	35	1	0	4	1	0	0	0	0	0	0	0	41
	11:15	0	132	24	0	9	3	0	0	1	0	0	0	0	169
	11:30	0	38	8	0	5	1	0	0	0	0	0	0	0	52
	11:45	0	38	9	0	1	0	0	0	0	0	0	0	0	48
	12:00	0	20	15	0	0	0	0	0	0	0	0	0	0	35
	12:15	0	33	4	0	2	2	0	0	1	0	0	0	0	42
	12:30	0	129	36	0	8	3	0	0	1	0	0	0	0	177
	12:45	1	42	17	0	1	0	0	0	0	0	0	0	0	61
	13:00	1	26	7	0	1	1	0	0	0	0	0	0	0	36
	13:15	0	43	12	0	2	1	0	1	0	0	0	0	0	59
	13:30	1	43	10	0	3	0	0	0	0	0	0	0	0	57
	13:45	3	154	46	0	7	2	0	1	0	0	0	0	0	213
Total		17	1262	270	2	49	13	0	8	10	0	0	0	0	1631
Percent		1.0%	77.4%	16.6%	0.1%	3.0%	0.8%	0.0%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E  
 Station ID: E

ALLIGATOR ROAD WEST OF JAMES TURNER ROAD

Latitude: 0' 0.000 Undefined

WB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	0	41	12	0	2	0	0	1	0	0	0	0	0	56
	12:15	1	41	8	0	0	0	0	0	1	0	0	0	0	51
	12:30	0	41	7	0	3	1	0	1	0	0	0	0	0	53
	12:45	0	37	14	1	2	1	0	0	1	0	0	0	0	56
		1	160	41	1	7	2	0	2	2	0	0	0	0	216
	13:00	0	35	11	0	3	1	0	0	0	0	0	0	0	50
	13:15	0	42	15	1	3	0	0	1	0	0	0	0	0	62
	13:30	1	39	5	1	3	0	0	0	0	0	0	0	0	49
	13:45	0	33	9	1	6	1	0	0	1	0	0	0	0	51
		1	149	40	3	15	2	0	1	1	0	0	0	0	212
	14:00	0	63	9	0	2	1	0	1	0	0	0	0	0	76
	14:15	2	68	13	0	1	0	0	0	0	0	0	1	0	85
	14:30	1	64	13	0	2	1	0	1	1	0	0	0	0	83
	14:45	2	62	12	0	2	0	0	0	1	0	0	0	0	79
		5	257	47	0	7	2	0	2	2	0	0	1	0	323
	15:00	0	55	12	0	2	0	0	0	0	0	0	0	0	69
	15:15	0	61	8	0	3	0	0	0	0	0	0	0	0	72
	15:30	0	79	15	0	1	1	0	1	1	0	0	0	0	98
	15:45	3	78	12	0	2	1	0	0	0	0	0	0	0	96
		3	273	47	0	8	2	0	1	1	0	0	0	0	335
	16:00	0	68	19	0	1	0	0	1	0	0	0	0	0	89
	16:15	0	68	15	0	1	0	0	0	0	0	0	0	0	84
	16:30	1	64	14	0	0	0	0	0	0	0	0	0	0	79
	16:45	1	81	12	1	4	0	0	0	0	0	0	0	0	99
		2	281	60	1	6	0	0	1	0	0	0	0	0	351
	17:00	1	94	22	0	1	2	0	1	0	0	0	0	0	121
	17:15	2	91	18	0	1	0	0	2	2	0	0	0	0	116
	17:30	5	92	20	0	2	0	0	0	0	0	0	0	0	119
	17:45	2	85	25	0	5	1	0	0	0	0	1	0	0	119
		10	362	85	0	9	3	0	3	2	0	1	0	0	475
	18:00	0	88	20	0	1	0	0	0	0	0	0	0	0	109
	18:15	1	88	7	0	0	0	0	0	1	0	0	0	0	97
	18:30	1	69	14	0	0	0	0	0	0	0	0	0	0	84
	18:45	1	58	12	0	0	0	0	0	0	0	0	0	0	71
		3	303	53	0	1	0	0	0	1	0	0	0	0	361
	19:00	2	74	7	0	0	0	0	0	0	0	0	0	0	83
	19:15	2	71	9	0	1	1	0	0	0	0	0	0	0	84
	19:30	0	45	11	0	0	0	0	2	0	0	0	0	0	58
	19:45	0	50	10	0	0	0	0	1	0	0	0	0	0	61
		4	240	37	0	1	1	0	3	0	0	0	0	0	286
	20:00	0	49	10	0	0	0	0	0	1	0	0	0	0	60
	20:15	0	40	4	0	1	0	0	0	0	0	0	0	0	45
	20:30	0	38	8	0	0	0	0	0	0	0	0	0	0	46
	20:45	0	43	10	0	0	0	0	0	0	0	0	0	0	53
		0	170	32	0	1	0	0	0	1	0	0	0	0	204
	21:00	2	29	3	0	1	0	0	0	0	0	0	0	0	35
	21:15	0	36	10	0	0	0	0	0	0	0	0	0	0	46
	21:30	0	37	7	0	0	0	0	0	0	0	0	0	0	44
	21:45	0	26	4	0	1	0	0	0	1	0	0	0	0	32
		2	128	24	0	2	0	0	0	1	0	0	0	0	157
	22:00	1	29	7	0	0	0	0	0	0	0	0	0	0	37
	22:15	0	17	5	0	0	0	0	0	0	0	0	0	0	22
	22:30	0	26	4	0	0	0	0	0	0	0	0	0	0	30
	22:45	0	13	3	0	0	0	0	0	0	0	0	0	0	16
		1	85	19	0	0	0	0	0	0	0	0	0	0	105
	23:00	0	16	3	0	0	0	0	0	0	0	0	0	0	19
	23:15	0	11	0	0	0	0	0	0	0	0	0	0	0	11
	23:30	0	12	2	0	1	0	0	0	0	0	0	0	0	15
	23:45	0	13	0	0	0	0	0	0	0	0	0	0	0	13
		0	52	5	0	1	0	0	0	0	0	0	0	0	58
	Total	32	2460	490	5	58	12	0	13	11	0	1	1	0	3083
	Percent	1.0%	79.8%	15.9%	0.2%	1.9%	0.4%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	
	Grand Total	49	3722	760	7	107	25	0	21	21	0	1	1	0	4714
	Percent	1.0%	79.0%	16.1%	0.1%	2.3%	0.5%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: F  
 Station ID: F  
 US52 - 301 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	14	1	0	1	0	0	0	1	0	0	0	0	17
	00:15	0	14	5	0	0	0	0	1	0	0	0	0	0	20
	00:30	0	13	2	0	0	1	0	0	1	0	0	0	0	17
	00:45	0	12	1	0	0	0	0	0	1	0	0	0	0	14
	01:00	0	53	9	0	1	1	0	1	3	0	0	0	0	68
	01:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11
	01:30	0	10	1	0	0	0	0	0	1	0	0	0	0	12
	01:30	0	14	0	1	0	0	0	0	1	0	0	0	0	16
	01:45	0	10	3	0	0	0	0	0	0	0	0	0	0	13
	02:00	0	44	5	1	0	0	0	0	2	0	0	0	0	52
	02:00	0	4	3	0	0	0	0	0	0	0	0	0	0	7
	02:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8
	02:30	0	3	4	0	0	0	0	0	0	0	0	0	0	7
	02:45	0	8	2	0	0	1	0	0	0	0	0	0	0	11
	03:00	0	21	11	0	0	1	0	0	0	0	0	0	0	33
	03:00	0	6	2	0	0	0	0	0	2	0	0	0	0	10
	03:15	0	8	3	0	0	0	0	0	2	0	0	0	0	13
	03:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12
	03:45	0	10	3	0	0	0	0	0	1	0	0	0	0	14
	04:00	0	34	10	0	0	0	0	0	5	0	0	0	0	49
	04:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
	04:15	2	22	5	0	1	0	0	0	5	0	0	0	0	35
	04:30	0	32	2	0	0	1	0	0	4	0	0	0	0	39
	04:45	0	31	6	0	0	0	0	1	6	0	0	0	1	45
	05:00	2	97	16	0	1	1	0	1	15	0	0	0	1	134
	05:00	0	30	14	0	1	0	0	0	5	0	0	0	0	50
	05:15	0	52	12	0	0	0	0	0	3	0	0	0	0	67
	05:30	0	66	22	0	2	1	0	2	1	0	0	0	0	94
	05:45	0	74	17	0	0	2	0	2	1	1	0	0	0	97
	06:00	0	222	65	0	3	3	0	4	10	1	0	0	0	308
	06:00	4	80	18	0	1	0	0	0	0	0	0	0	0	103
	06:15	2	117	24	1	4	4	0	1	0	0	1	1	0	155
	06:30	5	195	38	0	3	3	0	3	3	1	0	0	0	251
	06:45	2	173	35	2	1	8	1	2	3	0	0	0	0	227
	07:00	13	565	115	3	9	15	1	6	6	1	1	1	0	736
	07:00	3	225	36	1	0	6	0	2	1	1	0	0	1	276
	07:15	0	236	25	0	3	4	0	5	3	0	2	0	0	278
	07:30	7	303	28	0	4	7	1	5	1	1	1	0	1	359
	07:45	1	225	35	0	6	2	1	3	2	0	0	0	0	275
	08:00	11	989	124	1	13	19	2	15	7	2	3	0	2	1188
	08:00	4	216	27	1	4	3	4	7	3	0	0	0	1	270
	08:15	2	224	33	1	1	8	1	6	2	0	2	1	0	281
	08:30	7	209	29	0	4	3	0	3	1	0	0	0	0	256
	08:45	3	193	26	1	3	4	0	6	1	1	0	0	0	238
	09:00	16	842	115	3	12	18	5	22	7	1	2	1	1	1045
	09:00	3	168	18	1	5	4	0	2	1	0	0	1	1	204
	09:15	2	152	29	0	4	2	0	5	4	0	0	0	1	199
	09:30	2	176	34	1	4	6	0	3	1	0	0	0	1	228
	09:45	7	154	29	1	0	3	1	1	6	0	0	0	1	203
	10:00	14	650	110	3	13	15	1	11	12	0	0	1	4	834
	10:00	5	174	22	0	5	4	0	3	1	0	0	0	0	214
	10:15	0	140	30	1	3	3	0	1	2	0	0	0	0	180
	10:30	2	127	16	0	5	3	0	0	2	0	1	0	0	156
	10:45	5	106	24	1	4	5	2	3	1	0	0	0	0	151
	11:00	12	547	92	2	17	15	2	7	6	0	1	0	0	701
	11:00	0	118	13	2	2	0	2	0	0	1	0	0	0	138
	11:15	3	132	31	2	3	2	1	5	3	0	0	1	0	183
	11:30	1	153	27	3	2	2	1	3	2	0	0	0	0	194
	11:45	2	162	28	1	7	1	0	5	1	2	0	0	0	209
	12:00	6	565	99	8	14	5	4	13	6	3	0	1	0	724
	Total	74	4629	771	21	83	93	15	80	79	8	7	4	8	5872
	Percent	1.3%	78.8%	13.1%	0.4%	1.4%	1.6%	0.3%	1.4%	1.3%	0.1%	0.1%	0.1%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: F  
 Station ID: F  
 US52 - 301 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	5	171	27	1	6	2	0	2	3	0	1	0	0	218
	12:15	2	155	30	0	2	6	1	4	1	1	0	0	0	202
	12:30	3	200	29	1	7	5	0	4	2	1	0	0	0	252
	12:45	3	158	30	1	4	7	0	2	2	1	0	0	1	209
		13	684	116	3	19	20	1	12	8	3	1	0	1	881
	13:00	1	142	19	0	4	5	3	3	3	0	0	0	0	180
	13:15	4	167	20	2	7	2	0	5	4	1	0	0	0	212
	13:30	4	170	26	1	3	4	1	3	1	1	3	0	0	217
	13:45	0	159	17	1	2	2	0	3	3	0	0	0	0	187
		9	638	82	4	16	13	4	14	11	2	3	0	0	796
	14:00	2	165	28	0	3	5	0	5	1	1	0	0	0	210
	14:15	6	186	26	1	1	5	2	2	2	0	0	1	1	233
	14:30	3	157	22	1	0	0	0	1	4	0	0	0	1	189
	14:45	2	186	18	0	6	6	2	1	1	0	0	0	0	222
		13	694	94	2	10	16	4	9	8	1	0	1	2	854
	15:00	4	176	27	1	3	3	1	3	3	0	0	0	0	221
	15:15	2	167	23	1	6	7	0	5	3	1	0	0	0	215
	15:30	3	158	19	2	4	3	0	2	2	0	0	0	0	193
	15:45	4	147	20	0	4	3	0	2	1	2	1	0	1	185
		13	648	89	4	17	16	1	12	9	3	1	0	1	814
	16:00	3	132	27	2	7	5	0	2	2	0	0	0	0	180
	16:15	1	141	22	0	2	4	0	2	0	1	0	0	0	173
	16:30	2	147	24	0	4	4	0	1	2	0	1	0	0	185
	16:45	0	127	31	0	4	3	0	4	0	2	0	0	0	171
		6	547	104	2	17	16	0	9	4	3	1	0	0	709
	17:00	5	147	28	0	3	5	0	6	1	1	0	0	0	196
	17:15	1	157	26	1	1	4	0	2	1	1	0	0	0	194
	17:30	0	155	27	1	1	2	0	2	4	0	0	0	0	192
	17:45	3	142	17	0	2	0	0	5	0	2	0	0	2	173
		9	601	98	2	7	11	0	15	6	4	0	0	2	755
	18:00	6	161	20	0	3	3	1	2	1	0	0	1	1	199
	18:15	1	141	24	2	2	1	0	3	1	1	0	0	0	176
	18:30	2	184	29	0	3	3	0	4	1	0	0	0	0	226
	18:45	5	146	25	0	3	1	0	3	1	0	0	1	0	185
		14	632	98	2	11	8	1	12	4	1	0	2	1	786
	19:00	1	119	10	0	0	2	0	2	2	0	0	0	0	136
	19:15	2	104	14	0	2	0	0	1	2	0	0	0	0	125
	19:30	1	105	16	0	3	0	0	1	2	0	0	0	0	128
	19:45	3	90	15	0	1	0	0	2	2	0	0	0	0	113
		7	418	55	0	6	2	0	6	8	0	0	0	0	502
	20:00	0	87	19	0	1	1	0	0	1	0	0	0	0	109
	20:15	1	100	16	0	2	1	0	0	0	0	0	0	0	120
	20:30	0	84	22	0	0	0	0	0	1	0	0	0	0	107
	20:45	1	84	7	0	0	1	0	4	2	0	0	0	0	99
		2	355	64	0	3	3	0	4	4	0	0	0	0	435
	21:00	0	70	14	0	0	0	0	0	0	0	0	0	0	84
	21:15	0	61	8	0	0	0	0	1	1	0	0	0	0	71
	21:30	1	70	10	0	1	1	0	0	1	0	0	0	0	84
	21:45	0	53	6	0	0	0	0	0	0	0	0	0	0	59
		1	254	38	0	1	1	0	1	2	0	0	0	0	298
	22:00	0	61	6	0	0	2	0	0	0	0	0	0	0	69
	22:15	2	46	2	0	0	0	0	0	3	0	0	0	0	53
	22:30	0	47	7	0	0	0	0	1	1	0	0	0	0	56
	22:45	1	26	9	0	0	1	0	0	0	0	0	0	0	37
		3	180	24	0	0	3	0	1	4	0	0	0	0	215
	23:00	0	45	4	0	1	0	0	0	0	0	0	0	0	50
	23:15	2	41	3	0	0	0	0	0	0	0	0	0	0	46
	23:30	0	25	2	0	1	0	0	0	0	0	0	0	0	28
	23:45	0	20	2	0	1	0	0	0	1	0	0	0	0	24
		2	131	11	0	3	0	0	0	1	0	0	0	0	148
	Total	92	5782	873	19	110	109	11	95	69	17	6	3	7	7193
	Percent	1.3%	80.4%	12.1%	0.3%	1.5%	1.5%	0.2%	1.3%	1.0%	0.2%	0.1%	0.0%	0.1%	
	Grand Total	166	10411	1644	40	193	202	26	175	148	25	13	7	15	13065
	Percent	1.3%	79.7%	12.6%	0.3%	1.5%	1.5%	0.2%	1.3%	1.1%	0.2%	0.1%	0.1%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E.5  
 Station ID: E.5  
 US52 - 301 NORTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	21	7	0	0	0	0	0	0	0	0	0	0	28
00:15	0	15	10	0	0	0	0	0	0	1	0	0	0	26
00:30	0	14	5	0	0	0	0	0	0	0	0	0	0	19
00:45	0	13	7	0	0	0	0	0	0	0	0	0	0	20
01:00	0	63	29	0	0	0	0	0	0	1	0	0	0	93
01:15	0	16	4	0	1	0	0	0	2	0	0	0	0	23
01:30	1	11	2	0	0	0	0	0	0	0	0	0	0	14
01:45	0	6	2	0	0	0	0	1	0	0	0	0	0	9
02:00	0	8	6	1	0	0	0	1	1	0	0	0	0	17
02:15	1	41	14	1	1	0	0	2	3	0	0	0	0	63
02:30	0	10	4	0	0	0	0	0	0	0	0	0	0	14
02:45	0	7	4	0	0	0	0	0	0	0	0	0	0	11
03:00	0	6	0	0	0	0	0	0	2	0	0	0	0	8
03:15	0	6	3	0	0	0	0	0	0	0	0	0	0	9
03:30	0	29	11	0	0	0	0	0	2	0	0	0	0	42
03:45	0	8	0	0	1	0	0	0	1	0	0	0	0	10
04:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
04:15	0	3	2	0	0	1	0	0	1	0	0	0	0	7
04:30	0	6	4	0	0	0	0	0	1	0	0	0	0	11
04:45	0	24	8	0	1	1	0	0	3	0	0	0	0	37
05:00	0	5	2	0	0	0	0	0	2	0	0	0	0	9
05:15	0	11	3	0	0	1	0	1	1	0	0	0	0	17
05:30	0	13	2	0	0	0	0	2	2	0	0	0	0	19
05:45	0	3	5	1	1	0	0	1	0	0	0	0	0	11
06:00	0	32	12	1	1	1	0	4	5	0	0	0	0	56
06:15	0	13	7	1	1	0	0	0	2	0	0	0	0	24
06:30	0	10	8	1	2	0	0	1	1	0	0	0	0	23
06:45	0	29	11	1	0	1	0	1	3	0	0	0	0	46
07:00	0	23	11	1	1	1	0	0	1	0	0	0	0	38
07:15	0	75	37	4	4	2	0	2	7	0	0	0	0	131
07:30	1	31	6	3	5	0	0	0	2	0	0	0	0	48
07:45	1	53	9	3	3	1	0	1	2	0	0	0	0	73
08:00	0	59	19	0	6	0	0	1	2	0	0	0	0	87
08:15	0	83	18	1	0	1	0	1	4	0	0	0	1	109
08:30	2	226	52	7	14	2	0	3	10	0	0	0	1	317
08:45	0	105	27	0	1	1	0	4	1	0	0	0	0	139
09:00	0	127	24	0	2	1	0	1	6	0	0	0	0	161
09:15	3	119	44	1	5	1	0	7	2	0	0	0	0	182
09:30	3	163	39	2	6	3	0	8	2	0	0	0	1	227
09:45	6	514	134	3	14	6	0	20	11	0	0	0	1	709
10:00	6	168	38	2	5	4	0	6	8	0	0	0	0	237
10:15	8	155	36	1	5	1	0	2	2	0	0	0	0	210
10:30	0	73	41	0	7	3	0	3	3	0	0	0	0	130
10:45	1	64	37	6	7	2	1	3	6	0	0	0	0	127
11:00	15	460	152	9	24	10	1	14	19	0	0	0	0	704
11:15	0	63	35	3	5	1	1	2	3	0	1	0	0	114
11:30	0	74	32	0	3	0	0	3	1	1	0	0	0	114
11:45	0	80	32	1	9	2	0	4	4	0	0	0	1	133
12:00	0	103	42	0	9	4	0	2	5	0	0	0	0	165
12:15	0	320	141	4	26	7	1	11	13	1	1	0	1	526
12:30	0	84	35	3	8	0	0	2	6	0	0	0	1	139
12:45	2	106	31	0	2	3	0	4	3	0	0	0	0	151
13:00	0	89	45	0	2	1	0	3	4	0	0	0	0	144
13:15	0	97	36	0	6	1	0	2	4	1	0	0	0	147
13:30	2	376	147	3	18	5	0	11	17	1	0	0	1	581
13:45	0	100	33	1	8	2	0	2	1	0	0	0	0	147
14:00	1	113	34	2	3	1	0	3	2	1	0	0	0	160
14:15	3	113	29	1	4	3	0	3	3	1	0	0	0	160
14:30	1	131	40	0	4	1	0	4	5	1	0	0	0	187
14:45	5	457	136	4	19	7	0	12	11	3	0	0	0	654
<b>Total</b>	<b>31</b>	<b>2617</b>	<b>873</b>	<b>36</b>	<b>122</b>	<b>41</b>	<b>2</b>	<b>79</b>	<b>101</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>3913</b>
<b>Percent</b>	<b>0.8%</b>	<b>66.9%</b>	<b>22.3%</b>	<b>0.9%</b>	<b>3.1%</b>	<b>1.0%</b>	<b>0.1%</b>	<b>2.0%</b>	<b>2.6%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: E.5  
 Station ID: E.5  
 US52 - 301 NORTH OF ALLIGATOR ROAD

SB Latitude: 0' 0.000 Undefined

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	117	52	1	6	1	0	7	7	0	0	0	2	193
12:15	0	138	44	3	4	0	0	3	5	0	1	0	0	198
12:30	0	129	47	0	8	2	0	6	4	1	0	0	1	198
12:45	1	102	68	1	8	3	0	7	5	0	0	0	0	195
	1	486	211	5	26	6	0	23	21	1	1	0	3	784
13:00	1	128	40	2	9	0	0	7	3	1	0	0	0	191
13:15	1	129	54	3	7	2	0	8	2	0	0	1	0	207
13:30	2	126	44	6	7	1	0	2	4	1	1	0	2	196
13:45	1	115	46	2	9	0	0	5	4	1	0	0	0	183
	5	498	184	13	32	3	0	22	13	3	1	1	2	777
14:00	2	164	42	1	6	3	0	6	2	0	0	1	0	227
14:15	0	171	55	1	5	3	1	6	0	2	0	1	0	245
14:30	2	144	58	0	8	4	0	5	2	2	2	0	0	227
14:45	2	189	62	2	5	2	0	4	0	0	0	0	0	266
	6	668	217	4	24	12	1	21	4	4	2	2	0	965
15:00	1	181	59	1	7	3	0	9	1	1	0	0	0	263
15:15	1	218	48	2	6	4	1	5	3	0	0	0	0	288
15:30	3	211	48	1	4	4	0	9	2	0	0	1	0	283
15:45	2	204	65	3	8	5	0	9	1	4	0	0	1	302
	7	814	220	7	25	16	1	32	7	5	0	1	1	1136
16:00	0	195	61	2	12	1	0	5	0	1	1	0	0	278
16:15	3	229	46	3	6	4	0	5	2	2	0	0	0	300
16:30	2	238	57	1	6	5	0	9	0	1	1	0	0	320
16:45	3	241	40	1	6	3	1	9	0	1	0	0	0	305
	8	903	204	7	30	13	1	28	2	5	2	0	0	1203
17:00	3	221	69	1	5	3	0	6	0	0	1	1	0	310
17:15	8	267	71	1	1	8	1	7	0	0	0	0	0	364
17:30	7	225	47	3	3	4	1	10	0	2	1	0	0	303
17:45	5	238	64	0	4	6	1	8	0	1	2	0	0	329
	23	951	251	5	13	21	3	31	0	3	4	1	0	1306
18:00	1	247	69	1	5	6	0	7	1	0	0	0	1	338
18:15	2	228	66	1	4	6	0	7	5	0	0	1	0	320
18:30	0	194	47	0	3	4	0	3	3	0	0	0	0	254
18:45	1	193	41	2	1	1	0	1	1	3	0	0	1	245
	4	862	223	4	13	17	0	18	10	3	0	1	2	1157
19:00	3	163	49	0	3	2	0	4	0	0	2	0	1	227
19:15	1	179	44	0	1	1	0	6	1	1	0	0	1	235
19:30	2	142	49	0	4	2	0	3	2	0	0	0	0	204
19:45	1	134	43	0	3	1	0	1	0	0	0	0	0	183
	7	618	185	0	11	6	0	14	3	1	2	0	2	849
20:00	0	143	27	0	4	0	0	3	5	0	0	0	0	182
20:15	1	126	20	0	1	1	0	2	1	0	0	0	0	152
20:30	0	136	31	0	2	0	0	0	1	1	0	0	0	171
20:45	2	106	23	0	3	1	1	1	0	0	0	0	0	137
	3	511	101	0	10	2	1	6	7	1	0	0	0	642
21:00	0	118	29	0	5	1	0	0	1	0	0	0	0	154
21:15	0	101	37	0	5	1	0	4	1	0	0	0	0	149
21:30	2	98	33	0	3	2	0	1	1	0	0	0	0	140
21:45	0	78	19	0	1	0	0	3	1	0	0	0	0	102
	2	395	118	0	14	4	0	8	4	0	0	0	0	545
22:00	0	74	16	0	1	0	0	0	1	0	0	0	0	92
22:15	0	61	22	0	2	0	0	0	1	0	0	0	0	86
22:30	0	54	20	0	3	1	0	1	0	0	0	0	0	79
22:45	0	52	16	0	1	0	0	0	0	0	0	0	0	69
	0	241	74	0	7	1	0	1	2	0	0	0	0	326
23:00	0	43	16	0	3	0	0	0	1	0	0	0	0	63
23:15	0	35	15	0	1	0	0	0	0	1	0	0	0	52
23:30	0	37	11	1	1	0	0	0	1	0	0	0	0	51
23:45	0	34	10	0	2	0	0	0	1	0	0	0	0	47
	0	149	52	1	7	0	0	0	3	1	0	0	0	213
Total	66	7096	2040	46	212	101	7	204	76	27	12	6	10	9903
Percent	0.7%	71.7%	20.6%	0.5%	2.1%	1.0%	0.1%	2.1%	0.8%	0.3%	0.1%	0.1%	0.1%	
Grand Total	97	9713	2913	82	334	142	9	283	177	33	13	6	14	13816
Percent	0.7%	70.3%	21.1%	0.6%	2.4%	1.0%	0.1%	2.0%	1.3%	0.2%	0.1%	0.0%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
[alltrafficdata.net](http://alltrafficdata.net)

Site Code: 3  
 Station ID: G

US52 - 301 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	05/21/13	0	7	7	0	1	0	0	1	0	0	0	0	0	16
	00:15	0	12	6	0	1	0	0	1	1	0	0	0	0	21
	00:30	0	8	2	0	2	0	0	0	0	0	0	0	0	12
	00:45	0	4	2	0	1	0	0	0	0	0	0	0	0	7
	01:00	0	31	17	0	5	0	0	2	1	0	0	0	0	56
	01:15	0	5	2	0	0	0	0	0	2	0	0	0	0	9
	01:30	0	4	2	0	1	0	0	1	0	0	0	0	0	8
	01:45	0	2	6	0	1	0	0	0	0	0	0	0	0	9
	02:00	1	5	1	0	1	0	0	0	0	0	0	0	0	8
	02:15	1	16	11	0	3	0	0	1	2	0	0	0	0	34
	02:30	0	6	0	0	1	0	0	0	0	0	0	0	0	7
	02:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6
	03:00	0	4	2	0	0	0	0	0	1	0	0	0	0	7
	03:15	0	4	1	0	2	0	0	0	0	0	0	0	0	7
	03:30	0	18	5	0	3	0	0	0	1	0	0	0	0	27
	03:45	0	7	2	0	0	0	0	0	1	0	0	0	0	10
	04:00	0	6	1	0	1	0	0	0	1	0	0	0	0	9
	04:15	0	8	4	0	1	0	0	0	0	0	0	0	0	13
	04:30	0	8	5	0	2	0	0	0	0	0	0	0	0	15
	04:45	0	29	12	0	4	0	0	0	2	0	0	0	0	47
	05:00	0	9	5	0	2	0	0	1	0	0	0	0	0	17
	05:15	0	8	10	0	5	0	0	0	3	0	0	0	0	26
	05:30	0	16	12	0	3	0	0	1	6	0	0	0	0	38
	05:45	0	25	16	0	6	0	0	0	4	0	0	0	0	51
	06:00	0	58	43	0	16	0	0	2	13	0	0	0	0	132
	06:15	0	26	8	1	4	1	0	1	1	0	0	0	0	42
	06:30	0	41	23	0	9	1	0	2	2	0	0	0	0	78
	06:45	0	47	24	1	21	2	0	4	0	0	0	0	0	99
	07:00	0	51	21	0	15	1	0	4	2	1	0	0	0	95
	07:15	0	165	76	2	49	5	0	11	5	1	0	0	0	314
	07:30	1	52	34	2	13	2	0	3	0	0	0	0	0	107
	07:45	1	74	44	0	12	0	0	4	2	0	0	0	1	138
	08:00	0	128	65	0	18	2	0	10	1	1	0	0	0	225
	08:15	1	130	61	0	22	1	0	12	0	0	0	0	0	227
	08:30	3	384	204	2	65	5	0	29	3	1	0	0	1	697
	08:45	2	163	80	2	22	6	0	7	1	1	0	0	0	284
	09:00	6	189	56	2	15	5	1	14	2	2	1	1	1	295
	09:15	10	110	28	3	4	2	2	10	0	2	1	0	1	173
	09:30	7	90	17	3	3	3	2	15	0	3	1	0	1	145
	09:45	25	552	181	10	44	16	5	46	3	8	3	1	3	897
	10:00	1	94	27	2	8	2	4	13	0	6	3	1	1	162
	10:15	6	67	13	3	7	4	1	10	2	4	0	0	0	117
	10:30	4	112	50	4	9	2	3	9	0	4	1	0	1	199
	10:45	0	127	71	1	24	2	0	6	2	1	0	0	0	234
	11:00	11	400	161	10	48	10	8	38	4	15	4	1	2	712
	11:15	0	94	65	6	27	2	0	8	0	1	0	0	0	203
	11:30	0	96	62	0	16	2	0	6	3	1	0	0	0	186
	11:45	1	101	59	1	19	1	0	6	3	0	0	0	1	192
	12:00	0	87	52	2	12	2	0	4	1	0	0	0	0	160
	12:15	1	378	238	9	74	7	0	24	7	2	0	0	1	741
	12:30	0	79	59	1	16	2	0	7	0	0	0	0	0	164
	12:45	1	89	39	2	13	0	0	5	4	0	0	0	0	153
	13:00	0	93	47	0	25	1	0	3	1	0	0	0	0	170
	13:15	1	86	52	2	21	0	0	5	4	1	0	0	0	172
	13:30	2	347	197	5	75	3	0	20	9	1	0	0	0	659
	13:45	0	89	71	0	22	1	0	9	1	0	0	0	1	194
	14:00	1	92	50	1	14	0	0	3	6	0	0	0	0	167
	14:15	0	68	53	0	14	0	0	3	5	0	0	0	0	143
	14:30	0	95	42	0	23	2	0	5	3	0	1	0	0	171
	14:45	1	344	216	1	73	3	0	20	15	0	1	0	1	675
Total		44	2722	1361	39	459	49	13	193	65	28	8	2	8	4991
Percent		0.9%	54.5%	27.3%	0.8%	9.2%	1.0%	0.3%	3.9%	1.3%	0.6%	0.2%	0.0%	0.2%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: 3  
 Station ID: G  
 US52 - 301 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

NB	Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
	12 PM	1	68	43	1	24	2	0	11	2	0	0	0	0	152
	12:15	1	87	60	2	17	3	0	4	1	0	0	0	0	175
	12:30	2	90	55	1	17	2	1	8	2	0	0	0	0	178
	12:45	2	91	54	2	22	2	0	7	2	0	0	0	0	182
		6	336	212	6	80	9	1	30	7	0	0	0	0	687
	13:00	0	91	45	0	19	2	0	7	1	0	0	0	0	165
	13:15	2	102	45	2	21	0	0	7	3	0	0	0	0	182
	13:30	1	107	51	1	17	2	0	1	4	0	0	0	0	184
	13:45	0	111	69	1	22	3	0	12	3	0	0	0	0	221
		3	411	210	4	79	7	0	27	11	0	0	0	0	752
	14:00	1	124	65	1	9	1	1	4	2	1	1	0	0	210
	14:15	1	117	49	3	15	1	0	13	3	1	2	0	2	207
	14:30	2	113	60	2	20	2	0	9	1	2	0	0	0	211
	14:45	0	106	49	1	20	0	0	5	4	0	0	0	0	185
		4	460	223	7	64	4	1	31	10	4	3	0	2	813
	15:00	1	107	34	2	15	0	0	5	2	0	0	0	0	166
	15:15	2	107	53	0	17	1	0	10	4	0	0	0	1	195
	15:30	2	156	61	1	21	5	1	12	3	0	0	0	0	262
	15:45	2	181	73	0	21	1	0	11	2	1	0	0	0	292
		7	551	221	3	74	7	1	38	11	1	0	0	1	915
	16:00	2	142	64	1	22	2	0	10	0	1	0	0	0	244
	16:15	1	92	55	0	14	0	0	13	1	2	0	0	0	178
	16:30	2	120	54	3	15	1	0	4	3	0	0	0	0	202
	16:45	0	119	62	1	13	1	0	10	3	1	0	0	0	210
		5	473	235	5	64	4	0	37	7	4	0	0	0	834
	17:00	1	109	50	0	15	2	0	11	3	1	0	0	0	192
	17:15	1	120	49	1	25	2	0	1	1	0	0	0	0	200
	17:30	1	109	42	0	18	4	1	8	3	1	1	0	1	189
	17:45	0	114	53	1	17	2	1	6	2	0	1	0	0	197
		3	452	194	2	75	10	2	26	9	2	2	0	1	778
	18:00	0	108	44	0	14	1	0	6	1	0	0	1	0	175
	18:15	3	97	44	0	15	2	0	5	1	0	0	0	1	168
	18:30	2	110	42	2	14	2	0	7	2	0	0	0	0	181
	18:45	0	84	49	0	12	0	0	3	1	0	0	0	0	149
		5	399	179	2	55	5	0	21	5	0	0	1	1	673
	19:00	1	69	29	1	8	0	0	4	1	2	0	0	0	115
	19:15	1	63	30	1	13	0	0	1	0	0	0	0	0	109
	19:30	0	63	31	0	3	0	0	1	3	1	0	0	0	102
	19:45	1	55	30	0	11	1	0	1	5	0	0	0	0	104
		3	250	120	2	35	1	0	7	9	3	0	0	0	430
	20:00	1	70	33	0	8	1	0	0	4	0	0	0	0	117
	20:15	1	59	30	1	6	0	0	2	2	0	0	0	0	101
	20:30	1	43	26	1	4	0	0	2	1	0	0	0	0	78
	20:45	2	58	30	0	14	0	0	1	0	0	0	0	0	105
		5	230	119	2	32	1	0	5	7	0	0	0	0	401
	21:00	0	46	29	1	5	0	0	3	0	0	0	0	1	85
	21:15	0	37	18	0	5	0	0	1	0	0	0	0	0	61
	21:30	1	53	19	0	7	0	0	2	1	0	0	0	0	83
	21:45	0	43	23	0	10	0	0	2	0	1	0	0	0	79
		1	179	89	1	27	0	0	8	1	1	0	0	1	308
	22:00	0	38	18	0	3	1	0	1	2	0	0	0	0	63
	22:15	0	26	15	0	5	1	0	0	0	0	0	0	0	47
	22:30	0	40	12	0	3	0	0	0	1	0	0	0	0	56
	22:45	0	29	9	0	5	0	0	1	1	0	0	0	0	45
		0	133	54	0	16	2	0	2	4	0	0	0	0	211
	23:00	0	30	12	0	1	0	0	0	1	0	0	0	0	44
	23:15	0	22	6	0	2	0	0	0	0	0	0	0	0	30
	23:30	0	21	7	0	1	0	0	2	2	0	0	0	0	33
	23:45	0	15	7	0	4	0	0	0	1	0	0	0	0	27
		0	88	32	0	8	0	0	2	4	0	0	0	0	134
	Total	42	3962	1888	34	609	50	5	234	85	15	5	1	6	6936
	Percent	0.6%	57.1%	27.2%	0.5%	8.8%	0.7%	0.1%	3.4%	1.2%	0.2%	0.1%	0.0%	0.1%	
	Grand Total	86	6684	3249	73	1068	99	18	427	150	43	13	3	14	11927
	Percent	0.7%	56.0%	27.2%	0.6%	9.0%	0.8%	0.2%	3.6%	1.3%	0.4%	0.1%	0.0%	0.1%	

# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, GA 30012  
 alltrafficdata.net

Site Code: G.5  
 Station ID: G.5

US52 - 301 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/21/13	0	16	4	0	0	0	0	0	0	0	0	0	0	20
00:15	1	21	4	0	0	0	0	0	0	1	0	0	0	27
00:30	0	12	5	0	0	1	0	0	0	0	0	0	0	18
00:45	0	16	5	0	0	0	0	0	0	0	0	0	0	21
	1	65	18	0	0	1	0	0	0	1	0	0	0	86
01:00	0	17	3	0	1	0	0	0	1	0	0	0	0	22
01:15	1	9	3	0	0	0	0	0	0	0	0	0	0	13
01:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:45	0	11	3	1	0	0	0	1	0	0	0	0	0	16
	1	42	10	1	1	0	0	1	1	0	0	0	0	57
02:00	0	12	3	1	0	0	0	1	1	0	0	0	0	18
02:15	0	11	1	0	0	0	0	0	0	0	0	0	0	12
02:30	0	5	1	0	0	0	0	0	1	0	0	0	0	7
02:45	0	4	3	0	0	0	0	0	1	0	0	0	0	8
	0	32	8	1	0	0	0	1	3	0	0	0	0	45
03:00	0	9	0	0	1	0	0	0	1	0	0	0	0	11
03:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
03:30	0	5	1	0	0	1	0	0	1	0	0	0	0	8
03:45	0	7	3	0	0	1	0	0	1	0	0	0	0	12
	0	27	5	0	1	2	0	0	3	0	0	0	0	38
04:00	0	9	2	0	0	0	0	0	1	0	0	0	0	12
04:15	0	12	0	0	1	0	0	1	1	0	0	0	0	15
04:30	0	11	2	0	0	0	0	2	2	0	0	0	0	17
04:45	0	3	4	1	0	0	0	0	0	0	0	0	0	8
	0	35	8	1	1	0	0	3	4	0	0	0	0	52
05:00	0	9	4	0	2	0	0	0	2	0	0	0	0	17
05:15	0	14	6	0	1	0	0	1	1	0	0	0	0	23
05:30	0	25	13	2	1	0	0	1	3	0	0	0	0	45
05:45	1	30	17	1	2	1	0	0	2	0	0	0	0	54
	1	78	40	3	6	1	0	2	8	0	0	0	0	139
06:00	0	33	7	2	6	0	0	0	2	0	0	0	0	50
06:15	1	61	3	2	5	1	1	2	0	0	0	0	0	76
06:30	0	72	13	1	6	1	0	1	1	0	0	0	0	95
06:45	2	90	16	1	4	3	0	3	5	0	0	0	1	125
	3	256	39	6	21	5	1	6	8	0	0	0	1	346
07:00	1	126	17	0	0	4	0	3	1	0	0	0	1	153
07:15	2	132	26	0	3	5	0	2	4	0	0	0	0	174
07:30	1	126	21	0	0	3	1	3	3	0	0	0	0	158
07:45	2	122	25	2	3	1	0	1	1	0	1	0	0	158
	6	506	89	2	6	13	1	9	9	0	1	0	1	643
08:00	3	137	26	0	3	5	0	3	3	0	1	0	0	181
08:15	3	123	24	0	6	0	0	7	4	0	0	0	1	168
08:30	0	68	30	0	11	0	0	2	3	0	0	0	0	114
08:45	0	74	21	2	7	0	0	2	6	1	0	0	0	113
	6	402	101	2	27	5	0	14	16	1	1	0	1	576
09:00	0	53	17	0	7	1	1	4	4	0	0	0	1	88
09:15	1	80	20	1	5	1	1	3	2	0	0	0	0	114
09:30	1	73	26	0	9	2	0	3	4	0	0	0	1	119
09:45	3	78	20	0	5	2	1	7	6	2	0	0	1	125
	5	284	83	1	26	6	3	17	16	2	0	0	3	446
10:00	1	81	30	2	9	3	0	2	5	0	0	0	0	133
10:15	2	93	29	1	2	5	1	1	1	0	0	0	0	135
10:30	2	104	27	0	1	4	0	2	2	0	0	0	0	142
10:45	2	85	29	0	9	1	0	5	3	0	0	0	1	135
	7	363	115	3	21	13	1	10	11	0	0	0	1	545
11:00	2	84	29	1	2	4	0	3	1	1	1	0	1	129
11:15	1	108	27	0	1	3	0	1	4	0	0	0	0	145
11:30	3	93	26	2	5	5	0	2	2	0	0	0	0	138
11:45	0	111	26	1	7	3	0	2	3	0	0	0	0	153
	6	396	108	4	15	15	0	8	10	1	1	0	1	565
Total	36	2486	624	24	125	61	6	71	89	5	3	0	8	3538
Percent	1.0%	70.3%	17.6%	0.7%	3.5%	1.7%	0.2%	2.0%	2.5%	0.1%	0.1%	0.0%	0.2%	



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1336 Farmer Road  
 Conyers, GA 30012  
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Site Code: G.5  
 Station ID: G.5  
 US52 - 301 SOUTH OF ALLIGATOR ROAD

Latitude: 0' 0.000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	4	95	32	0	6	2	0	4	5	0	0	0	0	148
12:15	3	152	30	0	5	0	0	0	5	0	0	0	0	195
12:30	1	109	29	1	4	8	0	2	1	1	0	0	1	157
12:45	6	116	32	0	5	3	1	4	5	0	0	0	0	172
	14	472	123	1	20	13	1	10	16	1	0	0	1	672
13:00	2	127	25	1	9	4	0	3	3	0	0	0	1	175
13:15	4	118	29	1	3	10	0	8	0	0	0	1	0	174
13:30	0	119	24	4	5	6	0	1	6	0	0	0	0	165
13:45	3	125	36	0	9	7	0	5	3	0	0	0	0	188
	9	489	114	6	26	27	0	17	12	0	0	1	1	702
14:00	4	149	23	0	6	2	0	1	1	0	0	0	0	186
14:15	1	169	26	1	3	1	1	4	0	0	1	0	0	207
14:30	0	167	34	1	5	2	0	8	2	1	1	0	0	221
14:45	2	141	40	0	7	6	0	7	0	0	1	0	0	204
	7	626	123	2	21	11	1	20	3	1	3	0	0	818
15:00	3	160	36	0	4	2	0	6	1	1	0	0	0	213
15:15	1	156	37	3	7	4	1	5	2	0	1	0	0	217
15:30	4	193	30	0	7	2	0	4	0	0	0	0	0	240
15:45	0	160	35	1	13	3	0	3	4	2	0	0	1	222
	8	669	138	4	31	11	1	18	7	3	1	0	1	892
16:00	1	199	25	1	6	6	0	7	2	1	0	0	0	248
16:15	5	200	36	0	5	5	1	4	3	0	0	0	0	259
16:30	2	220	32	0	4	5	0	6	1	2	0	0	0	272
16:45	2	221	25	0	1	3	0	9	1	0	0	0	0	262
	10	840	118	1	16	19	1	26	7	3	0	0	0	1041
17:00	8	223	45	1	3	4	2	5	0	2	1	0	0	294
17:15	4	250	39	0	5	3	0	4	2	0	0	0	0	307
17:30	2	232	35	0	2	7	0	10	0	4	0	0	2	294
17:45	11	247	41	0	4	6	1	5	1	3	0	0	1	320
	25	952	160	1	14	20	3	24	3	9	1	0	3	1215
18:00	8	228	21	0	2	4	0	5	0	0	0	1	2	271
18:15	6	252	38	0	4	4	0	2	1	1	0	0	0	308
18:30	1	190	25	0	4	3	0	2	0	2	1	0	2	230
18:45	4	164	34	0	4	4	0	3	1	2	0	0	0	216
	19	834	118	0	14	15	0	12	2	5	1	1	4	1025
19:00	0	173	22	0	3	1	0	3	0	2	1	0	0	205
19:15	2	151	22	1	2	5	0	1	1	0	1	0	0	186
19:30	2	132	25	0	4	2	0	5	0	0	0	0	0	170
19:45	2	125	18	0	3	3	0	1	0	0	0	0	0	152
	6	581	87	1	12	11	0	10	1	2	2	0	0	713
20:00	2	118	16	0	4	4	1	4	2	0	0	0	0	151
20:15	0	132	19	0	2	1	0	1	1	0	0	0	0	156
20:30	2	116	26	0	1	2	0	0	2	0	0	0	0	149
20:45	2	89	14	0	4	1	0	2	1	0	0	0	0	113
	6	455	75	0	11	8	1	7	6	0	0	0	0	569
21:00	0	130	21	0	2	1	0	0	1	1	0	0	0	156
21:15	0	104	13	0	2	2	0	4	2	0	1	0	0	128
21:30	1	111	12	0	2	0	0	0	1	0	0	0	0	127
21:45	1	81	12	0	1	1	0	2	0	0	0	0	0	98
	2	426	58	0	7	4	0	6	4	1	1	0	0	509
22:00	0	70	7	0	0	1	1	0	2	0	0	0	0	81
22:15	1	70	14	0	0	2	0	0	1	0	0	0	0	88
22:30	0	59	14	0	2	0	0	1	0	0	0	0	0	76
22:45	1	50	12	0	2	0	0	1	0	0	0	0	0	66
	2	249	47	0	4	3	1	2	3	0	0	0	0	311
23:00	0	44	7	0	2	1	0	0	1	0	0	0	0	55
23:15	0	34	10	0	1	0	0	0	0	1	0	0	0	46
23:30	0	40	8	0	1	0	0	0	1	0	0	0	0	50
23:45	0	34	6	0	1	0	0	0	0	0	0	0	0	41
	0	152	31	0	5	1	0	0	2	1	0	0	0	192
Total	108	6745	1192	16	181	143	9	152	66	26	9	2	10	8659
Percent	1.2%	77.9%	13.8%	0.2%	2.1%	1.7%	0.1%	1.8%	0.8%	0.3%	0.1%	0.0%	0.1%	
Grand Total	144	9231	1816	40	306	204	15	223	155	31	12	2	18	12197
Percent	1.2%	75.7%	14.9%	0.3%	2.5%	1.7%	0.1%	1.8%	1.3%	0.3%	0.1%	0.0%	0.1%	

<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> NB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	0	1	5	2	2	0	1	0	0	0	0	11	36-45	7	
1:00 AM	0	0	0	0	0	2	1	1	1	0	1	0	0	0	6	36-45	3	
2:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3	46-55	2	
3:00 AM	0	0	0	0	0	1	2	2	0	0	0	0	0	0	5	41-50	4	
4:00 AM	0	0	0	0	2	2	5	5	4	1	0	0	0	0	19	41-50	10	
5:00 AM	0	0	0	0	0	5	10	20	9	7	1	1	0	0	53	41-50	30	
6:00 AM	0	0	0	0	2	5	42	46	21	3	0	0	1	0	120	41-50	87	
7:00 AM	0	0	0	0	2	35	78	81	23	3	0	0	0	0	222	41-50	158	
8:00 AM	3	0	1	0	3	15	50	49	17	2	1	0	0	0	141	41-50	99	
9:00 AM	0	0	0	0	8	20	36	33	18	2	1	0	0	0	118	41-50	68	
10:00 AM	0	0	0	1	8	15	32	26	10	2	1	0	1	0	96	41-50	58	
11:00 AM	2	0	0	1	3	7	40	33	13	5	1	0	0	0	105	41-50	72	
12:00 PM	2	0	0	2	5	11	29	33	7	2	0	0	0	0	91	41-50	61	
1:00 PM	1	0	1	1	5	23	36	22	16	2	0	0	0	0	107	36-45	59	
2:00 PM	4	0	1	5	2	22	44	38	11	1	0	0	0	0	128	41-50	81	
3:00 PM	1	0	0	4	9	16	42	47	16	3	1	0	0	0	139	41-50	89	
4:00 PM	3	0	0	1	8	22	33	58	12	2	1	0	0	0	140	41-50	90	
5:00 PM	1	0	0	4	6	20	35	40	20	1	0	0	0	0	127	41-50	75	
6:00 PM	0	0	0	1	0	12	44	38	19	4	0	0	0	0	118	41-50	81	
7:00 PM	0	0	0	1	4	21	35	28	6	4	0	0	0	0	99	41-50	62	
8:00 PM	3	0	0	4	5	17	21	19	5	2	1	0	0	0	77	41-50	39	
9:00 PM	0	0	0	0	1	8	18	14	4	2	1	0	0	0	48	41-50	31	
10:00 PM	0	0	0	0	0	3	7	13	4	2	1	1	0	0	31	41-50	20	
11:00 PM	0	0	0	0	2	2	5	5	2	1	0	0	0	0	17	41-50	10	
<b>Day Total</b>	20	0	3	25	76	289	648	654	239	52	11	2	2	0	2021	41-50	1302	
<b>Percent</b>	1.0%	0.0%	0.1%	1.2%	3.8%	14.3%	32.1%	32.4%	11.8%	2.6%	0.5%	0.1%	0.1%	0.0%				
<b>ADT 2021</b>																		
<b>AM Peak Volume</b>	8:00 AM	8:00 AM	10:00 AM	9:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	5:00 AM	1:00 AM	5:00 AM	6:00 AM			7:00 AM			
	3	1	1	8	35	78	81	23	7	1	1	1			222			
<b>PM Peak Volume</b>	2:00 PM	1:00 PM	2:00 PM	3:00 PM	1:00 PM	2:00 PM	4:00 PM	5:00 PM	6:00 PM	3:00 PM	10:00 PM				4:00 PM			
	4	1	5	9	23	44	58	20	4	1	1				140			
<i>Comments:</i>																		

<b>LOCATION:</b> Twin Church Rd 350' S of US 76														<b>QC JOB #:</b> 13216101			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> NB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	20	0	3	25	76	289	648	654	239	52	11	2	2	0	2021	41-50	1302
<b>Percent</b>	1.0%	0.0%	0.1%	1.2%	3.8%	14.3%	32.1%	32.4%	11.8%	2.6%	0.5%	0.1%	0.1%	0.0%			
<b>Cumulative Percent</b>	1.0%	1.0%	1.1%	2.4%	6.1%	20.4%	52.5%	84.9%	96.7%	99.3%	99.8%	99.9%	100.0%	100.0%			
<b>ADT 2021</b>															<b>85th Percentile</b> 50 MPH <b>Mean Speed(Average):</b> 44 MPH <b>Median</b> 44 MPH <b>Mode:</b> 48 MPH		
<i>Comments:</i>																	



**LOCATION:** Twin Church Rd 350' S of US 76  
**SPECIFIC LOCATION:** 0 ft from  
**CITY/STATE:** Florence, SC

**QC JOB #:** 13216101  
**DIRECTION:** NB  
**DATE:** Mar 10 2015

Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	10	0	0	0	0	0	0	1	0	0	0	0	0	11
1:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
2:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
4:00 AM	0	11	7	0	0	1	0	0	0	0	0	0	0	0	19
5:00 AM	0	35	15	0	2	1	0	0	0	0	0	0	0	0	53
6:00 AM	1	74	39	1	4	0	0	1	0	0	0	0	0	0	120
7:00 AM	0	157	59	1	4	0	0	1	0	0	0	0	0	0	222
8:00 AM	0	100	29	3	4	0	0	1	1	0	0	0	0	3	141
9:00 AM	0	82	25	0	7	2	0	2	0	0	0	0	0	0	118
10:00 AM	0	63	24	0	9	0	0	0	0	0	0	0	0	0	96
11:00 AM	1	71	28	0	2	0	0	0	1	0	0	0	0	2	105
12:00 PM	0	63	20	0	5	0	0	1	0	0	0	0	0	2	91
1:00 PM	0	73	24	1	5	0	0	2	1	0	0	0	0	1	107
2:00 PM	0	77	37	2	6	0	0	2	0	0	0	0	0	4	128
3:00 PM	0	92	35	1	8	0	0	2	0	0	0	0	0	1	139
4:00 PM	0	87	42	0	5	2	0	1	0	0	0	0	0	3	140
5:00 PM	3	86	34	0	2	0	0	1	0	0	0	0	0	1	127
6:00 PM	0	81	31	0	6	0	0	0	0	0	0	0	0	0	118
7:00 PM	0	70	24	1	4	0	0	0	0	0	0	0	0	0	99
8:00 PM	0	55	14	1	3	0	0	0	1	0	0	0	0	3	77
9:00 PM	0	34	13	0	1	0	0	0	0	0	0	0	0	0	48
10:00 PM	0	21	7	0	3	0	0	0	0	0	0	0	0	0	31
11:00 PM	0	12	5	0	0	0	0	0	0	0	0	0	0	0	17
<b>Day Total</b>	5	1366	512	11	82	6	0	14	5	0	0	0	0	20	2021
<b>Percent</b>	0.2%	67.6%	25.3%	0.5%	4.1%	0.3%	0.0%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	1.0%	
<b>ADT 2021</b>															
<b>AM Peak</b>	6:00 AM	7:00 AM	7:00 AM	8:00 AM	10:00 AM	9:00 AM		9:00 AM	12:00 AM					8:00 AM	7:00 AM
<b>Volume</b>	1	157	59	3	9	2		2	1					3	222
<b>PM Peak</b>	5:00 PM	3:00 PM	4:00 PM	2:00 PM	3:00 PM	4:00 PM		1:00 PM	1:00 PM					2:00 PM	4:00 PM
<b>Volume</b>	3	92	42	2	8	2		2	1					4	140

Comments:

<b>LOCATION:</b> Twin Church Rd 350' S of US 76													<b>QC JOB #:</b> 13216101		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> NB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	5	1366	512	11	82	6	0	14	5	0	0	0	0	20	2021
<b>Percent</b>	0.2%	67.6%	25.3%	0.5%	4.1%	0.3%	0.0%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	1.0%	
<b>ADT 2021</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC						<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> NB <b>DATE:</b> Mar 10 2015 - Mar 10 2015				
Start Time	Mon	Tue 10-Mar-15	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		11				11			11	
1:00 AM		6				6			6	
2:00 AM		3				3			3	
3:00 AM		5				5			5	
4:00 AM		19				19			19	
5:00 AM		53				53			53	
6:00 AM		120				120			120	
7:00 AM		222				222			222	
8:00 AM		141				141			141	
9:00 AM		118				118			118	
10:00 AM		96				96			96	
11:00 AM		105				105			105	
12:00 PM		91				91			91	
1:00 PM		107				107			107	
2:00 PM		128				128			128	
3:00 PM		139				139			139	
4:00 PM		140				140			140	
5:00 PM		127				127			127	
6:00 PM		118				118			118	
7:00 PM		99				99			99	
8:00 PM		77				77			77	
9:00 PM		48				48			48	
10:00 PM		31				31			31	
11:00 PM		17				17			17	
<b>Day Total</b>		2021				2021			2021	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		222				222			222	
PM Peak		4:00 PM				4:00 PM			4:00 PM	
Volume		140				140			140	
<i>Comments:</i>										

<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> NB/SB <b>DATE:</b> Mar 10 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	1	3	6	4	5	0	1	1	0	0	0	21	36-45	10
1:00 AM	0	0	0	0	0	2	7	3	1	0	1	0	0	0	14	41-50	10
2:00 AM	0	0	0	0	0	1	4	1	1	0	0	0	0	0	7	36-45	5
3:00 AM	0	0	0	0	1	1	4	3	1	0	0	0	0	0	10	42-51	6
4:00 AM	0	0	0	0	2	5	5	5	4	2	0	0	0	0	23	36-45	10
5:00 AM	0	0	0	0	0	13	19	24	9	8	2	1	0	0	76	41-50	42
6:00 AM	0	0	0	0	5	14	58	54	23	3	0	0	1	0	158	41-50	112
7:00 AM	1	0	0	0	9	51	118	103	25	4	0	0	0	0	311	41-50	221
8:00 AM	4	0	1	0	11	33	86	77	20	2	1	0	0	0	235	41-50	162
9:00 AM	1	0	0	2	11	34	64	45	24	3	1	0	0	0	185	41-50	109
10:00 AM	1	0	0	2	17	39	57	35	13	2	1	0	1	0	168	36-45	96
11:00 AM	3	0	0	2	10	33	71	46	16	5	2	0	0	0	188	41-50	116
12:00 PM	5	3	1	4	12	36	57	46	11	5	0	0	0	0	180	41-50	102
1:00 PM	3	0	1	3	16	57	68	38	20	2	0	0	0	0	208	36-45	124
2:00 PM	5	0	2	8	13	65	88	62	20	2	0	0	0	0	265	36-45	153
3:00 PM	2	0	0	6	19	58	98	79	21	3	1	0	0	0	287	41-50	177
4:00 PM	8	0	1	2	19	57	80	93	19	4	1	0	0	0	284	41-50	173
5:00 PM	3	0	0	4	18	69	136	103	29	3	1	0	0	0	366	41-50	239
6:00 PM	2	0	0	1	5	48	94	76	28	4	0	0	0	0	258	41-50	169
7:00 PM	1	0	0	2	10	47	76	53	9	4	0	0	0	0	202	41-50	129
8:00 PM	7	0	0	5	12	41	69	35	9	2	1	0	0	0	181	36-45	110
9:00 PM	0	0	0	1	3	21	52	21	5	2	1	0	0	0	106	36-45	73
10:00 PM	1	0	2	1	3	13	28	24	7	2	1	1	0	0	83	41-50	51
11:00 PM	0	0	0	0	2	7	12	9	4	1	1	0	0	0	36	41-50	20
<b>Day Total</b>	47	3	8	44	201	751	1355	1040	319	64	16	2	2	0	3852	41-50	2395
<b>Percent</b>	1.2%	0.1%	0.2%	1.1%	5.2%	19.5%	35.2%	27.0%	8.3%	1.7%	0.4%	0.1%	0.1%	0.0%			
<b>ADT</b> 3852																	
<b>AM Peak</b> Volume	8:00 AM	8:00 AM	9:00 AM	10:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	5:00 AM	5:00 AM	5:00 AM	6:00 AM	7:00 AM	311		
<b>PM Peak</b> Volume	4:00 PM	12:00 PM	2:00 PM	2:00 PM	3:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	12:00 PM	3:00 PM	10:00 PM	5:00 PM	366			
<b>Comments:</b>																	

<b>LOCATION:</b> Twin Church Rd 350' S of US 76														<b>QC JOB #:</b> 13216101			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> NB/SB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	47	3	8	44	201	751	1355	1040	319	64	16	2	2	0	3852	41-50	2395
<b>Percent</b>	1.2%	0.1%	0.2%	1.1%	5.2%	19.5%	35.2%	27.0%	8.3%	1.7%	0.4%	0.1%	0.1%	0.0%			
<b>Cumulative Percent</b>	1.2%	1.3%	1.5%	2.6%	7.9%	27.4%	62.5%	89.5%	97.8%	99.5%	99.9%	99.9%	100.0%	100.0%			
<b>ADT 3852</b>															<b>85th Percentile</b> 49 MPH <b>Mean Speed(Average)</b> 42 MPH <b>Median</b> 43 MPH <b>Mode:</b> 43 MPH		
<i>Comments:</i>																	





<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> NB/SB <b>DATE:</b> Mar 10 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	20	0	0	0	0	0	0	1	0	0	0	0	0	21
1:00 AM	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14
2:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	0	7
3:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	0	10
4:00 AM	0	13	9	0	0	1	0	0	0	0	0	0	0	0	23
5:00 AM	0	54	18	0	2	1	0	1	0	0	0	0	0	0	76
6:00 AM	1	105	45	1	4	0	0	2	0	0	0	0	0	0	158
7:00 AM	0	225	76	2	5	1	0	1	0	0	0	0	0	1	311
8:00 AM	1	169	48	4	7	0	0	1	1	0	0	0	0	4	235
9:00 AM	0	128	39	0	10	3	0	4	0	0	0	0	0	1	185
10:00 AM	0	119	36	0	11	0	0	1	0	0	0	0	0	1	168
11:00 AM	3	122	48	3	7	0	0	0	2	0	0	0	0	3	188
12:00 PM	1	126	39	0	7	1	0	1	0	0	0	0	0	5	180
1:00 PM	2	152	37	2	8	1	0	2	1	0	0	0	0	3	208
2:00 PM	1	178	65	2	11	0	0	2	1	0	0	0	0	5	265
3:00 PM	1	202	61	1	17	0	0	2	0	0	0	0	0	3	287
4:00 PM	1	178	80	0	12	4	0	1	0	0	0	0	0	8	284
5:00 PM	4	266	82	1	7	1	0	1	1	0	0	0	0	3	366
6:00 PM	1	186	58	0	9	1	0	1	0	0	0	0	0	2	258
7:00 PM	1	150	41	1	8	0	0	0	0	0	0	0	0	1	202
8:00 PM	0	125	42	1	4	1	0	0	1	0	0	0	0	7	181
9:00 PM	0	80	23	0	2	1	0	0	0	0	0	0	0	0	106
10:00 PM	1	63	13	0	5	0	0	0	0	0	0	0	0	1	83
11:00 PM	0	26	8	0	1	0	0	0	0	0	0	0	0	1	36
<b>Day Total</b>	18	2712	871	18	140	16	0	20	8	0	0	0	0	49	3852
<b>Percent</b>	0.5%	70.4%	22.6%	0.5%	3.6%	0.4%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	1.3%	
<b>ADT 3852</b>															
<b>AM Peak Volume</b>	11:00 AM	7:00 AM	7:00 AM	8:00 AM	10:00 AM	9:00 AM		9:00 AM	11:00 AM					8:00 AM	7:00 AM
	3	225	76	4	11	3		4	2					4	311
<b>PM Peak Volume</b>	5:00 PM	5:00 PM	5:00 PM	1:00 PM	3:00 PM	4:00 PM		1:00 PM	1:00 PM					4:00 PM	5:00 PM
	4	266	82	2	17	4		2	1					8	366
<i>Comments:</i>															

<b>LOCATION:</b> Twin Church Rd 350' S of US 76													<b>QC JOB #:</b> 13216101		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> NB/SB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	18	2712	871	18	140	16	0	20	8	0	0	0	0	49	3852
<b>Percent</b>	0.5%	70.4%	22.6%	0.5%	3.6%	0.4%	0.0%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	1.3%	
<b>ADT</b> 3852															
<i>Comments:</i>															



<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC						<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> NB/SB <b>DATE:</b> Mar 10 2015 - Mar 10 2015				
Start Time	Mon	Tue 10-Mar-15	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		21				21			21	
1:00 AM		14				14			14	
2:00 AM		7				7			7	
3:00 AM		10				10			10	
4:00 AM		23				23			23	
5:00 AM		76				76			76	
6:00 AM		158				158			158	
7:00 AM		311				311			311	
8:00 AM		235				235			235	
9:00 AM		185				185			185	
10:00 AM		168				168			168	
11:00 AM		188				188			188	
12:00 PM		180				180			180	
1:00 PM		208				208			208	
2:00 PM		265				265			265	
3:00 PM		287				287			287	
4:00 PM		284				284			284	
5:00 PM		366				366			366	
6:00 PM		258				258			258	
7:00 PM		202				202			202	
8:00 PM		181				181			181	
9:00 PM		106				106			106	
10:00 PM		83				83			83	
11:00 PM		36				36			36	
<b>Day Total</b>		3852				3852			3852	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		311				311			311	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		366				366			366	
<i>Comments:</i>										

<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> SB <b>DATE:</b> Mar 10 2015		
Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
	15	20	25	30	35	40	45	50	55	60	65	70	75	999			
12:00 AM	0	0	0	1	2	1	2	3	0	0	1	0	0	0	10	43-52	4
1:00 AM	0	0	0	0	0	0	6	2	0	0	0	0	0	0	8	41-50	8
2:00 AM	0	0	0	0	0	1	3	0	0	0	0	0	0	0	4	36-45	4
3:00 AM	0	0	0	0	1	0	2	1	1	0	0	0	0	0	5	41-50	3
4:00 AM	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4	31-40	3
5:00 AM	0	0	0	0	0	8	9	4	0	1	1	0	0	0	23	36-45	17
6:00 AM	0	0	0	0	3	9	16	8	2	0	0	0	0	0	38	36-45	25
7:00 AM	1	0	0	0	7	16	40	22	2	1	0	0	0	0	89	41-50	62
8:00 AM	1	0	0	0	8	18	36	28	3	0	0	0	0	0	94	41-50	63
9:00 AM	1	0	0	2	3	14	28	12	6	1	0	0	0	0	67	36-45	42
10:00 AM	1	0	0	1	9	24	25	9	3	0	0	0	0	0	72	36-45	49
11:00 AM	1	0	0	1	7	26	31	13	3	0	1	0	0	0	83	36-45	57
12:00 PM	3	3	1	2	7	25	28	13	4	3	0	0	0	0	89	36-45	52
1:00 PM	2	0	0	2	11	34	32	16	4	0	0	0	0	0	101	36-45	66
2:00 PM	1	0	1	3	11	43	44	24	9	1	0	0	0	0	137	36-45	87
3:00 PM	1	0	0	2	10	42	56	32	5	0	0	0	0	0	148	36-45	97
4:00 PM	5	0	1	1	11	35	47	35	7	2	0	0	0	0	144	37-46	82
5:00 PM	2	0	0	0	12	49	101	63	9	2	1	0	0	0	239	41-50	164
6:00 PM	2	0	0	0	5	36	50	38	9	0	0	0	0	0	140	41-50	87
7:00 PM	1	0	0	1	6	26	41	25	3	0	0	0	0	0	103	36-45	67
8:00 PM	4	0	0	1	7	24	48	16	4	0	0	0	0	0	104	36-45	71
9:00 PM	0	0	0	1	2	13	34	7	1	0	0	0	0	0	58	36-45	46
10:00 PM	1	0	2	1	3	10	21	11	3	0	0	0	0	0	52	41-50	32
11:00 PM	0	0	0	0	0	5	7	4	2	0	1	0	0	0	19	41-50	11
<b>Day Total</b>	27	3	5	19	125	462	707	386	80	12	5	0	0	0	1831	36-45	1169
<b>Percent</b>	1.5%	0.2%	0.3%	1.0%	6.8%	25.2%	38.6%	21.1%	4.4%	0.7%	0.3%	0.0%	0.0%	0.0%			
<b>ADT</b> 1831																	
<b>AM Peak</b> Volume	7:00 AM	9:00 AM			10:00 AM	11:00 AM	7:00 AM	8:00 AM	9:00 AM	4:00 AM	12:00 AM	8:00 AM			94		
	1	2			9	26	40	28	6	1	1						
<b>PM Peak</b> Volume	4:00 PM	12:00 PM	10:00 PM	2:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	2:00 PM	12:00 PM	5:00 PM	5:00 PM			239		
	5	3	2	3	12	49	101	63	9	3	1						
<i>Comments:</i>																	

<b>LOCATION:</b> Twin Church Rd 350' S of US 76														<b>QC JOB #:</b> 13216101			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> SB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	27	3	5	19	125	462	707	386	80	12	5	0	0	0	1831	36-45	1169
<b>Percent</b>	1.5%	0.2%	0.3%	1.0%	6.8%	25.2%	38.6%	21.1%	4.4%	0.7%	0.3%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	1.5%	1.6%	1.9%	2.9%	9.8%	35.0%	73.6%	94.7%	99.1%	99.7%	100.0%	100.0%	100.0%	100.0%			
<b>ADT</b> 1831															<b>85th Percentile</b> 47 MPH <b>Mean Speed(Average)</b> 41 MPH <b>Median</b> 41 MPH <b>Mode</b> 43 MPH		
<i>Comments:</i>																	



**LOCATION:** Twin Church Rd 350' S of US 76 **QC JOB #:** 13216101  
**SPECIFIC LOCATION:** 0 ft from **DIRECTION:** SB  
**CITY/STATE:** Florence, SC **DATE:** Mar 10 2015

Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
1:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
2:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
3:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
4:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
5:00 AM	0	19	3	0	0	0	0	1	0	0	0	0	0	0	23
6:00 AM	0	31	6	0	0	0	0	1	0	0	0	0	0	0	38
7:00 AM	0	68	17	1	1	1	0	0	0	0	0	0	0	1	89
8:00 AM	1	69	19	1	3	0	0	0	0	0	0	0	0	1	94
9:00 AM	0	46	14	0	3	1	0	2	0	0	0	0	0	1	67
10:00 AM	0	56	12	0	2	0	0	1	0	0	0	0	0	1	72
11:00 AM	2	51	20	3	5	0	0	0	1	0	0	0	0	1	83
12:00 PM	1	63	19	0	2	1	0	0	0	0	0	0	0	3	89
1:00 PM	2	79	13	1	3	1	0	0	0	0	0	0	0	2	101
2:00 PM	1	101	28	0	5	0	0	0	1	0	0	0	0	1	137
3:00 PM	1	110	26	0	9	0	0	0	0	0	0	0	0	2	148
4:00 PM	1	91	38	0	7	2	0	0	0	0	0	0	0	5	144
5:00 PM	1	180	48	1	5	1	0	0	1	0	0	0	0	2	239
6:00 PM	1	105	27	0	3	1	0	1	0	0	0	0	0	2	140
7:00 PM	1	80	17	0	4	0	0	0	0	0	0	0	0	1	103
8:00 PM	0	70	28	0	1	1	0	0	0	0	0	0	0	4	104
9:00 PM	0	46	10	0	1	1	0	0	0	0	0	0	0	0	58
10:00 PM	1	42	6	0	2	0	0	0	0	0	0	0	0	1	52
11:00 PM	0	14	3	0	1	0	0	0	0	0	0	0	0	1	19

<b>Day Total</b>	13	1346	359	7	58	10	0	6	3	0	0	0	0	29	1831
<b>Percent</b>	0.7%	73.5%	19.6%	0.4%	3.2%	0.5%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	1.6%	



<b>AM Peak Volume</b>	11:00 AM	8:00 AM	11:00 AM	11:00 AM	11:00 AM	7:00 AM		9:00 AM	11:00 AM					7:00 AM	8:00 AM
	2	69	20	3	5	1		2	1					1	94
<b>PM Peak Volume</b>	1:00 PM	5:00 PM	5:00 PM	1:00 PM	3:00 PM	4:00 PM		6:00 PM	2:00 PM					4:00 PM	5:00 PM
	2	180	48	1	9	2		1	1					5	239

*Comments:*

<b>LOCATION:</b> Twin Church Rd 350' S of US 76											<b>QC JOB #:</b> 13216101				
<b>SPECIFIC LOCATION:</b> 0 ft from											<b>DIRECTION:</b> SB				
<b>CITY/STATE:</b> Florence, SC											<b>DATE:</b> Mar 10 2015 - Mar 10 2015				
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	13	1346	359	7	58	10	0	6	3	0	0	0	0	29	1831
<b>Percent</b>	0.7%	73.5%	19.6%	0.4%	3.2%	0.5%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	1.6%	
<b>ADT</b> 1831															
<i>Comments:</i>															



<b>LOCATION:</b> Twin Church Rd 350' S of US 76 <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC						<b>QC JOB #:</b> 13216101 <b>DIRECTION:</b> SB <b>DATE:</b> Mar 10 2015 - Mar 10 2015				
Start Time	Mon	Tue 10-Mar-15	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		10				10			10	
1:00 AM		8				8			8	
2:00 AM		4				4			4	
3:00 AM		5				5			5	
4:00 AM		4				4			4	
5:00 AM		23				23			23	
6:00 AM		38				38			38	
7:00 AM		89				89			89	
8:00 AM		94				94			94	
9:00 AM		67				67			67	
10:00 AM		72				72			72	
11:00 AM		83				83			83	
12:00 PM		89				89			89	
1:00 PM		101				101			101	
2:00 PM		137				137			137	
3:00 PM		148				148			148	
4:00 PM		144				144			144	
5:00 PM		239				239			239	
6:00 PM		140				140			140	
7:00 PM		103				103			103	
8:00 PM		104				104			104	
9:00 PM		58				58			58	
10:00 PM		52				52			52	
11:00 PM		19				19			19	
<b>Day Total</b>		1831				1831			1831	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		8:00 AM				8:00 AM			8:00 AM	
Volume		94				94			94	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		239				239			239	
<i>Comments:</i>										



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 11 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
12:00 AM																	
1:00 AM																	
2:00 AM																	
3:00 AM																	
4:00 AM																	
5:00 AM																	
6:00 AM																	
7:00 AM																	
8:00 AM																	
9:00 AM																	
10:00 AM																	
11:00 AM																	
12:00 PM																	
1:00 PM																	
2:00 PM																	
3:00 PM																	
4:00 PM	18	1	16	34	81	145	110	14	0	0	0	0	0	0	419	36-45	255
5:00 PM	29	7	19	28	98	240	165	21	0	0	0	0	0	0	607	36-45	405
6:00 PM	39	3	8	23	88	197	114	18	1	0	1	0	0	0	492	36-45	310
7:00 PM	28	7	6	29	45	128	74	17	2	0	0	0	0	0	336	36-45	202
8:00 PM	16	3	14	43	118	88	14	2	0	0	0	0	0	0	298	31-40	206
9:00 PM	6	1	2	9	27	79	57	14	0	0	0	0	0	0	195	36-45	136
10:00 PM	2	1	3	3	18	50	49	7	0	0	0	0	0	0	133	36-45	99
11:00 PM	0	0	0	1	4	20	24	5	1	0	0	0	0	0	55	36-45	43
<b>Day Total</b>	138	23	68	170	479	947	607	98	4	0	1	0	0	0	2535	36-45	1554
<b>Percent</b>	5.4%	0.9%	2.7%	6.7%	18.9%	37.4%	23.9%	3.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak Volume																	
PM Peak Volume	6:00 PM	5:00 PM	5:00 PM	8:00 PM	8:00 PM	5:00 PM	5:00 PM	5:00 PM	7:00 PM	6:00 PM				5:00 PM			
	39	7	19	43	118	240	165	21	2	1				607			
<i>Comments:</i>																	

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 12 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	1	9	15	21	11	4	0	0	0	0	0	61	36-45	36	
1:00 AM	0	0	0	1	3	8	11	4	1	0	0	0	0	0	28	36-45	19	
2:00 AM	0	0	2	0	2	3	7	7	2	0	0	0	0	0	23	41-50	13	
3:00 AM	0	0	0	0	5	3	0	3	0	0	0	0	0	0	11	31-40	7	
4:00 AM	1	0	0	0	1	7	6	3	3	0	0	0	0	0	21	37-46	12	
5:00 AM	1	0	1	2	3	13	22	8	1	2	0	0	0	0	53	36-45	35	
6:00 AM	8	1	2	0	8	61	62	21	3	0	0	0	0	0	166	36-45	123	
7:00 AM	32	7	11	19	113	202	90	16	0	0	0	0	0	0	490	31-40	314	
8:00 AM	20	3	5	9	20	115	107	21	0	0	0	0	0	0	300	36-45	221	
9:00 AM	7	1	4	8	18	79	93	11	2	0	0	0	0	0	223	36-45	172	
10:00 AM	5	0	5	5	30	88	65	11	1	0	0	1	0	0	211	36-45	153	
11:00 AM	3	0	2	33	46	130	68	15	1	1	0	0	0	0	299	36-45	198	
12:00 PM	7	3	5	10	37	105	94	8	1	0	0	0	0	0	270	36-45	199	
1:00 PM	9	0	2	18	33	94	76	23	0	0	0	0	0	0	255	36-45	169	
2:00 PM	20	13	11	19	82	152	69	18	0	0	0	0	0	0	384	31-40	233	
3:00 PM	17	0	12	16	73	152	90	10	0	0	0	0	0	0	370	36-45	242	
4:00 PM																		
5:00 PM																		
6:00 PM																		
7:00 PM																		
8:00 PM																		
9:00 PM																		
10:00 PM																		
11:00 PM																		
<b>Day Total</b>	130	28	62	141	483	1227	881	190	19	3	0	1	0	0	3165	36-45	2107	
<b>Percent</b>	4.1%	0.9%	2.0%	4.5%	15.3%	38.8%	27.8%	6.0%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%				
AM Peak	7:00 AM	7:00 AM	7:00 AM	11:00 AM	7:00 AM	7:00 AM	8:00 AM	6:00 AM	12:00 AM	5:00 AM					7:00 AM			
Volume	32	7	11	33	113	202	107	21	4	2			1		490			
PM Peak	2:00 PM	2:00 PM	3:00 PM	2:00 PM	2:00 PM	2:00 PM	12:00 PM	1:00 PM	12:00 PM						2:00 PM			
Volume	20	13	12	19	82	152	94	23	1						384			
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd															<b>QC JOB #:</b> 13216102		
<b>SPECIFIC LOCATION:</b> 0 ft from															<b>DIRECTION:</b> EB		
<b>CITY/STATE:</b> Florence, SC															<b>DATE:</b> Mar 11 2015 - Mar 12 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	268	51	130	311	962	2174	1488	288	23	3	1	1	0	0	5700	36-45	3662
<b>Percent</b>	4.7%	0.9%	2.3%	5.5%	16.9%	38.1%	26.1%	5.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	4.7%	5.6%	7.9%	13.3%	30.2%	68.4%	94.5%	99.5%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 5700</b>															<b>85th Percentile</b> 43 MPH <b>Mean Speed(Average)</b> 36 MPH		
<i>Comments:</i>																<b>Median</b> 37 MPH <b>Mode:</b> 38 MPH	



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 11 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total	
12:00 AM																
1:00 AM																
2:00 AM																
3:00 AM																
4:00 AM																
5:00 AM																
6:00 AM																
7:00 AM																
8:00 AM																
9:00 AM																
10:00 AM																
11:00 AM																
12:00 PM																
1:00 PM																
2:00 PM																
3:00 PM																
4:00 PM	3	304	77	1	8	2	2	3	2	1	0	0	0	16	419	
5:00 PM	6	433	117	1	11	3	0	6	3	0	0	0	0	27	607	
6:00 PM	4	347	88	0	8	1	0	2	3	1	0	0	0	38	492	
7:00 PM	1	241	59	0	6	3	0	0	3	0	0	0	0	23	336	
8:00 PM	1	231	41	0	4	1	0	2	2	0	0	0	0	16	298	
9:00 PM	0	150	38	0	2	0	0	0	0	0	0	0	0	5	195	
10:00 PM	0	114	18	0	0	0	0	0	0	0	0	0	0	1	133	
11:00 PM	0	44	10	0	0	0	0	0	1	0	0	0	0	0	55	
<b>Day Total</b>	15	1864	448	2	39	10	2	13	14	2	0	0	0	126	2535	
<b>Percent</b>	0.6%	73.5%	17.7%	0.1%	1.5%	0.4%	0.1%	0.5%	0.6%	0.1%	0.0%	0.0%	0.0%	5.0%		
AM Peak Volume																
PM Peak Volume	5:00 PM 6	5:00 PM 433	5:00 PM 117	4:00 PM 1	5:00 PM 11	5:00 PM 3	4:00 PM 2	5:00 PM 6	5:00 PM 3	4:00 PM 1					6:00 PM 38	5:00 PM 607
<i>Comments:</i>																

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 12 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	50	11	0	0	0	0	0	0	0	0	0	0	0	61
1:00 AM	0	23	4	0	1	0	0	0	0	0	0	0	0	0	28
2:00 AM	0	20	2	0	0	1	0	0	0	0	0	0	0	0	23
3:00 AM	0	8	3	0	0	0	0	0	0	0	0	0	0	0	11
4:00 AM	0	15	4	0	0	0	0	1	0	0	0	0	0	1	21
5:00 AM	0	35	14	1	1	1	0	0	0	0	0	0	0	1	53
6:00 AM	0	129	23	2	3	0	0	0	1	0	0	0	0	8	166
7:00 AM	4	378	66	1	6	3	0	0	0	0	1	0	0	31	490
8:00 AM	2	202	58	1	9	1	1	1	10	0	0	0	0	15	300
9:00 AM	0	145	49	0	11	1	2	3	6	0	0	0	0	6	223
10:00 AM	0	138	51	0	8	2	1	3	1	0	0	0	2	5	211
11:00 AM	1	219	55	1	3	5	0	3	9	0	0	0	0	3	299
12:00 PM	3	174	66	1	6	0	1	4	8	0	0	0	0	7	270
1:00 PM	0	187	41	1	13	1	0	3	1	0	0	0	0	8	255
2:00 PM	1	283	64	2	9	1	0	2	2	1	0	0	0	19	384
3:00 PM	4	262	73	2	10	0	0	0	5	0	0	0	0	14	370
4:00 PM															
5:00 PM															
6:00 PM															
7:00 PM															
8:00 PM															
9:00 PM															
10:00 PM															
11:00 PM															
<b>Day Total</b>	15	2268	584	12	80	16	5	20	43	1	1	0	2	118	3165
<b>Percent</b>	0.5%	71.7%	18.5%	0.4%	2.5%	0.5%	0.2%	0.6%	1.4%	0.0%	0.0%	0.0%	0.1%	3.7%	
AM Peak	7:00 AM	7:00 AM	7:00 AM	6:00 AM	9:00 AM	11:00 AM	9:00 AM	9:00 AM	8:00 AM		7:00 AM		10:00 AM	7:00 AM	7:00 AM
Volume	4	378	66	2	11	5	2	3	10		1		2	31	490
PM Peak	3:00 PM	2:00 PM	3:00 PM	2:00 PM	1:00 PM	1:00 PM	12:00 PM	12:00 PM	12:00 PM	2:00 PM				2:00 PM	2:00 PM
Volume	4	283	73	2	13	1	1	4	8	1				19	384
<i>Comments:</i>															

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd													<b>QC JOB #:</b> 13216102		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> EB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 11 2015 - Mar 12 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	30	4132	1032	14	119	26	7	33	57	3	1	0	2	244	5700
<b>Percent</b>	0.5%	72.5%	18.1%	0.2%	2.1%	0.5%	0.1%	0.6%	1.0%	0.1%	0.0%	0.0%	0.0%	4.3%	
<b>ADT 5700</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 11 2015 - Mar 12 2015			
Start Time	Mon	Tue	Wed 11-Mar-15	Thu 12-Mar-15	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM				61		61			61	
1:00 AM				28		28			28	
2:00 AM				23		23			23	
3:00 AM				11		11			11	
4:00 AM				21		21			21	
5:00 AM				53		53			53	
6:00 AM				166		166			166	
7:00 AM				<b>490</b>		<b>490</b>			<b>490</b>	
8:00 AM				300		300			300	
9:00 AM				223		223			223	
10:00 AM				211		211			211	
11:00 AM				299		299			299	
12:00 PM				270		270			270	
1:00 PM				255		255			255	
2:00 PM				<b>384</b>		<b>384</b>			<b>384</b>	
3:00 PM				370		370			370	
4:00 PM			419	419		419			419	
5:00 PM			<b>607</b>	<b>607</b>		<b>607</b>			<b>607</b>	
6:00 PM			492	492		492			492	
7:00 PM			336	336		336			336	
8:00 PM			298	298		298			298	
9:00 PM			195	195		195			195	
10:00 PM			133	133		133			133	
11:00 PM			55	55		55			55	
<b>Day Total</b>			2535	3165		5700			5700	
% Weekday Average			44.5%	55.5%						
% Week Average			44.5%	55.5%		100.0%				
AM Peak Volume				7:00 AM 490		7:00 AM 490			7:00 AM 490	
PM Peak Volume			5:00 PM 607	2:00 PM 384		5:00 PM 607			5:00 PM 607	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 11 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
12:00 AM																	
1:00 AM																	
2:00 AM																	
3:00 AM																	
4:00 AM																	
5:00 AM																	
6:00 AM																	
7:00 AM																	
8:00 AM																	
9:00 AM																	
10:00 AM																	
11:00 AM																	
12:00 PM																	
1:00 PM																	
2:00 PM																	
3:00 PM																	
4:00 PM	37	4	19	36	111	214	269	125	22	0	0	0	0	0	837	36-45	482
5:00 PM	72	8	25	32	125	364	391	106	15	1	0	0	0	0	1139	36-45	755
6:00 PM	62	8	13	28	105	286	277	117	11	3	1	0	0	0	911	36-45	563
7:00 PM	50	12	11	32	69	216	181	78	7	2	0	0	0	0	658	36-45	397
8:00 PM	30	10	41	112	184	154	48	23	2	1	0	0	0	0	605	31-40	337
9:00 PM	11	1	6	10	36	121	133	59	10	1	0	0	0	0	388	36-45	254
10:00 PM	3	2	5	3	22	62	91	47	6	2	0	0	0	0	243	36-45	152
11:00 PM	0	0	0	3	6	28	41	19	10	5	1	1	1	0	115	36-45	69
<b>Day Total</b>	265	45	120	256	658	1445	1431	574	83	15	2	1	1	0	4896	36-45	2875
<b>Percent</b>	5.4%	0.9%	2.5%	5.2%	13.4%	29.5%	29.2%	11.7%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak Volume																	
PM Peak Volume	5:00 PM	7:00 PM	8:00 PM	8:00 PM	8:00 PM	5:00 PM	5:00 PM	4:00 PM	4:00 PM	11:00 PM	6:00 PM	11:00 PM	11:00 PM	11:00 PM	5:00 PM		
	72	12	41	112	184	364	391	125	22	5	1	1	1	1139			
<i>Comments:</i>																	



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 12 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	2	9	20	32	23	12	2	0	0	0	0	100	41-50	54	
1:00 AM	0	0	0	1	4	10	19	10	6	2	1	0	0	0	53	39-48	29	
2:00 AM	0	0	2	0	2	3	11	11	6	1	1	1	0	0	38	41-50	22	
3:00 AM	1	0	1	0	8	6	3	9	2	0	0	0	0	0	30	31-40	13	
4:00 AM	3	0	0	0	2	9	14	18	10	4	0	1	0	0	61	41-50	32	
5:00 AM	1	1	2	2	3	17	43	46	35	10	3	0	0	0	163	41-50	88	
6:00 AM	16	5	5	0	15	91	126	105	36	10	1	0	0	0	410	41-50	231	
7:00 AM	77	12	19	37	182	365	302	104	21	1	2	1	0	0	1123	36-45	667	
8:00 AM	33	6	12	9	29	152	244	148	33	1	1	0	0	0	668	37-46	395	
9:00 AM	13	4	7	9	22	99	179	98	51	9	2	0	0	0	493	36-45	278	
10:00 AM	7	3	7	7	33	106	130	112	34	5	0	1	0	0	445	41-50	241	
11:00 AM	9	8	5	37	51	149	147	101	28	4	2	0	0	0	541	36-45	295	
12:00 PM	17	6	9	11	49	124	188	126	35	2	1	0	0	0	568	41-50	314	
1:00 PM	19	1	5	20	45	163	199	125	28	3	2	0	0	0	610	36-45	361	
2:00 PM	41	13	15	22	96	213	225	133	20	3	1	0	0	0	782	36-45	438	
3:00 PM	38	2	14	25	84	207	229	125	33	5	0	0	0	0	762	36-45	435	
4:00 PM																		
5:00 PM																		
6:00 PM																		
7:00 PM																		
8:00 PM																		
9:00 PM																		
10:00 PM																		
11:00 PM																		
<b>Day Total</b>	275	61	103	182	634	1734	2091	1294	390	62	17	4	0	0	6847	36-45	3824	
<b>Percent</b>	4.0%	0.9%	1.5%	2.7%	9.3%	25.3%	30.5%	18.9%	5.7%	0.9%	0.2%	0.1%	0.0%	0.0%				
AM Peak	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	8:00 AM	9:00 AM	5:00 AM	5:00 AM	2:00 AM	7:00 AM					
Volume	77	12	19	37	182	365	302	148	51	10	3	1	1123					
PM Peak	2:00 PM	2:00 PM	2:00 PM	3:00 PM	2:00 PM	2:00 PM	3:00 PM	2:00 PM	12:00 PM	3:00 PM	1:00 PM	2:00 PM						
Volume	41	13	15	25	96	213	229	133	35	5	2	782						
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd														<b>QC JOB #:</b> 13216102			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> EB/WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 11 2015 - Mar 12 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	540	106	223	438	1292	3179	3522	1868	473	77	19	5	1	0	11743	36-45	6700
<b>Percent</b>	4.6%	0.9%	1.9%	3.7%	11.0%	27.1%	30.0%	15.9%	4.0%	0.7%	0.2%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	4.6%	5.5%	7.4%	11.1%	22.1%	49.2%	79.2%	95.1%	99.1%	99.8%	99.9%	100.0%	100.0%	100.0%			
<b>ADT 11743</b>															<b>85th Percentile</b> 46 MPH <b>Mean Speed(Average)</b> 38 MPH		
<i>Comments:</i>															<b>Median</b> 40 MPH <b>Mode:</b> 43 MPH		



**LOCATION:** Alligator Rd 750' E of Savannah Grove Rd  
**SPECIFIC LOCATION:** 0 ft from  
**CITY/STATE:** Florence, SC

**QC JOB #:** 13216102  
**DIRECTION:** EB/WB  
**DATE:** Mar 11 2015

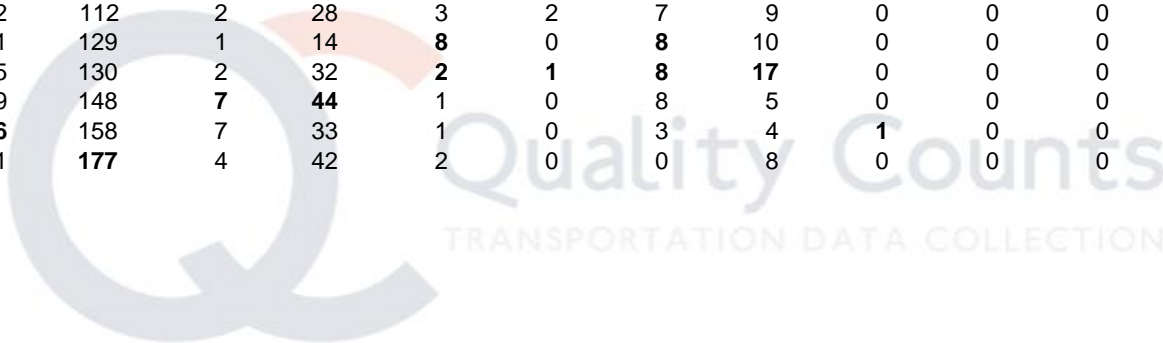
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM															
1:00 AM															
2:00 AM															
3:00 AM															
4:00 AM															
5:00 AM															
6:00 AM															
7:00 AM															
8:00 AM															
9:00 AM															
10:00 AM															
11:00 AM															
12:00 PM															
1:00 PM															
2:00 PM															
3:00 PM															
4:00 PM	3	586	164	3	25	6	2	8	4	1	0	0	0	35	837
5:00 PM	7	737	253	1	50	7	0	10	4	0	0	0	0	70	1139
6:00 PM	4	607	193	0	38	2	0	3	3	1	0	0	0	60	911
7:00 PM	1	447	136	0	26	3	0	1	4	0	0	0	0	40	658
8:00 PM	1	431	122	0	16	3	0	3	3	0	0	0	0	26	605
9:00 PM	0	279	79	1	19	0	0	0	0	0	0	0	0	10	388
10:00 PM	0	188	43	0	9	0	0	0	1	0	0	0	0	2	243
11:00 PM	0	85	27	0	2	0	0	0	1	0	0	0	0	0	115
<b>Day Total</b>	16	3360	1017	5	185	21	2	25	20	2	0	0	0	243	4896
<b>Percent</b>	0.3%	68.6%	20.8%	0.1%	3.8%	0.4%	0.0%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	5.0%	
AM Peak Volume															
PM Peak Volume	5:00 PM 7	5:00 PM 737	5:00 PM 253	4:00 PM 3	5:00 PM 50	5:00 PM 7	4:00 PM 2	5:00 PM 10	4:00 PM 4	4:00 PM 1				5:00 PM 70	5:00 PM 1139

Comments:

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 12 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	75	23	0	2	0	0	0	0	0	0	0	0	0	100
1:00 AM	0	38	14	0	1	0	0	0	0	0	0	0	0	0	53
2:00 AM	0	30	6	1	0	1	0	0	0	0	0	0	0	0	38
3:00 AM	0	20	8	0	0	0	0	1	0	0	0	0	0	1	30
4:00 AM	0	36	17	0	3	0	0	1	1	0	0	0	0	3	61
5:00 AM	0	102	45	1	13	1	0	0	0	0	0	0	0	1	163
6:00 AM	1	270	78	5	36	1	0	1	2	0	0	0	0	16	410
7:00 AM	6	791	209	3	29	6	0	2	0	0	1	0	0	76	1123
8:00 AM	3	402	158	2	45	5	1	7	17	0	0	0	0	28	668
9:00 AM	0	300	125	0	35	2	3	5	11	0	0	0	0	12	493
10:00 AM	1	272	112	2	28	3	2	7	9	0	0	0	2	7	445
11:00 AM	1	361	129	1	14	8	0	8	10	0	0	0	0	9	541
12:00 PM	4	355	130	2	32	2	1	8	17	0	0	0	0	17	568
1:00 PM	0	379	148	7	44	1	0	8	5	0	0	0	0	18	610
2:00 PM	1	536	158	7	33	1	0	3	4	1	0	0	0	38	782
3:00 PM	4	491	177	4	42	2	0	0	8	0	0	0	0	34	762
4:00 PM															
5:00 PM															
6:00 PM															
7:00 PM															
8:00 PM															
9:00 PM															
10:00 PM															
11:00 PM															
<b>Day Total</b>	21	4458	1537	35	357	33	7	51	84	1	1	0	2	260	6847
<b>Percent</b>	0.3%	65.1%	22.4%	0.5%	5.2%	0.5%	0.1%	0.7%	1.2%	0.0%	0.0%	0.0%	0.0%	3.8%	

AM Peak Volume	7:00 AM	7:00 AM	7:00 AM	6:00 AM	8:00 AM	11:00 AM	9:00 AM	11:00 AM	8:00 AM	7:00 AM	10:00 AM	7:00 AM	7:00 AM
PM Peak Volume	12:00 PM	2:00 PM	3:00 PM	1:00 PM	1:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd													<b>QC JOB #:</b> 13216102		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> EB/WB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 11 2015 - Mar 12 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	37	7818	2554	40	542	54	9	76	104	3	1	0	2	503	11743
<b>Percent</b>	0.3%	66.6%	21.7%	0.3%	4.6%	0.5%	0.1%	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	4.3%	
<b>ADT</b> 11743															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 11 2015 - Mar 12 2015			
Start Time	Mon	Tue	Wed 11-Mar-15	Thu 12-Mar-15	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM				100		100			100	
1:00 AM				53		53			53	
2:00 AM				38		38			38	
3:00 AM				30		30			30	
4:00 AM				61		61			61	
5:00 AM				163		163			163	
6:00 AM				410		410			410	
7:00 AM				<b>1123</b>		<b>1123</b>			<b>1123</b>	
8:00 AM				668		668			668	
9:00 AM				493		493			493	
10:00 AM				445		445			445	
11:00 AM				541		541			541	
12:00 PM				568		568			568	
1:00 PM				610		610			610	
2:00 PM				<b>782</b>		<b>782</b>			<b>782</b>	
3:00 PM				762		762			762	
4:00 PM			837			837			837	
5:00 PM			<b>1139</b>			<b>1139</b>			<b>1139</b>	
6:00 PM			911			911			911	
7:00 PM			658			658			658	
8:00 PM			605			605			605	
9:00 PM			388			388			388	
10:00 PM			243			243			243	
11:00 PM			115			115			115	
<b>Day Total</b>			4896	6847		11743			11743	
% Weekday Average			41.7%	58.3%						
% Week Average			41.7%	58.3%		100.0%				
AM Peak Volume				7:00 AM 1123		7:00 AM 1123			7:00 AM 1123	
PM Peak Volume			5:00 PM 1139	2:00 PM 782		5:00 PM 1139			5:00 PM 1139	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 11 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
12:00 AM																	
1:00 AM																	
2:00 AM																	
3:00 AM																	
4:00 AM																	
5:00 AM																	
6:00 AM																	
7:00 AM																	
8:00 AM																	
9:00 AM																	
10:00 AM																	
11:00 AM																	
12:00 PM																	
1:00 PM																	
2:00 PM																	
3:00 PM																	
4:00 PM	19	3	3	2	30	69	159	111	22	0	0	0	0	0	418	41-50	270
5:00 PM	43	1	6	4	27	124	226	85	15	1	0	0	0	0	532	36-45	350
6:00 PM	23	5	5	5	17	89	163	99	10	3	0	0	0	0	419	41-50	262
7:00 PM	22	5	5	3	24	88	107	61	5	2	0	0	0	0	322	36-45	194
8:00 PM	14	7	27	69	66	66	34	21	2	1	0	0	0	0	307	27-36	134
9:00 PM	5	0	4	1	9	42	76	45	10	1	0	0	0	0	193	41-50	121
10:00 PM	1	1	2	0	4	12	42	40	6	2	0	0	0	0	110	41-50	82
11:00 PM	0	0	0	2	2	8	17	14	9	5	1	1	1	0	60	41-50	30
<b>Day Total</b>	127	22	52	86	179	498	824	476	79	15	1	1	1	0	2361	36-45	1322
<b>Percent</b>	5.4%	0.9%	2.2%	3.6%	7.6%	21.1%	34.9%	20.2%	3.3%	0.6%	0.0%	0.0%	0.0%	0.0%			
AM Peak Volume																	
PM Peak Volume	5:00 PM	8:00 PM	8:00 PM	8:00 PM	8:00 PM	5:00 PM	5:00 PM	4:00 PM	4:00 PM	11:00 PM	11:00 PM	11:00 PM	11:00 PM		5:00 PM		
	43	7	27	69	66	124	226	111	22	5	1	1	1				
<i>Comments:</i>																	

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 12 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	1	0	5	11	12	8	2	0	0	0	0	39	42-51	22
1:00 AM	0	0	0	0	1	2	8	6	5	2	1	0	0	0	25	42-51	13
2:00 AM	0	0	0	0	0	0	4	4	4	1	1	1	0	0	15	46-55	8
3:00 AM	1	0	1	0	3	3	3	6	2	0	0	0	0	0	19	45-54	8
4:00 AM	2	0	0	0	1	2	8	15	7	4	0	1	0	0	40	41-50	23
5:00 AM	0	1	1	0	0	4	21	38	34	8	3	0	0	0	110	46-55	72
6:00 AM	8	4	3	0	7	30	64	84	33	10	1	0	0	0	244	41-50	148
7:00 AM	45	5	8	18	69	163	212	88	21	1	2	1	0	0	633	36-45	374
8:00 AM	13	3	7	0	9	37	137	127	33	1	1	0	0	0	368	41-50	263
9:00 AM	6	3	3	1	4	20	86	87	49	9	2	0	0	0	270	41-50	172
10:00 AM	2	3	2	2	3	18	65	101	33	5	0	0	0	0	234	41-50	165
11:00 AM	6	8	3	4	5	19	79	86	27	3	2	0	0	0	242	41-50	164
12:00 PM	10	3	4	1	12	19	94	118	34	2	1	0	0	0	298	41-50	212
1:00 PM	10	1	3	2	12	69	123	102	28	3	2	0	0	0	355	41-50	224
2:00 PM	21	0	4	3	14	61	156	115	20	3	1	0	0	0	398	41-50	271
3:00 PM	21	2	2	9	11	55	139	115	33	5	0	0	0	0	392	41-50	254
4:00 PM																	
5:00 PM																	
6:00 PM																	
7:00 PM																	
8:00 PM																	
9:00 PM																	
10:00 PM																	
11:00 PM																	
<b>Day Total</b>	145	33	41	41	151	507	1210	1104	371	59	17	3	0	0	3682	41-50	2314
<b>Percent</b>	3.9%	0.9%	1.1%	1.1%	4.1%	13.8%	32.9%	30.0%	10.1%	1.6%	0.5%	0.1%	0.0%	0.0%			
AM Peak	7:00 AM	11:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	8:00 AM	9:00 AM	6:00 AM	5:00 AM	2:00 AM	7:00 AM				
Volume	45	8	8	18	69	163	212	127	49	10	3	1	633				
PM Peak	2:00 PM	12:00 PM	12:00 PM	3:00 PM	2:00 PM	1:00 PM	2:00 PM	12:00 PM	12:00 PM	3:00 PM	1:00 PM	2:00 PM					
Volume	21	3	4	9	14	69	156	118	34	5	2	398					
<i>Comments:</i>																	



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd														<b>QC JOB #:</b> 13216102			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 11 2015 - Mar 12 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 9999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	272	55	93	127	330	1005	2034	1580	450	74	18	4	1	0	6043	41-50	3614
<b>Percent</b>	4.5%	0.9%	1.5%	2.1%	5.5%	16.6%	33.7%	26.1%	7.4%	1.2%	0.3%	0.1%	0.0%	0.0%			
<b>Cumulative Percent</b>	4.5%	5.4%	7.0%	9.1%	14.5%	31.1%	64.8%	90.9%	98.4%	99.6%	99.9%	100.0%	100.0%	100.0%			
<b>ADT 6043</b>															<b>85th Percentile</b> 48 MPH <b>Mean Speed(Average)</b> 41 MPH		
<i>Comments:</i>															<b>Median</b> 42 MPH <b>Mode:</b> 43 MPH		



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 11 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM															
1:00 AM															
2:00 AM															
3:00 AM															
4:00 AM															
5:00 AM															
6:00 AM															
7:00 AM															
8:00 AM															
9:00 AM															
10:00 AM															
11:00 AM															
12:00 PM															
1:00 PM															
2:00 PM															
3:00 PM															
4:00 PM	0	282	87	2	17	4	0	5	2	0	0	0	0	19	418
5:00 PM	1	304	136	0	39	4	0	4	1	0	0	0	0	43	532
6:00 PM	0	260	105	0	30	1	0	1	0	0	0	0	0	22	419
7:00 PM	0	206	77	0	20	0	0	1	1	0	0	0	0	17	322
8:00 PM	0	200	81	0	12	2	0	1	1	0	0	0	0	10	307
9:00 PM	0	129	41	1	17	0	0	0	0	0	0	0	0	5	193
10:00 PM	0	74	25	0	9	0	0	0	1	0	0	0	0	1	110
11:00 PM	0	41	17	0	2	0	0	0	0	0	0	0	0	0	60
<b>Day Total</b>	1	1496	569	3	146	11	0	12	6	0	0	0	0	117	2361
<b>Percent</b>	0.0%	63.4%	24.1%	0.1%	6.2%	0.5%	0.0%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	5.0%	
AM Peak Volume															
PM Peak Volume	5:00 PM 1	5:00 PM 304	5:00 PM 136	4:00 PM 2	5:00 PM 39	4:00 PM 4		4:00 PM 5	4:00 PM 2					5:00 PM 43	5:00 PM 532
<i>Comments:</i>															

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 12 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	25	12	0	2	0	0	0	0	0	0	0	0	0	39
1:00 AM	0	15	10	0	0	0	0	0	0	0	0	0	0	0	25
2:00 AM	0	10	4	1	0	0	0	0	0	0	0	0	0	0	15
3:00 AM	0	12	5	0	0	0	0	1	0	0	0	0	0	1	19
4:00 AM	0	21	13	0	3	0	0	0	1	0	0	0	0	2	40
5:00 AM	0	67	31	0	12	0	0	0	0	0	0	0	0	0	110
6:00 AM	1	141	55	3	33	1	0	1	1	0	0	0	0	8	244
7:00 AM	2	413	143	2	23	3	0	2	0	0	0	0	0	45	633
8:00 AM	1	200	100	1	36	4	0	6	7	0	0	0	0	13	368
9:00 AM	0	155	76	0	24	1	1	2	5	0	0	0	0	6	270
10:00 AM	1	134	61	2	20	1	1	4	8	0	0	0	0	2	234
11:00 AM	0	142	74	0	11	3	0	5	1	0	0	0	0	6	242
12:00 PM	1	181	64	1	26	2	0	4	9	0	0	0	0	10	298
1:00 PM	0	192	107	6	31	0	0	5	4	0	0	0	0	10	355
2:00 PM	0	253	94	5	24	0	0	1	2	0	0	0	0	19	398
3:00 PM	0	229	104	2	32	2	0	0	3	0	0	0	0	20	392
4:00 PM															
5:00 PM															
6:00 PM															
7:00 PM															
8:00 PM															
9:00 PM															
10:00 PM															
11:00 PM															
<b>Day Total</b>	6	2190	953	23	277	17	2	31	41	0	0	0	0	142	3682
<b>Percent</b>	0.2%	59.5%	25.9%	0.6%	7.5%	0.5%	0.1%	0.8%	1.1%	0.0%	0.0%	0.0%	0.0%	3.9%	
AM Peak	7:00 AM	7:00 AM	7:00 AM	6:00 AM	8:00 AM	8:00 AM	9:00 AM	8:00 AM	10:00 AM					7:00 AM	7:00 AM
Volume	2	413	143	3	36	4	1	6	8					45	633
PM Peak	12:00 PM	2:00 PM	1:00 PM	1:00 PM	3:00 PM	12:00 PM		1:00 PM	12:00 PM					3:00 PM	2:00 PM
Volume	1	253	107	6	32	2		5	9					20	398
<i>Comments:</i>															

<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd													<b>QC JOB #:</b> 13216102		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> WB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 11 2015 - Mar 12 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	7	3686	1522	26	423	28	2	43	47	0	0	0	0	259	6043
<b>Percent</b>	0.1%	61.0%	25.2%	0.4%	7.0%	0.5%	0.0%	0.7%	0.8%	0.0%	0.0%	0.0%	0.0%	4.3%	
<b>ADT 6043</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 750' E of Savannah Grove Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216102 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 11 2015 - Mar 12 2015			
Start Time	Mon	Tue	Wed 11-Mar-15	Thu 12-Mar-15	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM				39		39			39	
1:00 AM				25		25			25	
2:00 AM				15		15			15	
3:00 AM				19		19			19	
4:00 AM				40		40			40	
5:00 AM				110		110			110	
6:00 AM				244		244			244	
7:00 AM				<b>633</b>		<b>633</b>			<b>633</b>	
8:00 AM				368		368			368	
9:00 AM				270		270			270	
10:00 AM				234		234			234	
11:00 AM				242		242			242	
12:00 PM				298		298			298	
1:00 PM				355		355			355	
2:00 PM				<b>398</b>		<b>398</b>			<b>398</b>	
3:00 PM				392		392			392	
4:00 PM			418			418			418	
5:00 PM			<b>532</b>			<b>532</b>			<b>532</b>	
6:00 PM			419			419			419	
7:00 PM			322			322			322	
8:00 PM			307			307			307	
9:00 PM			193			193			193	
10:00 PM			110			110			110	
11:00 PM			60			60			60	
<b>Day Total</b>			2361	3682		6043			6043	
% Weekday Average			39.1%	60.9%						
% Week Average			39.1%	60.9%		100.0%				
AM Peak Volume				7:00 AM 633		7:00 AM 633			7:00 AM 633	
PM Peak Volume			5:00 PM 532	2:00 PM 398		5:00 PM 532			5:00 PM 532	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	1	2	0	3	6	11	8	3	0	0	1	1	0	0	36	36-45	19	
1:00 AM	0	0	0	0	3	4	6	3	0	1	0	0	0	0	17	40-49	9	
2:00 AM	0	0	0	0	4	8	0	1	0	0	0	0	0	0	13	31-40	12	
3:00 AM	1	0	0	0	3	5	4	1	0	1	0	0	0	0	15	36-45	9	
4:00 AM	0	0	0	0	1	8	5	3	0	0	0	0	0	0	17	36-45	13	
5:00 AM	0	0	0	1	9	24	18	3	0	0	0	0	0	0	55	36-45	41	
6:00 AM	3	0	0	5	21	78	49	5	1	0	1	0	0	0	163	36-45	127	
7:00 AM	22	0	3	18	147	187	63	5	0	0	0	0	0	0	445	31-40	333	
8:00 AM	8	0	0	20	76	127	57	9	0	0	0	0	0	0	297	31-40	202	
9:00 AM	5	0	2	7	30	78	50	15	3	0	0	0	0	0	190	36-45	128	
10:00 AM	3	0	2	15	37	78	34	6	0	0	0	0	0	0	175	32-41	114	
11:00 AM	4	0	0	8	45	96	42	7	0	1	0	0	0	0	203	32-41	140	
12:00 PM	2	0	1	19	81	102	44	12	2	0	0	0	0	0	263	31-40	182	
1:00 PM	10	0	5	15	80	120	41	7	1	0	0	0	0	0	279	31-40	200	
2:00 PM	8	0	4	24	98	158	50	8	1	0	0	0	0	0	351	31-40	256	
3:00 PM	17	0	9	25	85	163	56	9	1	0	0	0	0	0	365	31-40	248	
4:00 PM	15	0	3	37	148	170	59	4	1	0	0	0	0	0	437	31-40	318	
5:00 PM	26	0	6	55	223	257	74	5	1	0	0	0	0	0	647	31-40	479	
6:00 PM	22	1	2	13	114	208	83	7	0	0	0	0	0	0	450	31-40	322	
7:00 PM	7	1	0	20	109	143	44	5	2	0	0	0	0	0	331	31-40	252	
8:00 PM	1	0	6	9	106	103	44	1	0	1	0	0	0	0	271	31-40	209	
9:00 PM	4	0	1	7	54	90	37	6	2	0	0	1	0	0	202	31-40	144	
10:00 PM	0	0	0	4	25	50	25	9	1	1	0	0	0	0	115	31-40	75	
11:00 PM	0	0	0	2	10	33	19	9	0	0	0	0	0	0	73	36-45	51	
<b>Day Total</b>	159	4	44	307	1515	2301	912	143	16	5	2	2	0	0	5410	31-40	3815	
<b>Percent</b>	2.9%	0.1%	0.8%	5.7%	28.0%	42.5%	16.9%	2.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%				
<b>ADT</b> 5410																		
<b>AM Peak</b> Volume	7:00 AM	12:00 AM	7:00 AM	8:00 AM	7:00 AM	7:00 AM	7:00 AM	9:00 AM	9:00 AM	1:00 AM	12:00 AM	12:00 AM	7:00 AM	445				
<b>PM Peak</b> Volume	5:00 PM	6:00 PM	3:00 PM	5:00 PM	5:00 PM	5:00 PM	6:00 PM	12:00 PM	12:00 PM	8:00 PM	9:00 PM	5:00 PM	647					
<b>Comments:</b>																		

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd														<b>QC JOB #:</b> 13216103			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> EB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	159	4	44	307	1515	2301	912	143	16	5	2	2	0	0	5410	31-40	3815
<b>Percent</b>	2.9%	0.1%	0.8%	5.7%	28.0%	42.5%	16.9%	2.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	2.9%	3.0%	3.8%	9.5%	37.5%	80.0%	96.9%	99.5%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 5410</b>															<b>85th Percentile</b> 41 MPH <b>Mean Speed(Average)</b> 35 MPH		
<i>Comments:</i>															<b>Median</b> 36 MPH <b>Mode:</b> 38 MPH		



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total	
12:00 AM	0	28	7	0	0	0	0	0	0	0	0	0	0	1	36	
1:00 AM	0	10	6	0	1	0	0	0	0	0	0	0	0	0	17	
2:00 AM	0	9	3	0	0	0	0	0	1	0	0	0	0	0	13	
3:00 AM	0	13	0	0	0	0	0	0	1	0	0	0	0	1	15	
4:00 AM	0	13	4	0	0	0	0	0	0	0	0	0	0	0	17	
5:00 AM	0	40	13	0	1	1	0	0	0	0	0	0	0	0	55	
6:00 AM	1	123	28	2	6	0	0	0	0	0	0	0	0	3	163	
7:00 AM	0	<b>352</b>	<b>64</b>	0	5	1	0	0	1	0	0	0	0	<b>22</b>	<b>445</b>	
8:00 AM	2	204	60	1	<b>10</b>	0	<b>2</b>	<b>5</b>	<b>4</b>	0	0	0	0	9	297	
9:00 AM	1	134	38	0	7	1	0	2	2	0	0	0	0	5	190	
10:00 AM	1	109	40	2	10	<b>3</b>	0	5	2	0	0	0	0	3	175	
11:00 AM	0	141	43	<b>4</b>	6	0	1	1	3	0	0	0	0	4	203	
12:00 PM	2	190	53	<b>3</b>	8	0	0	1	4	0	0	0	0	2	263	
1:00 PM	4	192	50	3	10	2	<b>1</b>	2	<b>5</b>	0	0	0	0	10	279	
2:00 PM	0	243	75	2	15	4	0	1	3	0	0	0	0	8	351	
3:00 PM	2	255	71	1	12	4	1	0	2	0	0	0	0	17	365	
4:00 PM	0	314	87	0	12	<b>5</b>	0	1	3	0	0	0	0	15	437	
5:00 PM	<b>5</b>	<b>455</b>	<b>130</b>	0	<b>16</b>	3	0	<b>8</b>	4	0	0	0	0	<b>26</b>	<b>647</b>	
6:00 PM	1	331	81	1	8	3	0	1	2	0	0	0	0	22	450	
7:00 PM	1	255	58	0	8	1	0	1	0	0	0	0	0	7	331	
8:00 PM	0	209	52	0	7	0	0	1	1	0	0	0	0	1	271	
9:00 PM	2	161	32	0	1	1	0	0	1	0	0	0	0	4	202	
10:00 PM	1	101	12	0	1	0	0	0	0	0	0	0	0	0	115	
11:00 PM	1	59	13	0	0	0	0	0	0	0	0	0	0	0	73	
<b>Day Total</b>	24	3941	1020	19	144	29	5	29	39	0	0	0	0	160	5410	
<b>Percent</b>	0.4%	72.8%	18.9%	0.4%	2.7%	0.5%	0.1%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	3.0%		
<b>ADT</b> 5410																
AM Peak	8:00 AM	7:00 AM	7:00 AM	11:00 AM	8:00 AM	10:00 AM	8:00 AM	8:00 AM	8:00 AM						7:00 AM	7:00 AM
Volume	2	352	64	4	10	3	2	5	4						22	445
PM Peak	5:00 PM	5:00 PM	5:00 PM	12:00 PM	5:00 PM	4:00 PM	1:00 PM	5:00 PM	1:00 PM						5:00 PM	5:00 PM
Volume	5	455	130	3	16	5	1	8	5						26	647
<i>Comments:</i>																



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd													<b>QC JOB #:</b> 13216103		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> EB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	24	3941	1020	19	144	29	5	29	39	0	0	0	0	160	5410
<b>Percent</b>	0.4%	72.8%	18.9%	0.4%	2.7%	0.5%	0.1%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	3.0%	
<b>ADT</b> <b>5410</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 10 2015 - Mar 11 2015			
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		36	0			18			18	
1:00 AM		17				17			17	
2:00 AM		13				13			13	
3:00 AM		15				15			15	
4:00 AM		17				17			17	
5:00 AM		55				55			55	
6:00 AM		163				163			163	
7:00 AM		445				445			445	
8:00 AM		297				297			297	
9:00 AM		190				190			190	
10:00 AM		175				175			175	
11:00 AM		203				203			203	
12:00 PM		263				263			263	
1:00 PM		279				279			279	
2:00 PM		351				351			351	
3:00 PM		365				365			365	
4:00 PM		437				437			437	
5:00 PM		647				647			647	
6:00 PM		450				450			450	
7:00 PM		331				331			331	
8:00 PM		271				271			271	
9:00 PM		202				202			202	
10:00 PM		115				115			115	
11:00 PM		73				73			73	
<b>Day Total</b>		5410	0			5392			5392	
% Weekday Average		100.3%	0.0%							
% Week Average		100.3%	0.0%			100.0%				
AM Peak		7:00 AM	12:00 AM			7:00 AM			7:00 AM	
Volume		445	0			445			445	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		647				647			647	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	2	2	0	7	9	21	16	15	2	0	1	1	0	0	76	36-45	37	
1:00 AM	0	0	0	1	7	7	14	8	0	1	0	0	0	0	38	41-50	22	
2:00 AM	0	0	0	0	6	13	5	6	0	0	0	0	0	0	30	31-40	19	
3:00 AM	2	0	0	1	5	10	10	2	1	1	0	0	0	0	32	36-45	20	
4:00 AM	0	0	0	3	9	21	22	13	3	0	0	0	0	0	71	36-45	43	
5:00 AM	0	0	0	1	15	69	79	34	3	0	0	0	0	0	201	36-45	148	
6:00 AM	6	0	0	16	38	167	148	30	5	2	1	1	0	0	414	36-45	315	
7:00 AM	49	8	16	67	291	438	160	15	1	1	0	0	0	0	1046	31-40	728	
8:00 AM	21	0	1	42	159	290	163	21	0	0	0	0	0	0	697	36-45	453	
9:00 AM	10	0	2	12	68	179	139	37	6	0	0	0	0	0	453	36-45	317	
10:00 AM	8	0	2	21	68	168	119	37	0	0	0	0	0	0	423	36-45	287	
11:00 AM	13	0	0	16	98	188	116	29	4	1	0	0	0	0	465	36-45	304	
12:00 PM	11	0	1	26	124	220	107	23	5	0	0	0	0	0	517	31-40	344	
1:00 PM	30	0	9	42	154	233	118	21	2	0	0	0	0	0	609	31-40	387	
2:00 PM	19	0	6	44	185	325	105	20	2	1	0	0	0	0	707	31-40	510	
3:00 PM	41	5	13	55	169	347	148	22	2	0	0	0	0	0	802	31-40	516	
4:00 PM	44	0	5	69	233	343	158	17	2	0	0	0	0	0	871	31-40	576	
5:00 PM	70	0	7	82	345	457	159	12	1	0	0	0	0	0	1133	31-40	802	
6:00 PM	51	1	3	29	207	382	163	31	2	0	0	0	0	0	869	31-40	589	
7:00 PM	18	4	13	31	175	279	108	16	2	1	0	0	0	0	647	31-40	453	
8:00 PM	3	0	8	34	169	204	100	15	1	1	0	0	0	0	535	31-40	372	
9:00 PM	12	0	3	15	91	151	86	12	5	0	0	1	0	0	376	31-40	241	
10:00 PM	1	0	0	4	34	82	66	18	2	1	0	0	0	0	208	36-45	147	
11:00 PM	2	0	0	2	17	57	49	19	1	0	0	0	0	0	147	36-45	106	
<b>Day Total</b>	413	20	89	620	2676	4651	2358	473	52	10	2	3	0	0	11367	31-40	7327	
<b>Percent</b>	3.6%	0.2%	0.8%	5.5%	23.5%	40.9%	20.7%	4.2%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%				
<b>ADT</b> 11367																		
<b>AM Peak</b> Volume	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	8:00 AM	9:00 AM	9:00 AM	6:00 AM	12:00 AM	12:00 AM	7:00 AM					
	49	8	16	67	291	438	163	37	6	2	1	1	1046					
<b>PM Peak</b> Volume	5:00 PM	3:00 PM	3:00 PM	5:00 PM	5:00 PM	5:00 PM	6:00 PM	6:00 PM	12:00 PM	2:00 PM		9:00 PM	5:00 PM					
	70	5	13	82	345	457	163	31	5	1		1	1133					
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd														<b>QC JOB #:</b> 13216103			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> EB/WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	413	20	89	620	2676	4651	2358	473	52	10	2	3	0	0	11367	31-40	7327
<b>Percent</b>	3.6%	0.2%	0.8%	5.5%	23.5%	40.9%	20.7%	4.2%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	3.6%	3.8%	4.6%	10.0%	33.6%	74.5%	95.2%	99.4%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT</b> 11367															<b>85th Percentile</b> 42 MPH <b>Mean Speed(Average)</b> 36 MPH		
<i>Comments:</i>															<b>Median</b> 37 MPH <b>Mode:</b> 38 MPH		



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total	
12:00 AM	0	61	12	0	0	0	0	0	1	0	0	0	0	2	76	
1:00 AM	0	24	10	0	3	0	0	0	1	0	0	0	0	0	38	
2:00 AM	0	19	7	1	1	0	0	1	1	0	0	0	0	0	30	
3:00 AM	0	27	1	0	0	0	0	1	1	0	0	0	0	2	32	
4:00 AM	0	54	15	0	1	1	0	0	0	0	0	0	0	0	71	
5:00 AM	0	141	52	0	4	2	0	0	2	0	0	0	0	0	201	
6:00 AM	1	311	72	4	17	0	1	2	0	0	0	0	0	6	414	
7:00 AM	1	<b>785</b>	<b>180</b>	1	17	2	0	7	4	0	0	0	0	<b>49</b>	<b>1046</b>	
8:00 AM	<b>3</b>	492	131	2	<b>20</b>	4	<b>4</b>	<b>13</b>	<b>7</b>	0	0	0	0	21	697	
9:00 AM	1	319	86	0	18	<b>6</b>	1	6	6	0	0	0	0	10	453	
10:00 AM	1	283	93	7	18	4	0	6	3	0	0	0	0	8	423	
11:00 AM	1	320	98	<b>8</b>	12	2	1	5	5	0	0	0	0	13	465	
12:00 PM	2	367	104	<b>5</b>	16	2	0	2	<b>8</b>	0	0	0	0	11	517	
1:00 PM	5	414	119	4	21	2	<b>2</b>	5	8	0	0	0	0	29	609	
2:00 PM	0	474	161	4	<b>32</b>	6	0	6	5	0	0	0	0	19	707	
3:00 PM	4	569	149	2	23	<b>8</b>	1	1	4	0	0	0	0	41	802	
4:00 PM	1	605	184	0	22	8	0	3	4	0	0	0	0	44	871	
5:00 PM	<b>6</b>	<b>794</b>	<b>215</b>	0	25	6	0	<b>12</b>	5	0	0	0	0	<b>70</b>	<b>1133</b>	
6:00 PM	2	634	151	1	19	4	0	4	3	0	0	0	0	51	869	
7:00 PM	1	489	119	1	14	2	0	2	1	0	0	0	0	18	647	
8:00 PM	1	401	110	1	13	1	0	3	2	0	0	0	0	3	535	
9:00 PM	2	299	58	0	2	1	0	1	1	0	0	0	0	12	376	
10:00 PM	1	176	26	0	4	0	0	0	0	0	0	0	0	1	208	
11:00 PM	1	117	25	0	2	0	0	0	0	0	0	0	0	2	147	
<b>Day Total</b>	<b>34</b>	<b>8175</b>	<b>2178</b>	<b>41</b>	<b>304</b>	<b>61</b>	<b>10</b>	<b>80</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>412</b>	<b>11367</b>	
<b>Percent</b>	<b>0.3%</b>	<b>71.9%</b>	<b>19.2%</b>	<b>0.4%</b>	<b>2.7%</b>	<b>0.5%</b>	<b>0.1%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.6%</b>		
<b>ADT 11367</b>																
AM Peak	8:00 AM	7:00 AM	7:00 AM	11:00 AM	8:00 AM	9:00 AM	8:00 AM	8:00 AM	8:00 AM						7:00 AM	7:00 AM
Volume	3	785	180	8	20	6	4	13	7						49	1046
PM Peak	5:00 PM	5:00 PM	5:00 PM	12:00 PM	2:00 PM	3:00 PM	1:00 PM	5:00 PM	12:00 PM						5:00 PM	5:00 PM
Volume	6	794	215	5	32	8	2	12	8						70	1133
<i>Comments:</i>																

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd											<b>QC JOB #:</b> 13216103				
<b>SPECIFIC LOCATION:</b> 0 ft from											<b>DIRECTION:</b> EB/WB				
<b>CITY/STATE:</b> Florence, SC											<b>DATE:</b> Mar 10 2015 - Mar 10 2015				
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	34	8175	2178	41	304	61	10	80	72	0	0	0	0	412	11367
<b>Percent</b>	0.3%	71.9%	19.2%	0.4%	2.7%	0.5%	0.1%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	3.6%	
<b>ADT</b> 11367															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015 - Mar 11 2015			
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		76	0			38			38	
1:00 AM		38				38			38	
2:00 AM		30				30			30	
3:00 AM		32				32			32	
4:00 AM		71				71			71	
5:00 AM		201				201			201	
6:00 AM		414				414			414	
7:00 AM		1046				1046			1046	
8:00 AM		697				697			697	
9:00 AM		453				453			453	
10:00 AM		423				423			423	
11:00 AM		465				465			465	
12:00 PM		517				517			517	
1:00 PM		609				609			609	
2:00 PM		707				707			707	
3:00 PM		802				802			802	
4:00 PM		871				871			871	
5:00 PM		1133				1133			1133	
6:00 PM		869				869			869	
7:00 PM		647				647			647	
8:00 PM		535				535			535	
9:00 PM		376				376			376	
10:00 PM		208				208			208	
11:00 PM		147				147			147	
<b>Day Total</b>		11367	0			11329			11329	
% Weekday Average		100.3%	0.0%							
% Week Average		100.3%	0.0%			100.0%				
AM Peak		7:00 AM	12:00 AM			7:00 AM			7:00 AM	
Volume		1046	0			1046			1046	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		1133				1133			1133	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	1	0	0	4	3	10	8	12	2	0	0	0	0	0	40	41-50	19	
1:00 AM	0	0	0	1	4	3	8	5	0	0	0	0	0	0	21	41-50	13	
2:00 AM	0	0	0	0	2	5	5	5	0	0	0	0	0	0	17	36-45	10	
3:00 AM	1	0	0	1	2	5	6	1	1	0	0	0	0	0	17	37-46	10	
4:00 AM	0	0	0	3	8	13	17	10	3	0	0	0	0	0	54	37-46	29	
5:00 AM	0	0	0	0	6	45	61	31	3	0	0	0	0	0	146	36-45	105	
6:00 AM	3	0	0	11	17	89	99	25	4	2	0	1	0	0	251	36-45	188	
7:00 AM	27	8	13	49	144	251	97	10	1	1	0	0	0	0	601	31-40	395	
8:00 AM	13	0	1	22	83	163	106	12	0	0	0	0	0	0	400	36-45	269	
9:00 AM	5	0	0	5	38	101	89	22	3	0	0	0	0	0	263	36-45	190	
10:00 AM	5	0	0	6	31	90	85	31	0	0	0	0	0	0	248	36-45	175	
11:00 AM	9	0	0	8	53	92	74	22	4	0	0	0	0	0	262	36-45	166	
12:00 PM	9	0	0	7	43	118	63	11	3	0	0	0	0	0	254	36-45	181	
1:00 PM	20	0	4	27	74	113	77	14	1	0	0	0	0	0	330	36-45	189	
2:00 PM	11	0	2	20	87	167	55	12	1	1	0	0	0	0	356	31-40	254	
3:00 PM	24	5	4	30	84	184	92	13	1	0	0	0	0	0	437	36-45	275	
4:00 PM	29	0	2	32	85	173	99	13	1	0	0	0	0	0	434	36-45	272	
5:00 PM	44	0	1	27	122	200	85	7	0	0	0	0	0	0	486	31-40	322	
6:00 PM	29	0	1	16	93	174	80	24	2	0	0	0	0	0	419	31-40	267	
7:00 PM	11	3	13	11	66	136	64	11	0	1	0	0	0	0	316	33-42	201	
8:00 PM	2	0	2	25	63	101	56	14	1	0	0	0	0	0	264	31-40	163	
9:00 PM	8	0	2	8	37	61	49	6	3	0	0	0	0	0	174	36-45	110	
10:00 PM	1	0	0	0	9	32	41	9	1	0	0	0	0	0	93	36-45	73	
11:00 PM	2	0	0	0	7	24	30	10	1	0	0	0	0	0	74	36-45	54	
<b>Day Total</b>	254	16	45	313	1161	2350	1446	330	36	5	0	1	0	0	5957	36-45	3795	
<b>Percent</b>	4.3%	0.3%	0.8%	5.3%	19.5%	39.4%	24.3%	5.5%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%				
<b>ADT 5957</b>																		
<b>AM Peak Volume</b>	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	8:00 AM	5:00 AM	6:00 AM	6:00 AM	6:00 AM				7:00 AM			
	27	8	13	49	144	251	106	31	4	2	1				601			
<b>PM Peak Volume</b>	5:00 PM	3:00 PM	7:00 PM	4:00 PM	5:00 PM	5:00 PM	4:00 PM	6:00 PM	12:00 PM	2:00 PM						5:00 PM		
	44	5	13	32	122	200	99	24	3	1						486		
<i>Comments:</i>																		



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd														<b>QC JOB #:</b> 13216103			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	254	16	45	313	1161	2350	1446	330	36	5	0	1	0	0	5957	36-45	3795
<b>Percent</b>	4.3%	0.3%	0.8%	5.3%	19.5%	39.4%	24.3%	5.5%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	4.3%	4.5%	5.3%	10.5%	30.0%	69.5%	93.8%	99.3%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 5957</b>															<b>85th Percentile</b> 43 MPH <b>Mean Speed(Average)</b> 36 MPH		
<i>Comments:</i>															<b>Median</b> 37 MPH <b>Mode:</b> 38 MPH		



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	33	5	0	0	0	0	0	1	0	0	0	0	1	40
1:00 AM	0	14	4	0	2	0	0	0	1	0	0	0	0	0	21
2:00 AM	0	10	4	1	1	0	0	1	0	0	0	0	0	0	17
3:00 AM	0	14	1	0	0	0	0	1	0	0	0	0	0	1	17
4:00 AM	0	41	11	0	1	1	0	0	0	0	0	0	0	0	54
5:00 AM	0	101	39	0	3	1	0	0	2	0	0	0	0	0	146
6:00 AM	0	188	44	2	11	0	1	2	0	0	0	0	0	3	251
7:00 AM	1	433	116	1	12	1	0	7	3	0	0	0	0	27	601
8:00 AM	1	288	71	1	10	4	2	8	3	0	0	0	0	12	400
9:00 AM	0	185	48	0	11	5	1	4	4	0	0	0	0	5	263
10:00 AM	0	174	53	5	8	1	0	1	1	0	0	0	0	5	248
11:00 AM	1	179	55	4	6	2	0	4	2	0	0	0	0	9	262
12:00 PM	0	177	51	2	8	2	0	1	4	0	0	0	0	9	254
1:00 PM	1	222	69	1	11	0	1	3	3	0	0	0	0	19	330
2:00 PM	0	231	86	2	17	2	0	5	2	0	0	0	0	11	356
3:00 PM	2	314	78	1	11	4	0	1	2	0	0	0	0	24	437
4:00 PM	1	291	97	0	10	3	0	2	1	0	0	0	0	29	434
5:00 PM	1	339	85	0	9	3	0	4	1	0	0	0	0	44	486
6:00 PM	1	303	70	0	11	1	0	3	1	0	0	0	0	29	419
7:00 PM	0	234	61	1	6	1	0	1	1	0	0	0	0	11	316
8:00 PM	1	192	58	1	6	1	0	2	1	0	0	0	0	2	264
9:00 PM	0	138	26	0	1	0	0	1	0	0	0	0	0	8	174
10:00 PM	0	75	14	0	3	0	0	0	0	0	0	0	0	1	93
11:00 PM	0	58	12	0	2	0	0	0	0	0	0	0	0	2	74
<b>Day Total</b>	10	4234	1158	22	160	32	5	51	33	0	0	0	0	252	5957
<b>Percent</b>	0.2%	71.1%	19.4%	0.4%	2.7%	0.5%	0.1%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	4.2%	
<b>ADT 5957</b>															
<b>AM Peak</b>	7:00 AM	7:00 AM	7:00 AM	10:00 AM	7:00 AM	9:00 AM	8:00 AM	8:00 AM	9:00 AM					7:00 AM	7:00 AM
<b>Volume</b>	1	433	116	5	12	5	2	8	4					27	601
<b>PM Peak</b>	3:00 PM	5:00 PM	4:00 PM	12:00 PM	2:00 PM	3:00 PM	1:00 PM	2:00 PM	12:00 PM					5:00 PM	5:00 PM
<b>Volume</b>	2	339	97	2	17	4	1	5	4					44	486
<i>Comments:</i>															

<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd													<b>QC JOB #:</b> 13216103		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> WB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	10	4234	1158	22	160	32	5	51	33	0	0	0	0	252	5957
<b>Percent</b>	0.2%	71.1%	19.4%	0.4%	2.7%	0.5%	0.1%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	4.2%	
<b>ADT 5957</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 800' E of Knollwood Rd/Walker Swinton Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216103 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015 - Mar 11 2015			
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		40	0			20			20	
1:00 AM		21				21			21	
2:00 AM		17				17			17	
3:00 AM		17				17			17	
4:00 AM		54				54			54	
5:00 AM		146				146			146	
6:00 AM		251				251			251	
7:00 AM		601				601			601	
8:00 AM		400				400			400	
9:00 AM		263				263			263	
10:00 AM		248				248			248	
11:00 AM		262				262			262	
12:00 PM		254				254			254	
1:00 PM		330				330			330	
2:00 PM		356				356			356	
3:00 PM		437				437			437	
4:00 PM		434				434			434	
5:00 PM		486				486			486	
6:00 PM		419				419			419	
7:00 PM		316				316			316	
8:00 PM		264				264			264	
9:00 PM		174				174			174	
10:00 PM		93				93			93	
11:00 PM		74				74			74	
<b>Day Total</b>		5957	0			5937			5937	
% Weekday Average		100.3%	0.0%							
% Week Average		100.3%	0.0%			100.0%				
AM Peak Volume		7:00 AM 601	12:00 AM 0			7:00 AM 601			7:00 AM 601	
PM Peak Volume		5:00 PM 486				5:00 PM 486			5:00 PM 486	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	2	2	5	2	1	0	0	0	0	0	0	12	36-45	7	
1:00 AM	0	0	0	1	1	5	2	0	0	0	0	0	0	0	9	36-45	7	
2:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	21-30	1	
3:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	36-45	1	
4:00 AM	0	0	0	0	1	3	1	0	0	0	0	0	0	0	5	31-40	4	
5:00 AM	1	0	0	1	6	8	4	0	0	0	0	0	0	0	20	31-40	14	
6:00 AM	0	0	0	5	12	19	5	2	0	0	0	0	0	0	43	31-40	30	
7:00 AM	1	0	1	14	36	31	20	1	0	0	0	0	0	0	104	31-40	67	
8:00 AM	1	0	1	12	21	22	20	1	1	0	0	0	0	0	79	31-40	43	
9:00 AM	0	1	1	6	14	27	13	2	0	0	0	0	0	0	64	31-40	41	
10:00 AM	2	0	1	11	20	13	8	4	1	0	0	0	0	0	60	31-40	33	
11:00 AM	0	2	4	8	23	15	10	1	0	0	0	0	0	0	63	31-40	38	
12:00 PM	0	0	0	10	26	22	17	0	0	0	0	0	0	0	75	31-40	48	
1:00 PM	3	4	9	11	27	19	15	1	0	0	0	0	0	0	89	31-40	45	
2:00 PM	2	0	1	9	27	23	8	1	0	0	0	0	0	0	71	31-40	49	
3:00 PM	1	2	2	5	23	29	9	2	0	0	0	0	0	0	73	31-40	51	
4:00 PM	0	0	3	15	41	53	17	3	0	0	0	0	0	0	132	31-40	93	
5:00 PM	1	0	2	15	28	49	19	6	0	0	0	0	0	0	120	31-40	77	
6:00 PM	0	0	0	9	11	35	15	2	0	0	0	0	0	0	72	36-45	50	
7:00 PM	0	0	1	9	20	15	9	0	1	0	0	0	0	0	55	31-40	35	
8:00 PM	0	1	0	11	16	9	3	0	0	0	0	0	0	0	40	26-35	27	
9:00 PM	0	0	1	6	9	10	3	1	0	0	0	0	0	0	30	31-40	19	
10:00 PM	0	0	2	1	7	9	4	0	1	0	0	0	0	0	24	31-40	16	
11:00 PM	0	0	0	2	7	6	1	1	0	0	0	0	0	0	17	31-40	12	
<b>Day Total</b>	12	10	29	164	378	427	207	29	4	0	0	0	0	0	1260	31-40	805	
<b>Percent</b>	1.0%	0.8%	2.3%	13.0%	30.0%	33.9%	16.4%	2.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%				
<b>ADT 1260</b>																		
<b>AM Peak Volume</b>	10:00 AM	11:00 AM	11:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	10:00 AM	8:00 AM							7:00 AM		
	2	2	4	14	36	31	20	4	1							104		
<b>PM Peak Volume</b>	1:00 PM	1:00 PM	1:00 PM	4:00 PM	4:00 PM	4:00 PM	5:00 PM	5:00 PM	7:00 PM							4:00 PM		
	3	4	9	15	41	53	19	6	1							132		
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd															<b>QC JOB #:</b> 13216104		
<b>SPECIFIC LOCATION:</b> 0 ft from															<b>DIRECTION:</b> EB		
<b>CITY/STATE:</b> Florence, SC															<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	12	10	29	164	378	427	207	29	4	0	0	0	0	0	1260	31-40	805
<b>Percent</b>	1.0%	0.8%	2.3%	13.0%	30.0%	33.9%	16.4%	2.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	1.0%	1.7%	4.0%	17.1%	47.1%	81.0%	97.4%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 1260</b>															<b>85th Percentile</b> 41 MPH <b>Mean Speed(Average)</b> 35 MPH <b>Median</b> 35 MPH <b>Mode:</b> 38 MPH		
<i>Comments:</i>																	



**LOCATION:** Alligator Rd 250' W of Twin Church Rd  
**SPECIFIC LOCATION:** 0 ft from  
**CITY/STATE:** Florence, SC

**QC JOB #:** 13216104  
**DIRECTION:** EB  
**DATE:** Mar 10 2015

Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total	
12:00 AM	0	6	6	0	0	0	0	0	0	0	0	0	0	0	12	
1:00 AM	0	6	3	0	0	0	0	0	0	0	0	0	0	0	9	
2:00 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	
5:00 AM	1	13	5	0	0	0	0	0	0	0	0	0	0	1	20	
6:00 AM	1	23	13	2	4	0	0	0	0	0	0	0	0	0	43	
7:00 AM	0	72	30	0	1	0	0	0	1	0	0	0	0	0	104	
8:00 AM	0	45	22	0	2	1	1	3	4	0	0	0	0	1	79	
9:00 AM	1	40	18	0	3	0	0	1	1	0	0	0	0	0	64	
10:00 AM	1	35	14	0	2	3	0	3	1	0	0	0	0	1	60	
11:00 AM	1	41	15	0	2	0	1	0	3	0	0	0	0	0	63	
12:00 PM	1	47	19	0	5	1	0	1	1	0	0	0	0	0	75	
1:00 PM	1	53	22	0	5	1	1	0	4	0	0	0	0	2	89	
2:00 PM	0	38	22	1	6	0	0	0	2	0	0	0	0	2	71	
3:00 PM	1	43	22	0	1	1	1	0	4	0	0	0	0	0	73	
4:00 PM	2	80	38	1	7	2	0	0	2	0	0	0	0	0	132	
5:00 PM	0	77	29	1	7	0	0	2	3	0	0	0	0	1	120	
6:00 PM	0	45	23	0	1	0	0	1	2	0	0	0	0	0	72	
7:00 PM	0	37	16	0	1	0	0	1	0	0	0	0	0	0	55	
8:00 PM	0	26	13	0	0	0	0	1	0	0	0	0	0	0	40	
9:00 PM	2	21	7	0	0	0	0	0	0	0	0	0	0	0	30	
10:00 PM	0	18	5	0	1	0	0	0	0	0	0	0	0	0	24	
11:00 PM	0	11	6	0	0	0	0	0	0	0	0	0	0	0	17	
<b>Day Total</b>	12	784	348	5	48	9	4	13	29	0	0	0	0	8	1260	
<b>Percent</b>	1.0%	62.2%	27.6%	0.4%	3.8%	0.7%	0.3%	1.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.6%		
<b>ADT 1260</b>																
<b>AM Peak Volume</b>	5:00 AM	7:00 AM	7:00 AM	6:00 AM	6:00 AM	10:00 AM	8:00 AM	8:00 AM	8:00 AM						5:00 AM	7:00 AM
	1	72	30	2	4	3	1	3	4						1	104
<b>PM Peak Volume</b>	4:00 PM	4:00 PM	4:00 PM	2:00 PM	4:00 PM	4:00 PM	1:00 PM	5:00 PM	1:00 PM						1:00 PM	4:00 PM
	2	80	38	1	7	2	1	2	4						2	132

Comments:

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd													<b>QC JOB #:</b> 13216104		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> EB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	12	784	348	5	48	9	4	13	29	0	0	0	0	8	1260
<b>Percent</b>	1.0%	62.2%	27.6%	0.4%	3.8%	0.7%	0.3%	1.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.6%	
<b>ADT 1260</b>															
<i>Comments:</i>															





<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> EB <b>DATE:</b> Mar 10 2015 - Mar 11 2015			
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		12	0			6			6	
1:00 AM		9				9			9	
2:00 AM		2				2			2	
3:00 AM		1				1			1	
4:00 AM		5				5			5	
5:00 AM		20				20			20	
6:00 AM		43				43			43	
7:00 AM		104				104			104	
8:00 AM		79				79			79	
9:00 AM		64				64			64	
10:00 AM		60				60			60	
11:00 AM		63				63			63	
12:00 PM		75				75			75	
1:00 PM		89				89			89	
2:00 PM		71				71			71	
3:00 PM		73				73			73	
4:00 PM		132				132			132	
5:00 PM		120				120			120	
6:00 PM		72				72			72	
7:00 PM		55				55			55	
8:00 PM		40				40			40	
9:00 PM		30				30			30	
10:00 PM		24				24			24	
11:00 PM		17				17			17	
<b>Day Total</b>		1260	0			1254			1254	
% Weekday Average		100.5%	0.0%							
% Week Average		100.5%	0.0%			100.0%				
AM Peak		7:00 AM	12:00 AM			7:00 AM			7:00 AM	
Volume		104	0			104			104	
PM Peak		4:00 PM				4:00 PM			4:00 PM	
Volume		132				132			132	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	2	5	10	3	1	0	0	0	0	0	0	21	31-40	15	
1:00 AM	0	0	0	2	7	9	2	1	0	0	0	0	0	0	21	31-40	16	
2:00 AM	0	0	0	3	1	3	1	0	0	0	0	0	0	0	8	27-36	4	
3:00 AM	0	0	0	1	0	3	1	0	0	0	0	0	0	0	5	36-45	4	
4:00 AM	0	0	0	2	2	3	3	0	0	0	0	0	0	0	10	37-46	5	
5:00 AM	2	0	2	3	18	22	8	0	0	0	0	0	0	0	55	31-40	40	
6:00 AM	1	0	0	7	27	40	9	5	1	0	0	0	0	0	90	31-40	67	
7:00 AM	3	0	3	21	72	63	28	2	0	0	0	0	0	0	192	31-40	135	
8:00 AM	3	0	2	19	47	59	29	1	1	0	0	0	0	0	161	31-40	106	
9:00 AM	0	1	1	19	37	38	19	3	0	0	0	0	0	0	118	31-40	74	
10:00 AM	2	1	4	15	41	43	11	4	1	0	0	0	0	0	122	31-40	83	
11:00 AM	2	2	7	23	53	39	13	1	0	0	0	0	0	0	140	31-40	92	
12:00 PM	1	0	2	20	60	40	23	1	0	0	0	0	0	0	147	31-40	100	
1:00 PM	5	4	10	19	63	48	26	2	0	0	0	0	0	0	177	31-40	110	
2:00 PM	5	1	3	17	66	47	18	1	1	0	0	0	0	0	159	31-40	113	
3:00 PM	2	2	3	14	58	58	13	3	0	0	0	0	0	0	153	31-40	115	
4:00 PM	2	0	5	24	76	92	24	5	0	0	0	0	0	0	228	31-40	167	
5:00 PM	1	0	4	30	69	97	24	6	0	0	0	0	0	0	231	31-40	166	
6:00 PM	0	0	1	13	39	73	18	3	0	0	0	0	0	0	147	31-40	111	
7:00 PM	0	1	3	15	44	40	17	1	1	0	0	0	0	0	122	31-40	84	
8:00 PM	0	1	2	14	38	36	8	0	0	0	0	0	0	0	99	31-40	74	
9:00 PM	2	1	2	12	18	32	5	2	0	0	0	0	0	0	74	31-40	50	
10:00 PM	0	0	2	4	13	23	8	0	1	0	0	0	0	0	51	31-40	36	
11:00 PM	0	0	0	6	16	13	2	2	0	0	0	0	0	0	39	31-40	29	
<b>Day Total</b>	31	14	56	305	870	931	313	44	6	0	0	0	0	0	2570	31-40	1800	
<b>Percent</b>	1.2%	0.5%	2.2%	11.9%	33.9%	36.2%	12.2%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%				
<b>ADT 2570</b>																		
<b>AM Peak Volume</b>	7:00 AM	11:00 AM	11:00 AM	11:00 AM	7:00 AM	7:00 AM	8:00 AM	6:00 AM	6:00 AM							7:00 AM		
	3	2	7	23	72	63	29	5	1							192		
<b>PM Peak Volume</b>	1:00 PM	1:00 PM	1:00 PM	5:00 PM	4:00 PM	5:00 PM	1:00 PM	5:00 PM	2:00 PM							5:00 PM		
	5	4	10	30	76	97	26	6	1							231		
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd														<b>QC JOB #:</b> 13216104			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> EB/WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	31	14	56	305	870	931	313	44	6	0	0	0	0	0	2570	31-40	1800
<b>Percent</b>	1.2%	0.5%	2.2%	11.9%	33.9%	36.2%	12.2%	1.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	1.2%	1.8%	3.9%	15.8%	49.6%	85.9%	98.1%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 2570</b>															<b>85th Percentile</b> 39 MPH <b>Mean Speed(Average)</b> 34 MPH		
<i>Comments:</i>															<b>Median</b> 35 MPH <b>Mode:</b> 38 MPH		



<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total	
12:00 AM	0	11	10	0	0	0	0	0	0	0	0	0	0	0	21	
1:00 AM	1	12	7	1	0	0	0	0	0	0	0	0	0	0	21	
2:00 AM	0	5	1	1	0	0	0	0	1	0	0	0	0	0	8	
3:00 AM	0	4	0	0	0	0	0	1	0	0	0	0	0	0	5	
4:00 AM	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10	
5:00 AM	2	36	14	0	1	1	0	0	0	0	0	0	0	1	55	
6:00 AM	1	56	23	2	7	0	0	0	0	0	0	0	0	1	90	
7:00 AM	0	121	57	1	5	0	0	2	4	0	0	0	0	2	192	
8:00 AM	0	91	49	2	4	1	2	4	5	0	0	0	0	3	161	
9:00 AM	1	67	33	0	7	1	1	2	6	0	0	0	0	0	118	
10:00 AM	2	78	26	0	6	5	0	3	1	0	0	0	0	1	122	
11:00 AM	3	82	39	3	4	2	1	2	4	0	0	0	0	0	140	
12:00 PM	1	92	36	2	8	1	0	1	5	0	0	0	0	1	147	
1:00 PM	1	118	36	0	9	1	1	1	6	0	0	0	0	4	177	
2:00 PM	0	86	45	2	20	0	0	0	2	0	0	0	0	4	159	
3:00 PM	2	89	45	0	7	2	1	1	5	0	0	0	0	1	153	
4:00 PM	3	135	73	2	9	3	0	0	2	0	0	0	0	1	228	
5:00 PM	1	150	59	2	11	1	0	2	4	0	0	0	0	1	231	
6:00 PM	1	94	39	0	8	0	0	2	3	0	0	0	0	0	147	
7:00 PM	0	81	36	0	1	1	0	2	1	0	0	0	0	0	122	
8:00 PM	1	67	29	0	1	0	0	1	0	0	0	0	0	0	99	
9:00 PM	2	51	18	0	2	0	0	0	0	0	0	0	0	1	74	
10:00 PM	1	39	9	0	2	0	0	0	0	0	0	0	0	0	51	
11:00 PM	0	30	8	0	1	0	0	0	0	0	0	0	0	0	39	
<b>Day Total</b>	23	1605	692	18	113	19	6	24	49	0	0	0	0	21	2570	
<b>Percent</b>	0.9%	62.5%	26.9%	0.7%	4.4%	0.7%	0.2%	0.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.8%		
<b>ADT 2570</b>																
<b>AM Peak Volume</b>	11:00 AM	7:00 AM	7:00 AM	11:00 AM	6:00 AM	10:00 AM	8:00 AM	8:00 AM	9:00 AM						8:00 AM	7:00 AM
	3	121	57	3	7	5	2	4	6						3	192
<b>PM Peak Volume</b>	4:00 PM	5:00 PM	4:00 PM	12:00 PM	2:00 PM	4:00 PM	1:00 PM	5:00 PM	1:00 PM						1:00 PM	5:00 PM
	3	150	73	2	20	3	1	2	6						4	231
<i>Comments:</i>																

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd													<b>QC JOB #:</b> 13216104		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> EB/WB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	23	1605	692	18	113	19	6	24	49	0	0	0	0	21	2570
<b>Percent</b>	0.9%	62.5%	26.9%	0.7%	4.4%	0.7%	0.2%	0.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.8%	
<b>ADT 2570</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC						<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> EB/WB <b>DATE:</b> Mar 10 2015 - Mar 11 2015				
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		21	0			11			11	
1:00 AM		21				21			21	
2:00 AM		8				8			8	
3:00 AM		5				5			5	
4:00 AM		10				10			10	
5:00 AM		55				55			55	
6:00 AM		90				90			90	
7:00 AM		192				192			192	
8:00 AM		161				161			161	
9:00 AM		118				118			118	
10:00 AM		122				122			122	
11:00 AM		140				140			140	
12:00 PM		147				147			147	
1:00 PM		177				177			177	
2:00 PM		159				159			159	
3:00 PM		153				153			153	
4:00 PM		228				228			228	
5:00 PM		231				231			231	
6:00 PM		147				147			147	
7:00 PM		122				122			122	
8:00 PM		99				99			99	
9:00 PM		74				74			74	
10:00 PM		51				51			51	
11:00 PM		39				39			39	
<b>Day Total</b>		2570	0			2560			2560	
% Weekday Average		100.4%	0.0%							
% Week Average		100.4%	0.0%			100.0%				
AM Peak		7:00 AM	12:00 AM			7:00 AM			7:00 AM	
Volume		192	0			192			192	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		231				231			231	
<i>Comments:</i>										

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC															<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	0	3	5	1	0	0	0	0	0	0	0	9	31-40	8	
1:00 AM	0	0	0	1	6	4	0	1	0	0	0	0	0	0	12	31-40	10	
2:00 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	6	31-40	4	
3:00 AM	0	0	0	1	0	3	0	0	0	0	0	0	0	0	4	31-40	3	
4:00 AM	0	0	0	2	1	0	2	0	0	0	0	0	0	0	5	26-35	3	
5:00 AM	1	0	2	2	12	14	4	0	0	0	0	0	0	0	35	31-40	25	
6:00 AM	1	0	0	2	15	21	4	3	1	0	0	0	0	0	47	31-40	36	
7:00 AM	2	0	2	7	36	32	8	1	0	0	0	0	0	0	88	31-40	68	
8:00 AM	2	0	1	7	26	37	9	0	0	0	0	0	0	0	82	31-40	63	
9:00 AM	0	0	0	13	23	11	6	1	0	0	0	0	0	0	54	26-35	36	
10:00 AM	0	1	3	4	21	30	3	0	0	0	0	0	0	0	62	31-40	51	
11:00 AM	2	0	3	15	30	24	3	0	0	0	0	0	0	0	77	31-40	53	
12:00 PM	1	0	2	10	34	18	6	1	0	0	0	0	0	0	72	31-40	51	
1:00 PM	2	0	1	8	36	29	11	1	0	0	0	0	0	0	88	31-40	65	
2:00 PM	3	1	2	8	39	24	10	0	1	0	0	0	0	0	88	31-40	62	
3:00 PM	1	0	1	9	35	29	4	1	0	0	0	0	0	0	80	31-40	63	
4:00 PM	2	0	2	9	35	39	7	2	0	0	0	0	0	0	96	31-40	74	
5:00 PM	0	0	2	15	41	48	5	0	0	0	0	0	0	0	111	31-40	88	
6:00 PM	0	0	1	4	28	38	3	1	0	0	0	0	0	0	75	31-40	65	
7:00 PM	0	1	2	6	24	25	8	1	0	0	0	0	0	0	67	31-40	49	
8:00 PM	0	0	2	3	22	27	5	0	0	0	0	0	0	0	59	31-40	49	
9:00 PM	2	1	1	6	9	22	2	1	0	0	0	0	0	0	44	31-40	30	
10:00 PM	0	0	0	3	6	14	4	0	0	0	0	0	0	0	27	31-40	20	
11:00 PM	0	0	0	4	9	7	1	1	0	0	0	0	0	0	22	31-40	15	
<b>Day Total</b>	19	4	27	141	492	504	106	15	2	0	0	0	0	0	1310	31-40	995	
<b>Percent</b>	1.5%	0.3%	2.1%	10.8%	37.6%	38.5%	8.1%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%				
<b>ADT</b> 1310																		
<b>AM Peak</b> Volume	7:00 AM	10:00 AM	10:00 AM	11:00 AM	7:00 AM	8:00 AM	8:00 AM	6:00 AM	6:00 AM							7:00 AM		
	2	1	3	15	36	37	9	3	1							88		
<b>PM Peak</b> Volume	2:00 PM	2:00 PM	12:00 PM	5:00 PM	5:00 PM	5:00 PM	1:00 PM	4:00 PM	2:00 PM							5:00 PM		
	3	1	2	15	41	48	11	2	1							111		
<i>Comments:</i>																		

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd														<b>QC JOB #:</b> 13216104			
<b>SPECIFIC LOCATION:</b> 0 ft from														<b>DIRECTION:</b> WB			
<b>CITY/STATE:</b> Florence, SC														<b>DATE:</b> Mar 10 2015 - Mar 10 2015			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
<b>Grand Total</b>	19	4	27	141	492	504	106	15	2	0	0	0	0	0	1310	31-40	995
<b>Percent</b>	1.5%	0.3%	2.1%	10.8%	37.6%	38.5%	8.1%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
<b>Cumulative Percent</b>	1.5%	1.8%	3.8%	14.6%	52.1%	90.6%	98.7%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
<b>ADT 1310</b>															<b>85th Percentile</b> 39 MPH <b>Mean Speed(Average)</b> 34 MPH <b>Median</b> 34 MPH <b>Mode:</b> 38 MPH		
<i>Comments:</i>																	





<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC														<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
1:00 AM	1	6	4	1	0	0	0	0	0	0	0	0	0	0	12
2:00 AM	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
3:00 AM	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4
4:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 AM	1	23	9	0	1	1	0	0	0	0	0	0	0	0	35
6:00 AM	0	33	10	0	3	0	0	0	0	0	0	0	0	1	47
7:00 AM	0	49	27	1	4	0	0	2	3	0	0	0	0	2	88
8:00 AM	0	46	27	2	2	0	1	1	1	0	0	0	0	2	82
9:00 AM	0	27	15	0	4	1	1	1	5	0	0	0	0	0	54
10:00 AM	1	43	12	0	4	2	0	0	0	0	0	0	0	0	62
11:00 AM	2	41	24	3	2	2	0	2	1	0	0	0	0	0	77
12:00 PM	0	45	17	2	3	0	0	0	4	0	0	0	0	1	72
1:00 PM	0	65	14	0	4	0	0	1	2	0	0	0	0	2	88
2:00 PM	0	48	23	1	14	0	0	0	0	0	0	0	0	2	88
3:00 PM	1	46	23	0	6	1	0	1	1	0	0	0	0	1	80
4:00 PM	1	55	35	1	2	1	0	0	0	0	0	0	0	1	96
5:00 PM	1	73	30	1	4	1	0	0	1	0	0	0	0	0	111
6:00 PM	1	49	16	0	7	0	0	1	1	0	0	0	0	0	75
7:00 PM	0	44	20	0	0	1	0	1	1	0	0	0	0	0	67
8:00 PM	1	41	16	0	1	0	0	0	0	0	0	0	0	0	59
9:00 PM	0	30	11	0	2	0	0	0	0	0	0	0	0	1	44
10:00 PM	1	21	4	0	1	0	0	0	0	0	0	0	0	0	27
11:00 PM	0	19	2	0	1	0	0	0	0	0	0	0	0	0	22
<b>Day Total</b>	11	821	344	13	65	10	2	11	20	0	0	0	0	13	1310
<b>Percent</b>	0.8%	62.7%	26.3%	1.0%	5.0%	0.8%	0.2%	0.8%	1.5%	0.0%	0.0%	0.0%	0.0%	1.0%	
<b>ADT 1310</b>															
<b>AM Peak Volume</b>	11:00 AM	7:00 AM	7:00 AM	11:00 AM	7:00 AM	10:00 AM	8:00 AM	7:00 AM	9:00 AM					7:00 AM	7:00 AM
	2	49	27	3	4	2	1	2	5					2	88
<b>PM Peak Volume</b>	3:00 PM	5:00 PM	4:00 PM	12:00 PM	2:00 PM	3:00 PM		1:00 PM	12:00 PM					1:00 PM	5:00 PM
	1	73	35	2	14	1		1	4					2	111
<i>Comments:</i>															

<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd													<b>QC JOB #:</b> 13216104		
<b>SPECIFIC LOCATION:</b> 0 ft from													<b>DIRECTION:</b> WB		
<b>CITY/STATE:</b> Florence, SC													<b>DATE:</b> Mar 10 2015 - Mar 10 2015		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
<b>Grand Total</b>	11	821	344	13	65	10	2	11	20	0	0	0	0	13	1310
<b>Percent</b>	0.8%	62.7%	26.3%	1.0%	5.0%	0.8%	0.2%	0.8%	1.5%	0.0%	0.0%	0.0%	0.0%	1.0%	
<b>ADT 1310</b>															
<i>Comments:</i>															



<b>LOCATION:</b> Alligator Rd 250' W of Twin Church Rd <b>SPECIFIC LOCATION:</b> 0 ft from <b>CITY/STATE:</b> Florence, SC							<b>QC JOB #:</b> 13216104 <b>DIRECTION:</b> WB <b>DATE:</b> Mar 10 2015 - Mar 11 2015			
Start Time	Mon 10-Mar-15	Tue 11-Mar-15	Wed 11-Mar-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		9	0			5			5	
1:00 AM		12				12			12	
2:00 AM		6				6			6	
3:00 AM		4				4			4	
4:00 AM		5				5			5	
5:00 AM		35				35			35	
6:00 AM		47				47			47	
7:00 AM		88				88			88	
8:00 AM		82				82			82	
9:00 AM		54				54			54	
10:00 AM		62				62			62	
11:00 AM		77				77			77	
12:00 PM		72				72			72	
1:00 PM		88				88			88	
2:00 PM		88				88			88	
3:00 PM		80				80			80	
4:00 PM		96				96			96	
5:00 PM		111				111			111	
6:00 PM		75				75			75	
7:00 PM		67				67			67	
8:00 PM		59				59			59	
9:00 PM		44				44			44	
10:00 PM		27				27			27	
11:00 PM		22				22			22	
<b>Day Total</b>		1310	0			1306			1306	
% Weekday Average		100.3%	0.0%							
% Week Average		100.3%	0.0%			100.0%				
AM Peak		7:00 AM	12:00 AM			7:00 AM			7:00 AM	
Volume		88	0			88			88	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		111				111			111	
<i>Comments:</i>										

## **TURNING MOVEMENT COUNTS**

# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #1 US76@AlligatorRdAM

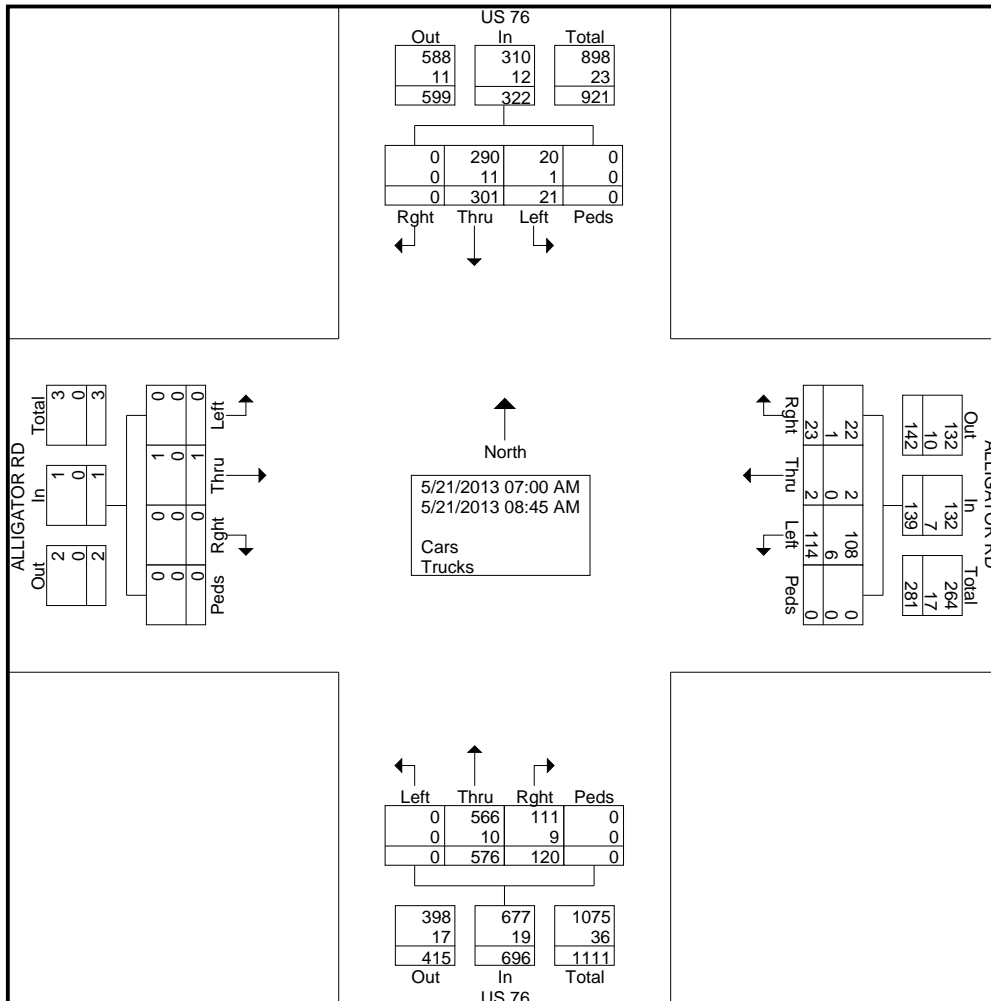
Site Code :

Start Date : 5/21/2013

Page No : 1

## Groups Printed- Cars - Trucks

Start Time	US 76 Southbound					ALLIGATOR RD Westbound					US 76 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	36	0	0	37	8	0	2	0	10	0	64	17	0	81	0	0	0	0	0	128
07:15 AM	2	37	0	0	39	18	1	3	0	22	0	84	15	0	99	0	0	0	0	0	160
07:30 AM	1	37	0	0	38	11	0	0	0	11	0	95	19	0	114	0	0	0	0	0	163
07:45 AM	5	41	0	0	46	17	0	4	0	21	0	95	18	0	113	0	0	0	0	0	180
<b>Total</b>	<b>9</b>	<b>151</b>	<b>0</b>	<b>0</b>	<b>160</b>	<b>54</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>338</b>	<b>69</b>	<b>0</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>631</b>
08:00 AM	1	41	0	0	42	13	0	3	0	16	0	73	11	0	84	0	1	0	0	1	143
08:15 AM	3	36	0	0	39	16	0	4	0	20	0	61	15	0	76	0	0	0	0	0	135
08:30 AM	5	31	0	0	36	16	0	3	0	19	0	40	12	0	52	0	0	0	0	0	107
08:45 AM	3	42	0	0	45	15	1	4	0	20	0	64	13	0	77	0	0	0	0	0	142
<b>Total</b>	<b>12</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>162</b>	<b>60</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>238</b>	<b>51</b>	<b>0</b>	<b>289</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>527</b>
<b>Grand Total</b>	<b>21</b>	<b>301</b>	<b>0</b>	<b>0</b>	<b>322</b>	<b>114</b>	<b>2</b>	<b>23</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>576</b>	<b>120</b>	<b>0</b>	<b>696</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1158</b>
Apprch %	6.5	93.5	0	0		82	1.4	16.5	0		0	82.8	17.2	0		0	100	0	0		
Total %	1.8	26	0	0	27.8	9.8	0.2	2	0	12	0	49.7	10.4	0	60.1	0	0.1	0	0	0.1	
Cars	20	290	0	0	310	108	2	22	0	132	0	566	111	0	677	0	1	0	0	1	1120
% Cars	95.2	96.3	0	0	96.3	94.7	100	95.7	0	95	0	98.3	92.5	0	97.3	0	100	0	0	100	96.7
Trucks	1	11	0	0	12	6	0	1	0	7	0	10	9	0	19	0	0	0	0	0	38
% Trucks	4.8	3.7	0	0	3.7	5.3	0	4.3	0	5	0	1.7	7.5	0	2.7	0	0	0	0	0	3.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

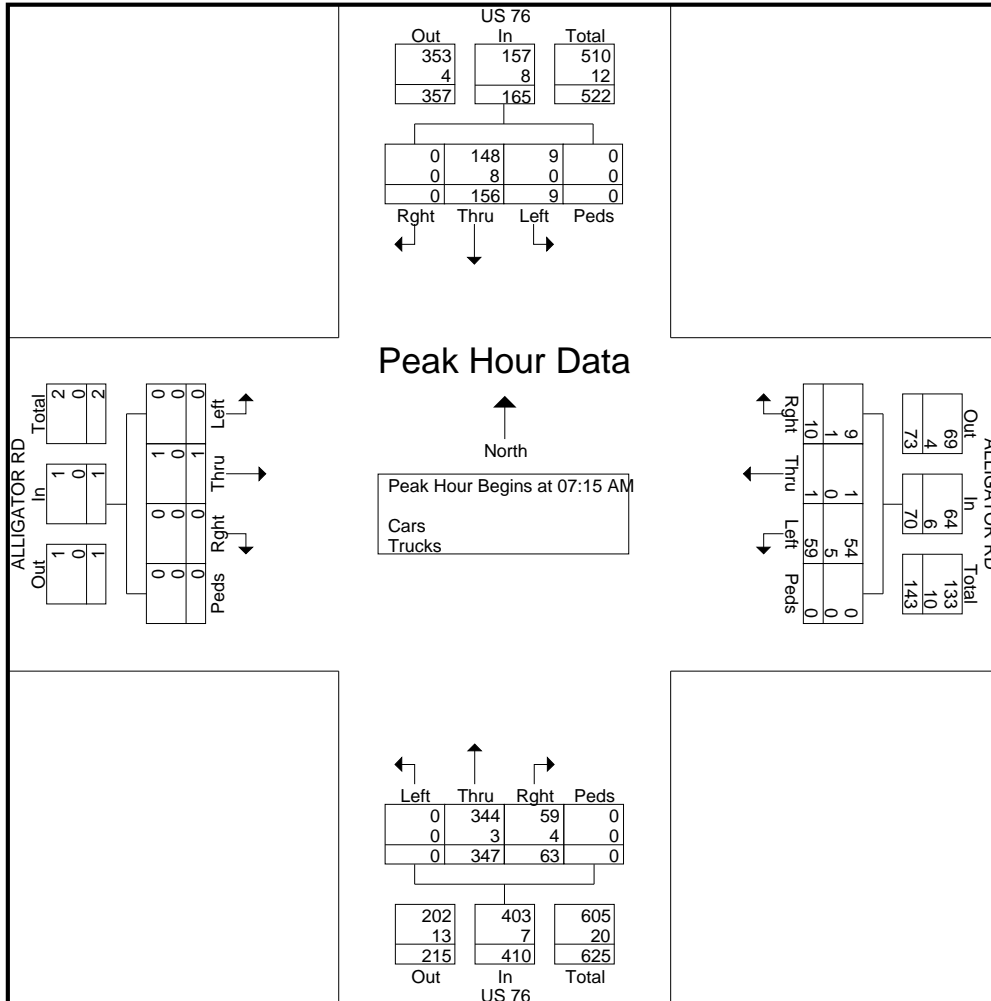
File Name : #1 US76@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	US 76 Southbound					ALLIGATOR RD Westbound					US 76 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	37	0	0	39	18	1	3	0	22	0	84	15	0	99	0	0	0	0	0	160
07:30 AM	1	37	0	0	38	11	0	0	0	11	0	95	19	0	114	0	0	0	0	0	163
07:45 AM	5	41	0	0	46	17	0	4	0	21	0	95	18	0	113	0	0	0	0	0	180
08:00 AM	1	41	0	0	42	13	0	3	0	16	0	73	11	0	84	0	1	0	0	1	143
Total Volume	9	156	0	0	165	59	1	10	0	70	0	347	63	0	410	0	1	0	0	1	646
% App. Total	5.5	94.5	0	0		84.3	1.4	14.3	0		0	84.6	15.4	0		0	100	0	0		
PHF	.450	.951	.000	.000	.897	.819	.250	.625	.000	.795	.000	.913	.829	.000	.899	.000	.250	.000	.000	.250	.897
Cars	9	148	0	0	157	54	1	9	0	64	0	344	59	0	403	0	1	0	0	1	625
% Cars	100	94.9	0	0	95.2	91.5	100	90.0	0	91.4	0	99.1	93.7	0	98.3	0	100	0	0	100	96.7
Trucks	0	8	0	0	8	5	0	1	0	6	0	3	4	0	7	0	0	0	0	0	21
% Trucks	0	5.1	0	0	4.8	8.5	0	10.0	0	8.6	0	0.9	6.3	0	1.7	0	0	0	0	0	3.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #1 US76@AlligatorRdPM

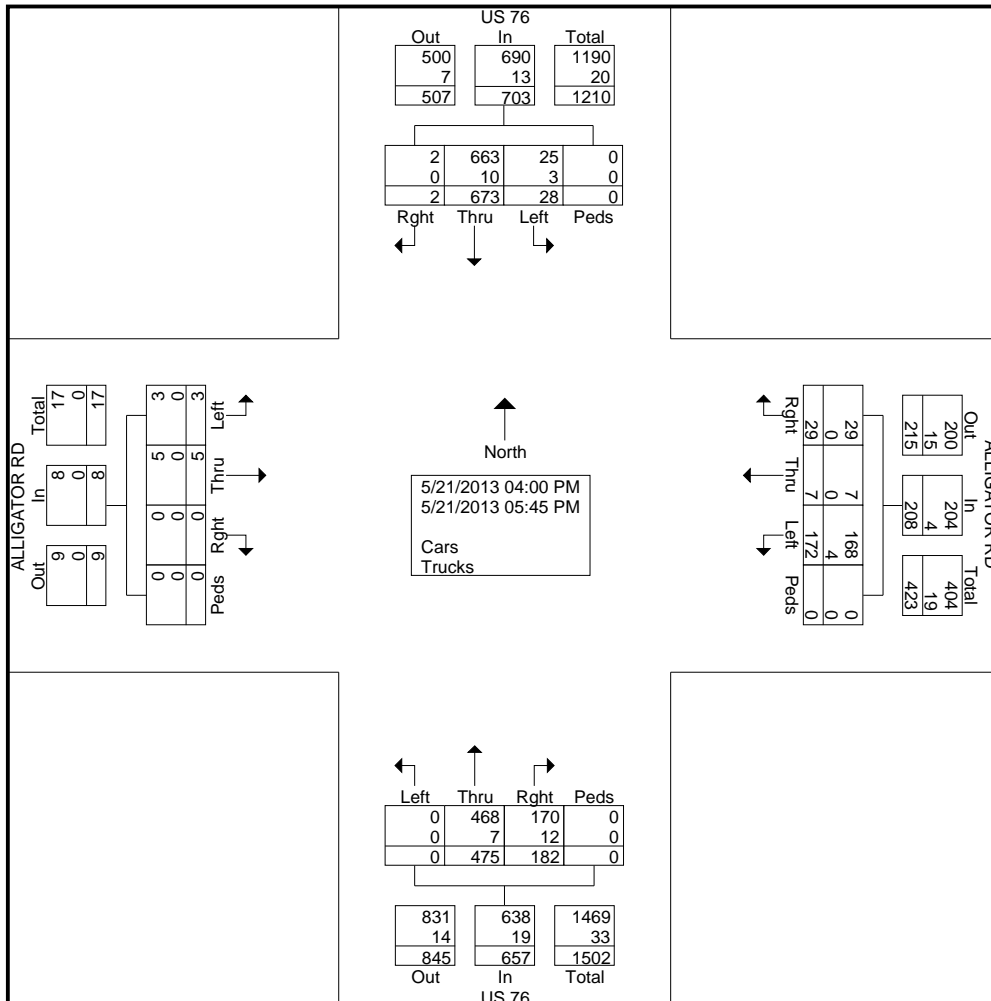
Site Code :

Start Date : 5/21/2013

Page No : 1

## Groups Printed- Cars - Trucks

Start Time	US 76 Southbound					ALLIGATOR RD Westbound					US 76 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	4	66	0	0	70	13	0	2	0	15	0	58	21	0	79	0	1	0	0	1	165
04:15 PM	1	70	0	0	71	15	2	2	0	19	0	56	17	0	73	1	1	0	0	2	165
04:30 PM	4	89	0	0	93	25	0	3	0	28	0	61	28	0	89	2	0	0	0	2	212
04:45 PM	1	100	0	0	101	13	1	1	0	15	0	56	26	0	82	0	0	0	0	0	198
<b>Total</b>	<b>10</b>	<b>325</b>	<b>0</b>	<b>0</b>	<b>335</b>	<b>66</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>231</b>	<b>92</b>	<b>0</b>	<b>323</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>740</b>
05:00 PM	0	73	0	0	73	23	0	8	0	31	0	76	26	0	102	0	1	0	0	1	207
05:15 PM	6	99	1	0	106	30	2	1	0	33	0	56	31	0	87	0	1	0	0	1	227
05:30 PM	7	83	0	0	90	29	2	8	0	39	0	63	18	0	81	0	0	0	0	0	210
05:45 PM	5	93	1	0	99	24	0	4	0	28	0	49	15	0	64	0	1	0	0	1	192
<b>Total</b>	<b>18</b>	<b>348</b>	<b>2</b>	<b>0</b>	<b>368</b>	<b>106</b>	<b>4</b>	<b>21</b>	<b>0</b>	<b>131</b>	<b>0</b>	<b>244</b>	<b>90</b>	<b>0</b>	<b>334</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>836</b>
<b>Grand Total</b>	<b>28</b>	<b>673</b>	<b>2</b>	<b>0</b>	<b>703</b>	<b>172</b>	<b>7</b>	<b>29</b>	<b>0</b>	<b>208</b>	<b>0</b>	<b>475</b>	<b>182</b>	<b>0</b>	<b>657</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>1576</b>
Apprch %	4	95.7	0.3	0		82.7	3.4	13.9	0		0	72.3	27.7	0		37.5	62.5	0	0		
Total %	1.8	42.7	0.1	0	44.6	10.9	0.4	1.8	0	13.2	0	30.1	11.5	0	41.7	0.2	0.3	0	0	0.5	
Cars	25	663	2	0	690	168	7	29	0	204	0	468	170	0	638	3	5	0	0	8	1540
% Cars	89.3	98.5	100	0	98.2	97.7	100	100	0	98.1	0	98.5	93.4	0	97.1	100	100	0	0	100	97.7
Trucks	3	10	0	0	13	4	0	0	0	4	0	7	12	0	19	0	0	0	0	0	36
% Trucks	10.7	1.5	0	0	1.8	2.3	0	0	0	1.9	0	1.5	6.6	0	2.9	0	0	0	0	0	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

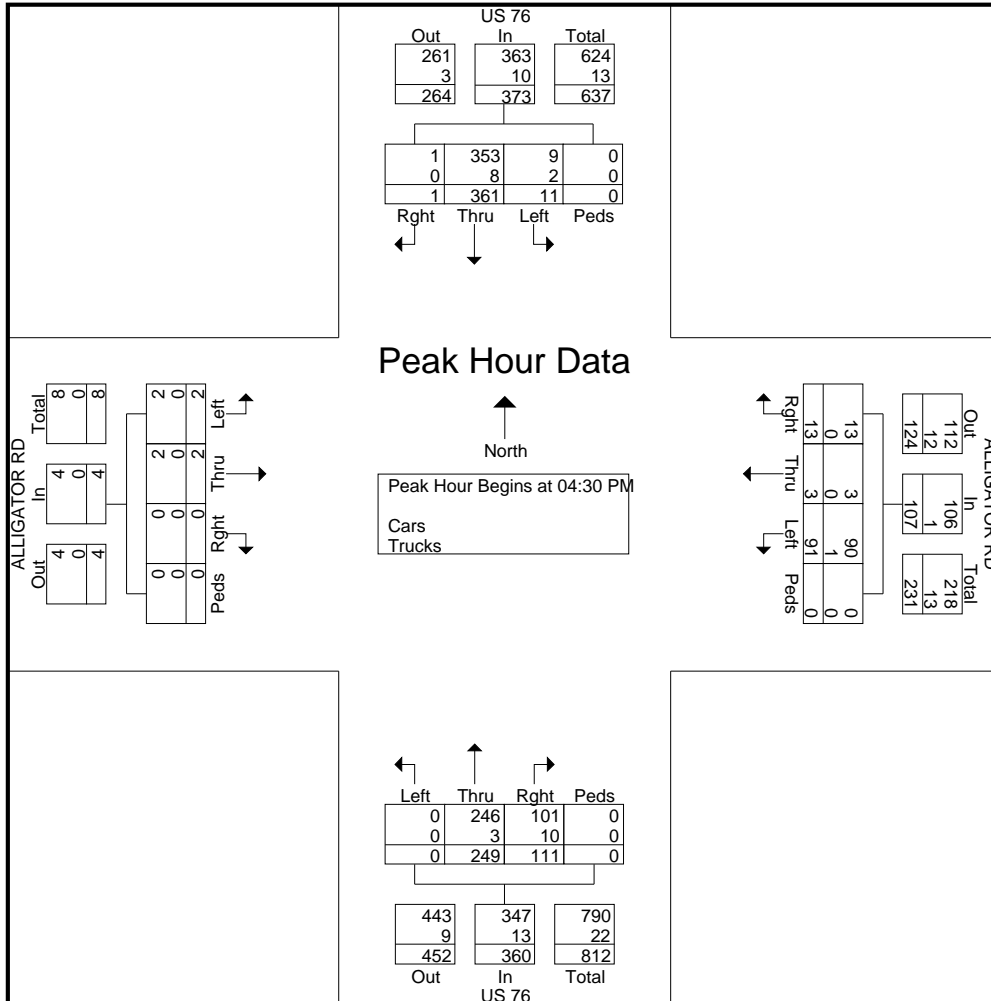
File Name : #1 US76@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	US 76 Southbound					ALLIGATOR RD Westbound					US 76 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	89	0	0	93	25	0	3	0	28	0	61	28	0	89	2	0	0	0	2	212
04:45 PM	1	100	0	0	101	13	1	1	0	15	0	56	26	0	82	0	0	0	0	0	198
05:00 PM	0	73	0	0	73	23	0	8	0	31	0	76	26	0	102	0	1	0	0	1	207
05:15 PM	6	99	1	0	106	30	2	1	0	33	0	56	31	0	87	0	1	0	0	1	227
Total Volume	11	361	1	0	373	91	3	13	0	107	0	249	111	0	360	2	2	0	0	4	844
% App. Total	2.9	96.8	0.3	0		85	2.8	12.1	0		0	69.2	30.8	0		50	50	0	0		
PHF	.458	.903	.250	.000	.880	.758	.375	.406	.000	.811	.000	.819	.895	.000	.882	.250	.500	.000	.000	.500	.930
Cars	9	353	1	0	363	90	3	13	0	106	0	246	101	0	347	2	2	0	0	4	820
% Cars	81.8	97.8	100	0	97.3	98.9	100	100	0	99.1	0	98.8	91.0	0	96.4	100	100	0	0	100	97.2
Trucks	2	8	0	0	10	1	0	0	0	1	0	3	10	0	13	0	0	0	0	0	24
% Trucks	18.2	2.2	0	0	2.7	1.1	0	0	0	0.9	0	1.2	9.0	0	3.6	0	0	0	0	0	2.8





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #2 SouthernAirRd@AlligatorRdAM

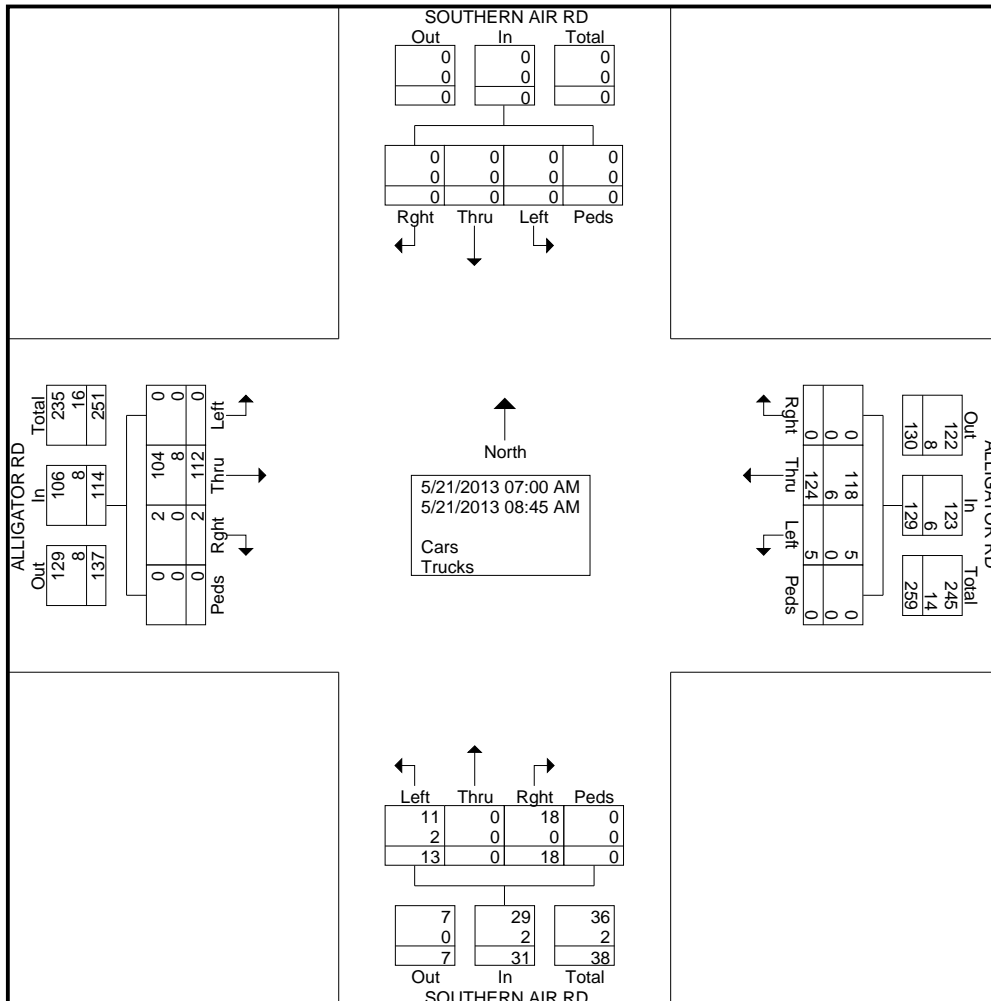
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	SOUTHERN AIR RD Southbound					ALLIGATOR RD Westbound					SOUTHERN AIR RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	9	0	0	9	0	0	2	0	2	0	16	0	0	16	27
07:15 AM	0	0	0	0	0	1	18	0	0	19	5	0	5	0	10	0	12	0	0	12	41
07:30 AM	0	0	0	0	0	1	12	0	0	13	0	0	2	0	2	0	17	1	0	18	33
07:45 AM	0	0	0	0	0	0	19	0	0	19	1	0	4	0	5	0	21	0	0	21	45
Total	0	0	0	0	0	2	58	0	0	60	6	0	13	0	19	0	66	1	0	67	146
08:00 AM	0	0	0	0	0	0	19	0	0	19	2	0	1	0	3	0	11	0	0	11	33
08:15 AM	0	0	0	0	0	1	16	0	0	17	2	0	2	0	4	0	12	0	0	12	33
08:30 AM	0	0	0	0	0	1	15	0	0	16	2	0	0	0	2	0	11	1	0	12	30
08:45 AM	0	0	0	0	0	1	16	0	0	17	1	0	2	0	3	0	12	0	0	12	32
Total	0	0	0	0	0	3	66	0	0	69	7	0	5	0	12	0	46	1	0	47	128
Grand Total	0	0	0	0	0	5	124	0	0	129	13	0	18	0	31	0	112	2	0	114	274
Apprch %	0	0	0	0		3.9	96.1	0	0		41.9	0	58.1	0		0	98.2	1.8	0		
Total %	0	0	0	0		1.8	45.3	0	0	47.1	4.7	0	6.6	0	11.3	0	40.9	0.7	0	41.6	
Cars	0	0	0	0	0	5	118	0	0	123	11	0	18	0	29	0	104	2	0	106	258
% Cars	0	0	0	0	0	100	95.2	0	0	95.3	84.6	0	100	0	93.5	0	92.9	100	0	93	94.2
Trucks	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	8	0	0	8	16
% Trucks	0	0	0	0	0	0	4.8	0	0	4.7	15.4	0	0	0	6.5	0	7.1	0	0	7	5.8



# All Traffic Data Services, Inc

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Conyers, Ga 30012  
404-374-1283

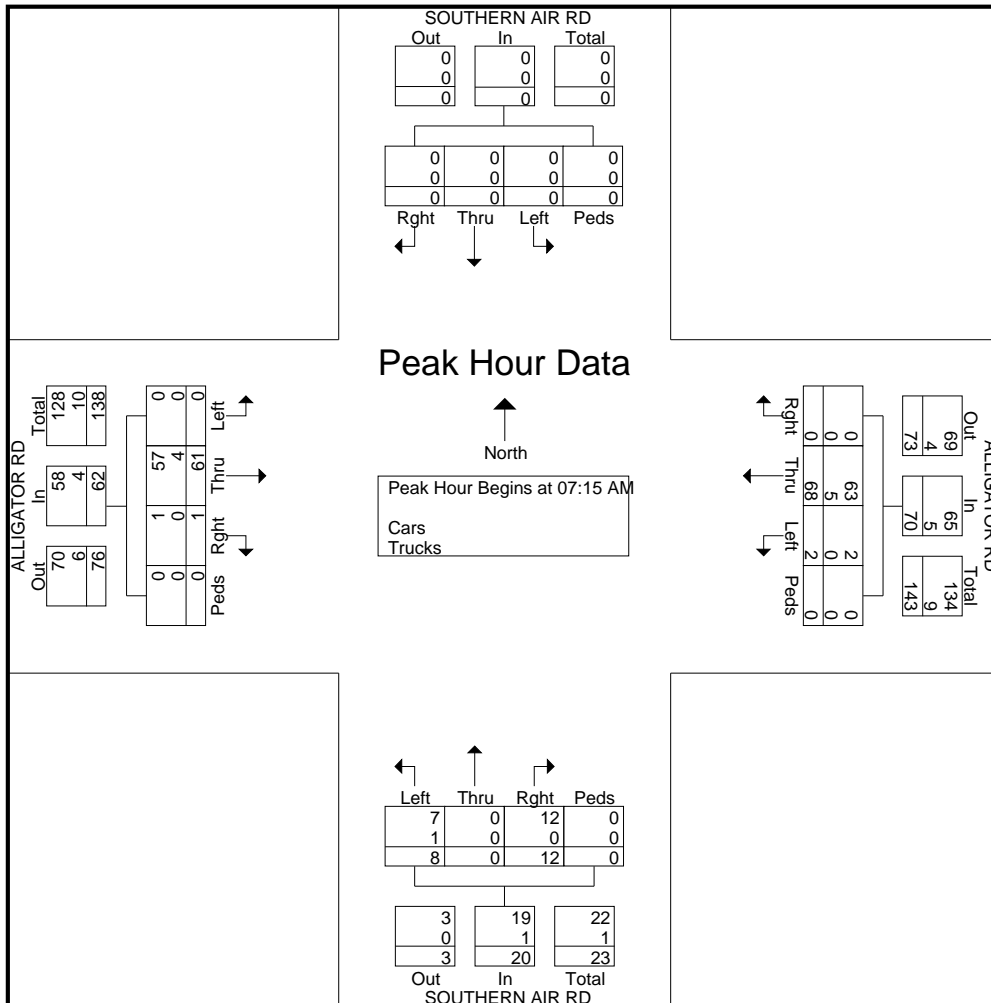
File Name : #2 SouthernAirRd@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	SOUTHERN AIR RD Southbound					ALLIGATOR RD Westbound					SOUTHERN AIR RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	1	18	0	0	19	5	0	5	0	10	0	12	0	0	12	41
07:30 AM	0	0	0	0	0	1	12	0	0	13	0	0	2	0	2	0	17	1	0	18	33
07:45 AM	0	0	0	0	0	0	19	0	0	19	1	0	4	0	5	0	21	0	0	21	45
08:00 AM	0	0	0	0	0	0	19	0	0	19	2	0	1	0	3	0	11	0	0	11	33
Total Volume	0	0	0	0	0	2	68	0	0	70	8	0	12	0	20	0	61	1	0	62	152
% App. Total	0	0	0	0	0	2.9	97.1	0	0	0	40	0	60	0	0	0	98.4	1.6	0	0	0
PHF	.000	.000	.000	.000	.000	.500	.895	.000	.000	.921	.400	.000	.600	.000	.500	.000	.726	.250	.000	.738	.844
Cars	0	0	0	0	0	2	63	0	0	65	7	0	12	0	19	0	57	1	0	58	142
% Cars	0	0	0	0	0	100	92.6	0	0	92.9	87.5	0	100	0	95.0	0	93.4	100	0	93.5	93.4
Trucks	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	4	0	0	4	10
% Trucks	0	0	0	0	0	0	7.4	0	0	7.1	12.5	0	0	0	5.0	0	6.6	0	0	6.5	6.6



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File Name : #2 SouthernAirRd@AlligatorRdPM

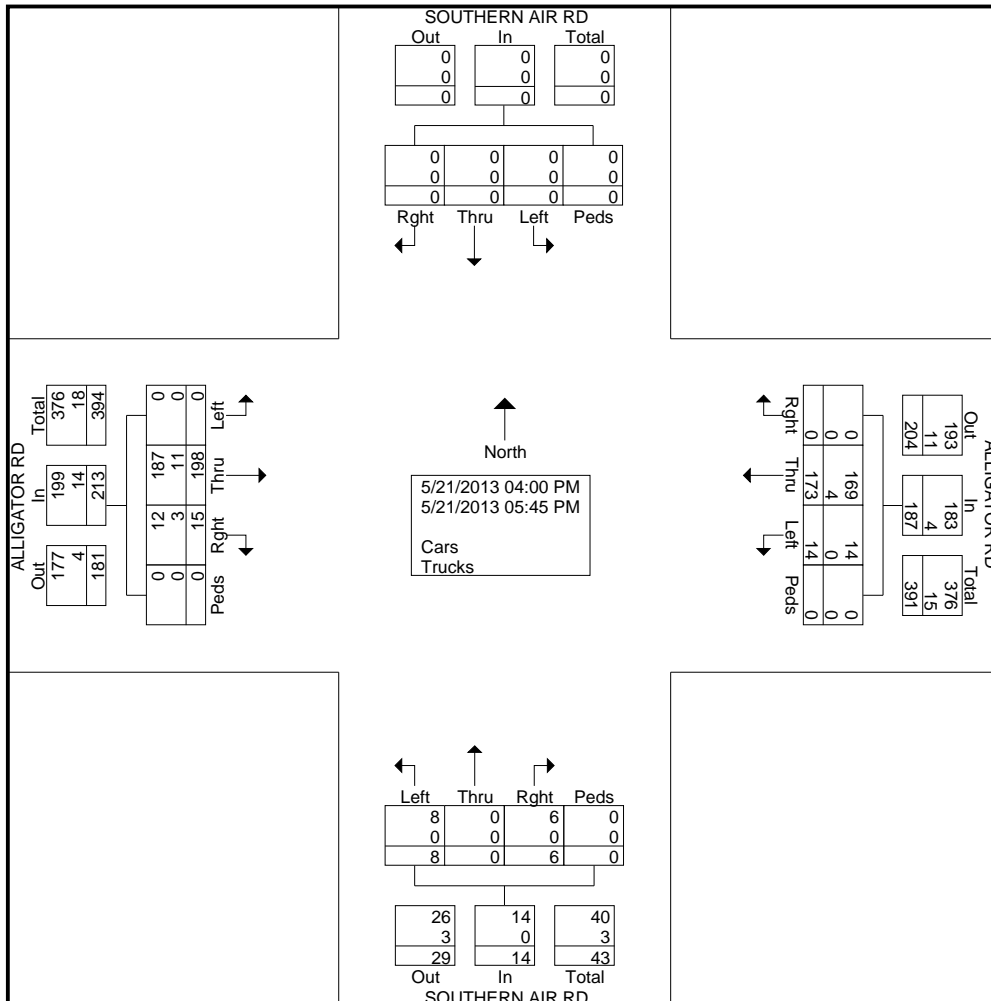
Site Code :

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Groups Printed- Cars - Trucks

Start Time	SOUTHERN AIR RD Southbound					ALLIGATOR RD Westbound					SOUTHERN AIR RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	1	12	0	0	13	1	0	0	0	1	0	27	2	0	29	43
04:15 PM	0	0	0	0	0	0	17	0	0	17	1	0	2	0	3	0	15	1	0	16	36
04:30 PM	0	0	0	0	0	1	22	0	0	23	0	0	0	0	0	0	28	0	0	28	51
04:45 PM	0	0	0	0	0	3	14	0	0	17	0	0	0	0	0	0	23	3	0	26	43
Total	0	0	0	0	0	5	65	0	0	70	2	0	2	0	4	0	93	6	0	99	173
05:00 PM	0	0	0	0	0	2	26	0	0	28	2	0	1	0	3	0	24	2	0	26	57
05:15 PM	0	0	0	0	0	2	30	0	0	32	0	0	2	0	2	0	37	2	0	39	73
05:30 PM	0	0	0	0	0	3	30	0	0	33	1	0	0	0	1	0	24	3	0	27	61
05:45 PM	0	0	0	0	0	2	22	0	0	24	3	0	1	0	4	0	20	2	0	22	50
Total	0	0	0	0	0	9	108	0	0	117	6	0	4	0	10	0	105	9	0	114	241
Grand Total	0	0	0	0	0	14	173	0	0	187	8	0	6	0	14	0	198	15	0	213	414
Apprch %	0	0	0	0	0	7.5	92.5	0	0		57.1	0	42.9	0		0	93	7	0		
Total %	0	0	0	0	0	3.4	41.8	0	0	45.2	1.9	0	1.4	0	3.4	0	47.8	3.6	0	51.4	
Cars	0	0	0	0	0	14	169	0	0	183	8	0	6	0	14	0	187	12	0	199	396
% Cars	0	0	0	0	0	100	97.7	0	0	97.9	100	0	100	0	100	0	94.4	80	0	93.4	95.7
Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	11	3	0	14	18
% Trucks	0	0	0	0	0	0	2.3	0	0	2.1	0	0	0	0	0	0	5.6	20	0	6.6	4.3

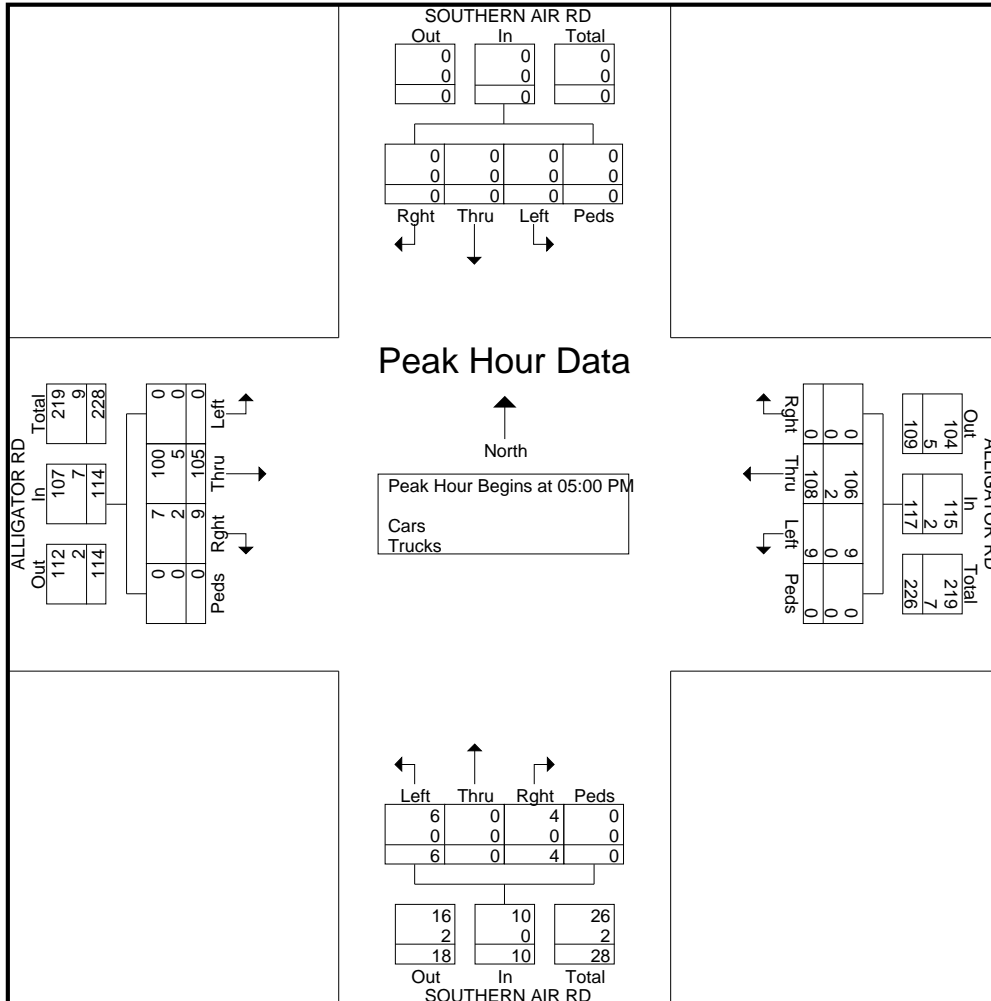


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #2 SouthernAirRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	SOUTHERN AIR RD Southbound					ALLIGATOR RD Westbound					SOUTHERN AIR RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	26	0	0	28	2	0	1	0	3	0	24	2	0	26	57
05:15 PM	0	0	0	0	0	2	<b>30</b>	0	0	32	0	0	2	0	2	0	<b>37</b>	2	0	<b>39</b>	<b>73</b>
05:30 PM	0	0	0	0	0	<b>3</b>	30	0	0	<b>33</b>	1	0	0	0	1	0	24	<b>3</b>	0	27	61
05:45 PM	0	0	0	0	0	2	22	0	0	24	<b>3</b>	0	1	0	<b>4</b>	0	20	2	0	22	50
Total Volume	0	0	0	0	0	9	108	0	0	117	6	0	4	0	10	0	105	9	0	114	241
% App. Total	0	0	0	0	0	7.7	92.3	0	0		60	0	40	0		0	92.1	7.9	0		
PHF	.000	.000	.000	.000	.000	.750	.900	.000	.000	.886	.500	.000	.500	.000	.625	.000	.709	.750	.000	.731	.825
Cars	0	0	0	0	0	9	106	0	0	115	6	0	4	0	10	0	100	7	0	107	232
% Cars	0	0	0	0	0	100	98.1	0	0	98.3	100	0	100	0	100	0	95.2	77.8	0	93.9	96.3
Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	2	0	7	9
% Trucks	0	0	0	0	0	0	1.9	0	0	1.7	0	0	0	0	0	0	4.8	22.2	0	6.1	3.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #3 LichfirdRd@AlligatorRdAM

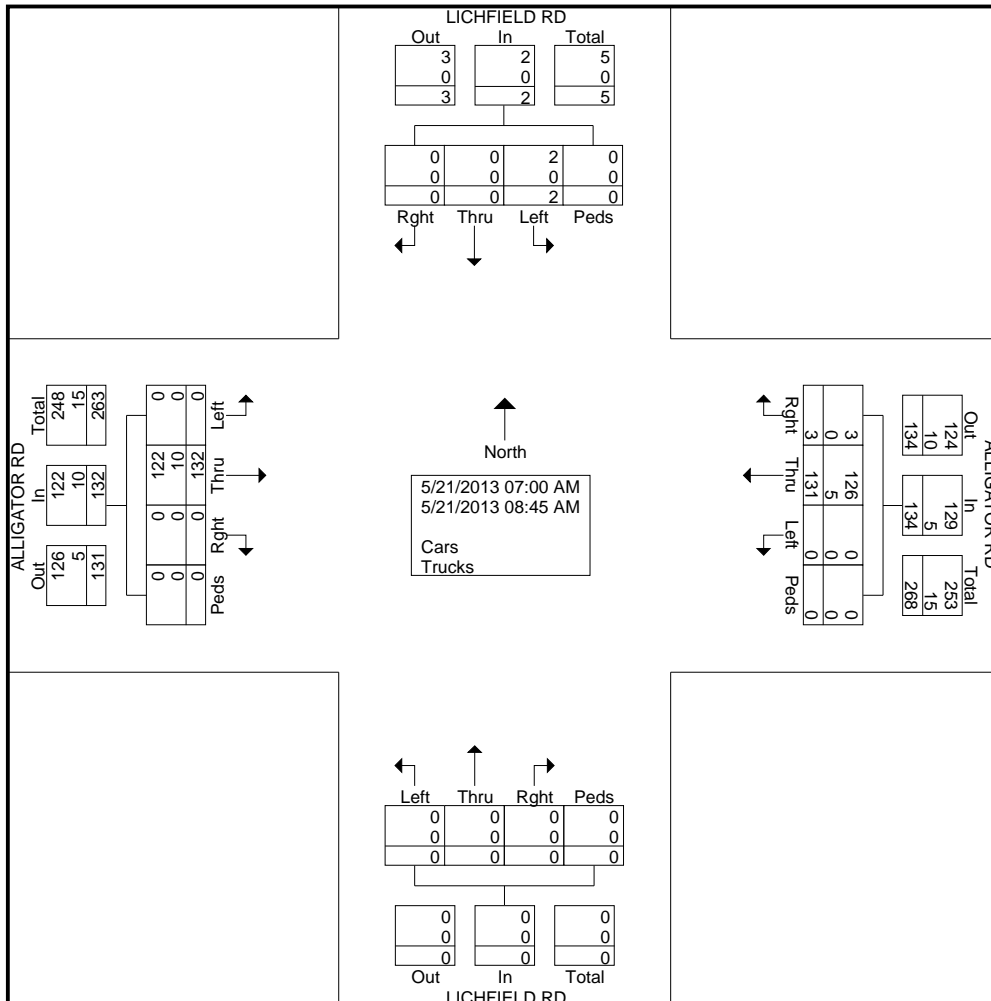
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	LICHFIELD RD Southbound					ALLIGATOR RD Westbound					LICHFIELD RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	15	0	0	15	27
07:15 AM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	20	0	0	20	40
07:30 AM	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	19	0	0	19	33
07:45 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	22	0	0	22	44
Total	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	0	76	0	0	76	144
08:00 AM	1	0	0	0	1	0	20	0	0	20	0	0	0	0	0	0	14	0	0	14	35
08:15 AM	1	0	0	0	1	0	11	2	0	13	0	0	0	0	0	0	15	0	0	15	29
08:30 AM	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	12	0	0	12	27
08:45 AM	0	0	0	0	0	0	17	1	0	18	0	0	0	0	0	0	15	0	0	15	33
Total	2	0	0	0	2	0	63	3	0	66	0	0	0	0	0	0	56	0	0	56	124
Grand Total	2	0	0	0	2	0	131	3	0	134	0	0	0	0	0	0	132	0	0	132	268
Apprch %	100	0	0	0		0	97.8	2.2	0		0	0	0	0		0	100	0	0		
Total %	0.7	0	0	0	0.7	0	48.9	1.1	0	50	0	0	0	0	0	0	49.3	0	0	49.3	
Cars	2	0	0	0	2	0	126	3	0	129	0	0	0	0	0	0	122	0	0	122	253
% Cars	100	0	0	0	100	0	96.2	100	0	96.3	0	0	0	0	0	0	92.4	0	0	92.4	94.4
Trucks	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	15
% Trucks	0	0	0	0	0	0	3.8	0	0	3.7	0	0	0	0	0	0	7.6	0	0	7.6	5.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

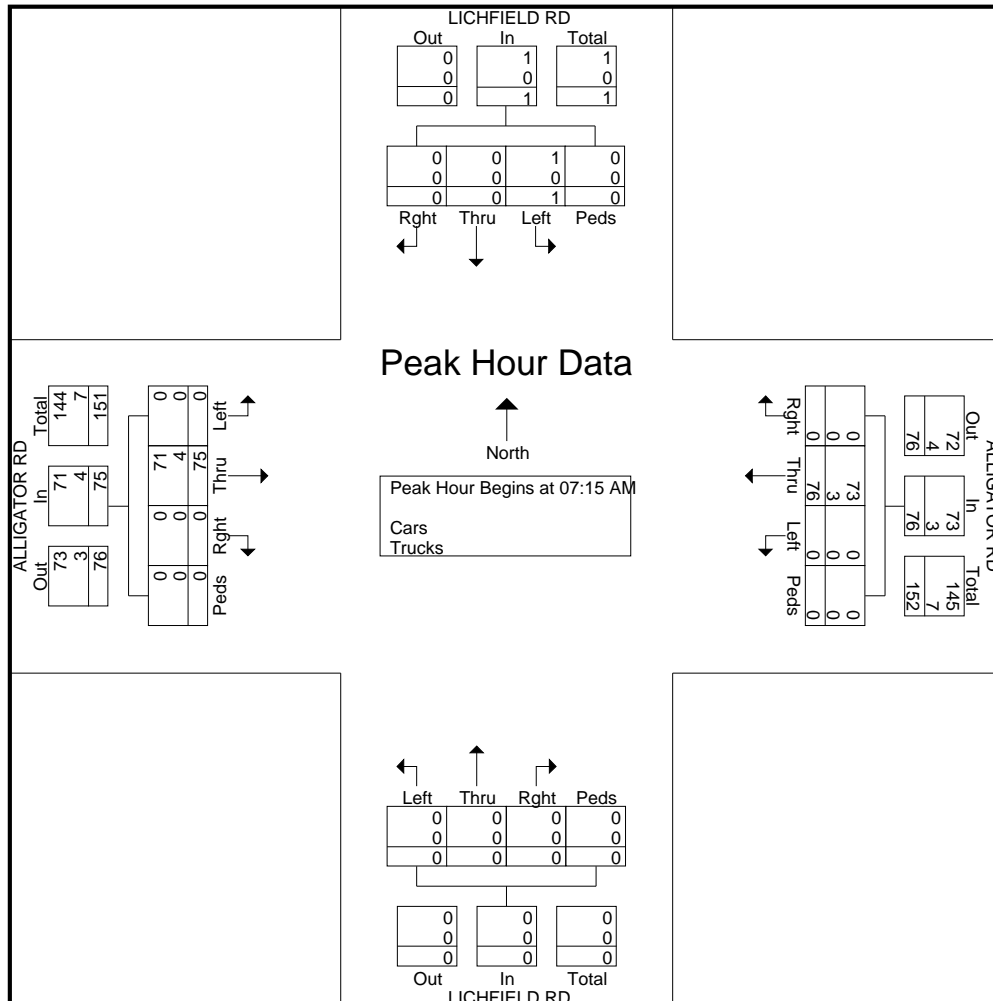
File Name : #3 LichfirdRd@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	LICHFIELD RD Southbound					ALLIGATOR RD Westbound					LICHFIELD RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	20	0	0	20	40
07:30 AM	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	19	0	0	19	33
07:45 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	22	0	0	22	44
08:00 AM	1	0	0	0	1	0	20	0	0	20	0	0	0	0	0	0	14	0	0	14	35
Total Volume	1	0	0	0	1	0	76	0	0	76	0	0	0	0	0	0	75	0	0	75	152
% App. Total	100	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0
PHF	.250	.000	.000	.000	.250	.000	.864	.000	.000	.864	.000	.000	.000	.000	.000	.000	.852	.000	.000	.852	.864
Cars	1	0	0	0	1	0	73	0	0	73	0	0	0	0	0	0	71	0	0	71	145
% Cars	100	0	0	0	100	0	96.1	0	0	96.1	0	0	0	0	0	0	94.7	0	0	94.7	95.4
Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	7
% Trucks	0	0	0	0	0	0	3.9	0	0	3.9	0	0	0	0	0	0	5.3	0	0	5.3	4.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #3 LichfirdRd@AlligatorRdPM

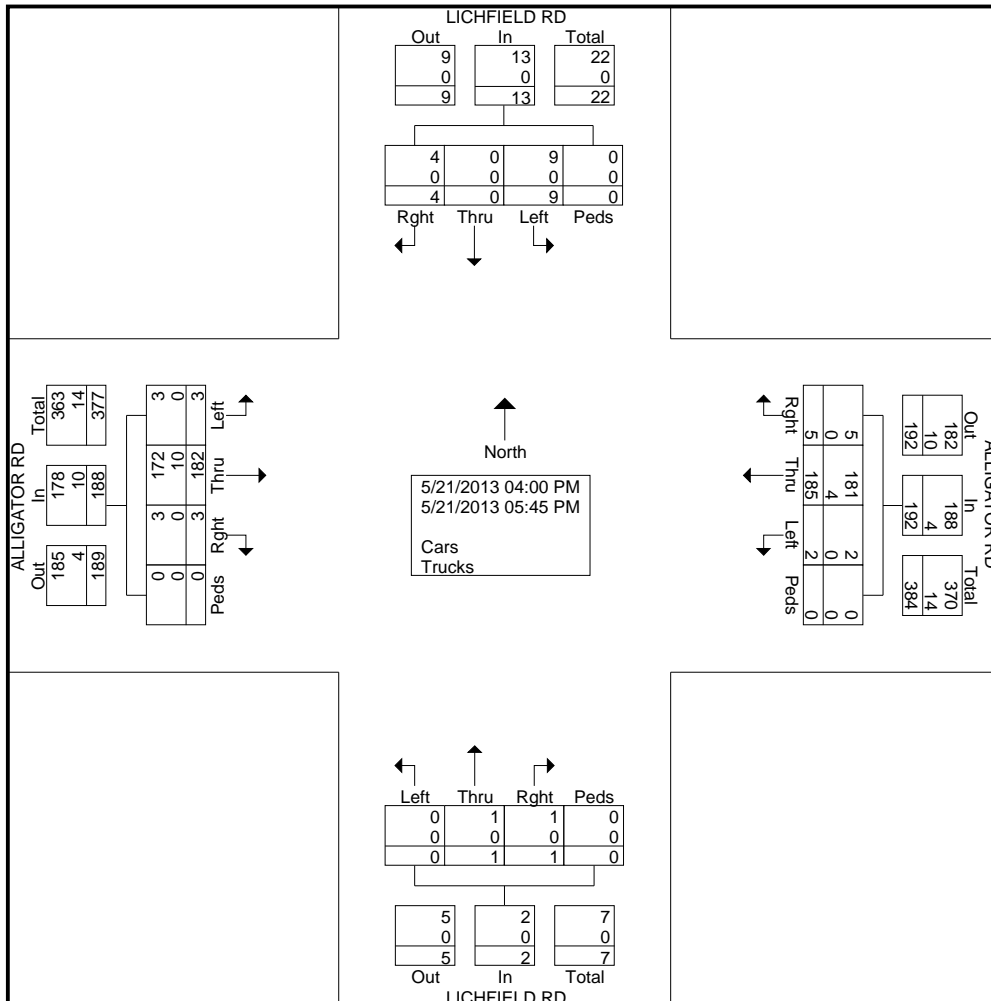
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	LICHFIELD RD Southbound					ALLIGATOR RD Westbound					LICHFIELD RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	2	0	0	0	2	0	10	0	0	10	0	0	0	0	0	0	22	0	0	22	34
04:15 PM	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	17	0	0	17	36
04:30 PM	3	0	1	0	4	0	21	0	0	21	0	0	0	0	0	2	26	0	0	28	53
04:45 PM	1	0	0	0	1	0	24	1	0	25	0	0	0	0	0	0	24	0	0	24	50
<b>Total</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>73</b>	<b>2</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>89</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>173</b>
05:00 PM	2	0	0	0	2	2	26	2	0	30	0	1	1	0	2	0	25	3	0	28	62
05:15 PM	0	0	2	0	2	0	29	0	0	29	0	0	0	0	0	0	28	0	0	28	59
05:30 PM	0	0	1	0	1	0	30	0	0	30	0	0	0	0	0	0	22	0	0	22	53
05:45 PM	1	0	0	0	1	0	27	1	0	28	0	0	0	0	0	1	18	0	0	19	48
<b>Total</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>112</b>	<b>3</b>	<b>0</b>	<b>117</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>93</b>	<b>3</b>	<b>0</b>	<b>97</b>	<b>222</b>
Grand Total	9	0	4	0	13	2	185	5	0	192	0	1	1	0	2	3	182	3	0	188	395
Apprch %	69.2	0	30.8	0		1	96.4	2.6	0		0	50	50	0		1.6	96.8	1.6	0		
Total %	2.3	0	1	0	3.3	0.5	46.8	1.3	0	48.6	0	0.3	0.3	0	0.5	0.8	46.1	0.8	0	47.6	
Cars	9	0	4	0	13	2	181	5	0	188	0	1	1	0	2	3	172	3	0	178	381
% Cars	100	0	100	0	100	100	97.8	100	0	97.9	0	100	100	0	100	100	94.5	100	0	94.7	96.5
Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	10	0	0	10	14
% Trucks	0	0	0	0	0	0	2.2	0	0	2.1	0	0	0	0	0	0	5.5	0	0	5.3	3.5

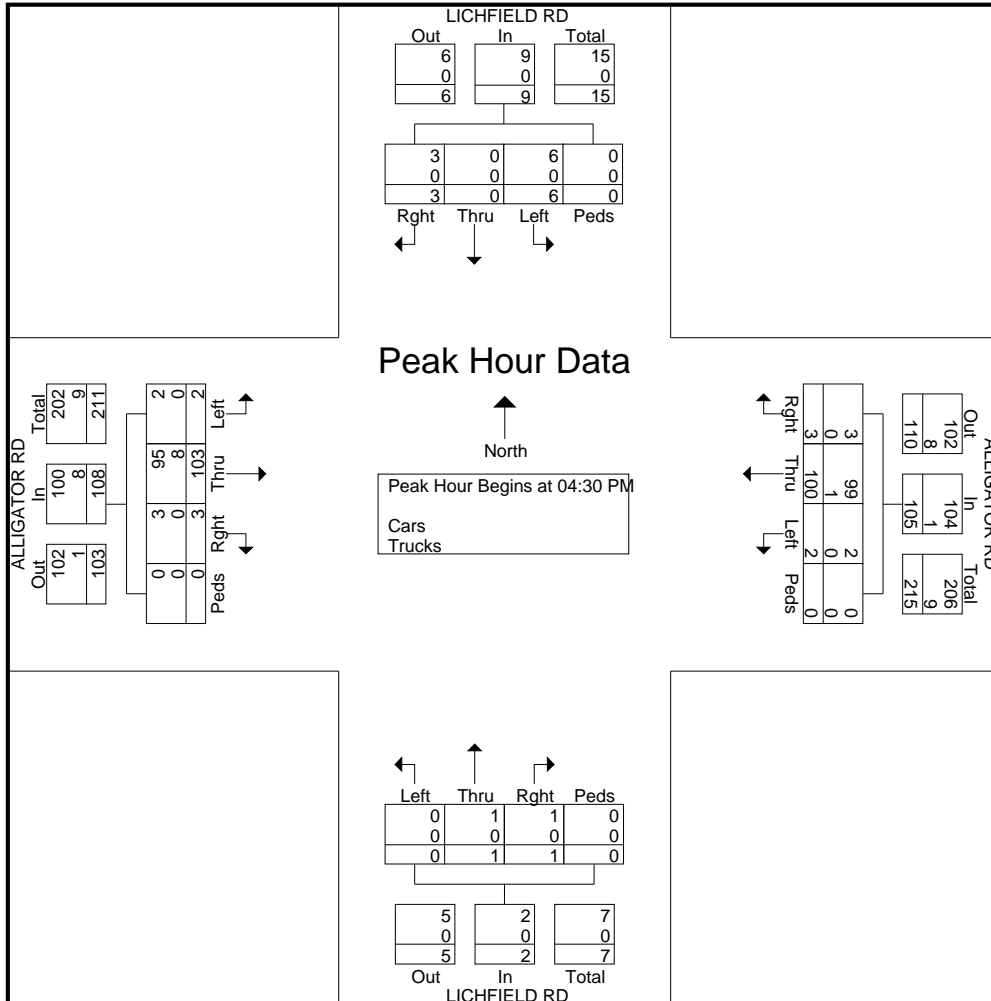


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #3 LichfirdRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	LICHFIELD RD Southbound					ALLIGATOR RD Westbound					LICHFIELD RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	3	0	1	0	4	0	21	0	0	21	0	0	0	0	0	2	26	0	0	28	53
04:45 PM	1	0	0	0	1	0	24	1	0	25	0	0	0	0	0	0	24	0	0	24	50
05:00 PM	2	0	0	0	2	2	26	2	0	30	0	1	1	0	2	0	25	3	0	28	62
05:15 PM	0	0	2	0	2	0	29	0	0	29	0	0	0	0	0	0	28	0	0	28	59
Total Volume	6	0	3	0	9	2	100	3	0	105	0	1	1	0	2	2	103	3	0	108	224
% App. Total	66.7	0	33.3	0		1.9	95.2	2.9	0		0	50	50	0		1.9	95.4	2.8	0		
PHF	.500	.000	.375	.000	.563	.250	.862	.375	.000	.875	.000	.250	.250	.000	.250	.250	.920	.250	.000	.964	.903
Cars	6	0	3	0	9	2	99	3	0	104	0	1	1	0	2	2	95	3	0	100	215
% Cars	100	0	100	0	100	100	99.0	100	0	99.0	0	100	100	0	100	100	92.2	100	0	92.6	96.0
Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	9
% Trucks	0	0	0	0	0	0	1.0	0	0	1.0	0	0	0	0	0	0	7.8	0	0	7.4	4.0





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #4 BridlePathLn@AlligatorRdAM

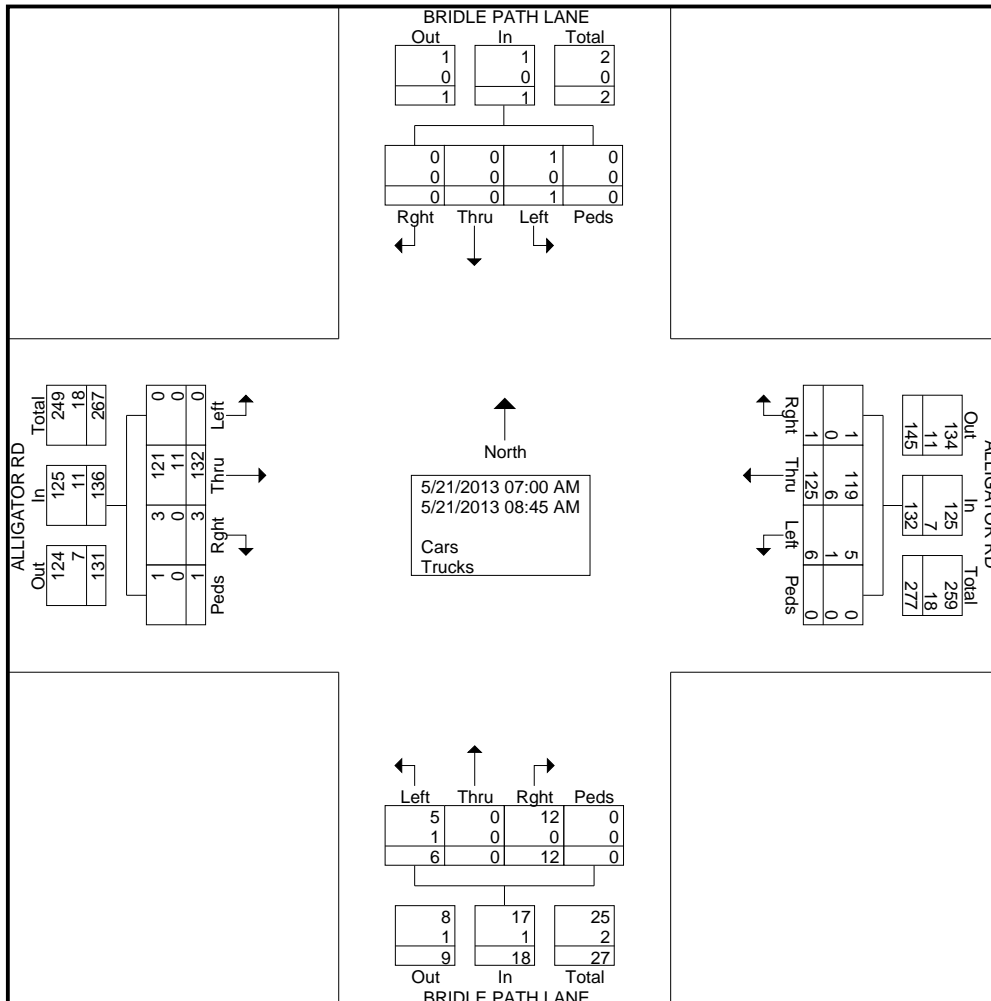
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BRIDLE PATH LANE Southbound					ALLIGATOR RD Westbound					BRIDLE PATH LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	2	0	2	0	16	0	0	16	31
07:15 AM	0	0	0	0	0	1	17	0	0	18	0	0	2	0	2	0	19	0	0	19	39
07:30 AM	0	0	0	0	0	1	15	0	0	16	1	0	2	0	3	0	19	0	0	19	38
07:45 AM	0	0	0	0	0	2	23	0	0	25	1	0	1	0	2	0	22	1	0	23	50
Total	0	0	0	0	0	4	68	0	0	72	2	0	7	0	9	0	76	1	0	77	158
08:00 AM	0	0	0	0	0	1	15	0	0	16	2	0	3	0	5	0	15	0	0	15	36
08:15 AM	1	0	0	0	1	0	12	1	0	13	0	0	0	0	0	0	15	1	0	16	30
08:30 AM	0	0	0	0	0	1	14	0	0	15	1	0	1	0	2	0	10	1	1	12	29
08:45 AM	0	0	0	0	0	0	16	0	0	16	1	0	1	0	2	0	16	0	0	16	34
Total	1	0	0	0	1	2	57	1	0	60	4	0	5	0	9	0	56	2	1	59	129
Grand Total	1	0	0	0	1	6	125	1	0	132	6	0	12	0	18	0	132	3	1	136	287
Apprch %	100	0	0	0		4.5	94.7	0.8	0		33.3	0	66.7	0		0	97.1	2.2	0.7		
Total %	0.3	0	0	0	0.3	2.1	43.6	0.3	0	46	2.1	0	4.2	0	6.3	0	46	1	0.3	47.4	
Cars	1	0	0	0	1	5	119	1	0	125	5	0	12	0	17	0	121	3	1	125	268
% Cars	100	0	0	0	100	83.3	95.2	100	0	94.7	83.3	0	100	0	94.4	0	91.7	100	100	91.9	93.4
Trucks	0	0	0	0	0	1	6	0	0	7	1	0	0	0	1	0	11	0	0	11	19
% Trucks	0	0	0	0	0	16.7	4.8	0	0	5.3	16.7	0	0	0	5.6	0	8.3	0	0	8.1	6.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

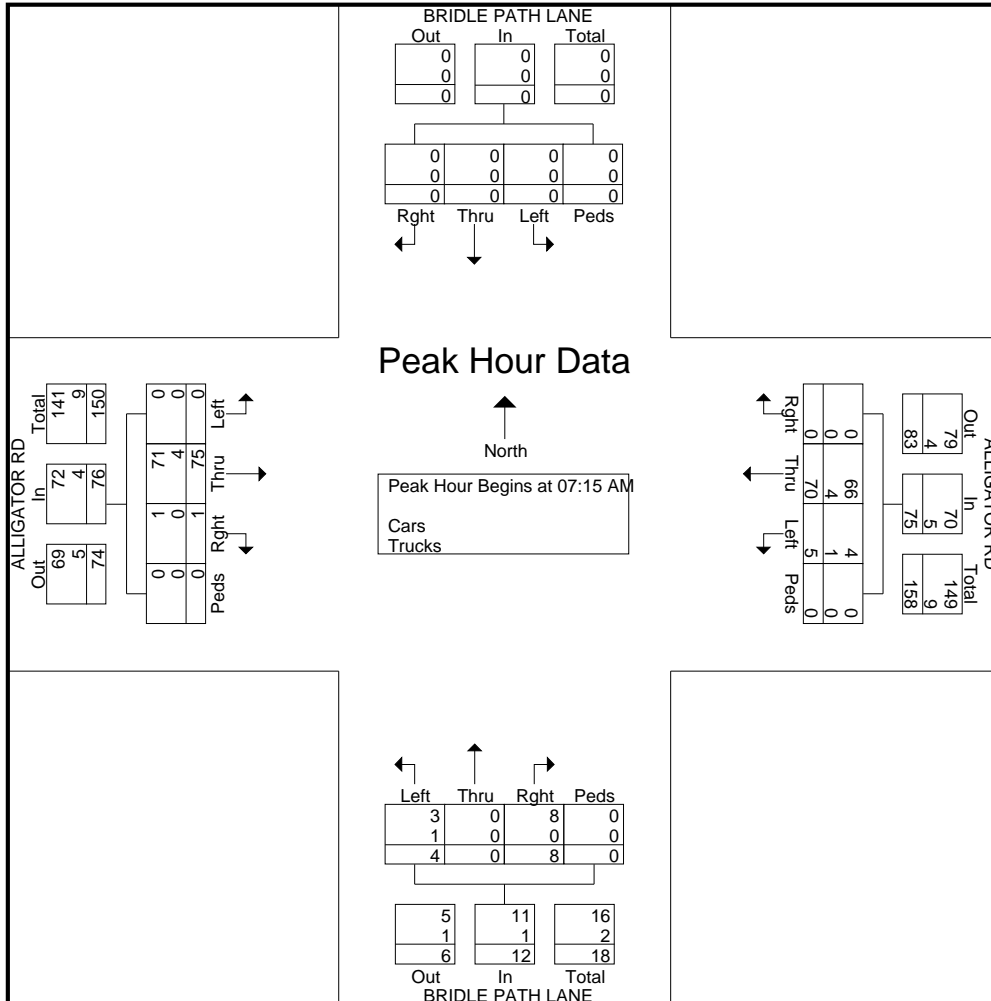
File Name : #4 BridlePathLn@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BRIDLE PATH LANE Southbound					ALLIGATOR RD Westbound					BRIDLE PATH LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	1	17	0	0	18	0	0	2	0	2	0	19	0	0	19	39
07:30 AM	0	0	0	0	0	1	15	0	0	16	1	0	2	0	3	0	19	0	0	19	38
07:45 AM	0	0	0	0	0	2	23	0	0	25	1	0	1	0	2	0	22	1	0	23	50
08:00 AM	0	0	0	0	0	1	15	0	0	16	2	0	3	0	5	0	15	0	0	15	36
Total Volume	0	0	0	0	0	5	70	0	0	75	4	0	8	0	12	0	75	1	0	76	163
% App. Total	0	0	0	0	0	6.7	93.3	0	0	93.3	33.3	0	66.7	0	91.7	0	98.7	1.3	0	99.7	
PHF	.000	.000	.000	.000	.000	.625	.761	.000	.000	.750	.500	.000	.667	.000	.600	.000	.852	.250	.000	.826	.815
Cars	0	0	0	0	0	4	66	0	0	70	3	0	8	0	11	0	71	1	0	72	153
% Cars	0	0	0	0	0	80.0	94.3	0	0	93.3	75.0	0	100	0	91.7	0	94.7	100	0	94.7	93.9
Trucks	0	0	0	0	0	1	4	0	0	5	1	0	0	0	1	0	4	0	0	4	10
% Trucks	0	0	0	0	0	20.0	5.7	0	0	6.7	25.0	0	0	0	8.3	0	5.3	0	0	5.3	6.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #4 BridlePathLn@AlligatorRdPM

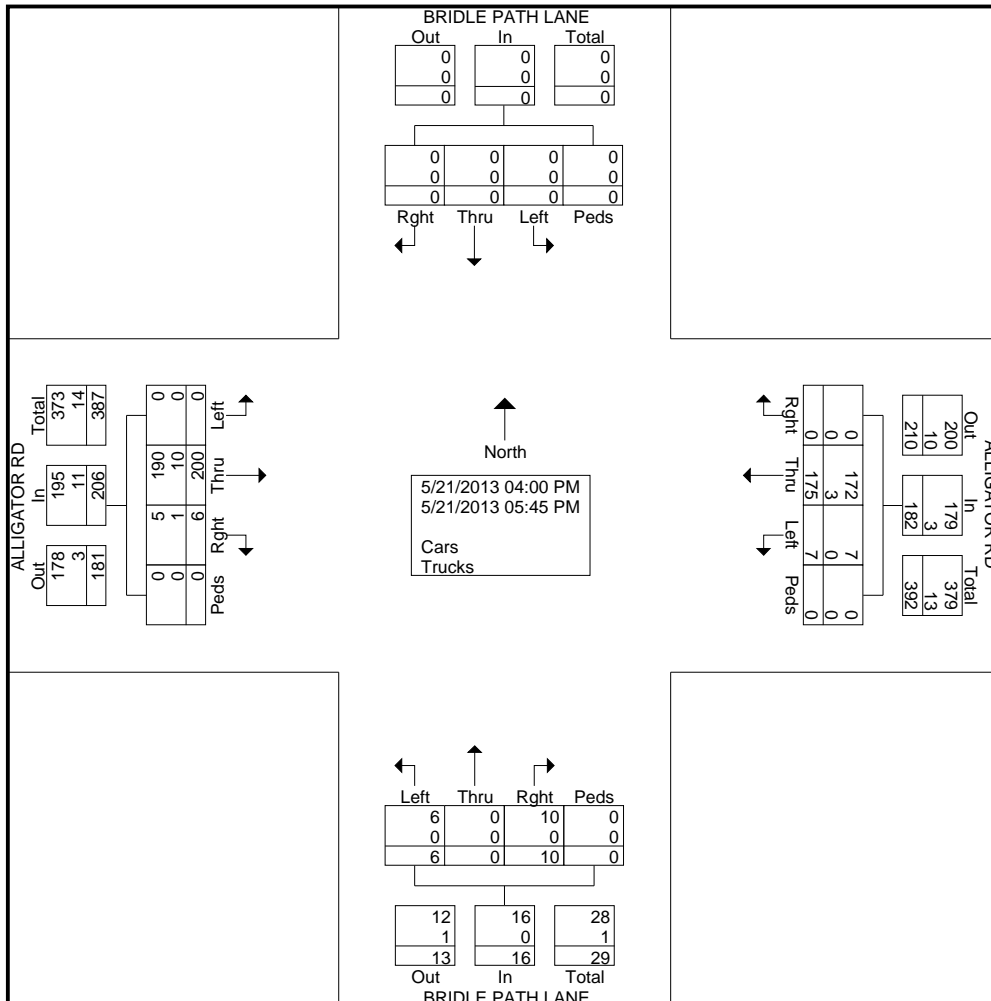
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BRIDLE PATH LANE Southbound					ALLIGATOR RD Westbound					BRIDLE PATH LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	1	11	0	0	12	0	0	1	0	1	0	26	0	0	26	39
04:15 PM	0	0	0	0	0	0	21	0	0	21	0	0	3	0	3	0	17	0	0	17	41
04:30 PM	0	0	0	0	0	1	17	0	0	18	1	0	2	0	3	0	26	1	0	27	48
04:45 PM	0	0	0	0	0	0	26	0	0	26	1	0	1	0	2	0	26	2	0	28	56
Total	0	0	0	0	0	2	75	0	0	77	2	0	7	0	9	0	95	3	0	98	184
05:00 PM	0	0	0	0	0	3	26	0	0	29	3	0	0	0	3	0	28	2	0	30	62
05:15 PM	0	0	0	0	0	1	15	0	0	16	0	0	3	0	3	0	37	1	0	38	57
05:30 PM	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	22	0	0	22	52
05:45 PM	0	0	0	0	0	1	29	0	0	30	1	0	0	0	1	0	18	0	0	18	49
Total	0	0	0	0	0	5	100	0	0	105	4	0	3	0	7	0	105	3	0	108	220
Grand Total	0	0	0	0	0	7	175	0	0	182	6	0	10	0	16	0	200	6	0	206	404
Apprch %	0	0	0	0		3.8	96.2	0	0		37.5	0	62.5	0		0	97.1	2.9	0		
Total %	0	0	0	0	0	1.7	43.3	0	0	45	1.5	0	2.5	0	4	0	49.5	1.5	0	51	
Cars	0	0	0	0	0	7	172	0	0	179	6	0	10	0	16	0	190	5	0	195	390
% Cars	0	0	0	0	0	100	98.3	0	0	98.4	100	0	100	0	100	0	95	83.3	0	94.7	96.5
Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	10	1	0	11	14
% Trucks	0	0	0	0	0	0	1.7	0	0	1.6	0	0	0	0	0	0	5	16.7	0	5.3	3.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

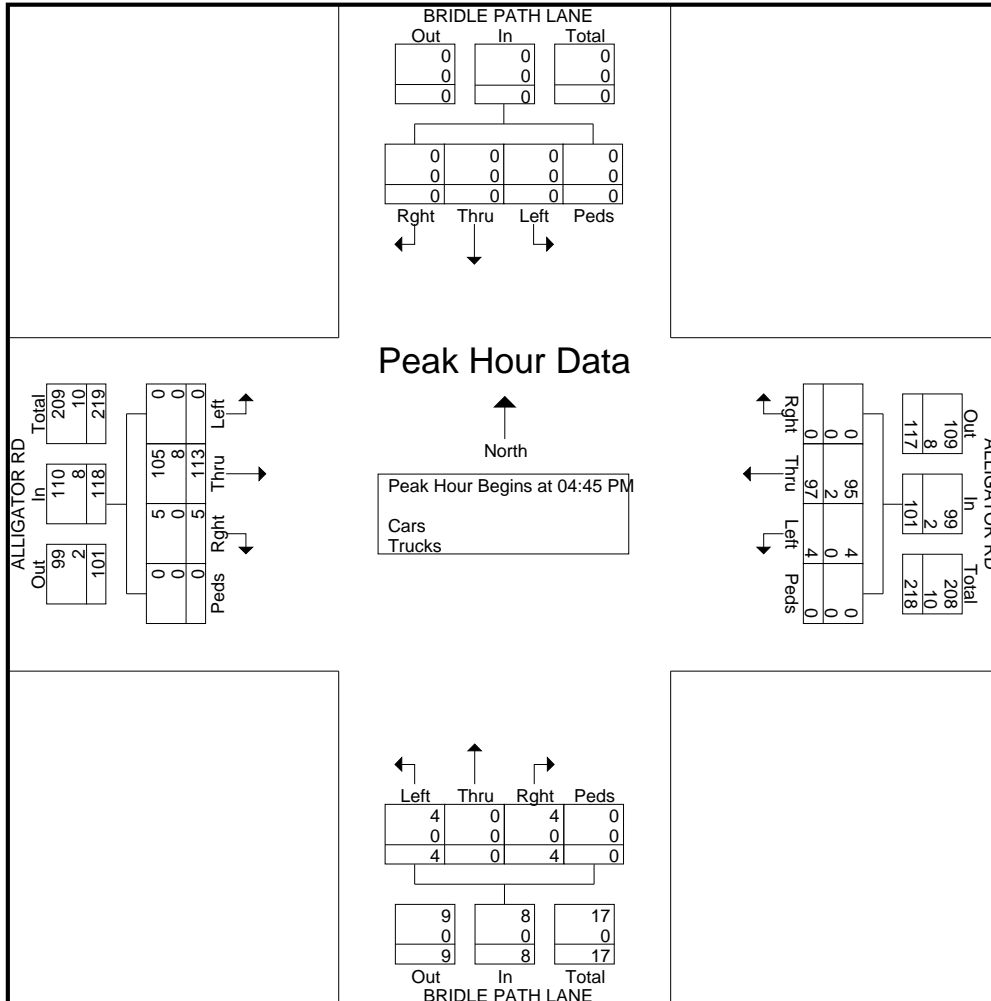
File Name : #4 BridlePathLn@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BRIDLE PATH LANE Southbound					ALLIGATOR RD Westbound					BRIDLE PATH LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	0	26	0	0	26	1	0	1	0	2	0	26	2	0	28	56
05:00 PM	0	0	0	0	0	3	26	0	0	29	3	0	0	0	3	0	28	2	0	30	62
05:15 PM	0	0	0	0	0	1	15	0	0	16	0	0	3	0	3	0	37	1	0	38	57
05:30 PM	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	22	0	0	22	52
Total Volume	0	0	0	0	0	4	97	0	0	101	4	0	4	0	8	0	113	5	0	118	227
% App. Total	0	0	0	0	0	4	96	0	0	98.0	50	0	50	0	100	0	95.8	4.2	0	96.0	
PHF	.000	.000	.000	.000	.000	.333	.808	.000	.000	.842	.333	.000	.333	.000	.667	.000	.764	.625	.000	.776	.915
Cars	0	0	0	0	0	4	95	0	0	99	4	0	4	0	8	0	105	5	0	110	217
% Cars	0	0	0	0	0	100	97.9	0	0	98.0	100	0	100	0	100	0	92.9	100	0	93.2	95.6
Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	10
% Trucks	0	0	0	0	0	0	2.1	0	0	2.0	0	0	0	0	0	0	7.1	0	0	6.8	4.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #5 TwinChurchRd@AlligatorRdAM

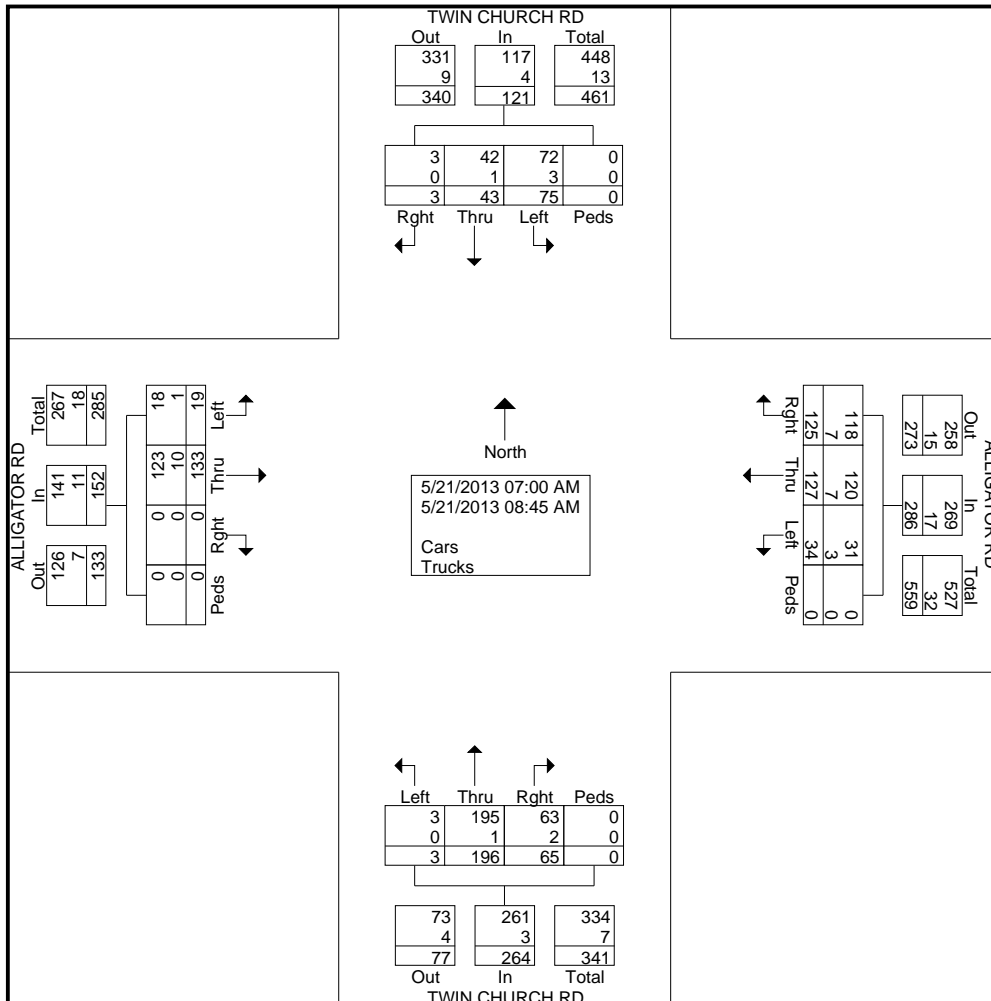
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	TWIN CHURCH RD Southbound					ALLIGATOR RD Westbound					TWIN CHURCH RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	6	3	0	0	9	1	11	22	0	34	0	11	7	0	18	1	19	0	0	20	81
07:15 AM	13	3	1	0	17	4	20	18	0	42	0	30	17	0	47	3	20	0	0	23	129
07:30 AM	10	2	0	0	12	4	13	24	0	41	0	44	12	0	56	2	19	0	0	21	130
07:45 AM	14	7	1	0	22	5	24	24	0	53	0	32	9	0	41	2	24	0	0	26	142
Total	43	15	2	0	60	14	68	88	0	170	0	117	45	0	162	8	82	0	0	90	482
08:00 AM	9	13	1	0	23	7	17	13	0	37	0	26	6	0	32	3	16	0	0	19	111
08:15 AM	11	3	0	0	14	5	13	7	0	25	1	16	4	0	21	3	13	0	0	16	76
08:30 AM	6	3	0	0	9	5	12	9	0	26	2	27	6	0	35	3	12	0	0	15	85
08:45 AM	6	9	0	0	15	3	17	8	0	28	0	10	4	0	14	2	10	0	0	12	69
Total	32	28	1	0	61	20	59	37	0	116	3	79	20	0	102	11	51	0	0	62	341
Grand Total	75	43	3	0	121	34	127	125	0	286	3	196	65	0	264	19	133	0	0	152	823
Apprch %	62	35.5	2.5	0		11.9	44.4	43.7	0		1.1	74.2	24.6	0		12.5	87.5	0	0		
Total %	9.1	5.2	0.4	0	14.7	4.1	15.4	15.2	0	34.8	0.4	23.8	7.9	0	32.1	2.3	16.2	0	0	18.5	
Cars	72	42	3	0	117	31	120	118	0	269	3	195	63	0	261	18	123	0	0	141	788
% Cars	96	97.7	100	0	96.7	91.2	94.5	94.4	0	94.1	100	99.5	96.9	0	98.9	94.7	92.5	0	0	92.8	95.7
Trucks	3	1	0	0	4	3	7	7	0	17	0	1	2	0	3	1	10	0	0	11	35
% Trucks	4	2.3	0	0	3.3	8.8	5.5	5.6	0	5.9	0	0.5	3.1	0	1.1	5.3	7.5	0	0	7.2	4.3

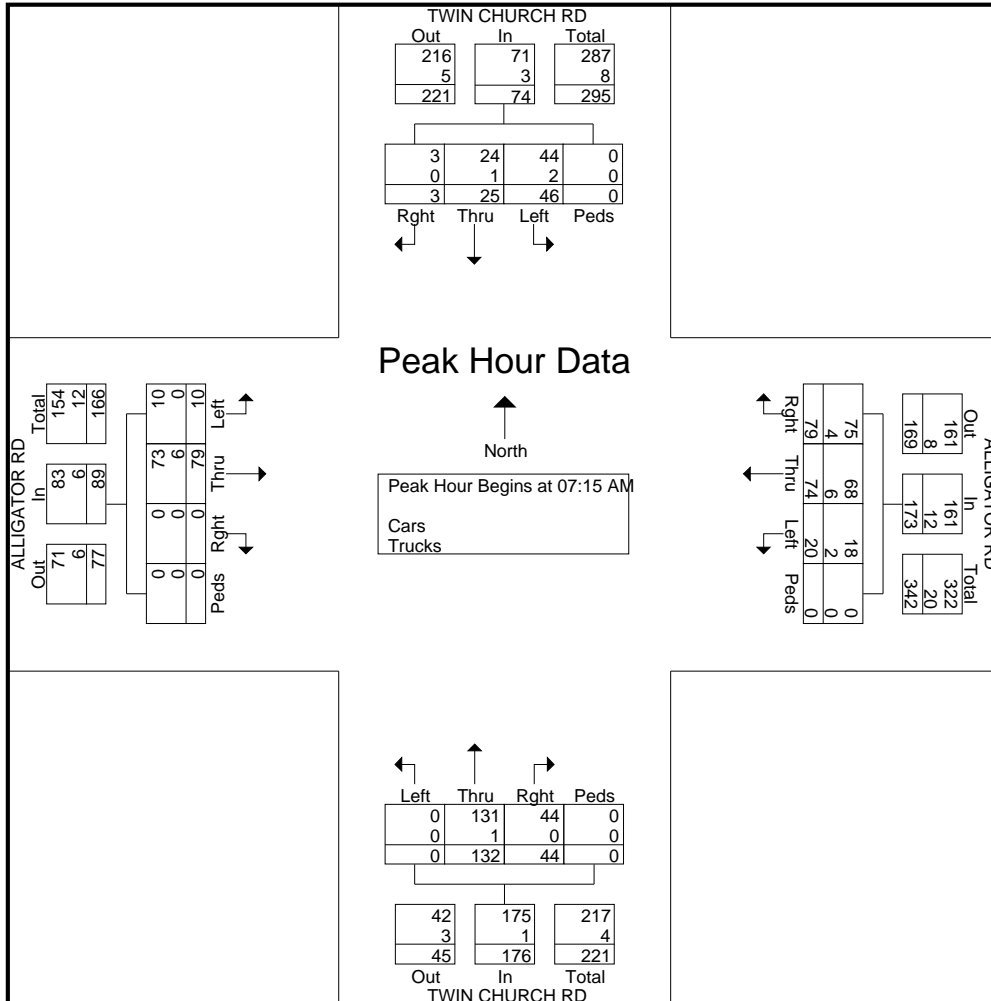


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #5 TwinChurchRd@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	TWIN CHURCH RD Southbound					ALLIGATOR RD Westbound					TWIN CHURCH RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	13	3	1	0	17	4	20	18	0	42	0	30	17	0	47	3	20	0	0	23	129
07:30 AM	10	2	0	0	12	4	13	24	0	41	0	44	12	0	56	2	19	0	0	21	130
07:45 AM	14	7	1	0	22	5	24	24	0	53	0	32	9	0	41	2	24	0	0	26	142
08:00 AM	9	13	1	0	23	7	17	13	0	37	0	26	6	0	32	3	16	0	0	19	111
Total Volume	46	25	3	0	74	20	74	79	0	173	0	132	44	0	176	10	79	0	0	89	512
% App. Total	62.2	33.8	4.1	0		11.6	42.8	45.7	0		0	75	25	0		11.2	88.8	0	0		
PHF	.821	.481	.750	.000	.804	.714	.771	.823	.000	.816	.000	.750	.647	.000	.786	.833	.823	.000	.000	.856	.901
Cars	44	24	3	0	71	18	68	75	0	161	0	131	44	0	175	10	73	0	0	83	490
% Cars	95.7	96.0	100	0	95.9	90.0	91.9	94.9	0	93.1	0	99.2	100	0	99.4	100	92.4	0	0	93.3	95.7
Trucks	2	1	0	0	3	2	6	4	0	12	0	1	0	0	1	0	6	0	0	6	22
% Trucks	4.3	4.0	0	0	4.1	10.0	8.1	5.1	0	6.9	0	0.8	0	0	0.6	0	7.6	0	0	6.7	4.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #5 TwinChurchRd@AlligatorRdPM

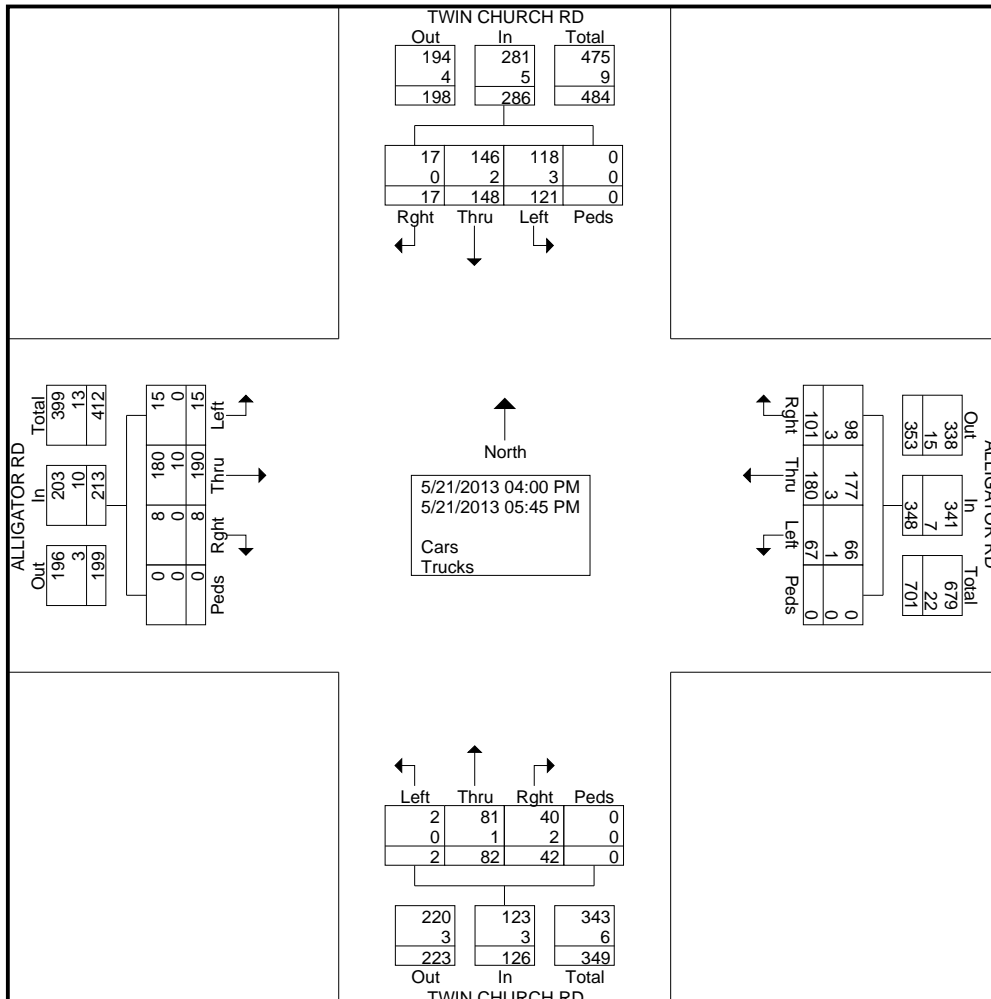
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	TWIN CHURCH RD Southbound					ALLIGATOR RD Westbound					TWIN CHURCH RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	15	12	2	0	29	6	10	13	0	29	0	7	5	0	12	3	19	1	0	23	93
04:15 PM	15	14	3	0	32	11	15	15	0	41	1	12	5	0	18	3	19	2	0	24	115
04:30 PM	8	17	1	0	26	7	21	13	0	41	0	7	4	0	11	1	24	0	0	25	103
04:45 PM	23	15	1	0	39	8	22	12	0	42	0	10	2	0	12	3	25	0	0	28	121
Total	61	58	7	0	126	32	68	53	0	153	1	36	16	0	53	10	87	3	0	100	432
05:00 PM	9	14	2	0	25	10	27	14	0	51	0	7	6	0	13	0	23	1	0	24	113
05:15 PM	18	27	3	0	48	10	33	12	0	55	0	8	6	0	14	3	38	2	0	43	160
05:30 PM	18	28	3	0	49	9	27	11	0	47	1	17	9	0	27	1	24	0	0	25	148
05:45 PM	15	21	2	0	38	6	25	11	0	42	0	14	5	0	19	1	18	2	0	21	120
Total	60	90	10	0	160	35	112	48	0	195	1	46	26	0	73	5	103	5	0	113	541
Grand Total	121	148	17	0	286	67	180	101	0	348	2	82	42	0	126	15	190	8	0	213	973
Apprch %	42.3	51.7	5.9	0		19.3	51.7	29	0		1.6	65.1	33.3	0		7	89.2	3.8	0		
Total %	12.4	15.2	1.7	0	29.4	6.9	18.5	10.4	0	35.8	0.2	8.4	4.3	0	12.9	1.5	19.5	0.8	0	21.9	
Cars	118	146	17	0	281	66	177	98	0	341	2	81	40	0	123	15	180	8	0	203	948
% Cars	97.5	98.6	100	0	98.3	98.5	98.3	97	0	98	100	98.8	95.2	0	97.6	100	94.7	100	0	95.3	97.4
Trucks	3	2	0	0	5	1	3	3	0	7	0	1	2	0	3	0	10	0	0	10	25
% Trucks	2.5	1.4	0	0	1.7	1.5	1.7	3	0	2	0	1.2	4.8	0	2.4	0	5.3	0	0	4.7	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

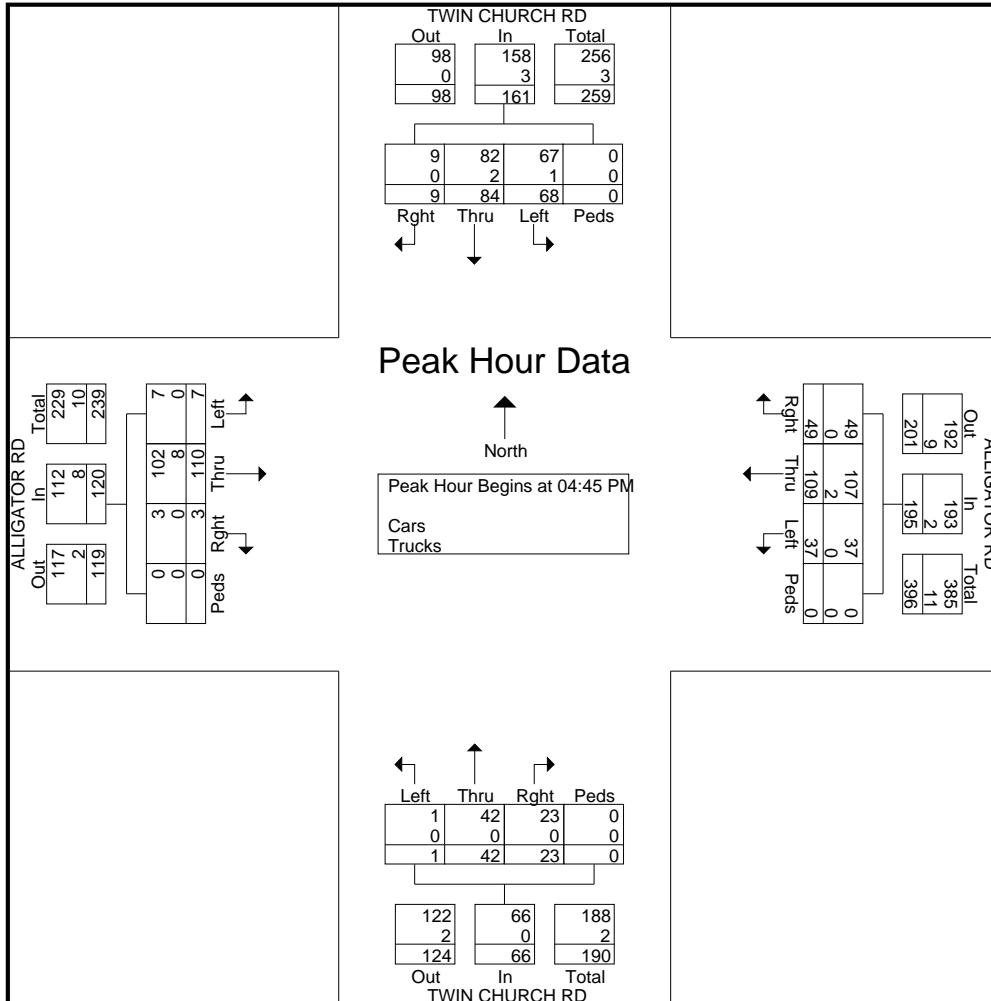
File Name : #5 TwinChurchRd@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	TWIN CHURCH RD Southbound					ALLIGATOR RD Westbound					TWIN CHURCH RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	23	15	1	0	39	8	22	12	0	42	0	10	2	0	12	3	25	0	0	28	121
05:00 PM	9	14	2	0	25	10	27	14	0	51	0	7	6	0	13	0	23	1	0	24	113
05:15 PM	18	27	3	0	48	10	33	12	0	55	0	8	6	0	14	3	38	2	0	43	160
05:30 PM	18	28	3	0	49	9	27	11	0	47	1	17	9	0	27	1	24	0	0	25	148
Total Volume	68	84	9	0	161	37	109	49	0	195	1	42	23	0	66	7	110	3	0	120	542
% App. Total	42.2	52.2	5.6	0		19	55.9	25.1	0		1.5	63.6	34.8	0		5.8	91.7	2.5	0		
PHF	.739	.750	.750	.000	.821	.925	.826	.875	.000	.886	.250	.618	.639	.000	.611	.583	.724	.375	.000	.698	.847
Cars	67	82	9	0	158	37	107	49	0	193	1	42	23	0	66	7	102	3	0	112	529
% Cars	98.5	97.6	100	0	98.1	100	98.2	100	0	99.0	100	100	100	0	100	100	92.7	100	0	93.3	97.6
Trucks	1	2	0	0	3	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	13
% Trucks	1.5	2.4	0	0	1.9	0	1.8	0	0	1.0	0	0	0	0	0	0	7.3	0	0	6.7	2.4





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #6 McLaurinDr@AlligatorRdAM

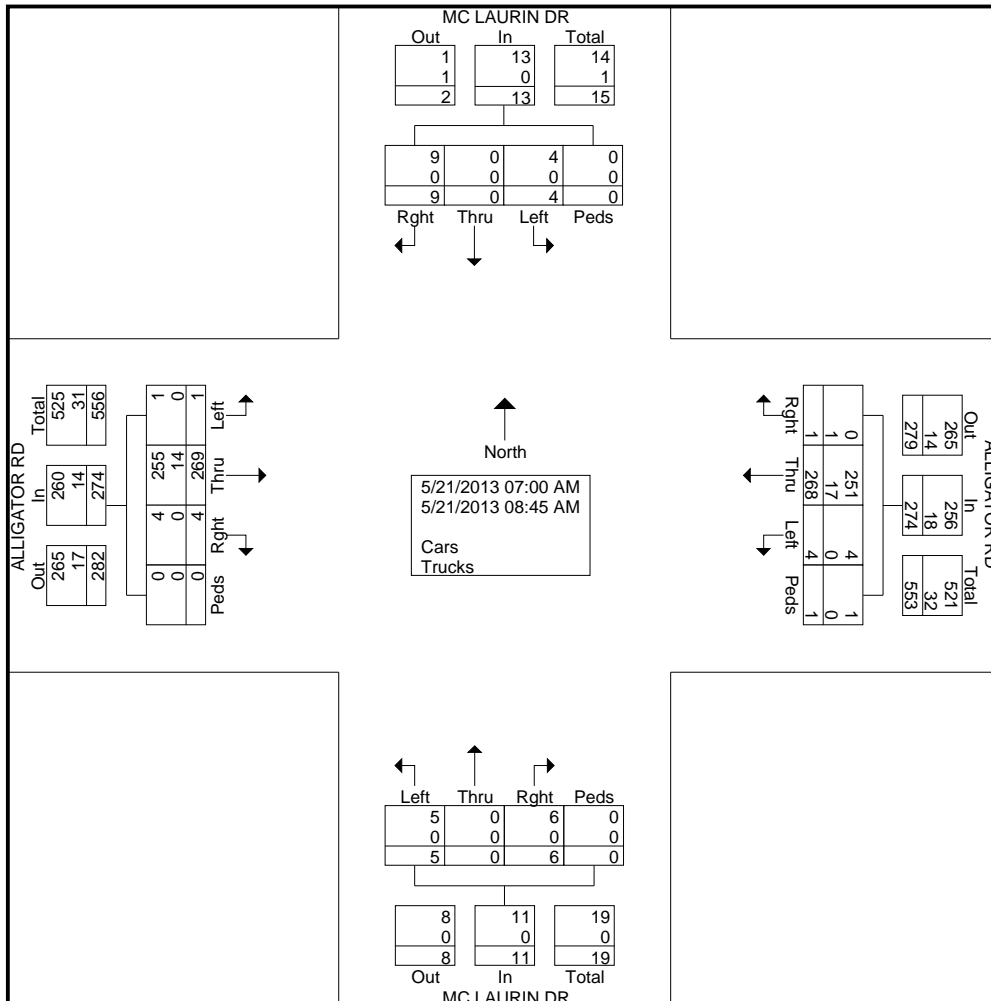
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	MC LAURIN DR Southbound					ALLIGATOR RD Westbound					MC LAURIN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	1	0	2	0	39	0	0	39	1	0	0	0	1	0	36	0	0	36	78
07:15 AM	0	0	1	0	1	1	30	0	0	31	0	0	1	0	1	0	42	0	0	42	75
07:30 AM	2	0	2	0	4	0	49	0	1	50	1	0	1	0	2	0	38	0	0	38	94
07:45 AM	0	0	1	0	1	1	42	1	0	44	1	0	0	0	1	1	50	0	0	51	97
<b>Total</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>160</b>	<b>1</b>	<b>1</b>	<b>164</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>344</b>
08:00 AM	1	0	1	0	2	1	40	0	0	41	0	0	1	0	1	0	33	0	0	33	77
08:15 AM	0	0	1	0	1	0	17	0	0	17	1	0	1	0	2	0	25	1	0	26	46
08:30 AM	0	0	2	0	2	1	27	0	0	28	0	0	0	0	0	0	22	2	0	24	54
08:45 AM	0	0	0	0	0	0	24	0	0	24	1	0	2	0	3	0	23	1	0	24	51
<b>Total</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>103</b>	<b>4</b>	<b>0</b>	<b>107</b>	<b>228</b>
<b>Grand Total</b>	<b>4</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>13</b>	<b>4</b>	<b>268</b>	<b>1</b>	<b>1</b>	<b>274</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>269</b>	<b>4</b>	<b>0</b>	<b>274</b>	<b>572</b>
Apprch %	30.8	0	69.2	0		1.5	97.8	0.4	0.4		45.5	0	54.5	0		0.4	98.2	1.5	0		
Total %	0.7	0	1.6	0	2.3	0.7	46.9	0.2	0.2	47.9	0.9	0	1	0	1.9	0.2	47	0.7	0	47.9	
Cars	4	0	9	0	13	4	251	0	1	256	5	0	6	0	11	1	255	4	0	260	540
% Cars	100	0	100	0	100	100	93.7	0	100	93.4	100	0	100	0	100	100	94.8	100	0	94.9	94.4
Trucks	0	0	0	0	0	0	17	1	0	18	0	0	0	0	0	0	14	0	0	14	32
% Trucks	0	0	0	0	0	0	6.3	100	0	6.6	0	0	0	0	0	0	5.2	0	0	5.1	5.6

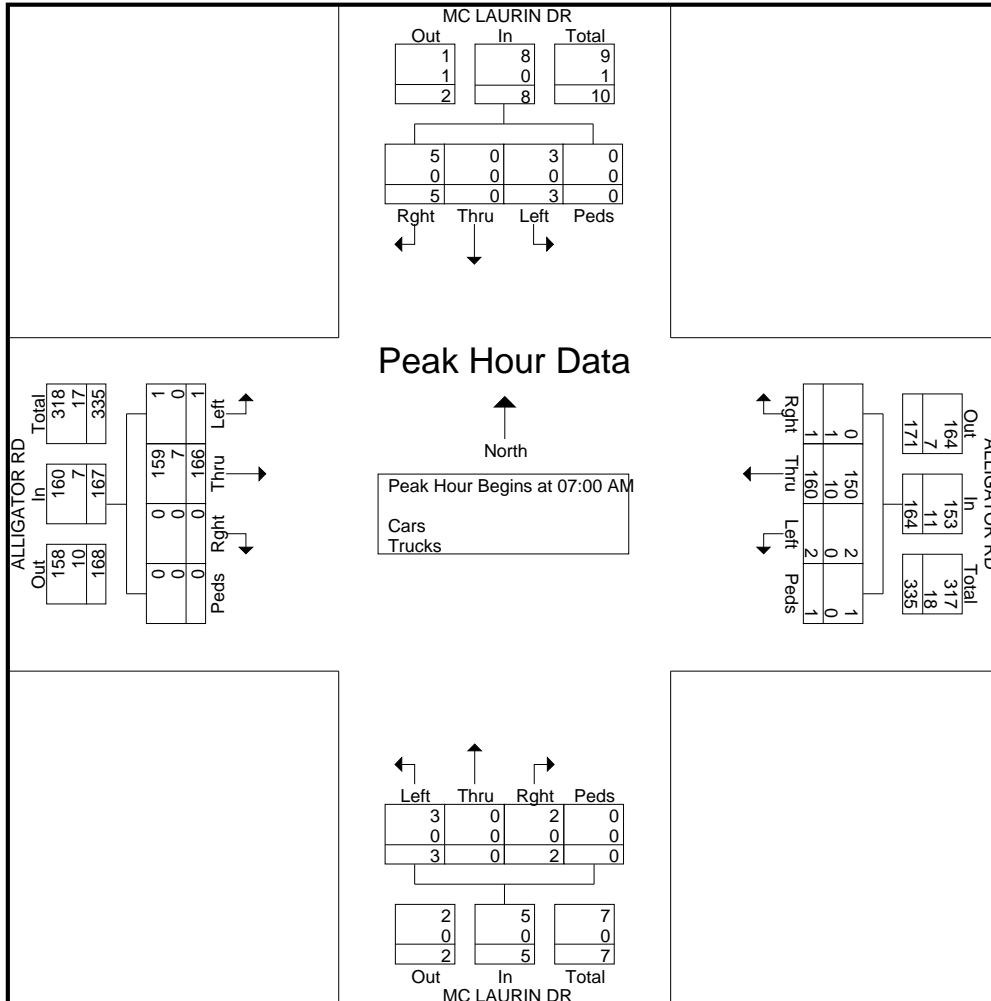


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #6 McLaurinDr@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	MC LAURIN DR Southbound					ALLIGATOR RD Westbound					MC LAURIN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	0	1	0	2	0	39	0	0	39	1	0	0	0	1	0	36	0	0	36	78
07:15 AM	0	0	1	0	1	1	30	0	0	31	0	0	1	0	1	0	42	0	0	42	75
07:30 AM	2	0	2	0	4	0	49	0	1	50	1	0	1	0	2	0	38	0	0	38	94
07:45 AM	0	0	1	0	1	1	42	1	0	44	1	0	0	0	1	1	50	0	0	51	97
Total Volume	3	0	5	0	8	2	160	1	1	164	3	0	2	0	5	1	166	0	0	167	344
% App. Total	37.5	0	62.5	0		1.2	97.6	0.6	0.6		60	0	40	0		0.6	99.4	0	0		
PHF	.375	.000	.625	.000	.500	.500	.816	.250	.250	.820	.750	.000	.500	.000	.625	.250	.830	.000	.000	.819	.887
Cars	3	0	5	0	8	2	150	0	1	153	3	0	2	0	5	1	159	0	0	160	326
% Cars	100	0	100	0	100	100	93.8	0	100	93.3	100	0	100	0	100	100	95.8	0	0	95.8	94.8
Trucks	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	7	0	0	7	18
% Trucks	0	0	0	0	0	0	6.3	100	0	6.7	0	0	0	0	0	0	4.2	0	0	4.2	5.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #6 McLaurinDr@AlligatorRdPM

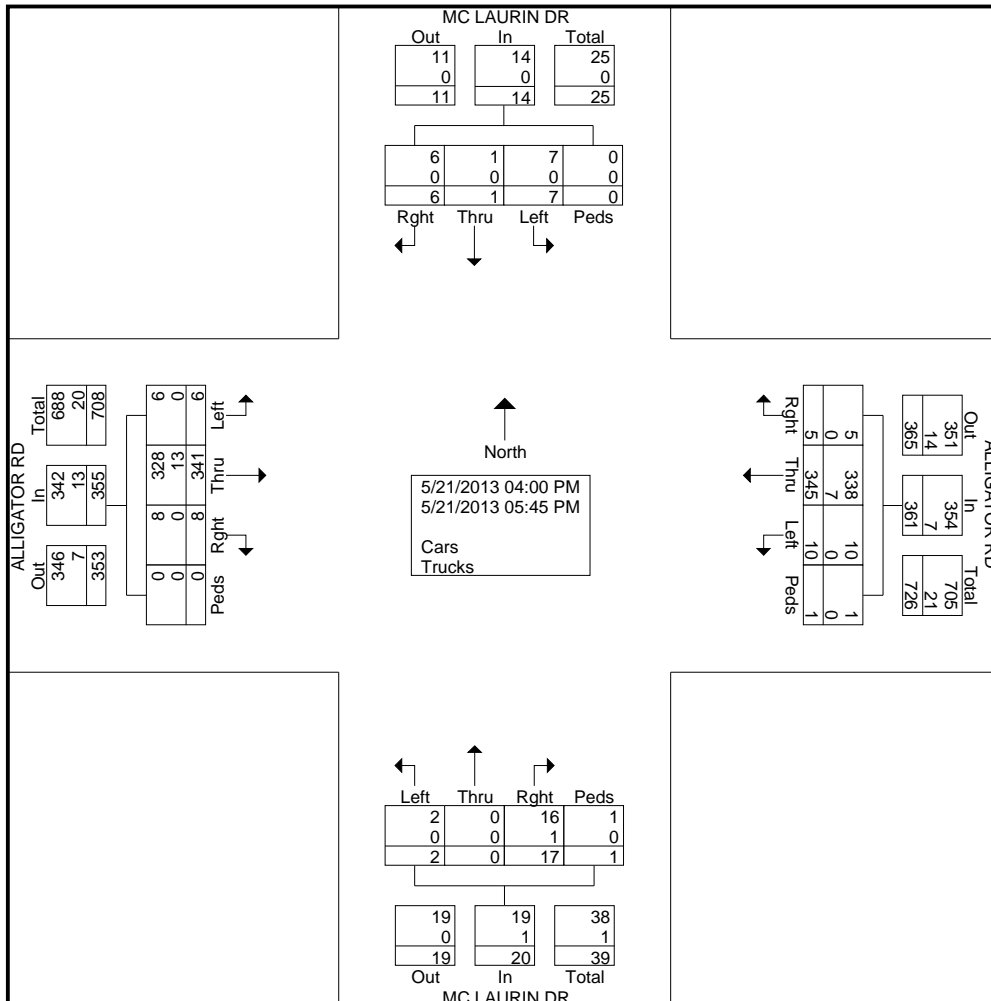
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	MC LAURIN DR Southbound					ALLIGATOR RD Westbound					MC LAURIN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	2	1	0	0	3	2	29	0	1	32	0	0	1	0	1	2	45	0	0	47	83
04:15 PM	0	0	1	0	1	2	35	0	0	37	1	0	1	0	2	0	35	0	0	35	75
04:30 PM	1	0	0	0	1	2	40	1	0	43	0	0	4	1	5	2	40	0	0	42	91
04:45 PM	0	0	0	0	0	1	44	0	0	45	1	0	4	0	5	1	39	3	0	43	93
Total	3	1	1	0	5	7	148	1	1	157	2	0	10	1	13	5	159	3	0	167	342
05:00 PM	0	0	3	0	3	2	58	1	0	61	0	0	1	0	1	0	40	1	0	41	106
05:15 PM	2	0	1	0	3	1	51	0	0	52	0	0	3	0	3	1	60	1	0	62	120
05:30 PM	1	0	1	0	2	0	41	3	0	44	0	0	3	0	3	0	47	1	0	48	97
05:45 PM	1	0	0	0	1	0	47	0	0	47	0	0	0	0	0	0	35	2	0	37	85
Total	4	0	5	0	9	3	197	4	0	204	0	0	7	0	7	1	182	5	0	188	408
Grand Total	7	1	6	0	14	10	345	5	1	361	2	0	17	1	20	6	341	8	0	355	750
Apprch %	50	7.1	42.9	0		2.8	95.6	1.4	0.3		10	0	85	5		1.7	96.1	2.3	0		
Total %	0.9	0.1	0.8	0	1.9	1.3	46	0.7	0.1	48.1	0.3	0	2.3	0.1	2.7	0.8	45.5	1.1	0	47.3	
Cars	7	1	6	0	14	10	338	5	1	354	2	0	16	1	19	6	328	8	0	342	729
% Cars	100	100	100	0	100	100	98	100	100	98.1	100	0	94.1	100	95	100	96.2	100	0	96.3	97.2
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	0	13	0	0	13	21
% Trucks	0	0	0	0	0	0	2	0	0	1.9	0	0	5.9	0	5	0	3.8	0	0	3.7	2.8

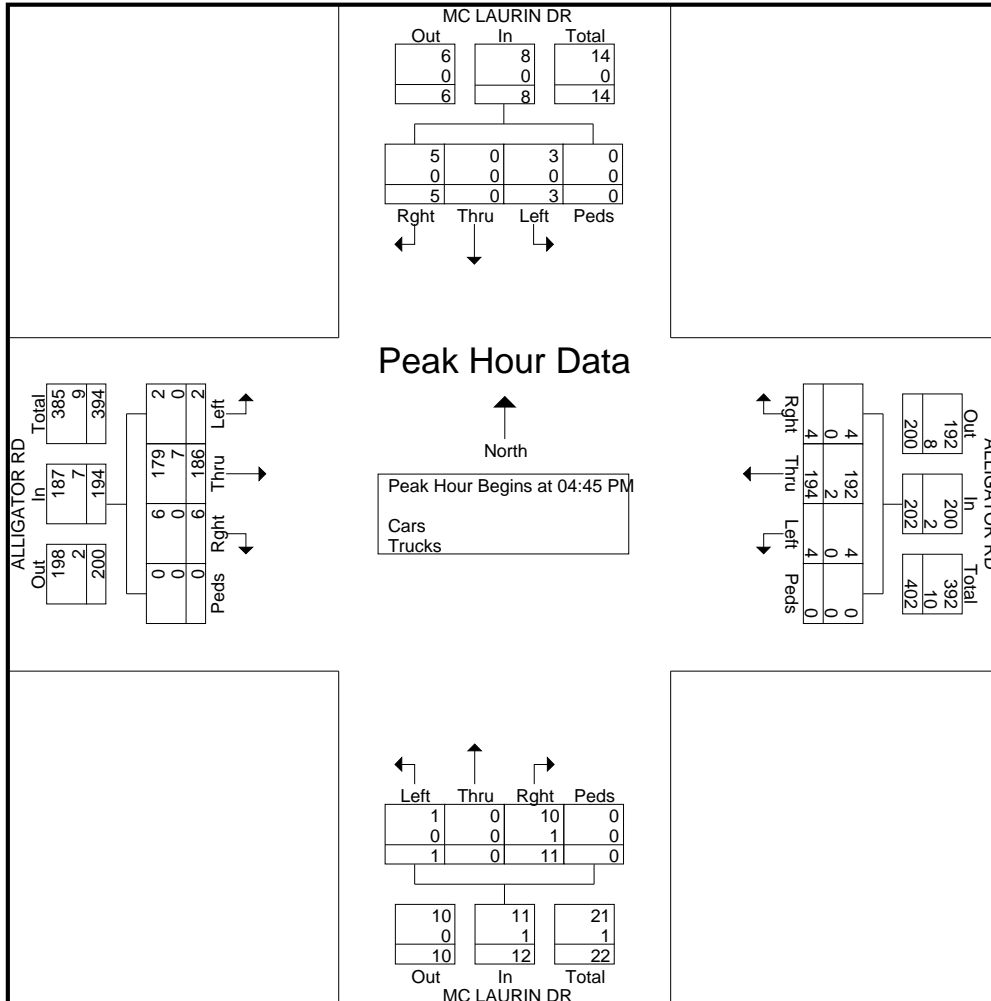


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #6 McLaurinDr@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	MC LAURIN DR Southbound					ALLIGATOR RD Westbound					MC LAURIN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	1	44	0	0	45	1	0	4	0	5	1	39	3	0	43	93
05:00 PM	0	0	3	0	3	2	58	1	0	61	0	0	1	0	1	0	40	1	0	41	106
05:15 PM	2	0	1	0	3	1	51	0	0	52	0	0	3	0	3	1	60	1	0	62	120
05:30 PM	1	0	1	0	2	0	41	3	0	44	0	0	3	0	3	0	47	1	0	48	97
Total Volume	3	0	5	0	8	4	194	4	0	202	1	0	11	0	12	2	186	6	0	194	416
% App. Total	37.5	0	62.5	0		2	96	2	0		8.3	0	91.7	0		1	95.9	3.1	0		
PHF	.375	.000	.417	.000	.667	.500	.836	.333	.000	.828	.250	.000	.688	.000	.600	.500	.775	.500	.000	.782	.867
Cars	3	0	5	0	8	4	192	4	0	200	1	0	10	0	11	2	179	6	0	187	406
% Cars	100	0	100	0	100	100	99.0	100	0	99.0	100	0	90.9	0	91.7	100	96.2	100	0	96.4	97.6
Trucks	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	7	0	0	7	10
% Trucks	0	0	0	0	0	0	1.0	0	0	1.0	0	0	9.1	0	8.3	0	3.8	0	0	3.6	2.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #7 LunnDr@AlligatorRdAM

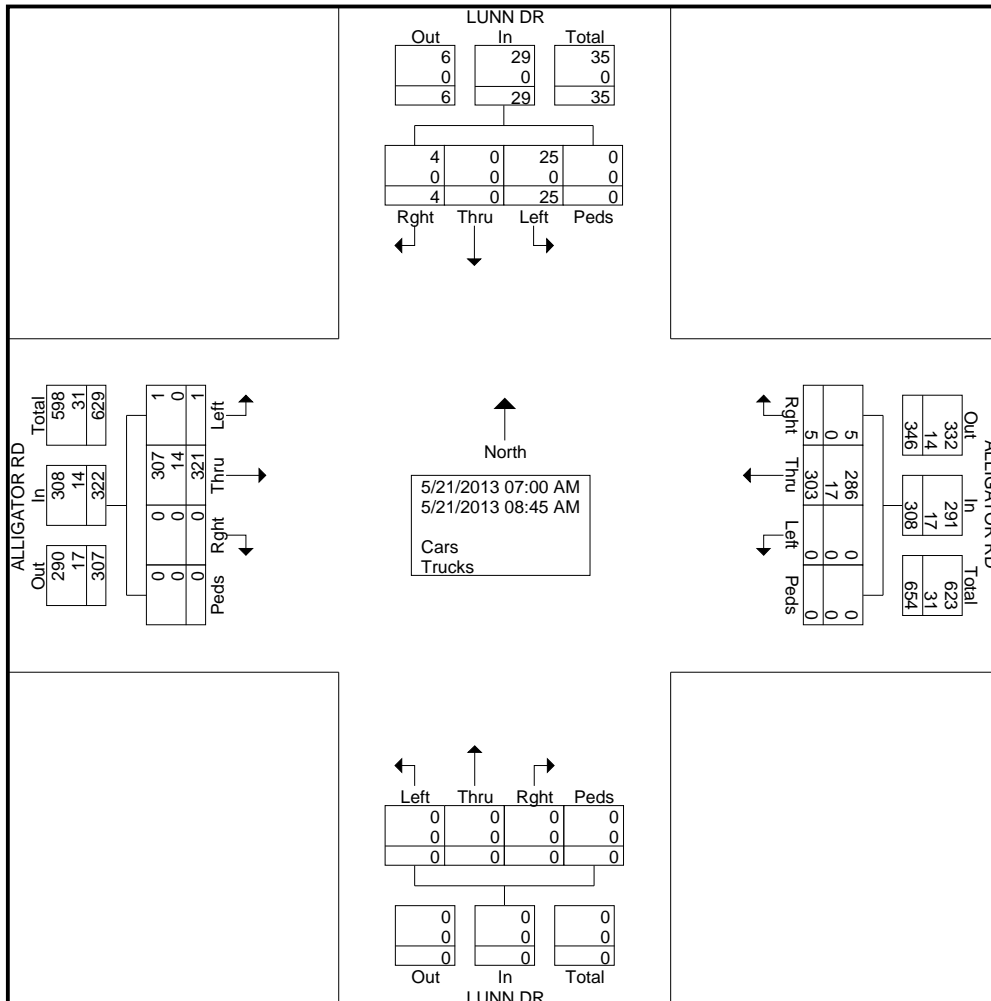
Site Code :

Start Date : 5/21/2013

Page No : 1

## Groups Printed- Cars - Trucks

Start Time	LUNN DR Southbound					ALLIGATOR RD Westbound					LUNN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	0	0	1	0	37	0	0	37	0	0	0	0	0	0	42	0	0	42	80
07:15 AM	7	0	1	0	8	0	30	0	0	30	0	0	0	0	0	0	59	0	0	59	97
07:30 AM	5	0	0	0	5	0	57	0	0	57	0	0	0	0	0	0	47	0	0	47	109
07:45 AM	3	0	1	0	4	0	60	0	0	60	0	0	0	0	0	0	56	0	0	56	120
<b>Total</b>	<b>16</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>184</b>	<b>0</b>	<b>0</b>	<b>184</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>	<b>0</b>	<b>0</b>	<b>204</b>	<b>406</b>
08:00 AM	6	0	2	0	8	0	36	4	0	40	0	0	0	0	0	0	33	0	0	33	81
08:15 AM	1	0	0	0	1	0	22	1	0	23	0	0	0	0	0	0	31	0	0	31	55
08:30 AM	2	0	0	0	2	0	31	0	0	31	0	0	0	0	0	1	23	0	0	24	57
08:45 AM	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	30	0	0	30	60
<b>Total</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>119</b>	<b>5</b>	<b>0</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>117</b>	<b>0</b>	<b>0</b>	<b>118</b>	<b>253</b>
<b>Grand Total</b>	<b>25</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>303</b>	<b>5</b>	<b>0</b>	<b>308</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>321</b>	<b>0</b>	<b>0</b>	<b>322</b>	<b>659</b>
Apprch %	86.2	0	13.8	0		0	98.4	1.6	0		0	0	0	0		0.3	99.7	0	0		
Total %	3.8	0	0.6	0	4.4	0	46	0.8	0	46.7	0	0	0	0	0	0.2	48.7	0	0	48.9	
Cars	25	0	4	0	29	0	286	5	0	291	0	0	0	0	0	1	307	0	0	308	628
% Cars	100	0	100	0	100	0	94.4	100	0	94.5	0	0	0	0	0	100	95.6	0	0	95.7	95.3
Trucks	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	14	0	0	14	31
% Trucks	0	0	0	0	0	0	5.6	0	0	5.5	0	0	0	0	0	0	4.4	0	0	4.3	4.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

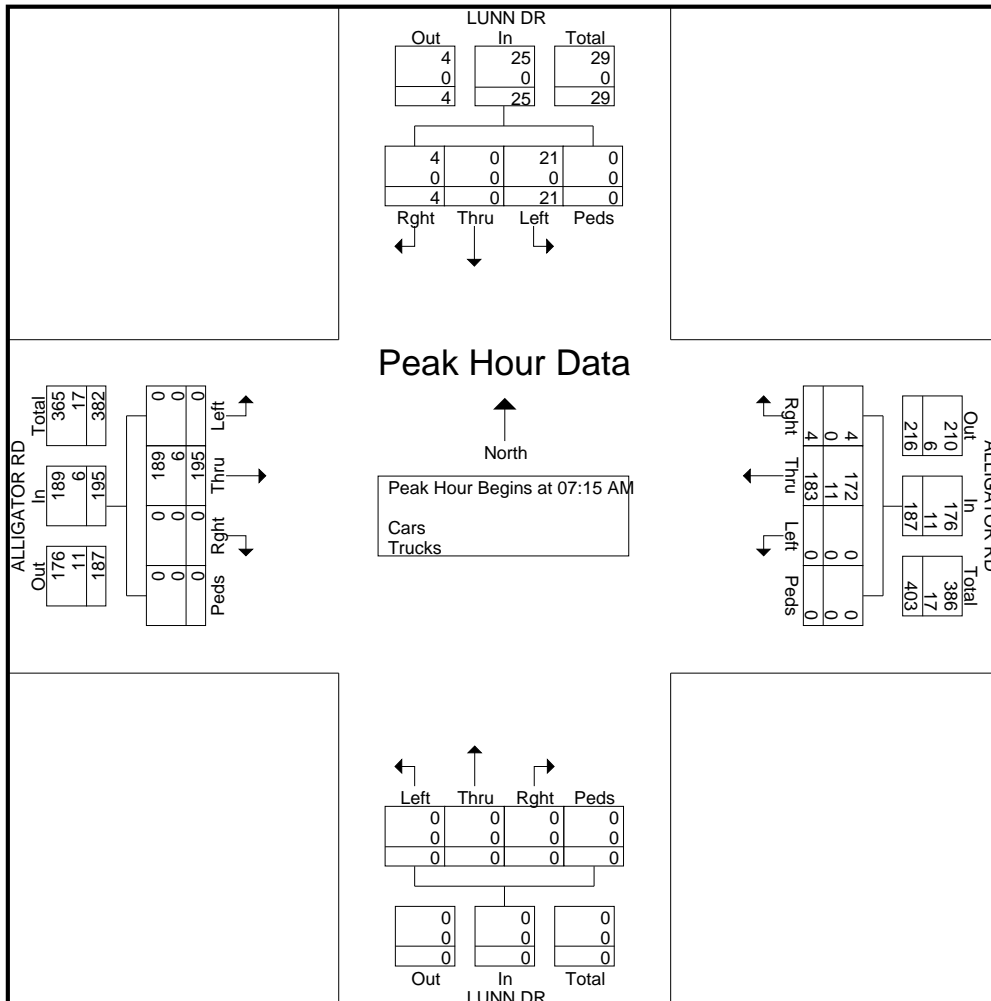
File Name : #7 LunnDr@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	LUNN DR Southbound					ALLIGATOR RD Westbound					LUNN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	0	1	0	8	0	30	0	0	30	0	0	0	0	0	0	59	0	0	59	97
07:30 AM	5	0	0	0	5	0	57	0	0	57	0	0	0	0	0	0	47	0	0	47	109
07:45 AM	3	0	1	0	4	0	60	0	0	60	0	0	0	0	0	0	56	0	0	56	120
08:00 AM	6	0	2	0	8	0	36	4	0	40	0	0	0	0	0	0	33	0	0	33	81
Total Volume	21	0	4	0	25	0	183	4	0	187	0	0	0	0	0	0	195	0	0	195	407
% App. Total	84	0	16	0		0	97.9	2.1	0		0	0	0	0		0	100	0	0		
PHF	.750	.000	.500	.000	.781	.000	.763	.250	.000	.779	.000	.000	.000	.000	.000	.000	.826	.000	.000	.826	.848
Cars	21	0	4	0	25	0	172	4	0	176	0	0	0	0	0	0	189	0	0	189	390
% Cars	100	0	100	0	100	0	94.0	100	0	94.1	0	0	0	0	0	0	96.9	0	0	96.9	95.8
Trucks	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	6	0	0	6	17
% Trucks	0	0	0	0	0	0	6.0	0	0	5.9	0	0	0	0	0	0	3.1	0	0	3.1	4.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #7 LunnDr@AlligatorRdPM

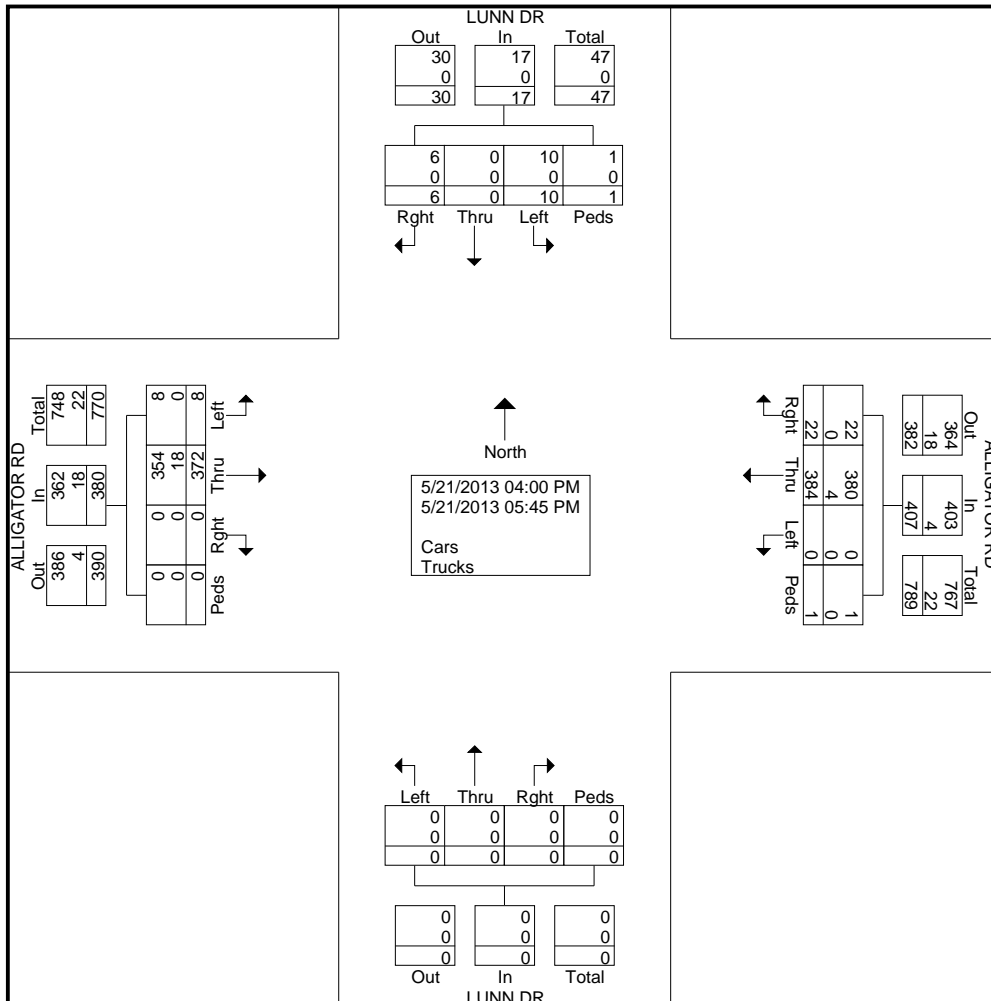
Site Code :

Start Date : 5/21/2013

Page No : 1

## Groups Printed- Cars - Trucks

Start Time	LUNN DR Southbound					ALLIGATOR RD Westbound					LUNN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	2	0	1	0	3	0	35	2	0	37	0	0	0	0	0	0	42	0	0	42	82
04:15 PM	3	0	0	0	3	0	36	2	0	38	0	0	0	0	0	2	37	0	0	39	80
04:30 PM	0	0	0	0	0	0	46	1	0	47	0	0	0	0	0	0	43	0	0	43	90
04:45 PM	1	0	1	0	2	0	50	3	0	53	0	0	0	0	0	1	48	0	0	49	104
<b>Total</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>167</b>	<b>8</b>	<b>0</b>	<b>175</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>356</b>
05:00 PM	0	0	1	0	1	0	65	5	0	70	0	0	0	0	0	1	44	0	0	45	116
05:15 PM	0	0	1	0	1	0	52	4	0	56	0	0	0	0	0	2	58	0	0	60	117
05:30 PM	1	0	2	0	3	0	50	1	0	51	0	0	0	0	0	2	60	0	0	62	116
05:45 PM	3	0	0	1	4	0	50	4	1	55	0	0	0	0	0	0	40	0	0	40	99
<b>Total</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>217</b>	<b>14</b>	<b>1</b>	<b>232</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>202</b>	<b>0</b>	<b>0</b>	<b>207</b>	<b>448</b>
Grand Total	10	0	6	1	17	0	384	22	1	407	0	0	0	0	0	8	372	0	0	380	804
Apprch %	58.8	0	35.3	5.9		0	94.3	5.4	0.2		0	0	0	0		2.1	97.9	0	0		
Total %	1.2	0	0.7	0.1	2.1	0	47.8	2.7	0.1	50.6	0	0	0	0	0	1	46.3	0	0	47.3	
Cars	10	0	6	1	17	0	380	22	1	403	0	0	0	0	0	8	354	0	0	362	782
% Cars	100	0	100	100	100	0	99	100	100	99	0	0	0	0	0	100	95.2	0	0	95.3	97.3
Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	18	0	0	18	22
% Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4.8	0	0	4.7	2.7

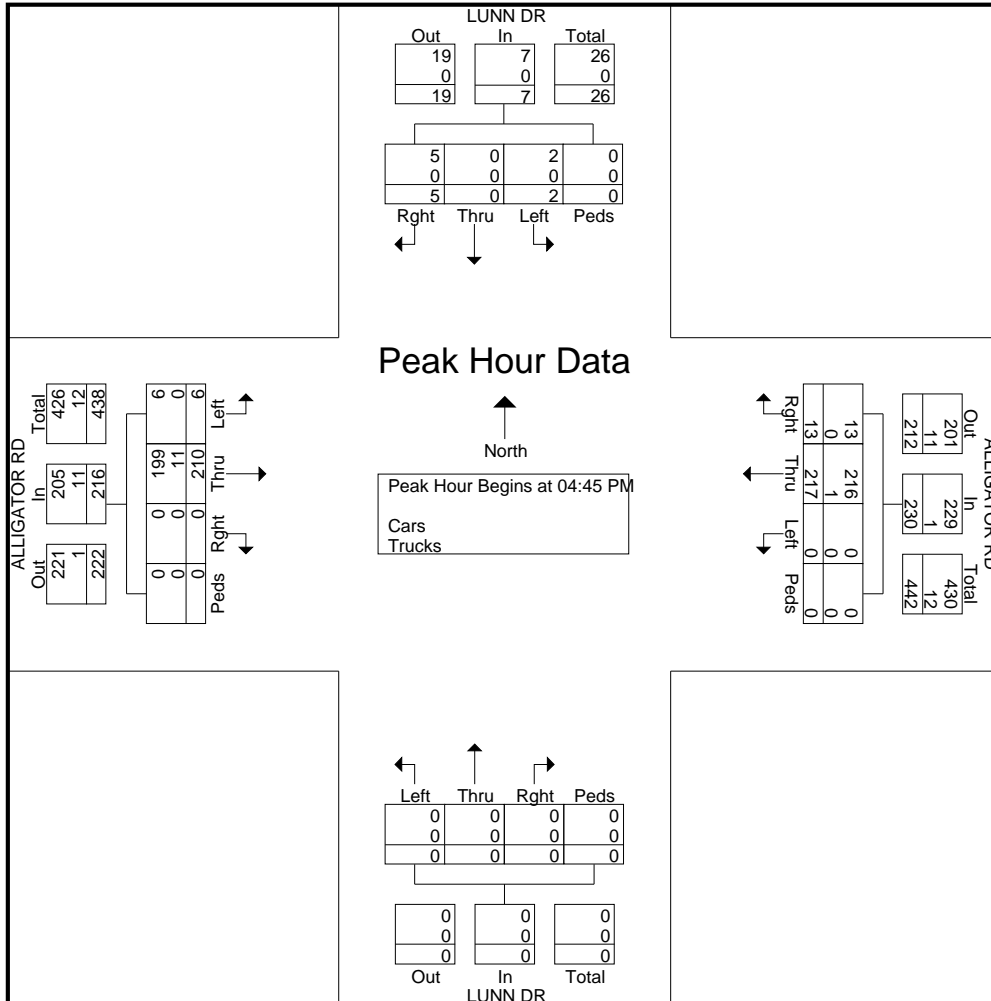


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #7 LunnDr@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	LUNN DR Southbound					ALLIGATOR RD Westbound					LUNN DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	0	1	0	2	0	50	3	0	53	0	0	0	0	0	1	48	0	0	49	104
05:00 PM	0	0	1	0	1	0	65	5	0	70	0	0	0	0	0	1	44	0	0	45	116
05:15 PM	0	0	1	0	1	0	52	4	0	56	0	0	0	0	0	2	58	0	0	60	117
05:30 PM	1	0	2	0	3	0	50	1	0	51	0	0	0	0	0	2	60	0	0	62	116
Total Volume	2	0	5	0	7	0	217	13	0	230	0	0	0	0	0	6	210	0	0	216	453
% App. Total	28.6	0	71.4	0		0	94.3	5.7	0		0	0	0	0		2.8	97.2	0	0		
PHF	.500	.000	.625	.000	.583	.000	.835	.650	.000	.821	.000	.000	.000	.000	.000	.750	.875	.000	.000	.871	.968
Cars	2	0	5	0	7	0	216	13	0	229	0	0	0	0	0	6	199	0	0	205	441
% Cars	100	0	100	0	100	0	99.5	100	0	99.6	0	0	0	0	0	100	94.8	0	0	94.9	97.4
Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	11	0	0	11	12
% Trucks	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	5.2	0	0	5.1	2.6





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #8 Knollwood-WalkerSwintonRd@AlligatorRdAM

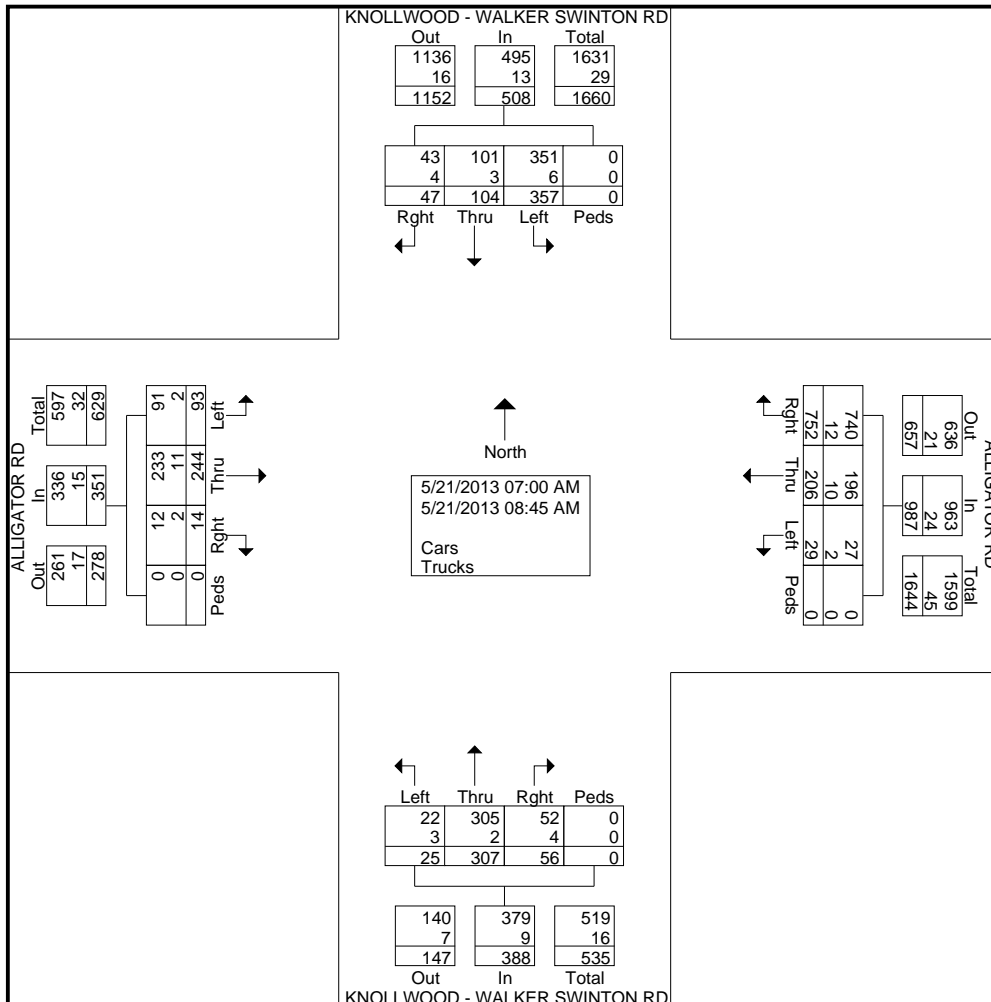
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	KNOLLWOOD - WALKER SWINTON RD Southbound					ALLIGATOR RD Westbound					KNOLLWOOD - WALKER SWINTON RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	48	8	2	0	58	5	25	71	0	101	3	38	6	0	47	8	33	0	0	41	247
07:15 AM	79	10	2	0	91	2	32	105	0	139	0	33	8	0	41	25	41	1	0	67	338
07:30 AM	49	9	5	0	63	5	30	138	0	173	6	60	11	0	77	14	40	2	0	56	369
07:45 AM	55	12	9	0	76	5	30	158	0	193	6	51	10	0	67	14	35	4	0	53	389
Total	231	39	18	0	288	17	117	472	0	606	15	182	35	0	232	61	149	7	0	217	1343
08:00 AM	52	17	12	0	81	2	26	87	0	115	3	46	11	0	60	10	32	2	0	44	300
08:15 AM	28	22	4	0	54	6	17	84	0	107	2	37	6	0	45	3	24	3	0	30	236
08:30 AM	26	12	5	0	43	4	25	57	0	86	2	19	2	0	23	7	20	0	0	27	179
08:45 AM	20	14	8	0	42	0	21	52	0	73	3	23	2	0	28	12	19	2	0	33	176
Total	126	65	29	0	220	12	89	280	0	381	10	125	21	0	156	32	95	7	0	134	891
Grand Total	357	104	47	0	508	29	206	752	0	987	25	307	56	0	388	93	244	14	0	351	2234
Apprch %	70.3	20.5	9.3	0		2.9	20.9	76.2	0		6.4	79.1	14.4	0		26.5	69.5	4	0		
Total %	16	4.7	2.1	0	22.7	1.3	9.2	33.7	0	44.2	1.1	13.7	2.5	0	17.4	4.2	10.9	0.6	0	15.7	
Cars	351	101	43	0	495	27	196	740	0	963	22	305	52	0	379	91	233	12	0	336	2173
% Cars	98.3	97.1	91.5	0	97.4	93.1	95.1	98.4	0	97.6	88	99.3	92.9	0	97.7	97.8	95.5	85.7	0	95.7	97.3
Trucks	6	3	4	0	13	2	10	12	0	24	3	2	4	0	9	2	11	2	0	15	61
% Trucks	1.7	2.9	8.5	0	2.6	6.9	4.9	1.6	0	2.4	12	0.7	7.1	0	2.3	2.2	4.5	14.3	0	4.3	2.7

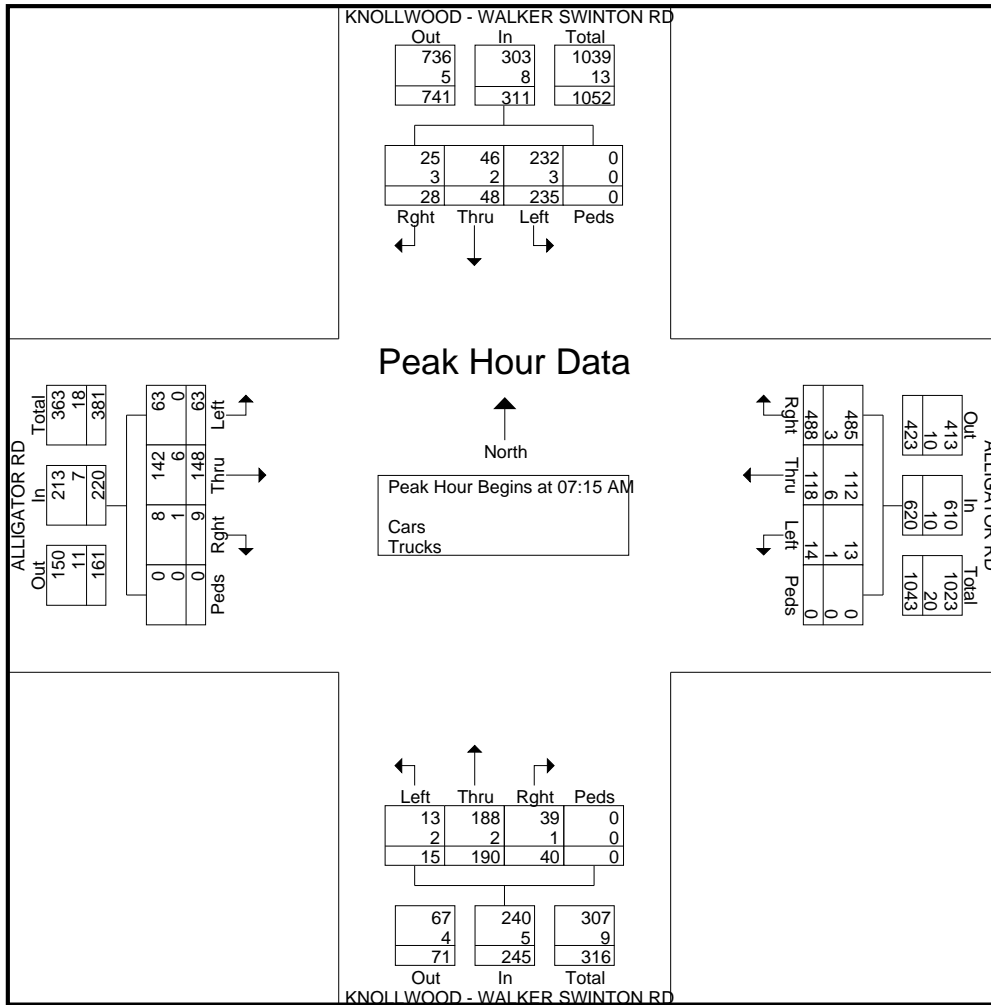


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #8 Knollwood-WalkerSwintonRd@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	KNOLLWOOD - WALKER SWINTON RD Southbound					ALLIGATOR RD Westbound					KNOLLWOOD - WALKER SWINTON RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	79	10	2	0	91	2	32	105	0	139	0	33	8	0	41	25	41	1	0	67	338
07:30 AM	49	9	5	0	63	5	30	138	0	173	6	60	11	0	77	14	40	2	0	56	369
07:45 AM	55	12	9	0	76	5	30	158	0	193	6	51	10	0	67	14	35	4	0	53	389
08:00 AM	52	17	12	0	81	2	26	87	0	115	3	46	11	0	60	10	32	2	0	44	300
Total Volume	235	48	28	0	311	14	118	488	0	620	15	190	40	0	245	63	148	9	0	220	1396
% App. Total	75.6	15.4	9	0		2.3	19	78.7	0		6.1	77.6	16.3	0		28.6	67.3	4.1	0		
PHF	.744	.706	.583	.000	.854	.700	.922	.772	.000	.803	.625	.792	.909	.000	.795	.630	.902	.563	.000	.821	.897
Cars	232	46	25	0	303	13	112	485	0	610	13	188	39	0	240	63	142	8	0	213	1366
% Cars	98.7	95.8	89.3	0	97.4	92.9	94.9	99.4	0	98.4	86.7	98.9	97.5	0	98.0	100	95.9	88.9	0	96.8	97.9
Trucks	3	2	3	0	8	1	6	3	0	10	2	2	1	0	5	0	6	1	0	7	30
% Trucks	1.3	4.2	10.7	0	2.6	7.1	5.1	0.6	0	1.6	13.3	1.1	2.5	0	2.0	0	4.1	11.1	0	3.2	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #8 Knollwood-WalkerSwintonRd@AlligatorRdPM

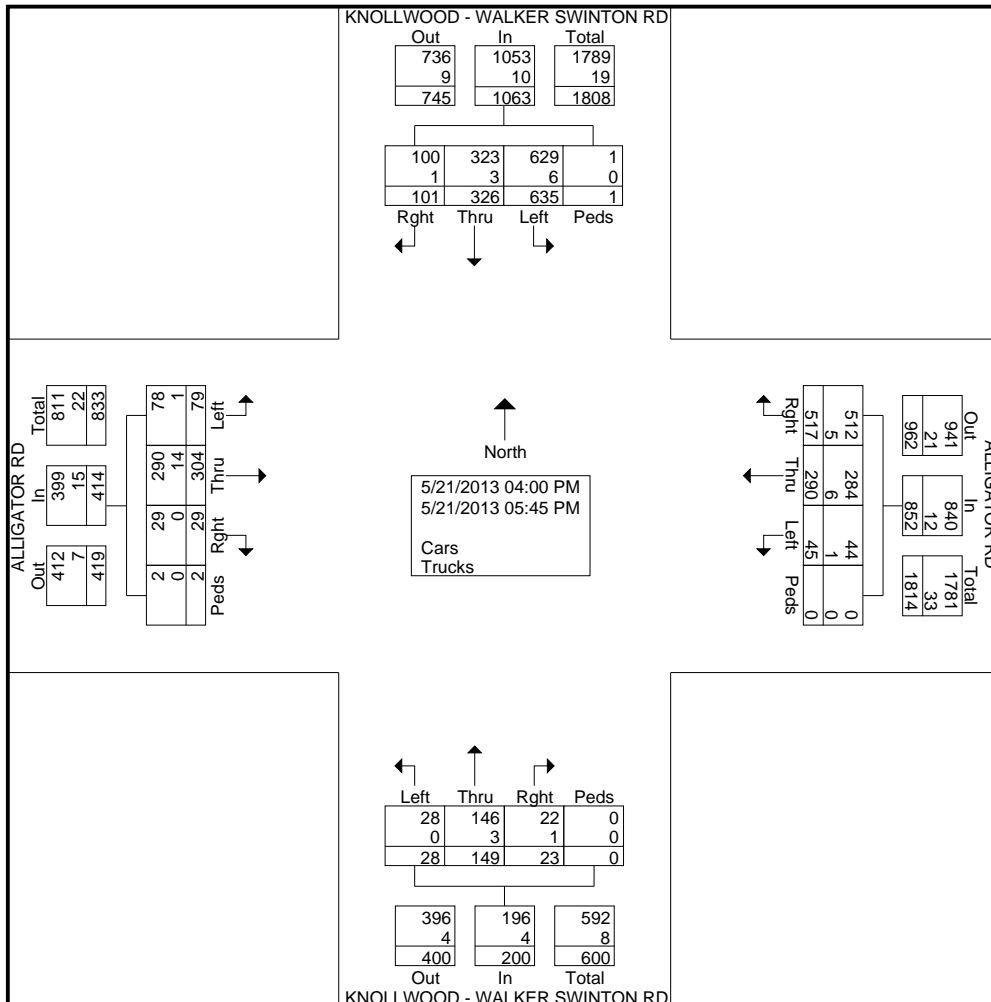
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	KNOLLWOOD - WALKER SWINTON RD Southbound					ALLIGATOR RD Westbound					KNOLLWOOD - WALKER SWINTON RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	62	37	11	0	110	7	23	51	0	81	1	14	2	0	17	7	43	7	0	57	265
04:15 PM	61	29	11	0	101	9	33	82	0	124	4	17	3	0	24	12	29	3	0	44	293
04:30 PM	81	34	12	1	128	2	33	59	0	94	3	20	1	0	24	11	33	5	2	51	297
04:45 PM	62	44	17	0	123	5	34	51	0	90	3	21	4	0	28	8	38	2	0	48	289
Total	266	144	51	1	462	23	123	243	0	389	11	72	10	0	93	38	143	17	2	200	1144
05:00 PM	77	43	20	0	140	6	44	77	0	127	6	23	4	0	33	10	32	2	0	44	344
05:15 PM	99	51	12	0	162	1	40	48	0	89	5	16	1	0	22	13	45	1	0	59	332
05:30 PM	91	46	11	0	148	6	39	77	0	122	2	24	7	0	33	6	45	6	0	57	360
05:45 PM	102	42	7	0	151	9	44	72	0	125	4	14	1	0	19	12	39	3	0	54	349
Total	369	182	50	0	601	22	167	274	0	463	17	77	13	0	107	41	161	12	0	214	1385
Grand Total	635	326	101	1	1063	45	290	517	0	852	28	149	23	0	200	79	304	29	2	414	2529
Apprch %	59.7	30.7	9.5	0.1		5.3	34	60.7	0		14	74.5	11.5	0		19.1	73.4	7	0.5		
Total %	25.1	12.9	4	0	42	1.8	11.5	20.4	0	33.7	1.1	5.9	0.9	0	7.9	3.1	12	1.1	0.1	16.4	
Cars	629	323	100	1	1053	44	284	512	0	840	28	146	22	0	196	78	290	29	2	399	2488
% Cars	99.1	99.1	99	100	99.1	97.8	97.9	99	0	98.6	100	98	95.7	0	98	98.7	95.4	100	100	96.4	98.4
Trucks	6	3	1	0	10	1	6	5	0	12	0	3	1	0	4	1	14	0	0	15	41
% Trucks	0.9	0.9	1	0	0.9	2.2	2.1	1	0	1.4	0	2	4.3	0	2	1.3	4.6	0	0	3.6	1.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

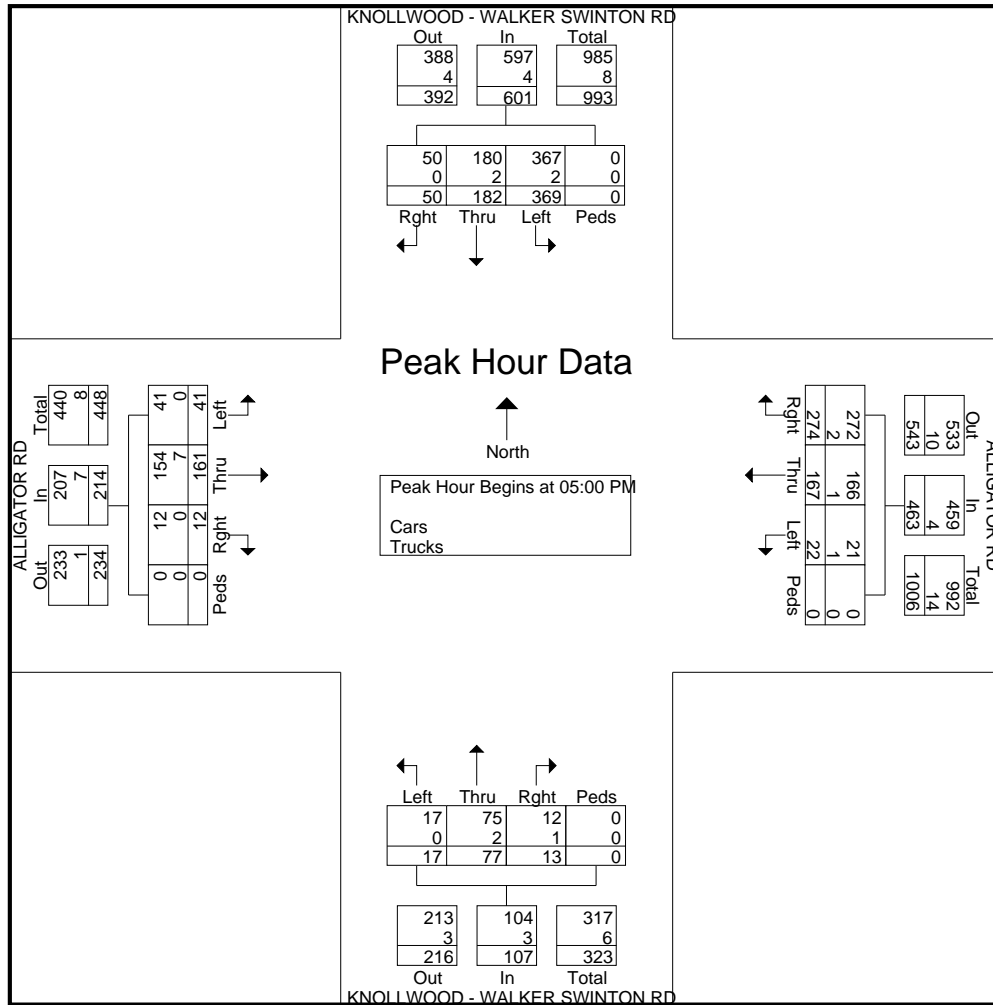
File Name : #8 Knollwood-WalkerSwintonRd@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	KNOLLWOOD - WALKER SWINTON RD Southbound					ALLIGATOR RD Westbound					KNOLLWOOD - WALKER SWINTON RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	77	43	20	0	140	6	44	77	0	127	6	23	4	0	33	10	32	2	0	44	344
05:15 PM	99	51	12	0	162	1	40	48	0	89	5	16	1	0	22	13	45	1	0	59	332
05:30 PM	91	46	11	0	148	6	39	77	0	122	2	24	7	0	33	6	45	6	0	57	360
05:45 PM	102	42	7	0	151	9	44	72	0	125	4	14	1	0	19	12	39	3	0	54	349
Total Volume	369	182	50	0	601	22	167	274	0	463	17	77	13	0	107	41	161	12	0	214	1385
% App. Total	61.4	30.3	8.3	0		4.8	36.1	59.2	0		15.9	72	12.1	0		19.2	75.2	5.6	0		
PHF	.904	.892	.625	.000	.927	.611	.949	.890	.000	.911	.708	.802	.464	.000	.811	.788	.894	.500	.000	.907	.962
Cars	367	180	50	0	597	21	166	272	0	459	17	75	12	0	104	41	154	12	0	207	1367
% Cars	99.5	98.9	100	0	99.3	95.5	99.4	99.3	0	99.1	100	97.4	92.3	0	97.2	100	95.7	100	0	96.7	98.7
Trucks	2	2	0	0	4	1	1	2	0	4	0	2	1	0	3	0	7	0	0	7	18
% Trucks	0.5	1.1	0	0	0.7	4.5	0.6	0.7	0	0.9	0	2.6	7.7	0	2.8	0	4.3	0	0	3.3	1.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #9 WalkerSwintonRd@OliverRdAM

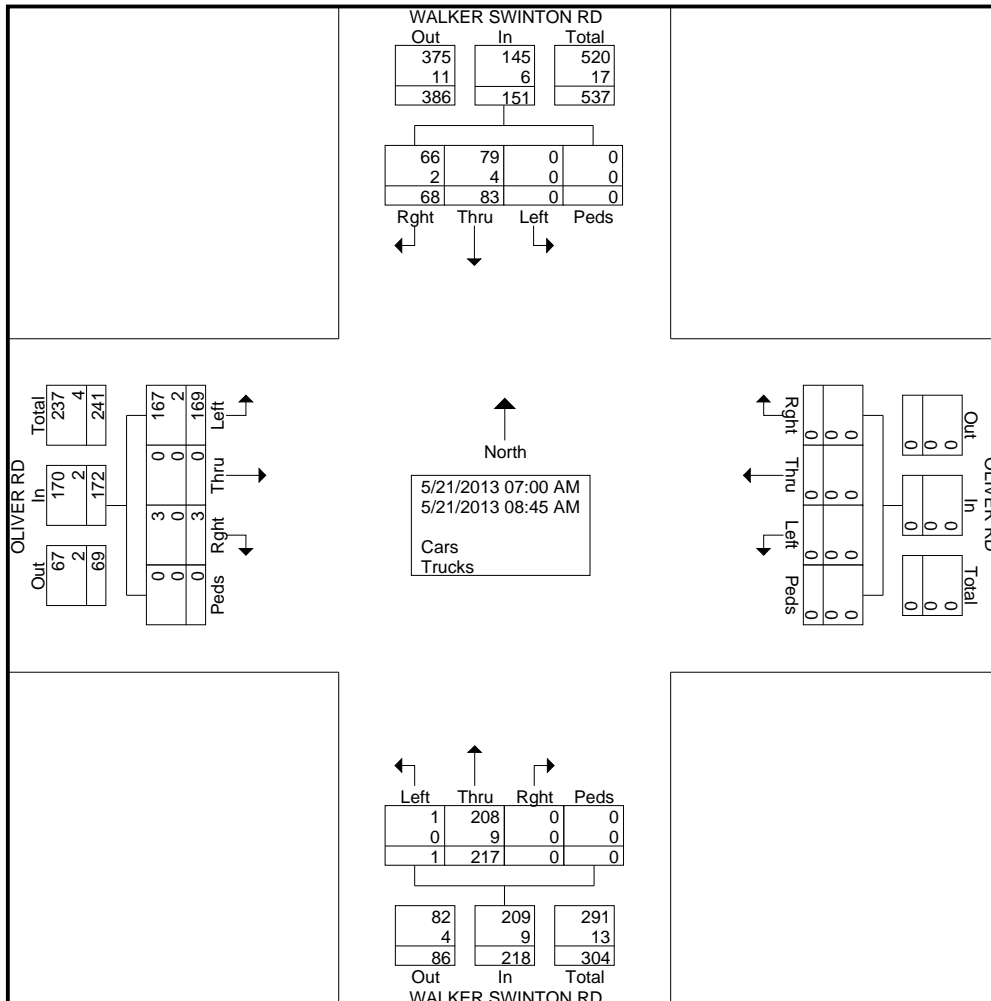
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WALKER SWINTON RD Southbound					OLIVER RD Westbound					WALKER SWINTON RD Northbound					OLIVER RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	5	7	0	12	0	0	0	0	0	0	20	0	0	20	25	0	0	0	25	57
07:15 AM	0	12	3	0	15	0	0	0	0	0	0	18	0	0	18	25	0	0	0	25	58
07:30 AM	0	13	4	0	17	0	0	0	0	0	0	49	0	0	49	29	0	1	0	30	96
07:45 AM	0	14	8	0	22	0	0	0	0	0	0	47	0	0	47	21	0	0	0	21	90
Total	0	44	22	0	66	0	0	0	0	0	0	134	0	0	134	100	0	1	0	101	301
08:00 AM	0	12	7	0	19	0	0	0	0	0	0	29	0	0	29	27	0	0	0	27	75
08:15 AM	0	11	21	0	32	0	0	0	0	0	1	30	0	0	31	18	0	1	0	19	82
08:30 AM	0	7	9	0	16	0	0	0	0	0	0	13	0	0	13	9	0	0	0	9	38
08:45 AM	0	9	9	0	18	0	0	0	0	0	0	11	0	0	11	15	0	1	0	16	45
Total	0	39	46	0	85	0	0	0	0	0	1	83	0	0	84	69	0	2	0	71	240
Grand Total	0	83	68	0	151	0	0	0	0	0	1	217	0	0	218	169	0	3	0	172	541
Apprch %	0	55	45	0		0	0	0	0		0.5	99.5	0	0		98.3	0	1.7	0		
Total %	0	15.3	12.6	0	27.9	0	0	0	0	0	0.2	40.1	0	0	40.3	31.2	0	0.6	0	31.8	
Cars	0	79	66	0	145	0	0	0	0	0	1	208	0	0	209	167	0	3	0	170	524
% Cars	0	95.2	97.1	0	96	0	0	0	0	0	100	95.9	0	0	95.9	98.8	0	100	0	98.8	96.9
Trucks	0	4	2	0	6	0	0	0	0	0	0	9	0	0	9	2	0	0	0	2	17
% Trucks	0	4.8	2.9	0	4	0	0	0	0	0	0	4.1	0	0	4.1	1.2	0	0	0	1.2	3.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
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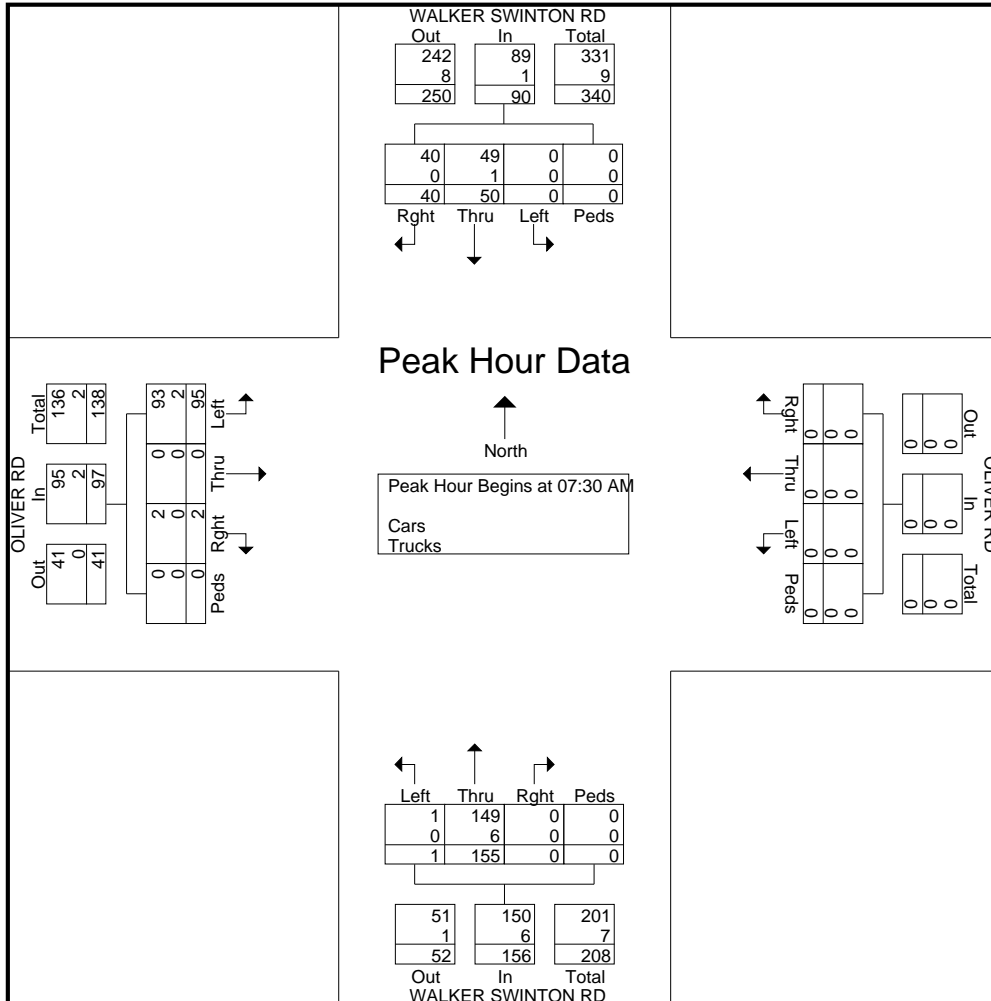
File Name : #9 WalkerSwintonRd@OliverRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WALKER SWINTON RD Southbound					OLIVER RD Westbound					WALKER SWINTON RD Northbound					OLIVER RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	13	4	0	17	0	0	0	0	0	0	49	0	0	49	29	0	1	0	30	96
07:45 AM	0	14	8	0	22	0	0	0	0	0	0	47	0	0	47	21	0	0	0	21	90
08:00 AM	0	12	7	0	19	0	0	0	0	0	0	29	0	0	29	27	0	0	0	27	75
08:15 AM	0	11	21	0	32	0	0	0	0	0	1	30	0	0	31	18	0	1	0	19	82
Total Volume	0	50	40	0	90	0	0	0	0	0	1	155	0	0	156	95	0	2	0	97	343
% App. Total	0	55.6	44.4	0		0	0	0	0	0	0.6	99.4	0	0		97.9	0	2.1	0		
PHF	.000	.893	.476	.000	.703	.000	.000	.000	.000	.000	.250	.791	.000	.000	.796	.819	.000	.500	.000	.808	.893
Cars	0	49	40	0	89	0	0	0	0	0	1	149	0	0	150	93	0	2	0	95	334
% Cars	0	98.0	100	0	98.9	0	0	0	0	0	100	96.1	0	0	96.2	97.9	0	100	0	97.9	97.4
Trucks	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	9
% Trucks	0	2.0	0	0	1.1	0	0	0	0	0	0	3.9	0	0	3.8	2.1	0	0	0	2.1	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #9 WalkerSwintonRd@OliverRdPM

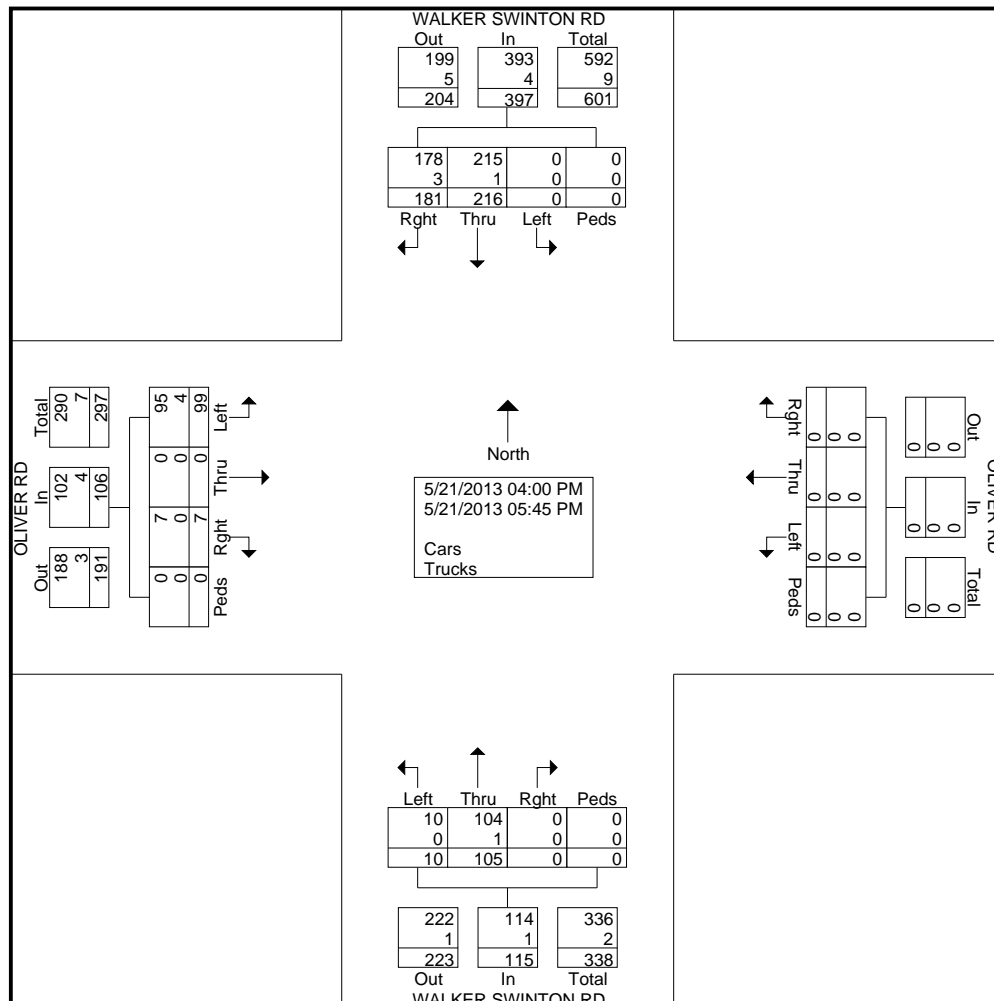
Site Code :

Start Date : 5/21/2013

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Groups Printed- Cars - Trucks

Start Time	WALKER SWINTON RD Southbound					OLIVER RD Westbound					WALKER SWINTON RD Northbound					OLIVER RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	25	25	0	50	0	0	0	0	0	1	12	0	0	13	9	0	2	0	11	74
04:15 PM	0	22	18	0	40	0	0	0	0	0	1	12	0	0	13	8	0	1	0	9	62
04:30 PM	0	22	22	0	44	0	0	0	0	0	0	20	0	0	20	7	0	1	0	8	72
04:45 PM	0	24	23	0	47	0	0	0	0	0	2	9	0	0	11	16	0	0	0	16	74
<b>Total</b>	<b>0</b>	<b>93</b>	<b>88</b>	<b>0</b>	<b>181</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>40</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>44</b>	<b>282</b>
05:00 PM	0	25	25	0	50	0	0	0	0	0	1	18	0	0	19	16	0	2	0	18	87
05:15 PM	0	38	18	0	56	0	0	0	0	0	0	11	0	0	11	13	0	0	0	13	80
05:30 PM	0	32	23	0	55	0	0	0	0	0	1	17	0	0	18	15	0	1	0	16	89
05:45 PM	0	28	27	0	55	0	0	0	0	0	4	6	0	0	10	15	0	0	0	15	80
<b>Total</b>	<b>0</b>	<b>123</b>	<b>93</b>	<b>0</b>	<b>216</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>59</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>62</b>	<b>336</b>
<b>Grand Total</b>	<b>0</b>	<b>216</b>	<b>181</b>	<b>0</b>	<b>397</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>99</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>106</b>	<b>618</b>
Apprch %	0	54.4	45.6	0		0	0	0	0		8.7	91.3	0	0		93.4	0	6.6	0		
Total %	0	35	29.3	0	64.2	0	0	0	0		1.6	17	0	0	18.6	16	0	1.1	0	17.2	
Cars	0	215	178	0	393	0	0	0	0	0	10	104	0	0	114	95	0	7	0	102	609
% Cars	0	99.5	98.3	0	99	0	0	0	0	0	100	99	0	0	99.1	96	0	100	0	96.2	98.5
Trucks	0	1	3	0	4	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	9
% Trucks	0	0.5	1.7	0	1	0	0	0	0	0	0	1	0	0	0.9	4	0	0	0	3.8	1.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
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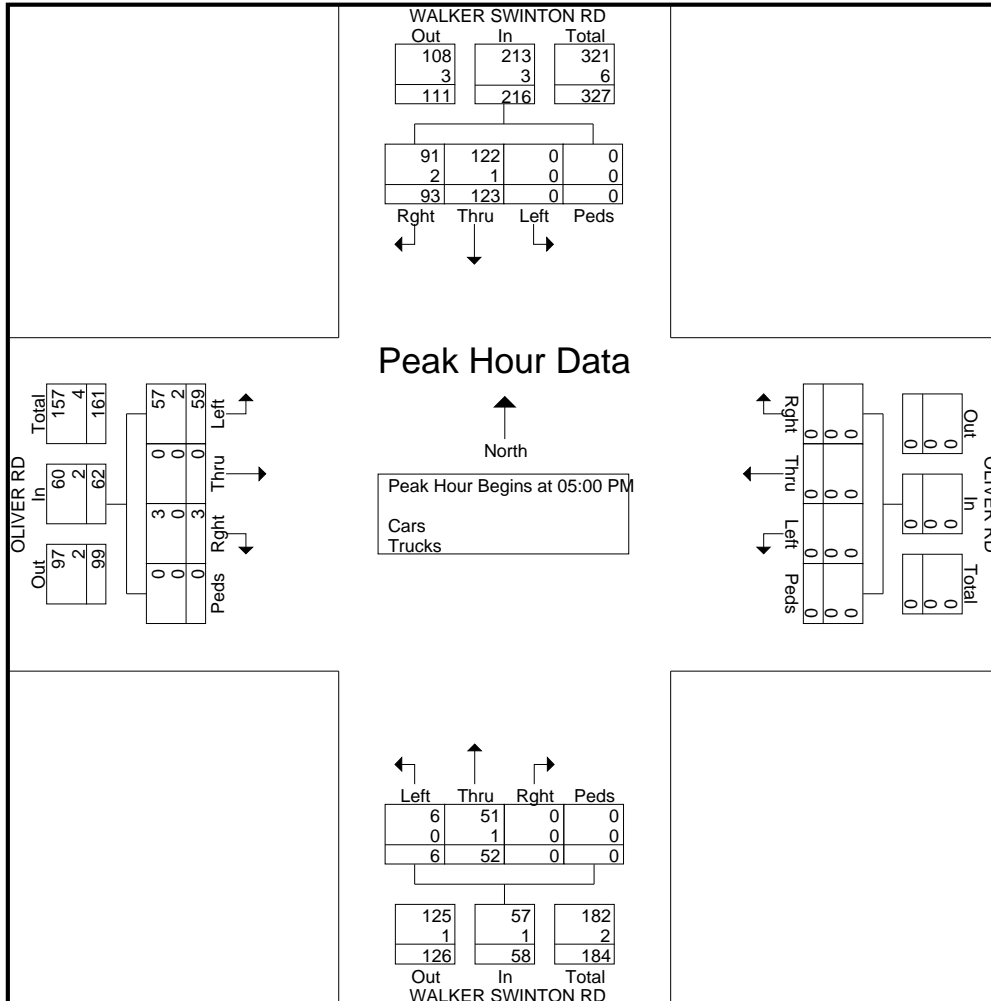
File Name : #9 WalkerSwintonRd@OliverRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WALKER SWINTON RD Southbound					OLIVER RD Westbound					WALKER SWINTON RD Northbound					OLIVER RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	25	25	0	50	0	0	0	0	0	1	18	0	0	19	16	0	2	0	18	87
05:15 PM	0	38	18	0	56	0	0	0	0	0	0	11	0	0	11	13	0	0	0	13	80
05:30 PM	0	32	23	0	55	0	0	0	0	0	1	17	0	0	18	15	0	1	0	16	89
05:45 PM	0	28	27	0	55	0	0	0	0	0	4	6	0	0	10	15	0	0	0	15	80
Total Volume	0	123	93	0	216	0	0	0	0	0	6	52	0	0	58	59	0	3	0	62	336
% App. Total	0	56.9	43.1	0		0	0	0	0	0	10.3	89.7	0	0		95.2	0	4.8	0		
PHF	.000	.809	.861	.000	.964	.000	.000	.000	.000	.000	.375	.722	.000	.000	.763	.922	.000	.375	.000	.861	.944
Cars	0	122	91	0	213	0	0	0	0	0	6	51	0	0	57	57	0	3	0	60	330
% Cars	0	99.2	97.8	0	98.6	0	0	0	0	0	100	98.1	0	0	98.3	96.6	0	100	0	96.8	98.2
Trucks	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	6
% Trucks	0	0.8	2.2	0	1.4	0	0	0	0	0	0	1.9	0	0	1.7	3.4	0	0	0	3.2	1.8





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #10 SavannahGroveRd@AlligatorRdAM

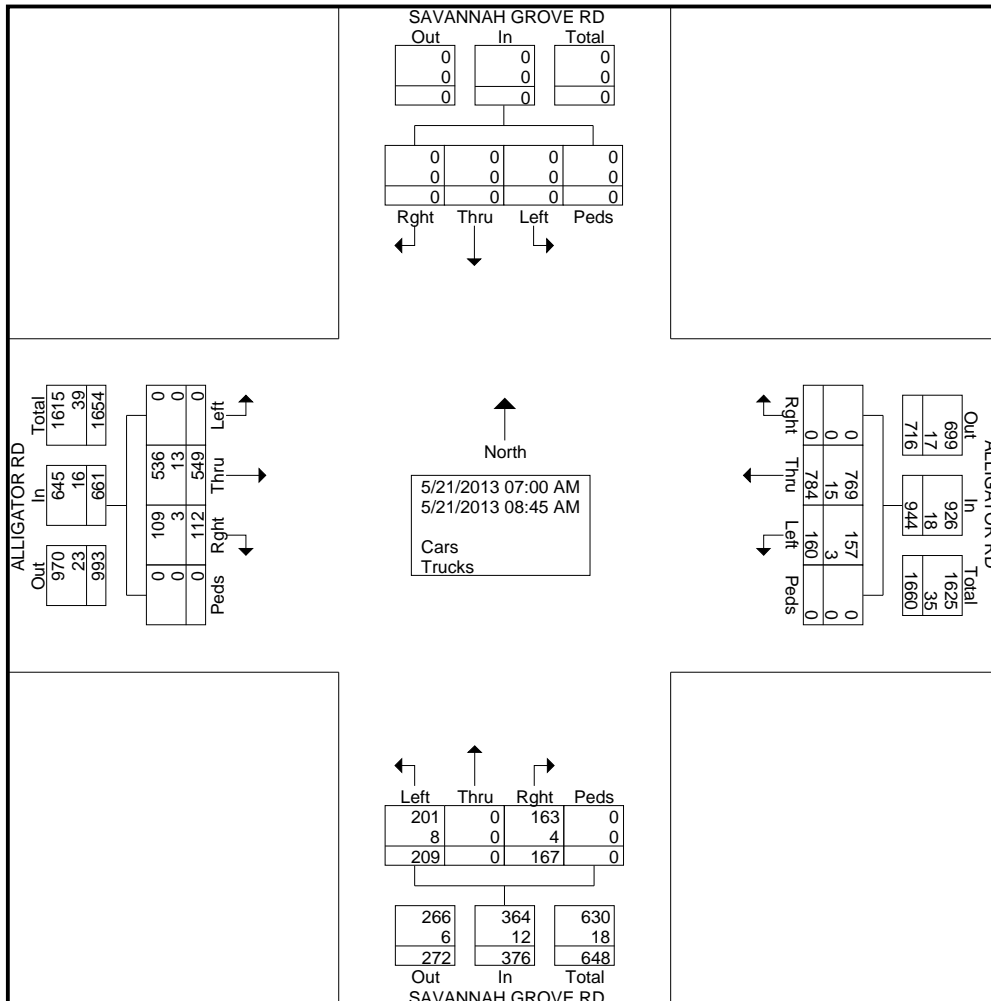
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	SAVANNAH GROVE RD Southbound					ALLIGATOR RD Westbound					SAVANNAH GROVE RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	28	72	0	0	100	25	0	28	0	53	0	70	16	0	86	239
07:15 AM	0	0	0	0	0	46	107	0	0	153	32	0	33	0	65	0	93	34	0	127	345
07:30 AM	0	0	0	0	0	46	131	0	0	177	49	0	43	0	92	0	75	32	0	107	376
07:45 AM	0	0	0	0	0	23	144	0	0	167	53	0	43	0	96	0	75	16	0	91	354
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>597</b>	<b>159</b>	<b>0</b>	<b>147</b>	<b>0</b>	<b>306</b>	<b>0</b>	<b>313</b>	<b>98</b>	<b>0</b>	<b>411</b>	<b>1314</b>
08:00 AM	0	0	0	0	0	5	97	0	0	102	15	0	7	0	22	0	95	5	0	100	224
08:15 AM	0	0	0	0	0	5	92	0	0	97	16	0	7	0	23	0	56	4	0	60	180
08:30 AM	0	0	0	0	0	3	78	0	0	81	10	0	2	0	12	0	47	4	0	51	144
08:45 AM	0	0	0	0	0	4	63	0	0	67	9	0	4	0	13	0	38	1	0	39	119
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>330</b>	<b>0</b>	<b>0</b>	<b>347</b>	<b>50</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>70</b>	<b>0</b>	<b>236</b>	<b>14</b>	<b>0</b>	<b>250</b>	<b>667</b>
Grand Total	0	0	0	0	0	160	784	0	0	944	209	0	167	0	376	0	549	112	0	661	1981
Apprch %	0	0	0	0	0	16.9	83.1	0	0		55.6	0	44.4	0		0	83.1	16.9	0		
Total %	0	0	0	0	0	8.1	39.6	0	0	47.7	10.6	0	8.4	0	19	0	27.7	5.7	0	33.4	
Cars	0	0	0	0	0	157	769	0	0	926	201	0	163	0	364	0	536	109	0	645	1935
% Cars	0	0	0	0	0	98.1	98.1	0	0	98.1	96.2	0	97.6	0	96.8	0	97.6	97.3	0	97.6	97.7
Trucks	0	0	0	0	0	3	15	0	0	18	8	0	4	0	12	0	13	3	0	16	46
% Trucks	0	0	0	0	0	1.9	1.9	0	0	1.9	3.8	0	2.4	0	3.2	0	2.4	2.7	0	2.4	2.3

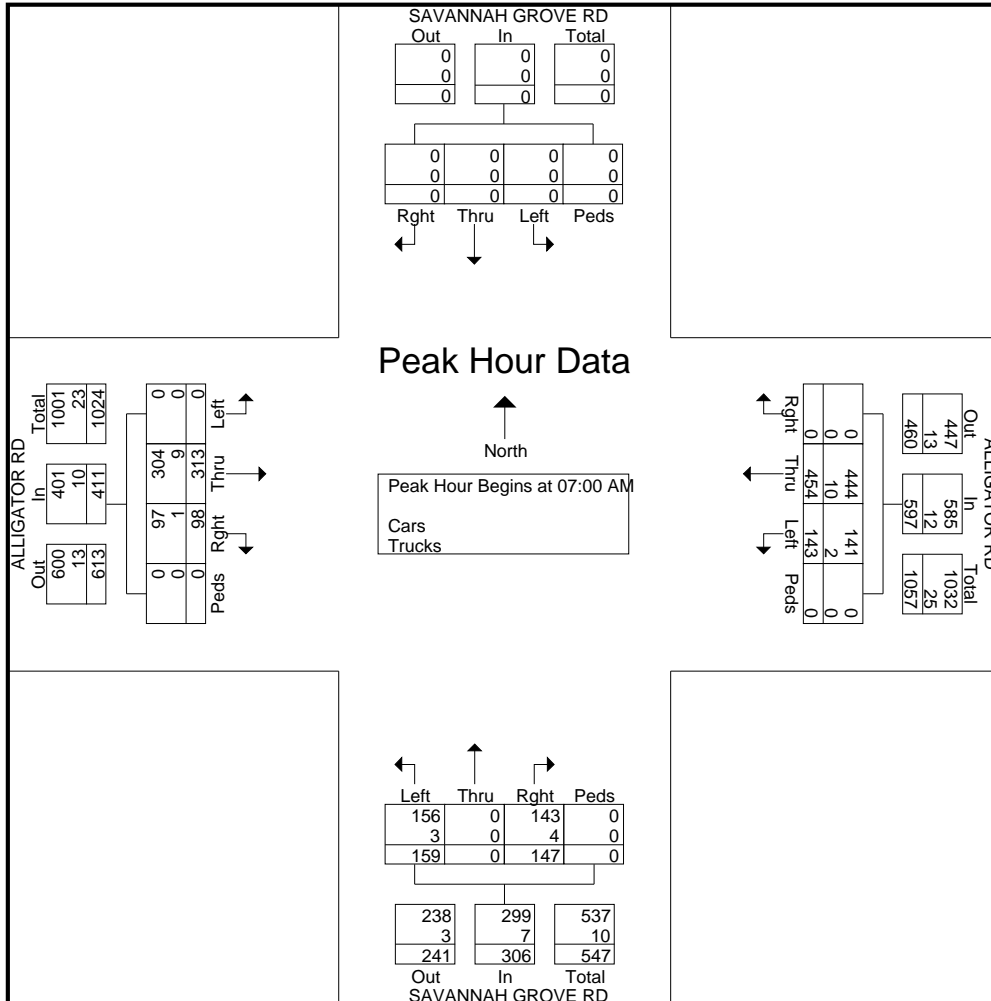


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #10 SavannahGroveRd@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	SAVANNAH GROVE RD Southbound					ALLIGATOR RD Westbound					SAVANNAH GROVE RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	28	72	0	0	100	25	0	28	0	53	0	70	16	0	86	239
07:15 AM	0	0	0	0	0	46	107	0	0	153	32	0	33	0	65	0	93	34	0	127	345
07:30 AM	0	0	0	0	0	46	131	0	0	177	49	0	43	0	92	0	75	32	0	107	376
07:45 AM	0	0	0	0	0	23	144	0	0	167	53	0	43	0	96	0	75	16	0	91	354
Total Volume	0	0	0	0	0	143	454	0	0	597	159	0	147	0	306	0	313	98	0	411	1314
% App. Total	0	0	0	0	0	24	76	0	0	2.0	52	0	48	0	2.0	0	76.2	23.8	0	2.0	
PHF	.000	.000	.000	.000	.000	.777	.788	.000	.000	.843	.750	.000	.855	.000	.797	.000	.841	.721	.000	.809	.874
Cars	0	0	0	0	0	141	444	0	0	585	156	0	143	0	299	0	304	97	0	401	1285
% Cars	0	0	0	0	0	98.6	97.8	0	0	98.0	98.1	0	97.3	0	97.7	0	97.1	99.0	0	97.6	97.8
Trucks	0	0	0	0	0	2	10	0	0	12	3	0	4	0	7	0	9	1	0	10	29
% Trucks	0	0	0	0	0	1.4	2.2	0	0	2.0	1.9	0	2.7	0	2.3	0	2.9	1.0	0	2.4	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #10 SavannahGroveRd@AlligatorRdPM

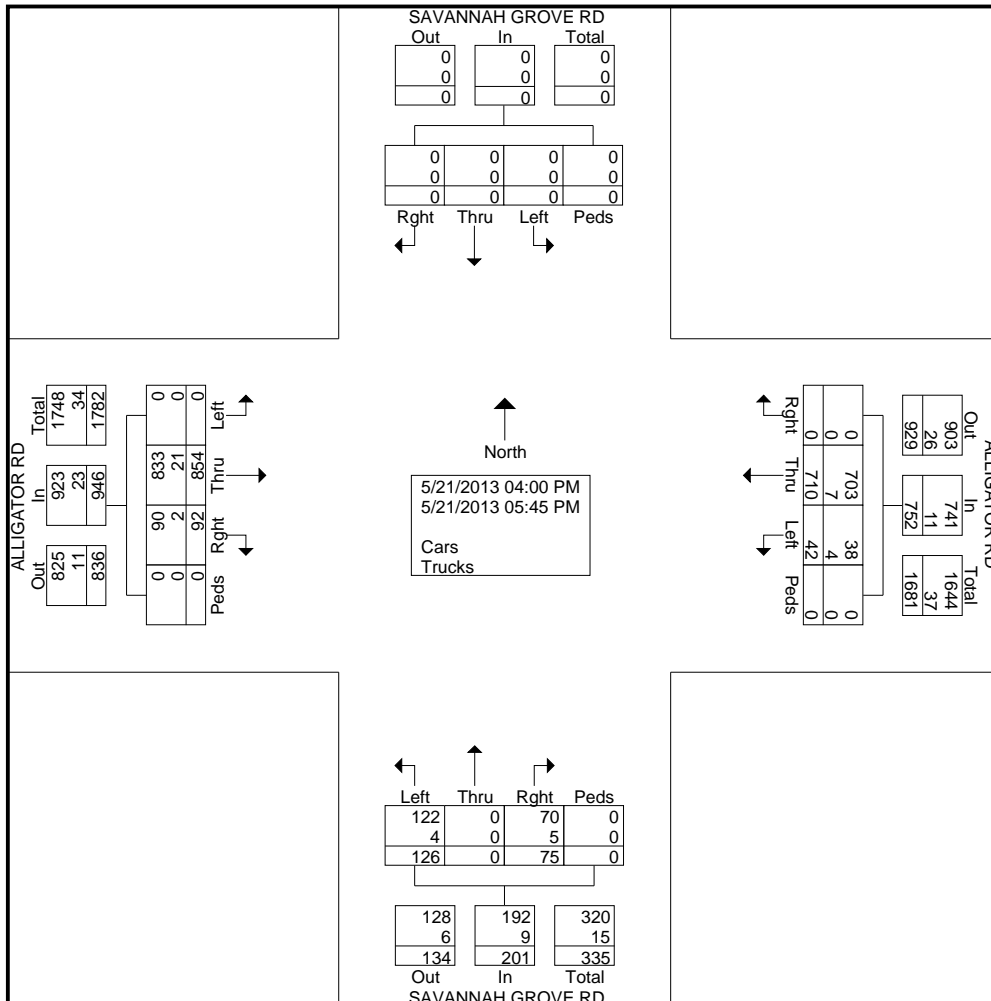
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	SAVANNAH GROVE RD Southbound					ALLIGATOR RD Westbound					SAVANNAH GROVE RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	67	0	0	67	12	0	4	0	16	0	85	18	0	103	186
04:15 PM	0	0	0	0	0	0	75	0	0	75	41	0	22	0	63	0	80	7	0	87	225
04:30 PM	0	0	0	0	0	2	81	0	0	83	14	0	13	0	27	0	112	9	0	121	231
04:45 PM	0	0	0	0	0	0	77	0	0	77	7	0	5	0	12	0	90	9	0	99	188
Total	0	0	0	0	0	2	300	0	0	302	74	0	44	0	118	0	367	43	0	410	830
05:00 PM	0	0	0	0	0	11	106	0	0	117	20	0	6	0	26	0	100	8	0	108	251
05:15 PM	0	0	0	0	0	14	81	0	0	95	7	0	1	0	8	0	131	11	0	142	245
05:30 PM	0	0	0	0	0	6	112	0	0	118	10	0	10	0	20	0	124	19	0	143	281
05:45 PM	0	0	0	0	0	9	111	0	0	120	15	0	14	0	29	0	132	11	0	143	292
Total	0	0	0	0	0	40	410	0	0	450	52	0	31	0	83	0	487	49	0	536	1069
Grand Total	0	0	0	0	0	42	710	0	0	752	126	0	75	0	201	0	854	92	0	946	1899
Apprch %	0	0	0	0		5.6	94.4	0	0		62.7	0	37.3	0		0	90.3	9.7	0		
Total %	0	0	0	0		2.2	37.4	0	0	39.6	6.6	0	3.9	0	10.6	0	45	4.8	0	49.8	
Cars	0	0	0	0		38	703	0	0	741	122	0	70	0	192	0	833	90	0	923	1856
% Cars	0	0	0	0		90.5	99	0	0	98.5	96.8	0	93.3	0	95.5	0	97.5	97.8	0	97.6	97.7
Trucks	0	0	0	0		4	7	0	0	11	4	0	5	0	9	0	21	2	0	23	43
% Trucks	0	0	0	0		9.5	1	0	0	1.5	3.2	0	6.7	0	4.5	0	2.5	2.2	0	2.4	2.3

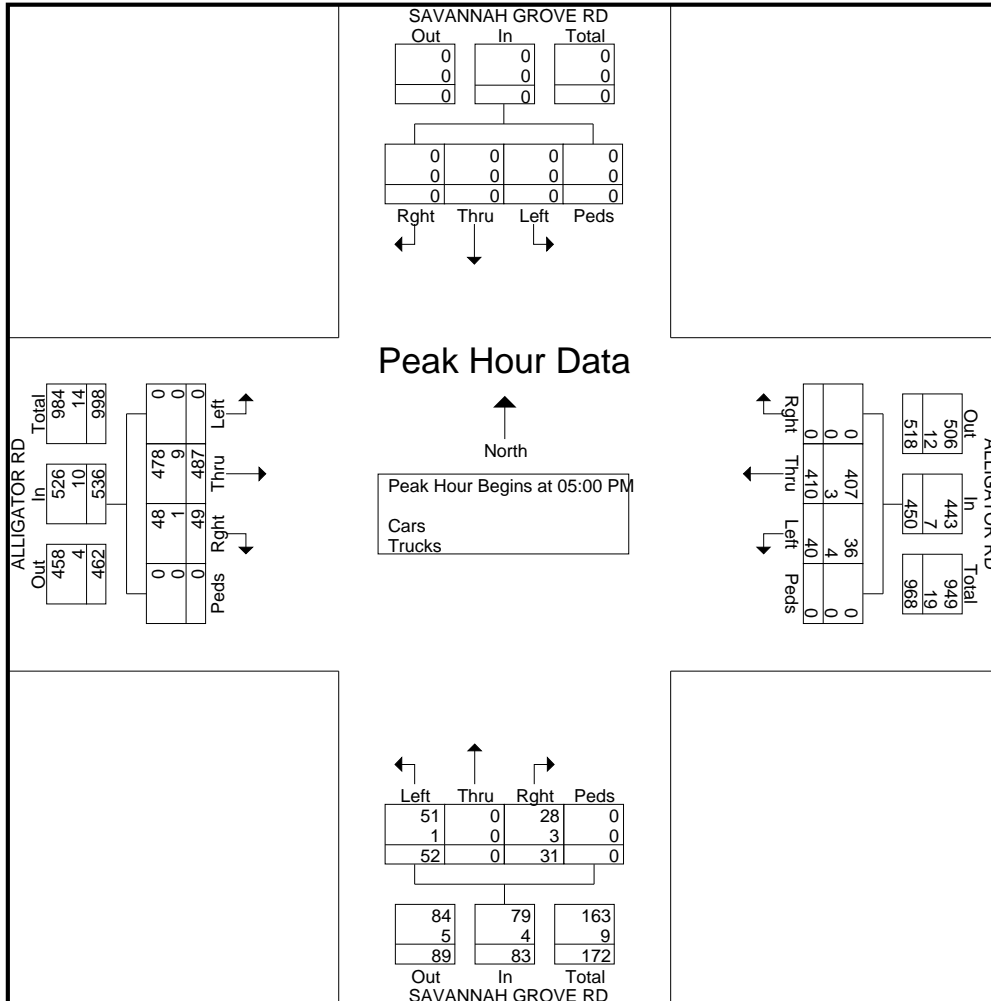


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #10 SavannahGroveRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	SAVANNAH GROVE RD Southbound					ALLIGATOR RD Westbound					SAVANNAH GROVE RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	11	106	0	0	117	20	0	6	0	26	0	100	8	0	108	251
05:15 PM	0	0	0	0	0	14	81	0	0	95	7	0	1	0	8	0	131	11	0	142	245
05:30 PM	0	0	0	0	0	6	112	0	0	118	10	0	10	0	20	0	124	19	0	143	281
05:45 PM	0	0	0	0	0	9	111	0	0	120	15	0	14	0	29	0	132	11	0	143	292
Total Volume	0	0	0	0	0	40	410	0	0	450	52	0	31	0	83	0	487	49	0	536	1069
% App. Total	0	0	0	0	0	8.9	91.1	0	0	0	62.7	0	37.3	0	0	0	90.9	9.1	0	0	0
PHF	.000	.000	.000	.000	.000	.714	.915	.000	.000	.938	.650	.000	.554	.000	.716	.000	.922	.645	.000	.937	.915
Cars	0	0	0	0	0	36	407	0	0	443	51	0	28	0	79	0	478	48	0	526	1048
% Cars	0	0	0	0	0	90.0	99.3	0	0	98.4	98.1	0	90.3	0	95.2	0	98.2	98.0	0	98.1	98.0
Trucks	0	0	0	0	0	4	3	0	0	7	1	0	3	0	4	0	9	1	0	10	21
% Trucks	0	0	0	0	0	10.0	0.7	0	0	1.6	1.9	0	9.7	0	4.8	0	1.8	2.0	0	1.9	2.0



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #11 GardenGateWay@AlligatorRdAM

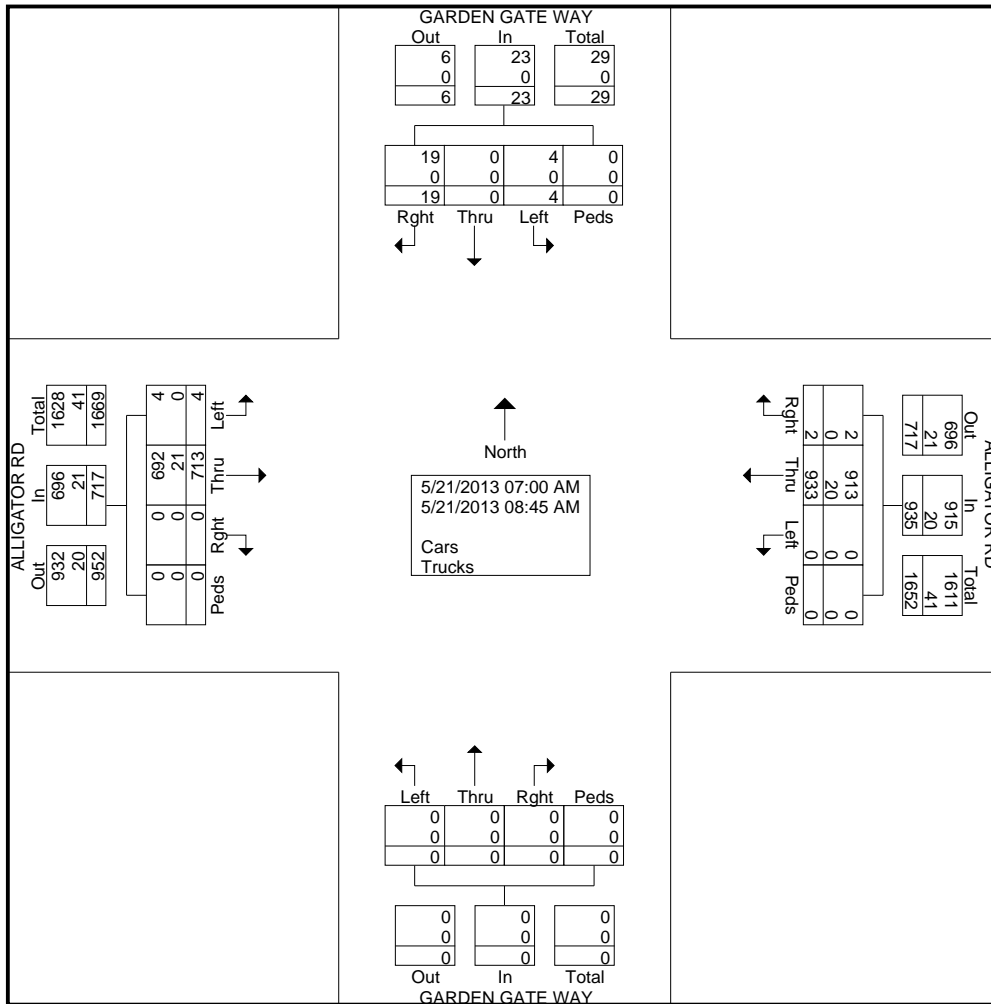
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	GARDEN GATE WAY Southbound					ALLIGATOR RD Westbound					GARDEN GATE WAY Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	2	0	2	0	106	0	0	106	0	0	0	0	0	0	95	0	0	95	203
07:15 AM	1	0	4	0	5	0	145	0	0	145	0	0	0	0	0	1	126	0	0	127	277
07:30 AM	1	0	4	0	5	0	188	1	0	189	0	0	0	0	0	2	116	0	0	118	312
07:45 AM	1	0	3	0	4	0	152	0	0	152	0	0	0	0	0	1	121	0	0	122	278
<b>Total</b>	<b>3</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>591</b>	<b>1</b>	<b>0</b>	<b>592</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>458</b>	<b>0</b>	<b>0</b>	<b>462</b>	<b>1070</b>
08:00 AM	0	0	1	0	1	0	100	0	0	100	0	0	0	0	0	0	102	0	0	102	203
08:15 AM	1	0	1	0	2	0	94	0	0	94	0	0	0	0	0	0	62	0	0	62	158
08:30 AM	0	0	3	0	3	0	81	1	0	82	0	0	0	0	0	0	49	0	0	49	134
08:45 AM	0	0	1	0	1	0	67	0	0	67	0	0	0	0	0	0	42	0	0	42	110
<b>Total</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>342</b>	<b>1</b>	<b>0</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>255</b>	<b>0</b>	<b>0</b>	<b>255</b>	<b>605</b>
<b>Grand Total</b>	<b>4</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>933</b>	<b>2</b>	<b>0</b>	<b>935</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>713</b>	<b>0</b>	<b>0</b>	<b>717</b>	<b>1675</b>
Apprch %	17.4	0	82.6	0		0	99.8	0.2	0		0	0	0	0		0.6	99.4	0	0		
Total %	0.2	0	1.1	0	1.4	0	55.7	0.1	0	55.8	0	0	0	0	0	0.2	42.6	0	0	42.8	
Cars	4	0	19	0	23	0	913	2	0	915	0	0	0	0	0	4	692	0	0	696	1634
% Cars	100	0	100	0	100	0	97.9	100	0	97.9	0	0	0	0	0	100	97.1	0	0	97.1	97.6
Trucks	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	21	0	0	21	41
% Trucks	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	0	2.9	0	0	2.9	2.4

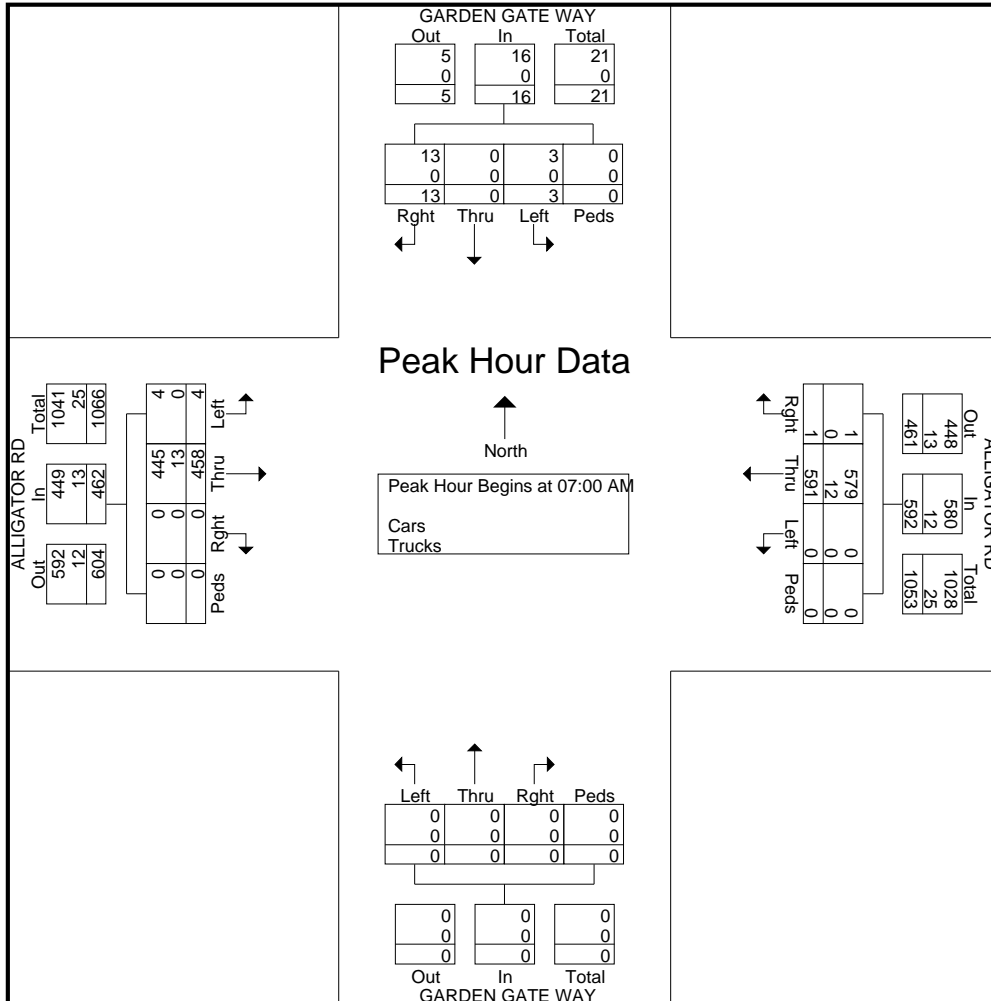


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #11 GardenGateWay@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	GARDEN GATE WAY Southbound					ALLIGATOR RD Westbound					GARDEN GATE WAY Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	2	0	2	0	106	0	0	106	0	0	0	0	0	0	95	0	0	95	203
07:15 AM	1	0	4	0	5	0	145	0	0	145	0	0	0	0	0	1	126	0	0	127	277
07:30 AM	1	0	4	0	5	0	188	1	0	189	0	0	0	0	0	2	116	0	0	118	312
07:45 AM	1	0	3	0	4	0	152	0	0	152	0	0	0	0	0	1	121	0	0	122	278
Total Volume	3	0	13	0	16	0	591	1	0	592	0	0	0	0	0	4	458	0	0	462	1070
% App. Total	18.8	0	81.2	0		0	99.8	0.2	0		0	0	0	0	0	0.9	99.1	0	0		
PHF	.750	.000	.813	.000	.800	.000	.786	.250	.000	.783	.000	.000	.000	.000	.000	.500	.909	.000	.000	.909	.857
Cars	3	0	13	0	16	0	579	1	0	580	0	0	0	0	0	4	445	0	0	449	1045
% Cars	100	0	100	0	100	0	98.0	100	0	98.0	0	0	0	0	0	100	97.2	0	0	97.2	97.7
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	13	0	0	13	25
% Trucks	0	0	0	0	0	0	2.0	0	0	2.0	0	0	0	0	0	0	2.8	0	0	2.8	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #11 GardenGateWay@AlligatorRdPM

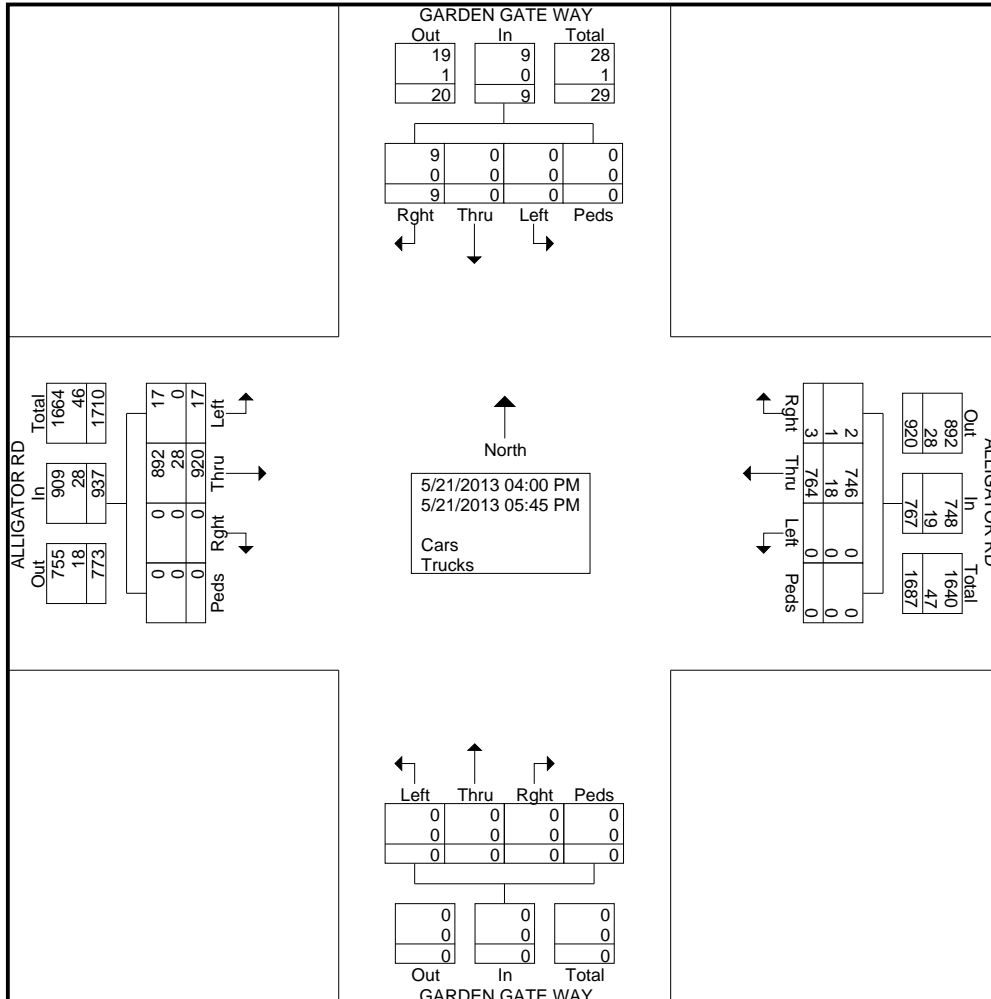
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	GARDEN GATE WAY Southbound					ALLIGATOR RD Westbound					GARDEN GATE WAY Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	71	1	0	72	0	0	0	0	0	1	84	0	0	85	157
04:15 PM	0	0	3	0	3	0	76	0	0	76	0	0	0	0	0	3	104	0	0	107	186
04:30 PM	0	0	3	0	3	0	82	0	0	82	0	0	0	0	0	0	123	0	0	123	208
04:45 PM	0	0	0	0	0	0	88	0	0	88	0	0	0	0	0	1	98	0	0	99	187
Total	0	0	6	0	6	0	317	1	0	318	0	0	0	0	0	5	409	0	0	414	738
05:00 PM	0	0	0	0	0	0	118	0	0	118	0	0	0	0	0	0	107	0	0	107	225
05:15 PM	0	0	2	0	2	0	92	0	0	92	0	0	0	0	0	4	131	0	0	135	229
05:30 PM	0	0	1	0	1	0	118	1	0	119	0	0	0	0	0	3	134	0	0	137	257
05:45 PM	0	0	0	0	0	0	119	1	0	120	0	0	0	0	0	5	139	0	0	144	264
Total	0	0	3	0	3	0	447	2	0	449	0	0	0	0	0	12	511	0	0	523	975
Grand Total	0	0	9	0	9	0	764	3	0	767	0	0	0	0	0	17	920	0	0	937	1713
Apprch %	0	0	100	0		0	99.6	0.4	0		0	0	0	0		1.8	98.2	0	0		
Total %	0	0	0.5	0	0.5	0	44.6	0.2	0	44.8	0	0	0	0	0	1	53.7	0	0	54.7	
Cars	0	0	9	0	9	0	746	2	0	748	0	0	0	0	0	17	892	0	0	909	1666
% Cars	0	0	100	0	100	0	97.6	66.7	0	97.5	0	0	0	0	0	100	97	0	0	97	97.3
Trucks	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	28	0	0	28	47
% Trucks	0	0	0	0	0	0	2.4	33.3	0	2.5	0	0	0	0	0	0	3	0	0	3	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

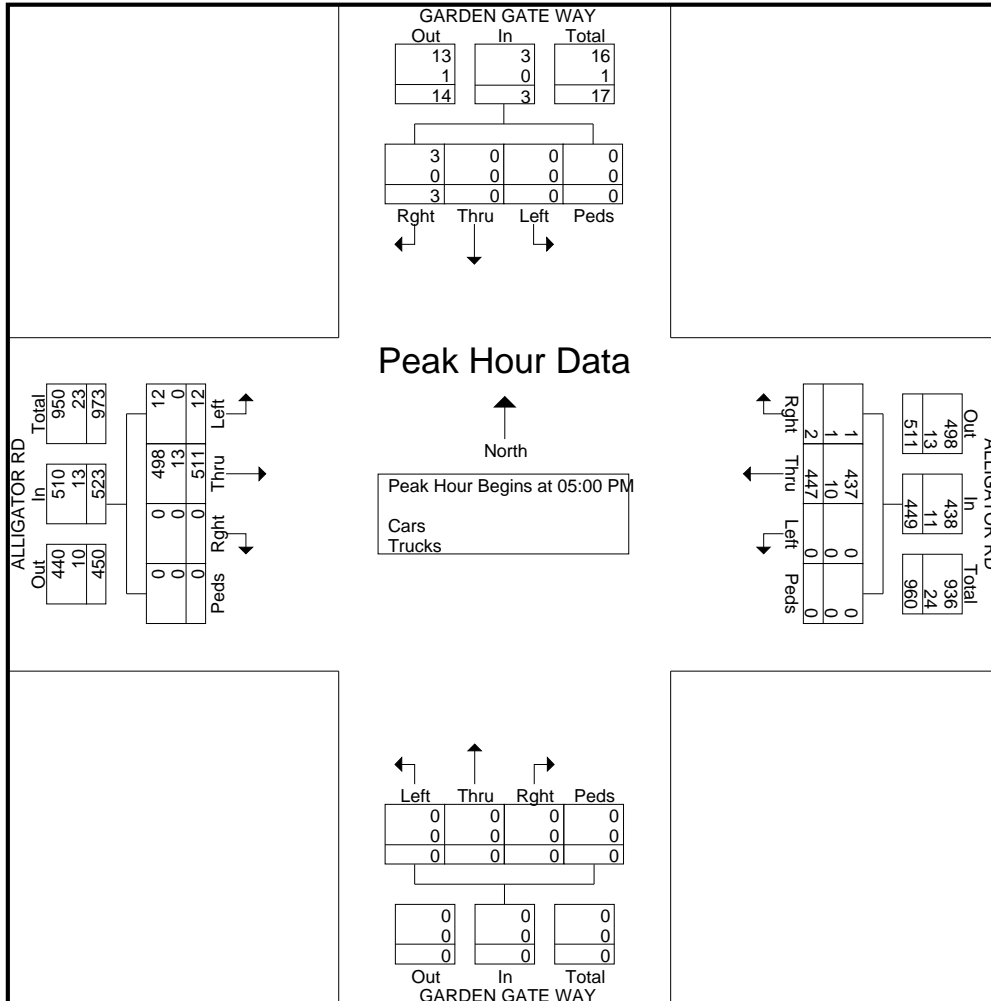
File Name : #11 GardenGateWay@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	GARDEN GATE WAY Southbound					ALLIGATOR RD Westbound					GARDEN GATE WAY Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	118	0	0	118	0	0	0	0	0	0	107	0	0	107	225
05:15 PM	0	0	2	0	2	0	92	0	0	92	0	0	0	0	0	4	131	0	0	135	229
05:30 PM	0	0	1	0	1	0	118	1	0	119	0	0	0	0	0	3	134	0	0	137	257
05:45 PM	0	0	0	0	0	0	119	1	0	120	0	0	0	0	0	5	139	0	0	144	264
Total Volume	0	0	3	0	3	0	447	2	0	449	0	0	0	0	0	12	511	0	0	523	975
% App. Total	0	0	100	0	0	0	99.6	0.4	0	0	0	0	0	0	0	2.3	97.7	0	0	0	0
PHF	.000	.000	.375	.000	.375	.000	.939	.500	.000	.935	.000	.000	.000	.000	.000	.600	.919	.000	.000	.908	.923
Cars	0	0	3	0	3	0	437	1	0	438	0	0	0	0	0	12	498	0	0	510	951
% Cars	0	0	100	0	100	0	97.8	50.0	0	97.6	0	0	0	0	0	100	97.5	0	0	97.5	97.5
Trucks	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	13	0	0	13	24
% Trucks	0	0	0	0	0	0	2.2	50.0	0	2.4	0	0	0	0	0	0	2.5	0	0	2.5	2.5





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #12 WomakGardenRd@AlligatorRdAM

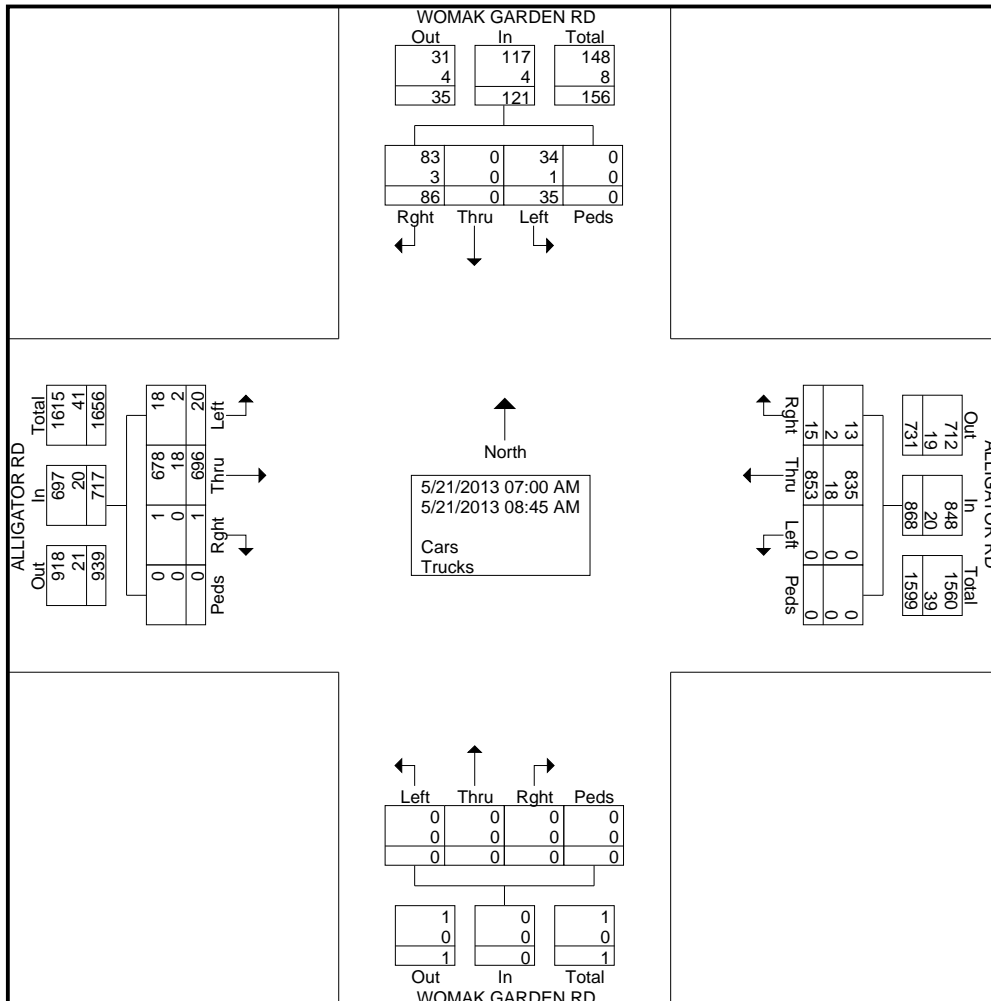
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOMAK GARDEN RD Southbound					ALLIGATOR RD Westbound					WOMAK GARDEN RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	7	0	9	0	16	0	92	0	0	92	0	0	0	0	0	1	96	0	0	97	205
07:15 AM	9	0	14	0	23	0	134	2	0	136	0	0	0	0	0	0	124	0	0	124	283
07:30 AM	5	0	16	0	21	0	166	2	0	168	0	0	0	0	0	4	113	0	0	117	306
07:45 AM	4	0	16	0	20	0	139	2	0	141	0	0	0	0	0	2	117	1	0	120	281
Total	25	0	55	0	80	0	531	6	0	537	0	0	0	0	0	7	450	1	0	458	1075
08:00 AM	6	0	11	0	17	0	91	4	0	95	0	0	0	0	0	4	102	0	0	106	218
08:15 AM	2	0	10	0	12	0	91	1	0	92	0	0	0	0	0	5	60	0	0	65	169
08:30 AM	1	0	5	0	6	0	76	4	0	80	0	0	0	0	0	2	46	0	0	48	134
08:45 AM	1	0	5	0	6	0	64	0	0	64	0	0	0	0	0	2	38	0	0	40	110
Total	10	0	31	0	41	0	322	9	0	331	0	0	0	0	0	13	246	0	0	259	631
Grand Total	35	0	86	0	121	0	853	15	0	868	0	0	0	0	0	20	696	1	0	717	1706
Apprch %	28.9	0	71.1	0		0	98.3	1.7	0		0	0	0	0		2.8	97.1	0.1	0		
Total %	2.1	0	5	0	7.1	0	50	0.9	0	50.9	0	0	0	0	0	1.2	40.8	0.1	0	42	
Cars	34	0	83	0	117	0	835	13	0	848	0	0	0	0	0	18	678	1	0	697	1662
% Cars	97.1	0	96.5	0	96.7	0	97.9	86.7	0	97.7	0	0	0	0	0	90	97.4	100	0	97.2	97.4
Trucks	1	0	3	0	4	0	18	2	0	20	0	0	0	0	0	2	18	0	0	20	44
% Trucks	2.9	0	3.5	0	3.3	0	2.1	13.3	0	2.3	0	0	0	0	0	10	2.6	0	0	2.8	2.6

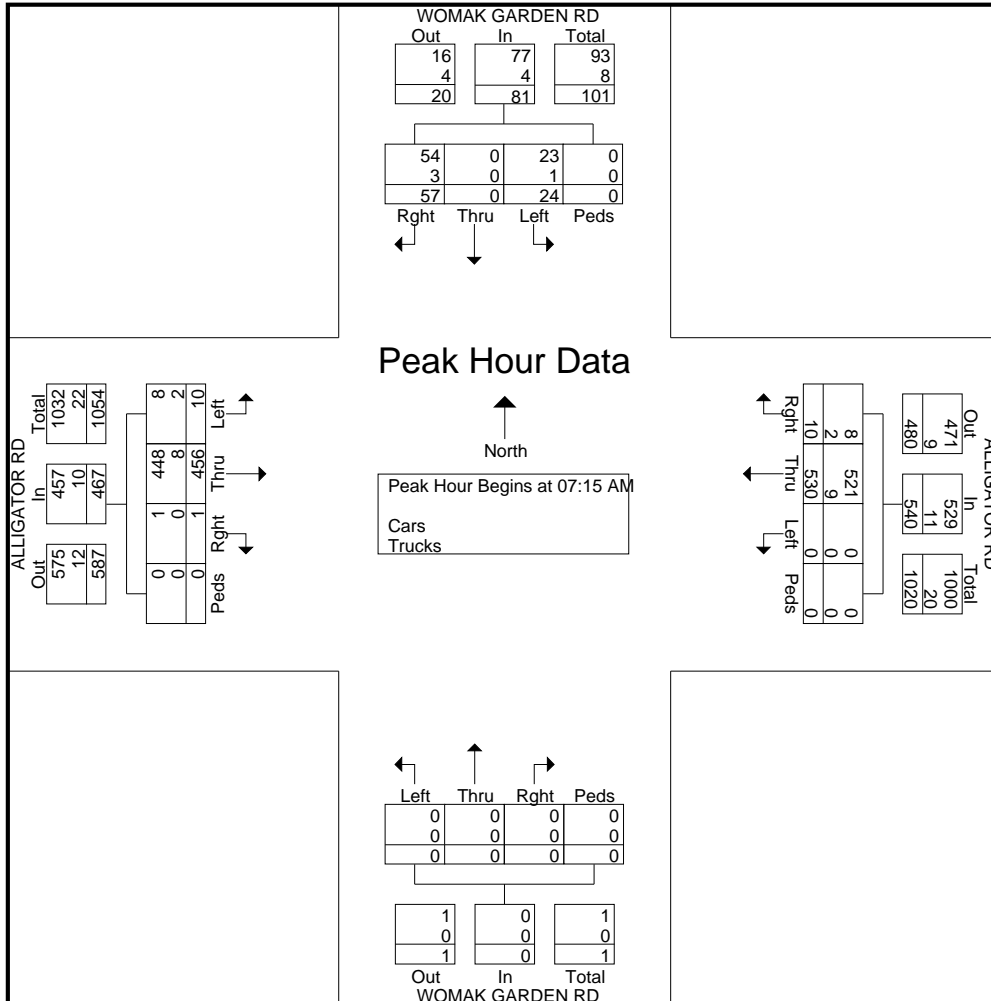


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #12 WomakGardenRd@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	WOMAK GARDEN RD Southbound					ALLIGATOR RD Westbound					WOMAK GARDEN RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	9	0	14	0	23	0	134	2	0	136	0	0	0	0	0	0	124	0	0	124	283
07:30 AM	5	0	16	0	21	0	166	2	0	168	0	0	0	0	0	4	113	0	0	117	306
07:45 AM	4	0	16	0	20	0	139	2	0	141	0	0	0	0	0	2	117	1	0	120	281
08:00 AM	6	0	11	0	17	0	91	4	0	95	0	0	0	0	0	4	102	0	0	106	218
Total Volume	24	0	57	0	81	0	530	10	0	540	0	0	0	0	0	10	456	1	0	467	1088
% App. Total	29.6	0	70.4	0		0	98.1	1.9	0		0	0	0	0		2.1	97.6	0.2	0		
PHF	.667	.000	.891	.000	.880	.000	.798	.625	.000	.804	.000	.000	.000	.000	.000	.625	.919	.250	.000	.942	.889
Cars	23	0	54	0	77	0	521	8	0	529	0	0	0	0	0	8	448	1	0	457	1063
% Cars	95.8	0	94.7	0	95.1	0	98.3	80.0	0	98.0	0	0	0	0	0	80.0	98.2	100	0	97.9	97.7
Trucks	1	0	3	0	4	0	9	2	0	11	0	0	0	0	0	2	8	0	0	10	25
% Trucks	4.2	0	5.3	0	4.9	0	1.7	20.0	0	2.0	0	0	0	0	0	20.0	1.8	0	0	2.1	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #12 WomakGardenRd@AlligatorRdPM

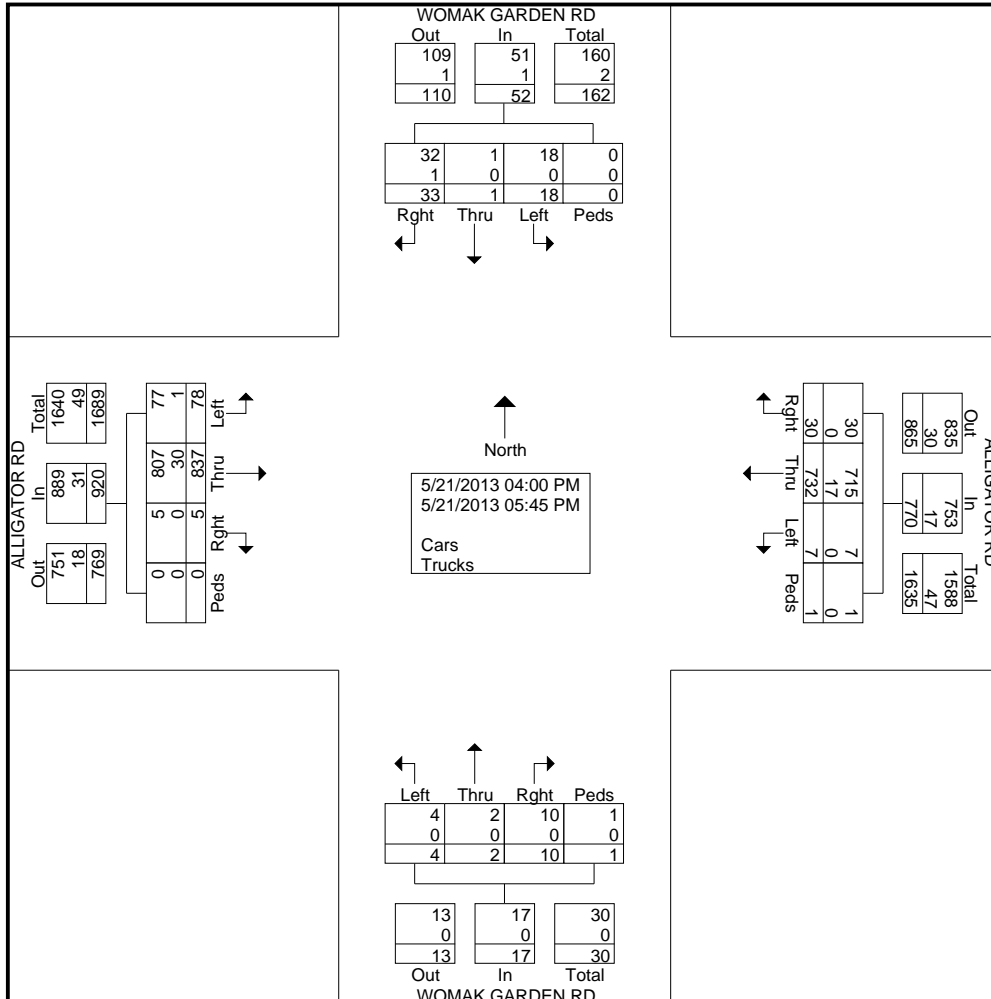
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOMAK GARDEN RD Southbound					ALLIGATOR RD Westbound					WOMAK GARDEN RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	2	0	3	0	5	3	72	4	1	80	0	2	2	1	5	10	77	1	0	88	178
04:15 PM	4	0	3	0	7	1	75	3	0	79	0	0	0	0	0	12	90	1	0	103	189
04:30 PM	1	0	3	0	4	0	75	2	0	77	0	0	4	0	4	10	117	0	0	127	212
04:45 PM	2	0	4	0	6	0	83	4	0	87	1	0	0	0	1	4	82	1	0	87	181
Total	9	0	13	0	22	4	305	13	1	323	1	2	6	1	10	36	366	3	0	405	760
05:00 PM	2	1	8	0	11	1	111	4	0	116	1	0	2	0	3	9	101	1	0	111	241
05:15 PM	2	0	3	0	5	0	85	4	0	89	1	0	1	0	2	16	120	1	0	137	233
05:30 PM	3	0	2	0	5	2	118	5	0	125	1	0	1	0	2	6	121	0	0	127	259
05:45 PM	2	0	7	0	9	0	113	4	0	117	0	0	0	0	0	11	129	0	0	140	266
Total	9	1	20	0	30	3	427	17	0	447	3	0	4	0	7	42	471	2	0	515	999
Grand Total	18	1	33	0	52	7	732	30	1	770	4	2	10	1	17	78	837	5	0	920	1759
Apprch %	34.6	1.9	63.5	0		0.9	95.1	3.9	0.1		23.5	11.8	58.8	5.9		8.5	91	0.5	0		
Total %	1	0.1	1.9	0	3	0.4	41.6	1.7	0.1	43.8	0.2	0.1	0.6	0.1	1	4.4	47.6	0.3	0	52.3	
Cars	18	1	32	0	51	7	715	30	1	753	4	2	10	1	17	77	807	5	0	889	1710
% Cars	100	100	97	0	98.1	100	97.7	100	100	97.8	100	100	100	100	100	98.7	96.4	100	0	96.6	97.2
Trucks	0	0	1	0	1	0	17	0	0	17	0	0	0	0	0	1	30	0	0	31	49
% Trucks	0	0	3	0	1.9	0	2.3	0	0	2.2	0	0	0	0	0	1.3	3.6	0	0	3.4	2.8



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

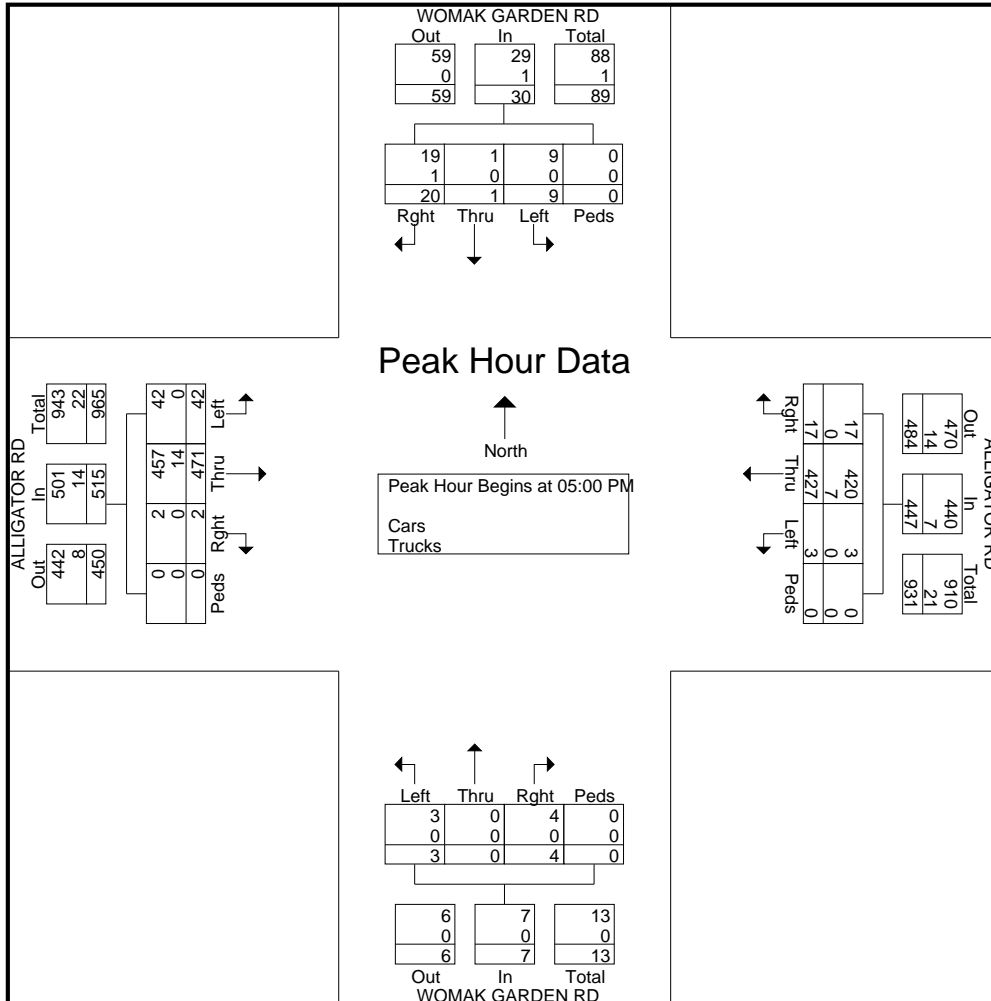
File Name : #12 WomakGardenRd@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WOMAK GARDEN RD Southbound					ALLIGATOR RD Westbound					WOMAK GARDEN RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	1	8	0	11	1	111	4	0	116	1	0	2	0	3	9	101	1	0	111	241
05:15 PM	2	0	3	0	5	0	85	4	0	89	1	0	1	0	2	16	120	1	0	137	233
05:30 PM	3	0	2	0	5	2	118	5	0	125	1	0	1	0	2	6	121	0	0	127	259
05:45 PM	2	0	7	0	9	0	113	4	0	117	0	0	0	0	0	11	129	0	0	140	266
Total Volume	9	1	20	0	30	3	427	17	0	447	3	0	4	0	7	42	471	2	0	515	999
% App. Total	30	3.3	66.7	0		0.7	95.5	3.8	0		42.9	0	57.1	0		8.2	91.5	0.4	0		
PHF	.750	.250	.625	.000	.682	.375	.905	.850	.000	.894	.750	.000	.500	.000	.583	.656	.913	.500	.000	.920	.939
Cars	9	1	19	0	29	3	420	17	0	440	3	0	4	0	7	42	457	2	0	501	977
% Cars	100	100	95.0	0	96.7	100	98.4	100	0	98.4	100	0	100	0	100	100	97.0	100	0	97.3	97.8
Trucks	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	0	14	0	0	14	22
% Trucks	0	0	5.0	0	3.3	0	1.6	0	0	1.6	0	0	0	0	0	0	3.0	0	0	2.7	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #13 CommunityLn@AlligatorRdAM

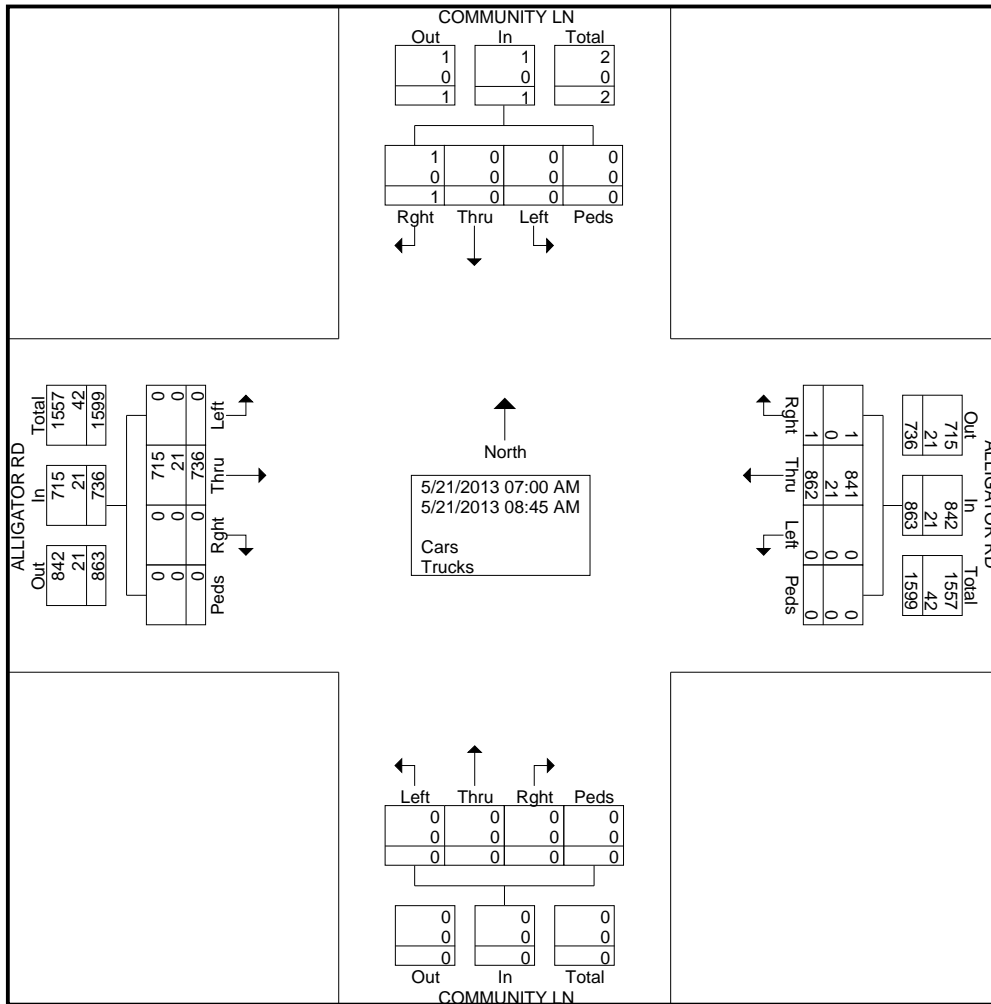
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	COMMUNITY LN Southbound					ALLIGATOR RD Westbound					COMMUNITY LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	99	0	0	99	0	0	0	0	0	0	105	0	0	105	204
07:15 AM	0	0	1	0	1	0	128	1	0	129	0	0	0	0	0	0	133	0	0	133	263
07:30 AM	0	0	0	0	0	0	173	0	0	173	0	0	0	0	0	0	117	0	0	117	290
07:45 AM	0	0	0	0	0	0	138	0	0	138	0	0	0	0	0	0	120	0	0	120	258
Total	0	0	1	0	1	0	538	1	0	539	0	0	0	0	0	0	475	0	0	475	1015
08:00 AM	0	0	0	0	0	0	91	0	0	91	0	0	0	0	0	0	111	0	0	111	202
08:15 AM	0	0	0	0	0	0	85	0	0	85	0	0	0	0	0	0	62	0	0	62	147
08:30 AM	0	0	0	0	0	0	80	0	0	80	0	0	0	0	0	0	48	0	0	48	128
08:45 AM	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	0	40	0	0	40	108
Total	0	0	0	0	0	0	324	0	0	324	0	0	0	0	0	0	261	0	0	261	585
Grand Total	0	0	1	0	1	0	862	1	0	863	0	0	0	0	0	0	736	0	0	736	1600
Apprch %	0	0	100	0		0	99.9	0.1	0		0	0	0	0		0	100	0	0		
Total %	0	0	0.1	0	0.1	0	53.9	0.1	0	53.9	0	0	0	0	0	0	46	0	0	46	
Cars	0	0	1	0	1	0	841	1	0	842	0	0	0	0	0	0	715	0	0	715	1558
% Cars	0	0	100	0	100	0	97.6	100	0	97.6	0	0	0	0	0	0	97.1	0	0	97.1	97.4
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	21	0	0	21	42
% Trucks	0	0	0	0	0	0	2.4	0	0	2.4	0	0	0	0	0	0	2.9	0	0	2.9	2.6

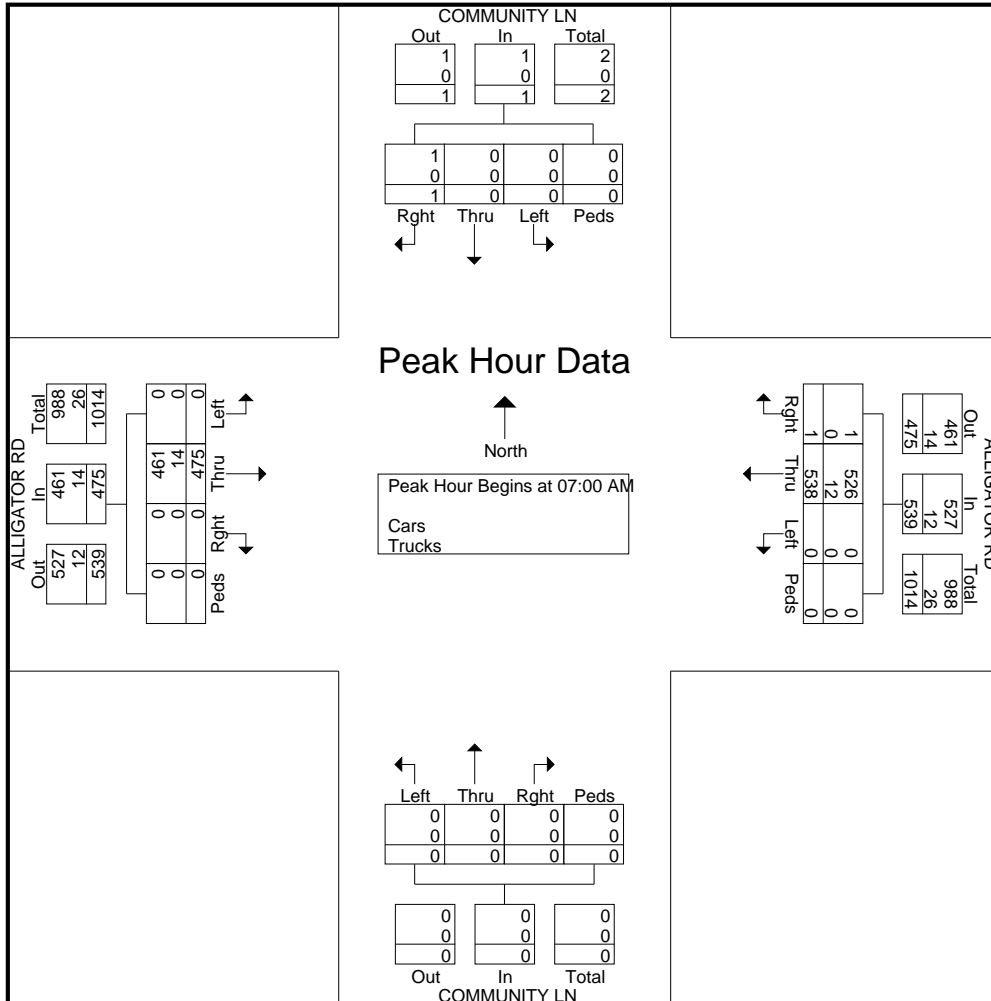


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #13 CommunityLn@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	COMMUNITY LN Southbound					ALLIGATOR RD Westbound					COMMUNITY LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	99	0	0	99	0	0	0	0	0	0	105	0	0	105	204
07:15 AM	0	0	1	0	1	0	128	1	0	129	0	0	0	0	0	0	133	0	0	133	263
07:30 AM	0	0	0	0	0	0	173	0	0	173	0	0	0	0	0	0	117	0	0	117	290
07:45 AM	0	0	0	0	0	0	138	0	0	138	0	0	0	0	0	0	120	0	0	120	258
Total Volume	0	0	1	0	1	0	538	1	0	539	0	0	0	0	0	0	475	0	0	475	1015
% App. Total	0	0	100	0	0	0	99.8	0.2	0	0	0	0	0	0	0	0	100	0	0	0	0
PHF	.000	.000	.250	.000	.250	.000	.777	.250	.000	.779	.000	.000	.000	.000	.000	.000	.893	.000	.000	.893	.875
Cars	0	0	1	0	1	0	526	1	0	527	0	0	0	0	0	0	461	0	0	461	989
% Cars	0	0	100	0	100	0	97.8	100	0	97.8	0	0	0	0	0	0	97.1	0	0	97.1	97.4
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	14	0	0	14	26
% Trucks	0	0	0	0	0	0	2.2	0	0	2.2	0	0	0	0	0	0	2.9	0	0	2.9	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #13 CommunityLn@AlligatorRdPM

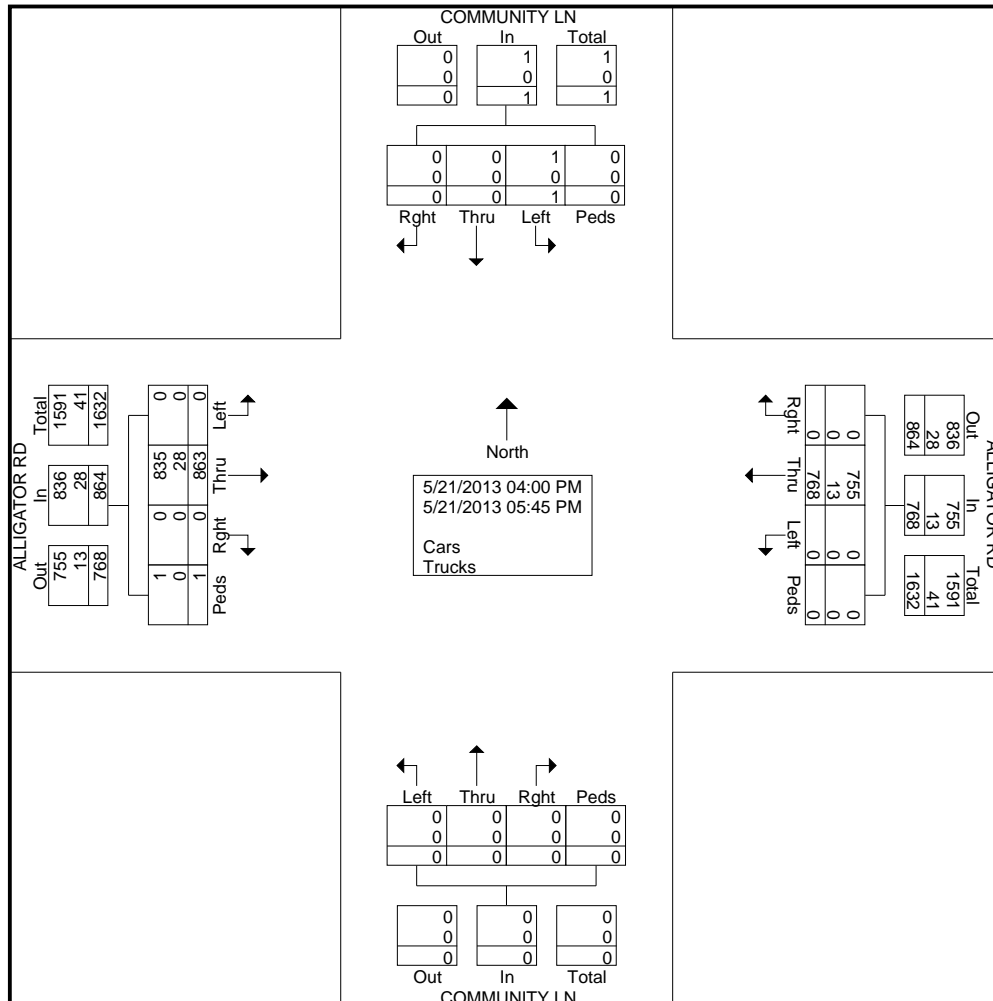
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	COMMUNITY LN Southbound					ALLIGATOR RD Westbound					COMMUNITY LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	73	0	0	73	0	0	0	0	0	0	80	0	0	80	153
04:15 PM	0	0	0	0	0	0	82	0	0	82	0	0	0	0	0	0	91	0	0	91	173
04:30 PM	0	0	0	0	0	0	77	0	0	77	0	0	0	0	0	0	124	0	0	124	201
04:45 PM	0	0	0	0	0	0	90	0	0	90	0	0	0	0	0	0	83	0	0	83	173
Total	0	0	0	0	0	0	322	0	0	322	0	0	0	0	0	0	378	0	0	378	700
05:00 PM	1	0	0	0	1	0	114	0	0	114	0	0	0	0	0	0	108	0	0	108	223
05:15 PM	0	0	0	0	0	0	97	0	0	97	0	0	0	0	0	0	124	0	1	125	222
05:30 PM	0	0	0	0	0	0	116	0	0	116	0	0	0	0	0	0	124	0	0	124	240
05:45 PM	0	0	0	0	0	0	119	0	0	119	0	0	0	0	0	0	129	0	0	129	248
Total	1	0	0	0	1	0	446	0	0	446	0	0	0	0	0	0	485	0	1	486	933
Grand Total	1	0	0	0	1	0	768	0	0	768	0	0	0	0	0	0	863	0	1	864	1633
Apprch %	100	0	0	0		0	100	0	0		0	0	0	0		0	99.9	0	0.1		
Total %	0.1	0	0	0	0.1	0	47	0	0	47	0	0	0	0	0	0	52.8	0	0.1	52.9	
Cars	1	0	0	0	1	0	755	0	0	755	0	0	0	0	0	0	835	0	1	836	1592
% Cars	100	0	0	0	100	0	98.3	0	0	98.3	0	0	0	0	0	0	96.8	0	100	96.8	97.5
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	28	0	0	28	41
% Trucks	0	0	0	0	0	0	1.7	0	0	1.7	0	0	0	0	0	0	3.2	0	0	3.2	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

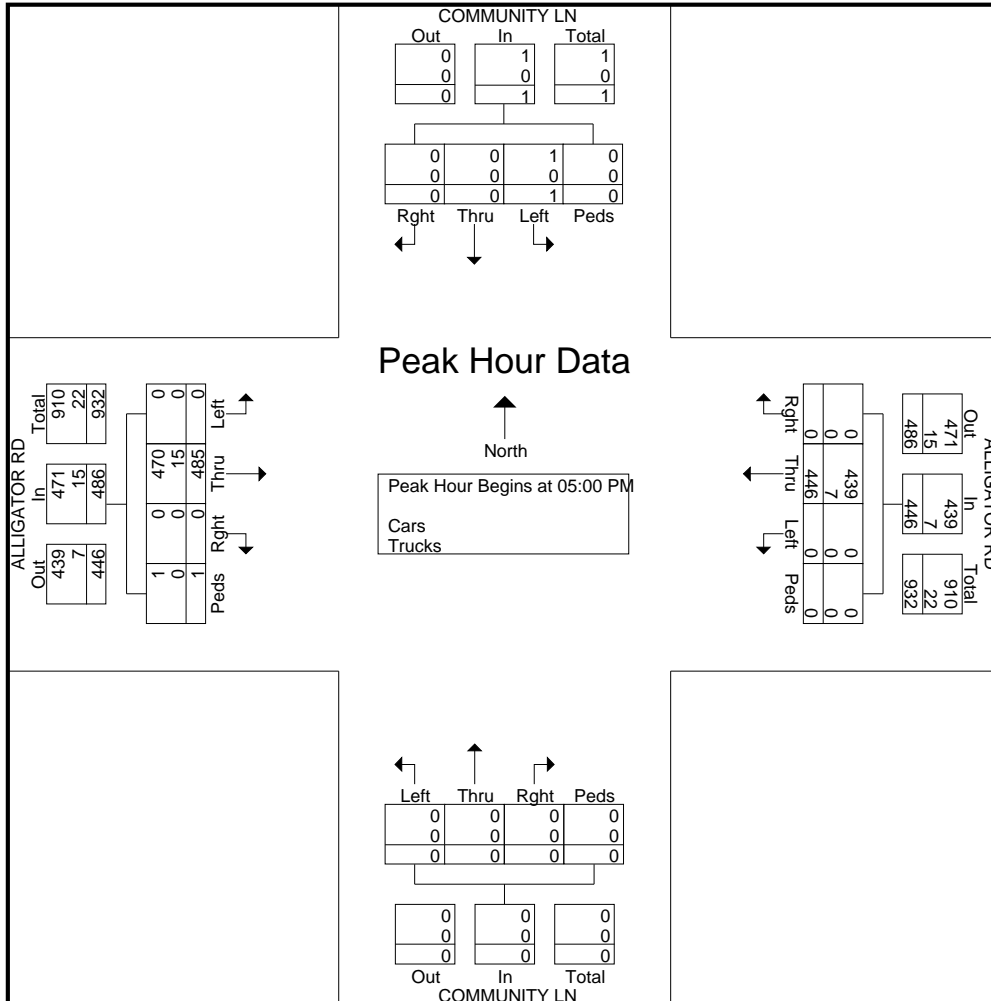
File Name : #13 CommunityLn@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	COMMUNITY LN Southbound					ALLIGATOR RD Westbound					COMMUNITY LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	0	0	1	0	114	0	0	114	0	0	0	0	0	0	108	0	0	108	223
05:15 PM	0	0	0	0	0	0	97	0	0	97	0	0	0	0	0	0	124	0	1	125	222
05:30 PM	0	0	0	0	0	0	116	0	0	116	0	0	0	0	0	0	124	0	0	124	240
05:45 PM	0	0	0	0	0	0	119	0	0	119	0	0	0	0	0	0	129	0	0	129	248
Total Volume	1	0	0	0	1	0	446	0	0	446	0	0	0	0	0	0	485	0	1	486	933
% App. Total	100	0	0	0	100	0	100	0	0	100	0	0	0	0	0	0	99.8	0	0.2	100	97.6
PHF	.250	.000	.000	.000	.250	.000	.937	.000	.000	.937	.000	.000	.000	.000	.000	.000	.940	.000	.250	.942	.941
Cars	1	0	0	0	1	0	439	0	0	439	0	0	0	0	0	0	470	0	1	471	911
% Cars	100	0	0	0	100	0	98.4	0	0	98.4	0	0	0	0	0	0	96.9	0	100	96.9	97.6
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	15	0	0	15	22
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3.1	0	0	3.1	2.4





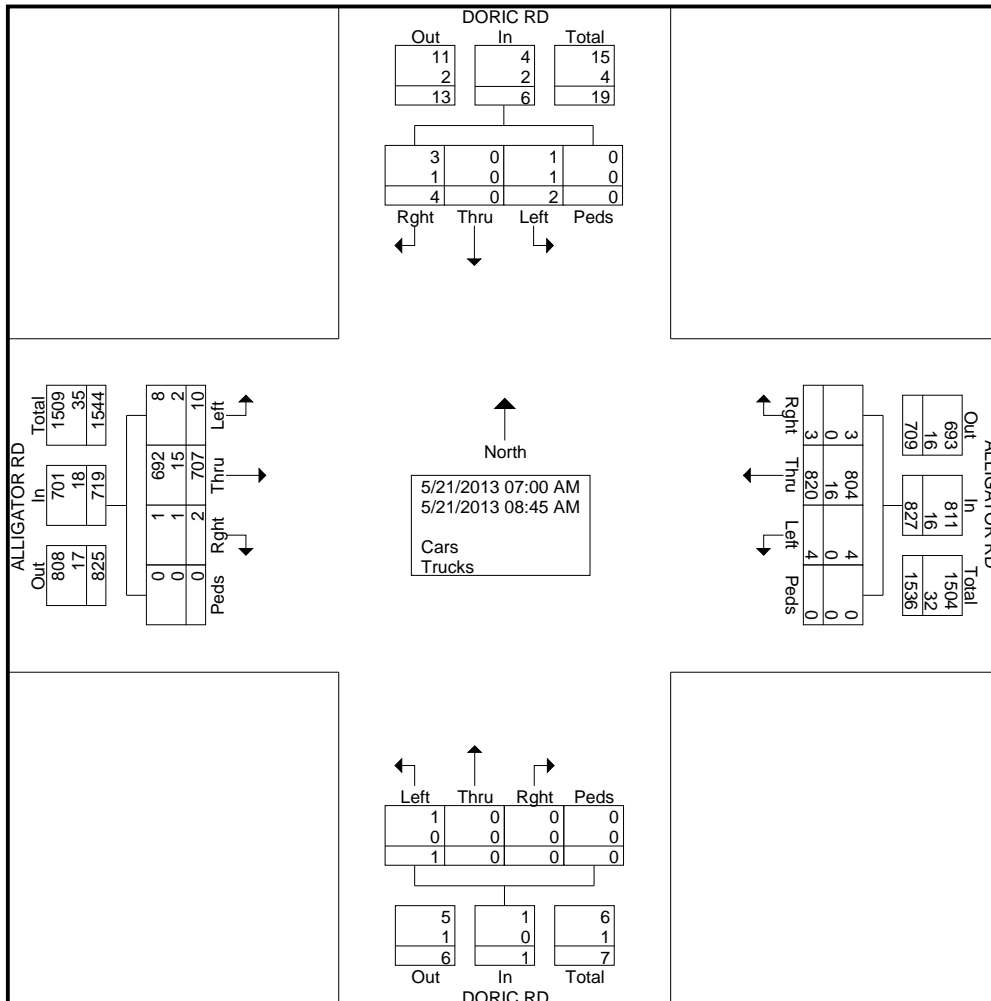
# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #14 DoricRd@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 1

## Groups Printed- Cars - Trucks

Start Time	DORIC RD Southbound					ALLIGATOR RD Westbound					DORIC RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	2	0	2	1	94	0	0	95	0	0	0	0	0	4	90	0	0	94	191
07:15 AM	0	0	1	0	1	1	114	0	0	115	0	0	0	0	0	4	115	0	0	119	235
07:30 AM	1	0	0	0	1	1	166	1	0	168	0	0	0	0	0	0	126	0	0	126	295
07:45 AM	0	0	0	0	0	1	124	1	0	126	0	0	0	0	0	0	114	0	0	114	240
<b>Total</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>498</b>	<b>2</b>	<b>0</b>	<b>504</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>445</b>	<b>0</b>	<b>0</b>	<b>453</b>	<b>961</b>
08:00 AM	1	0	0	0	1	0	87	1	0	88	0	0	0	0	0	0	104	0	0	104	193
08:15 AM	0	0	0	0	0	0	81	0	0	81	1	0	0	0	1	0	65	1	0	66	148
08:30 AM	0	0	0	0	0	0	83	0	0	83	0	0	0	0	0	1	49	1	0	51	134
08:45 AM	0	0	1	0	1	0	71	0	0	71	0	0	0	0	0	1	44	0	0	45	117
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>322</b>	<b>1</b>	<b>0</b>	<b>323</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>262</b>	<b>2</b>	<b>0</b>	<b>266</b>	<b>592</b>
<b>Grand Total</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>4</b>	<b>820</b>	<b>3</b>	<b>0</b>	<b>827</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>707</b>	<b>2</b>	<b>0</b>	<b>719</b>	<b>1553</b>
Apprch %	33.3	0	66.7	0		0.5	99.2	0.4	0		100	0	0	0		1.4	98.3	0.3	0		
Total %	0.1	0	0.3	0	0.4	0.3	52.8	0.2	0	53.3	0.1	0	0	0	0.1	0.6	45.5	0.1	0	46.3	
Cars	1	0	3	0	4	4	804	3	0	811	1	0	0	0	1	8	692	1	0	701	1517
% Cars	50	0	75	0	66.7	100	98	100	0	98.1	100	0	0	0	100	80	97.9	50	0	97.5	97.7
Trucks	1	0	1	0	2	0	16	0	0	16	0	0	0	0	0	2	15	1	0	18	36
% Trucks	50	0	25	0	33.3	0	2	0	0	1.9	0	0	0	0	0	20	2.1	50	0	2.5	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

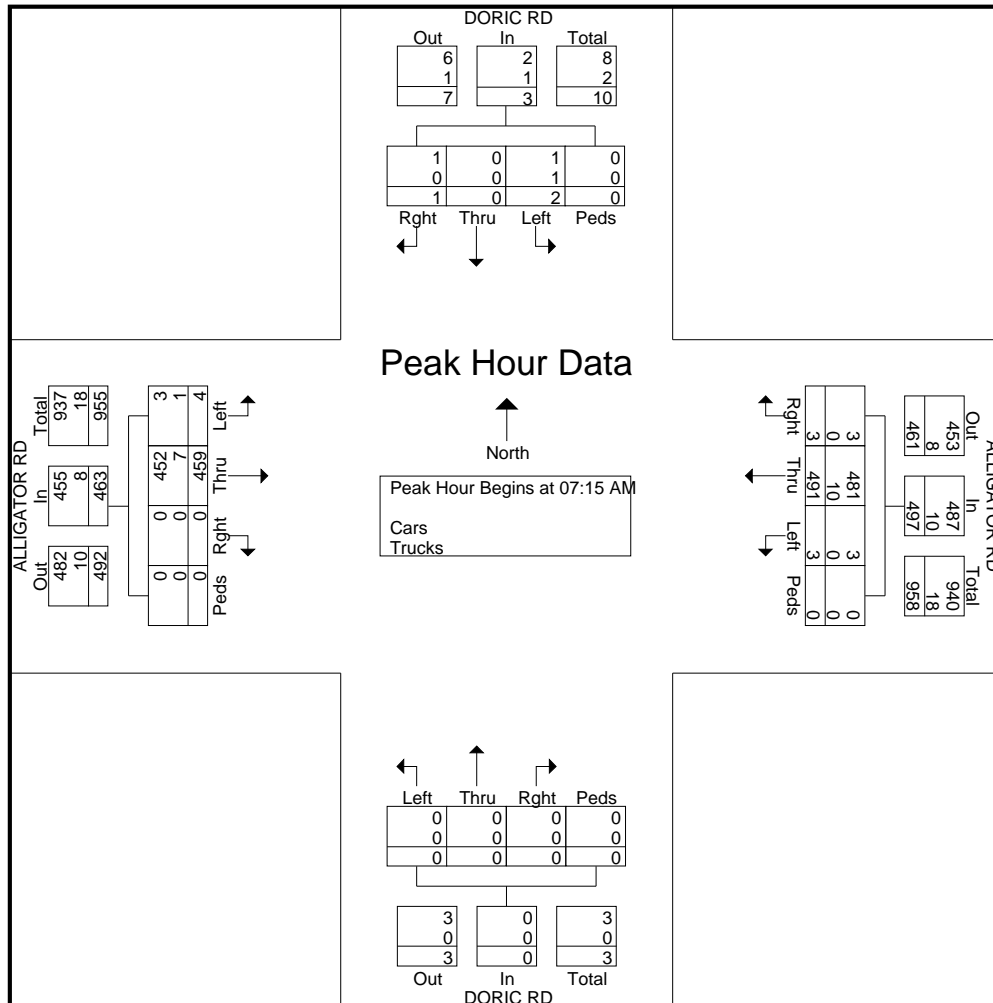
File Name : #14 DoricRd@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	DORIC RD Southbound					ALLIGATOR RD Westbound					DORIC RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	1	0	1	1	114	0	0	115	0	0	0	0	0	4	115	0	0	119	235
07:30 AM	1	0	0	0	1	1	166	1	0	168	0	0	0	0	0	0	126	0	0	126	295
07:45 AM	0	0	0	0	0	1	124	1	0	126	0	0	0	0	0	0	114	0	0	114	240
08:00 AM	1	0	0	0	1	0	87	1	0	88	0	0	0	0	0	0	104	0	0	104	193
Total Volume	2	0	1	0	3	3	491	3	0	497	0	0	0	0	0	4	459	0	0	463	963
% App. Total	66.7	0	33.3	0		0.6	98.8	0.6	0		0	0	0	0	0	0.9	99.1	0	0		
PHF	.500	.000	.250	.000	.750	.750	.739	.750	.000	.740	.000	.000	.000	.000	.000	.250	.911	.000	.000	.919	.816
Cars	1	0	1	0	2	3	481	3	0	487	0	0	0	0	0	3	452	0	0	455	944
% Cars	50.0	0	100	0	66.7	100	98.0	100	0	98.0	0	0	0	0	0	75.0	98.5	0	0	98.3	98.0
Trucks	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	1	7	0	0	8	19
% Trucks	50.0	0	0	0	33.3	0	2.0	0	0	2.0	0	0	0	0	0	25.0	1.5	0	0	1.7	2.0



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #14 DoricRd@AlligatorRdPM

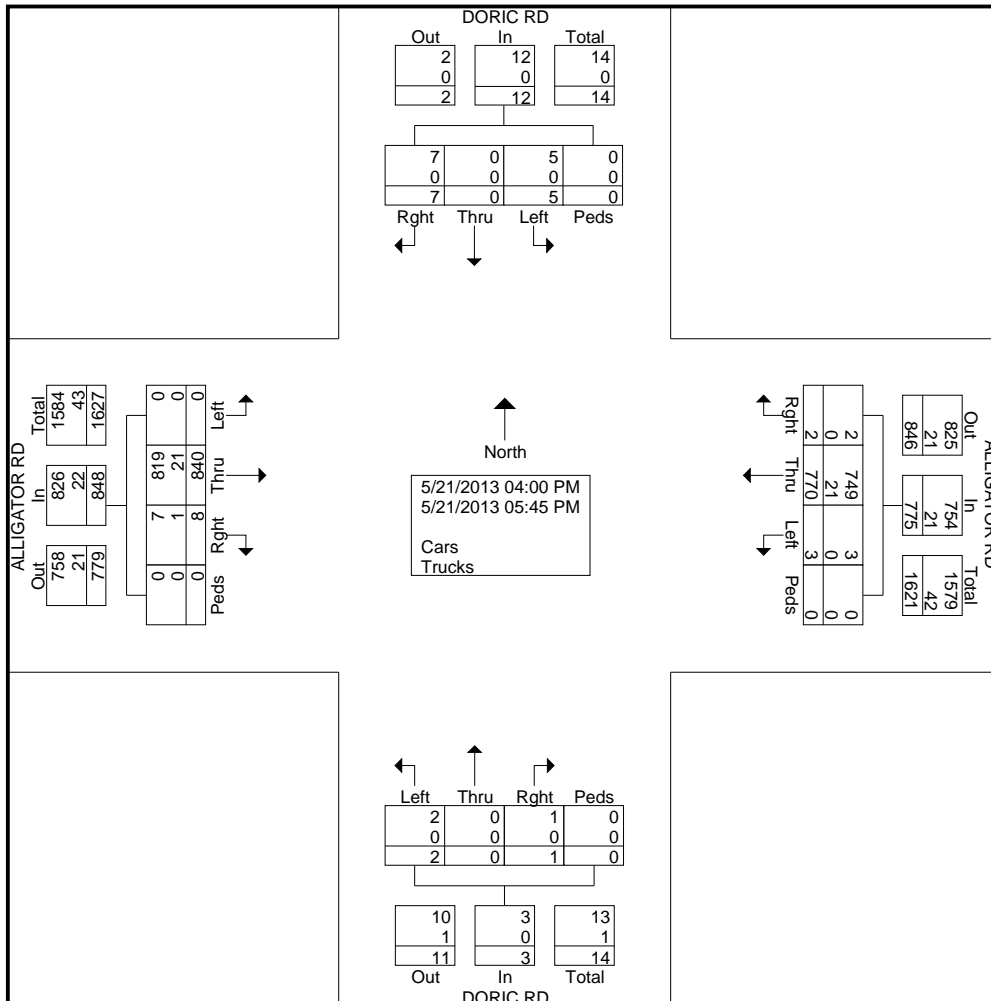
Site Code :

Start Date : 5/21/2013

Page No : 1

## Groups Printed- Cars - Trucks

Start Time	DORIC RD Southbound					ALLIGATOR RD Westbound					DORIC RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	0	5	0	6	0	73	1	0	74	0	0	0	0	0	0	75	1	0	76	156
04:15 PM	1	0	0	0	1	0	88	0	0	88	1	0	1	0	2	0	92	1	0	93	184
04:30 PM	0	0	1	0	1	0	85	0	0	85	1	0	0	0	1	0	116	0	0	116	203
04:45 PM	1	0	0	0	1	0	96	0	0	96	0	0	0	0	0	0	93	0	0	93	190
<b>Total</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>342</b>	<b>1</b>	<b>0</b>	<b>343</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>376</b>	<b>2</b>	<b>0</b>	<b>378</b>	<b>733</b>
05:00 PM	1	0	0	0	1	0	109	0	0	109	0	0	0	0	0	0	100	1	0	101	211
05:15 PM	1	0	1	0	2	1	98	0	0	99	0	0	0	0	0	0	131	2	0	133	234
05:30 PM	0	0	0	0	0	0	103	0	0	103	0	0	0	0	0	0	113	2	0	115	218
05:45 PM	0	0	0	0	0	2	118	1	0	121	0	0	0	0	0	0	120	1	0	121	242
<b>Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>428</b>	<b>1</b>	<b>0</b>	<b>432</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>464</b>	<b>6</b>	<b>0</b>	<b>470</b>	<b>905</b>
<b>Grand Total</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>12</b>	<b>3</b>	<b>770</b>	<b>2</b>	<b>0</b>	<b>775</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>840</b>	<b>8</b>	<b>0</b>	<b>848</b>	<b>1638</b>
Apprch %	41.7	0	58.3	0		0.4	99.4	0.3	0		66.7	0	33.3	0		0	99.1	0.9	0		
Total %	0.3	0	0.4	0	0.7	0.2	47	0.1	0	47.3	0.1	0	0.1	0	0.2	0	51.3	0.5	0	51.8	
Cars	5	0	7	0	12	3	749	2	0	754	2	0	1	0	3	0	819	7	0	826	1595
% Cars	100	0	100	0	100	100	97.3	100	0	97.3	100	0	100	0	100	0	97.5	87.5	0	97.4	97.4
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	21	1	0	22	43
% Trucks	0	0	0	0	0	0	2.7	0	0	2.7	0	0	0	0	0	0	2.5	12.5	0	2.6	2.6

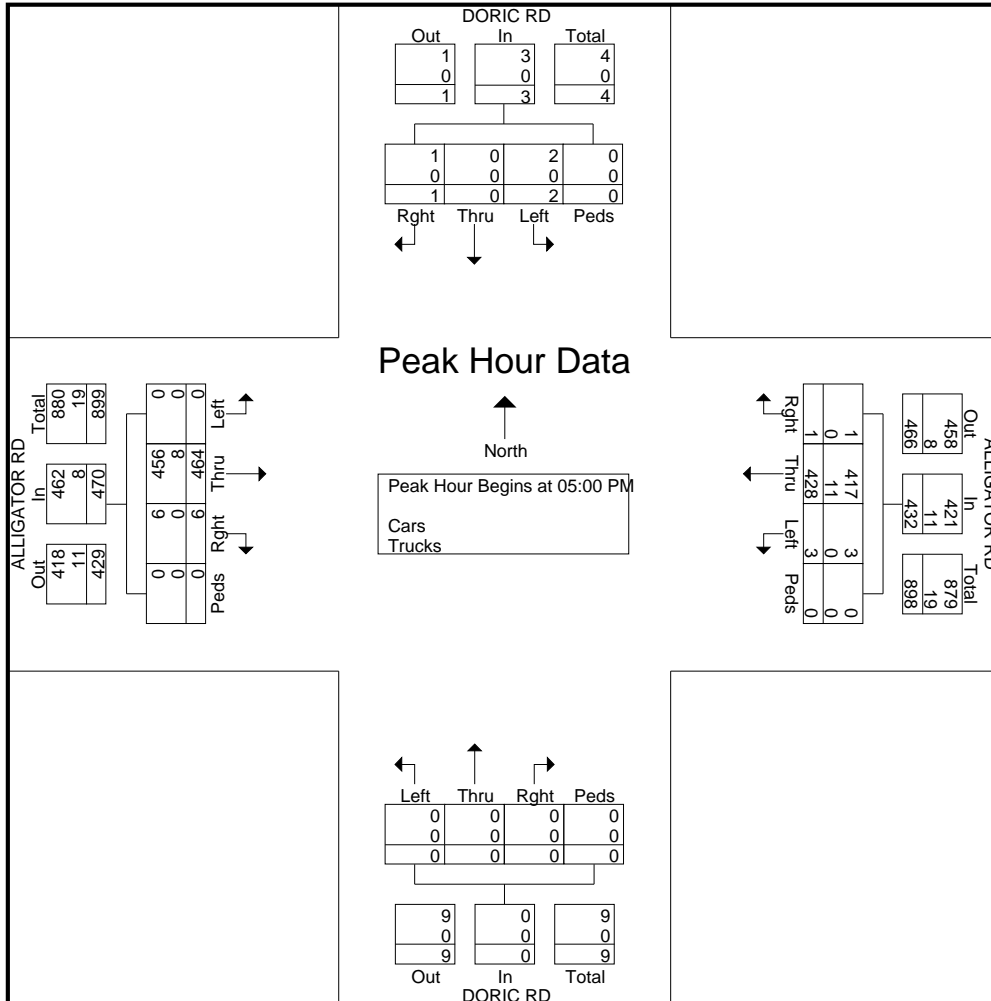


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #14 DoricRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	DORIC RD Southbound					ALLIGATOR RD Westbound					DORIC RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	0	0	1	0	109	0	0	109	0	0	0	0	0	0	100	1	0	101	211
05:15 PM	1	0	1	0	2	1	98	0	0	99	0	0	0	0	0	0	131	2	0	133	234
05:30 PM	0	0	0	0	0	0	103	0	0	103	0	0	0	0	0	0	113	2	0	115	218
05:45 PM	0	0	0	0	0	2	118	1	0	121	0	0	0	0	0	0	120	1	0	121	242
Total Volume	2	0	1	0	3	3	428	1	0	432	0	0	0	0	0	0	464	6	0	470	905
% App. Total	66.7	0	33.3	0		0.7	99.1	0.2	0		0	0	0	0	0	0	98.7	1.3	0		
PHF	.500	.000	.250	.000	.375	.375	.907	.250	.000	.893	.000	.000	.000	.000	.000	.000	.885	.750	.000	.883	.935
Cars	2	0	1	0	3	3	417	1	0	421	0	0	0	0	0	0	456	6	0	462	886
% Cars	100	0	100	0	100	100	97.4	100	0	97.5	0	0	0	0	0	0	98.3	100	0	98.3	97.9
Trucks	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	19
% Trucks	0	0	0	0	0	0	2.6	0	0	2.5	0	0	0	0	0	0	1.7	0	0	1.7	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #15 SunsetMemoryGardens@AlligatorRdAM

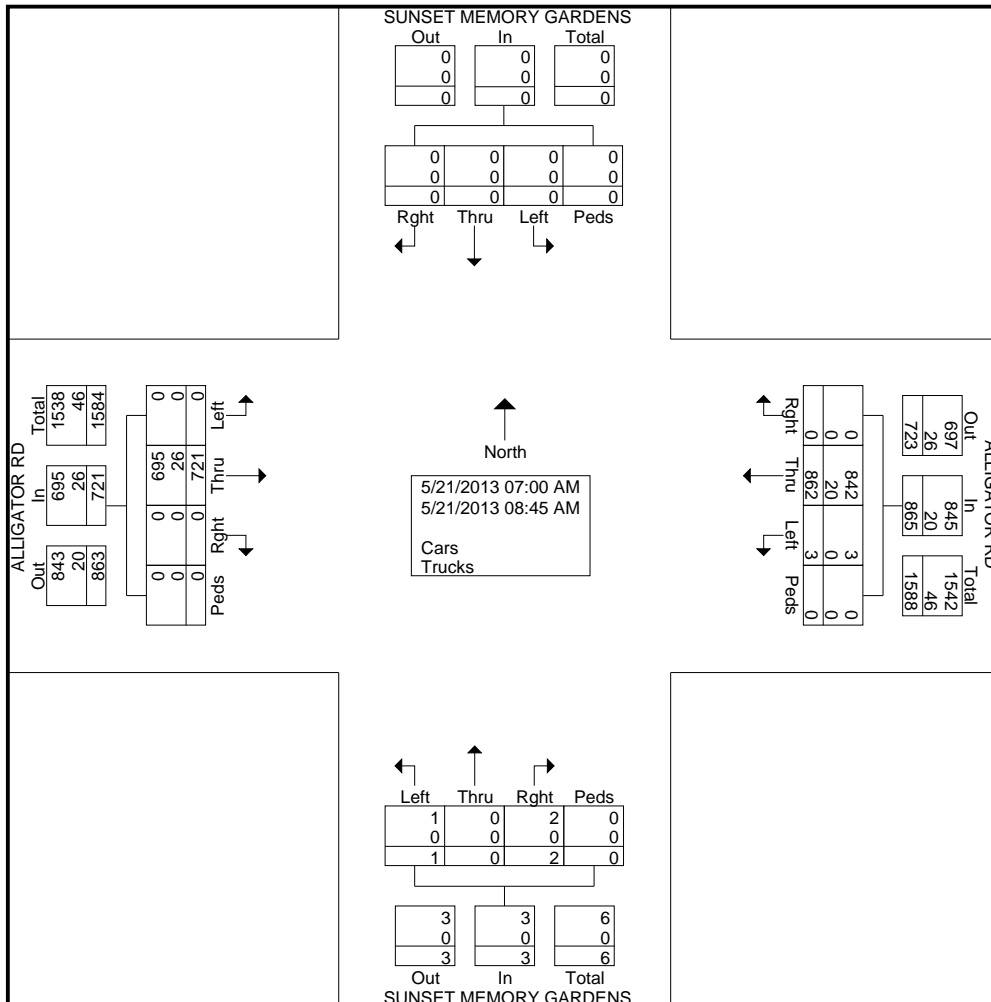
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	SUNSET MEMORY GARDENS Southbound					ALLIGATOR RD Westbound					SUNSET MEMORY GARDENS Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	98	0	0	98	0	0	0	0	0	0	98	0	0	98	196
07:15 AM	0	0	0	0	0	0	131	0	0	131	0	0	0	0	0	0	127	0	0	127	258
07:30 AM	0	0	0	0	0	0	175	0	0	175	0	0	0	0	0	0	113	0	0	113	288
07:45 AM	0	0	0	0	0	2	140	0	0	142	1	0	0	0	1	0	119	0	0	119	262
Total	0	0	0	0	0	2	544	0	0	546	1	0	0	0	1	0	457	0	0	457	1004
08:00 AM	0	0	0	0	0	1	91	0	0	92	0	0	0	0	0	0	108	0	0	108	200
08:15 AM	0	0	0	0	0	0	84	0	0	84	0	0	2	0	2	0	67	0	0	67	153
08:30 AM	0	0	0	0	0	0	81	0	0	81	0	0	0	0	0	0	48	0	0	48	129
08:45 AM	0	0	0	0	0	0	62	0	0	62	0	0	0	0	0	0	41	0	0	41	103
Total	0	0	0	0	0	1	318	0	0	319	0	0	2	0	2	0	264	0	0	264	585
Grand Total	0	0	0	0	0	3	862	0	0	865	1	0	2	0	3	0	721	0	0	721	1589
Apprch %	0	0	0	0		0.3	99.7	0	0		33.3	0	66.7	0		0	100	0	0		
Total %	0	0	0	0	0	0.2	54.2	0	0	54.4	0.1	0	0.1	0	0.2	0	45.4	0	0	45.4	
Cars	0	0	0	0	0	3	842	0	0	845	1	0	2	0	3	0	695	0	0	695	1543
% Cars	0	0	0	0	0	100	97.7	0	0	97.7	100	0	100	0	100	0	96.4	0	0	96.4	97.1
Trucks	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	26	0	0	26	46
% Trucks	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	0	3.6	0	0	3.6	2.9

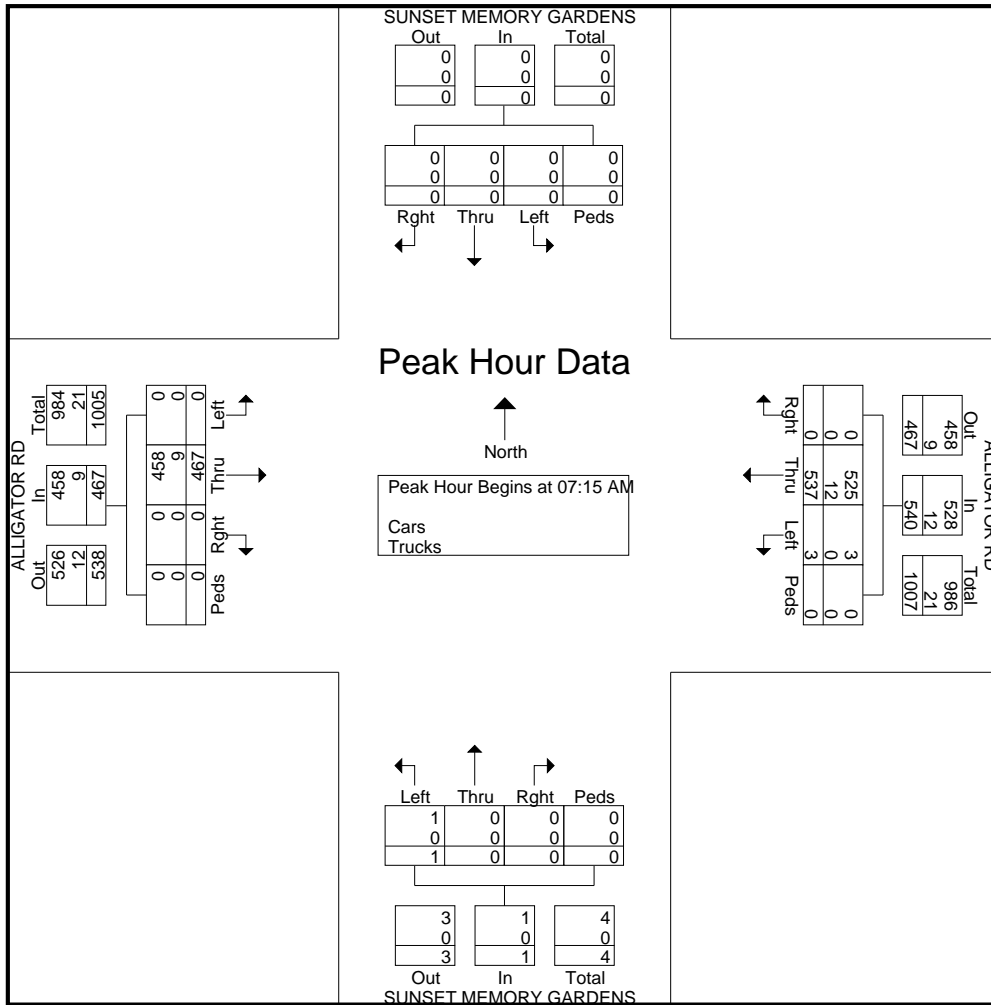


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #15 SunsetMemoryGardens@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	SUNSET MEMORY GARDENS Southbound					ALLIGATOR RD Westbound					SUNSET MEMORY GARDENS Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	131	0	0	131	0	0	0	0	0	0	127	0	0	127	258
07:30 AM	0	0	0	0	0	0	175	0	0	175	0	0	0	0	0	0	113	0	0	113	288
07:45 AM	0	0	0	0	0	2	140	0	0	142	1	0	0	0	1	0	119	0	0	119	262
08:00 AM	0	0	0	0	0	1	91	0	0	92	0	0	0	0	0	0	108	0	0	108	200
Total Volume	0	0	0	0	0	3	537	0	0	540	1	0	0	0	1	0	467	0	0	467	1008
% App. Total	0	0	0	0	0	0.6	99.4	0	0	0	100	0	0	0	0	0	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.375	.767	.000	.000	.771	.250	.000	.000	.000	.250	.000	.919	.000	.000	.919	.875
Cars	0	0	0	0	0	3	525	0	0	528	1	0	0	0	1	0	458	0	0	458	987
% Cars	0	0	0	0	0	100	97.8	0	0	97.8	100	0	0	0	100	0	98.1	0	0	98.1	97.9
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	9	0	0	9	21
% Trucks	0	0	0	0	0	0	2.2	0	0	2.2	0	0	0	0	0	0	1.9	0	0	1.9	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #15 SunsetMemoryGardens@AlligatorRdPM

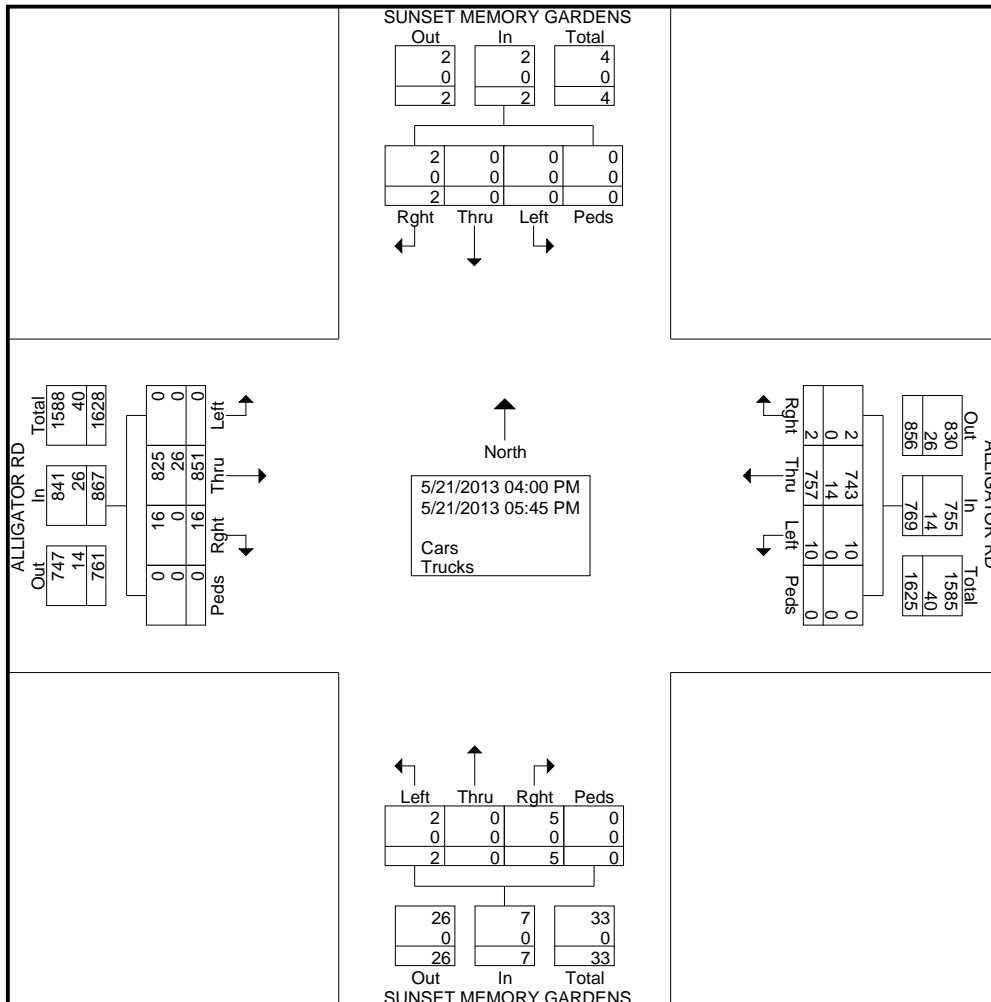
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	SUNSET MEMORY GARDENS Southbound					ALLIGATOR RD Westbound					SUNSET MEMORY GARDENS Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	75	0	0	75	0	0	0	0	0	0	83	0	0	83	158
04:15 PM	0	0	1	0	1	0	79	1	0	80	0	0	0	0	0	0	92	0	0	92	173
04:30 PM	0	0	0	0	0	0	78	0	0	78	0	0	0	0	0	0	121	0	0	121	199
04:45 PM	0	0	0	0	0	0	89	0	0	89	0	0	0	0	0	0	83	0	0	83	172
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>321</b>	<b>1</b>	<b>0</b>	<b>322</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>379</b>	<b>0</b>	<b>0</b>	<b>379</b>	<b>702</b>
05:00 PM	0	0	0	0	0	2	109	1	0	112	1	0	1	0	2	0	107	1	0	108	222
05:15 PM	0	0	1	0	1	2	94	0	0	96	0	0	0	0	0	0	117	2	0	119	216
05:30 PM	0	0	0	0	0	3	116	0	0	119	1	0	4	0	5	0	125	3	0	128	252
05:45 PM	0	0	0	0	0	3	117	0	0	120	0	0	0	0	0	0	123	10	0	133	253
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>436</b>	<b>1</b>	<b>0</b>	<b>447</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>472</b>	<b>16</b>	<b>0</b>	<b>488</b>	<b>943</b>
Grand Total	0	0	2	0	2	10	757	2	0	769	2	0	5	0	7	0	851	16	0	867	1645
Apprch %	0	0	100	0		1.3	98.4	0.3	0		28.6	0	71.4	0		0	98.2	1.8	0		
Total %	0	0	0.1	0	0.1	0.6	46	0.1	0	46.7	0.1	0	0.3	0	0.4	0	51.7	1	0	52.7	
Cars	0	0	2	0	2	10	743	2	0	755	2	0	5	0	7	0	825	16	0	841	1605
% Cars	0	0	100	0	100	100	98.2	100	0	98.2	100	0	100	0	100	0	96.9	100	0	97	97.6
Trucks	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	26	0	0	26	40
% Trucks	0	0	0	0	0	0	1.8	0	0	1.8	0	0	0	0	0	0	3.1	0	0	3	2.4

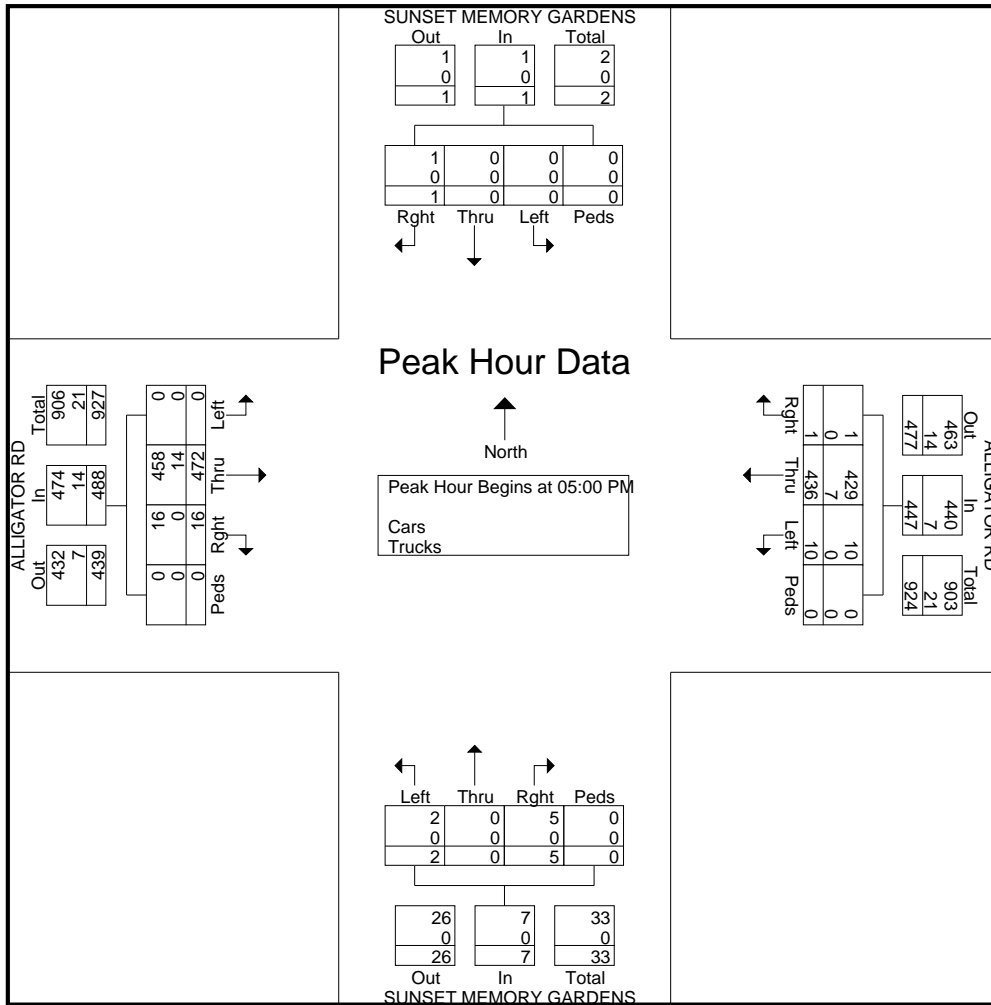


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #15 SunsetMemoryGardens@AlligatorRdPM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	SUNSET MEMORY GARDENS Southbound					ALLIGATOR RD Westbound					SUNSET MEMORY GARDENS Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	109	1	0	112	1	0	1	0	2	0	107	1	0	108	222
05:15 PM	0	0	1	0	1	2	94	0	0	96	0	0	0	0	0	0	117	2	0	119	216
05:30 PM	0	0	0	0	0	3	116	0	0	119	1	0	4	0	5	0	125	3	0	128	252
05:45 PM	0	0	0	0	0	3	117	0	0	120	0	0	0	0	0	0	123	10	0	133	253
Total Volume	0	0	1	0	1	10	436	1	0	447	2	0	5	0	7	0	472	16	0	488	943
% App. Total	0	0	100	0		2.2	97.5	0.2	0		28.6	0	71.4	0		0	96.7	3.3	0		
PHF	.000	.000	.250	.000	.250	.833	.932	.250	.000	.931	.500	.000	.313	.000	.350	.000	.944	.400	.000	.917	.932
Cars	0	0	1	0	1	10	429	1	0	440	2	0	5	0	7	0	458	16	0	474	922
% Cars	0	0	100	0	100	100	98.4	100	0	98.4	100	0	100	0	100	0	97.0	100	0	97.1	97.8
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	14	0	0	14	21
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3.0	0	0	2.9	2.2





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #16 WillisPI@AlligatorRdAM

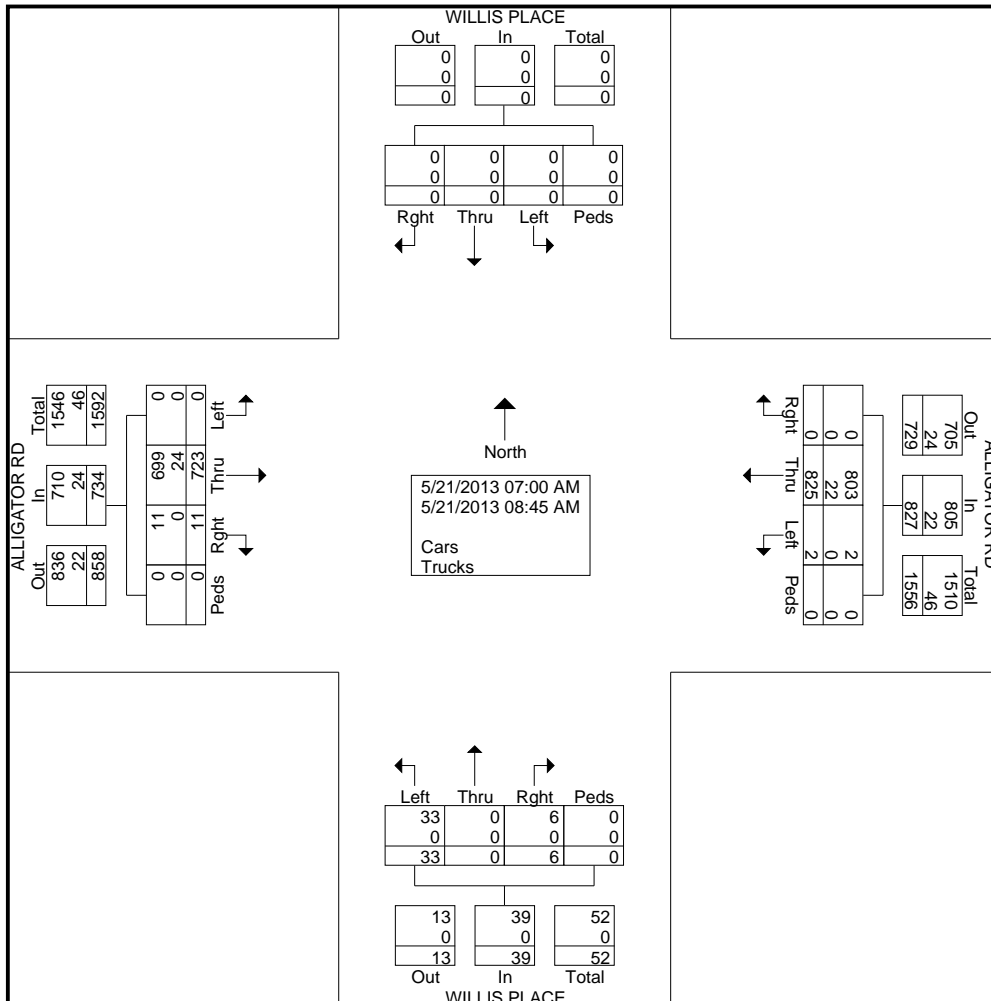
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WILLIS PLACE Southbound					ALLIGATOR RD Westbound					WILLIS PLACE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	1	94	0	0	95	7	0	1	0	8	0	101	0	0	101	204
07:15 AM	0	0	0	0	0	0	121	0	0	121	7	0	0	0	7	0	129	1	0	130	258
07:30 AM	0	0	0	0	0	1	164	0	0	165	7	0	1	0	8	0	117	1	0	118	291
07:45 AM	0	0	0	0	0	0	135	0	0	135	5	0	2	0	7	0	117	1	0	118	260
Total	0	0	0	0	0	2	514	0	0	516	26	0	4	0	30	0	464	3	0	467	1013
08:00 AM	0	0	0	0	0	0	89	0	0	89	5	0	2	0	7	0	106	5	0	111	207
08:15 AM	0	0	0	0	0	0	86	0	0	86	0	0	0	0	0	0	65	2	0	67	153
08:30 AM	0	0	0	0	0	0	74	0	0	74	0	0	0	0	0	0	48	0	0	48	122
08:45 AM	0	0	0	0	0	0	62	0	0	62	2	0	0	0	2	0	40	1	0	41	105
Total	0	0	0	0	0	0	311	0	0	311	7	0	2	0	9	0	259	8	0	267	587
Grand Total	0	0	0	0	0	2	825	0	0	827	33	0	6	0	39	0	723	11	0	734	1600
Apprch %	0	0	0	0		0.2	99.8	0	0		84.6	0	15.4	0		0	98.5	1.5	0		
Total %	0	0	0	0		0.1	51.6	0	0	51.7	2.1	0	0.4	0	2.4	0	45.2	0.7	0	45.9	
Cars	0	0	0	0		2	803	0	0	805	33	0	6	0	39	0	699	11	0	710	1554
% Cars	0	0	0	0		100	97.3	0	0	97.3	100	0	100	0	100	0	96.7	100	0	96.7	97.1
Trucks	0	0	0	0		0	22	0	0	22	0	0	0	0	0	0	24	0	0	24	46
% Trucks	0	0	0	0		0	2.7	0	0	2.7	0	0	0	0	0	0	3.3	0	0	3.3	2.9

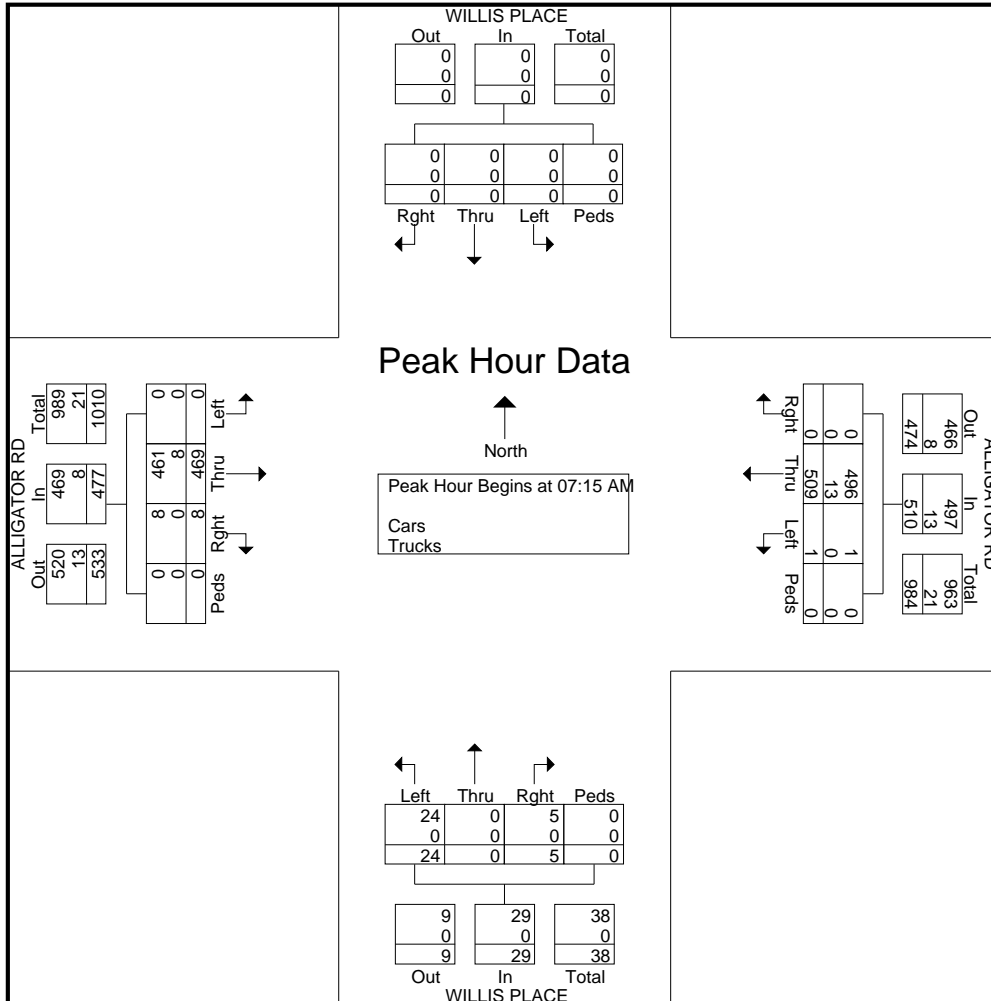


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #16 WillisPI@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	WILLIS PLACE Southbound					ALLIGATOR RD Westbound					WILLIS PLACE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	121	0	0	121	7	0	0	0	7	0	129	1	0	130	258
07:30 AM	0	0	0	0	0	1	164	0	0	165	7	0	1	0	8	0	117	1	0	118	291
07:45 AM	0	0	0	0	0	0	135	0	0	135	5	0	2	0	7	0	117	1	0	118	260
08:00 AM	0	0	0	0	0	0	89	0	0	89	5	0	2	0	7	0	106	5	0	111	207
Total Volume	0	0	0	0	0	1	509	0	0	510	24	0	5	0	29	0	469	8	0	477	1016
% App. Total	0	0	0	0	0	0.2	99.8	0	0	0	82.8	0	17.2	0	0	0	98.3	1.7	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.776	.000	.000	.773	.857	.000	.625	.000	.906	.000	.909	.400	.000	.917	.873
Cars	0	0	0	0	0	1	496	0	0	497	24	0	5	0	29	0	461	8	0	469	995
% Cars	0	0	0	0	0	100	97.4	0	0	97.5	100	0	100	0	100	0	98.3	100	0	98.3	97.9
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	8	0	0	8	21
% Trucks	0	0	0	0	0	0	2.6	0	0	2.5	0	0	0	0	0	0	1.7	0	0	1.7	2.1



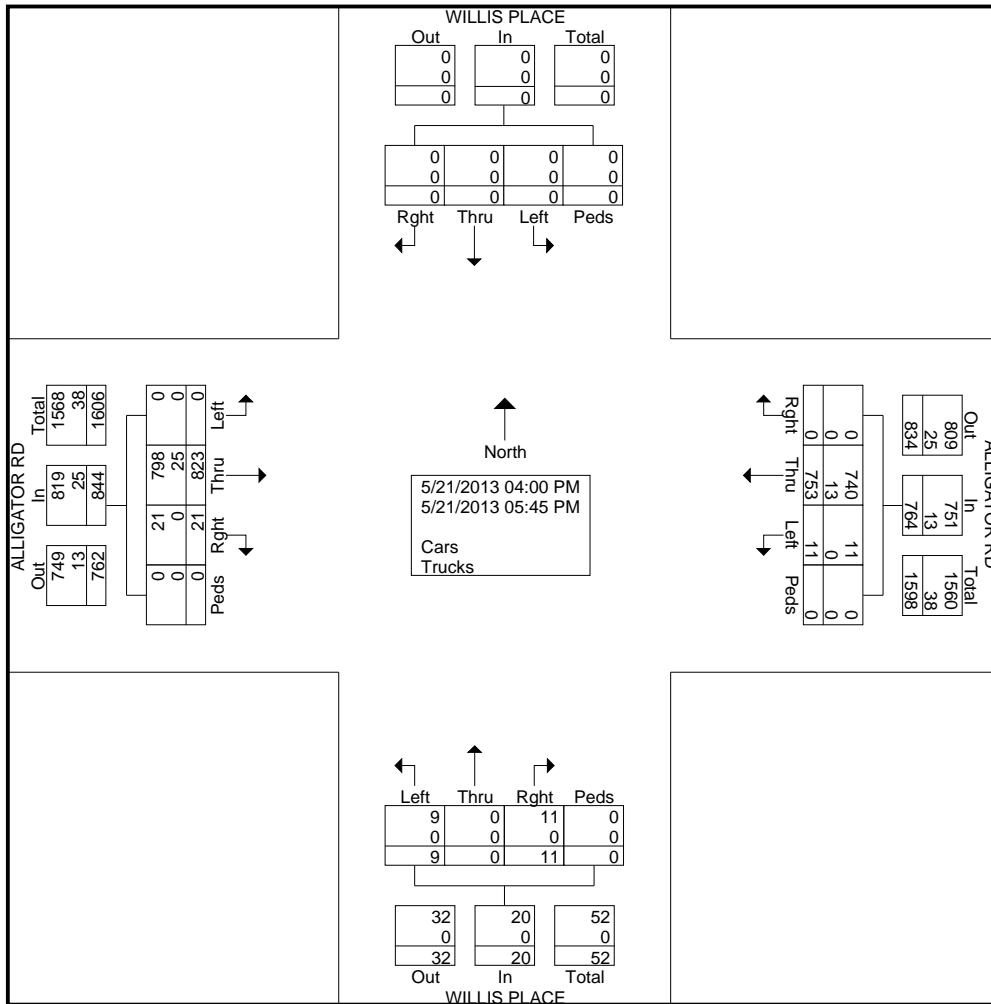
# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #16 WillisPI@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	WILLIS PLACE Southbound					ALLIGATOR RD Westbound					WILLIS PLACE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	73	0	0	73	0	0	1	0	1	0	81	2	0	83	157
04:15 PM	0	0	0	0	0	1	78	0	0	79	2	0	1	0	3	0	84	4	0	88	170
04:30 PM	0	0	0	0	0	0	76	0	0	76	1	0	0	0	1	0	119	2	0	121	198
04:45 PM	0	0	0	0	0	3	90	0	0	93	1	0	2	0	3	0	81	1	0	82	178
Total	0	0	0	0	0	4	317	0	0	321	4	0	4	0	8	0	365	9	0	374	703
05:00 PM	0	0	0	0	0	0	116	0	0	116	1	0	0	0	1	0	104	1	0	105	222
05:15 PM	0	0	0	0	0	1	95	0	0	96	0	0	3	0	3	0	120	1	0	121	220
05:30 PM	0	0	0	0	0	5	110	0	0	115	3	0	2	0	5	0	118	7	0	125	245
05:45 PM	0	0	0	0	0	1	115	0	0	116	1	0	2	0	3	0	116	3	0	119	238
Total	0	0	0	0	0	7	436	0	0	443	5	0	7	0	12	0	458	12	0	470	925
Grand Total	0	0	0	0	0	11	753	0	0	764	9	0	11	0	20	0	823	21	0	844	1628
Apprch %	0	0	0	0		1.4	98.6	0	0		45	0	55	0		0	97.5	2.5	0		
Total %	0	0	0	0		0.7	46.3	0	0	46.9	0.6	0	0.7	0	1.2	0	50.6	1.3	0	51.8	
Cars	0	0	0	0	0	11	740	0	0	751	9	0	11	0	20	0	798	21	0	819	1590
% Cars	0	0	0	0	0	100	98.3	0	0	98.3	100	0	100	0	100	0	97	100	0	97	97.7
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	25	0	0	25	38
% Trucks	0	0	0	0	0	0	1.7	0	0	1.7	0	0	0	0	0	0	3	0	0	3	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

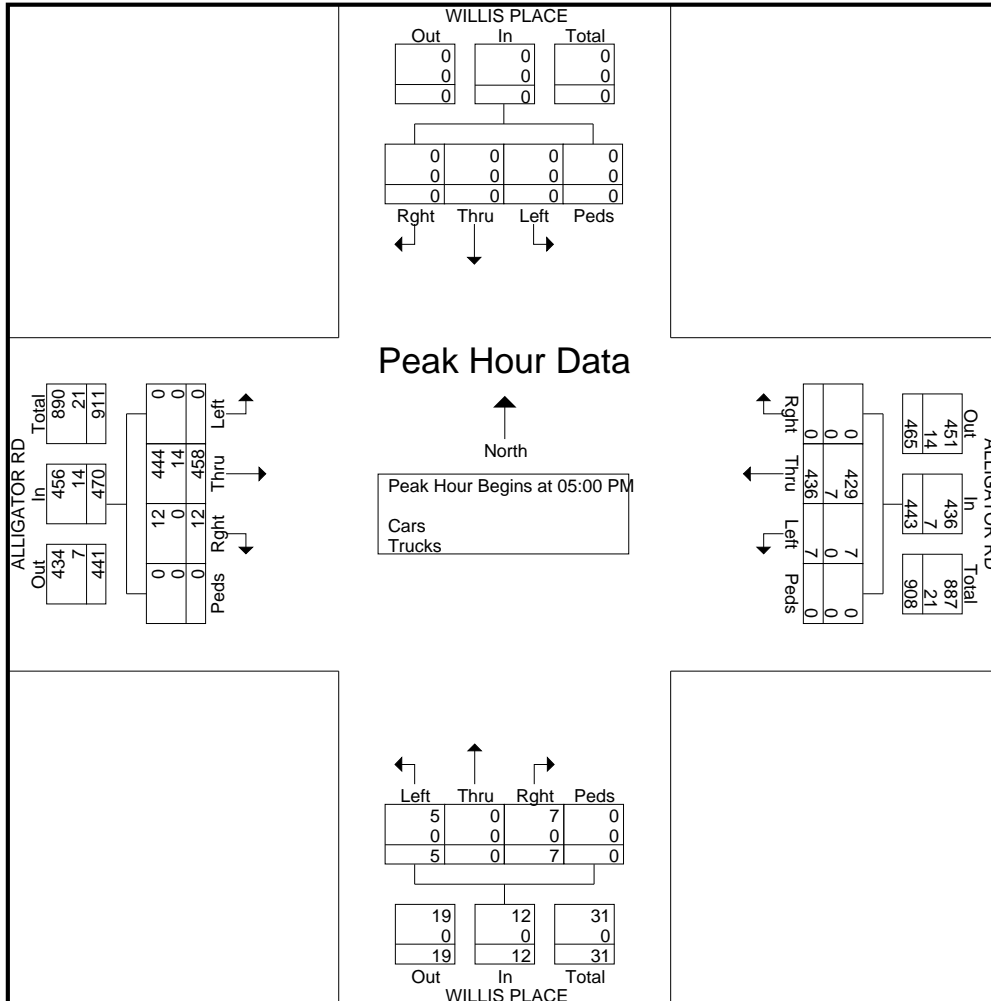
File Name : #16 WillisPI@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WILLIS PLACE Southbound					ALLIGATOR RD Westbound					WILLIS PLACE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	116	0	0	116	1	0	0	0	1	0	104	1	0	105	222
05:15 PM	0	0	0	0	0	1	95	0	0	96	0	0	3	0	3	0	120	1	0	121	220
05:30 PM	0	0	0	0	0	5	110	0	0	115	3	0	2	0	5	0	118	7	0	125	245
05:45 PM	0	0	0	0	0	1	115	0	0	116	1	0	2	0	3	0	116	3	0	119	238
Total Volume	0	0	0	0	0	7	436	0	0	443	5	0	7	0	12	0	458	12	0	470	925
% App. Total	0	0	0	0	0	1.6	98.4	0	0	98.4	41.7	0	58.3	0	100	0	97.4	2.6	0	97.4	97.7
PHF	.000	.000	.000	.000	.000	.350	.940	.000	.000	.955	.417	.000	.583	.000	.600	.000	.954	.429	.000	.940	.944
Cars	0	0	0	0	0	7	429	0	0	436	5	0	7	0	12	0	444	12	0	456	904
% Cars	0	0	0	0	0	100	98.4	0	0	98.4	100	0	100	0	100	0	96.9	100	0	97.0	97.7
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	14	0	0	14	21
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3.1	0	0	3.0	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #17 WhippoorwillRd@AlligatorRdAM

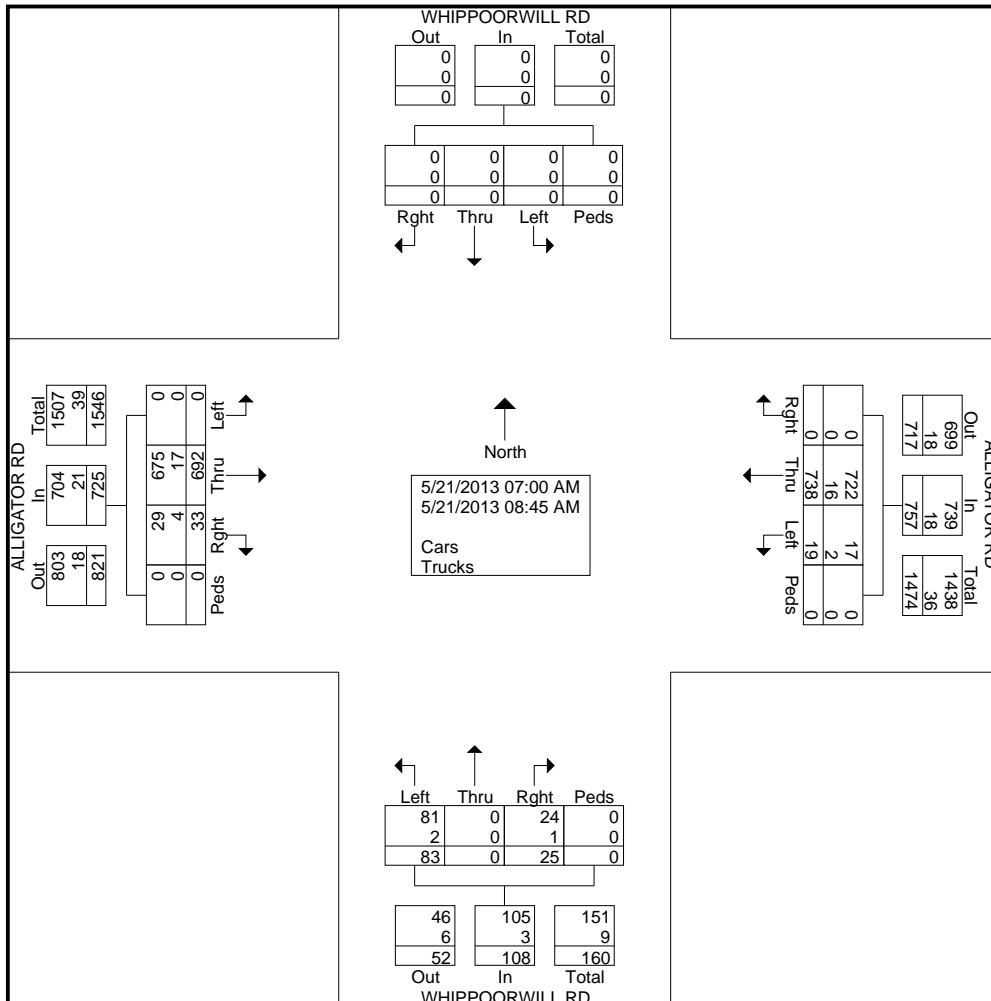
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WHIPPOORWILL RD Southbound					ALLIGATOR RD Westbound					WHIPPOORWILL RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	89	0	0	89	9	0	3	0	12	0	98	6	0	104	205
07:15 AM	0	0	0	0	0	1	110	0	0	111	15	0	2	0	17	0	122	6	0	128	256
07:30 AM	0	0	0	0	0	4	142	0	0	146	21	0	4	0	25	0	114	4	0	118	289
07:45 AM	0	0	0	0	0	5	106	0	0	111	17	0	2	0	19	0	115	8	0	123	253
Total	0	0	0	0	0	10	447	0	0	457	62	0	11	0	73	0	449	24	0	473	1003
08:00 AM	0	0	0	0	0	1	90	0	0	91	9	0	2	0	11	0	99	4	0	103	205
08:15 AM	0	0	0	0	0	4	76	0	0	80	3	0	3	0	6	0	56	4	0	60	146
08:30 AM	0	0	0	0	0	4	67	0	0	71	6	0	5	0	11	0	46	1	0	47	129
08:45 AM	0	0	0	0	0	0	58	0	0	58	3	0	4	0	7	0	42	0	0	42	107
Total	0	0	0	0	0	9	291	0	0	300	21	0	14	0	35	0	243	9	0	252	587
Grand Total	0	0	0	0	0	19	738	0	0	757	83	0	25	0	108	0	692	33	0	725	1590
Apprch %	0	0	0	0		2.5	97.5	0	0		76.9	0	23.1	0		0	95.4	4.6	0		
Total %	0	0	0	0		1.2	46.4	0	0	47.6	5.2	0	1.6	0	6.8	0	43.5	2.1	0	45.6	
Cars	0	0	0	0		17	722	0	0	739	81	0	24	0	105	0	675	29	0	704	1548
% Cars	0	0	0	0		89.5	97.8	0	0	97.6	97.6	0	96	0	97.2	0	97.5	87.9	0	97.1	97.4
Trucks	0	0	0	0		2	16	0	0	18	2	0	1	0	3	0	17	4	0	21	42
% Trucks	0	0	0	0		10.5	2.2	0	0	2.4	2.4	0	4	0	2.8	0	2.5	12.1	0	2.9	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

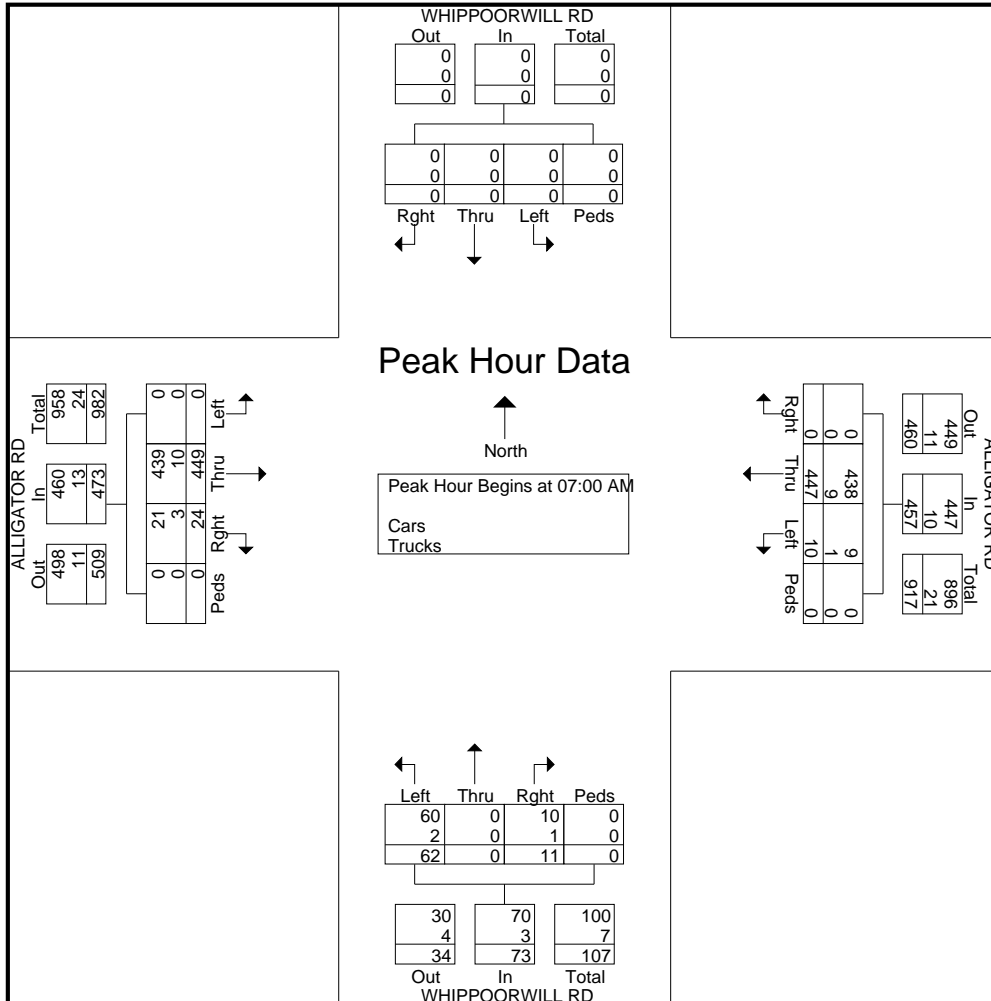
File Name : #17 WhippoorwillRd@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WHIPPOORWILL RD Southbound					ALLIGATOR RD Westbound					WHIPPOORWILL RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	89	0	0	89	9	0	3	0	12	0	98	6	0	104	205
07:15 AM	0	0	0	0	0	1	110	0	0	111	15	0	2	0	17	0	122	6	0	128	256
07:30 AM	0	0	0	0	0	4	142	0	0	146	21	0	4	0	25	0	114	4	0	118	289
07:45 AM	0	0	0	0	0	5	106	0	0	111	17	0	2	0	19	0	115	8	0	123	253
Total Volume	0	0	0	0	0	10	447	0	0	457	62	0	11	0	73	0	449	24	0	473	1003
% App. Total	0	0	0	0	0	2.2	97.8	0	0		84.9	0	15.1	0		0	94.9	5.1	0		
PHF	.000	.000	.000	.000	.000	.500	.787	.000	.000	.783	.738	.000	.688	.000	.730	.000	.920	.750	.000	.924	.868
Cars	0	0	0	0	0	9	438	0	0	447	60	0	10	0	70	0	439	21	0	460	977
% Cars	0	0	0	0	0	90.0	98.0	0	0	97.8	96.8	0	90.9	0	95.9	0	97.8	87.5	0	97.3	97.4
Trucks	0	0	0	0	0	1	9	0	0	10	2	0	1	0	3	0	10	3	0	13	26
% Trucks	0	0	0	0	0	10.0	2.0	0	0	2.2	3.2	0	9.1	0	4.1	0	2.2	12.5	0	2.7	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #17 WhippoorwillRd@AlligatorRdPM

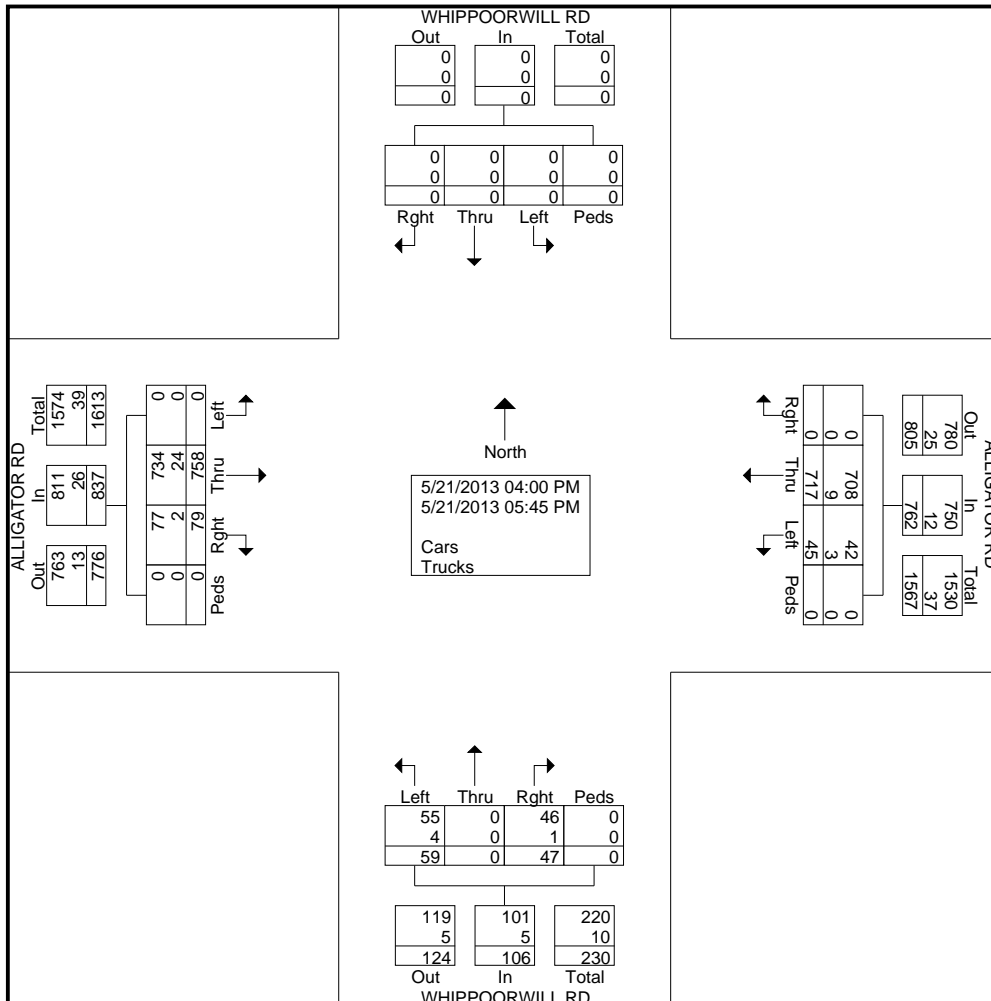
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WHIPPOORWILL RD Southbound					ALLIGATOR RD Westbound					WHIPPOORWILL RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	4	73	0	0	77	6	0	9	0	15	0	75	7	0	82	174
04:15 PM	0	0	0	0	0	3	72	0	0	75	5	0	6	0	11	0	72	8	0	80	166
04:30 PM	0	0	0	0	0	3	72	0	0	75	7	0	5	0	12	0	107	15	0	122	209
04:45 PM	0	0	0	0	0	7	93	0	0	100	5	0	2	0	7	0	83	8	0	91	198
Total	0	0	0	0	0	17	310	0	0	327	23	0	22	0	45	0	337	38	0	375	747
05:00 PM	0	0	0	0	0	6	107	0	0	113	6	0	6	0	12	0	93	10	0	103	228
05:15 PM	0	0	0	0	0	11	89	0	0	100	7	0	7	0	14	0	107	13	0	120	234
05:30 PM	0	0	0	0	0	7	106	0	0	113	13	0	7	0	20	0	114	10	0	124	257
05:45 PM	0	0	0	0	0	4	105	0	0	109	10	0	5	0	15	0	107	8	0	115	239
Total	0	0	0	0	0	28	407	0	0	435	36	0	25	0	61	0	421	41	0	462	958
Grand Total	0	0	0	0	0	45	717	0	0	762	59	0	47	0	106	0	758	79	0	837	1705
Apprch %	0	0	0	0		5.9	94.1	0	0		55.7	0	44.3	0		0	90.6	9.4	0		
Total %	0	0	0	0		2.6	42.1	0	0	44.7	3.5	0	2.8	0	6.2	0	44.5	4.6	0	49.1	
Cars	0	0	0	0	0	42	708	0	0	750	55	0	46	0	101	0	734	77	0	811	1662
% Cars	0	0	0	0	0	93.3	98.7	0	0	98.4	93.2	0	97.9	0	95.3	0	96.8	97.5	0	96.9	97.5
Trucks	0	0	0	0	0	3	9	0	0	12	4	0	1	0	5	0	24	2	0	26	43
% Trucks	0	0	0	0	0	6.7	1.3	0	0	1.6	6.8	0	2.1	0	4.7	0	3.2	2.5	0	3.1	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

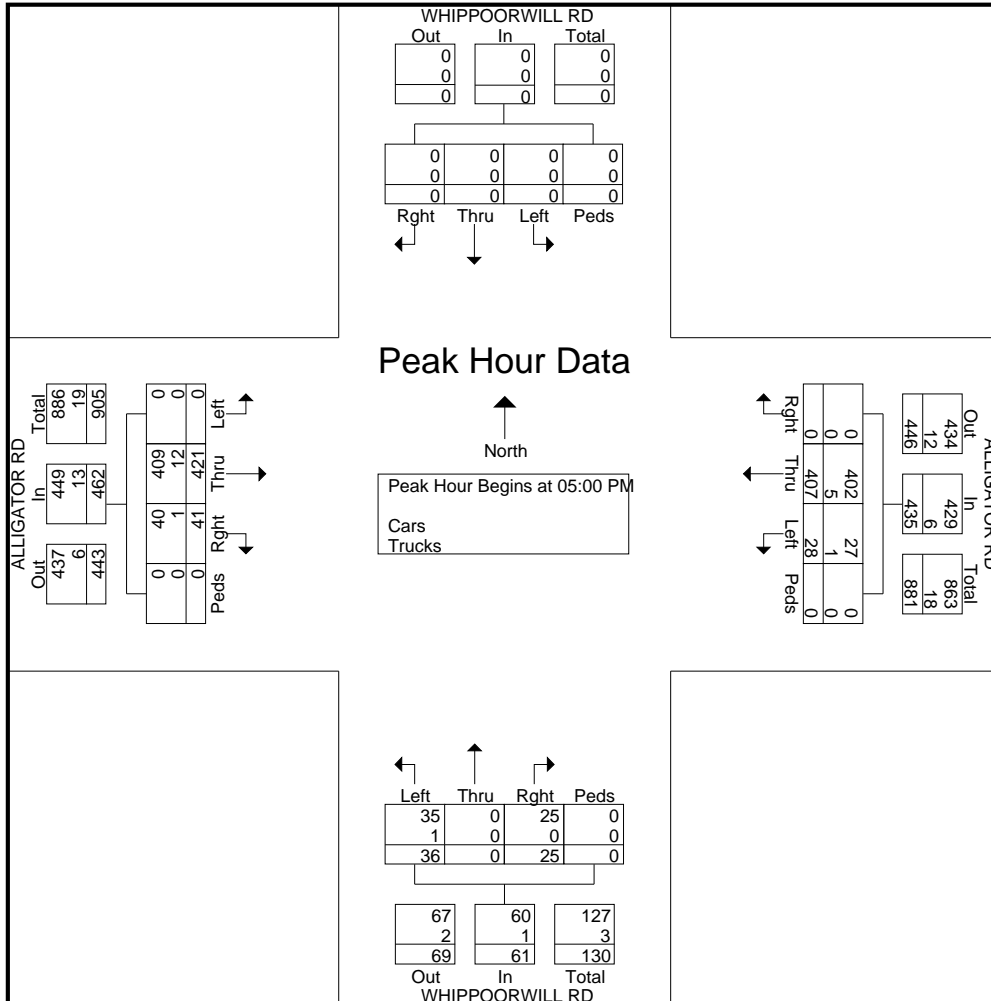
File Name : #17 WhippoorwillRd@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WHIPPOORWILL RD Southbound					ALLIGATOR RD Westbound					WHIPPOORWILL RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	6	107	0	0	113	6	0	6	0	12	0	93	10	0	103	228
05:15 PM	0	0	0	0	0	11	89	0	0	100	7	0	7	0	14	0	107	13	0	120	234
05:30 PM	0	0	0	0	0	7	106	0	0	113	13	0	7	0	20	0	114	10	0	124	257
05:45 PM	0	0	0	0	0	4	105	0	0	109	10	0	5	0	15	0	107	8	0	115	239
Total Volume	0	0	0	0	0	28	407	0	0	435	36	0	25	0	61	0	421	41	0	462	958
% App. Total	0	0	0	0	0	6.4	93.6	0	0	98.6	59	0	41	0	98.4	0	91.1	8.9	0	97.2	97.9
PHF	.000	.000	.000	.000	.000	.636	.951	.000	.000	.962	.692	.000	.893	.000	.763	.000	.923	.788	.000	.931	.932
Cars	0	0	0	0	0	27	402	0	0	429	35	0	25	0	60	0	409	40	0	449	938
% Cars	0	0	0	0	0	96.4	98.8	0	0	98.6	97.2	0	100	0	98.4	0	97.1	97.6	0	97.2	97.9
Trucks	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	0	12	1	0	13	20
% Trucks	0	0	0	0	0	3.6	1.2	0	0	1.4	2.8	0	0	0	1.6	0	2.9	2.4	0	2.8	2.1





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #18 McElveenLn@AlligatorRdAM

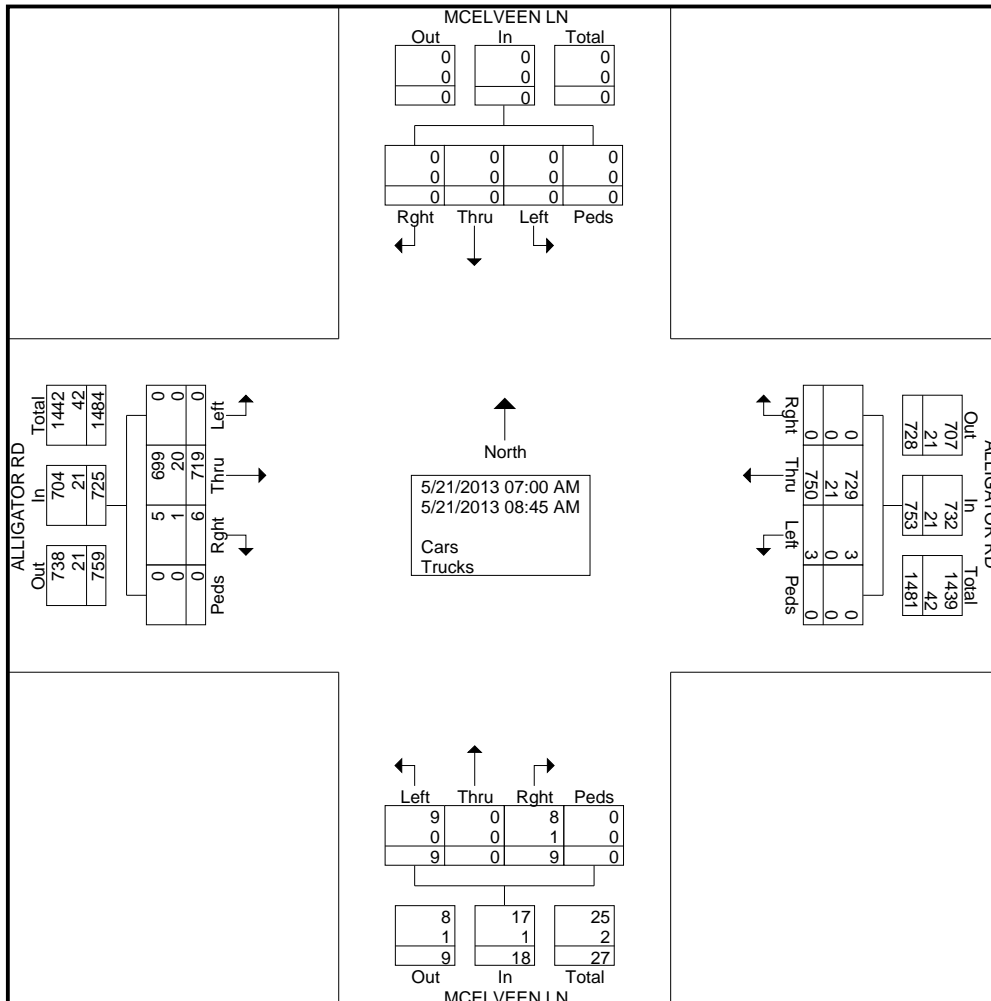
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	MCELVEEN LN Southbound					ALLIGATOR RD Westbound					MCELVEEN LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	86	0	0	86	1	0	1	0	2	0	97	0	0	97	185
07:15 AM	0	0	0	0	0	0	105	0	0	105	0	0	0	0	0	0	121	1	0	122	227
07:30 AM	0	0	0	0	0	1	147	0	0	148	5	0	2	0	7	0	108	0	0	108	263
07:45 AM	0	0	0	0	0	0	120	0	0	120	0	0	2	0	2	0	131	2	0	133	255
Total	0	0	0	0	0	1	458	0	0	459	6	0	5	0	11	0	457	3	0	460	930
08:00 AM	0	0	0	0	0	0	79	0	0	79	0	0	1	0	1	0	104	0	0	104	184
08:15 AM	0	0	0	0	0	1	87	0	0	88	1	0	0	0	1	0	64	1	0	65	154
08:30 AM	0	0	0	0	0	1	69	0	0	70	0	0	3	0	3	0	49	2	0	51	124
08:45 AM	0	0	0	0	0	0	57	0	0	57	2	0	0	0	2	0	45	0	0	45	104
Total	0	0	0	0	0	2	292	0	0	294	3	0	4	0	7	0	262	3	0	265	566
Grand Total	0	0	0	0	0	3	750	0	0	753	9	0	9	0	18	0	719	6	0	725	1496
Apprch %	0	0	0	0		0.4	99.6	0	0		50	0	50	0		0	99.2	0.8	0		
Total %	0	0	0	0	0	0.2	50.1	0	0	50.3	0.6	0	0.6	0	1.2	0	48.1	0.4	0	48.5	
Cars	0	0	0	0	0	3	729	0	0	732	9	0	8	0	17	0	699	5	0	704	1453
% Cars	0	0	0	0	0	100	97.2	0	0	97.2	100	0	88.9	0	94.4	0	97.2	83.3	0	97.1	97.1
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	1	0	1	0	20	1	0	21	43
% Trucks	0	0	0	0	0	0	2.8	0	0	2.8	0	0	11.1	0	5.6	0	2.8	16.7	0	2.9	2.9

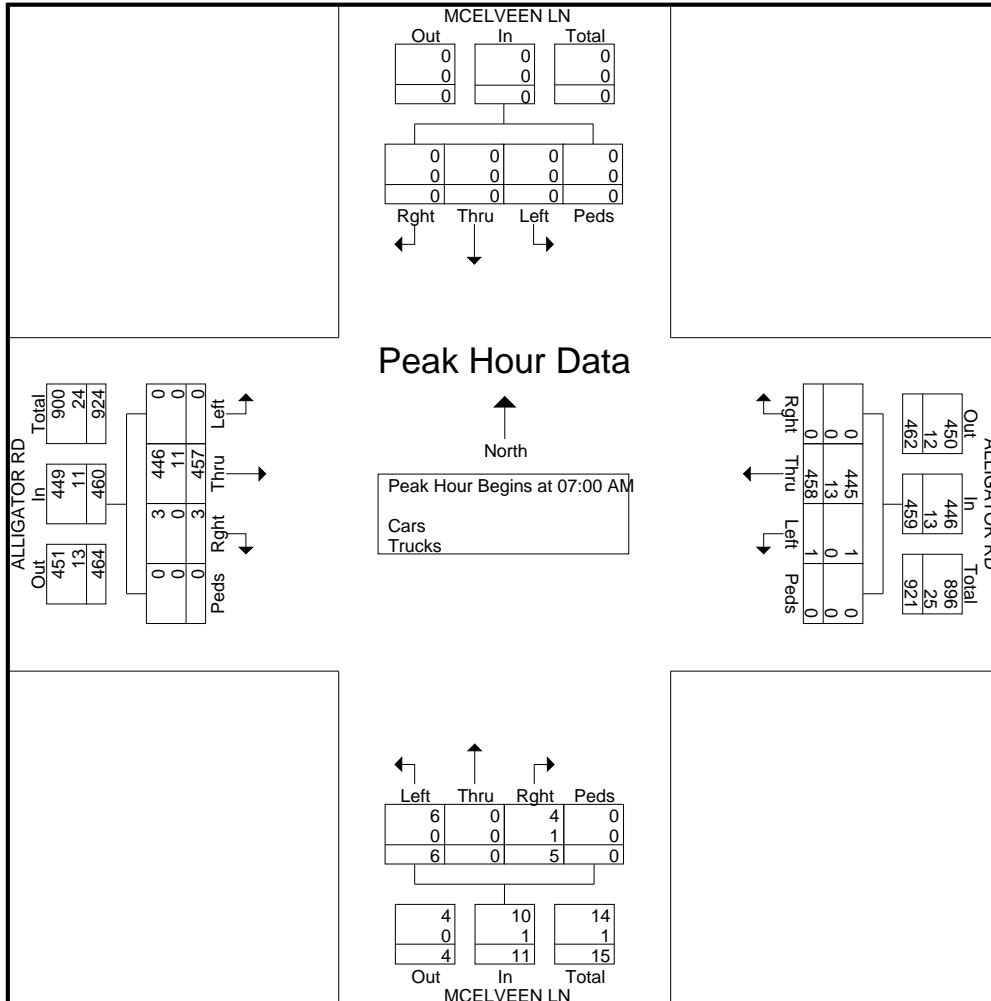


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #18 McElveenLn@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	MCELVEEN LN Southbound					ALLIGATOR RD Westbound					MCELVEEN LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	86	0	0	86	1	0	1	0	2	0	97	0	0	97	185
07:15 AM	0	0	0	0	0	0	105	0	0	105	0	0	0	0	0	0	121	1	0	122	227
07:30 AM	0	0	0	0	0	1	147	0	0	148	5	0	2	0	7	0	108	0	0	108	263
07:45 AM	0	0	0	0	0	0	120	0	0	120	0	0	2	0	2	0	131	2	0	133	255
Total Volume	0	0	0	0	0	1	458	0	0	459	6	0	5	0	11	0	457	3	0	460	930
% App. Total	0	0	0	0	0	0.2	99.8	0	0	0	54.5	0	45.5	0	0	0	99.3	0.7	0	0	
PHF	.000	.000	.000	.000	.000	.250	.779	.000	.000	.775	.300	.000	.625	.000	.393	.000	.872	.375	.000	.865	.884
Cars	0	0	0	0	0	1	445	0	0	446	6	0	4	0	10	0	446	3	0	449	905
% Cars	0	0	0	0	0	100	97.2	0	0	97.2	100	0	80.0	0	90.9	0	97.6	100	0	97.6	97.3
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	1	0	1	0	11	0	0	11	25
% Trucks	0	0	0	0	0	0	2.8	0	0	2.8	0	0	20.0	0	9.1	0	2.4	0	0	2.4	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #18 McElveenLn@AlligatorRdPM

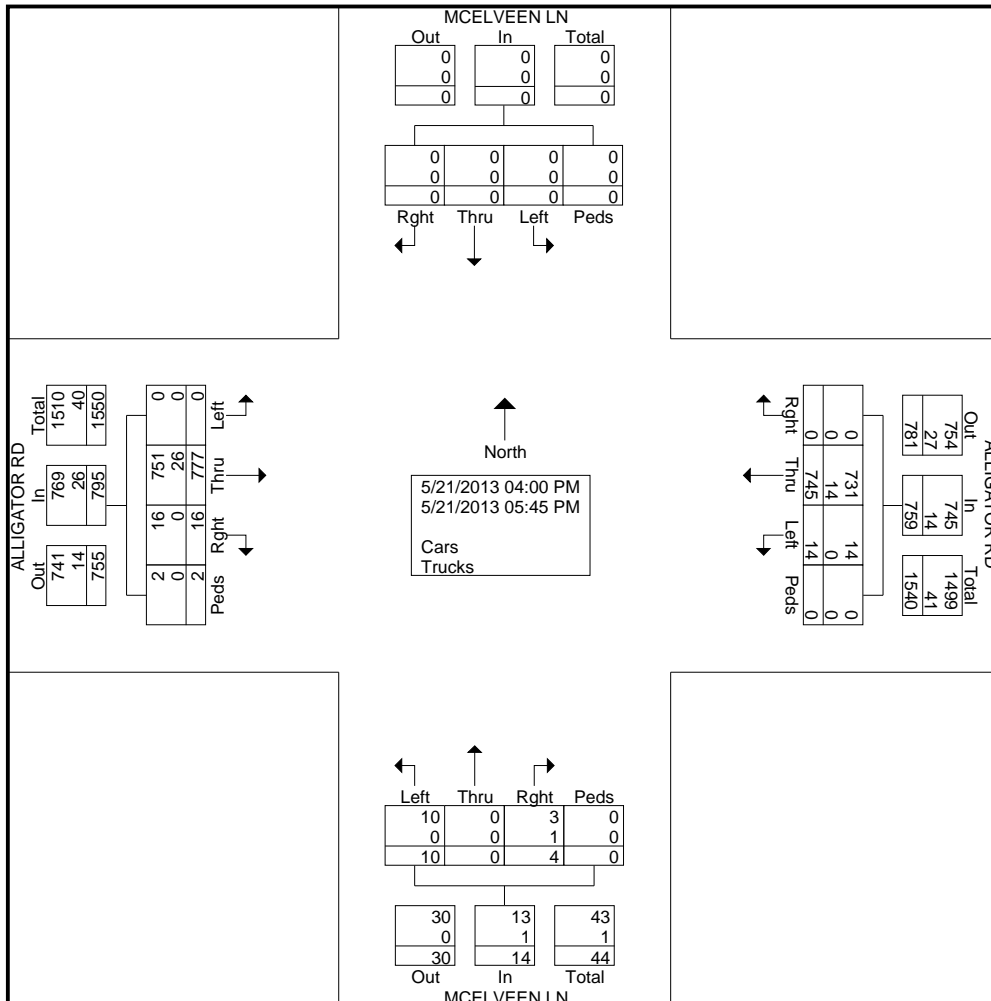
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	MCELVEEN LN Southbound					ALLIGATOR RD Westbound					MCELVEEN LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	2	73	0	0	75	0	0	1	0	1	0	80	0	0	80	156
04:15 PM	0	0	0	0	0	2	75	0	0	77	3	0	1	0	4	0	80	1	0	81	162
04:30 PM	0	0	0	0	0	2	69	0	0	71	1	0	1	0	2	0	104	2	0	106	179
04:45 PM	0	0	0	0	0	1	97	0	0	98	0	0	1	0	1	0	77	1	0	78	177
Total	0	0	0	0	0	7	314	0	0	321	4	0	4	0	8	0	341	4	0	345	674
05:00 PM	0	0	0	0	0	2	110	0	0	112	2	0	0	0	2	0	103	2	0	105	219
05:15 PM	0	0	0	0	0	4	104	0	0	108	2	0	0	0	2	0	111	3	0	114	224
05:30 PM	0	0	0	0	0	1	113	0	0	114	0	0	0	0	0	0	111	6	2	119	233
05:45 PM	0	0	0	0	0	0	104	0	0	104	2	0	0	0	2	0	111	1	0	112	218
Total	0	0	0	0	0	7	431	0	0	438	6	0	0	0	6	0	436	12	2	450	894
Grand Total	0	0	0	0	0	14	745	0	0	759	10	0	4	0	14	0	777	16	2	795	1568
Apprch %	0	0	0	0		1.8	98.2	0	0		71.4	0	28.6	0		0	97.7	2	0.3		
Total %	0	0	0	0	0	0.9	47.5	0	0	48.4	0.6	0	0.3	0	0.9	0	49.6	1	0.1	50.7	
Cars	0	0	0	0	0	14	731	0	0	745	10	0	3	0	13	0	751	16	2	769	1527
% Cars	0	0	0	0	0	100	98.1	0	0	98.2	100	0	75	0	92.9	0	96.7	100	100	96.7	97.4
Trucks	0	0	0	0	0	0	14	0	0	14	0	0	1	0	1	0	26	0	0	26	41
% Trucks	0	0	0	0	0	0	1.9	0	0	1.8	0	0	25	0	7.1	0	3.3	0	0	3.3	2.6

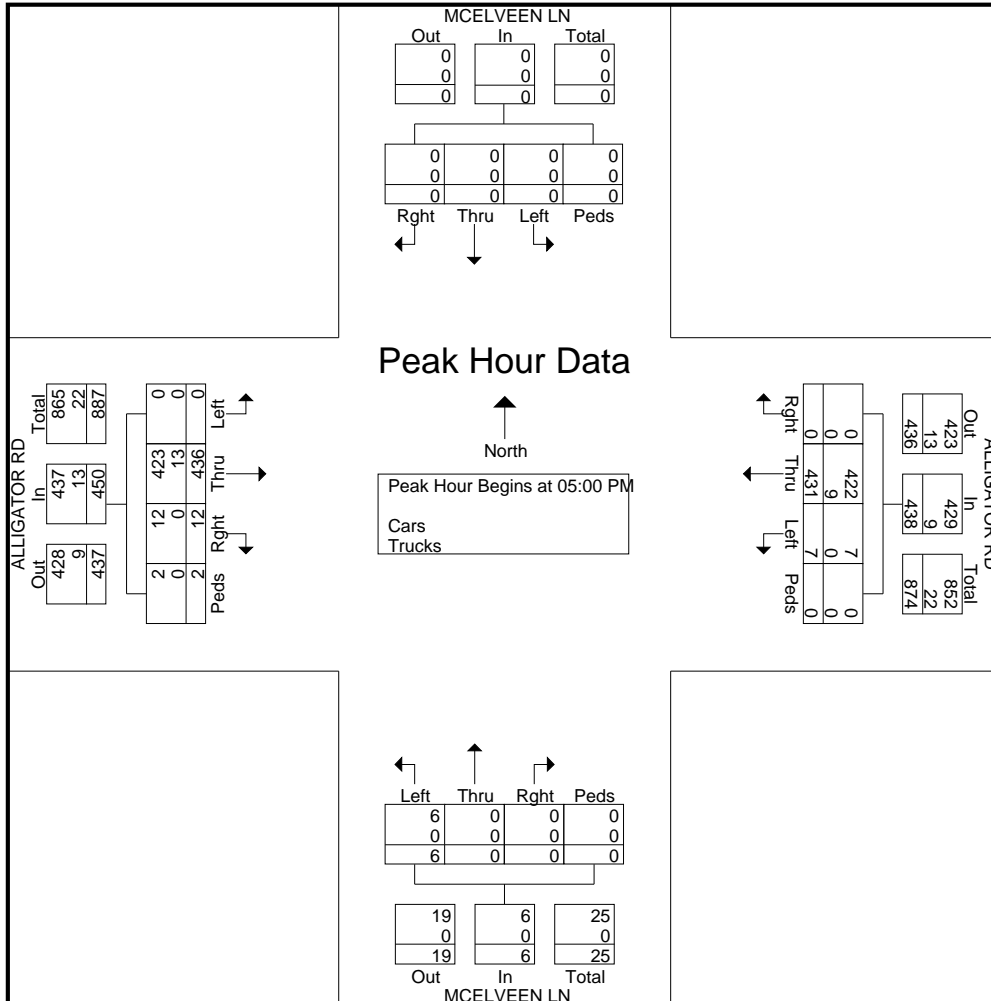


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #18 McElveenLn@AlligatorRdPM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	MCELVEEN LN Southbound					ALLIGATOR RD Westbound					MCELVEEN LN Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	110	0	0	112	2	0	0	0	2	0	103	2	0	105	219
05:15 PM	0	0	0	0	0	4	104	0	0	108	2	0	0	0	2	0	111	3	0	114	224
05:30 PM	0	0	0	0	0	1	113	0	0	114	0	0	0	0	0	0	111	6	2	119	233
05:45 PM	0	0	0	0	0	0	104	0	0	104	2	0	0	0	2	0	111	1	0	112	218
Total Volume	0	0	0	0	0	7	431	0	0	438	6	0	0	0	6	0	436	12	2	450	894
% App. Total	0	0	0	0	0	1.6	98.4	0	0	0	100	0	0	0	100	0	96.9	2.7	0.4	0	0
PHF	.000	.000	.000	.000	.000	.438	.954	.000	.000	.961	.750	.000	.000	.000	.750	.000	.982	.500	.250	.945	.959
Cars	0	0	0	0	0	7	422	0	0	429	6	0	0	0	6	0	423	12	2	437	872
% Cars	0	0	0	0	0	100	97.9	0	0	97.9	100	0	0	0	100	0	97.0	100	100	97.1	97.5
Trucks	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	13	0	0	13	22
% Trucks	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	0	3.0	0	0	2.9	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #19 AshfordDr@AlligatorRdAM

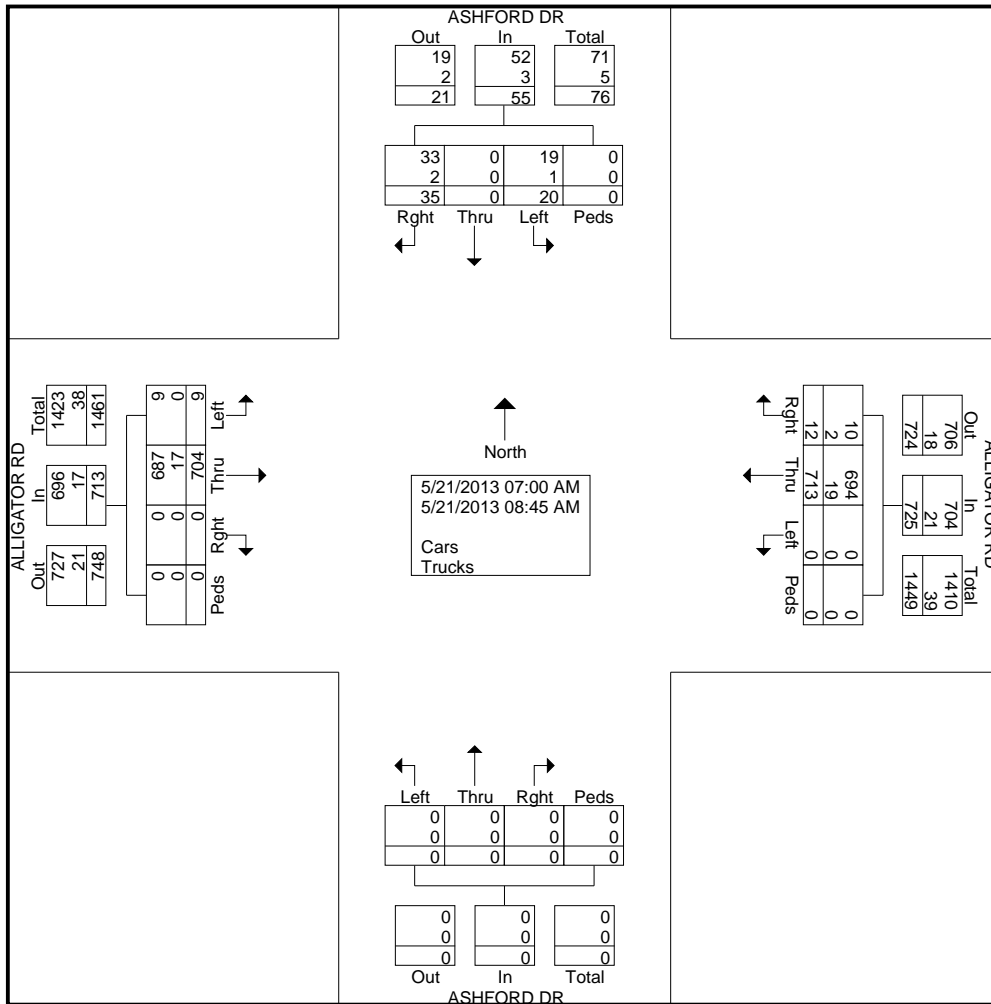
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	ASHFORD DR Southbound					ALLIGATOR RD Westbound					ASHFORD DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	7	0	8	0	91	2	0	93	0	0	0	0	0	2	100	0	0	102	203
07:15 AM	4	0	7	0	11	0	104	3	0	107	0	0	0	0	0	4	127	0	0	131	249
07:30 AM	7	0	9	0	16	0	149	3	0	152	0	0	0	0	0	0	122	0	0	122	290
07:45 AM	3	0	3	0	6	0	90	0	0	90	0	0	0	0	0	2	110	0	0	112	208
Total	15	0	26	0	41	0	434	8	0	442	0	0	0	0	0	8	459	0	0	467	950
08:00 AM	3	0	2	0	5	0	78	0	0	78	0	0	0	0	0	0	94	0	0	94	177
08:15 AM	1	0	2	0	3	0	83	2	0	85	0	0	0	0	0	0	57	0	0	57	145
08:30 AM	1	0	3	0	4	0	67	1	0	68	0	0	0	0	0	1	49	0	0	50	122
08:45 AM	0	0	2	0	2	0	51	1	0	52	0	0	0	0	0	0	45	0	0	45	99
Total	5	0	9	0	14	0	279	4	0	283	0	0	0	0	0	1	245	0	0	246	543
Grand Total	20	0	35	0	55	0	713	12	0	725	0	0	0	0	0	9	704	0	0	713	1493
Apprch %	36.4	0	63.6	0		0	98.3	1.7	0		0	0	0	0		1.3	98.7	0	0		
Total %	1.3	0	2.3	0	3.7	0	47.8	0.8	0	48.6	0	0	0	0	0	0.6	47.2	0	0	47.8	
Cars	19	0	33	0	52	0	694	10	0	704	0	0	0	0	0	9	687	0	0	696	1452
% Cars	95	0	94.3	0	94.5	0	97.3	83.3	0	97.1	0	0	0	0	0	100	97.6	0	0	97.6	97.3
Trucks	1	0	2	0	3	0	19	2	0	21	0	0	0	0	0	0	17	0	0	17	41
% Trucks	5	0	5.7	0	5.5	0	2.7	16.7	0	2.9	0	0	0	0	0	0	2.4	0	0	2.4	2.7

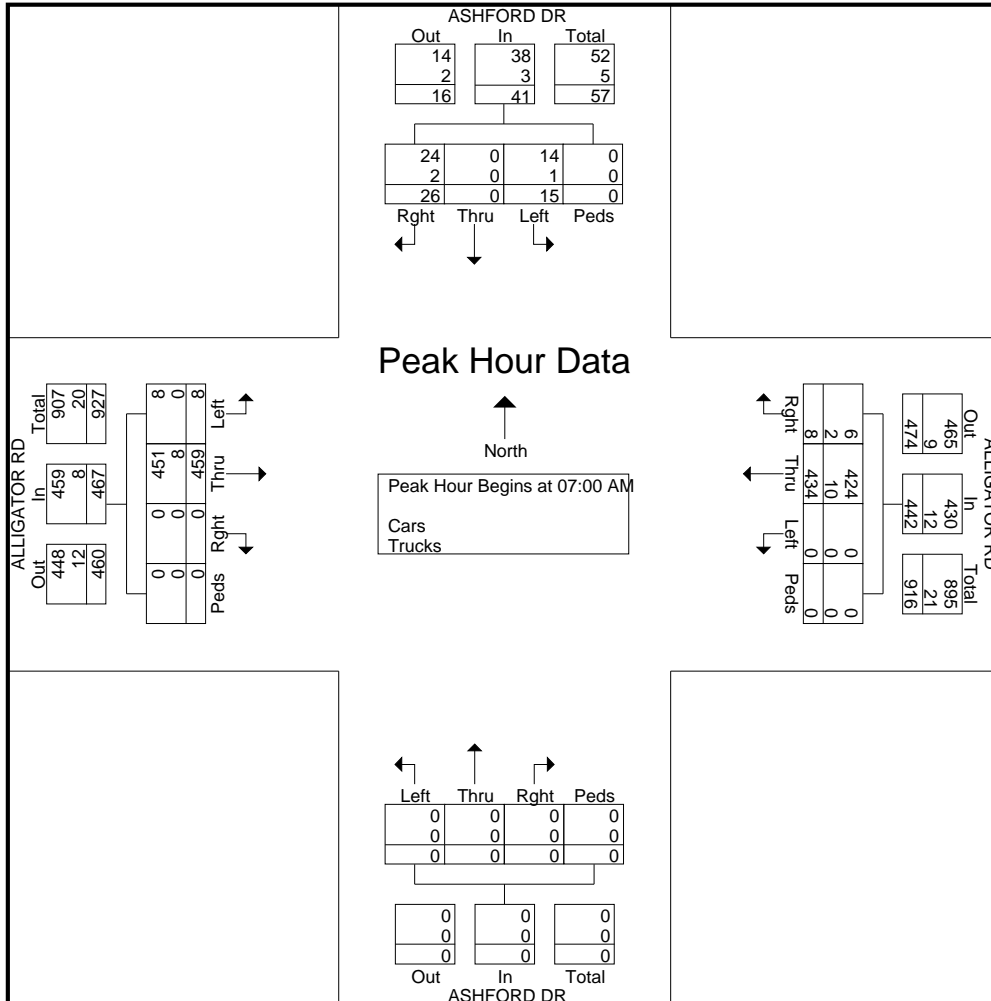


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #19 AshfordDr@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	ASHFORD DR Southbound					ALLIGATOR RD Westbound					ASHFORD DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	0	7	0	8	0	91	2	0	93	0	0	0	0	0	2	100	0	0	102	203
07:15 AM	4	0	7	0	11	0	104	3	0	107	0	0	0	0	0	4	127	0	0	131	249
07:30 AM	7	0	9	0	16	0	149	3	0	152	0	0	0	0	0	0	122	0	0	122	290
07:45 AM	3	0	3	0	6	0	90	0	0	90	0	0	0	0	0	2	110	0	0	112	208
Total Volume	15	0	26	0	41	0	434	8	0	442	0	0	0	0	0	8	459	0	0	467	950
% App. Total	36.6	0	63.4	0		0	98.2	1.8	0		0	0	0	0		1.7	98.3	0	0		
PHF	.536	.000	.722	.000	.641	.000	.728	.667	.000	.727	.000	.000	.000	.000	.000	.500	.904	.000	.000	.891	.819
Cars	14	0	24	0	38	0	424	6	0	430	0	0	0	0	0	8	451	0	0	459	927
% Cars	93.3	0	92.3	0	92.7	0	97.7	75.0	0	97.3	0	0	0	0	0	100	98.3	0	0	98.3	97.6
Trucks	1	0	2	0	3	0	10	2	0	12	0	0	0	0	0	0	8	0	0	8	23
% Trucks	6.7	0	7.7	0	7.3	0	2.3	25.0	0	2.7	0	0	0	0	0	0	1.7	0	0	1.7	2.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #19 AshfordDr@AlligatorRdPM

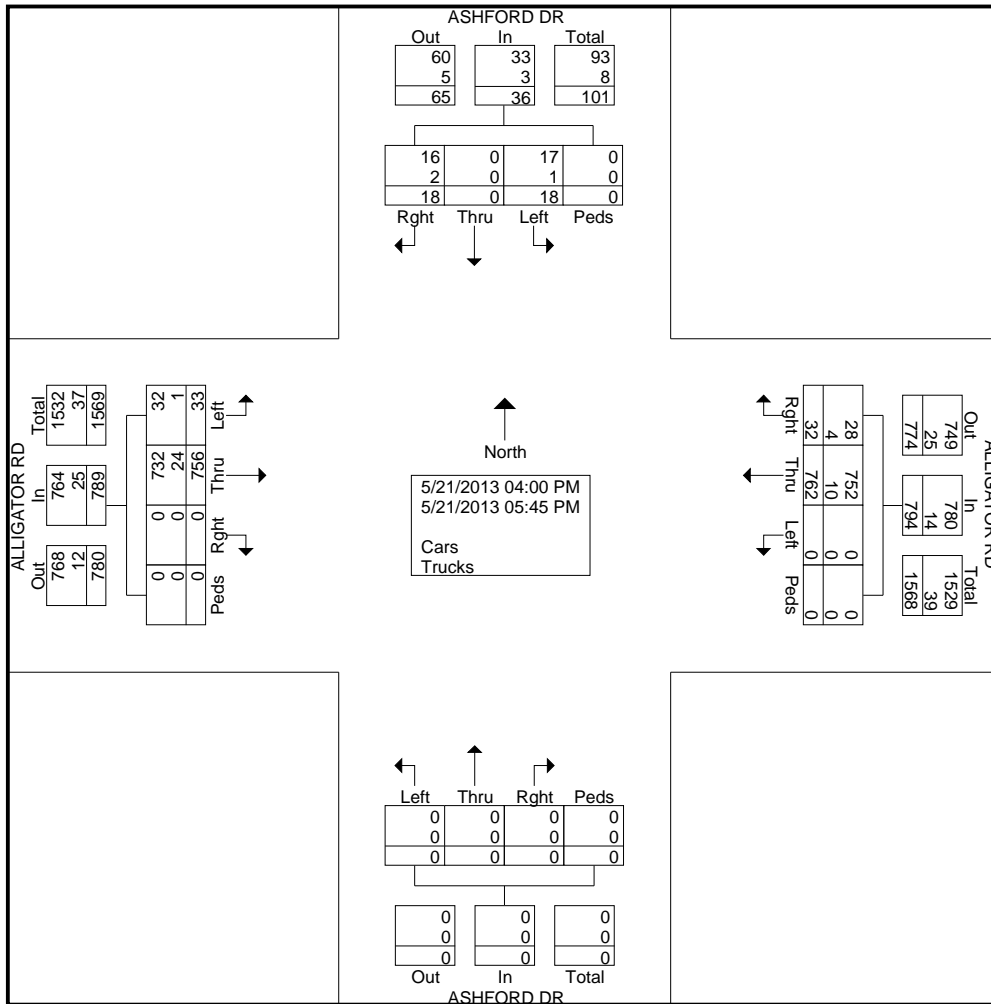
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	ASHFORD DR Southbound					ALLIGATOR RD Westbound					ASHFORD DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	0	3	0	4	0	87	5	0	92	0	0	0	0	0	2	78	0	0	80	176
04:15 PM	2	0	5	0	7	0	70	6	0	76	0	0	0	0	0	6	78	0	0	84	167
04:30 PM	4	0	1	0	5	0	74	1	0	75	0	0	0	0	0	2	100	0	0	102	182
04:45 PM	4	0	1	0	5	0	99	2	0	101	0	0	0	0	0	1	87	0	0	88	194
<b>Total</b>	<b>11</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>330</b>	<b>14</b>	<b>0</b>	<b>344</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>354</b>	<b>719</b>
05:00 PM	1	0	0	0	1	0	107	4	0	111	0	0	0	0	0	4	91	0	0	95	207
05:15 PM	3	0	3	0	6	0	109	4	0	113	0	0	0	0	0	4	111	0	0	115	234
05:30 PM	1	0	1	0	2	0	111	2	0	113	0	0	0	0	0	7	114	0	0	121	236
05:45 PM	2	0	4	0	6	0	105	8	0	113	0	0	0	0	0	7	97	0	0	104	223
<b>Total</b>	<b>7</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>432</b>	<b>18</b>	<b>0</b>	<b>450</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>413</b>	<b>0</b>	<b>0</b>	<b>435</b>	<b>900</b>
Grand Total	18	0	18	0	36	0	762	32	0	794	0	0	0	0	0	33	756	0	0	789	1619
Apprch %	50	0	50	0		0	96	4	0		0	0	0	0		4.2	95.8	0	0		
Total %	1.1	0	1.1	0	2.2	0	47.1	2	0	49	0	0	0	0	0	2	46.7	0	0	48.7	
Cars	17	0	16	0	33	0	752	28	0	780	0	0	0	0	0	32	732	0	0	764	1577
% Cars	94.4	0	88.9	0	91.7	0	98.7	87.5	0	98.2	0	0	0	0	0	97	96.8	0	0	96.8	97.4
Trucks	1	0	2	0	3	0	10	4	0	14	0	0	0	0	0	1	24	0	0	25	42
% Trucks	5.6	0	11.1	0	8.3	0	1.3	12.5	0	1.8	0	0	0	0	0	3	3.2	0	0	3.2	2.6

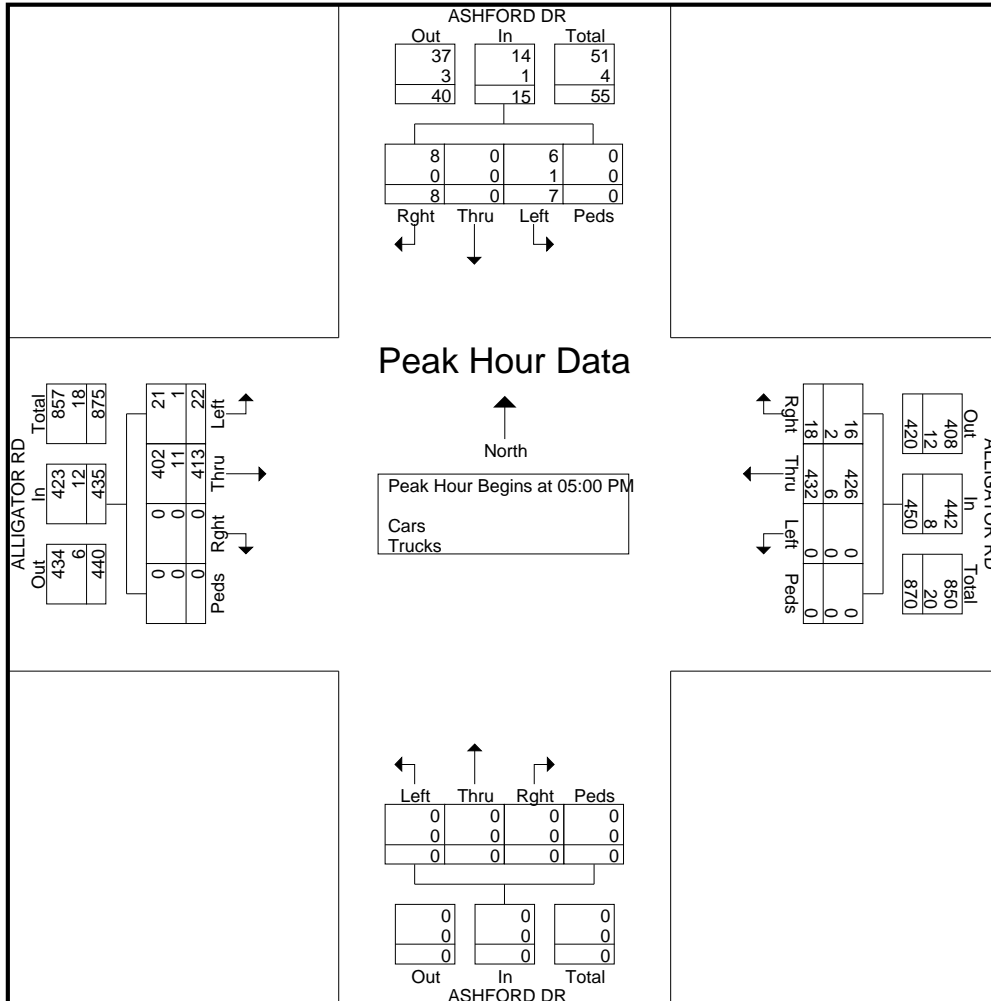


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #19 AshfordDr@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	ASHFORD DR Southbound					ALLIGATOR RD Westbound					ASHFORD DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	0	0	1	0	107	4	0	111	0	0	0	0	0	4	91	0	0	95	207
05:15 PM	3	0	3	0	6	0	109	4	0	113	0	0	0	0	0	4	111	0	0	115	234
05:30 PM	1	0	1	0	2	0	111	2	0	113	0	0	0	0	0	7	114	0	0	121	236
05:45 PM	2	0	4	0	6	0	105	8	0	113	0	0	0	0	0	7	97	0	0	104	223
Total Volume	7	0	8	0	15	0	432	18	0	450	0	0	0	0	0	22	413	0	0	435	900
% App. Total	46.7	0	53.3	0		0	96	4	0		0	0	0	0		5.1	94.9	0	0		
PHF	.583	.000	.500	.000	.625	.000	.973	.563	.000	.996	.000	.000	.000	.000	.000	.786	.906	.000	.000	.899	.953
Cars	6	0	8	0	14	0	426	16	0	442	0	0	0	0	0	21	402	0	0	423	879
% Cars	85.7	0	100	0	93.3	0	98.6	88.9	0	98.2	0	0	0	0	0	95.5	97.3	0	0	97.2	97.7
Trucks	1	0	0	0	1	0	6	2	0	8	0	0	0	0	0	1	11	0	0	12	21
% Trucks	14.3	0	0	0	6.7	0	1.4	11.1	0	1.8	0	0	0	0	0	4.5	2.7	0	0	2.8	2.3





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #20 PleasantValleyCircle(West)@AlligatorRdAM

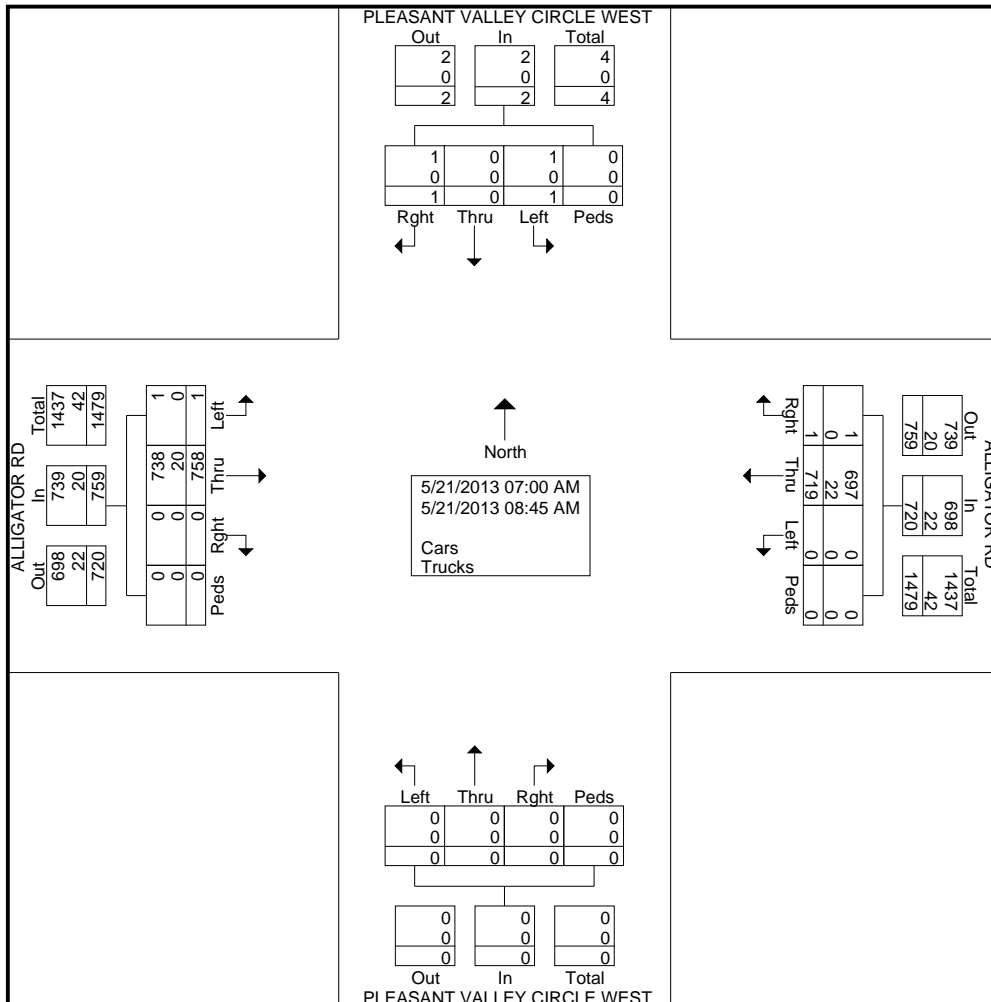
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	PLEASANT VALLEY CIRCLE WEST Southbound					ALLIGATOR RD Westbound					PLEASANT VALLEY CIRCLE WEST Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	77	0	0	77	0	0	0	0	0	0	99	0	0	99	176
07:15 AM	0	0	0	0	0	0	102	0	0	102	0	0	0	0	0	0	119	0	0	119	221
07:30 AM	0	0	1	0	1	0	142	1	0	143	0	0	0	0	0	0	120	0	0	120	264
07:45 AM	0	0	0	0	0	0	105	0	0	105	0	0	0	0	0	1	137	0	0	138	243
Total	0	0	1	0	1	0	426	1	0	427	0	0	0	0	0	1	475	0	0	476	904
08:00 AM	0	0	0	0	0	0	82	0	0	82	0	0	0	0	0	0	106	0	0	106	188
08:15 AM	1	0	0	0	1	0	87	0	0	87	0	0	0	0	0	0	70	0	0	70	158
08:30 AM	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	0	51	0	0	51	119
08:45 AM	0	0	0	0	0	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	112
Total	1	0	0	0	1	0	293	0	0	293	0	0	0	0	0	0	283	0	0	283	577
Grand Total	1	0	1	0	2	0	719	1	0	720	0	0	0	0	0	1	758	0	0	759	1481
Apprch %	50	0	50	0		0	99.9	0.1	0		0	0	0	0		0.1	99.9	0	0		
Total %	0.1	0	0.1	0	0.1	0	48.5	0.1	0	48.6	0	0	0	0	0	0.1	51.2	0	0	51.2	
Cars	1	0	1	0	2	0	697	1	0	698	0	0	0	0	0	1	738	0	0	739	1439
% Cars	100	0	100	0	100	0	96.9	100	0	96.9	0	0	0	0	0	100	97.4	0	0	97.4	97.2
Trucks	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	20	0	0	20	42
% Trucks	0	0	0	0	0	0	3.1	0	0	3.1	0	0	0	0	0	0	2.6	0	0	2.6	2.8



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

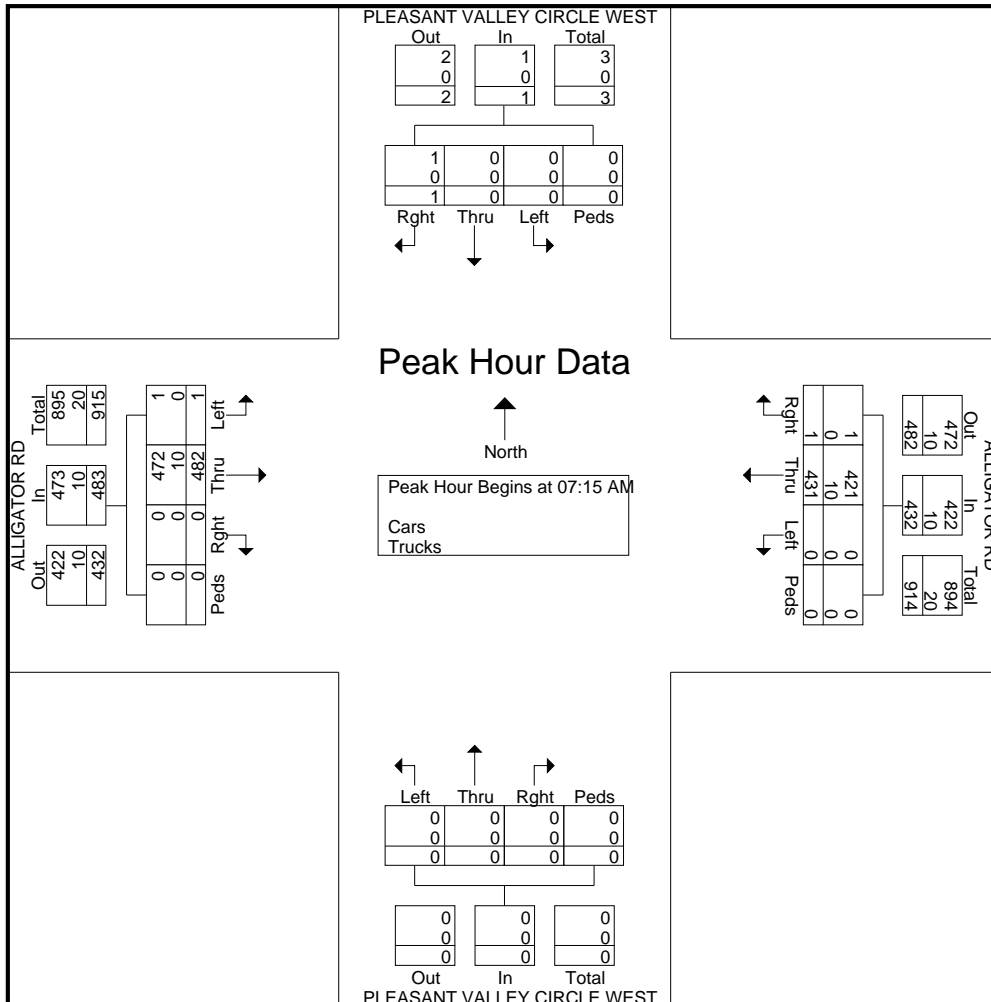
File Name : #20 PleasantValleyCircle(West)@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	PLEASANT VALLEY CIRCLE WEST Southbound					ALLIGATOR RD Westbound					PLEASANT VALLEY CIRCLE WEST Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	102	0	0	102	0	0	0	0	0	0	119	0	0	119	221
07:30 AM	0	0	1	0	1	0	142	1	0	143	0	0	0	0	0	0	120	0	0	120	264
07:45 AM	0	0	0	0	0	0	105	0	0	105	0	0	0	0	0	1	137	0	0	138	243
08:00 AM	0	0	0	0	0	0	82	0	0	82	0	0	0	0	0	0	106	0	0	106	188
Total Volume	0	0	1	0	1	0	431	1	0	432	0	0	0	0	0	1	482	0	0	483	916
% App. Total	0	0	100	0	0	0	99.8	0.2	0	0	0	0	0	0	0	0.2	99.8	0	0	0	0
PHF	.000	.000	.250	.000	.250	.000	.759	.250	.000	.755	.000	.000	.000	.000	.000	.250	.880	.000	.000	.875	.867
Cars	0	0	1	0	1	0	421	1	0	422	0	0	0	0	0	1	472	0	0	473	896
% Cars	0	0	100	0	100	0	97.7	100	0	97.7	0	0	0	0	0	100	97.9	0	0	97.9	97.8
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	20
% Trucks	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	0	2.1	0	0	2.1	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #20 PleasantValleyCircle(West)@AlligatorRdPM

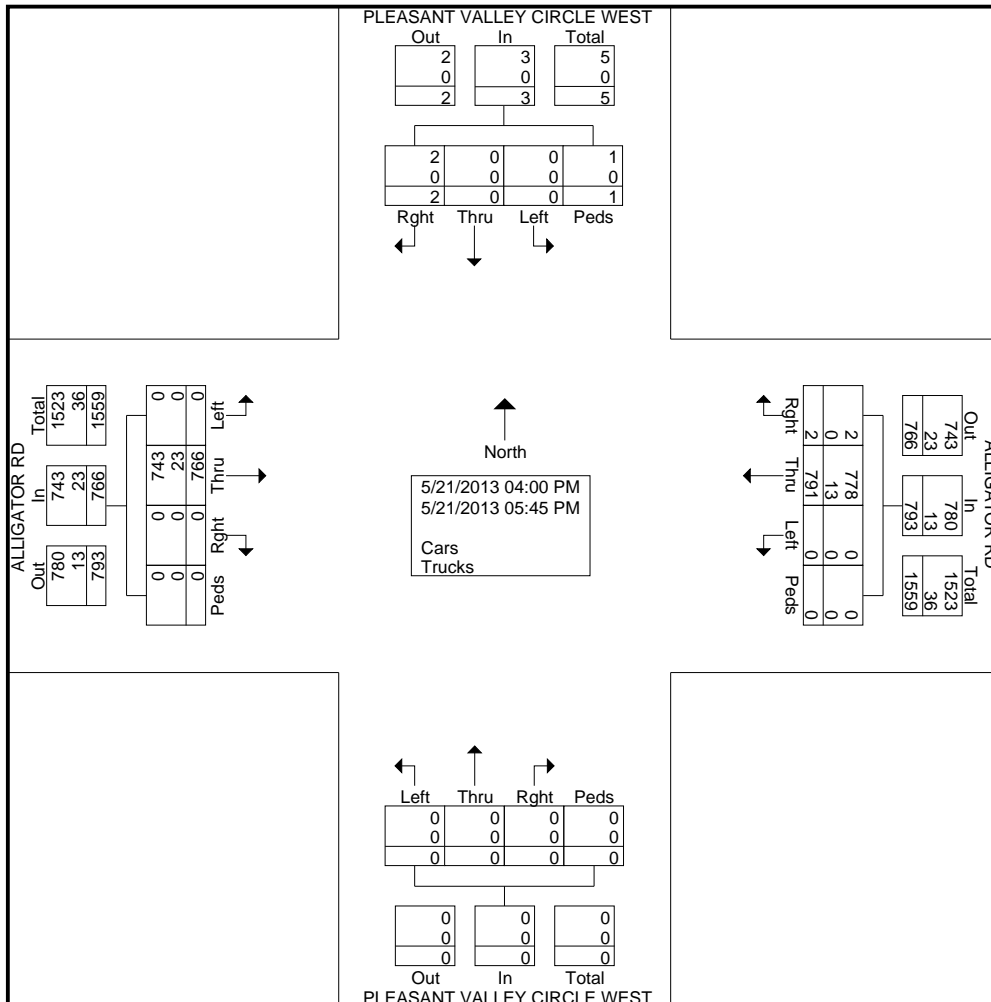
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	PLEASANT VALLEY CIRCLE WEST Southbound					ALLIGATOR RD Westbound					PLEASANT VALLEY CIRCLE WEST Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	86	0	0	86	0	0	0	0	0	0	81	0	0	81	167
04:15 PM	0	0	1	0	1	0	78	1	0	79	0	0	0	0	0	0	80	0	0	80	160
04:30 PM	0	0	0	0	0	0	72	0	0	72	0	0	0	0	0	0	101	0	0	101	173
04:45 PM	0	0	0	0	0	0	97	0	0	97	0	0	0	0	0	0	85	0	0	85	182
Total	0	0	1	0	1	0	333	1	0	334	0	0	0	0	0	0	347	0	0	347	682
05:00 PM	0	0	0	0	0	0	117	1	0	118	0	0	0	0	0	0	104	0	0	104	222
05:15 PM	0	0	0	1	1	0	111	0	0	111	0	0	0	0	0	0	100	0	0	100	212
05:30 PM	0	0	1	0	1	0	119	0	0	119	0	0	0	0	0	0	98	0	0	98	218
05:45 PM	0	0	0	0	0	0	111	0	0	111	0	0	0	0	0	0	117	0	0	117	228
Total	0	0	1	1	2	0	458	1	0	459	0	0	0	0	0	0	419	0	0	419	880
Grand Total	0	0	2	1	3	0	791	2	0	793	0	0	0	0	0	0	766	0	0	766	1562
Apprch %	0	0	66.7	33.3		0	99.7	0.3	0		0	0	0	0		0	100	0	0		
Total %	0	0	0.1	0.1	0.2	0	50.6	0.1	0	50.8	0	0	0	0	0	0	49	0	0	49	
Cars	0	0	2	1	3	0	778	2	0	780	0	0	0	0	0	0	743	0	0	743	1526
% Cars	0	0	100	100	100	0	98.4	100	0	98.4	0	0	0	0	0	0	97	0	0	97	97.7
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	23	0	0	23	36
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3	0	0	3	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

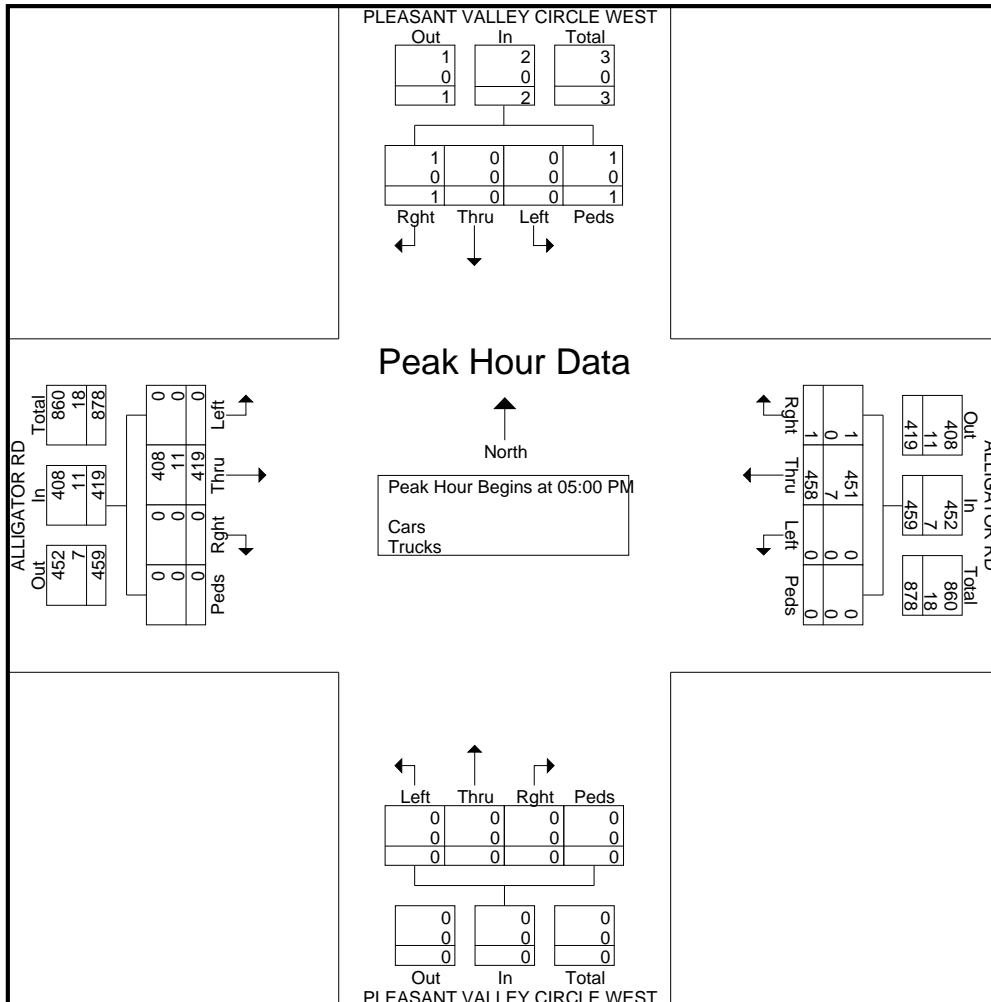
File Name : #20 PleasantValleyCircle(West)@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	PLEASANT VALLEY CIRCLE WEST Southbound					ALLIGATOR RD Westbound					PLEASANT VALLEY CIRCLE WEST Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	117	1	0	118	0	0	0	0	0	0	104	0	0	104	222
05:15 PM	0	0	0	1	1	0	111	0	0	111	0	0	0	0	0	0	100	0	0	100	212
05:30 PM	0	0	1	0	1	0	119	0	0	119	0	0	0	0	0	0	98	0	0	98	218
05:45 PM	0	0	0	0	0	0	111	0	0	111	0	0	0	0	0	0	117	0	0	117	228
Total Volume	0	0	1	1	2	0	458	1	0	459	0	0	0	0	0	0	419	0	0	419	880
% App. Total	0	0	50	50		0	99.8	0.2	0		0	0	0	0	0	0	100	0	0		
PHF	.000	.000	.250	.250	.500	.000	.962	.250	.000	.964	.000	.000	.000	.000	.000	.000	.895	.000	.000	.895	.965
Cars	0	0	1	1	2	0	451	1	0	452	0	0	0	0	0	0	408	0	0	408	862
% Cars	0	0	100	100	100	0	98.5	100	0	98.5	0	0	0	0	0	0	97.4	0	0	97.4	98.0
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	11	0	0	11	18
% Trucks	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	2.6	0	0	2.6	2.0



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #21 RedBerryCircle(1)@AlligatorRdAM

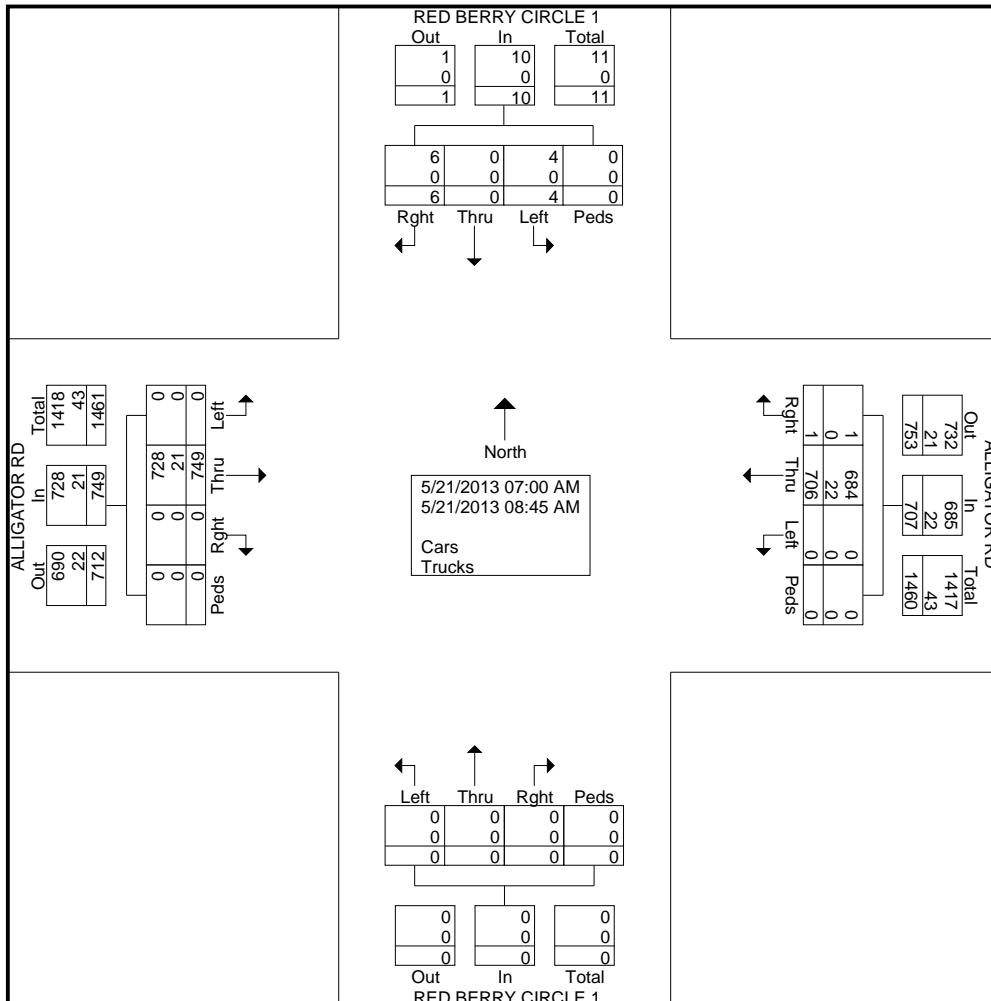
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED BERRY CIRCLE 1 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 1 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	85	0	0	85	0	0	0	0	0	0	98	0	0	98	183
07:15 AM	1	0	2	0	3	0	94	0	0	94	0	0	0	0	0	0	129	0	0	129	226
07:30 AM	1	0	1	0	2	0	152	0	0	152	0	0	0	0	0	0	123	0	0	123	277
07:45 AM	1	0	2	0	3	0	93	0	0	93	0	0	0	0	0	0	124	0	0	124	220
<b>Total</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>424</b>	<b>0</b>	<b>0</b>	<b>424</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>474</b>	<b>0</b>	<b>0</b>	<b>474</b>	<b>906</b>
08:00 AM	0	0	0	0	0	0	83	1	0	84	0	0	0	0	0	0	107	0	0	107	191
08:15 AM	1	0	0	0	1	0	83	0	0	83	0	0	0	0	0	0	63	0	0	63	147
08:30 AM	0	0	1	0	1	0	64	0	0	64	0	0	0	0	0	0	57	0	0	57	122
08:45 AM	0	0	0	0	0	0	52	0	0	52	0	0	0	0	0	0	48	0	0	48	100
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>282</b>	<b>1</b>	<b>0</b>	<b>283</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>560</b>
<b>Grand Total</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>706</b>	<b>1</b>	<b>0</b>	<b>707</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>749</b>	<b>0</b>	<b>0</b>	<b>749</b>	<b>1466</b>
Apprch %	40	0	60	0		0	99.9	0.1	0		0	0	0	0		0	100	0	0		
Total %	0.3	0	0.4	0	0.7	0	48.2	0.1	0	48.2	0	0	0	0	0	0	51.1	0	0	51.1	
Cars	4	0	6	0	10	0	684	1	0	685	0	0	0	0	0	0	728	0	0	728	1423
% Cars	100	0	100	0	100	0	96.9	100	0	96.9	0	0	0	0	0	0	97.2	0	0	97.2	97.1
Trucks	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	21	0	0	21	43
% Trucks	0	0	0	0	0	0	3.1	0	0	3.1	0	0	0	0	0	0	2.8	0	0	2.8	2.9

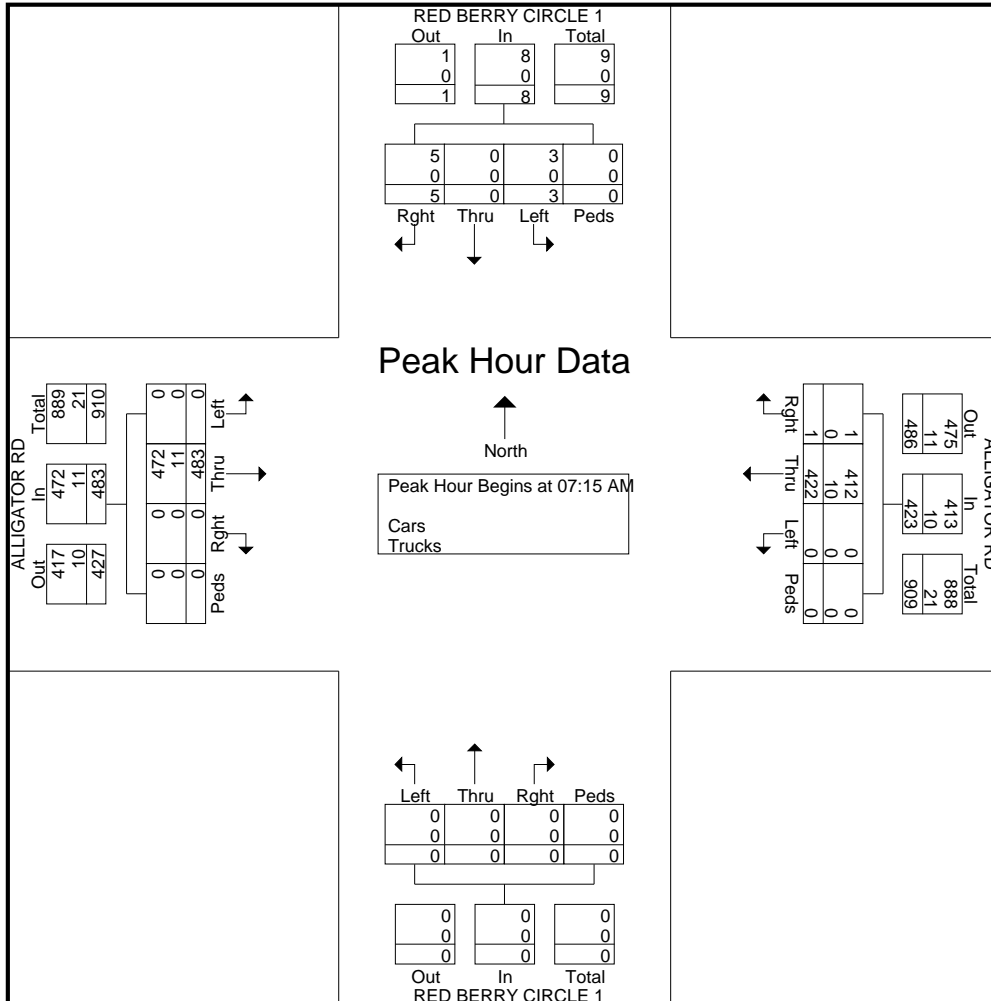


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #21 RedBerryCircle(1)@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	RED BERRY CIRCLE 1 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 1 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	0	2	0	3	0	94	0	0	94	0	0	0	0	0	0	129	0	0	129	226
07:30 AM	1	0	1	0	2	0	152	0	0	152	0	0	0	0	0	0	123	0	0	123	277
07:45 AM	1	0	2	0	3	0	93	0	0	93	0	0	0	0	0	0	124	0	0	124	220
08:00 AM	0	0	0	0	0	0	83	1	0	84	0	0	0	0	0	0	107	0	0	107	191
Total Volume	3	0	5	0	8	0	422	1	0	423	0	0	0	0	0	0	483	0	0	483	914
% App. Total	37.5	0	62.5	0		0	99.8	0.2	0		0	0	0	0	0	0	100	0	0		
PHF	.750	.000	.625	.000	.667	.000	.694	.250	.000	.696	.000	.000	.000	.000	.000	.000	.936	.000	.000	.936	.825
Cars	3	0	5	0	8	0	412	1	0	413	0	0	0	0	0	0	472	0	0	472	893
% Cars	100	0	100	0	100	0	97.6	100	0	97.6	0	0	0	0	0	0	97.7	0	0	97.7	97.7
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	11	0	0	11	21
% Trucks	0	0	0	0	0	0	2.4	0	0	2.4	0	0	0	0	0	0	2.3	0	0	2.3	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #21 RedBerryCircle(1)@AlligatorRdPM

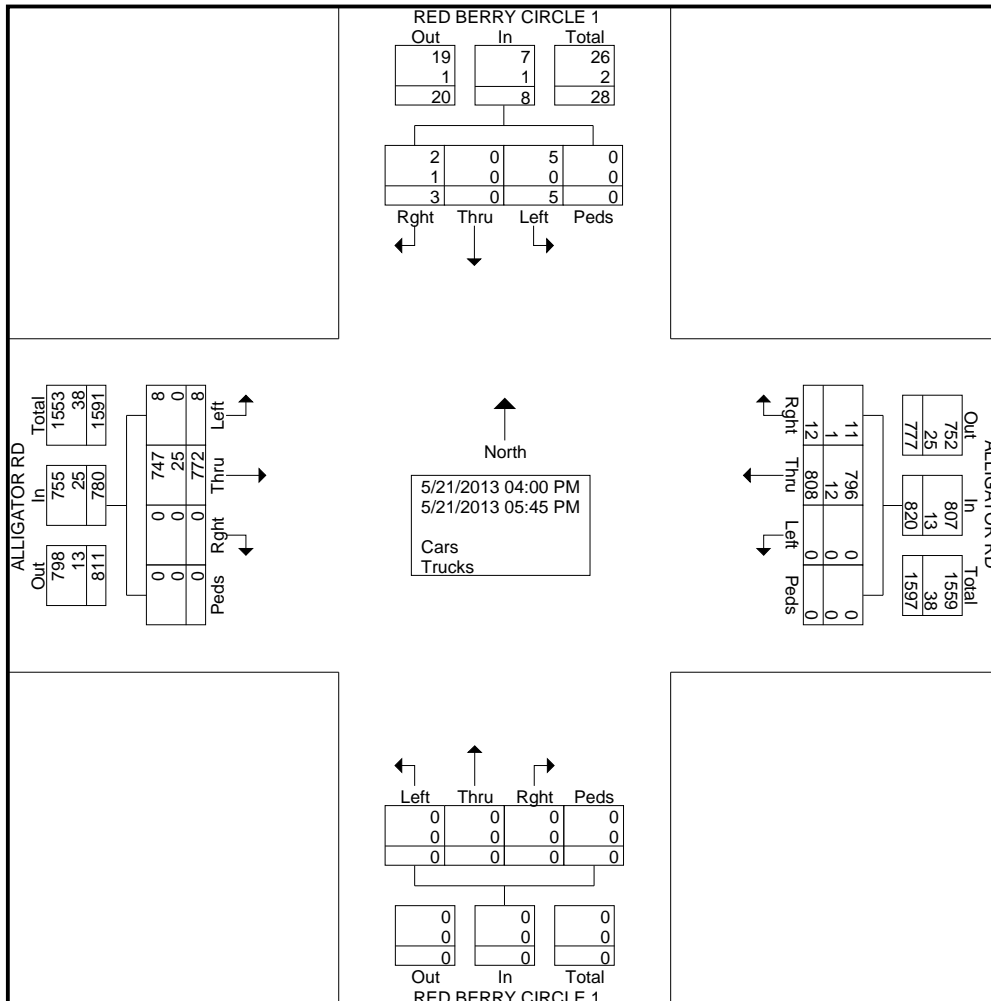
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED BERRY CIRCLE 1 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 1 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	89	0	0	89	0	0	0	0	0	0	83	0	0	83	172
04:15 PM	1	0	0	0	1	0	82	0	0	82	0	0	0	0	0	3	72	0	0	75	158
04:30 PM	1	0	1	0	2	0	75	0	0	75	0	0	0	0	0	3	109	0	0	112	189
04:45 PM	0	0	0	0	0	0	99	3	0	102	0	0	0	0	0	0	80	0	0	80	182
<b>Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>345</b>	<b>3</b>	<b>0</b>	<b>348</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>344</b>	<b>0</b>	<b>0</b>	<b>350</b>	<b>701</b>
05:00 PM	2	0	0	0	2	0	114	4	0	118	0	0	0	0	0	1	99	0	0	100	220
05:15 PM	0	0	1	0	1	0	116	3	0	119	0	0	0	0	0	0	110	0	0	110	230
05:30 PM	1	0	0	0	1	0	113	1	0	114	0	0	0	0	0	0	109	0	0	109	224
05:45 PM	0	0	1	0	1	0	120	1	0	121	0	0	0	0	0	1	110	0	0	111	233
<b>Total</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>463</b>	<b>9</b>	<b>0</b>	<b>472</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>428</b>	<b>0</b>	<b>0</b>	<b>430</b>	<b>907</b>
Grand Total	5	0	3	0	8	0	808	12	0	820	0	0	0	0	0	8	772	0	0	780	1608
Apprch %	62.5	0	37.5	0		0	98.5	1.5	0		0	0	0	0		1	99	0	0		
Total %	0.3	0	0.2	0	0.5	0	50.2	0.7	0	51	0	0	0	0	0	0.5	48	0	0	48.5	
Cars	5	0	2	0	7	0	796	11	0	807	0	0	0	0	0	8	747	0	0	755	1569
% Cars	100	0	66.7	0	87.5	0	98.5	91.7	0	98.4	0	0	0	0	0	100	96.8	0	0	96.8	97.6
Trucks	0	0	1	0	1	0	12	1	0	13	0	0	0	0	0	0	25	0	0	25	39
% Trucks	0	0	33.3	0	12.5	0	1.5	8.3	0	1.6	0	0	0	0	0	0	3.2	0	0	3.2	2.4

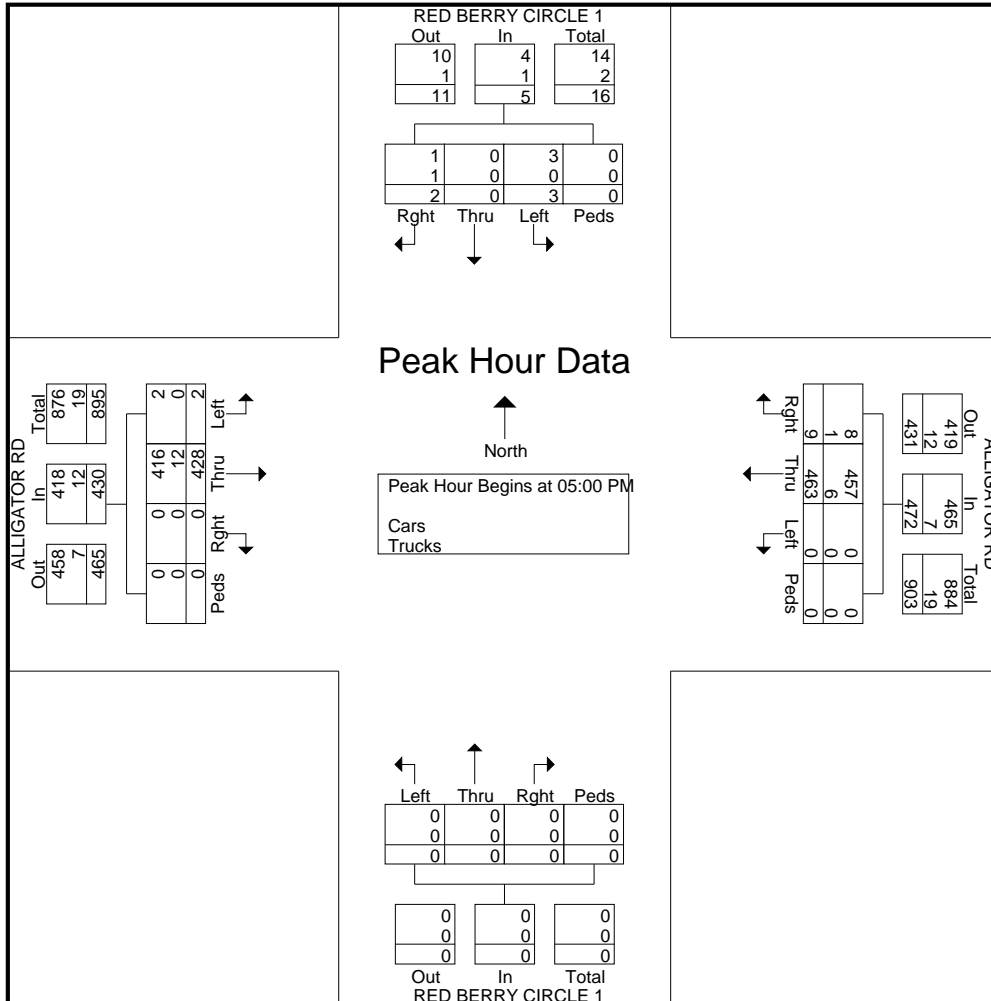


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #21 RedBerryCircle(1)@AlligatorRdPM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	RED BERRY CIRCLE 1 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 1 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	0	0	0	2	0	114	4	0	118	0	0	0	0	0	1	99	0	0	100	220
05:15 PM	0	0	1	0	1	0	116	3	0	119	0	0	0	0	0	0	110	0	0	110	230
05:30 PM	1	0	0	0	1	0	113	1	0	114	0	0	0	0	0	0	109	0	0	109	224
05:45 PM	0	0	1	0	1	0	120	1	0	121	0	0	0	0	0	1	110	0	0	111	233
Total Volume	3	0	2	0	5	0	463	9	0	472	0	0	0	0	0	2	428	0	0	430	907
% App. Total	60	0	40	0		0	98.1	1.9	0		0	0	0	0		0.5	99.5	0	0		
PHF	.375	.000	.500	.000	.625	.000	.965	.563	.000	.975	.000	.000	.000	.000	.000	.500	.973	.000	.000	.968	.973
Cars	3	0	1	0	4	0	457	8	0	465	0	0	0	0	0	2	416	0	0	418	887
% Cars	100	0	50.0	0	80.0	0	98.7	88.9	0	98.5	0	0	0	0	0	100	97.2	0	0	97.2	97.8
Trucks	0	0	1	0	1	0	6	1	0	7	0	0	0	0	0	0	12	0	0	12	20
% Trucks	0	0	50.0	0	20.0	0	1.3	11.1	0	1.5	0	0	0	0	0	0	2.8	0	0	2.8	2.2





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #22 RedBerryCircle(2)@AlligatorRdAM

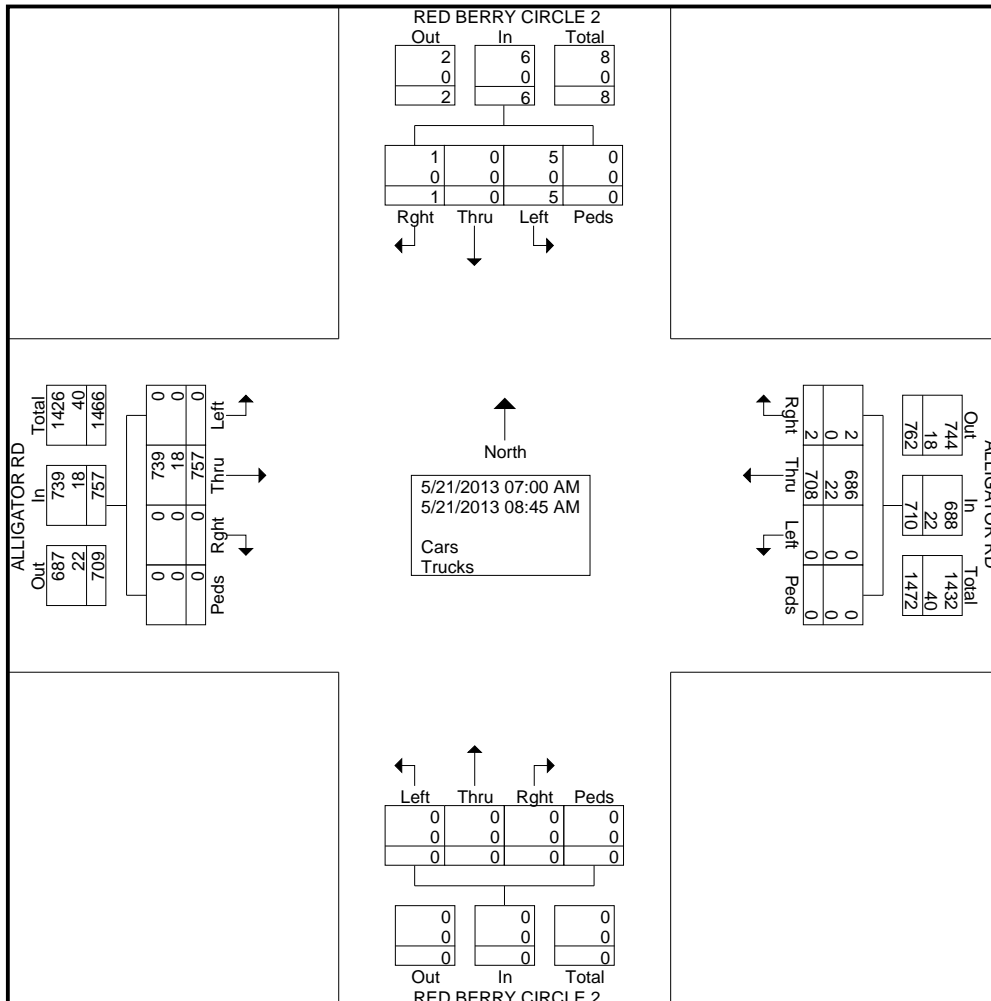
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED BERRY CIRCLE 2 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 2 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	0	0	1	0	76	0	0	76	0	0	0	0	0	0	101	0	0	101	178
07:15 AM	2	0	0	0	2	0	103	0	0	103	0	0	0	0	0	0	117	0	0	117	222
07:30 AM	0	0	0	0	0	0	141	2	0	143	0	0	0	0	0	0	119	0	0	119	262
07:45 AM	1	0	0	0	1	0	99	0	0	99	0	0	0	0	0	0	141	0	0	141	241
Total	4	0	0	0	4	0	419	2	0	421	0	0	0	0	0	0	478	0	0	478	903
08:00 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	106	0	0	106	198
08:15 AM	0	0	0	0	0	0	82	0	0	82	0	0	0	0	0	0	71	0	0	71	153
08:30 AM	0	0	1	0	1	0	64	0	0	64	0	0	0	0	0	0	49	0	0	49	114
08:45 AM	0	0	0	0	0	0	52	0	0	52	0	0	0	0	0	0	53	0	0	53	105
Total	1	0	1	0	2	0	289	0	0	289	0	0	0	0	0	0	279	0	0	279	570
Grand Total	5	0	1	0	6	0	708	2	0	710	0	0	0	0	0	0	757	0	0	757	1473
Apprch %	83.3	0	16.7	0		0	99.7	0.3	0		0	0	0	0		0	100	0	0		
Total %	0.3	0	0.1	0	0.4	0	48.1	0.1	0	48.2	0	0	0	0	0	0	51.4	0	0	51.4	
Cars	5	0	1	0	6	0	686	2	0	688	0	0	0	0	0	0	739	0	0	739	1433
% Cars	100	0	100	0	100	0	96.9	100	0	96.9	0	0	0	0	0	0	97.6	0	0	97.6	97.3
Trucks	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	18	0	0	18	40
% Trucks	0	0	0	0	0	0	3.1	0	0	3.1	0	0	0	0	0	0	2.4	0	0	2.4	2.7

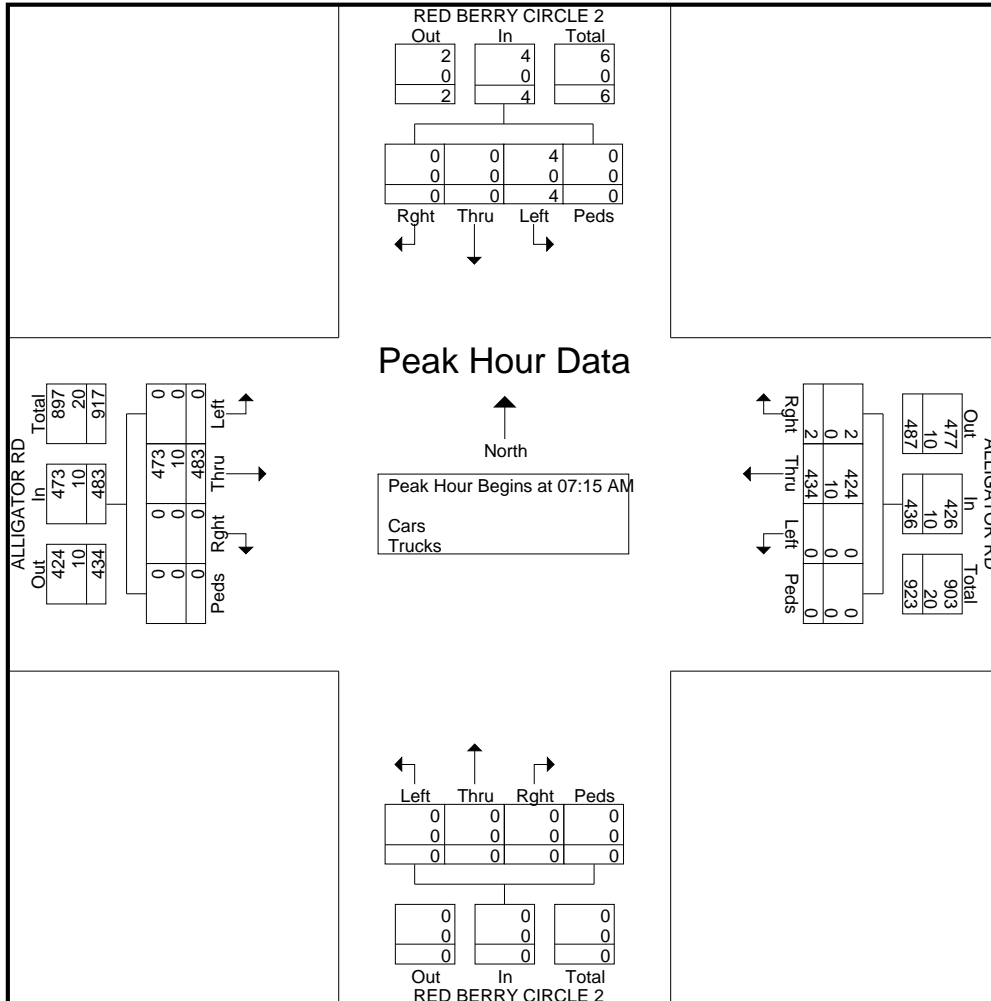


# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #22 RedBerryCircle(2)@AlligatorRdAM  
 Site Code :  
 Start Date : 5/21/2013  
 Page No : 2

Start Time	RED BERRY CIRCLE 2 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 2 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	0	0	0	2	0	103	0	0	103	0	0	0	0	0	0	117	0	0	117	222
07:30 AM	0	0	0	0	0	0	141	2	0	143	0	0	0	0	0	0	119	0	0	119	262
07:45 AM	1	0	0	0	1	0	99	0	0	99	0	0	0	0	0	0	141	0	0	141	241
08:00 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	106	0	0	106	198
Total Volume	4	0	0	0	4	0	434	2	0	436	0	0	0	0	0	0	483	0	0	483	923
% App. Total	100	0	0	0	100	0	99.5	0.5	0	99.7	0	0	0	0	0	0	100	0	0	100	97.8
PHF	.500	.000	.000	.000	.500	.000	.770	.250	.000	.762	.000	.000	.000	.000	.000	.000	.856	.000	.000	.856	.881
Cars	4	0	0	0	4	0	424	2	0	426	0	0	0	0	0	0	473	0	0	473	903
% Cars	100	0	0	0	100	0	97.7	100	0	97.7	0	0	0	0	0	0	97.9	0	0	97.9	97.8
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	20
% Trucks	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	0	2.1	0	0	2.1	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #22 RedBerryCircle(2)@AlligatorRdPM

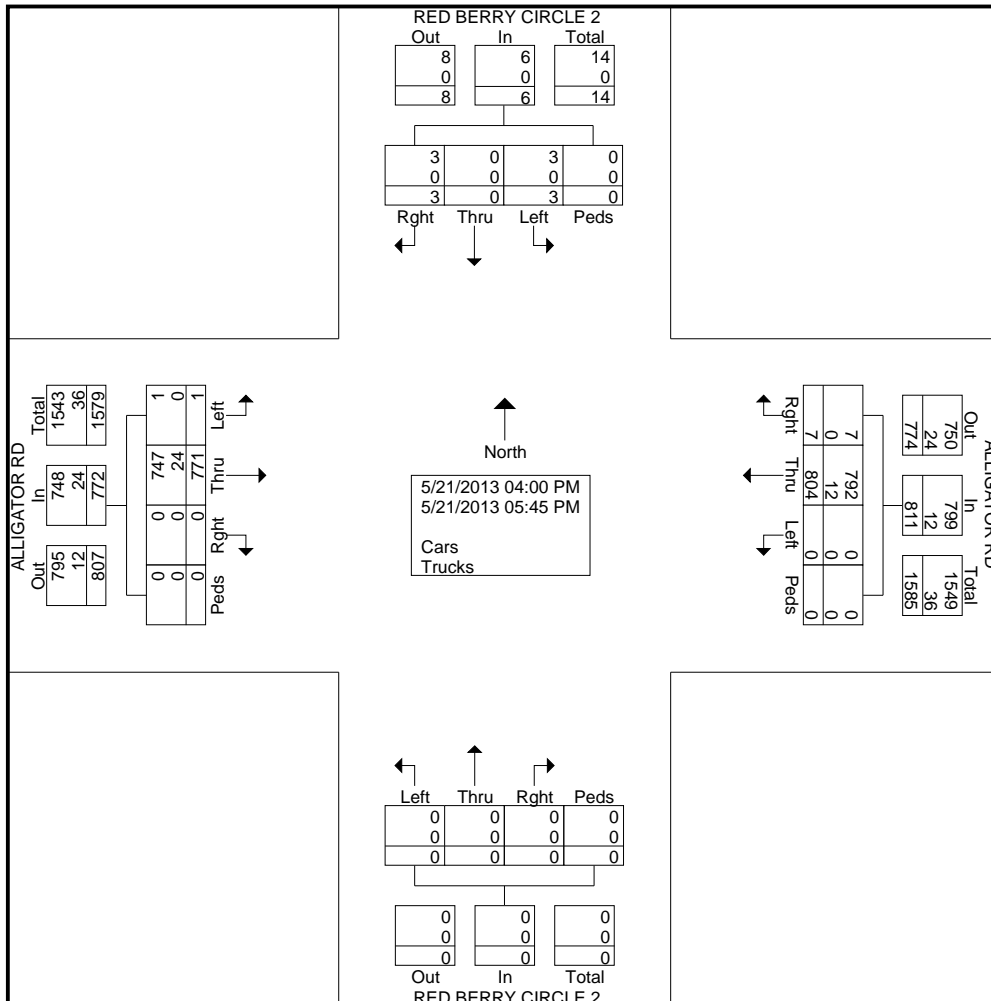
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED BERRY CIRCLE 2 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 2 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	1	0	1	0	87	0	0	87	0	0	0	0	0	0	79	0	0	79	167
04:15 PM	0	0	0	0	0	0	75	0	0	75	0	0	0	0	0	0	82	0	0	82	157
04:30 PM	0	0	0	0	0	0	74	3	0	77	0	0	0	0	0	0	98	0	0	98	175
04:45 PM	1	0	1	0	2	0	103	0	0	103	0	0	0	0	0	1	82	0	0	83	188
Total	1	0	2	0	3	0	339	3	0	342	0	0	0	0	0	1	341	0	0	342	687
05:00 PM	0	0	0	0	0	0	122	2	0	124	0	0	0	0	0	0	106	0	0	106	230
05:15 PM	0	0	1	0	1	0	108	0	0	108	0	0	0	0	0	0	102	0	0	102	211
05:30 PM	1	0	0	0	1	0	121	2	0	123	0	0	0	0	0	0	97	0	0	97	221
05:45 PM	1	0	0	0	1	0	114	0	0	114	0	0	0	0	0	0	125	0	0	125	240
Total	2	0	1	0	3	0	465	4	0	469	0	0	0	0	0	0	430	0	0	430	902
Grand Total	3	0	3	0	6	0	804	7	0	811	0	0	0	0	0	1	771	0	0	772	1589
Apprch %	50	0	50	0		0	99.1	0.9	0		0	0	0	0		0.1	99.9	0	0		
Total %	0.2	0	0.2	0	0.4	0	50.6	0.4	0	51	0	0	0	0	0	0.1	48.5	0	0	48.6	
Cars	3	0	3	0	6	0	792	7	0	799	0	0	0	0	0	1	747	0	0	748	1553
% Cars	100	0	100	0	100	0	98.5	100	0	98.5	0	0	0	0	0	100	96.9	0	0	96.9	97.7
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	24	0	0	24	36
% Trucks	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	3.1	0	0	3.1	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

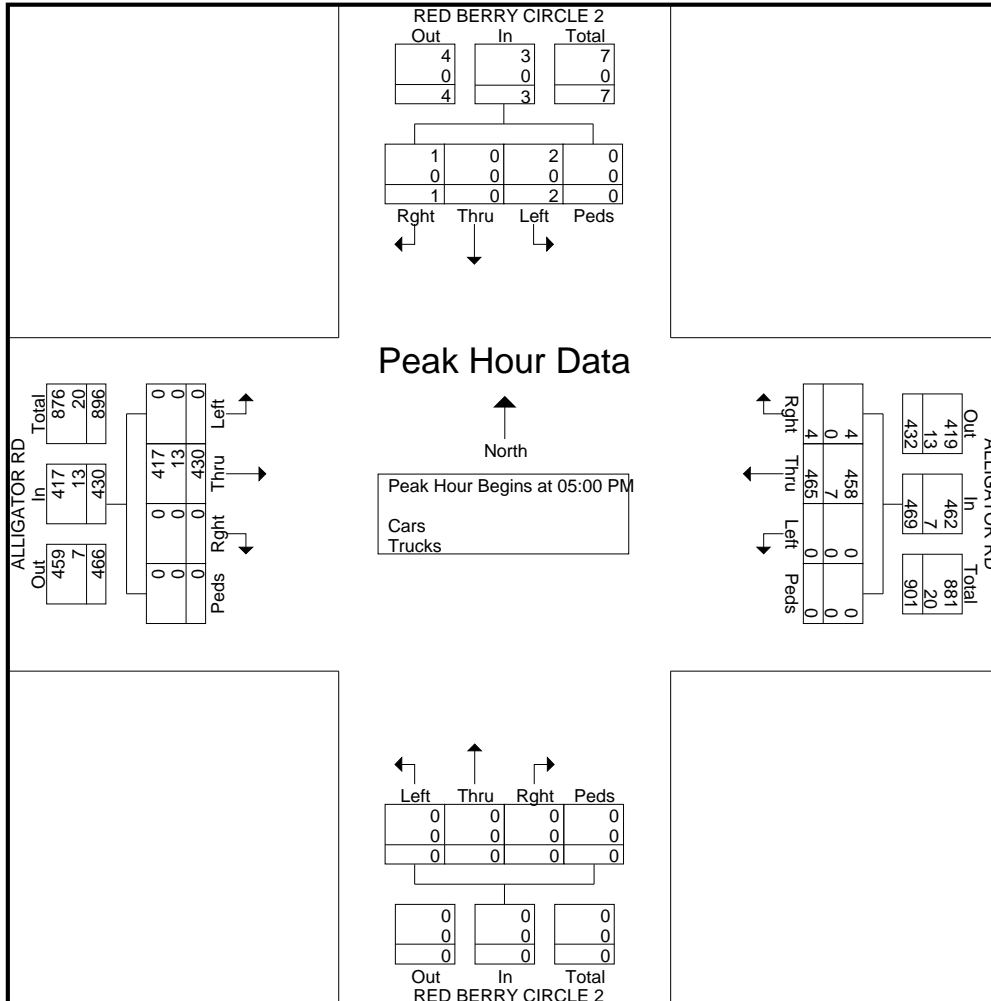
File Name : #22 RedBerryCircle(2)@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	RED BERRY CIRCLE 2 Southbound					ALLIGATOR RD Westbound					RED BERRY CIRCLE 2 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	122	2	0	124	0	0	0	0	0	0	106	0	0	106	230
05:15 PM	0	0	1	0	1	0	108	0	0	108	0	0	0	0	0	0	102	0	0	102	211
05:30 PM	1	0	0	0	1	0	121	2	0	123	0	0	0	0	0	0	97	0	0	97	221
05:45 PM	1	0	0	0	1	0	114	0	0	114	0	0	0	0	0	0	125	0	0	125	240
Total Volume	2	0	1	0	3	0	465	4	0	469	0	0	0	0	0	0	430	0	0	430	902
% App. Total	66.7	0	33.3	0		0	99.1	0.9	0		0	0	0	0	0	0	100	0	0		
PHF	.500	.000	.250	.000	.750	.000	.953	.500	.000	.946	.000	.000	.000	.000	.000	.000	.860	.000	.000	.860	.940
Cars	2	0	1	0	3	0	458	4	0	462	0	0	0	0	0	0	417	0	0	417	882
% Cars	100	0	100	0	100	0	98.5	100	0	98.5	0	0	0	0	0	0	97.0	0	0	97.0	97.8
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	13	0	0	13	20
% Trucks	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	3.0	0	0	3.0	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #23 RedHawkRd@AlligatorRdAM

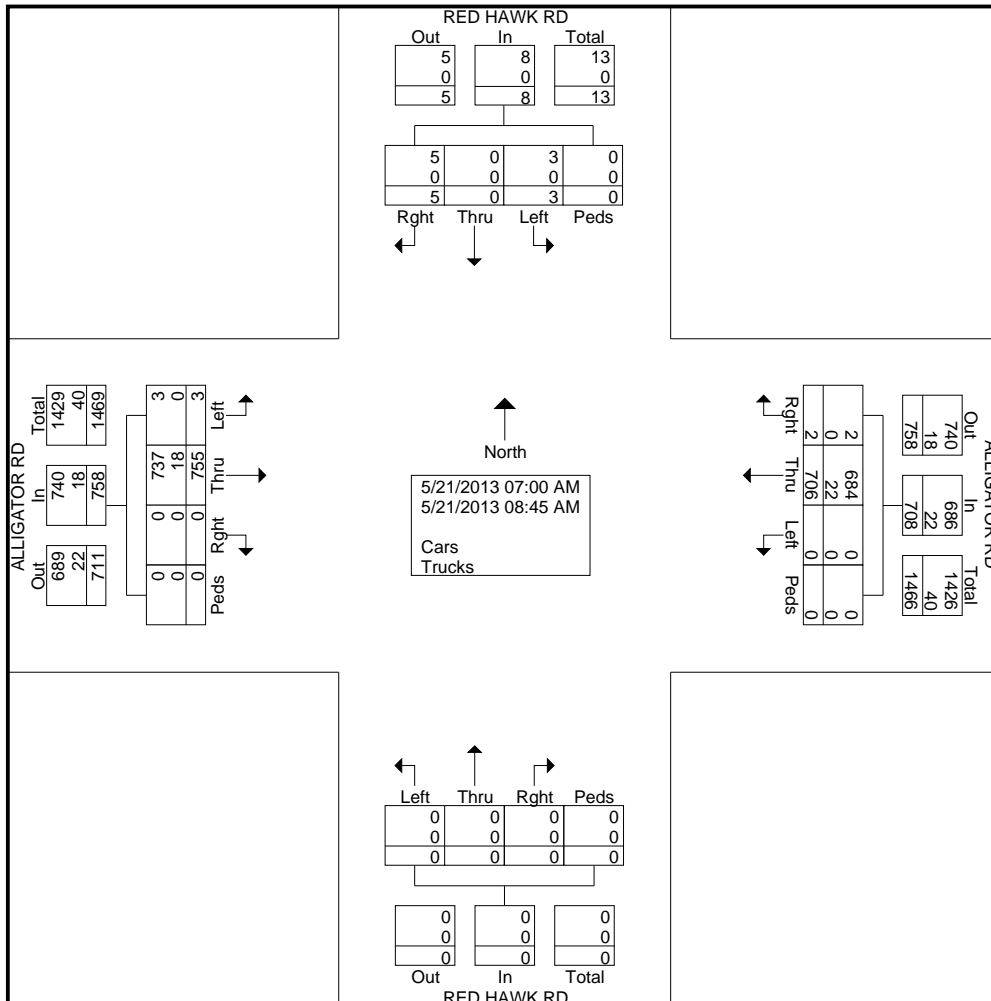
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED HAWK RD Southbound					ALLIGATOR RD Westbound					RED HAWK RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	1	0	1	0	77	0	0	77	0	0	0	0	0	1	100	0	0	101	179
07:15 AM	0	0	2	0	2	0	99	0	0	99	0	0	0	0	0	0	119	0	0	119	220
07:30 AM	2	0	1	0	3	0	146	0	0	146	0	0	0	0	0	0	120	0	0	120	269
07:45 AM	0	0	0	0	0	0	95	0	0	95	0	0	0	0	0	0	142	0	0	142	237
Total	2	0	4	0	6	0	417	0	0	417	0	0	0	0	0	1	481	0	0	482	905
08:00 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	105	0	0	105	197
08:15 AM	0	0	1	0	1	0	81	0	0	81	0	0	0	0	0	0	70	0	0	70	152
08:30 AM	0	0	0	0	0	0	63	2	0	65	0	0	0	0	0	1	48	0	0	49	114
08:45 AM	0	0	0	0	0	0	54	0	0	54	0	0	0	0	0	1	51	0	0	52	106
Total	1	0	1	0	2	0	289	2	0	291	0	0	0	0	0	2	274	0	0	276	569
Grand Total	3	0	5	0	8	0	706	2	0	708	0	0	0	0	0	3	755	0	0	758	1474
Apprch %	37.5	0	62.5	0		0	99.7	0.3	0		0	0	0	0		0.4	99.6	0	0		
Total %	0.2	0	0.3	0	0.5	0	47.9	0.1	0	48	0	0	0	0	0	0.2	51.2	0	0	51.4	
Cars	3	0	5	0	8	0	684	2	0	686	0	0	0	0	0	3	737	0	0	740	1434
% Cars	100	0	100	0	100	0	96.9	100	0	96.9	0	0	0	0	0	100	97.6	0	0	97.6	97.3
Trucks	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	18	0	0	18	40
% Trucks	0	0	0	0	0	0	3.1	0	0	3.1	0	0	0	0	0	0	2.4	0	0	2.4	2.7

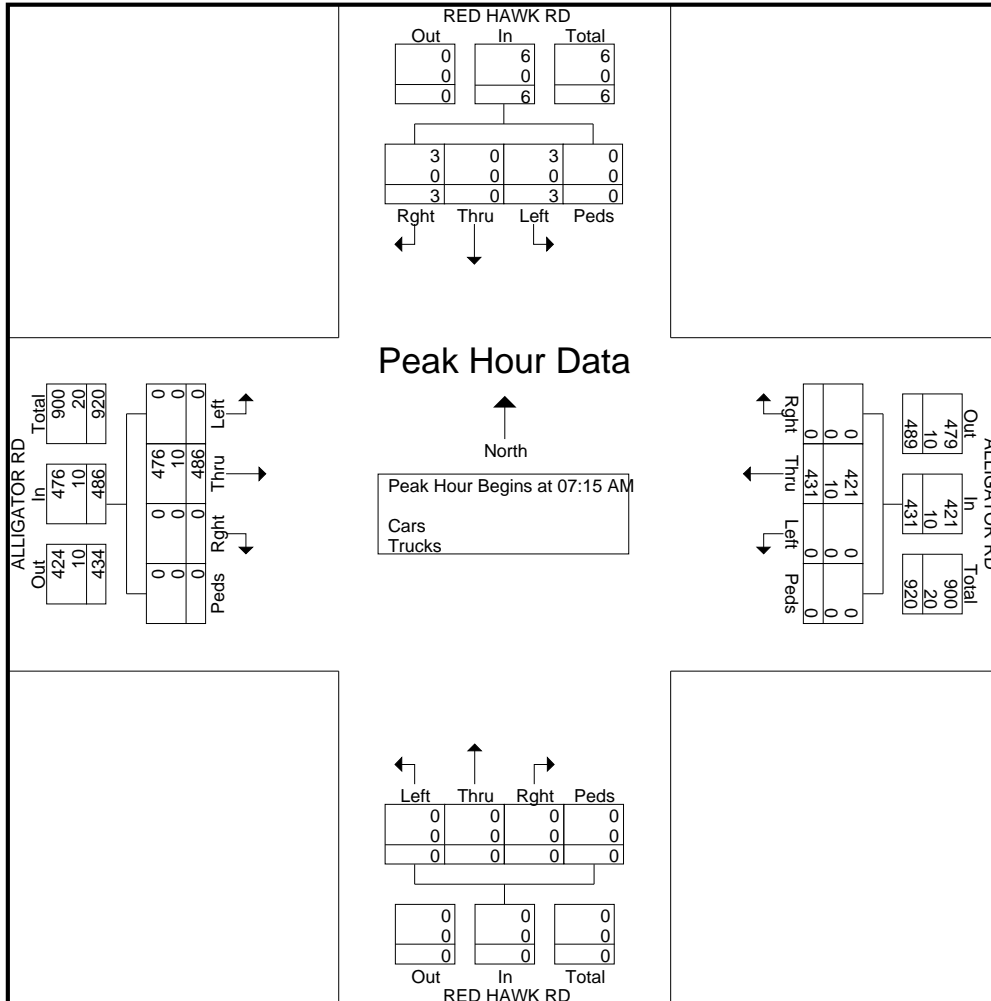


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #23 RedHawkRd@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	RED HAWK RD Southbound					ALLIGATOR RD Westbound					RED HAWK RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	2	0	2	0	99	0	0	99	0	0	0	0	0	0	119	0	0	119	220
07:30 AM	2	0	1	0	3	0	146	0	0	146	0	0	0	0	0	0	120	0	0	120	269
07:45 AM	0	0	0	0	0	0	95	0	0	95	0	0	0	0	0	0	142	0	0	142	237
08:00 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	105	0	0	105	197
Total Volume	3	0	3	0	6	0	431	0	0	431	0	0	0	0	0	0	486	0	0	486	923
% App. Total	50	0	50	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0
PHF	.375	.000	.375	.000	.500	.000	.738	.000	.000	.738	.000	.000	.000	.000	.000	.000	.856	.000	.000	.856	.858
Cars	3	0	3	0	6	0	421	0	0	421	0	0	0	0	0	0	476	0	0	476	903
% Cars	100	0	100	0	100	0	97.7	0	0	97.7	0	0	0	0	0	0	97.9	0	0	97.9	97.8
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	20
% Trucks	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	0	2.1	0	0	2.1	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #23 RedHawkRd@AlligatorRdPM

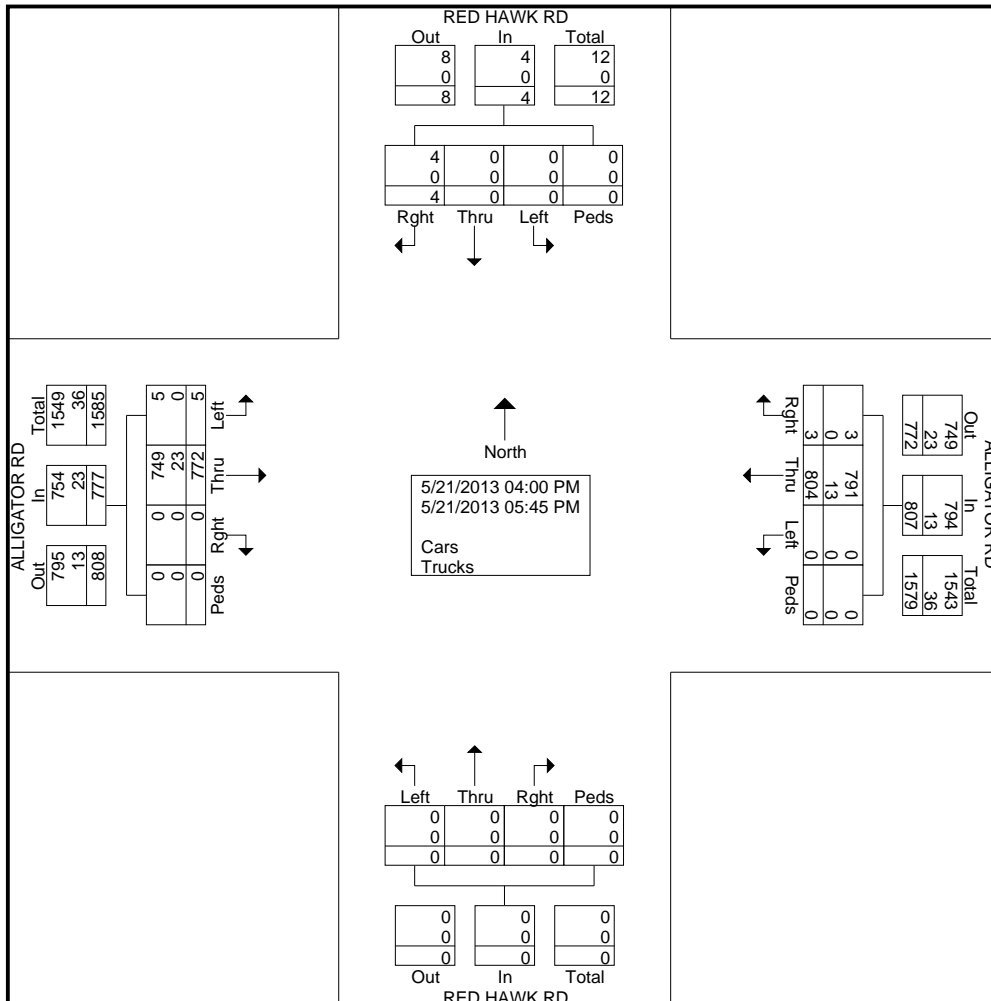
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	RED HAWK RD Southbound					ALLIGATOR RD Westbound					RED HAWK RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	87	0	0	87	0	0	0	0	0	0	78	0	0	78	165
04:15 PM	0	0	1	0	1	0	75	1	0	76	0	0	0	0	0	0	84	0	0	84	161
04:30 PM	0	0	0	0	0	0	78	0	0	78	0	0	0	0	0	0	97	0	0	97	175
04:45 PM	0	0	1	0	1	0	101	1	0	102	0	0	0	0	0	0	83	0	0	83	186
Total	0	0	2	0	2	0	341	2	0	343	0	0	0	0	0	0	342	0	0	342	687
05:00 PM	0	0	1	0	1	0	121	0	0	121	0	0	0	0	0	2	103	0	0	105	227
05:15 PM	0	0	0	0	0	0	108	0	0	108	0	0	0	0	0	1	105	0	0	106	214
05:30 PM	0	0	0	0	0	0	123	1	0	124	0	0	0	0	0	1	97	0	0	98	222
05:45 PM	0	0	1	0	1	0	111	0	0	111	0	0	0	0	0	1	125	0	0	126	238
Total	0	0	2	0	2	0	463	1	0	464	0	0	0	0	0	5	430	0	0	435	901
Grand Total	0	0	4	0	4	0	804	3	0	807	0	0	0	0	0	5	772	0	0	777	1588
Apprch %	0	0	100	0		0	99.6	0.4	0		0	0	0	0		0.6	99.4	0	0		
Total %	0	0	0.3	0	0.3	0	50.6	0.2	0	50.8	0	0	0	0	0	0.3	48.6	0	0	48.9	
Cars	0	0	4	0	4	0	791	3	0	794	0	0	0	0	0	5	749	0	0	754	1552
% Cars	0	0	100	0	100	0	98.4	100	0	98.4	0	0	0	0	0	100	97	0	0	97	97.7
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	23	0	0	23	36
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3	0	0	3	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

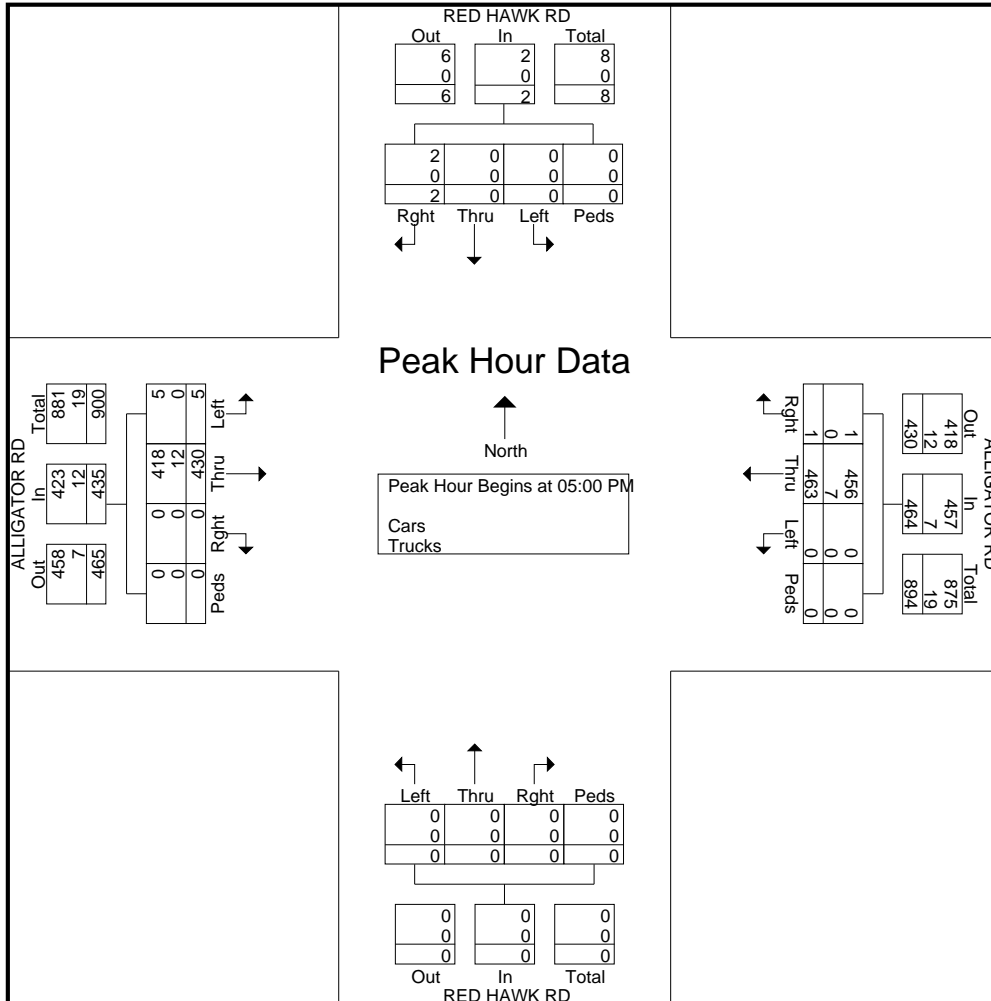
File Name : #23 RedHawkRd@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	RED HAWK RD Southbound					ALLIGATOR RD Westbound					RED HAWK RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	1	0	1	0	121	0	0	121	0	0	0	0	0	2	103	0	0	105	227
05:15 PM	0	0	0	0	0	0	108	0	0	108	0	0	0	0	0	1	105	0	0	106	214
05:30 PM	0	0	0	0	0	0	123	1	0	124	0	0	0	0	0	1	97	0	0	98	222
05:45 PM	0	0	1	0	1	0	111	0	0	111	0	0	0	0	0	1	125	0	0	126	238
Total Volume	0	0	2	0	2	0	463	1	0	464	0	0	0	0	0	5	430	0	0	435	901
% App. Total	0	0	100	0	100	0	99.8	0.2	0	99.8	0	0	0	0	0	1.1	98.9	0	0	99.9	100
PHF	.000	.000	.500	.000	.500	.000	.941	.250	.000	.935	.000	.000	.000	.000	.000	.625	.860	.000	.000	.863	.946
Cars	0	0	2	0	2	0	456	1	0	457	0	0	0	0	0	5	418	0	0	423	882
% Cars	0	0	100	0	100	0	98.5	100	0	98.5	0	0	0	0	0	100	97.2	0	0	97.2	97.9
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	12	0	0	12	19
% Trucks	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	2.8	0	0	2.8	2.1





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #24 SWildTurkeyDr@AlligatorRdAM

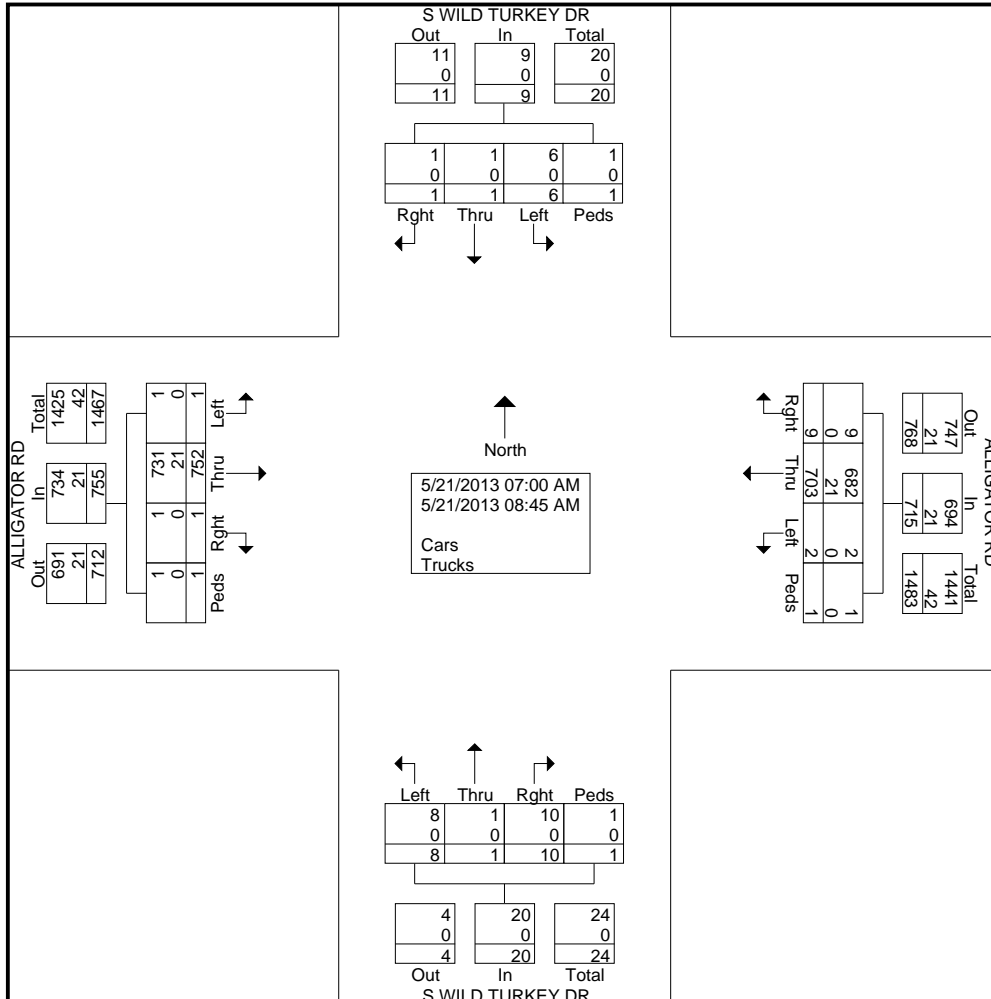
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	S WILD TURKEY DR Southbound					ALLIGATOR RD Westbound					S WILD TURKEY DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	2	0	0	0	2	0	83	2	0	85	1	0	1	0	2	0	98	0	0	98	187
07:15 AM	0	0	0	0	0	0	90	1	1	92	0	1	3	1	5	0	125	0	0	125	222
07:30 AM	2	0	0	0	2	0	155	0	0	155	1	0	0	0	1	0	121	0	0	121	279
07:45 AM	1	0	0	0	1	1	93	0	0	94	0	0	5	0	5	0	136	0	0	136	236
Total	5	0	0	0	5	1	421	3	1	426	2	1	9	1	13	0	480	0	0	480	924
08:00 AM	0	1	1	1	3	0	82	1	0	83	3	0	0	0	3	1	106	1	1	109	198
08:15 AM	1	0	0	0	1	1	82	0	0	83	1	0	0	0	1	0	67	0	0	67	152
08:30 AM	0	0	0	0	0	0	65	0	0	65	1	0	0	0	1	0	54	0	0	54	120
08:45 AM	0	0	0	0	0	0	53	5	0	58	1	0	1	0	2	0	45	0	0	45	105
Total	1	1	1	1	4	1	282	6	0	289	6	0	1	0	7	1	272	1	1	275	575
Grand Total	6	1	1	1	9	2	703	9	1	715	8	1	10	1	20	1	752	1	1	755	1499
Apprch %	66.7	11.1	11.1	11.1		0.3	98.3	1.3	0.1		40	5	50	5		0.1	99.6	0.1	0.1		
Total %	0.4	0.1	0.1	0.1	0.6	0.1	46.9	0.6	0.1	47.7	0.5	0.1	0.7	0.1	1.3	0.1	50.2	0.1	0.1	50.4	
Cars	6	1	1	1	9	2	682	9	1	694	8	1	10	1	20	1	731	1	1	734	1457
% Cars	100	100	100	100	100	100	97	100	100	97.1	100	100	100	100	100	100	97.2	100	100	97.2	
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	21	0	0	21	42
% Trucks	0	0	0	0	0	0	3	0	0	2.9	0	0	0	0	0	0	2.8	0	0	2.8	2.8



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

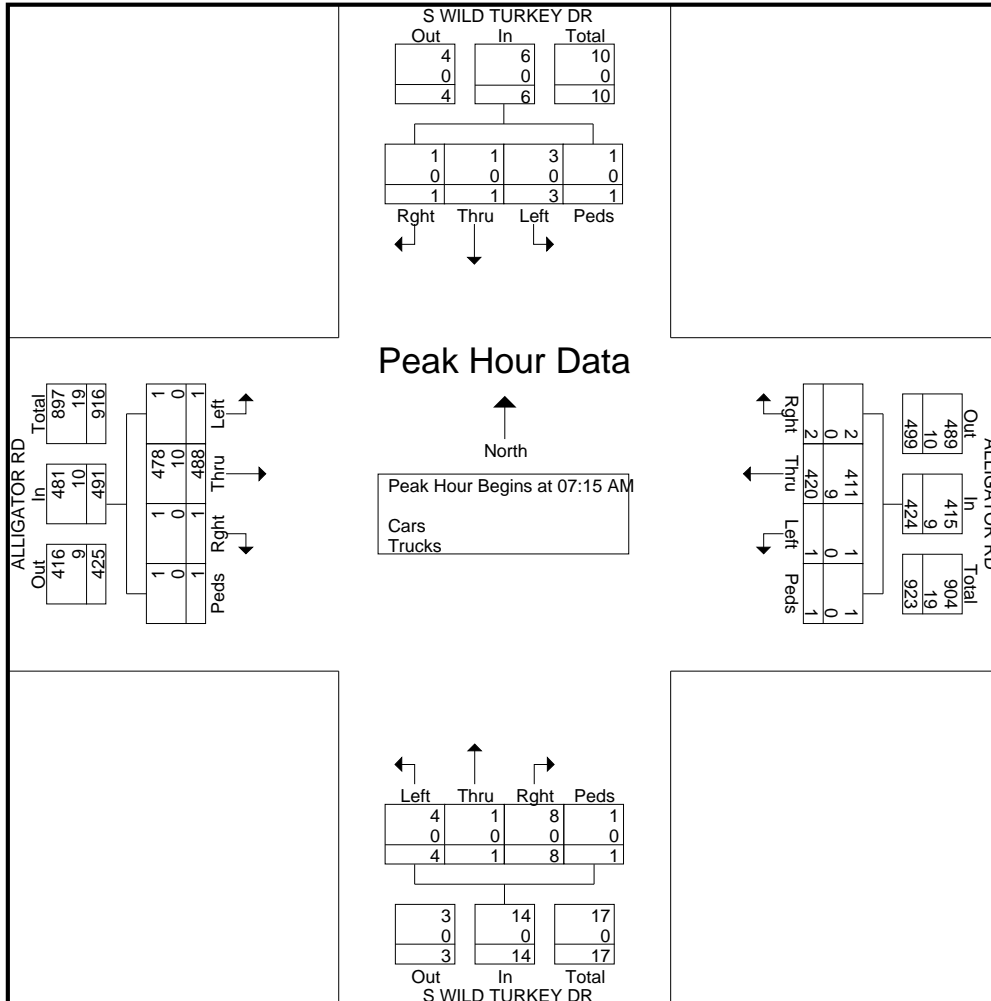
File Name : #24 SWildTurkeyDr@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	S WILD TURKEY DR Southbound					ALLIGATOR RD Westbound					S WILD TURKEY DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	90	1	1	92	0	1	3	1	5	0	125	0	0	125	222
07:30 AM	2	0	0	0	2	0	155	0	0	155	1	0	0	0	1	0	121	0	0	121	279
07:45 AM	1	0	0	0	1	1	93	0	0	94	0	0	5	0	5	0	136	0	0	136	236
08:00 AM	0	1	1	1	3	0	82	1	0	83	3	0	0	0	3	1	106	1	1	109	198
Total Volume	3	1	1	1	6	1	420	2	1	424	4	1	8	1	14	1	488	1	1	491	935
% App. Total	50	16.7	16.7	16.7		0.2	99.1	0.5	0.2		28.6	7.1	57.1	7.1		0.2	99.4	0.2	0.2		
PHF	.375	.250	.250	.250	.500	.250	.677	.500	.250	.684	.333	.250	.400	.250	.700	.250	.897	.250	.250	.903	.838
Cars	3	1	1	1	6	1	411	2	1	415	4	1	8	1	14	1	478	1	1	481	916
% Cars	100	100	100	100	100	100	97.9	100	100	97.9	100	100	100	100	100	100	98.0	100	100	98.0	98.0
Trucks	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	19
% Trucks	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	0	2.0	0	0	2.0	2.0



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #24 SWildTurkeyDr@AlligatorRdPM

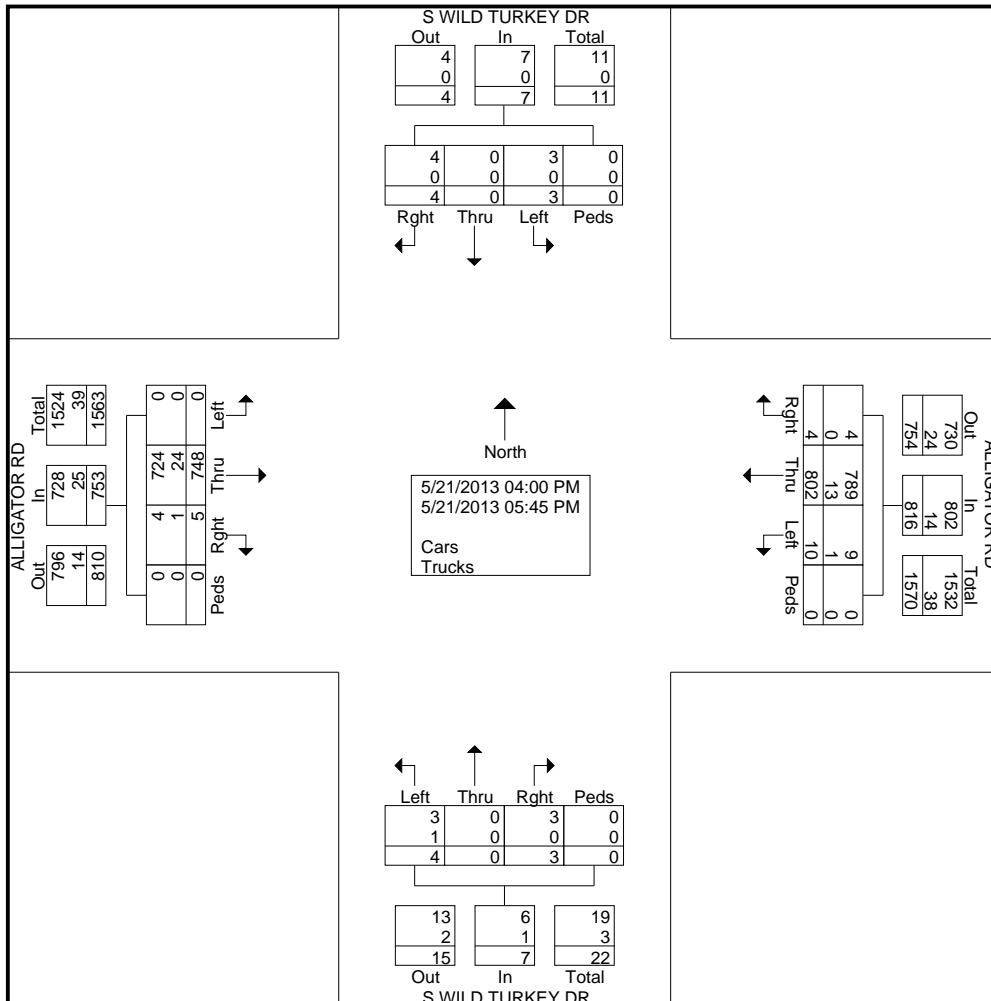
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	S WILD TURKEY DR Southbound					ALLIGATOR RD Westbound					S WILD TURKEY DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	2	85	1	0	88	0	0	0	0	0	0	80	1	0	81	169
04:15 PM	0	0	1	0	1	2	77	2	0	81	1	0	0	0	1	0	70	0	0	70	153
04:30 PM	1	0	0	0	1	0	79	1	0	80	0	0	0	0	0	0	97	1	0	98	179
04:45 PM	0	0	0	0	0	1	95	0	0	96	1	0	1	0	2	0	80	1	0	81	179
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>336</b>	<b>4</b>	<b>0</b>	<b>345</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>327</b>	<b>3</b>	<b>0</b>	<b>330</b>	<b>680</b>
05:00 PM	0	0	0	0	0	1	118	0	0	119	1	0	0	0	1	0	101	0	0	101	221
05:15 PM	0	0	0	0	0	0	116	0	0	116	0	0	1	0	1	0	103	1	0	104	221
05:30 PM	2	0	2	0	4	3	117	0	0	120	0	0	1	0	1	0	102	0	0	102	227
05:45 PM	0	0	1	0	1	1	115	0	0	116	1	0	0	0	1	0	115	1	0	116	234
<b>Total</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>466</b>	<b>0</b>	<b>0</b>	<b>471</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>421</b>	<b>2</b>	<b>0</b>	<b>423</b>	<b>903</b>
Grand Total	3	0	4	0	7	10	802	4	0	816	4	0	3	0	7	0	748	5	0	753	1583
Apprch %	42.9	0	57.1	0		1.2	98.3	0.5	0		57.1	0	42.9	0		0	99.3	0.7	0		
Total %	0.2	0	0.3	0	0.4	0.6	50.7	0.3	0	51.5	0.3	0	0.2	0	0.4	0	47.3	0.3	0	47.6	
Cars	3	0	4	0	7	9	789	4	0	802	3	0	3	0	6	0	724	4	0	728	1543
% Cars	100	0	100	0	100	90	98.4	100	0	98.3	75	0	100	0	85.7	0	96.8	80	0	96.7	97.5
Trucks	0	0	0	0	0	1	13	0	0	14	1	0	0	0	1	0	24	1	0	25	40
% Trucks	0	0	0	0	0	10	1.6	0	0	1.7	25	0	0	0	14.3	0	3.2	20	0	3.3	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

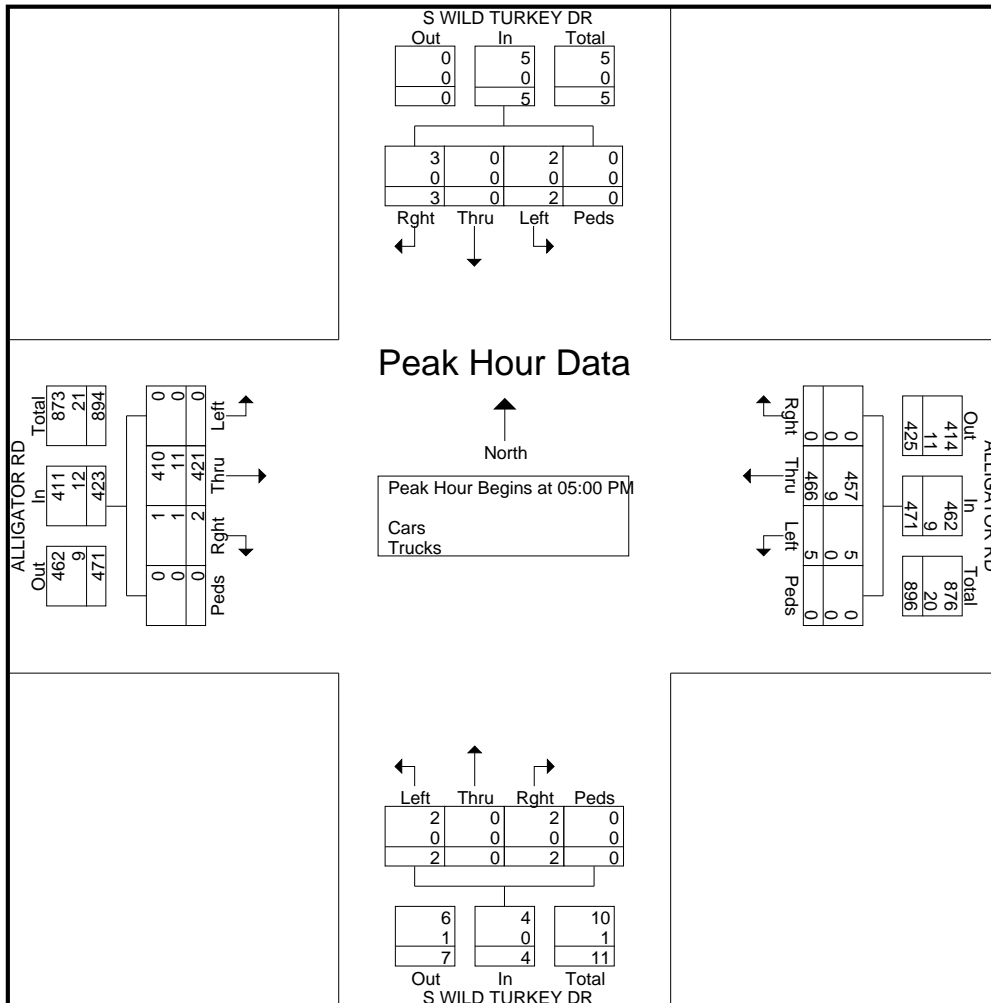
File Name : #24 SWildTurkeyDr@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	S WILD TURKEY DR Southbound					ALLIGATOR RD Westbound					S WILD TURKEY DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	1	118	0	0	119	1	0	0	0	1	0	101	0	0	101	221
05:15 PM	0	0	0	0	0	0	116	0	0	116	0	0	1	0	1	0	103	1	0	104	221
05:30 PM	2	0	2	0	4	3	117	0	0	120	0	0	1	0	1	0	102	0	0	102	227
05:45 PM	0	0	1	0	1	1	115	0	0	116	1	0	0	0	1	0	115	1	0	116	234
Total Volume	2	0	3	0	5	5	466	0	0	471	2	0	2	0	4	0	421	2	0	423	903
% App. Total	40	0	60	0		1.1	98.9	0	0		50	0	50	0		0	99.5	0.5	0		
PHF	.250	.000	.375	.000	.313	.417	.987	.000	.000	.981	.500	.000	.500	.000	1.00	.000	.915	.500	.000	.912	.965
Cars	2	0	3	0	5	5	457	0	0	462	2	0	2	0	4	0	410	1	0	411	882
% Cars	100	0	100	0	100	100	98.1	0	0	98.1	100	0	100	0	100	0	97.4	50.0	0	97.2	97.7
Trucks	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	11	1	0	12	21
% Trucks	0	0	0	0	0	0	1.9	0	0	1.9	0	0	0	0	0	0	2.6	50.0	0	2.8	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #25 JamesTurnerRd@AlligatorRdAM

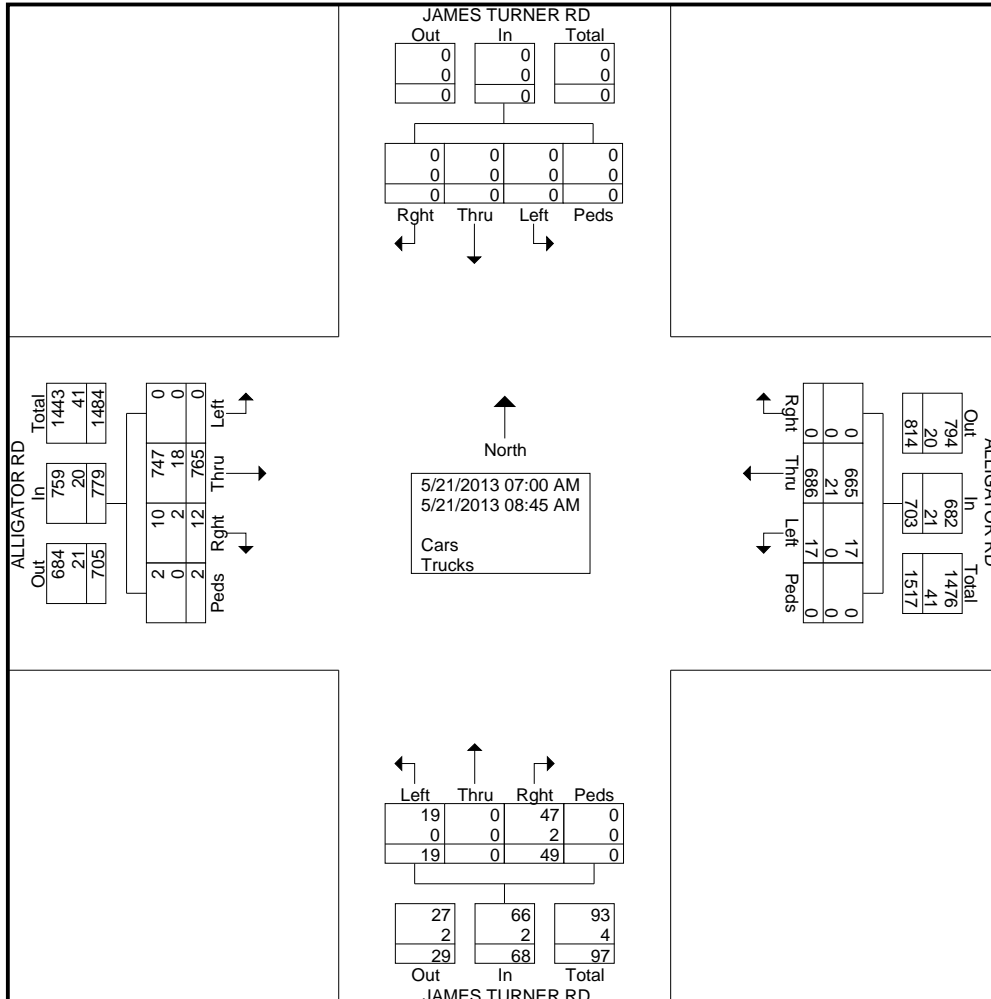
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	JAMES TURNER RD Southbound					ALLIGATOR RD Westbound					JAMES TURNER RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	2	79	0	0	81	4	0	8	0	12	0	97	1	0	98	191
07:15 AM	0	0	0	0	0	4	89	0	0	93	2	0	13	0	15	0	128	2	0	130	238
07:30 AM	0	0	0	0	0	1	146	0	0	147	6	0	7	0	13	0	122	2	0	124	284
07:45 AM	0	0	0	0	0	2	96	0	0	98	2	0	5	0	7	0	146	2	0	148	253
Total	0	0	0	0	0	9	410	0	0	419	14	0	33	0	47	0	493	7	0	500	966
08:00 AM	0	0	0	0	0	2	78	0	0	80	3	0	6	0	9	0	106	0	0	106	195
08:15 AM	0	0	0	0	0	5	77	0	0	82	2	0	1	0	3	0	73	0	0	73	158
08:30 AM	0	0	0	0	0	1	62	0	0	63	0	0	5	0	5	0	42	4	0	46	114
08:45 AM	0	0	0	0	0	0	59	0	0	59	0	0	4	0	4	0	51	1	2	54	117
Total	0	0	0	0	0	8	276	0	0	284	5	0	16	0	21	0	272	5	2	279	584
Grand Total	0	0	0	0	0	17	686	0	0	703	19	0	49	0	68	0	765	12	2	779	1550
Apprch %	0	0	0	0		2.4	97.6	0	0		27.9	0	72.1	0		0	98.2	1.5	0.3		
Total %	0	0	0	0	0	1.1	44.3	0	0	45.4	1.2	0	3.2	0	4.4	0	49.4	0.8	0.1	50.3	
Cars	0	0	0	0	0	17	665	0	0	682	19	0	47	0	66	0	747	10	2	759	1507
% Cars	0	0	0	0	0	100	96.9	0	0	97	100	0	95.9	0	97.1	0	97.6	83.3	100	97.4	97.2
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	2	0	2	0	18	2	0	20	43
% Trucks	0	0	0	0	0	0	3.1	0	0	3	0	0	4.1	0	2.9	0	2.4	16.7	0	2.6	2.8

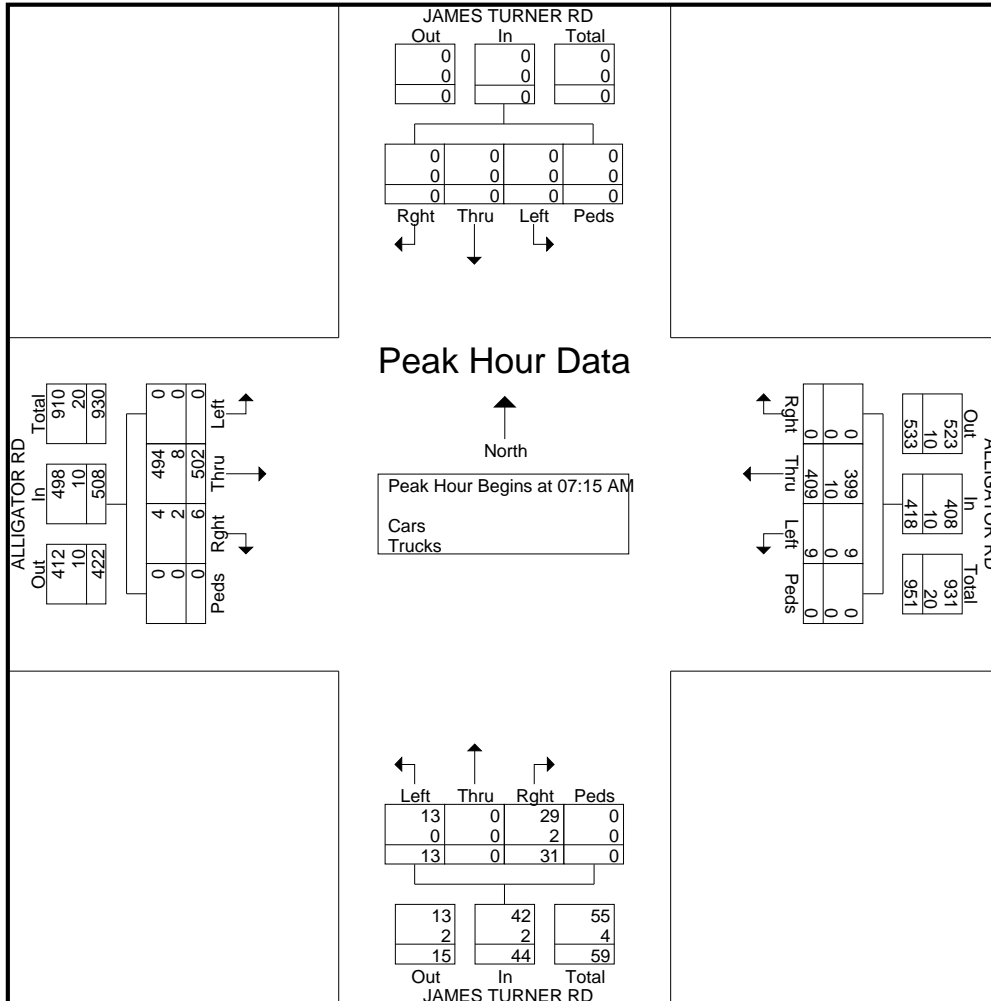


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #25 JamesTurnerRd@AlligatorRdAM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	JAMES TURNER RD Southbound					ALLIGATOR RD Westbound					JAMES TURNER RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	4	89	0	0	93	2	0	13	0	15	0	128	2	0	130	238
07:30 AM	0	0	0	0	0	1	146	0	0	147	6	0	7	0	13	0	122	2	0	124	284
07:45 AM	0	0	0	0	0	2	96	0	0	98	2	0	5	0	7	0	146	2	0	148	253
08:00 AM	0	0	0	0	0	2	78	0	0	80	3	0	6	0	9	0	106	0	0	106	195
Total Volume	0	0	0	0	0	9	409	0	0	418	13	0	31	0	44	0	502	6	0	508	970
% App. Total	0	0	0	0	0	2.2	97.8	0	0	0	29.5	0	70.5	0	0	0	98.8	1.2	0	0	0
PHF	.000	.000	.000	.000	.000	.563	.700	.000	.000	.711	.542	.000	.596	.000	.733	.000	.860	.750	.000	.858	.854
Cars	0	0	0	0	0	9	399	0	0	408	13	0	29	0	42	0	494	4	0	498	948
% Cars	0	0	0	0	0	100	97.6	0	0	97.6	100	0	93.5	0	95.5	0	98.4	66.7	0	98.0	97.7
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	2	0	2	0	8	2	0	10	22
% Trucks	0	0	0	0	0	0	2.4	0	0	2.4	0	0	6.5	0	4.5	0	1.6	33.3	0	2.0	2.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #25 JamesTurnerRd@AlligatorRdPM

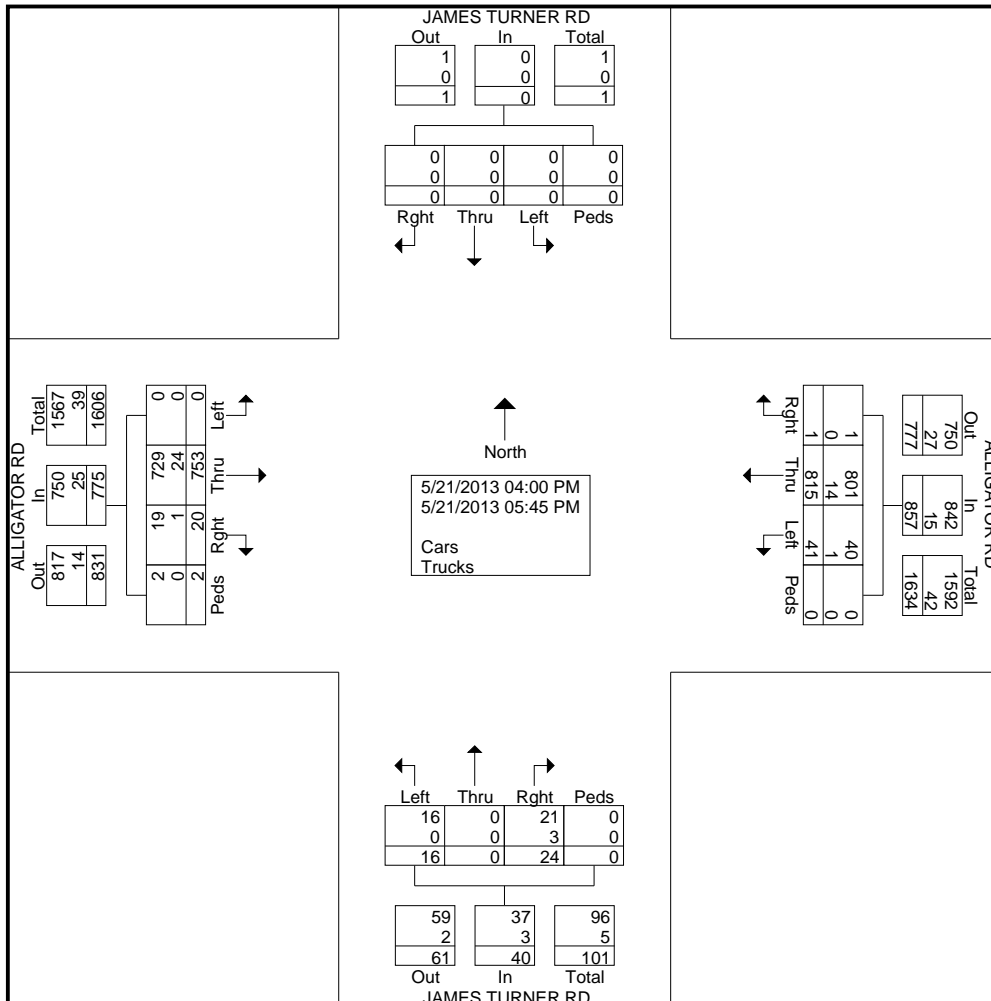
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	JAMES TURNER RD Southbound					ALLIGATOR RD Westbound					JAMES TURNER RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	1	88	1	0	90	1	0	2	0	3	0	72	1	0	73	166
04:15 PM	0	0	0	0	0	7	83	0	0	90	0	0	4	0	4	0	82	4	0	86	180
04:30 PM	0	0	0	0	0	3	80	0	0	83	2	0	2	0	4	0	93	2	0	95	182
04:45 PM	0	0	0	0	0	4	98	0	0	102	2	0	1	0	3	0	76	4	0	80	185
Total	0	0	0	0	0	15	349	1	0	365	5	0	9	0	14	0	323	11	0	334	713
05:00 PM	0	0	0	0	0	10	120	0	0	130	1	0	2	0	3	0	105	3	0	108	241
05:15 PM	0	0	0	0	0	7	112	0	0	119	4	0	5	0	9	0	105	0	2	107	235
05:30 PM	0	0	0	0	0	6	117	0	0	123	3	0	3	0	6	0	98	3	0	101	230
05:45 PM	0	0	0	0	0	3	117	0	0	120	3	0	5	0	8	0	122	3	0	125	253
Total	0	0	0	0	0	26	466	0	0	492	11	0	15	0	26	0	430	9	2	441	959
Grand Total	0	0	0	0	0	41	815	1	0	857	16	0	24	0	40	0	753	20	2	775	1672
Apprch %	0	0	0	0		4.8	95.1	0.1	0		40	0	60	0		0	97.2	2.6	0.3		
Total %	0	0	0	0	0	2.5	48.7	0.1	0	51.3	1	0	1.4	0	2.4	0	45	1.2	0.1	46.4	
Cars	0	0	0	0	0	40	801	1	0	842	16	0	21	0	37	0	729	19	2	750	1629
% Cars	0	0	0	0	0	97.6	98.3	100	0	98.2	100	0	87.5	0	92.5	0	96.8	95	100	96.8	97.4
Trucks	0	0	0	0	0	1	14	0	0	15	0	0	3	0	3	0	24	1	0	25	43
% Trucks	0	0	0	0	0	2.4	1.7	0	0	1.8	0	0	12.5	0	7.5	0	3.2	5	0	3.2	2.6

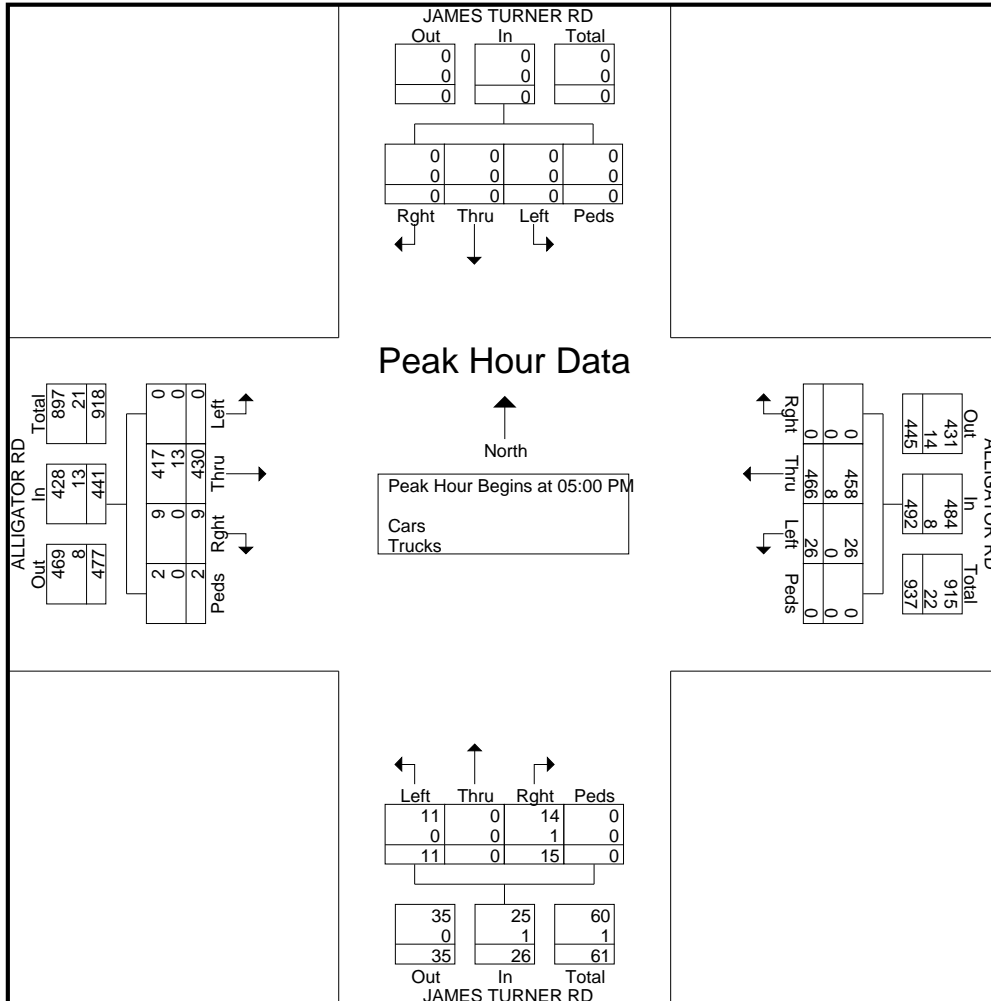


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #25 JamesTurnerRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	JAMES TURNER RD Southbound					ALLIGATOR RD Westbound					JAMES TURNER RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	10	120	0	0	130	1	0	2	0	3	0	105	3	0	108	241
05:15 PM	0	0	0	0	0	7	112	0	0	119	4	0	5	0	9	0	105	0	2	107	235
05:30 PM	0	0	0	0	0	6	117	0	0	123	3	0	3	0	6	0	98	3	0	101	230
05:45 PM	0	0	0	0	0	3	117	0	0	120	3	0	5	0	8	0	122	3	0	125	253
Total Volume	0	0	0	0	0	26	466	0	0	492	11	0	15	0	26	0	430	9	2	441	959
% App. Total	0	0	0	0	0	5.3	94.7	0	0	98.4	42.3	0	57.7	0	96.2	0	97.5	2	0.5	97.1	97.7
PHF	.000	.000	.000	.000	.000	.650	.971	.000	.000	.946	.688	.000	.750	.000	.722	.000	.881	.750	.250	.882	.948
Cars	0	0	0	0	0	26	458	0	0	484	11	0	14	0	25	0	417	9	2	428	937
% Cars	0	0	0	0	0	100	98.3	0	0	98.4	100	0	93.3	0	96.2	0	97.0	100	100	97.1	97.7
Trucks	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	0	13	0	0	13	22
% Trucks	0	0	0	0	0	0	1.7	0	0	1.6	0	0	6.7	0	3.8	0	3.0	0	0	2.9	2.3





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #26 BriargateDr@AlligatorRdAM

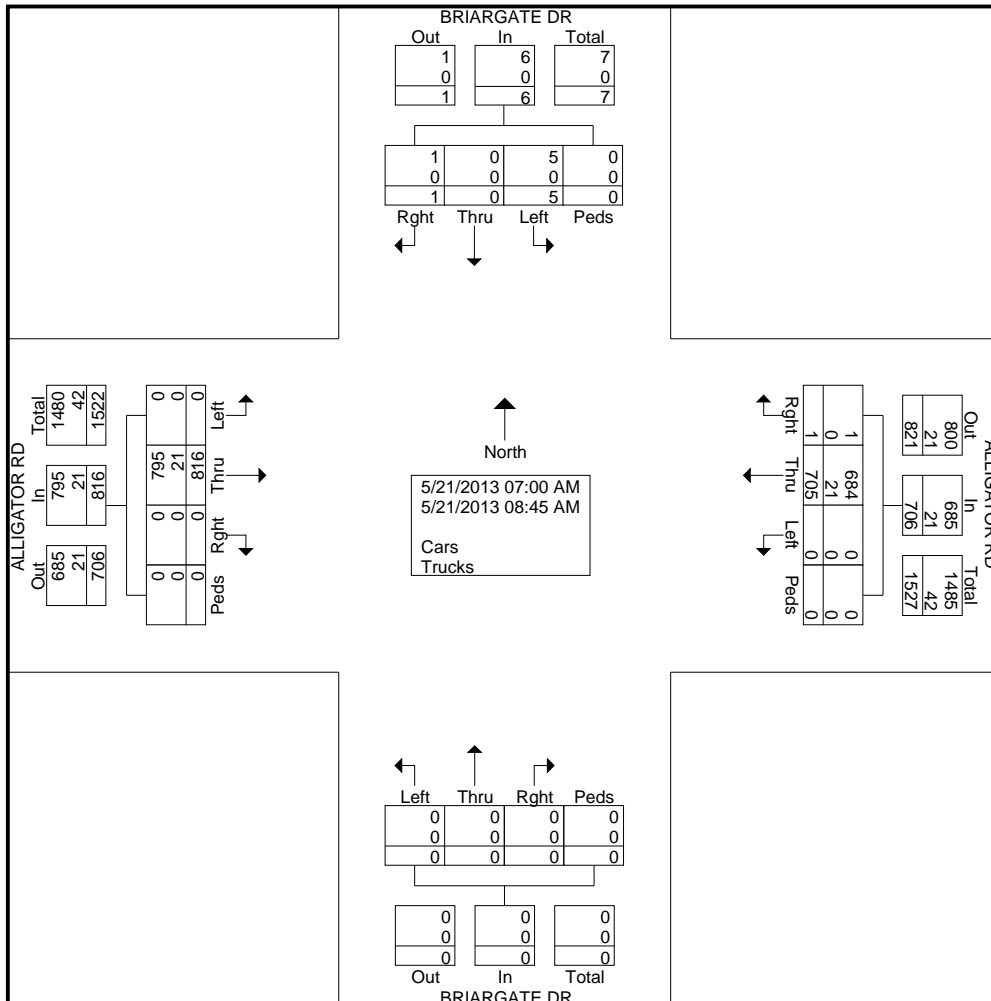
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BRIARGATE DR Southbound					ALLIGATOR RD Westbound					BRIARGATE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	2	0	0	0	2	0	83	1	0	84	0	0	0	0	0	0	112	0	0	112	198
07:15 AM	0	0	0	0	0	0	101	0	0	101	0	0	0	0	0	0	136	0	0	136	237
07:30 AM	0	0	1	0	1	0	145	0	0	145	0	0	0	0	0	0	127	0	0	127	273
07:45 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	152	0	0	152	244
Total	3	0	1	0	4	0	420	1	0	421	0	0	0	0	0	0	527	0	0	527	952
08:00 AM	2	0	0	0	2	0	79	0	0	79	0	0	0	0	0	0	114	0	0	114	195
08:15 AM	0	0	0	0	0	0	84	0	0	84	0	0	0	0	0	0	73	0	0	73	157
08:30 AM	0	0	0	0	0	0	65	0	0	65	0	0	0	0	0	0	49	0	0	49	114
08:45 AM	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	0	53	0	0	53	110
Total	2	0	0	0	2	0	285	0	0	285	0	0	0	0	0	0	289	0	0	289	576
Grand Total	5	0	1	0	6	0	705	1	0	706	0	0	0	0	0	0	816	0	0	816	1528
Apprch %	83.3	0	16.7	0		0	99.9	0.1	0		0	0	0	0		0	100	0	0		
Total %	0.3	0	0.1	0	0.4	0	46.1	0.1	0	46.2	0	0	0	0	0	0	53.4	0	0	53.4	
Cars	5	0	1	0	6	0	684	1	0	685	0	0	0	0	0	0	795	0	0	795	1486
% Cars	100	0	100	0	100	0	97	100	0	97	0	0	0	0	0	0	97.4	0	0	97.4	97.3
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	21	0	0	21	42
% Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2.6	0	0	2.6	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

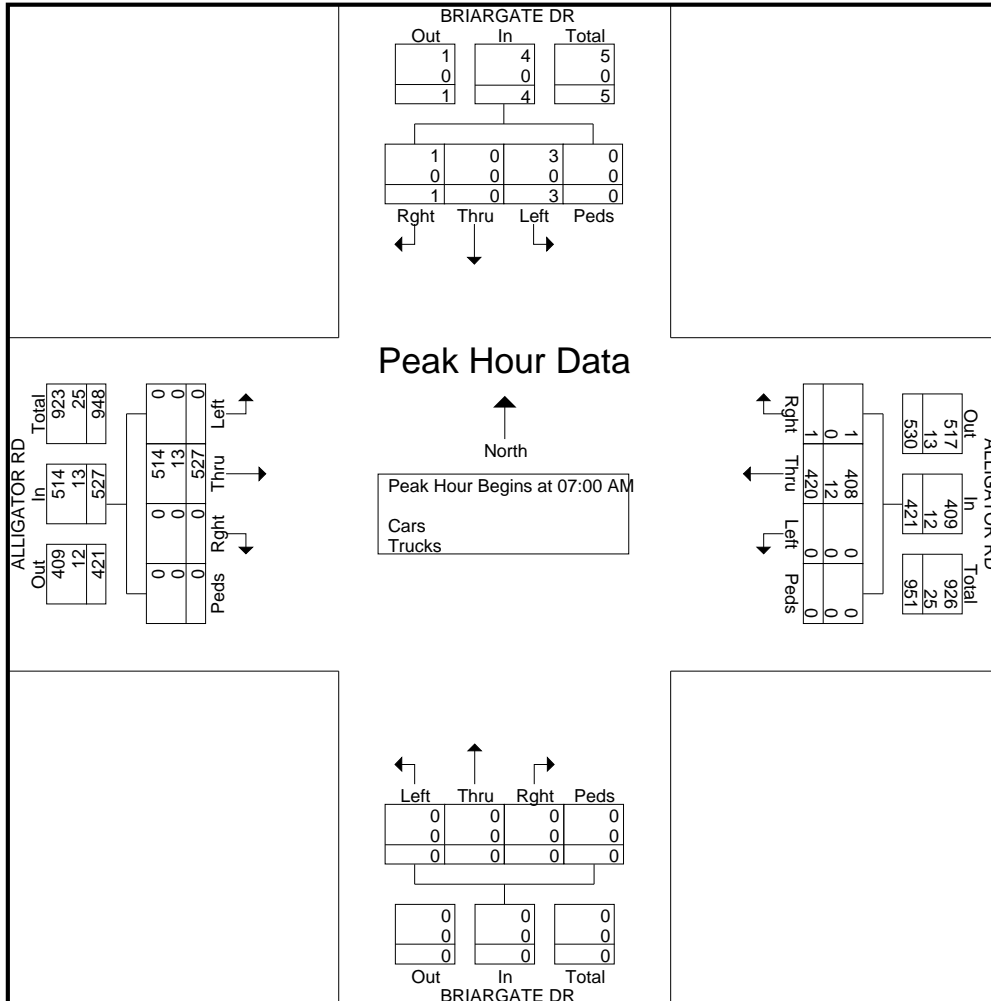
File Name : #26 BriargateDr@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BRIARGATE DR Southbound					ALLIGATOR RD Westbound					BRIARGATE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	0	0	0	2	0	83	1	0	84	0	0	0	0	0	0	112	0	0	112	198
07:15 AM	0	0	0	0	0	0	101	0	0	101	0	0	0	0	0	0	136	0	0	136	237
07:30 AM	0	0	1	0	1	0	145	0	0	145	0	0	0	0	0	0	127	0	0	127	273
07:45 AM	1	0	0	0	1	0	91	0	0	91	0	0	0	0	0	0	152	0	0	152	244
Total Volume	3	0	1	0	4	0	420	1	0	421	0	0	0	0	0	0	527	0	0	527	952
% App. Total	75	0	25	0		0	99.8	0.2	0		0	0	0	0		0	100	0	0		
PHF	.375	.000	.250	.000	.500	.000	.724	.250	.000	.726	.000	.000	.000	.000	.000	.000	.867	.000	.000	.867	.872
Cars	3	0	1	0	4	0	408	1	0	409	0	0	0	0	0	0	514	0	0	514	927
% Cars	100	0	100	0	100	0	97.1	100	0	97.1	0	0	0	0	0	0	97.5	0	0	97.5	97.4
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	13	0	0	13	25
% Trucks	0	0	0	0	0	0	2.9	0	0	2.9	0	0	0	0	0	0	2.5	0	0	2.5	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #26 BriargateDr@AlligatorRdPM

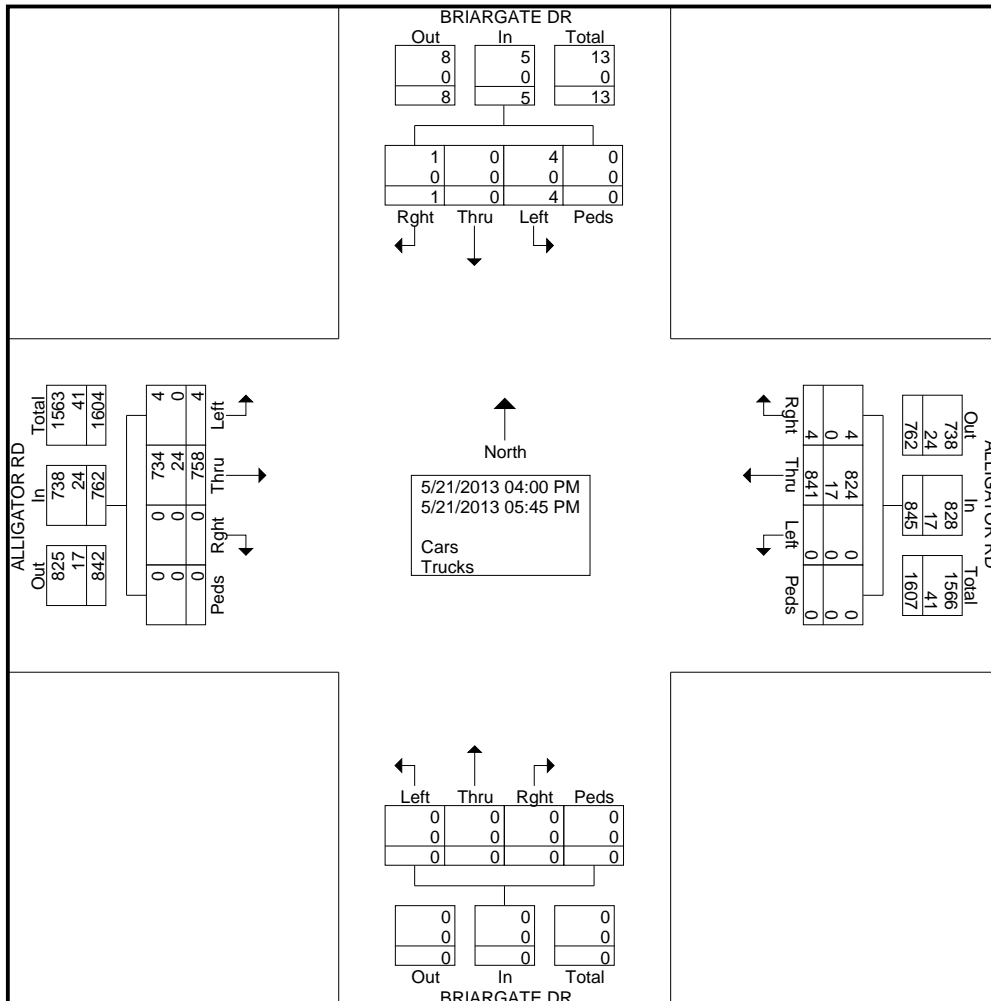
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BRIARGATE DR Southbound					ALLIGATOR RD Westbound					BRIARGATE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	0	86	0	0	86	179
04:15 PM	1	0	1	0	2	0	81	1	0	82	0	0	0	0	0	1	66	0	0	67	151
04:30 PM	1	0	0	0	1	0	96	0	0	96	0	0	0	0	0	0	113	0	0	113	210
04:45 PM	1	0	0	0	1	0	107	1	0	108	0	0	0	0	0	1	83	0	0	84	193
<b>Total</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>377</b>	<b>2</b>	<b>0</b>	<b>379</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>348</b>	<b>0</b>	<b>0</b>	<b>350</b>	<b>733</b>
05:00 PM	1	0	0	0	1	0	122	0	0	122	0	0	0	0	0	1	97	0	0	98	221
05:15 PM	0	0	0	0	0	0	130	1	0	131	0	0	0	0	0	0	111	0	0	111	242
05:30 PM	0	0	0	0	0	0	127	1	0	128	0	0	0	0	0	1	110	0	0	111	239
05:45 PM	0	0	0	0	0	0	85	0	0	85	0	0	0	0	0	0	92	0	0	92	177
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>464</b>	<b>2</b>	<b>0</b>	<b>466</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>410</b>	<b>0</b>	<b>0</b>	<b>412</b>	<b>879</b>
Grand Total	4	0	1	0	5	0	841	4	0	845	0	0	0	0	0	4	758	0	0	762	1612
Apprch %	80	0	20	0		0	99.5	0.5	0		0	0	0	0		0.5	99.5	0	0		
Total %	0.2	0	0.1	0	0.3	0	52.2	0.2	0	52.4	0	0	0	0	0	0.2	47	0	0	47.3	
Cars	4	0	1	0	5	0	824	4	0	828	0	0	0	0	0	4	734	0	0	738	1571
% Cars	100	0	100	0	100	0	98	100	0	98	0	0	0	0	0	100	96.8	0	0	96.9	97.5
Trucks	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	24	0	0	24	41
% Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3.2	0	0	3.1	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

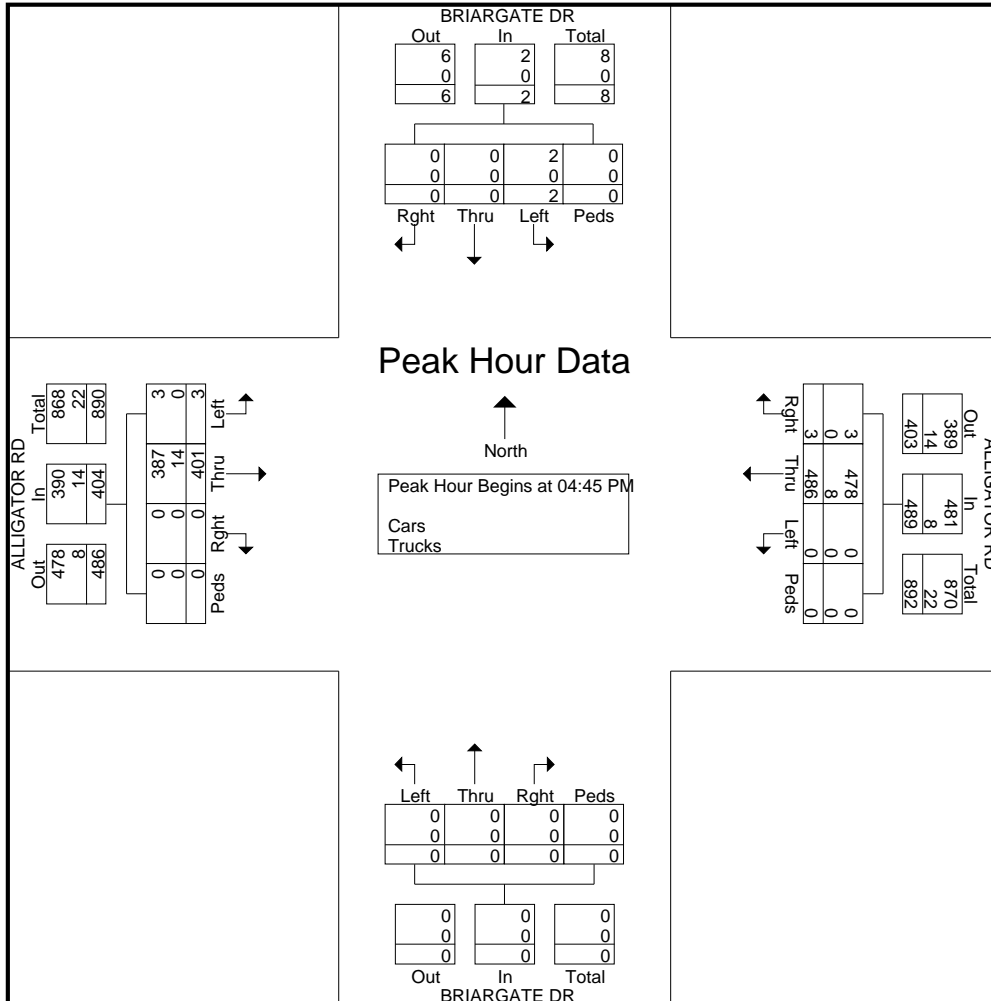
File Name : #26 BriargateDr@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BRIARGATE DR Southbound					ALLIGATOR RD Westbound					BRIARGATE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	0	0	0	1	0	107	1	0	108	0	0	0	0	0	1	83	0	0	84	193
05:00 PM	1	0	0	0	1	0	122	0	0	122	0	0	0	0	0	1	97	0	0	98	221
05:15 PM	0	0	0	0	0	0	130	1	0	131	0	0	0	0	0	0	111	0	0	111	242
05:30 PM	0	0	0	0	0	0	127	1	0	128	0	0	0	0	0	1	110	0	0	111	239
Total Volume	2	0	0	0	2	0	486	3	0	489	0	0	0	0	0	3	401	0	0	404	895
% App. Total	100	0	0	0	100	0	99.4	0.6	0	99.4	0	0	0	0	0	0.7	99.3	0	0	99.3	99.3
PHF	.500	.000	.000	.000	.500	.000	.935	.750	.000	.933	.000	.000	.000	.000	.000	.750	.903	.000	.000	.910	.925
Cars	2	0	0	0	2	0	478	3	0	481	0	0	0	0	0	3	387	0	0	390	873
% Cars	100	0	0	0	100	0	98.4	100	0	98.4	0	0	0	0	0	100	96.5	0	0	96.5	97.5
Trucks	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	14	0	0	14	22
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3.5	0	0	3.5	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #27 WoodStreamRd@AlligatorRdAM

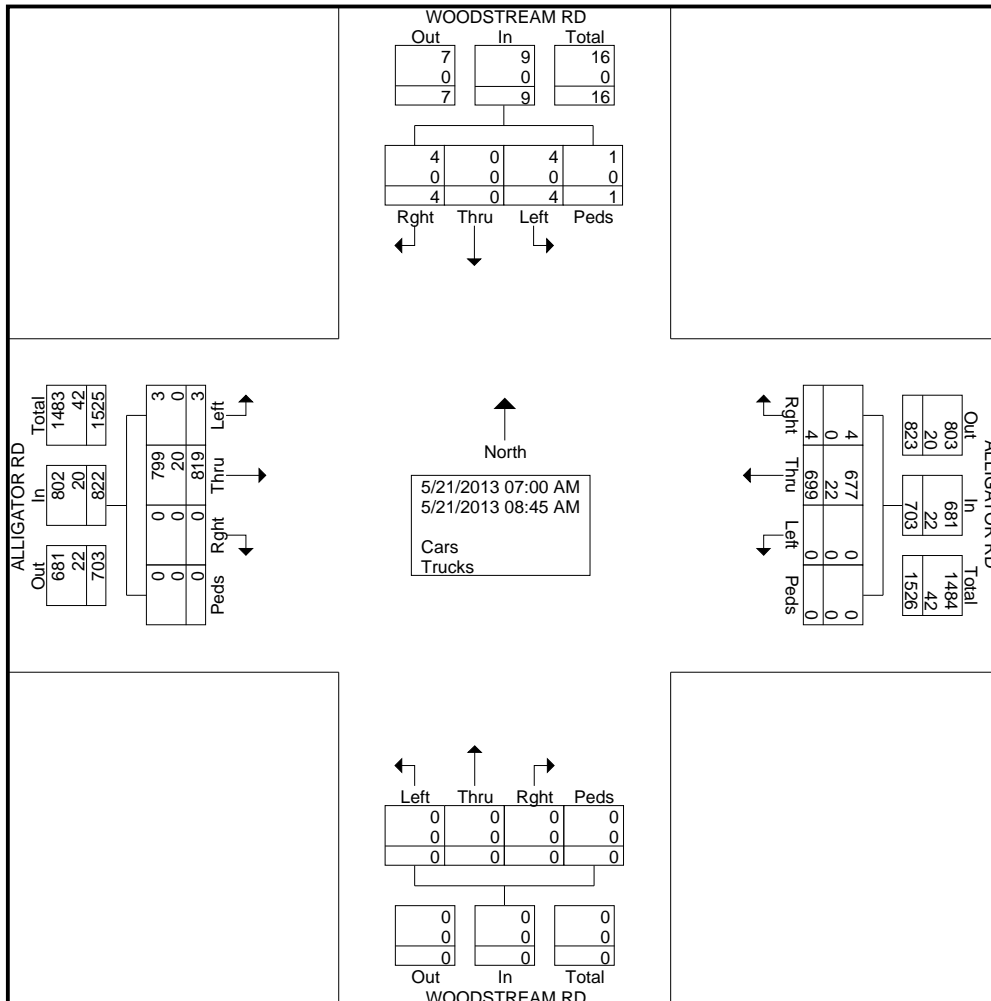
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOODSTREAM RD Southbound					ALLIGATOR RD Westbound					WOODSTREAM RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	84	1	0	85	0	0	0	0	0	0	103	0	0	103	188
07:15 AM	1	0	0	0	1	0	97	1	0	98	0	0	0	0	0	0	143	0	0	143	242
07:30 AM	0	0	3	1	4	0	141	0	0	141	0	0	0	0	0	0	132	0	0	132	277
07:45 AM	0	0	0	0	0	0	96	1	0	97	0	0	0	0	0	2	144	0	0	146	243
Total	1	0	3	1	5	0	418	3	0	421	0	0	0	0	0	2	522	0	0	524	950
08:00 AM	1	0	0	0	1	0	80	0	0	80	0	0	0	0	0	1	114	0	0	115	196
08:15 AM	2	0	0	0	2	0	83	0	0	83	0	0	0	0	0	0	81	0	0	81	166
08:30 AM	0	0	0	0	0	0	64	1	0	65	0	0	0	0	0	0	43	0	0	43	108
08:45 AM	0	0	1	0	1	0	54	0	0	54	0	0	0	0	0	0	59	0	0	59	114
Total	3	0	1	0	4	0	281	1	0	282	0	0	0	0	0	1	297	0	0	298	584
Grand Total	4	0	4	1	9	0	699	4	0	703	0	0	0	0	0	3	819	0	0	822	1534
Apprch %	44.4	0	44.4	11.1		0	99.4	0.6	0		0	0	0	0		0.4	99.6	0	0		
Total %	0.3	0	0.3	0.1	0.6	0	45.6	0.3	0	45.8	0	0	0	0	0	0.2	53.4	0	0	53.6	
Cars	4	0	4	1	9	0	677	4	0	681	0	0	0	0	0	3	799	0	0	802	1492
% Cars	100	0	100	100	100	0	96.9	100	0	96.9	0	0	0	0	0	100	97.6	0	0	97.6	97.3
Trucks	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	20	0	0	20	42
% Trucks	0	0	0	0	0	0	3.1	0	0	3.1	0	0	0	0	0	0	2.4	0	0	2.4	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

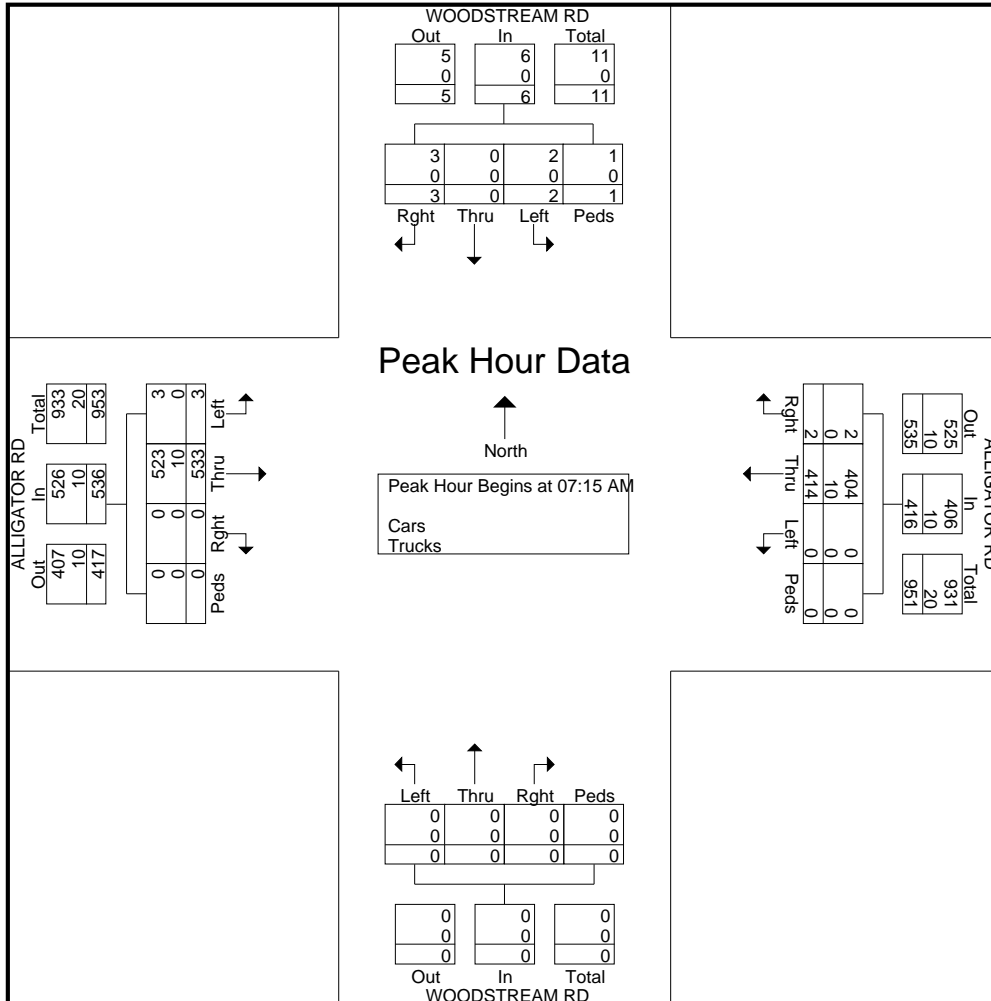
File Name : #27 WoodStreamRd@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WOODSTREAM RD Southbound					ALLIGATOR RD Westbound					WOODSTREAM RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	0	0	0	1	0	97	1	0	98	0	0	0	0	0	0	143	0	0	143	242
07:30 AM	0	0	3	1	4	0	141	0	0	141	0	0	0	0	0	0	132	0	0	132	277
07:45 AM	0	0	0	0	0	0	96	1	0	97	0	0	0	0	0	2	144	0	0	146	243
08:00 AM	1	0	0	0	1	0	80	0	0	80	0	0	0	0	0	1	114	0	0	115	196
Total Volume	2	0	3	1	6	0	414	2	0	416	0	0	0	0	0	3	533	0	0	536	958
% App. Total	33.3	0	50	16.7		0	99.5	0.5	0		0	0	0	0		0.6	99.4	0	0		
PHF	.500	.000	.250	.250	.375	.000	.734	.500	.000	.738	.000	.000	.000	.000	.000	.375	.925	.000	.000	.918	.865
Cars	2	0	3	1	6	0	404	2	0	406	0	0	0	0	0	3	523	0	0	526	938
% Cars	100	0	100	100	100	0	97.6	100	0	97.6	0	0	0	0	0	100	98.1	0	0	98.1	97.9
Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	20
% Trucks	0	0	0	0	0	0	2.4	0	0	2.4	0	0	0	0	0	0	1.9	0	0	1.9	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #27 WoodStreamRd@AlligatorRdPM

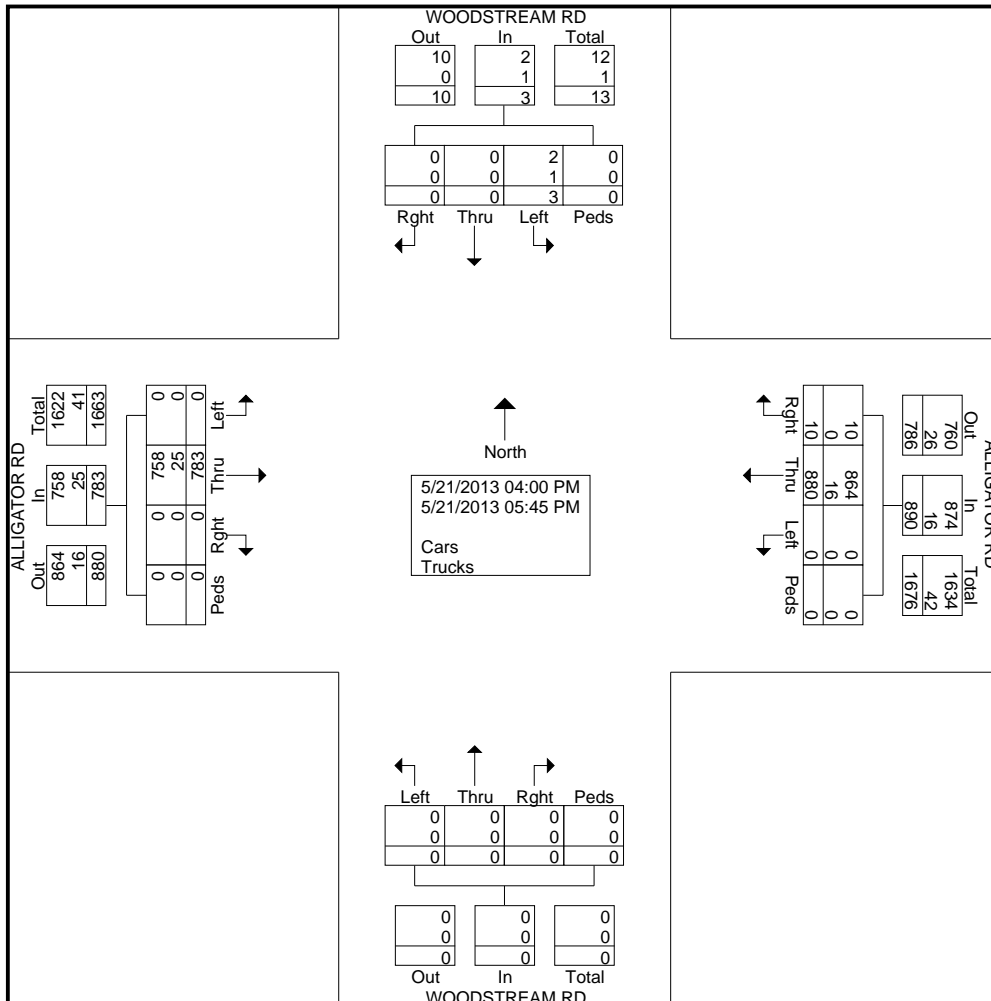
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOODSTREAM RD Southbound					ALLIGATOR RD Westbound					WOODSTREAM RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	0	0	0	1	0	92	1	0	93	0	0	0	0	0	0	73	0	0	73	167
04:15 PM	0	0	0	0	0	0	93	1	0	94	0	0	0	0	0	0	83	0	0	83	177
04:30 PM	0	0	0	0	0	0	88	3	0	91	0	0	0	0	0	0	97	0	0	97	188
04:45 PM	1	0	0	0	1	0	102	0	0	102	0	0	0	0	0	0	82	0	0	82	185
Total	2	0	0	0	2	0	375	5	0	380	0	0	0	0	0	0	335	0	0	335	717
05:00 PM	0	0	0	0	0	0	132	0	0	132	0	0	0	0	0	0	109	0	0	109	241
05:15 PM	0	0	0	0	0	0	120	0	0	120	0	0	0	0	0	0	112	0	0	112	232
05:30 PM	1	0	0	0	1	0	131	2	0	133	0	0	0	0	0	0	100	0	0	100	234
05:45 PM	0	0	0	0	0	0	122	3	0	125	0	0	0	0	0	0	127	0	0	127	252
Total	1	0	0	0	1	0	505	5	0	510	0	0	0	0	0	0	448	0	0	448	959
Grand Total	3	0	0	0	3	0	880	10	0	890	0	0	0	0	0	0	783	0	0	783	1676
Apprch %	100	0	0	0		0	98.9	1.1	0		0	0	0	0		0	100	0	0		
Total %	0.2	0	0	0	0.2	0	52.5	0.6	0	53.1	0	0	0	0	0	0	46.7	0	0	46.7	
Cars	2	0	0	0	2	0	864	10	0	874	0	0	0	0	0	0	758	0	0	758	1634
% Cars	66.7	0	0	0	66.7	0	98.2	100	0	98.2	0	0	0	0	0	0	96.8	0	0	96.8	97.5
Trucks	1	0	0	0	1	0	16	0	0	16	0	0	0	0	0	0	25	0	0	25	42
% Trucks	33.3	0	0	0	33.3	0	1.8	0	0	1.8	0	0	0	0	0	0	3.2	0	0	3.2	2.5

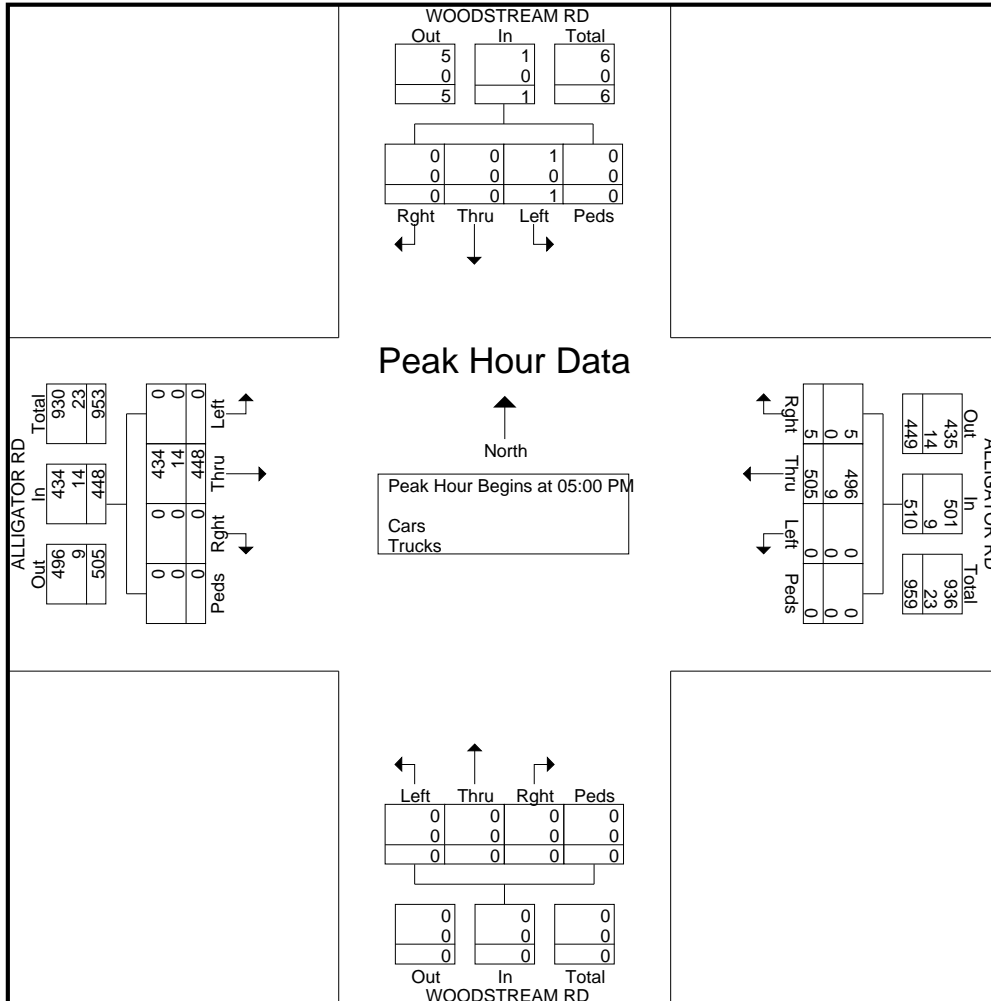


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #27 WoodStreamRd@AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	WOODSTREAM RD Southbound					ALLIGATOR RD Westbound					WOODSTREAM RD Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	132	0	0	132	0	0	0	0	0	0	109	0	0	109	241
05:15 PM	0	0	0	0	0	0	120	0	0	120	0	0	0	0	0	0	112	0	0	112	232
05:30 PM	1	0	0	0	1	0	131	2	0	133	0	0	0	0	0	0	100	0	0	100	234
05:45 PM	0	0	0	0	0	0	122	3	0	125	0	0	0	0	0	0	127	0	0	127	252
Total Volume	1	0	0	0	1	0	505	5	0	510	0	0	0	0	0	0	448	0	0	448	959
% App. Total	100	0	0	0	0	0	99	1	0	0	0	0	0	0	0	0	100	0	0	0	0
PHF	.250	.000	.000	.000	.250	.000	.956	.417	.000	.959	.000	.000	.000	.000	.000	.000	.882	.000	.000	.882	.951
Cars	1	0	0	0	1	0	496	5	0	501	0	0	0	0	0	0	434	0	0	434	936
% Cars	100	0	0	0	100	0	98.2	100	0	98.2	0	0	0	0	0	0	96.9	0	0	96.9	97.6
Trucks	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	14	0	0	14	23
% Trucks	0	0	0	0	0	0	1.8	0	0	1.8	0	0	0	0	0	0	3.1	0	0	3.1	2.4





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #28 WoodsideDr@AlligatorRdAM

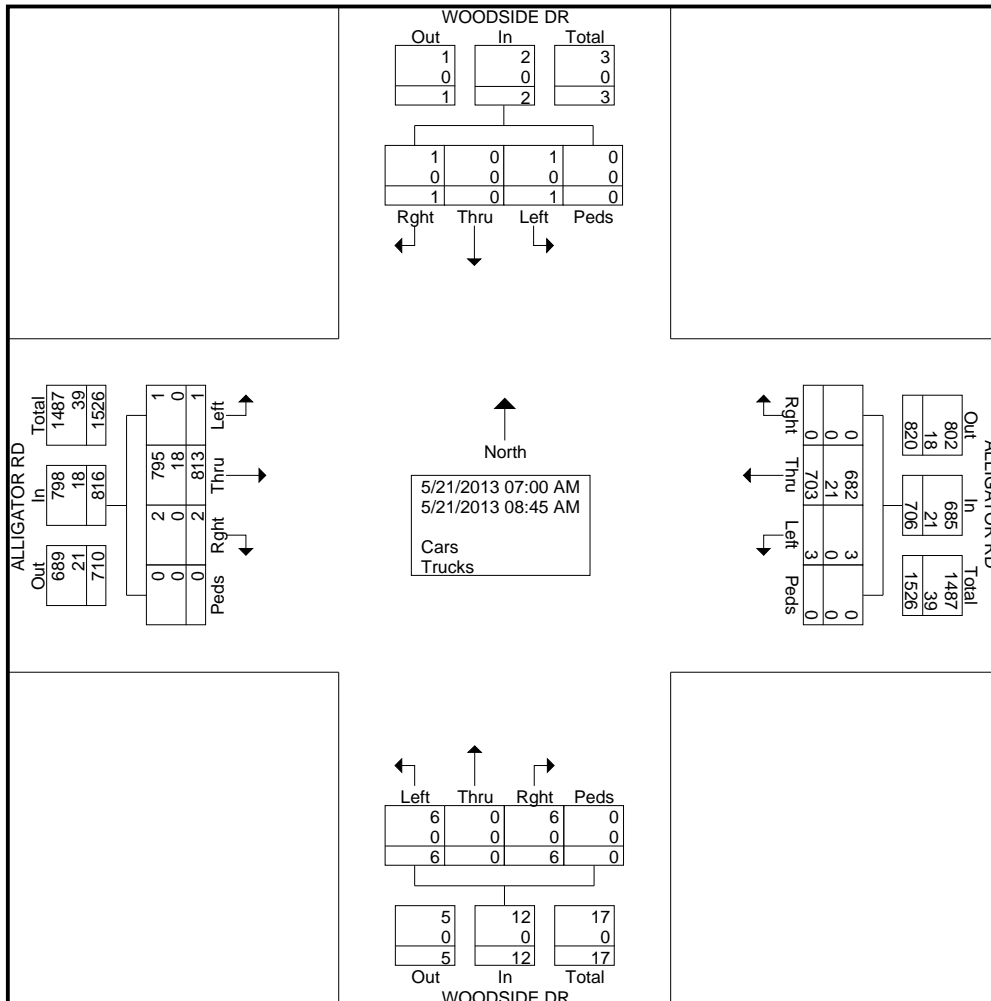
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOODSIDE DR Southbound					ALLIGATOR RD Westbound					WOODSIDE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	93	0	0	93	1	0	1	0	2	0	109	1	0	110	205
07:15 AM	0	0	0	0	0	0	102	0	0	102	2	0	1	0	3	0	139	0	0	139	244
07:30 AM	0	0	1	0	1	0	138	0	0	138	2	0	0	0	2	0	127	1	0	128	269
07:45 AM	0	0	0	0	0	0	90	0	0	90	1	0	1	0	2	1	149	0	0	150	242
Total	0	0	1	0	1	0	423	0	0	423	6	0	3	0	9	1	524	2	0	527	960
08:00 AM	0	0	0	0	0	0	76	0	0	76	0	0	2	0	2	0	113	0	0	113	191
08:15 AM	0	0	0	0	0	3	88	0	0	91	0	0	1	0	1	0	76	0	0	76	168
08:30 AM	0	0	0	0	0	0	62	0	0	62	0	0	0	0	0	0	49	0	0	49	111
08:45 AM	1	0	0	0	1	0	54	0	0	54	0	0	0	0	0	0	51	0	0	51	106
Total	1	0	0	0	1	3	280	0	0	283	0	0	3	0	3	0	289	0	0	289	576
Grand Total	1	0	1	0	2	3	703	0	0	706	6	0	6	0	12	1	813	2	0	816	1536
Apprch %	50	0	50	0		0.4	99.6	0	0		50	0	50	0		0.1	99.6	0.2	0		
Total %	0.1	0	0.1	0	0.1	0.2	45.8	0	0	46	0.4	0	0.4	0	0.8	0.1	52.9	0.1	0	53.1	
Cars	1	0	1	0	2	3	682	0	0	685	6	0	6	0	12	1	795	2	0	798	1497
% Cars	100	0	100	0	100	100	97	0	0	97	100	0	100	0	100	100	97.8	100	0	97.8	97.5
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	18	0	0	18	39
% Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2.2	0	0	2.2	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

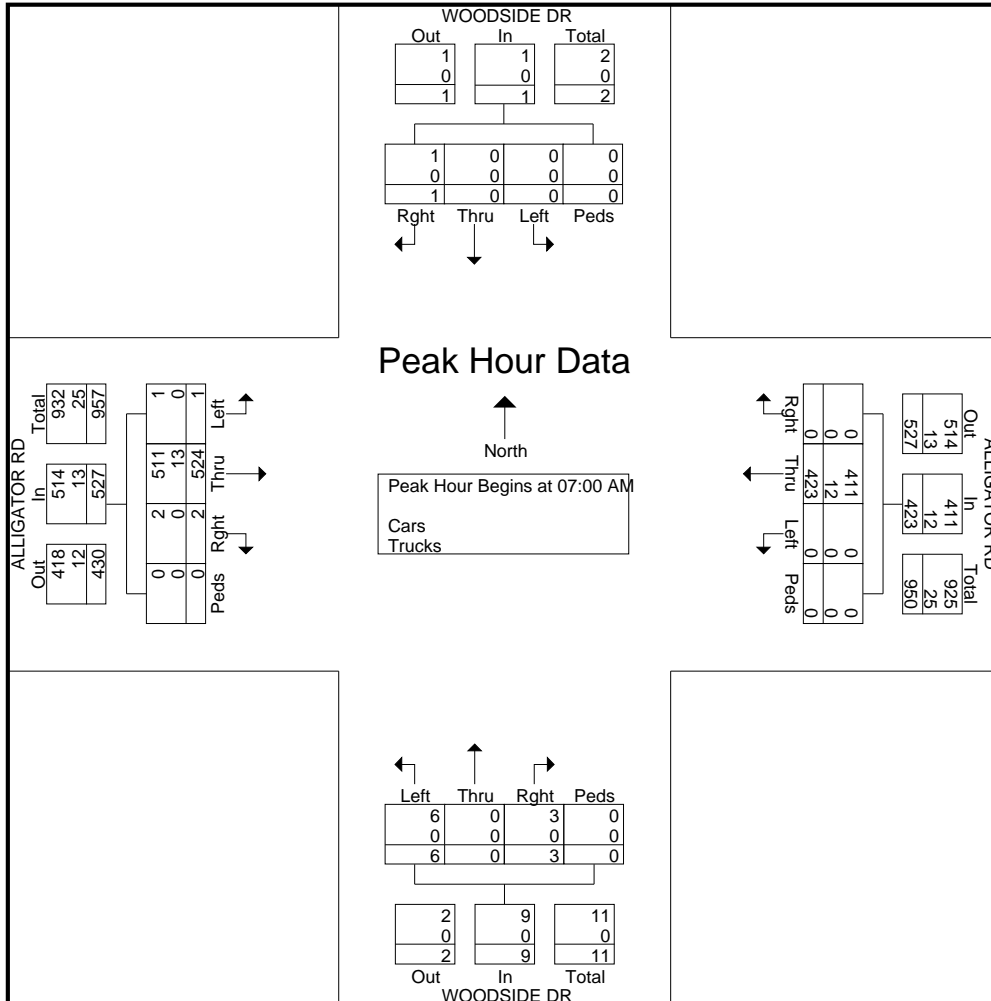
File Name : #28 WoodsideDr@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WOODSIDE DR Southbound					ALLIGATOR RD Westbound					WOODSIDE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	93	0	0	93	1	0	1	0	2	0	109	1	0	110	205
07:15 AM	0	0	0	0	0	0	102	0	0	102	2	0	1	0	3	0	139	0	0	139	244
07:30 AM	0	0	1	0	1	0	138	0	0	138	2	0	0	0	2	0	127	1	0	128	269
07:45 AM	0	0	0	0	0	0	90	0	0	90	1	0	1	0	2	1	149	0	0	150	242
Total Volume	0	0	1	0	1	0	423	0	0	423	6	0	3	0	9	1	524	2	0	527	960
% App. Total	0	0	100	0	0	0	100	0	0	100	66.7	0	33.3	0	0	0.2	99.4	0.4	0	0	0
PHF	.000	.000	.250	.000	.250	.000	.766	.000	.000	.766	.750	.000	.750	.000	.750	.250	.879	.500	.000	.878	.892
Cars	0	0	1	0	1	0	411	0	0	411	6	0	3	0	9	1	511	2	0	514	935
% Cars	0	0	100	0	100	0	97.2	0	0	97.2	100	0	100	0	100	100	97.5	100	0	97.5	97.4
Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	13	0	0	13	25
% Trucks	0	0	0	0	0	0	2.8	0	0	2.8	0	0	0	0	0	0	2.5	0	0	2.5	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #28 WoodsideDr@AlligatorRdPM

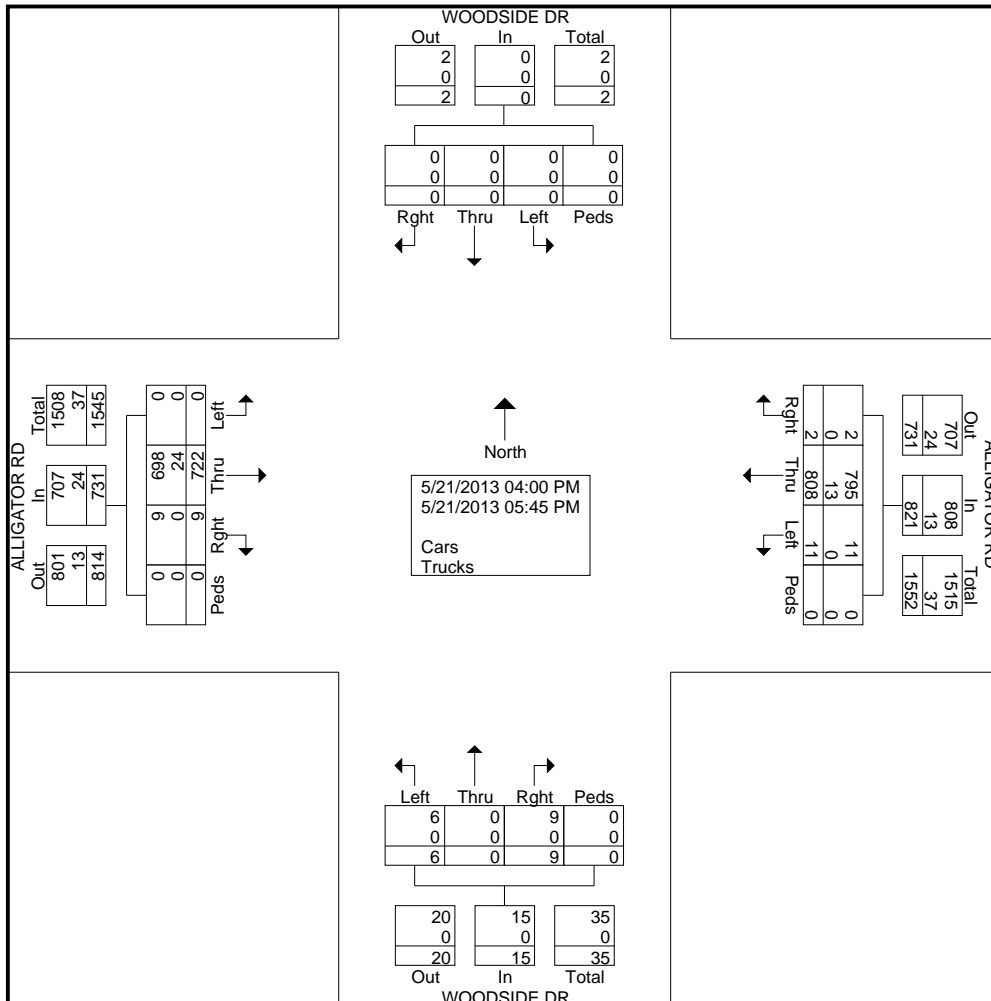
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	WOODSIDE DR Southbound					ALLIGATOR RD Westbound					WOODSIDE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	2	96	0	0	98	0	0	0	0	0	0	73	0	0	73	171
04:15 PM	0	0	0	0	0	2	77	0	0	79	0	0	0	0	0	0	79	1	0	80	159
04:30 PM	0	0	0	0	0	1	79	0	0	80	0	0	2	0	2	0	93	1	0	94	176
04:45 PM	0	0	0	0	0	1	99	1	0	101	5	0	1	0	6	0	76	1	0	77	184
Total	0	0	0	0	0	6	351	1	0	358	5	0	3	0	8	0	321	3	0	324	690
05:00 PM	0	0	0	0	0	2	123	0	0	125	1	0	0	0	1	0	94	0	0	94	220
05:15 PM	0	0	0	0	0	1	106	0	0	107	0	0	1	0	1	0	104	1	0	105	213
05:30 PM	0	0	0	0	0	2	121	0	0	123	0	0	3	0	3	0	91	2	0	93	219
05:45 PM	0	0	0	0	0	0	107	1	0	108	0	0	2	0	2	0	112	3	0	115	225
Total	0	0	0	0	0	5	457	1	0	463	1	0	6	0	7	0	401	6	0	407	877
Grand Total	0	0	0	0	0	11	808	2	0	821	6	0	9	0	15	0	722	9	0	731	1567
Apprch %	0	0	0	0		1.3	98.4	0.2	0		40	0	60	0		0	98.8	1.2	0		
Total %	0	0	0	0	0	0.7	51.6	0.1	0	52.4	0.4	0	0.6	0	1	0	46.1	0.6	0	46.6	
Cars	0	0	0	0	0	11	795	2	0	808	6	0	9	0	15	0	698	9	0	707	1530
% Cars	0	0	0	0	0	100	98.4	100	0	98.4	100	0	100	0	100	0	96.7	100	0	96.7	97.6
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	24	0	0	24	37
% Trucks	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	0	3.3	0	0	3.3	2.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

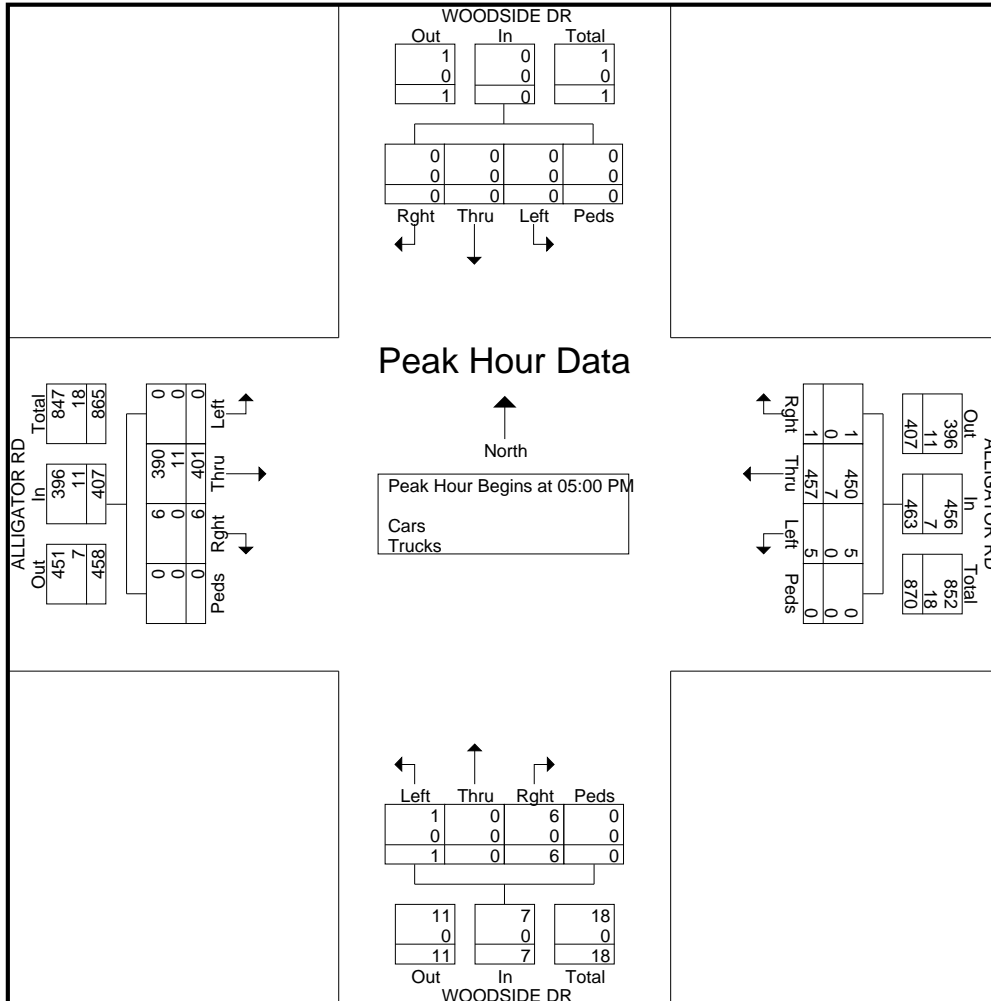
File Name : #28 WoodsideDr@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	WOODSIDE DR Southbound					ALLIGATOR RD Westbound					WOODSIDE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	123	0	0	125	1	0	0	0	1	0	94	0	0	94	220
05:15 PM	0	0	0	0	0	1	106	0	0	107	0	0	1	0	1	0	104	1	0	105	213
05:30 PM	0	0	0	0	0	2	121	0	0	123	0	0	3	0	3	0	91	2	0	93	219
05:45 PM	0	0	0	0	0	0	107	1	0	108	0	0	2	0	2	0	112	3	0	115	225
Total Volume	0	0	0	0	0	5	457	1	0	463	1	0	6	0	7	0	401	6	0	407	877
% App. Total	0	0	0	0	0	1.1	98.7	0.2	0		14.3	0	85.7	0		0	98.5	1.5	0		
PHF	.000	.000	.000	.000	.000	.625	.929	.250	.000	.926	.250	.000	.500	.000	.583	.000	.895	.500	.000	.885	.974
Cars	0	0	0	0	0	5	450	1	0	456	1	0	6	0	7	0	390	6	0	396	859
% Cars	0	0	0	0	0	100	98.5	100	0	98.5	100	0	100	0	100	0	97.3	100	0	97.3	97.9
Trucks	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	11	0	0	11	18
% Trucks	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	2.7	0	0	2.7	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #29 BrookstoneDr@AlligatorRdAM

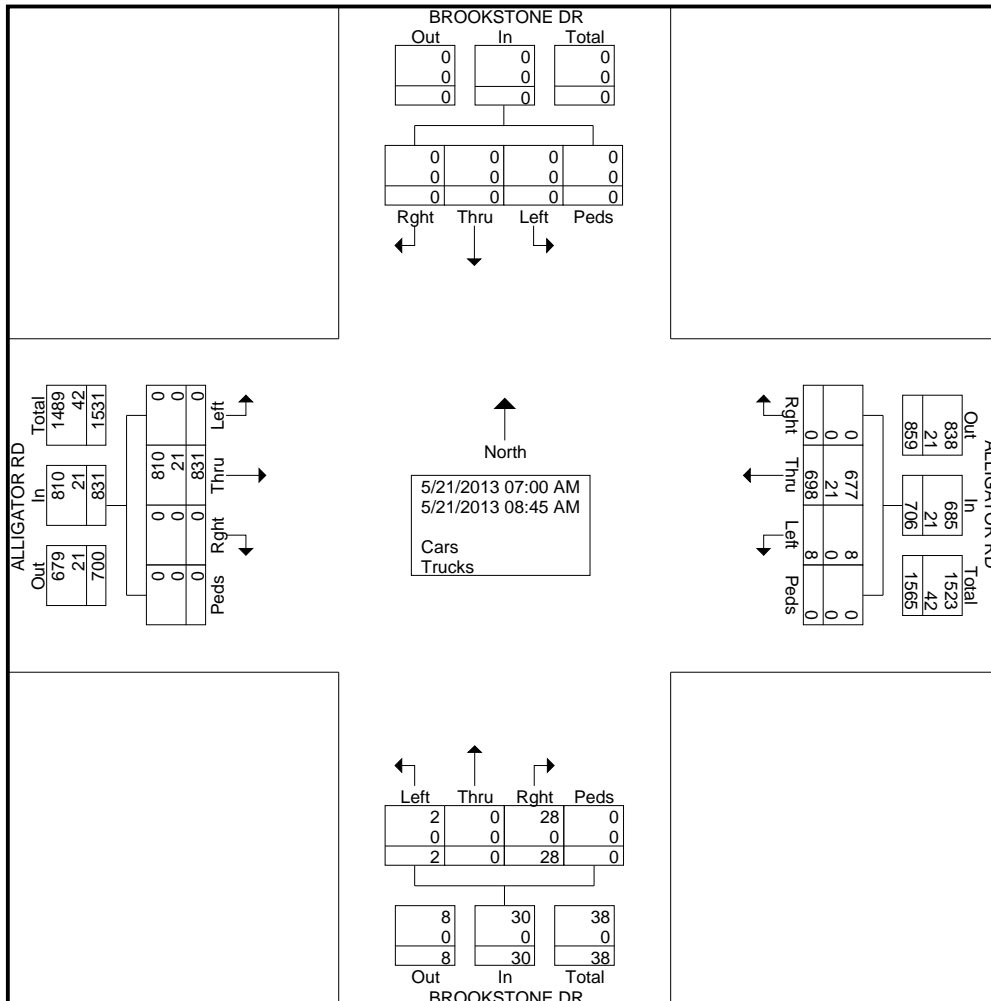
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BROOKSTONE DR Southbound					ALLIGATOR RD Westbound					BROOKSTONE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	82	0	0	82	1	0	3	0	4	0	102	0	0	102	188
07:15 AM	0	0	0	0	0	1	97	0	0	98	0	0	6	0	6	0	139	0	0	139	243
07:30 AM	0	0	0	0	0	0	138	0	0	138	1	0	7	0	8	0	140	0	0	140	286
07:45 AM	0	0	0	0	0	1	95	0	0	96	0	0	4	0	4	0	138	0	0	138	238
Total	0	0	0	0	0	2	412	0	0	414	2	0	20	0	22	0	519	0	0	519	955
08:00 AM	0	0	0	0	0	1	80	0	0	81	0	0	4	0	4	0	115	0	0	115	200
08:15 AM	0	0	0	0	0	4	85	0	0	89	0	0	3	0	3	0	95	0	0	95	187
08:30 AM	0	0	0	0	0	1	64	0	0	65	0	0	1	0	1	0	43	0	0	43	109
08:45 AM	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	0	59	0	0	59	116
Total	0	0	0	0	0	6	286	0	0	292	0	0	8	0	8	0	312	0	0	312	612
Grand Total	0	0	0	0	0	8	698	0	0	706	2	0	28	0	30	0	831	0	0	831	1567
Apprch %	0	0	0	0		1.1	98.9	0	0		6.7	0	93.3	0		0	100	0	0		
Total %	0	0	0	0	0	0.5	44.5	0	0	45.1	0.1	0	1.8	0	1.9	0	53	0	0	53	
Cars	0	0	0	0	0	8	677	0	0	685	2	0	28	0	30	0	810	0	0	810	1525
% Cars	0	0	0	0	0	100	97	0	0	97	100	0	100	0	100	0	97.5	0	0	97.5	97.3
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	21	0	0	21	42
% Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2.5	0	0	2.5	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

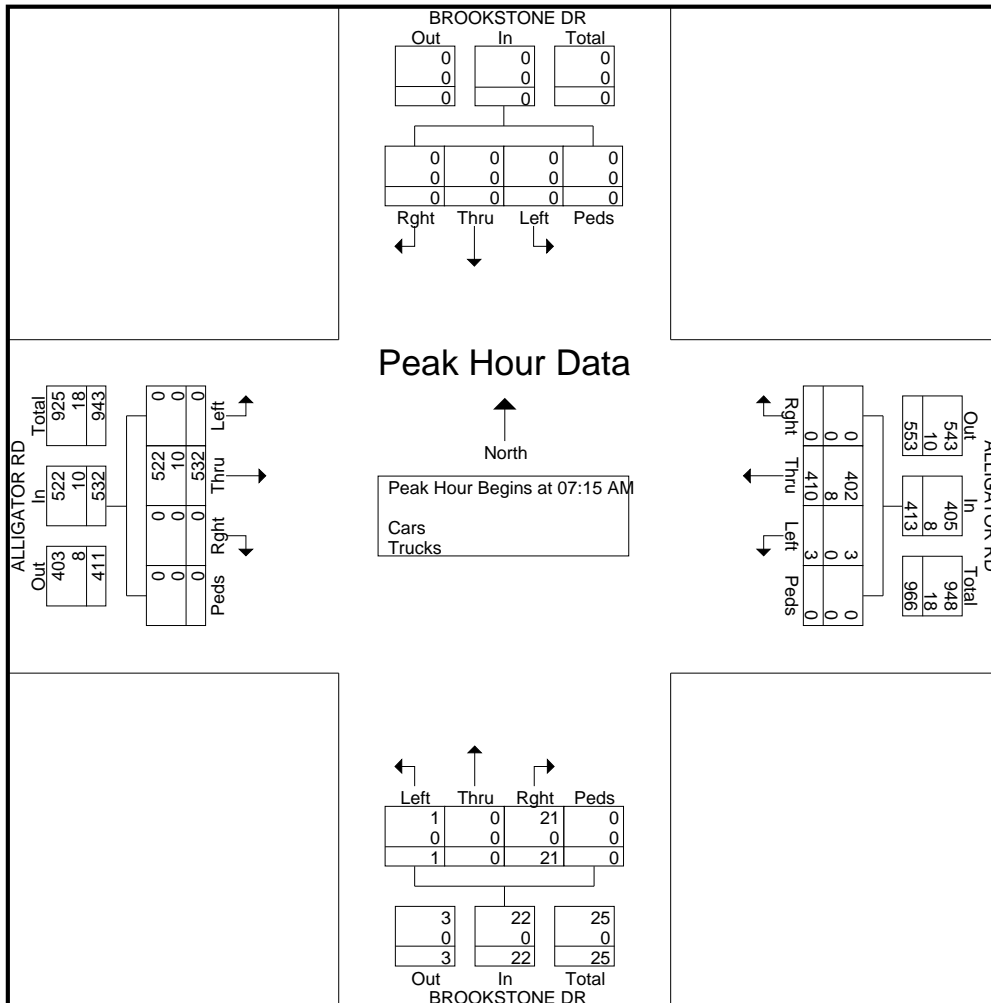
File Name : #29 BrookstoneDr@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BROOKSTONE DR Southbound					ALLIGATOR RD Westbound					BROOKSTONE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	1	97	0	0	98	0	0	6	0	6	0	139	0	0	139	243
07:30 AM	0	0	0	0	0	0	138	0	0	138	1	0	7	0	8	0	140	0	0	140	286
07:45 AM	0	0	0	0	0	1	95	0	0	96	0	0	4	0	4	0	138	0	0	138	238
08:00 AM	0	0	0	0	0	1	80	0	0	81	0	0	4	0	4	0	115	0	0	115	200
Total Volume	0	0	0	0	0	3	410	0	0	413	1	0	21	0	22	0	532	0	0	532	967
% App. Total	0	0	0	0	0	0.7	99.3	0	0	98.1	4.5	0	95.5	0	100	0	100	0	0	100	98.1
PHF	.000	.000	.000	.000	.000	.750	.743	.000	.000	.748	.250	.000	.750	.000	.688	.000	.950	.000	.000	.950	.845
Cars	0	0	0	0	0	3	402	0	0	405	1	0	21	0	22	0	522	0	0	522	949
% Cars	0	0	0	0	0	100	98.0	0	0	98.1	100	0	100	0	100	0	98.1	0	0	98.1	98.1
Trucks	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	10	0	0	10	18
% Trucks	0	0	0	0	0	0	2.0	0	0	1.9	0	0	0	0	0	0	1.9	0	0	1.9	1.9



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #29 BrookstoneDr@AlligatorRdPM

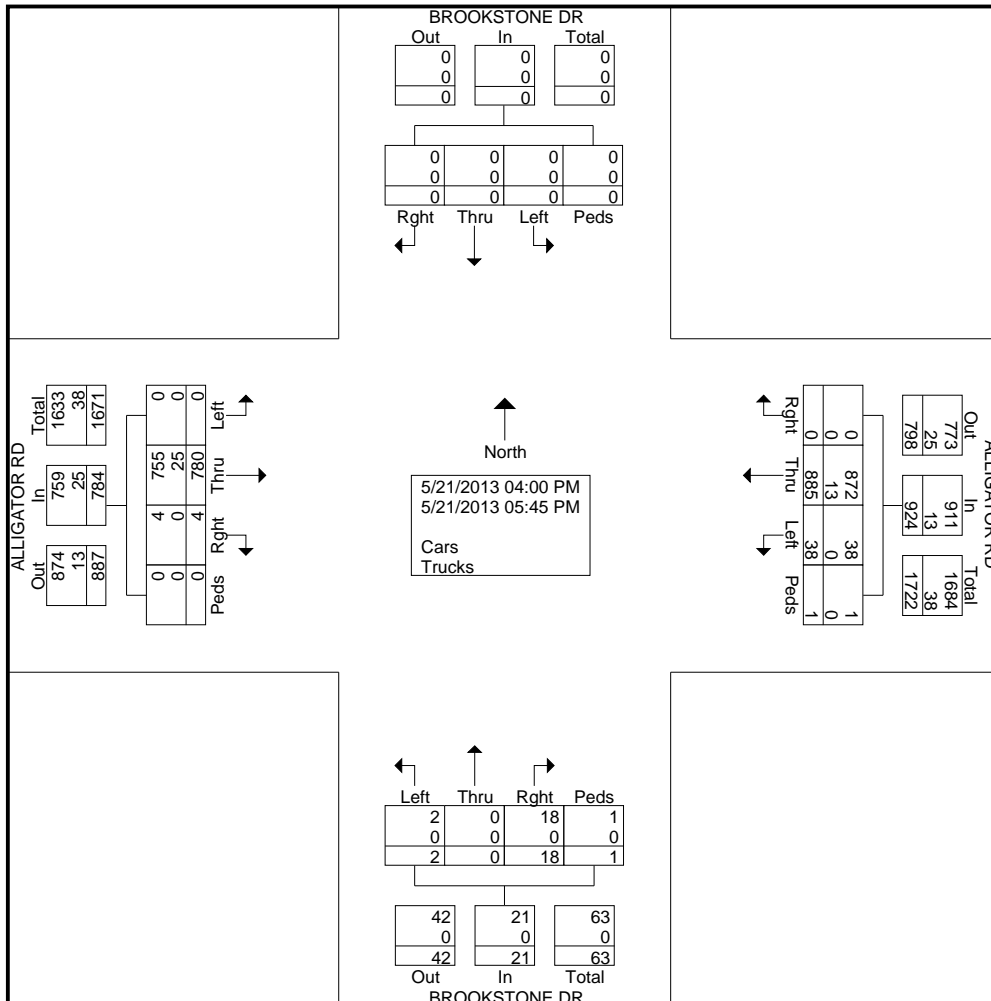
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	BROOKSTONE DR Southbound					ALLIGATOR RD Westbound					BROOKSTONE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	9	92	0	1	102	0	0	1	1	2	0	82	2	0	84	188
04:15 PM	0	0	0	0	0	2	99	0	0	101	0	0	4	0	4	0	81	0	0	81	186
04:30 PM	0	0	0	0	0	7	91	0	0	98	1	0	2	0	3	0	97	0	0	97	198
04:45 PM	0	0	0	0	0	5	98	0	0	103	0	0	2	0	2	0	81	1	0	82	187
Total	0	0	0	0	0	23	380	0	1	404	1	0	9	1	11	0	341	3	0	344	759
05:00 PM	0	0	0	0	0	2	131	0	0	133	0	0	2	0	2	0	108	0	0	108	243
05:15 PM	0	0	0	0	0	3	113	0	0	116	1	0	1	0	2	0	107	0	0	107	225
05:30 PM	0	0	0	0	0	6	134	0	0	140	0	0	4	0	4	0	108	1	0	109	253
05:45 PM	0	0	0	0	0	4	127	0	0	131	0	0	2	0	2	0	116	0	0	116	249
Total	0	0	0	0	0	15	505	0	0	520	1	0	9	0	10	0	439	1	0	440	970
Grand Total	0	0	0	0	0	38	885	0	1	924	2	0	18	1	21	0	780	4	0	784	1729
Apprch %	0	0	0	0		4.1	95.8	0	0.1		9.5	0	85.7	4.8		0	99.5	0.5	0		
Total %	0	0	0	0	0	2.2	51.2	0	0.1	53.4	0.1	0	1	0.1	1.2	0	45.1	0.2	0	45.3	
Cars	0	0	0	0	0	38	872	0	1	911	2	0	18	1	21	0	755	4	0	759	1691
% Cars	0	0	0	0	0	100	98.5	0	100	98.6	100	0	100	100	100	0	96.8	100	0	96.8	97.8
Trucks	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	25	0	0	25	38
% Trucks	0	0	0	0	0	0	1.5	0	0	1.4	0	0	0	0	0	0	3.2	0	0	3.2	2.2



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

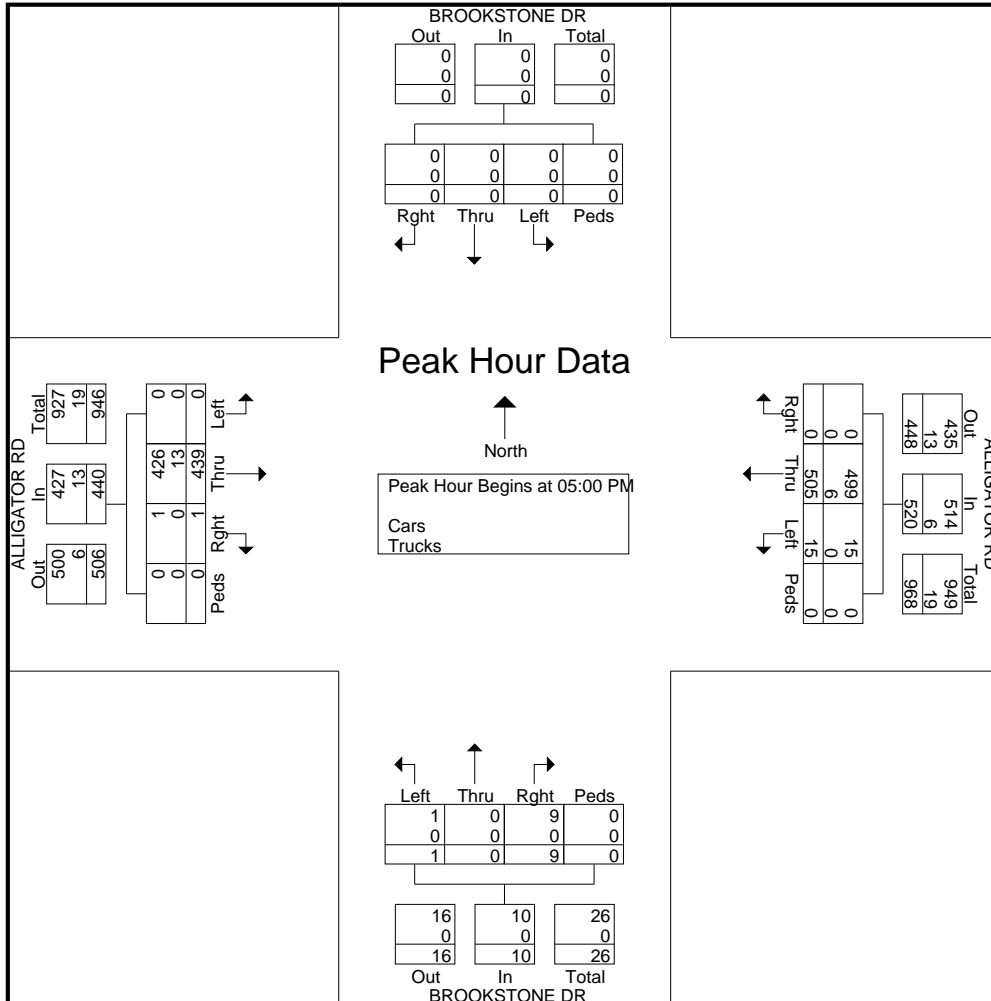
File Name : #29 BrookstoneDr@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	BROOKSTONE DR Southbound					ALLIGATOR RD Westbound					BROOKSTONE DR Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	131	0	0	133	0	0	2	0	2	0	108	0	0	108	243
05:15 PM	0	0	0	0	0	3	113	0	0	116	1	0	1	0	2	0	107	0	0	107	225
05:30 PM	0	0	0	0	0	6	134	0	0	140	0	0	4	0	4	0	108	1	0	109	253
05:45 PM	0	0	0	0	0	4	127	0	0	131	0	0	2	0	2	0	116	0	0	116	249
Total Volume	0	0	0	0	0	15	505	0	0	520	1	0	9	0	10	0	439	1	0	440	970
% App. Total	0	0	0	0	0	2.9	97.1	0	0	98.8	10	0	90	0	100	0	99.8	0.2	0	99.8	98.0
PHF	.000	.000	.000	.000	.000	.625	.942	.000	.000	.929	.250	.000	.563	.000	.625	.000	.946	.250	.000	.948	.958
Cars	0	0	0	0	0	15	499	0	0	514	1	0	9	0	10	0	426	1	0	427	951
% Cars	0	0	0	0	0	100	98.8	0	0	98.8	100	0	100	0	100	0	97.0	100	0	97.0	98.0
Trucks	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	13	0	0	13	19
% Trucks	0	0	0	0	0	0	1.2	0	0	1.2	0	0	0	0	0	0	3.0	0	0	3.0	2.0





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #30 US52-US301@ERedbudLnAM

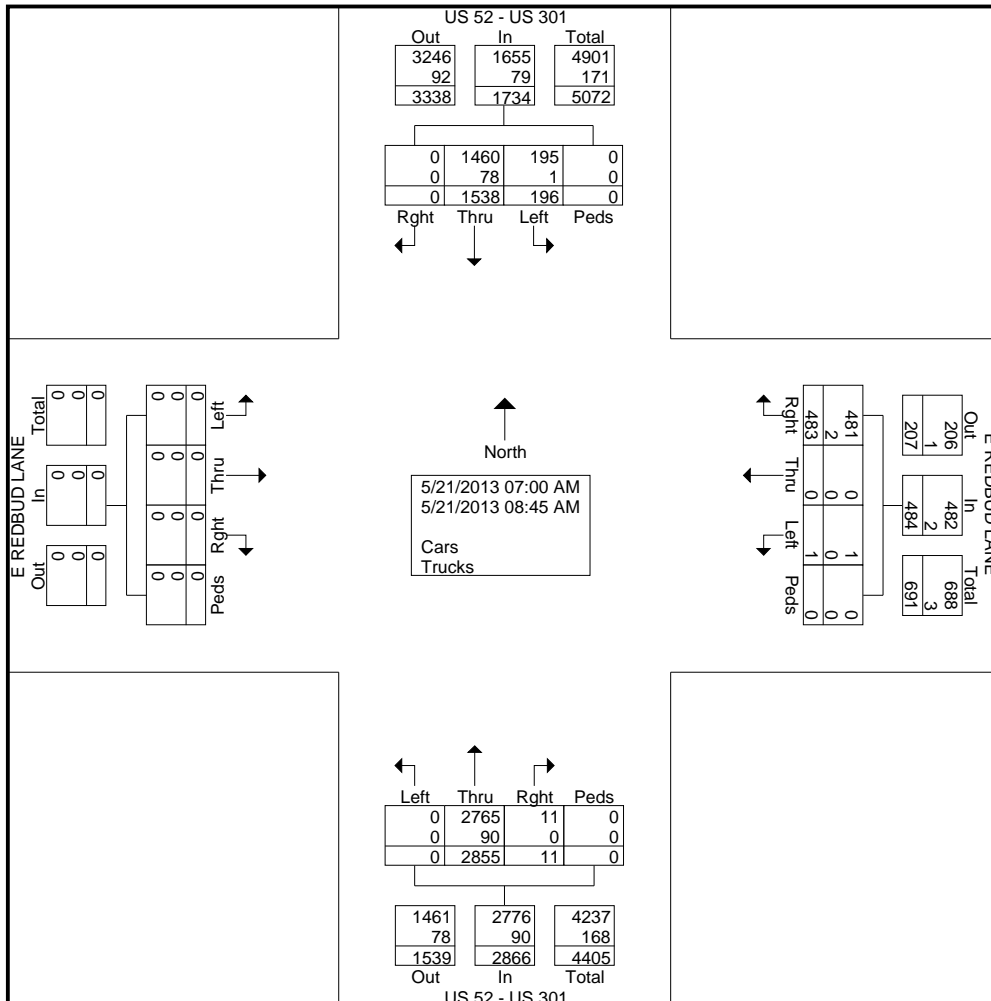
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	US 52 - US 301 Southbound					E REDBUD LANE Westbound					US 52 - US 301 Northbound					E REDBUD LANE Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	6	143	0	0	149	0	0	40	0	40	0	344	0	0	344	0	0	0	0	0	533
07:15 AM	19	163	0	0	182	0	0	65	0	65	0	379	0	0	379	0	0	0	0	0	626
07:30 AM	18	178	0	0	196	0	0	66	0	66	0	432	0	0	432	0	0	0	0	0	694
07:45 AM	27	214	0	0	241	0	0	68	0	68	0	374	0	0	374	0	0	0	0	0	683
Total	70	698	0	0	768	0	0	239	0	239	0	1529	0	0	1529	0	0	0	0	0	2536
08:00 AM	52	317	0	0	369	0	0	87	0	87	0	346	4	0	350	0	0	0	0	0	806
08:15 AM	37	250	0	0	287	1	0	96	0	97	0	356	3	0	359	0	0	0	0	0	743
08:30 AM	21	141	0	0	162	0	0	36	0	36	0	387	1	0	388	0	0	0	0	0	586
08:45 AM	16	132	0	0	148	0	0	25	0	25	0	237	3	0	240	0	0	0	0	0	413
Total	126	840	0	0	966	1	0	244	0	245	0	1326	11	0	1337	0	0	0	0	0	2548
Grand Total	196	1538	0	0	1734	1	0	483	0	484	0	2855	11	0	2866	0	0	0	0	0	5084
Apprch %	11.3	88.7	0	0		0.2	0	99.8	0		0	99.6	0.4	0		0	0	0	0	0	
Total %	3.9	30.3	0	0	34.1	0	0	9.5	0	9.5	0	56.2	0.2	0	56.4	0	0	0	0	0	
Cars	195	1460	0	0	1655	1	0	481	0	482	0	2765	11	0	2776	0	0	0	0	0	4913
% Cars	99.5	94.9	0	0	95.4	100	0	99.6	0	99.6	0	96.8	100	0	96.9	0	0	0	0	0	96.6
Trucks	1	78	0	0	79	0	0	2	0	2	0	90	0	0	90	0	0	0	0	0	171
% Trucks	0.5	5.1	0	0	4.6	0	0	0.4	0	0.4	0	3.2	0	0	3.1	0	0	0	0	0	3.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

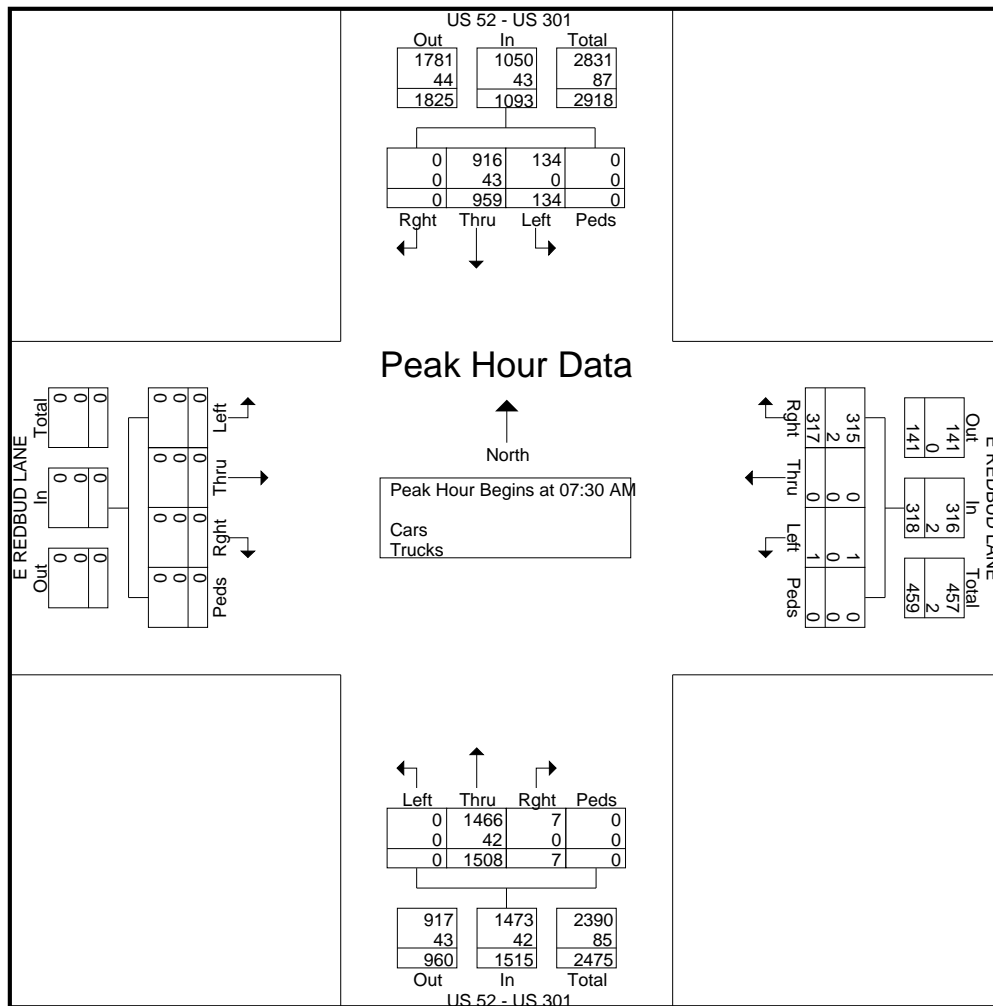
File Name : #30 US52-US301@ERedbudLnAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	US 52 - US 301 Southbound					E REDBUD LANE Westbound					US 52 - US 301 Northbound					E REDBUD LANE Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	18	178	0	0	196	0	0	66	0	66	0	432	0	0	432	0	0	0	0	0	694
07:45 AM	27	214	0	0	241	0	0	68	0	68	0	374	0	0	374	0	0	0	0	0	683
08:00 AM	52	317	0	0	369	0	0	87	0	87	0	346	4	0	350	0	0	0	0	0	806
08:15 AM	37	250	0	0	287	1	0	96	0	97	0	356	3	0	359	0	0	0	0	0	743
Total Volume	134	959	0	0	1093	1	0	317	0	318	0	1508	7	0	1515	0	0	0	0	0	2926
% App. Total	12.3	87.7	0	0		0.3	0	99.7	0		0	99.5	0.5	0		0	0	0	0	0	
PHF	.644	.756	.000	.000	.741	.250	.000	.826	.000	.820	.000	.873	.438	.000	.877	.000	.000	.000	.000	.000	.908
Cars	134	916	0	0	1050	1	0	315	0	316	0	1466	0	0	1466	0	0	0	0	0	97.0
% Cars	100	95.5	0	0	96.1	100	0	99.4	0	99.4	0	97.2	100	0	97.2	0	0	0	0	0	
Trucks	0	43	0	0	43	0	0	2	0	2	0	42	0	0	42	0	0	0	0	0	87
% Trucks	0	4.5	0	0	3.9	0	0	0.6	0	0.6	0	2.8	0	0	2.8	0	0	0	0	0	3.0



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #30 US52-US301@ERedbudLnPM

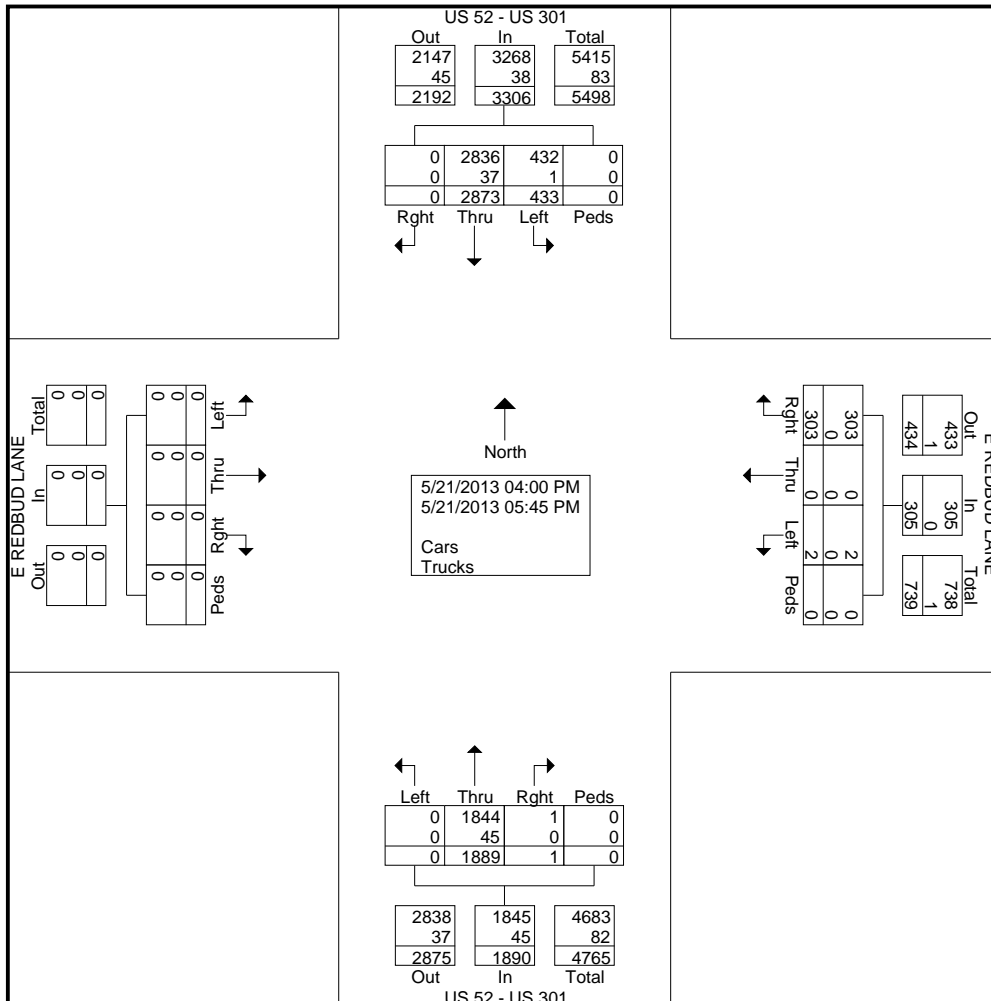
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	US 52 - US 301 Southbound					E REDBUD LANE Westbound					US 52 - US 301 Northbound					E REDBUD LANE Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	41	306	0	0	347	0	0	45	0	45	0	254	0	0	254	0	0	0	0	0	646
04:15 PM	60	315	0	0	375	0	0	36	0	36	0	219	1	0	220	0	0	0	0	0	631
04:30 PM	39	329	0	0	368	1	0	47	0	48	0	241	0	0	241	0	0	0	0	0	657
04:45 PM	46	347	0	0	393	1	0	35	0	36	0	264	0	0	264	0	0	0	0	0	693
Total	186	1297	0	0	1483	2	0	163	0	165	0	978	1	0	979	0	0	0	0	0	2627
05:00 PM	68	375	0	0	443	0	0	35	0	35	0	232	0	0	232	0	0	0	0	0	710
05:15 PM	61	423	0	0	484	0	0	29	0	29	0	230	0	0	230	0	0	0	0	0	743
05:30 PM	52	405	0	0	457	0	0	49	0	49	0	229	0	0	229	0	0	0	0	0	735
05:45 PM	66	373	0	0	439	0	0	27	0	27	0	220	0	0	220	0	0	0	0	0	686
Total	247	1576	0	0	1823	0	0	140	0	140	0	911	0	0	911	0	0	0	0	0	2874
Grand Total	433	2873	0	0	3306	2	0	303	0	305	0	1889	1	0	1890	0	0	0	0	0	5501
Apprch %	13.1	86.9	0	0		0.7	0	99.3	0		0	99.9	0.1	0		0	0	0	0	0	
Total %	7.9	52.2	0	0	60.1	0	0	5.5	0	5.5	0	34.3	0	0	34.4	0	0	0	0	0	
Cars	432	2836	0	0	3268	2	0	303	0	305	0	1844	1	0	1845	0	0	0	0	0	5418
% Cars	99.8	98.7	0	0	98.9	100	0	100	0	100	0	97.6	100	0	97.6	0	0	0	0	0	98.5
Trucks	1	37	0	0	38	0	0	0	0	0	0	45	0	0	45	0	0	0	0	0	83
% Trucks	0.2	1.3	0	0	1.1	0	0	0	0	0	0	2.4	0	0	2.4	0	0	0	0	0	1.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

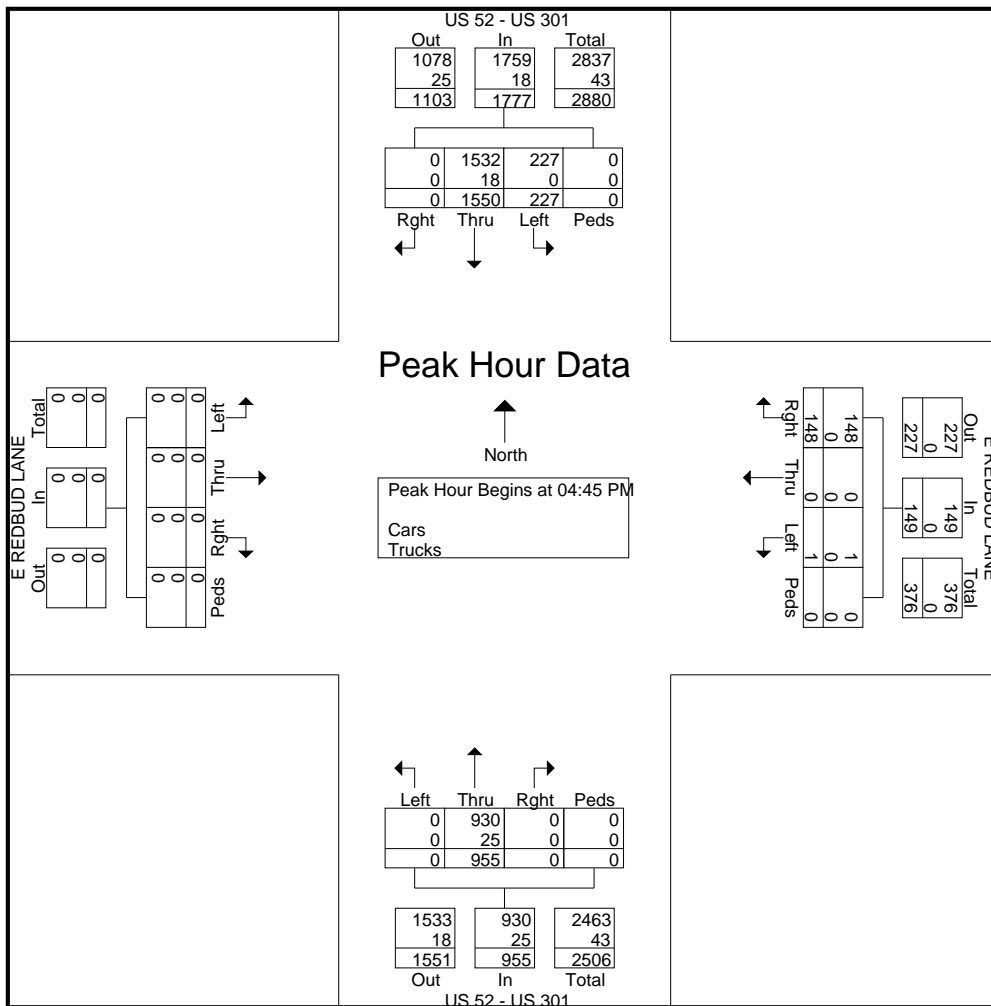
File Name : #30 US52-US301@ERedbudLnPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	US 52 - US 301 Southbound					E REDBUD LANE Westbound					US 52 - US 301 Northbound					E REDBUD LANE Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	46	347	0	0	393	1	0	35	0	36	0	264	0	0	264	0	0	0	0	0	693
05:00 PM	68	375	0	0	443	0	0	35	0	35	0	232	0	0	232	0	0	0	0	0	710
05:15 PM	61	423	0	0	484	0	0	29	0	29	0	230	0	0	230	0	0	0	0	0	743
05:30 PM	52	405	0	0	457	0	0	49	0	49	0	229	0	0	229	0	0	0	0	0	735
Total Volume	227	1550	0	0	1777	1	0	148	0	149	0	955	0	0	955	0	0	0	0	0	2881
% App. Total	12.8	87.2	0	0		0.7	0	99.3	0		0	100	0	0		0	0	0	0		
PHF	.835	.916	.000	.000	.918	.250	.000	.755	.000	.760	.000	.904	.000	.000	.904	.000	.000	.000	.000	.000	.969
Cars	227	1532																			
% Cars	100	98.8	0	0	99.0	100	0	100	0	100	0	97.4	0	0	97.4	0	0	0	0	0	98.5
Trucks	0	18	0	0	18	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	43
% Trucks	0	1.2	0	0	1.0	0	0	0	0	0	0	2.6	0	0	2.6	0	0	0	0	0	1.5



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #31 US52-US301 @AlligatorRdAM

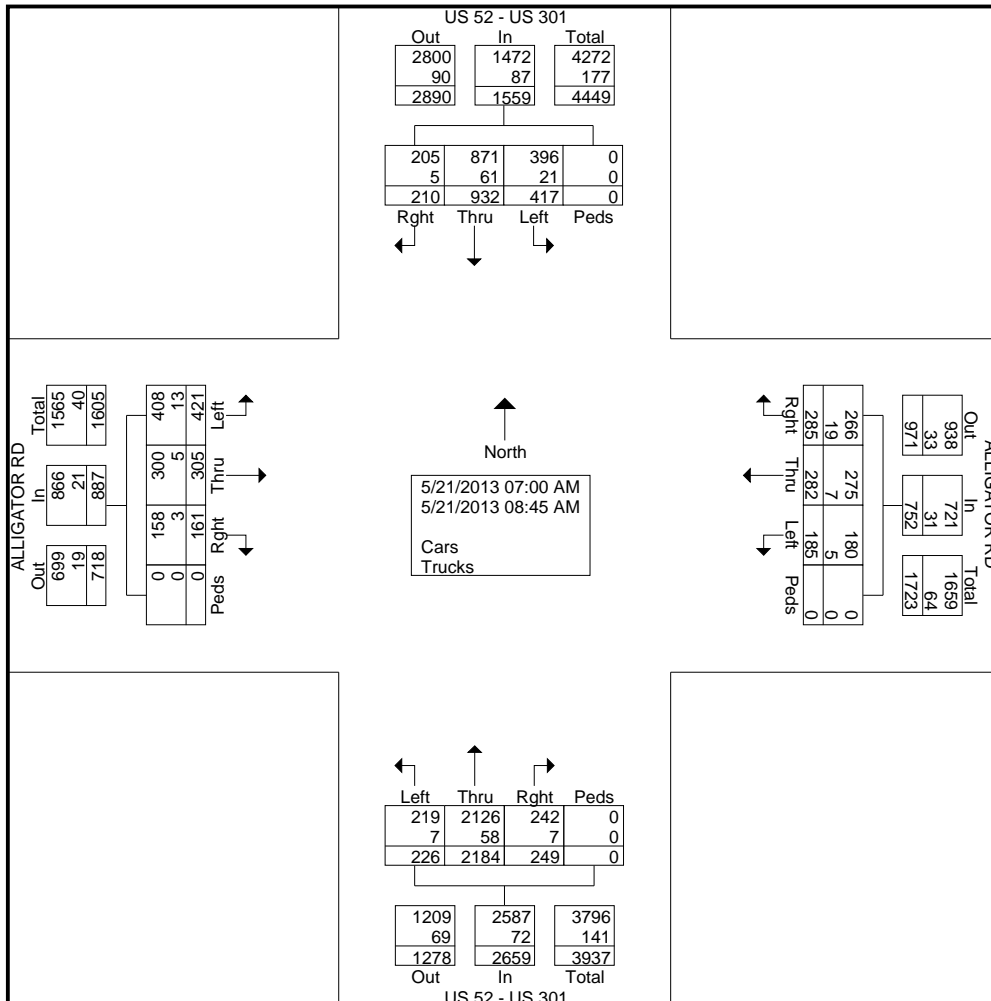
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	US 52 - US 301 Southbound					ALLIGATOR RD Westbound					US 52 - US 301 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	9	117	24	0	150	32	37	15	0	84	32	297	15	0	344	58	21	29	0	108	686
07:15 AM	30	108	25	0	163	39	37	27	0	103	48	318	44	0	410	53	42	34	0	129	805
07:30 AM	43	109	37	0	189	33	61	55	0	149	29	306	41	0	376	70	44	24	0	138	852
07:45 AM	83	128	33	0	244	21	36	63	0	120	20	279	43	0	342	70	47	15	0	132	838
Total	165	462	119	0	746	125	171	160	0	456	129	1200	143	0	1472	251	154	102	0	507	3181
08:00 AM	98	146	30	0	274	22	37	41	0	100	22	222	57	0	301	52	76	11	0	139	814
08:15 AM	110	149	26	0	285	17	44	45	0	106	20	253	21	0	294	53	52	14	0	119	804
08:30 AM	26	92	18	0	136	10	16	24	0	50	30	320	15	0	365	27	13	16	0	56	607
08:45 AM	18	83	17	0	118	11	14	15	0	40	25	189	13	0	227	38	10	18	0	66	451
Total	252	470	91	0	813	60	111	125	0	296	97	984	106	0	1187	170	151	59	0	380	2676
Grand Total	417	932	210	0	1559	185	282	285	0	752	226	2184	249	0	2659	421	305	161	0	887	5857
Apprch %	26.7	59.8	13.5	0		24.6	37.5	37.9	0		8.5	82.1	9.4	0		47.5	34.4	18.2	0		
Total %	7.1	15.9	3.6	0	26.6	3.2	4.8	4.9	0	12.8	3.9	37.3	4.3	0	45.4	7.2	5.2	2.7	0	15.1	
Cars	396	871	205	0	1472	180	275	266	0	721	219	2126	242	0	2587	408	300	158	0	866	5646
% Cars	95	93.5	97.6	0	94.4	97.3	97.5	93.3	0	95.9	96.9	97.3	97.2	0	97.3	96.9	98.4	98.1	0	97.6	96.4
Trucks	21	61	5	0	87	5	7	19	0	31	7	58	7	0	72	13	5	3	0	21	211
% Trucks	5	6.5	2.4	0	5.6	2.7	2.5	6.7	0	4.1	3.1	2.7	2.8	0	2.7	3.1	1.6	1.9	0	2.4	3.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

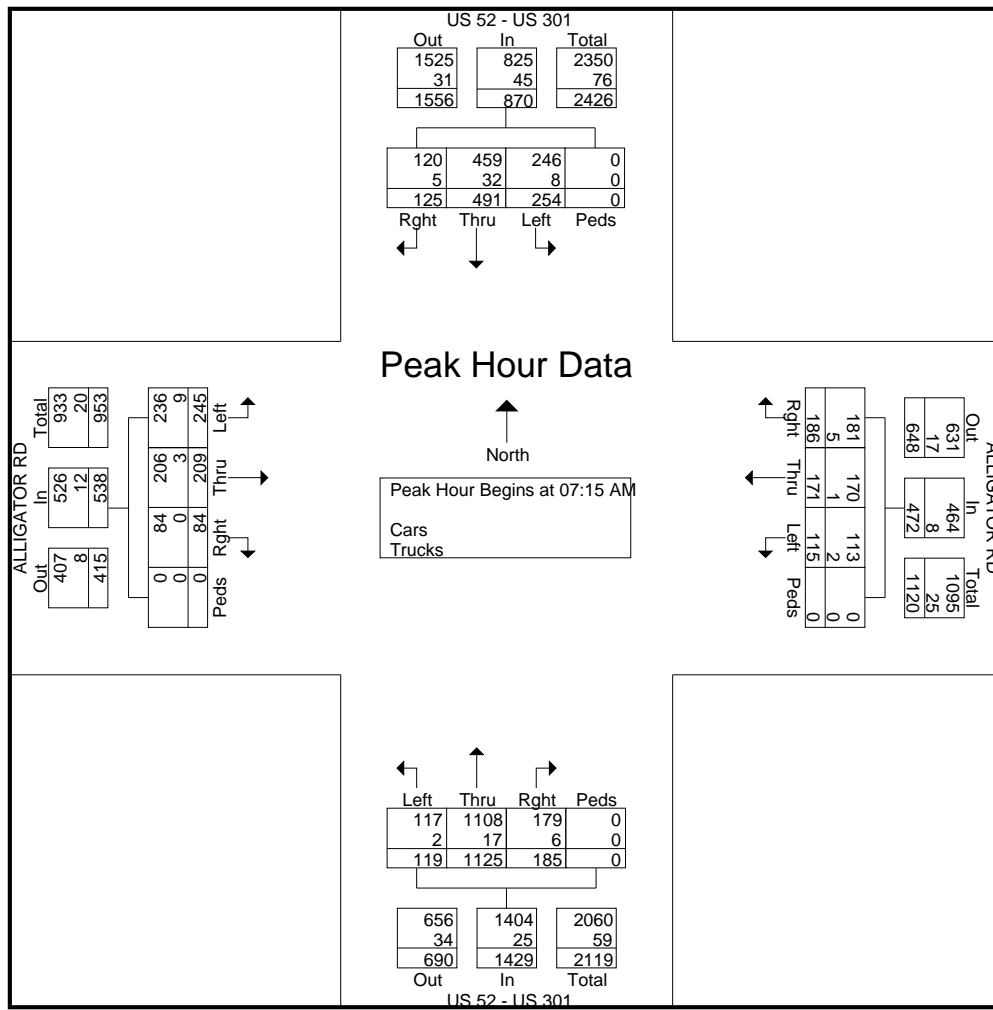
File Name : #31 US52-US301 @AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	US 52 - US 301 Southbound					ALLIGATOR RD Westbound					US 52 - US 301 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	30	108	25	0	163	39	37	27	0	103	48	318	44	0	410	53	42	34	0	129	805
07:30 AM	43	109	37	0	189	33	61	55	0	149	29	306	41	0	376	70	44	24	0	138	852
07:45 AM	83	128	33	0	244	21	36	63	0	120	20	279	43	0	342	70	47	15	0	132	838
08:00 AM	98	146	30	0	274	22	37	41	0	100	22	222	57	0	301	52	76	11	0	139	814
Total Volume	254	491	125	0	870	115	171	186	0	472	119	1125	185	0	1429	245	209	84	0	538	3309
% App. Total	29.2	56.4	14.4	0		24.4	36.2	39.4	0		8.3	78.7	12.9	0		45.5	38.8	15.6	0		
PHF	.648	.841	.845	.000	.794	.737	.701	.738	.000	.792	.620	.884	.811	.000	.871	.875	.688	.618	.000	.968	.971
Cars	246	459	120	0	825	113	170	181	0	464	117	1108									
% Cars	96.9	93.5	96.0	0	94.8	98.3	99.4	97.3	0	98.3	98.3	98.5	96.8	0	98.3	96.3	98.6	100	0	97.8	97.3
Trucks	8	32	5	0	45	2	1	5	0	8	2	17	6	0	25	9	3	0	0	12	90
% Trucks	3.1	6.5	4.0	0	5.2	1.7	0.6	2.7	0	1.7	1.7	1.5	3.2	0	1.7	3.7	1.4	0	0	2.2	2.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #31 US52-US301@AlligatorRdPM

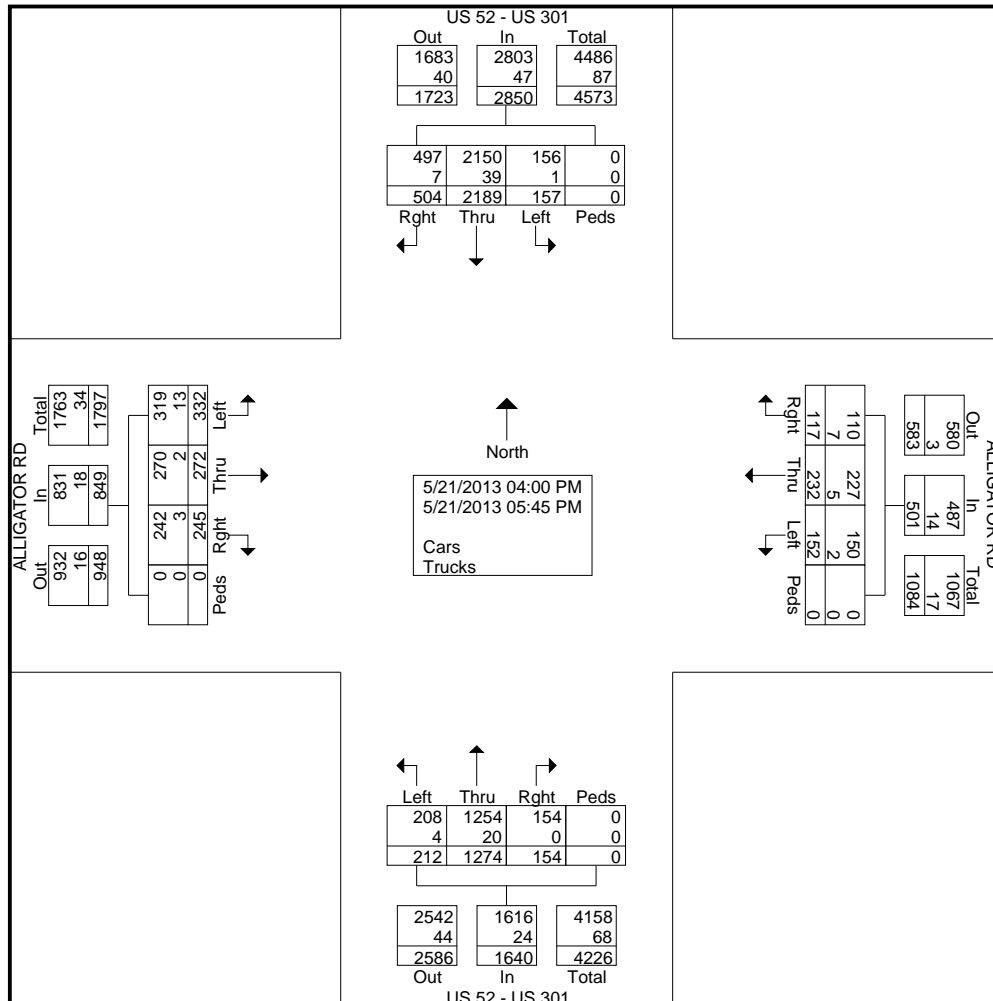
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	US 52 - US 301 Southbound					ALLIGATOR RD Westbound					US 52 - US 301 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	15	235	50	0	300	32	32	24	0	88	34	161	35	0	230	32	25	28	0	85	703
04:15 PM	23	232	57	0	312	19	15	12	0	46	22	150	17	0	189	38	29	29	0	96	643
04:30 PM	19	260	42	0	321	7	22	18	0	47	29	171	15	0	215	44	32	27	0	103	686
04:45 PM	20	271	69	0	360	17	23	23	0	63	25	173	16	0	214	47	23	26	0	96	733
Total	77	998	218	0	1293	75	92	77	0	244	110	655	83	0	848	161	109	110	0	380	2765
05:00 PM	18	274	72	0	364	17	33	14	0	64	30	148	17	0	195	47	43	32	0	122	745
05:15 PM	28	315	78	0	421	23	33	8	0	64	22	166	17	0	205	32	44	37	0	113	803
05:30 PM	12	299	72	0	383	16	39	8	0	63	28	161	16	0	205	42	38	24	0	104	755
05:45 PM	22	303	64	0	389	21	35	10	0	66	22	144	21	0	187	50	38	42	0	130	772
Total	80	1191	286	0	1557	77	140	40	0	257	102	619	71	0	792	171	163	135	0	469	3075
Grand Total	157	2189	504	0	2850	152	232	117	0	501	212	1274	154	0	1640	332	272	245	0	849	5840
Apprch %	5.5	76.8	17.7	0		30.3	46.3	23.4	0		12.9	77.7	9.4	0		39.1	32	28.9	0		
Total %	2.7	37.5	8.6	0	48.8	2.6	4	2	0	8.6	3.6	21.8	2.6	0	28.1	5.7	4.7	4.2	0	14.5	
Cars	156	2150	497	0	2803	150	227	110	0	487	208	1254	154	0	1616	319	270	242	0	831	5737
% Cars	99.4	98.2	98.6	0	98.4	98.7	97.8	94	0	97.2	98.1	98.4	100	0	98.5	96.1	99.3	98.8	0	97.9	98.2
Trucks	1	39	7	0	47	2	5	7	0	14	4	20	0	0	24	13	2	3	0	18	103
% Trucks	0.6	1.8	1.4	0	1.6	1.3	2.2	6	0	2.8	1.9	1.6	0	0	1.5	3.9	0.7	1.2	0	2.1	1.8

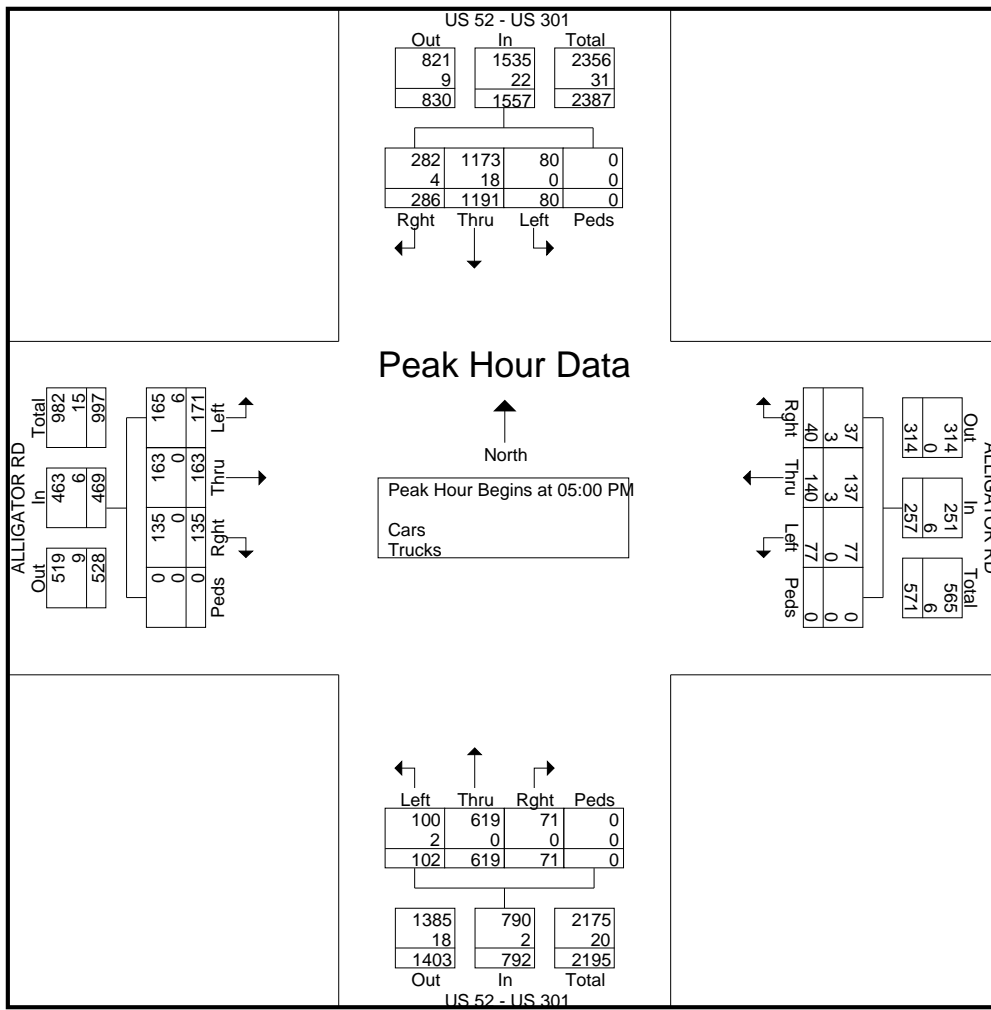


# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #31 US52-US301 @AlligatorRdPM  
Site Code :  
Start Date : 5/21/2013  
Page No : 2

Start Time	US 52 - US 301 Southbound					ALLIGATOR RD Westbound					US 52 - US 301 Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	18	274	72	0	364	17	33	14	0	64	30	148	17	0	195	47	43	32	0	122	745
05:15 PM	28	315	78	0	421	23	33	8	0	64	22	166	17	0	205	32	44	37	0	113	803
05:30 PM	12	299	72	0	383	16	39	8	0	63	28	161	16	0	205	42	38	24	0	104	755
05:45 PM	22	303	64	0	389	21	35	10	0	66	22	144	21	0	187	50	38	42	0	130	772
Total Volume	80	1191	286	0	1557	77	140	40	0	257	102	619	71	0	792	171	163	135	0	469	3075
% App. Total	5.1	76.5	18.4	0		30	54.5	15.6	0		12.9	78.2	9	0		36.5	34.8	28.8	0		
PHF	.714	.945	.917	.000	.925	.837	.897	.714	.000	.973	.850	.932	.845	.000	.966	.855	.926	.804	.000	.902	.957
Cars	80	1173																			
% Cars	100	98.5	98.6	0	98.6	100	97.9	92.5	0	97.7	98.0	100	100	0	99.7	96.5	100	100	0	98.7	98.8
Trucks	0	18	4	0	22	0	3	3	0	6	2	0	0	0	2	6	0	0	0	6	36
% Trucks	0	1.5	1.4	0	1.4	0	2.1	7.5	0	2.3	2.0	0	0	0	0.3	3.5	0	0	0	1.3	1.2





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #32 SBruinsLn@AlligatorRdAM

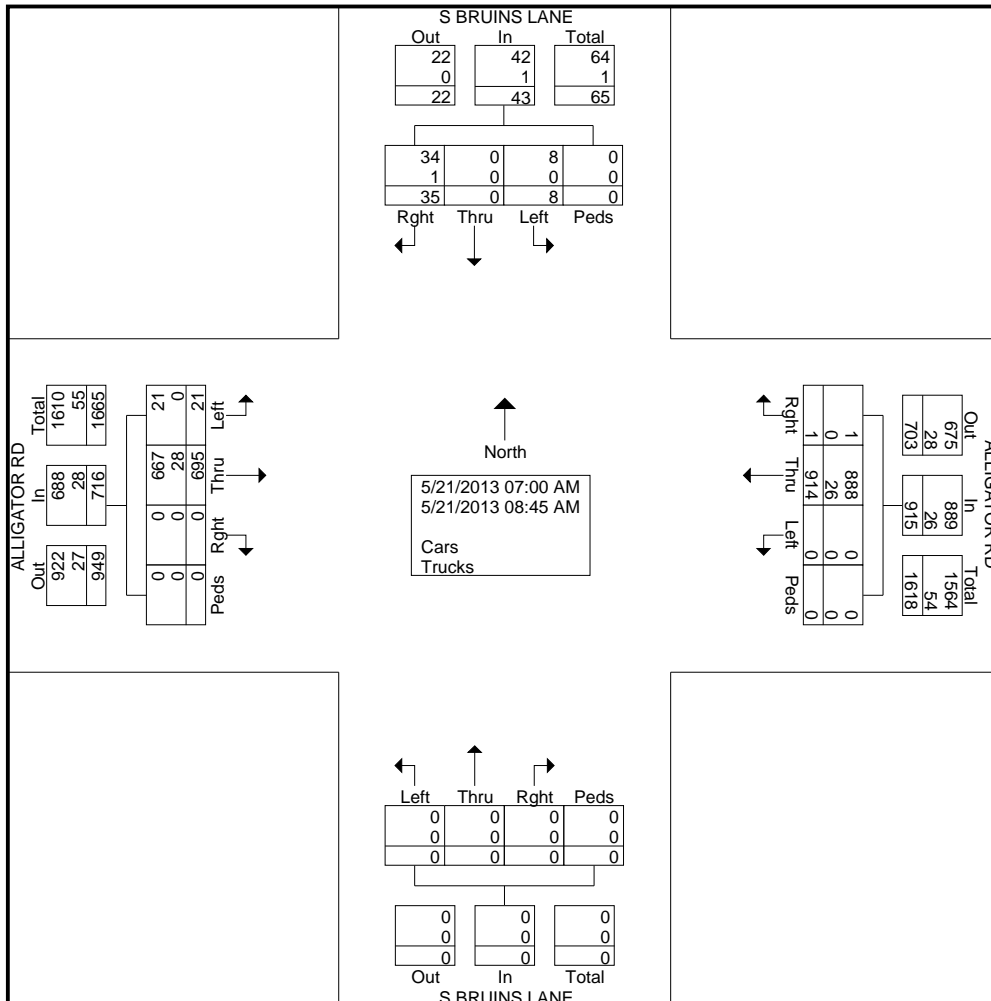
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	S BRUINS LANE Southbound					ALLIGATOR RD Westbound					S BRUINS LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	90	0	0	90	0	0	0	0	0	0	40	0	0	40	130
07:15 AM	0	0	1	0	1	0	105	0	0	105	0	0	0	0	0	2	82	0	0	84	190
07:30 AM	0	0	5	0	5	0	153	0	0	153	0	0	0	0	0	1	93	0	0	94	252
07:45 AM	0	0	3	0	3	0	134	0	0	134	0	0	0	0	0	2	115	0	0	117	254
Total	0	0	9	0	9	0	482	0	0	482	0	0	0	0	0	5	330	0	0	335	826
08:00 AM	7	0	9	0	16	0	183	0	0	183	0	0	0	0	0	5	177	0	0	182	381
08:15 AM	0	0	14	0	14	0	185	0	0	185	0	0	0	0	0	10	122	0	0	132	331
08:30 AM	1	0	1	0	2	0	36	0	0	36	0	0	0	0	0	1	43	0	0	44	82
08:45 AM	0	0	2	0	2	0	28	1	0	29	0	0	0	0	0	0	23	0	0	23	54
Total	8	0	26	0	34	0	432	1	0	433	0	0	0	0	0	16	365	0	0	381	848
Grand Total	8	0	35	0	43	0	914	1	0	915	0	0	0	0	0	21	695	0	0	716	1674
Apprch %	18.6	0	81.4	0		0	99.9	0.1	0		0	0	0	0		2.9	97.1	0	0		
Total %	0.5	0	2.1	0	2.6	0	54.6	0.1	0	54.7	0	0	0	0	0	1.3	41.5	0	0	42.8	
Cars	8	0	34	0	42	0	888	1	0	889	0	0	0	0	0	21	667	0	0	688	1619
% Cars	100	0	97.1	0	97.7	0	97.2	100	0	97.2	0	0	0	0	0	100	96	0	0	96.1	96.7
Trucks	0	0	1	0	1	0	26	0	0	26	0	0	0	0	0	0	28	0	0	28	55
% Trucks	0	0	2.9	0	2.3	0	2.8	0	0	2.8	0	0	0	0	0	0	4	0	0	3.9	3.3



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

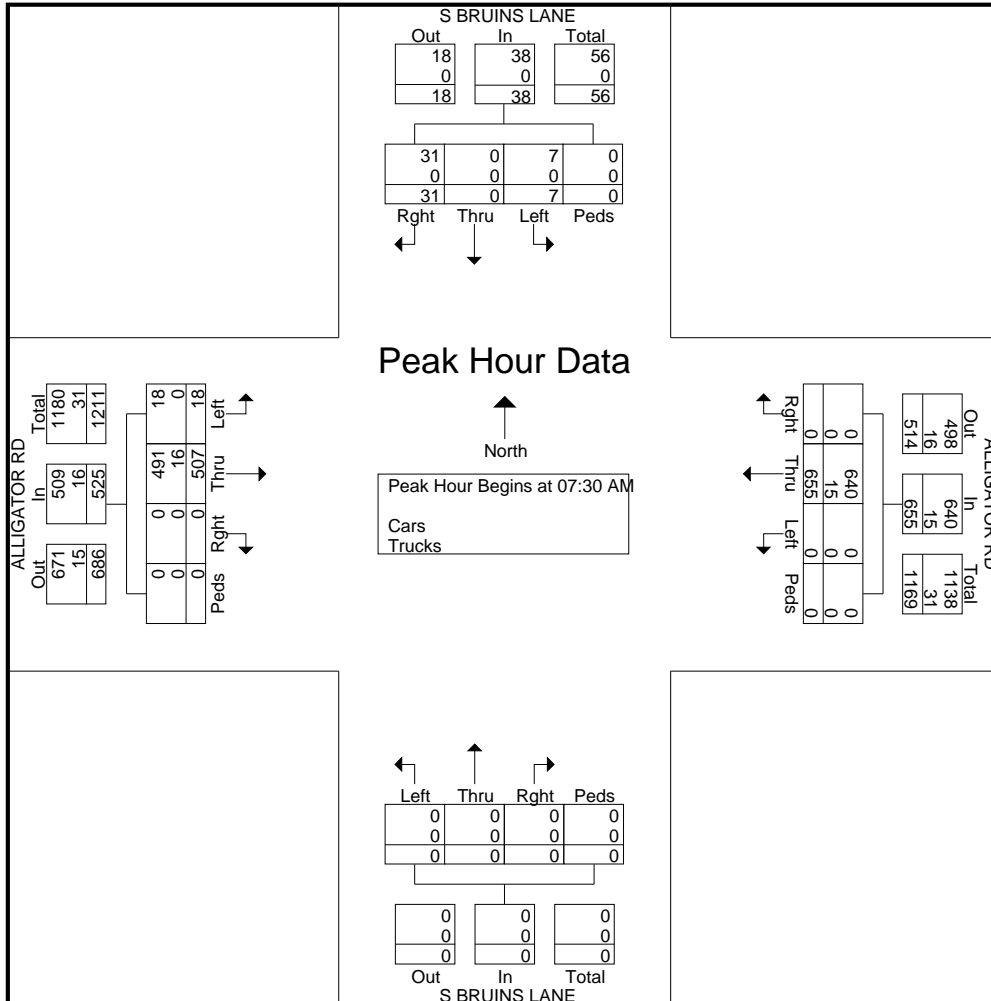
File Name : #32 SBruinsLn@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	S BRUINS LANE Southbound					ALLIGATOR RD Westbound					S BRUINS LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	5	0	5	0	153	0	0	153	0	0	0	0	0	1	93	0	0	94	252
07:45 AM	0	0	3	0	3	0	134	0	0	134	0	0	0	0	0	2	115	0	0	117	254
08:00 AM	7	0	9	0	16	0	183	0	0	183	0	0	0	0	0	5	177	0	0	182	381
08:15 AM	0	0	14	0	14	0	185	0	0	185	0	0	0	0	0	10	122	0	0	132	331
Total Volume	7	0	31	0	38	0	655	0	0	655	0	0	0	0	0	18	507	0	0	525	1218
% App. Total	18.4	0	81.6	0		0	100	0	0		0	0	0	0		3.4	96.6	0	0		
PHF	.250	.000	.554	.000	.594	.000	.885	.000	.000	.885	.000	.000	.000	.000	.000	.450	.716	.000	.000	.721	.799
Cars	7	0	31	0	38	0	640	0	0	640	0	0	0	0	0	18	491	0	0	509	1187
% Cars	100	0	100	0	100	0	97.7	0	0	97.7	0	0	0	0	0	100	96.8	0	0	97.0	97.5
Trucks	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	16	0	0	16	31
% Trucks	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	0	3.2	0	0	3.0	2.5



# All Traffic Data Services, Inc

1336 Farmer Road  
 Conyers, Ga 30012  
 404-374-1283

File Name : #32 SBruinsLn@AlligatorRdPM

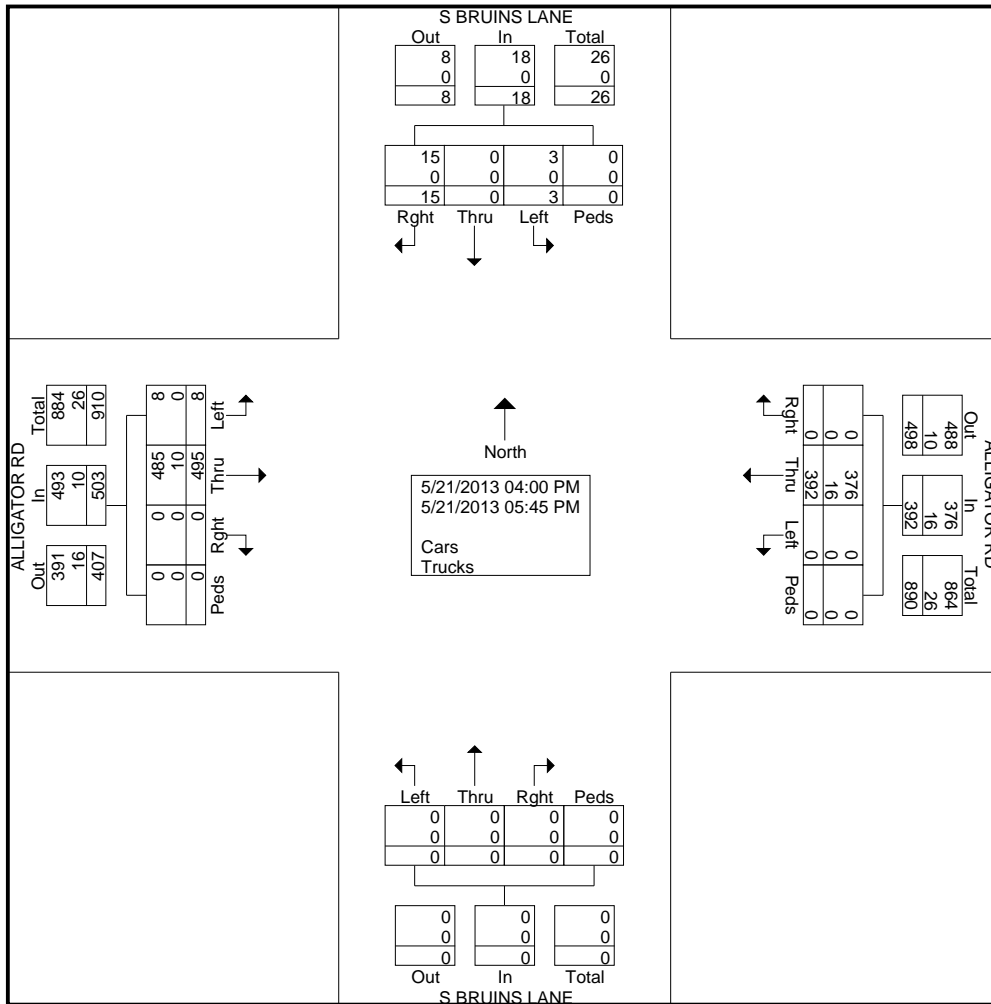
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	S BRUINS LANE Southbound					ALLIGATOR RD Westbound					S BRUINS LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	2	0	2	0	58	0	0	58	0	0	0	0	0	3	68	0	0	71	131
04:15 PM	1	0	2	0	3	0	34	0	0	34	0	0	0	0	0	1	59	0	0	60	97
04:30 PM	0	0	1	0	1	0	32	0	0	32	0	0	0	0	0	0	50	0	0	50	83
04:45 PM	0	0	0	0	0	0	39	0	0	39	0	0	0	0	0	0	53	0	0	53	92
<b>Total</b>	1	0	5	0	6	0	163	0	0	163	0	0	0	0	0	4	230	0	0	234	403
05:00 PM	1	0	4	0	5	0	50	0	0	50	0	0	0	0	0	2	68	0	0	70	125
05:15 PM	1	0	2	0	3	0	54	0	0	54	0	0	0	0	0	1	69	0	0	70	127
05:30 PM	0	0	1	0	1	0	60	0	0	60	0	0	0	0	0	1	67	0	0	68	129
05:45 PM	0	0	3	0	3	0	65	0	0	65	0	0	0	0	0	0	61	0	0	61	129
<b>Total</b>	2	0	10	0	12	0	229	0	0	229	0	0	0	0	0	4	265	0	0	269	510
Grand Total	3	0	15	0	18	0	392	0	0	392	0	0	0	0	0	8	495	0	0	503	913
Apprch %	16.7	0	83.3	0		0	100	0	0		0	0	0	0		1.6	98.4	0	0		
Total %	0.3	0	1.6	0	2	0	42.9	0	0	42.9	0	0	0	0	0	0.9	54.2	0	0	55.1	
Cars	3	0	15	0	18	0	376	0	0	376	0	0	0	0	0	8	485	0	0	493	887
% Cars	100	0	100	0	100	0	95.9	0	0	95.9	0	0	0	0	0	100	98	0	0	98	97.2
Trucks	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	10	0	0	10	26
% Trucks	0	0	0	0	0	0	4.1	0	0	4.1	0	0	0	0	0	0	2	0	0	2	2.8



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

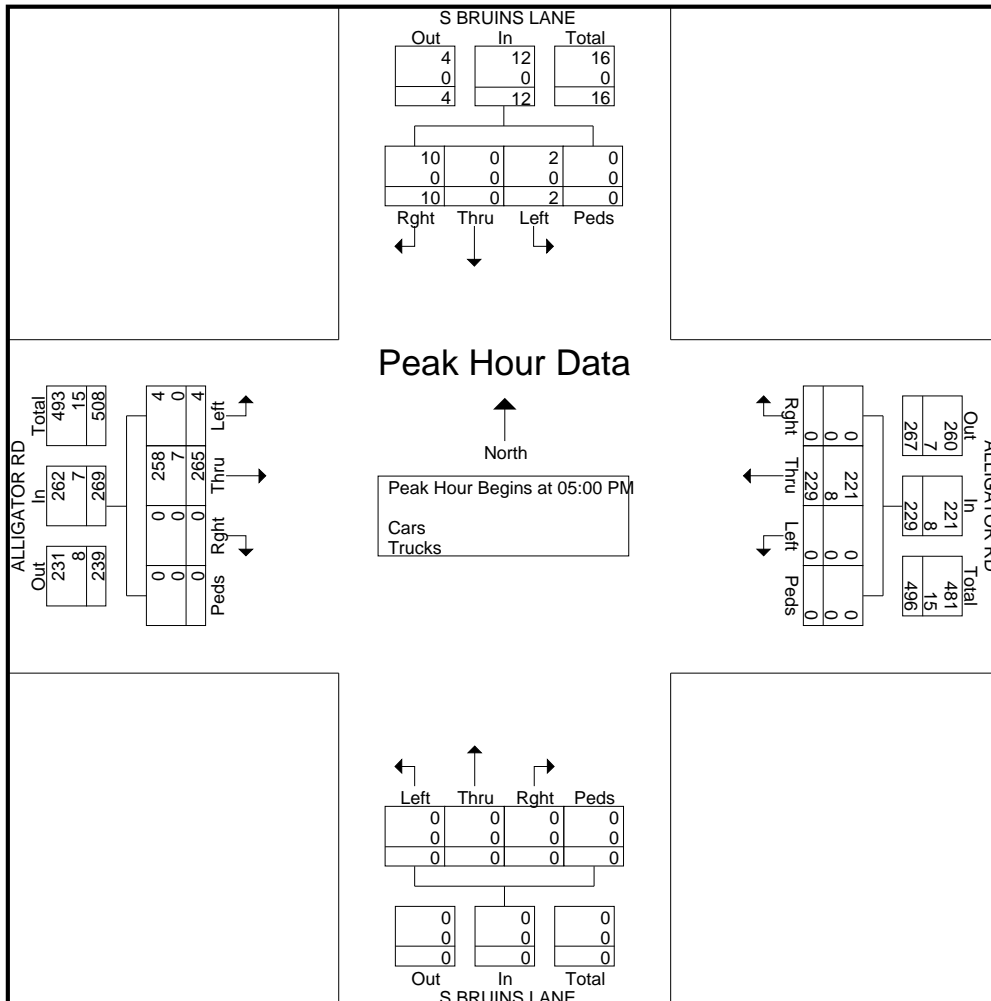
File Name : #32 SBruinsLn@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	S BRUINS LANE Southbound					ALLIGATOR RD Westbound					S BRUINS LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	4	0	5	0	50	0	0	50	0	0	0	0	0	2	68	0	0	70	125
05:15 PM	1	0	2	0	3	0	54	0	0	54	0	0	0	0	0	1	69	0	0	70	127
05:30 PM	0	0	1	0	1	0	60	0	0	60	0	0	0	0	0	1	67	0	0	68	129
05:45 PM	0	0	3	0	3	0	65	0	0	65	0	0	0	0	0	0	61	0	0	61	129
Total Volume	2	0	10	0	12	0	229	0	0	229	0	0	0	0	0	4	265	0	0	269	510
% App. Total	16.7	0	83.3	0		0	100	0	0		0	0	0	0		1.5	98.5	0	0		
PHF	.500	.000	.625	.000	.600	.000	.881	.000	.000	.881	.000	.000	.000	.000	.000	.500	.960	.000	.000	.961	.988
Cars	2	0	10	0	12	0	221	0	0	221	0	0	0	0	0	4	258	0	0	262	495
% Cars	100	0	100	0	100	0	96.5	0	0	96.5	0	0	0	0	0	100	97.4	0	0	97.4	97.1
Trucks	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	15
% Trucks	0	0	0	0	0	0	3.5	0	0	3.5	0	0	0	0	0	0	2.6	0	0	2.6	2.9



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #33 CherryLn@AlligatorRdAM

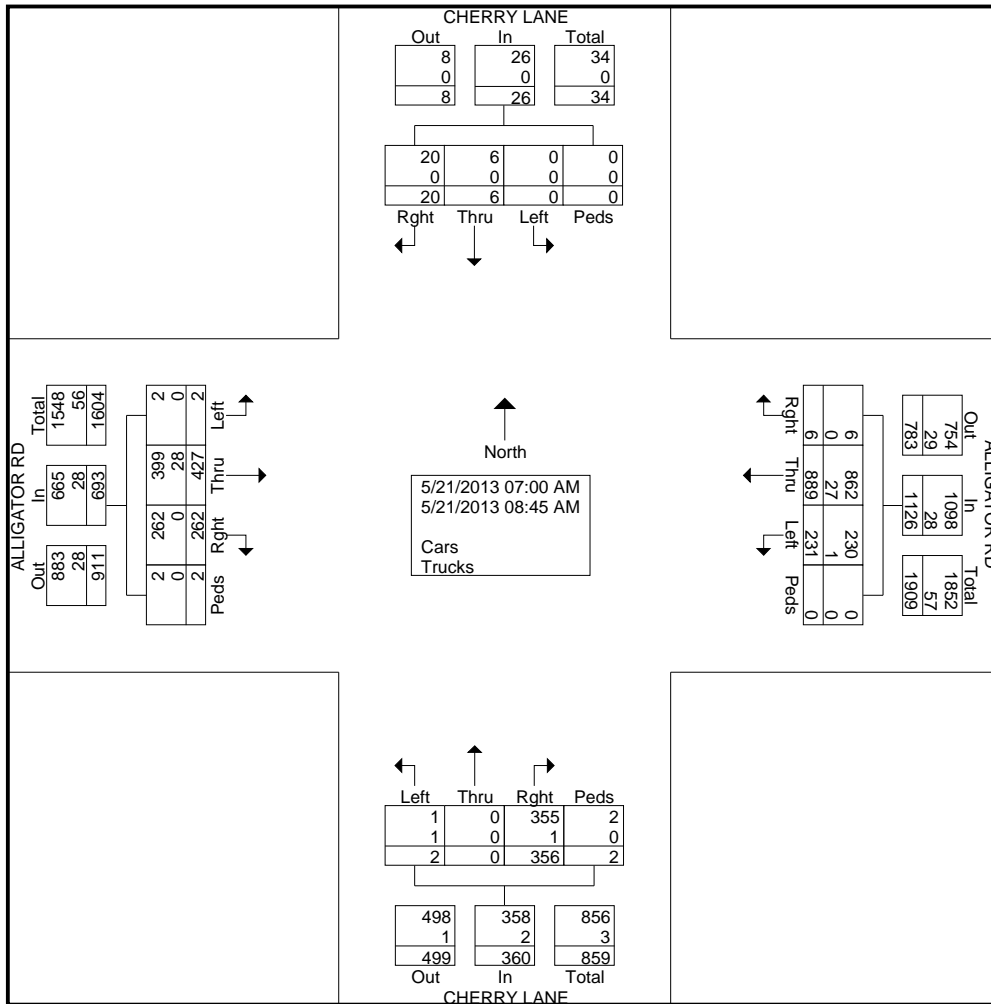
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	CHERRY LANE Southbound					ALLIGATOR RD Westbound					CHERRY LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	1	2	0	3	4	88	1	0	93	1	0	3	0	4	0	34	6	0	40	140
07:15 AM	0	1	1	0	2	12	104	0	0	116	0	0	18	0	18	1	60	20	0	81	217
07:30 AM	0	0	4	0	4	33	150	1	0	184	0	0	61	0	61	1	49	44	0	94	343
07:45 AM	0	0	4	0	4	51	133	1	0	185	0	0	79	0	79	0	48	66	0	114	382
<b>Total</b>	<b>0</b>	<b>2</b>	<b>11</b>	<b>0</b>	<b>13</b>	<b>100</b>	<b>475</b>	<b>3</b>	<b>0</b>	<b>578</b>	<b>1</b>	<b>0</b>	<b>161</b>	<b>0</b>	<b>162</b>	<b>2</b>	<b>191</b>	<b>136</b>	<b>0</b>	<b>329</b>	<b>1082</b>
08:00 AM	0	0	2	0	2	69	184	0	0	253	0	0	119	0	119	0	94	83	2	179	553
08:15 AM	0	2	6	0	8	52	168	2	0	222	0	0	71	0	71	0	88	31	0	119	420
08:30 AM	0	2	0	0	2	3	36	0	0	39	0	0	5	2	7	0	34	10	0	44	92
08:45 AM	0	0	1	0	1	7	26	1	0	34	1	0	0	0	1	0	20	2	0	22	58
<b>Total</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>13</b>	<b>131</b>	<b>414</b>	<b>3</b>	<b>0</b>	<b>548</b>	<b>1</b>	<b>0</b>	<b>195</b>	<b>2</b>	<b>198</b>	<b>0</b>	<b>236</b>	<b>126</b>	<b>2</b>	<b>364</b>	<b>1123</b>
Grand Total	0	6	20	0	26	231	889	6	0	1126	2	0	356	2	360	2	427	262	2	693	2205
Apprch %	0	23.1	76.9	0		20.5	79	0.5	0		0.6	0	98.9	0.6		0.3	61.6	37.8	0.3		
Total %	0	0.3	0.9	0	1.2	10.5	40.3	0.3	0	51.1	0.1	0	16.1	0.1	16.3	0.1	19.4	11.9	0.1	31.4	
Cars	0	6	20	0	26	230	862	6	0	1098	1	0	355	2	358	2	399	262	2	665	2147
% Cars	0	100	100	0	100	99.6	97	100	0	97.5	50	0	99.7	100	99.4	100	93.4	100	100	96	97.4
Trucks	0	0	0	0	0	1	27	0	0	28	1	0	1	0	2	0	28	0	0	28	58
% Trucks	0	0	0	0	0	0.4	3	0	0	2.5	50	0	0.3	0	0.6	0	6.6	0	0	4	2.6



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

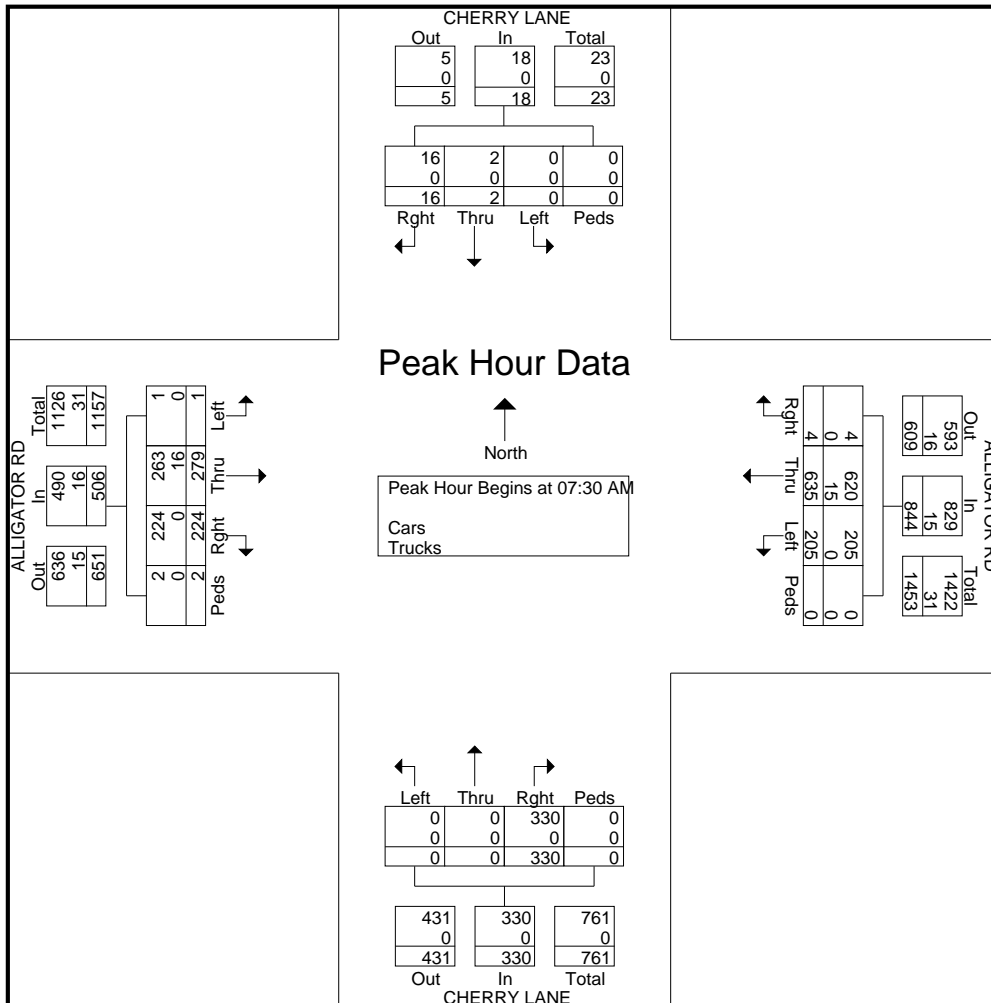
File Name : #33 CherryLn@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	CHERRY LANE Southbound					ALLIGATOR RD Westbound					CHERRY LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	4	0	4	33	150	1	0	184	0	0	61	0	61	1	49	44	0	94	343
07:45 AM	0	0	4	0	4	51	133	1	0	185	0	0	79	0	79	0	48	66	0	114	382
08:00 AM	0	0	2	0	2	<b>69</b>	<b>184</b>	0	0	<b>253</b>	0	0	<b>119</b>	0	<b>119</b>	0	<b>94</b>	<b>83</b>	<b>2</b>	<b>179</b>	<b>553</b>
08:15 AM	0	<b>2</b>	<b>6</b>	0	<b>8</b>	52	168	<b>2</b>	0	222	0	0	71	0	71	0	88	31	0	119	420
Total Volume	0	2	16	0	18	205	635	4	0	844	0	0	330	0	330	1	279	224	2	506	1698
% App. Total	0	11.1	88.9	0		24.3	75.2	0.5	0		0	0	100	0		0.2	55.1	44.3	0.4		
PHF	.000	.250	.667	.000	.563	.743	.863	.500	.000	.834	.000	.000	.693	.000	.693	.250	.742	.675	.250	.707	.768
Cars	0	2	16	0	18	205	620	4	0	829	0	0	330	0	330	1	263	224	2	490	1667
% Cars	0	100	100	0	100	100	97.6	100	0	98.2	0	0	100	0	100	100	94.3	100	100	96.8	98.2
Trucks	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	16	0	0	16	31
% Trucks	0	0	0	0	0	0	2.4	0	0	1.8	0	0	0	0	0	0	5.7	0	0	3.2	1.8



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #33 CherryLn@AlligatorRdPM

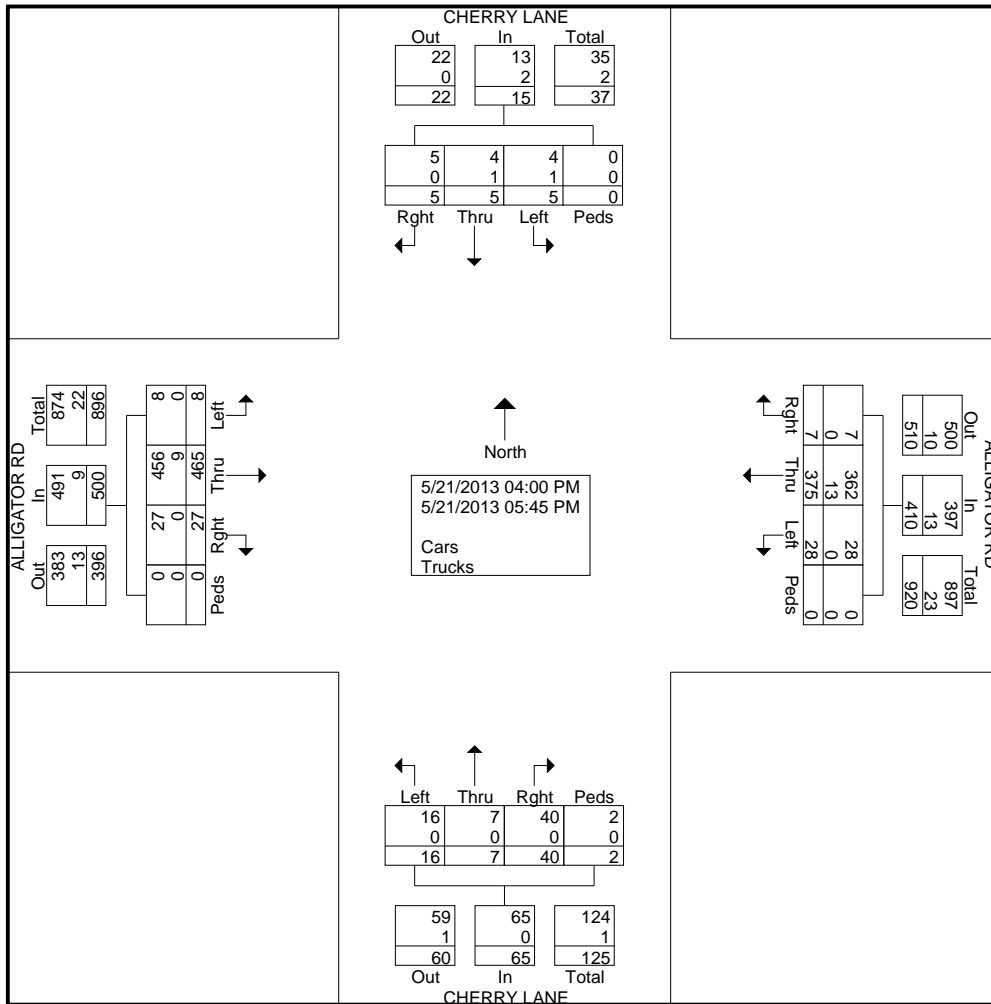
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	CHERRY LANE Southbound					ALLIGATOR RD Westbound					CHERRY LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	5	58	4	0	67	0	0	13	1	14	1	64	3	0	68	149
04:15 PM	4	1	2	0	7	2	32	2	0	36	0	0	6	1	7	2	54	4	0	60	110
04:30 PM	0	0	0	0	0	2	28	0	0	30	4	2	1	0	7	0	48	1	0	49	86
04:45 PM	0	0	0	0	0	1	38	1	0	40	2	0	1	0	3	2	48	3	0	53	96
<b>Total</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>10</b>	<b>156</b>	<b>7</b>	<b>0</b>	<b>173</b>	<b>6</b>	<b>2</b>	<b>21</b>	<b>2</b>	<b>31</b>	<b>5</b>	<b>214</b>	<b>11</b>	<b>0</b>	<b>230</b>	<b>441</b>
05:00 PM	0	0	0	0	0	2	48	0	0	50	2	1	2	0	5	0	72	0	0	72	127
05:15 PM	0	1	1	0	2	5	52	0	0	57	0	0	1	0	1	1	58	11	0	70	130
05:30 PM	0	2	0	0	2	8	54	0	0	62	6	3	14	0	23	1	66	1	0	68	155
05:45 PM	1	1	2	0	4	3	65	0	0	68	2	1	2	0	5	1	55	4	0	60	137
<b>Total</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>18</b>	<b>219</b>	<b>0</b>	<b>0</b>	<b>237</b>	<b>10</b>	<b>5</b>	<b>19</b>	<b>0</b>	<b>34</b>	<b>3</b>	<b>251</b>	<b>16</b>	<b>0</b>	<b>270</b>	<b>549</b>
<b>Grand Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>15</b>	<b>28</b>	<b>375</b>	<b>7</b>	<b>0</b>	<b>410</b>	<b>16</b>	<b>7</b>	<b>40</b>	<b>2</b>	<b>65</b>	<b>8</b>	<b>465</b>	<b>27</b>	<b>0</b>	<b>500</b>	<b>990</b>
Apprch %	33.3	33.3	33.3	0		6.8	91.5	1.7	0		24.6	10.8	61.5	3.1		1.6	93	5.4	0		
Total %	0.5	0.5	0.5	0	1.5	2.8	37.9	0.7	0	41.4	1.6	0.7	4	0.2	6.6	0.8	47	2.7	0	50.5	
Cars	4	4	5	0	13	28	362	7	0	397	16	7	40	2	65	8	456	27	0	491	966
% Cars	80	80	100	0	86.7	100	96.5	100	0	96.8	100	100	100	100	100	100	98.1	100	0	98.2	97.6
Trucks	1	1	0	0	2	0	13	0	0	13	0	0	0	0	0	0	9	0	0	9	24
% Trucks	20	20	0	0	13.3	0	3.5	0	0	3.2	0	0	0	0	0	0	1.9	0	0	1.8	2.4



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

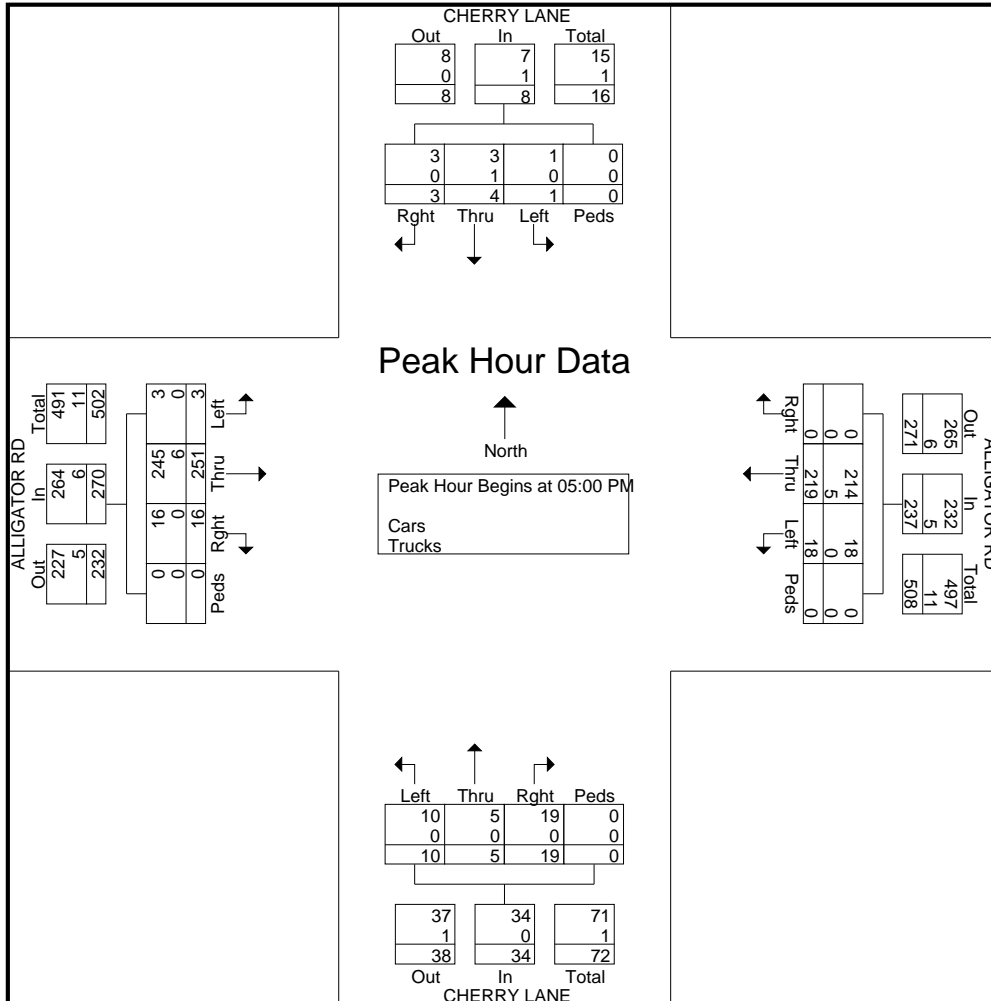
File Name : #33 CherryLn@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	CHERRY LANE Southbound					ALLIGATOR RD Westbound					CHERRY LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	2	48	0	0	50	2	1	2	0	5	0	72	0	0	72	127
05:15 PM	0	1	1	0	2	5	52	0	0	57	0	0	1	0	1	1	58	11	0	70	130
05:30 PM	0	2	0	0	2	8	54	0	0	62	6	3	14	0	23	1	66	1	0	68	155
05:45 PM	1	1	2	0	4	3	65	0	0	68	2	1	2	0	5	1	55	4	0	60	137
Total Volume	1	4	3	0	8	18	219	0	0	237	10	5	19	0	34	3	251	16	0	270	549
% App. Total	12.5	50	37.5	0		7.6	92.4	0	0		29.4	14.7	55.9	0		1.1	93	5.9	0		
PHF	.250	.500	.375	.000	.500	.563	.842	.000	.000	.871	.417	.417	.339	.000	.370	.750	.872	.364	.000	.938	.885
Cars	1	3	3	0	7	18	214	0	0	232	10	5	19	0	34	3	245	16	0	264	537
% Cars	100	75.0	100	0	87.5	100	97.7	0	0	97.9	100	100	100	0	100	100	97.6	100	0	97.8	97.8
Trucks	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	12
% Trucks	0	25.0	0	0	12.5	0	2.3	0	0	2.1	0	0	0	0	0	0	2.4	0	0	2.2	2.2





# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #34 ERedbudLn@AlligatorRdAM

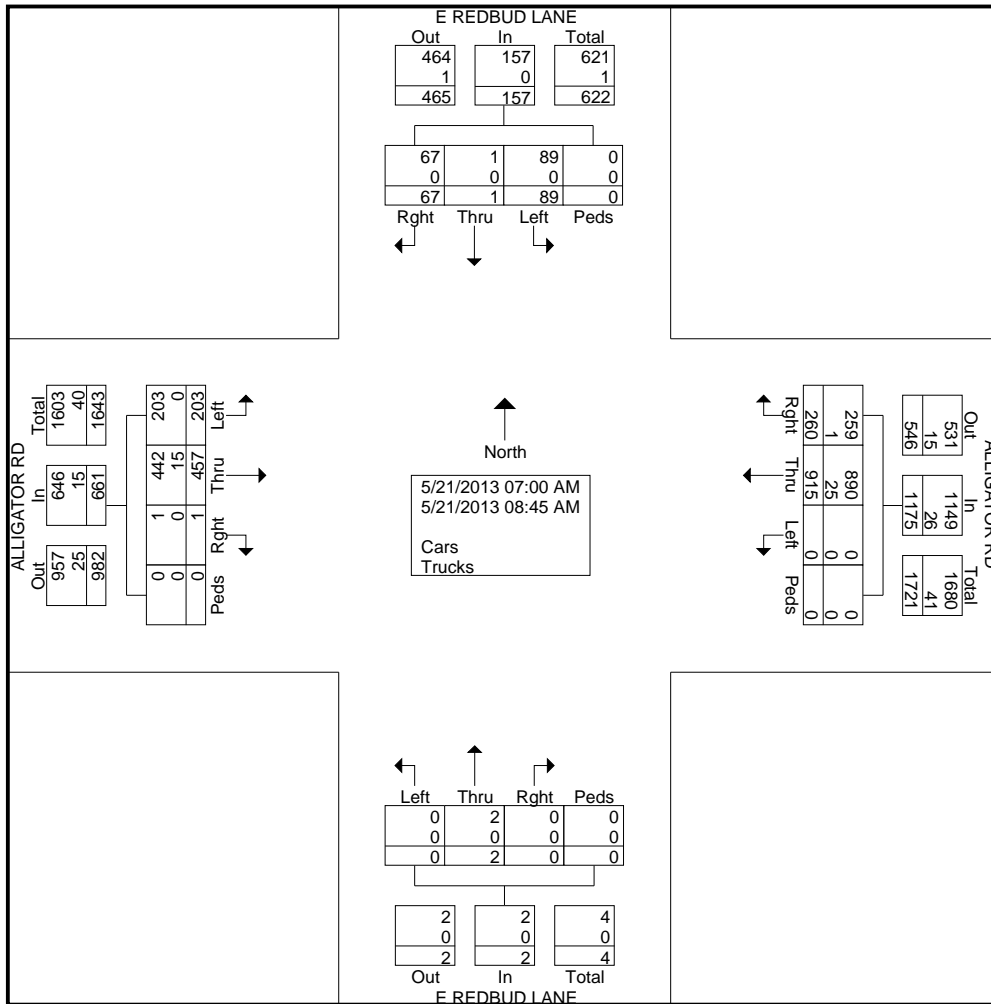
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	E REDBUD LANE Southbound					ALLIGATOR RD Westbound					E REDBUD LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	5	0	0	0	5	0	94	47	0	141	0	0	0	0	0	3	34	0	0	37	183
07:15 AM	11	0	5	0	16	0	108	45	0	153	0	1	0	0	1	12	60	0	0	72	242
07:30 AM	11	0	4	0	15	0	159	39	0	198	0	0	0	0	0	30	64	0	0	94	307
07:45 AM	3	0	9	0	12	0	149	33	0	182	0	0	0	0	0	45	57	1	0	103	297
Total	30	0	18	0	48	0	510	164	0	674	0	1	0	0	1	90	215	1	0	306	1029
08:00 AM	12	0	24	0	36	0	199	25	0	224	0	1	0	0	1	59	110	0	0	169	430
08:15 AM	20	0	22	0	42	0	145	22	0	167	0	0	0	0	0	49	81	0	0	130	339
08:30 AM	17	0	1	0	18	0	32	26	0	58	0	0	0	0	0	5	33	0	0	38	114
08:45 AM	10	1	2	0	13	0	29	23	0	52	0	0	0	0	0	0	18	0	0	18	83
Total	59	1	49	0	109	0	405	96	0	501	0	1	0	0	1	113	242	0	0	355	966
Grand Total	89	1	67	0	157	0	915	260	0	1175	0	2	0	0	2	203	457	1	0	661	1995
Apprch %	56.7	0.6	42.7	0		0	77.9	22.1	0		0	100	0	0		30.7	69.1	0.2	0		
Total %	4.5	0.1	3.4	0	7.9	0	45.9	13	0	58.9	0	0.1	0	0	0.1	10.2	22.9	0.1	0	33.1	
Cars	89	1	67	0	157	0	890	259	0	1149	0	2	0	0	2	203	442	1	0	646	1954
% Cars	100	100	100	0	100	0	97.3	99.6	0	97.8	0	100	0	0	100	100	96.7	100	0	97.7	97.9
Trucks	0	0	0	0	0	0	25	1	0	26	0	0	0	0	0	0	15	0	0	15	41
% Trucks	0	0	0	0	0	0	2.7	0.4	0	2.2	0	0	0	0	0	0	3.3	0	0	2.3	2.1



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

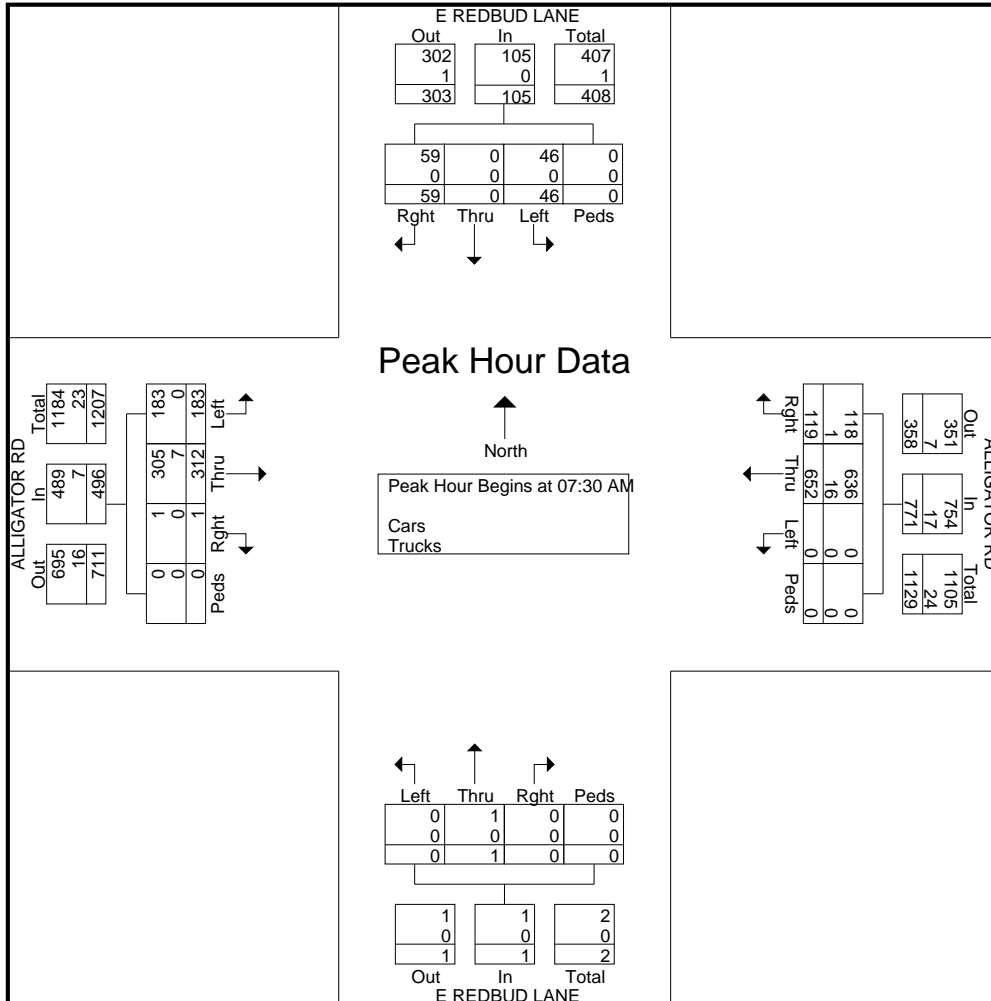
File Name : #34 ERedbudLn@AlligatorRdAM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	E REDBUD LANE Southbound					ALLIGATOR RD Westbound					E REDBUD LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	11	0	4	0	15	0	159	39	0	198	0	0	0	0	0	30	64	0	0	94	307
07:45 AM	3	0	9	0	12	0	149	33	0	182	0	0	0	0	0	45	57	1	0	103	297
08:00 AM	12	0	24	0	36	0	199	25	0	224	0	1	0	0	1	59	110	0	0	169	430
08:15 AM	20	0	22	0	42	0	145	22	0	167	0	0	0	0	0	49	81	0	0	130	339
Total Volume	46	0	59	0	105	0	652	119	0	771	0	1	0	0	1	183	312	1	0	496	1373
% App. Total	43.8	0	56.2	0		0	84.6	15.4	0		0	100	0	0		36.9	62.9	0.2	0		
PHF	.575	.000	.615	.000	.625	.000	.819	.763	.000	.860	.000	.250	.000	.000	.250	.775	.709	.250	.000	.734	.798
Cars	46	0	59	0	105	0	636	118	0	754	0	1	0	0	1	183	305	1	0	489	1349
% Cars	100	0	100	0	100	0	97.5	99.2	0	97.8	0	100	0	0	100	100	97.8	100	0	98.6	98.3
Trucks	0	0	0	0	0	0	16	1	0	17	0	0	0	0	0	0	7	0	0	7	24
% Trucks	0	0	0	0	0	0	2.5	0.8	0	2.2	0	0	0	0	0	0	2.2	0	0	1.4	1.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

File Name : #34 ERedbudLn@AlligatorRdPM

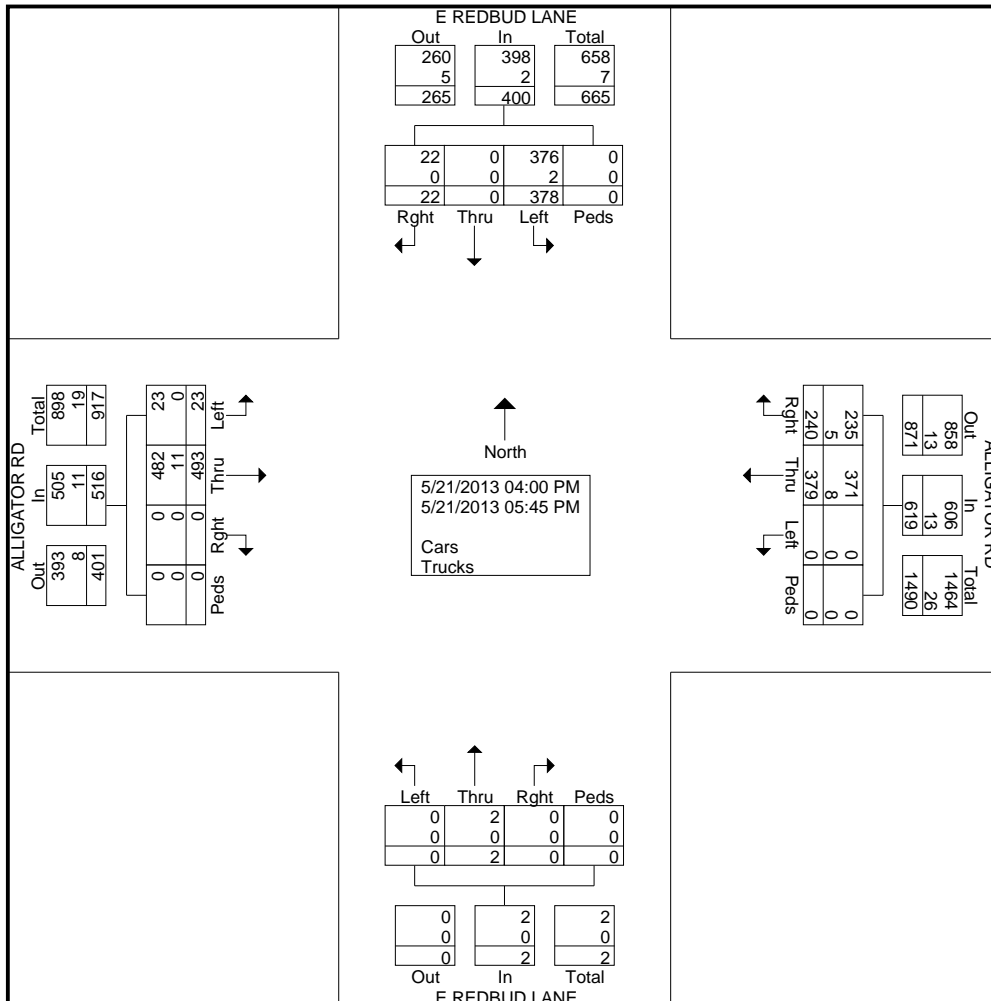
Site Code :

Start Date : 5/21/2013

Page No : 1

Groups Printed- Cars - Trucks

Start Time	E REDBUD LANE Southbound					ALLIGATOR RD Westbound					E REDBUD LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	35	0	7	0	42	0	55	24	0	79	0	0	0	0	0	10	67	0	0	77	198
04:15 PM	50	0	3	0	53	0	32	30	0	62	0	0	0	0	0	1	64	0	0	65	180
04:30 PM	33	0	2	0	35	0	33	40	0	73	0	0	0	0	0	2	51	0	0	53	161
04:45 PM	39	0	3	0	42	0	33	34	0	67	0	1	0	0	1	1	47	0	0	48	158
Total	157	0	15	0	172	0	153	128	0	281	0	1	0	0	1	14	229	0	0	243	697
05:00 PM	59	0	4	0	63	0	48	25	0	73	0	0	0	0	0	2	70	0	0	72	208
05:15 PM	60	0	0	0	60	0	56	27	0	83	0	1	0	0	1	1	62	0	0	63	207
05:30 PM	46	0	2	0	48	0	58	43	0	101	0	0	0	0	0	3	75	0	0	78	227
05:45 PM	56	0	1	0	57	0	64	17	0	81	0	0	0	0	0	3	57	0	0	60	198
Total	221	0	7	0	228	0	226	112	0	338	0	1	0	0	1	9	264	0	0	273	840
Grand Total	378	0	22	0	400	0	379	240	0	619	0	2	0	0	2	23	493	0	0	516	1537
Apprch %	94.5	0	5.5	0		0	61.2	38.8	0		0	100	0	0		4.5	95.5	0	0		
Total %	24.6	0	1.4	0	26	0	24.7	15.6	0	40.3	0	0.1	0	0	0.1	1.5	32.1	0	0	33.6	
Cars	376	0	22	0	398	0	371	235	0	606	0	2	0	0	2	23	482	0	0	505	1511
% Cars	99.5	0	100	0	99.5	0	97.9	97.9	0	97.9	0	100	0	0	100	100	97.8	0	0	97.9	98.3
Trucks	2	0	0	0	2	0	8	5	0	13	0	0	0	0	0	0	11	0	0	11	26
% Trucks	0.5	0	0	0	0.5	0	2.1	2.1	0	2.1	0	0	0	0	0	0	2.2	0	0	2.1	1.7



# All Traffic Data Services, Inc

1336 Farmer Road  
Conyers, Ga 30012  
404-374-1283

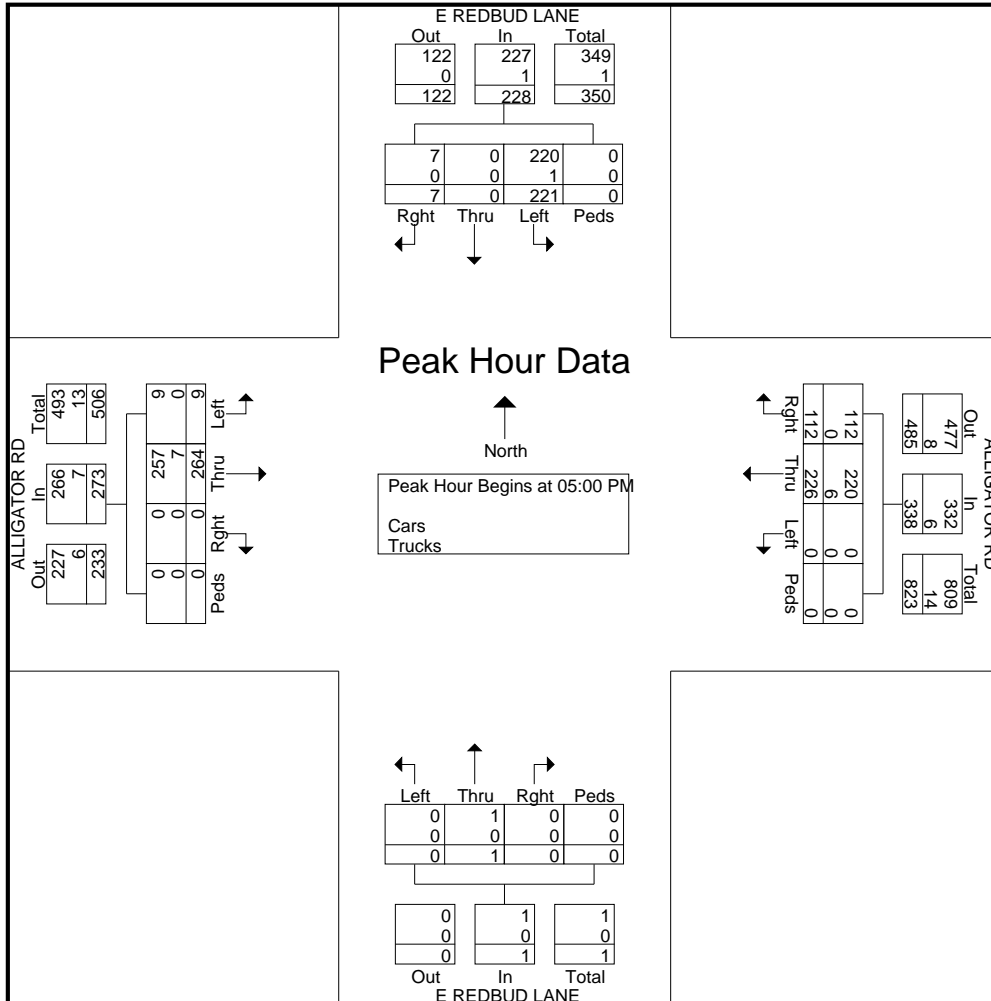
File Name : #34 ERedbudLn@AlligatorRdPM

Site Code :

Start Date : 5/21/2013

Page No : 2

Start Time	E REDBUD LANE Southbound					ALLIGATOR RD Westbound					E REDBUD LANE Northbound					ALLIGATOR RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	59	0	4	0	63	0	48	25	0	73	0	0	0	0	0	2	70	0	0	72	208
05:15 PM	60	0	0	0	60	0	56	27	0	83	0	1	0	0	1	1	62	0	0	63	207
05:30 PM	46	0	2	0	48	0	58	43	0	101	0	0	0	0	0	3	75	0	0	78	227
05:45 PM	56	0	1	0	57	0	64	17	0	81	0	0	0	0	0	3	57	0	0	60	198
Total Volume	221	0	7	0	228	0	226	112	0	338	0	1	0	0	1	9	264	0	0	273	840
% App. Total	96.9	0	3.1	0		0	66.9	33.1	0		0	100	0	0		3.3	96.7	0	0		
PHF	.921	.000	.438	.000	.905	.000	.883	.651	.000	.837	.000	.250	.000	.000	.250	.750	.880	.000	.000	.875	.925
Cars	220	0	7	0	227	0	220	112	0	332	0	1	0	0	1	9	257	0	0	266	826
% Cars	99.5	0	100	0	99.6	0	97.3	100	0	98.2	0	100	0	0	100	100	97.3	0	0	97.4	98.3
Trucks	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	14
% Trucks	0.5	0	0	0	0.4	0	2.7	0	0	1.8	0	0	0	0	0	0	2.7	0	0	2.6	1.7



SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
TRAFFIC ENGINEERING

County: **Florence**

City: **Florence**

Date: **3/5/2015**

Major Rt: **Alligator Rd**  
\* Not on State System

Minor Rt: **Twin Church Rd**  
\* Not on State System

Day of Week: **Thursday**

Weather: **Clear**

Office: **Short Counts**

**JMS**

Type of Control: **Stop Sign**

Speed Limit (major st) **45**

Direction of Minor Street: **N-S**

Intersection ADT - **5590** (Calc)

Number of Lanes (major st)\* **1**

Number of Lanes (minor st)\* **1**  
\* Each Direction

**INTERSECTION VOLUME SUMMARY**

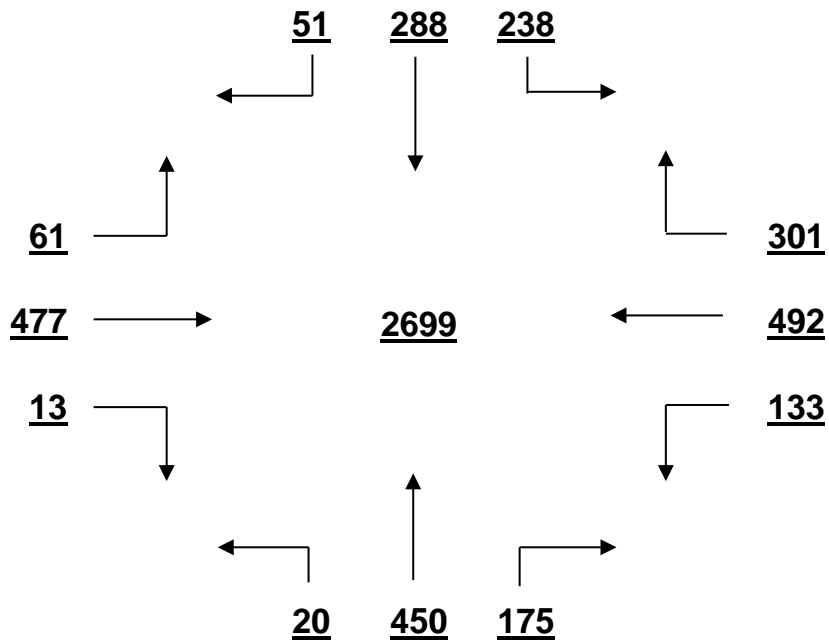
	From N Twin Church Rd				From S Twin Church Rd				From E Alligator Rd				From W Alligator Rd				Total Vol	Total Peds
	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT		
7:00 - 7:15	17	0	1	18	0	21	9	30	7	15	20	42	1	12	0	13	103	0
7:15 - 7:30	19	7	2	28	2	46	9	57	4	29	19	52	2	21	1	24	161	0
7:30 - 7:45	8	6	0	14	1	32	10	43	3	20	23	46	6	19	1	26	129	0
7:45 - 8:00	15	8	0	23	0	39	15	54	2	17	25	44	3	22	0	25	146	0
8:00 - 8:15	8	10	0	18	1	22	7	30	5	20	22	47	3	24	1	28	123	0
8:15 - 8:30	10	8	3	21	1	22	4	27	5	26	15	46	0	18	0	18	112	0
8:30 - 8:45	10	22	13	45	0	2	0	2	1	11	0	12	2	14	0	16	75	0
8:45 - 9:00	9	6	2	17	0	11	7	18	4	17	3	24	3	12	0	15	74	0
9:00 - 9:15	3	8	1	12	0	14	3	17	2	6	10	18	1	14	0	15	62	0
9:15 - 9:30	3	2	0	5	1	10	5	16	0	16	5	21	1	19	0	20	62	0
9:30 - 9:45	5	5	4	14	1	19	6	26	5	6	3	14	4	12	0	16	70	0
9:45 - 10:00	2	6	1	9	0	15	4	19	4	13	4	21	2	13	0	15	64	0
10:00 - 10:15	9	3	2	14	0	8	3	11	4	10	5	19	0	9	0	9	53	0
10:15 - 10:30	3	6	1	10	0	16	1	17	1	10	8	19	2	18	1	21	67	0
10:30 - 10:45	3	7	2	12	0	4	2	6	1	9	4	14	0	10	0	10	42	0
10:45 - 11:00	5	5	0	10	0	13	6	19	4	12	6	22	2	16	0	18	69	0
11:00 - 11:15	8	8	0	16	0	4	5	9	5	12	7	24	1	10	0	11	60	0
11:15 - 11:30	4	14	0	18	3	10	4	17	2	15	5	22	1	15	0	16	73	0
11:30 - 11:45	7	12	0	19	2	14	6	22	6	18	17	41	3	11	0	14	96	0
11:45 - 12:00	5	12	1	18	1	10	8	19	6	17	3	26	2	14	0	16	79	0
12:00 - 12:15	5	6	5	16	0	9	10	19	7	11	5	23	0	13	0	13	71	0
12:15 - 12:30	6	14	0	20	0	8	10	18	6	15	10	31	2	13	0	15	84	0
12:30 - 12:45	8	10	2	20	1	12	3	16	2	20	10	32	4	9	2	15	83	0
12:45 - 13:00	9	10	2	21	1	9	4	14	8	14	9	31	0	13	2	15	81	0
13:00 - 13:15	6	9	1	16	2	12	6	20	2	19	5	26	4	8	1	13	75	0
13:15 - 13:30	9	9	1	19	0	13	1	14	1	20	2	23	5	14	0	19	75	0
13:30 - 13:45	7	12	0	19	1	7	2	10	1	9	13	23	1	14	1	16	68	0
13:45 - 14:00	7	12	1	20	1	12	4	17	5	17	1	23	2	17	2	21	81	0
14:00 - 14:15	4	13	1	18	0	13	4	17	4	18	7	29	0	21	0	21	85	0
14:15 - 14:30	7	9	2	18	0	6	8	14	8	14	10	32	0	10	1	11	75	0
14:30 - 14:45	10	17	2	29	0	11	5	16	8	21	11	40	3	23	0	26	111	0
14:45 - 15:00	7	12	1	20	1	6	4	11	10	15	14	39	1	19	0	20	90	0
<b>TOTAL</b>	<b>238</b>	<b>288</b>	<b>51</b>	<b>577</b>	<b>20</b>	<b>450</b>	<b>175</b>	<b>645</b>	<b>133</b>	<b>492</b>	<b>301</b>	<b>926</b>	<b>61</b>	<b>477</b>	<b>13</b>	<b>551</b>	<b>2699</b>	<b>0</b>
Trucks	4	1	0	5	0	1	0	1	0	26	11	37	2	32	0	34	77	2.9%
School Buses	2	0	1	3	0	2	1	3	1	4	1	6	0	1	0	1	13	0.5%

TOTAL AND PEAK HOUR VOLUME DIAGRAMS

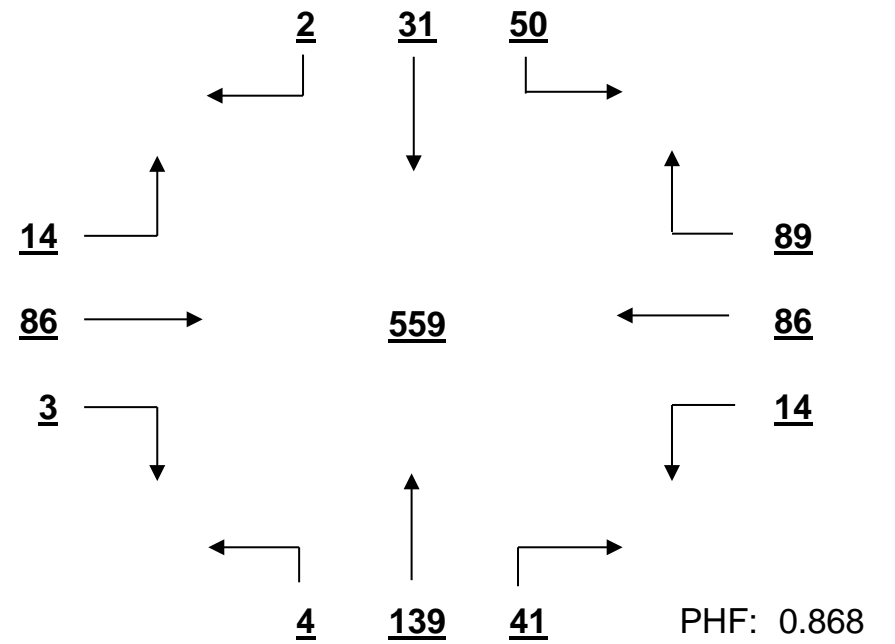
Alligator Rd AT Twin Church Rd

Date: 3/5/2015

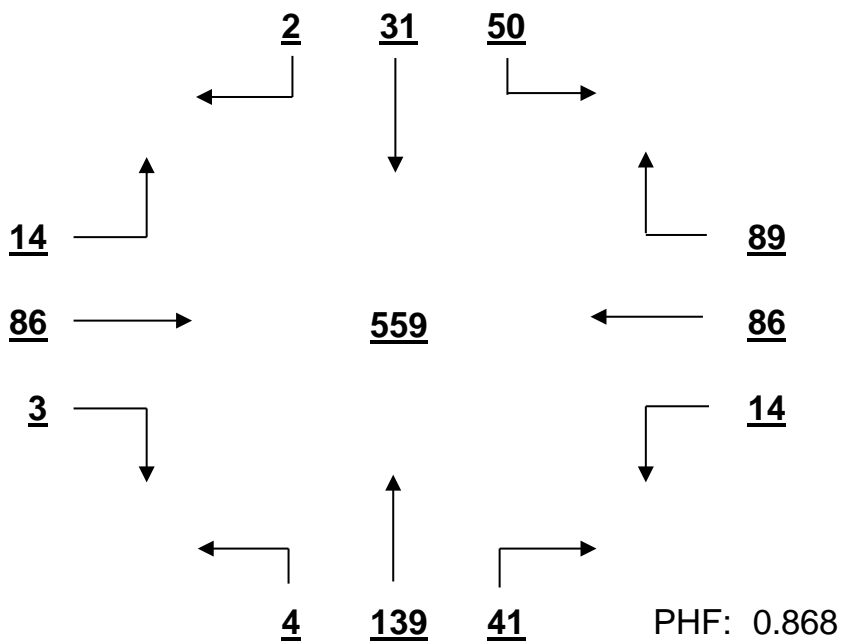
8.0 HOUR TOTAL VOLUME  
FROM 7:00 TO 15:00



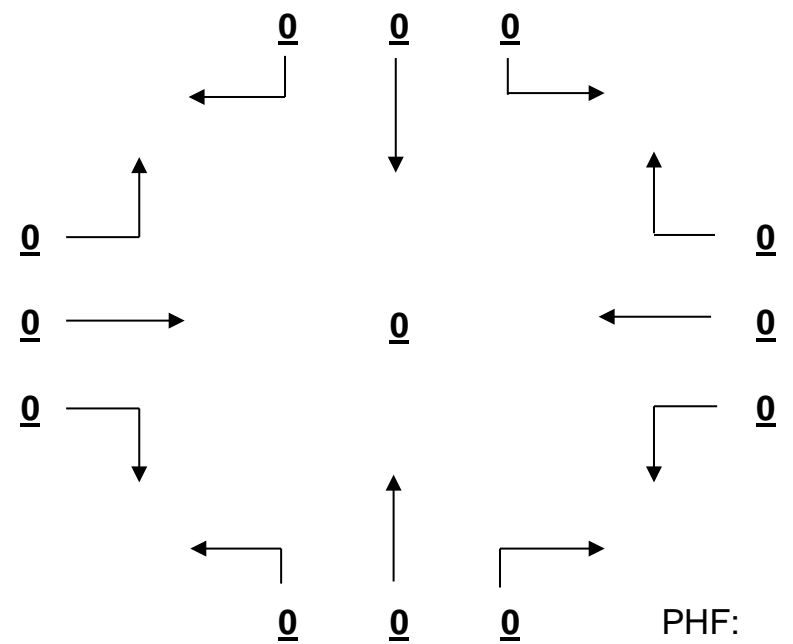
OVERALL PEAK HOUR VOLUME  
FROM 7:15 TO 8:15



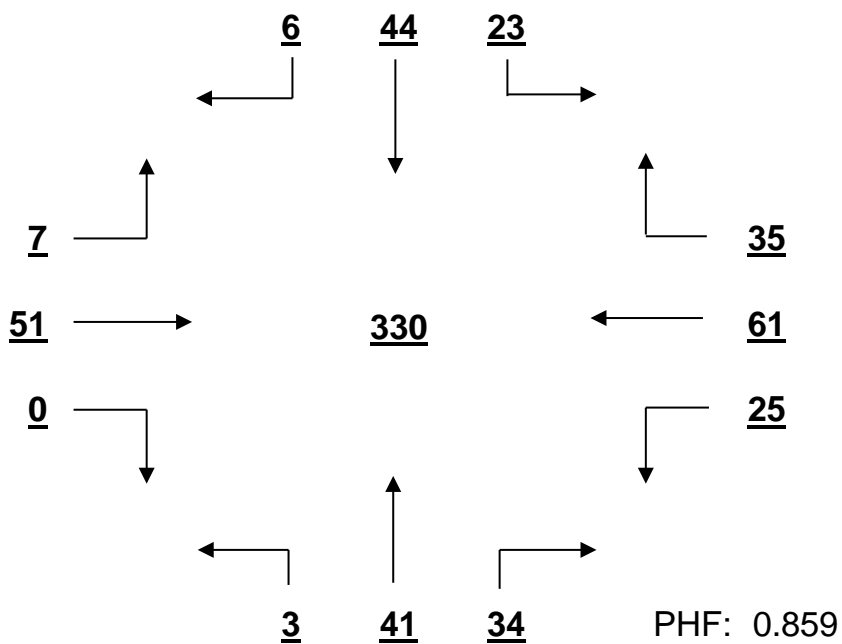
AM PEAK HOUR VOLUME (0:00-10:45)  
FROM 7:15 TO 8:15



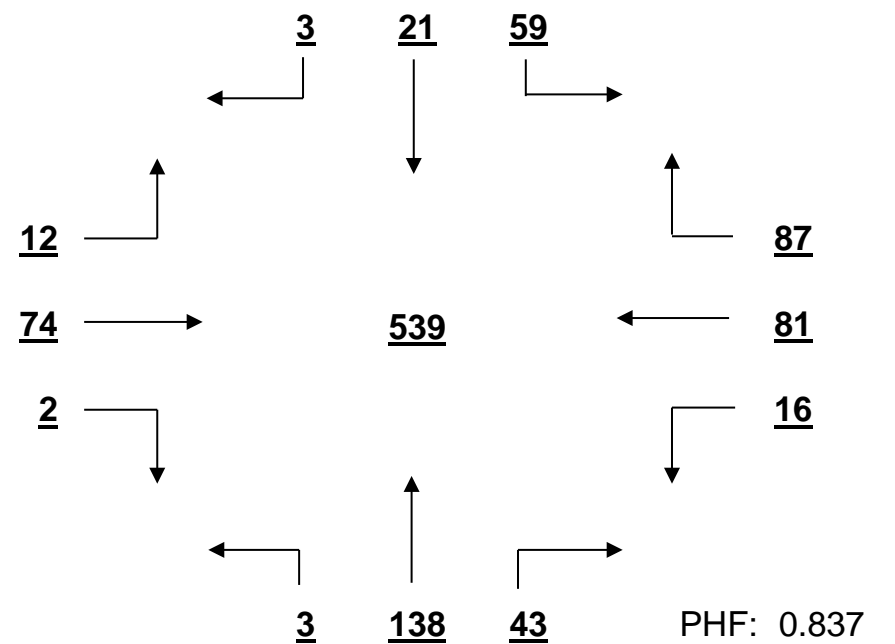
PM PEAK HOUR VOLUME (14:15-23:45)  
FROM 0:00 TO 0:00



MID-DAY PEAK HOUR VOLUME (11:00-14:00)  
FROM 11:30 TO 12:30



OTHER HOUR VOLUME  
FROM 7:00 TO 8:00



SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
TRAFFIC ENGINEERING

County: **Florence**

City: **Florence**

Date: **3/5/2015**

Major Rt: **Alligator Rd**  
\* Not on State System

Minor Rt: **Twin Church Rd**  
\* Not on State System

Day of Week: **Thursday**

Weather: **Clear**

Office: **Short Counts**

**JMS**

Type of Control: **Stop Sign**

Speed Limit (major st) **45**

Direction of Minor Street: **N-S**

Intersection ADT - **5530** (Calc)

Number of Lanes (major st)\* **1**

Number of Lanes (minor st)\* **1**  
\* Each Direction

**INTERSECTION VOLUME SUMMARY**

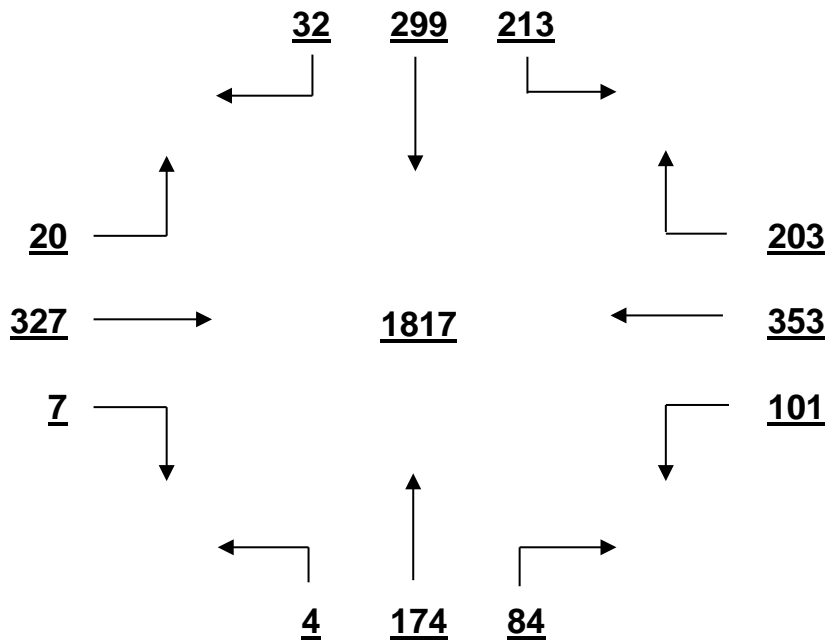
	From N Twin Church Rd				From S Twin Church Rd				From E Alligator Rd				From W Alligator Rd				Total Vol	Total Peds
	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT		
15:00 - 15:15	14	13	0	27	0	15	2	17	7	21	6	34	1	12	0	13	91	0
15:15 - 15:30	11	16	1	28	0	10	5	15	5	20	9	34	1	13	0	14	91	1
15:30 - 15:45	15	21	4	40	1	9	10	20	6	13	10	29	2	17	0	19	108	0
15:45 - 16:00	13	14	4	31	0	11	7	18	11	21	8	40	0	22	1	23	112	0
16:00 - 16:15	10	23	2	35	0	12	6	18	5	24	20	49	2	29	0	31	133	0
16:15 - 16:30	16	17	2	35	1	13	8	22	6	22	13	41	2	30	2	34	132	0
16:30 - 16:45	15	21	5	41	1	7	8	16	2	36	13	51	0	21	2	23	131	0
16:45 - 17:00	17	19	3	39	0	9	6	15	2	17	20	39	2	23	0	25	118	0
17:00 - 17:15	17	25	2	44	1	17	2	20	7	27	15	49	2	23	0	25	138	0
17:15 - 17:30	17	35	1	53	0	9	3	12	9	33	19	61	1	26	0	27	153	0
17:30 - 17:45	19	18	1	38	0	11	7	18	9	25	17	51	2	30	1	33	140	0
17:45 - 18:00	18	21	2	41	0	13	5	18	7	20	16	43	0	20	0	20	122	0
18:00 - 18:15	8	14	2	24	0	10	2	12	6	19	7	32	0	11	0	11	79	0
18:15 - 18:30	9	14	1	24	0	4	6	10	7	16	9	32	5	17	1	23	89	0
18:30 - 18:45	6	18	0	24	0	15	3	18	5	21	7	33	0	11	0	11	86	0
18:45 - 19:00	8	10	2	20	0	9	4	13	7	18	14	39	0	22	0	22	94	0
<b>TOTAL</b>	<b>213</b>	<b>299</b>	<b>32</b>	<b>544</b>	<b>4</b>	<b>174</b>	<b>84</b>	<b>262</b>	<b>101</b>	<b>353</b>	<b>203</b>	<b>657</b>	<b>20</b>	<b>327</b>	<b>7</b>	<b>354</b>	<b>1817</b>	<b>1</b>
Trucks	0	0	0	0	0	0	1	1	0	5	2	7	0	14	0	14	22	1.2%
School Buses	1	0	1	2	0	1	1	2	1	3	0	4	0	2	0	2	10	0.6%

**TOTAL AND PEAK HOUR VOLUME DIAGRAMS**

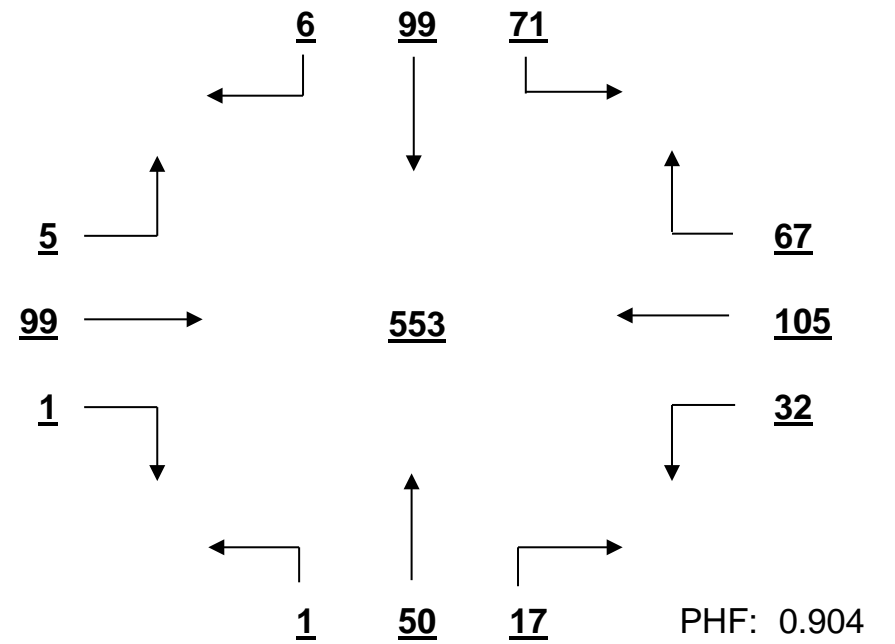
Alligator Rd AT Twin Church Rd

Date: 3/5/2015

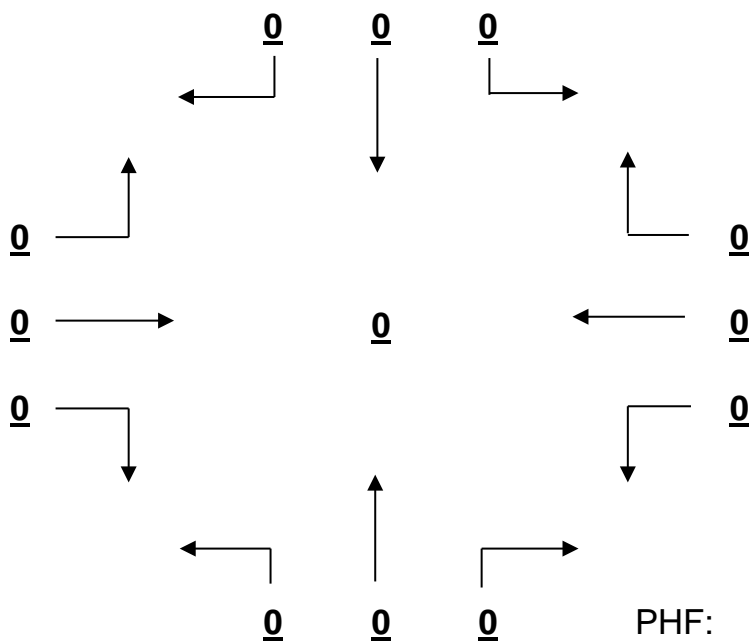
**8.0 HOUR TOTAL VOLUME**  
FROM 15:00 TO 23:00



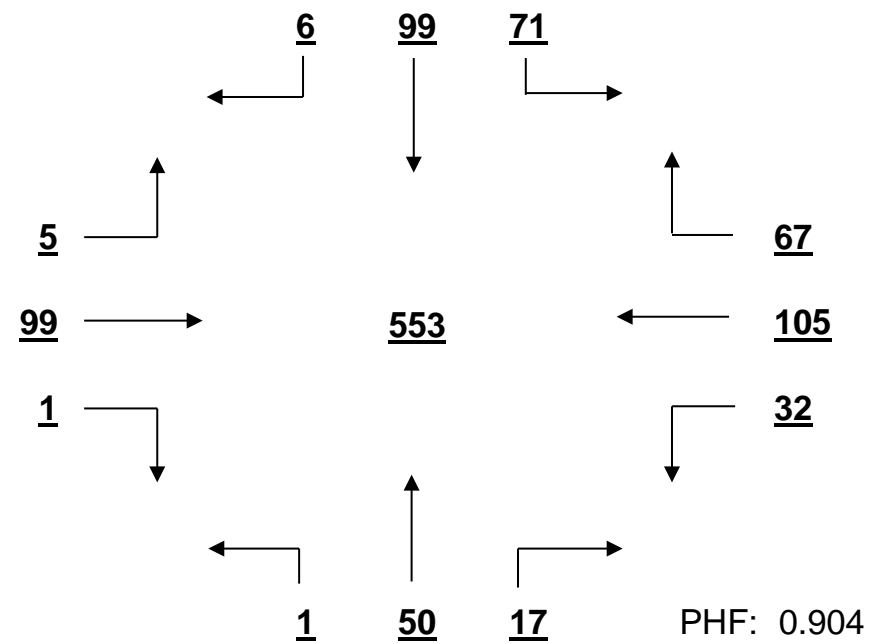
**OVERALL PEAK HOUR VOLUME**  
FROM 17:00 TO 18:00



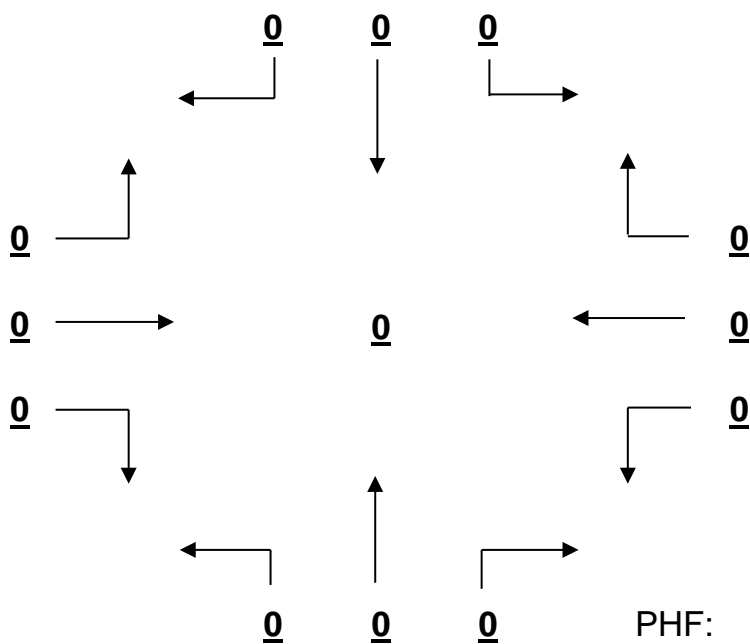
**AM PEAK HOUR VOLUME (0:00-10:45)**  
FROM 0:00 TO 0:00



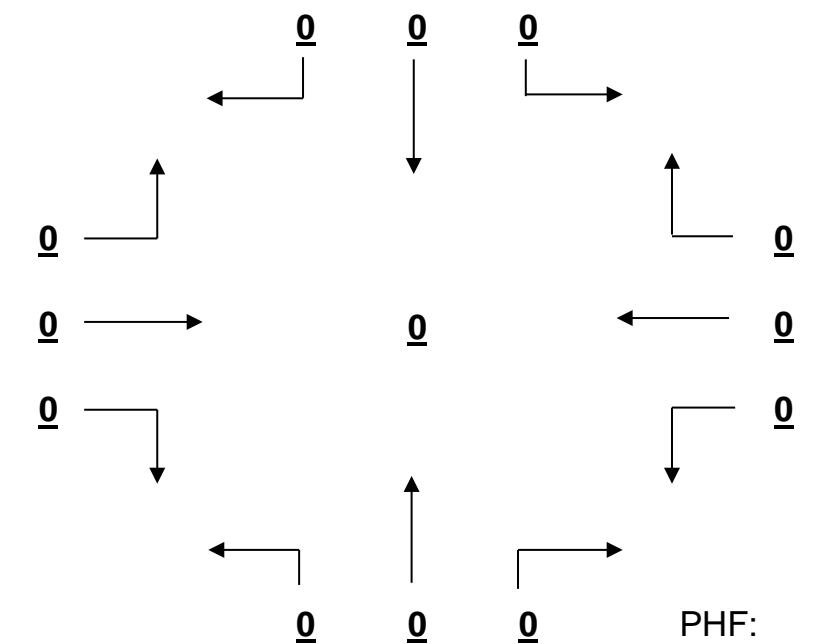
**PM PEAK HOUR VOLUME (14:15-23:45)**  
FROM 17:00 TO 18:00



**MID-DAY PEAK HOUR VOLUME (11:00-14:00)**  
FROM 0:00 TO 0:00



**OTHER HOUR VOLUME**  
FROM 7:00 TO 8:00





SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
TRAFFIC ENGINEERING

County: Florence

City: Florence

Date: 3/5/2015

Major Rt: US 52

Minor Rt: Alligator Rd  
\* Not on State System

Day of Week: Thursday

Weather: Clear

Office: Short Counts

JMS

Type of Control: Signal

Speed Limit (major st) 50

Direction of Minor Street: E-W

Intersection ADT - 34580 (Calc)

Number of Lanes (major st)\* 2

Number of Lanes (minor st)\* 1  
\* Each Direction

**INTERSECTION VOLUME SUMMARY**

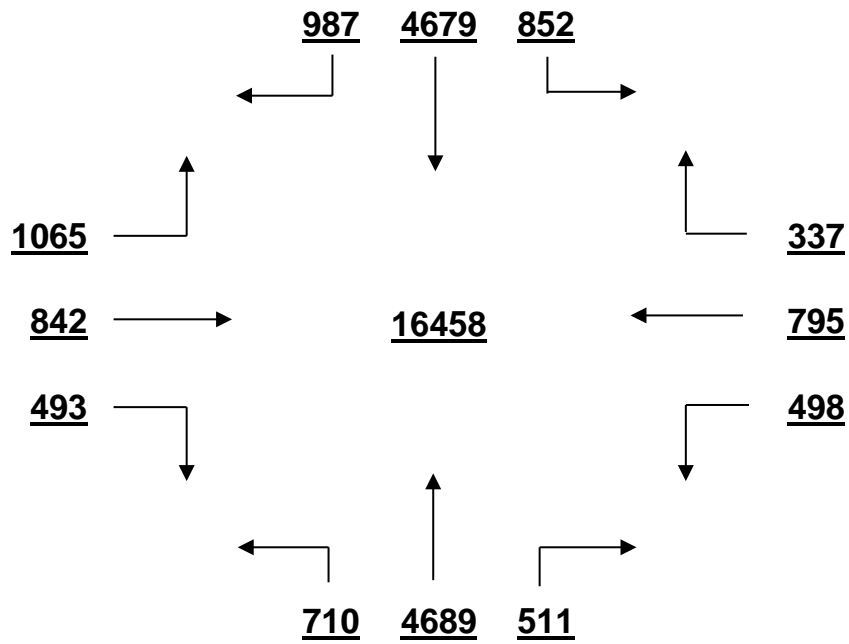
	From N US 52				From S US 52				From E Alligator Rd				From W Alligator Rd				Total Vol	Total Peds
	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT	LT	STR	RT	TOT		
7:00 - 7:15	5	47	6	58	12	63	8	83	12	16	7	35	16	19	11	46	222	0
7:15 - 7:30	23	87	22	132	32	156	42	230	26	26	13	65	35	24	16	75	502	0
7:30 - 7:45	56	136	28	220	38	289	29	356	40	79	24	143	85	58	21	164	883	0
7:45 - 8:00	103	154	29	286	21	272	44	337	22	39	38	99	73	50	14	137	859	0
8:00 - 8:15	92	144	24	260	29	261	49	339	36	55	51	142	67	70	23	160	901	0
8:15 - 8:30	84	118	25	227	22	296	28	346	21	38	34	93	52	75	22	149	815	0
8:30 - 8:45	30	111	27	168	35	328	22	385	15	23	12	50	48	24	8	80	683	0
8:45 - 9:00	14	109	20	143	30	243	11	284	9	25	5	39	48	14	17	79	545	0
14:00 - 14:15	14	184	37	235	34	189	11	234	12	21	15	48	26	28	22	76	593	0
14:15 - 14:30	15	210	55	280	32	153	15	200	18	22	6	46	57	17	26	100	626	0
14:30 - 14:45	10	226	34	270	24	206	16	246	18	19	3	40	52	20	28	100	656	0
14:45 - 15:00	38	210	50	298	26	175	28	229	22	11	5	38	52	29	24	105	670	2
15:00 - 15:15	36	213	52	301	33	184	20	237	11	16	9	36	37	20	18	75	649	0
15:15 - 15:30	59	251	64	374	29	178	22	229	7	32	7	46	39	20	29	88	737	0
15:30 - 15:45	37	172	43	252	20	157	34	211	41	42	6	89	34	35	8	77	629	0
15:45 - 16:00	48	275	59	382	31	202	23	256	38	47	19	104	49	44	10	103	845	0
16:00 - 16:15	22	221	48	291	34	188	19	241	24	37	24	85	49	26	19	94	711	1
16:15 - 16:30	18	250	50	318	31	178	15	224	15	32	11	58	35	26	35	96	696	0
16:30 - 16:45	28	234	47	309	27	151	14	192	21	44	15	80	29	32	17	78	659	3
16:45 - 17:00	23	292	62	377	33	167	16	216	11	27	7	45	39	23	16	78	716	0
17:00 - 17:15	19	270	52	341	35	161	16	212	17	46	3	66	37	46	24	107	726	0
17:15 - 17:30	16	284	71	371	32	163	9	204	16	29	3	48	31	51	29	111	734	0
17:30 - 17:45	27	231	46	304	38	154	10	202	21	26	7	54	26	41	22	89	649	0
17:45 - 18:00	35	250	36	321	32	175	10	217	25	43	13	81	49	50	34	133	752	0
<b>TOTAL</b>	<b>852</b>	<b>4679</b>	<b>987</b>	<b>6518</b>	<b>710</b>	<b>4689</b>	<b>511</b>	<b>5910</b>	<b>498</b>	<b>795</b>	<b>337</b>	<b>1630</b>	<b>1065</b>	<b>842</b>	<b>493</b>	<b>2400</b>	<b>16458</b>	<b>6</b>
Trucks	1	88	1	90	9	96	6	111	6	7	1	14	8	22	8	38	253	1.5%
School Buses	21	28	5	54	8	31	15	54	23	6	26	55	7	5	5	17	180	1.1%

TOTAL AND PEAK HOUR VOLUME DIAGRAMS

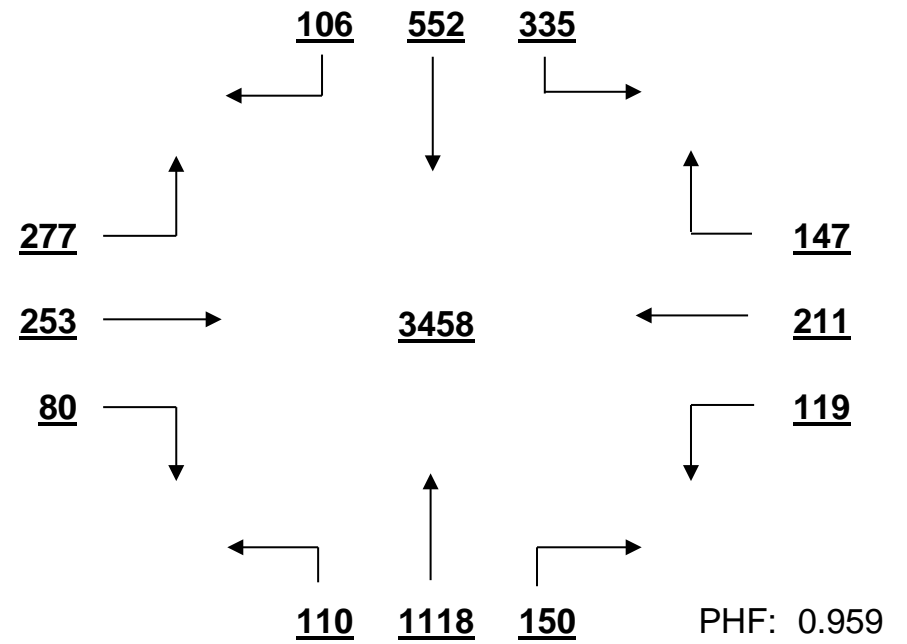
US 52 AT Alligator Rd

Date: 3/5/2015

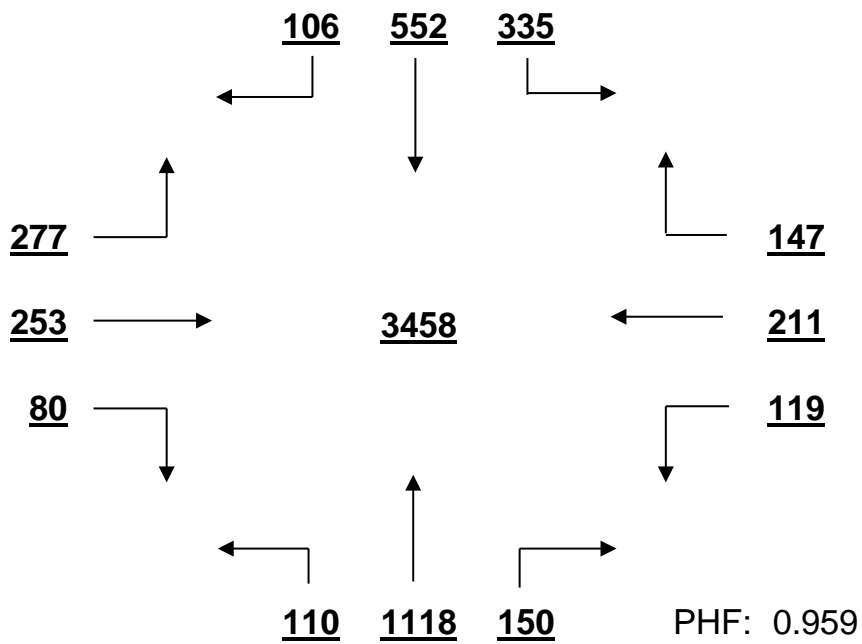
8.0 HOUR TOTAL VOLUME  
FROM 7:00 TO 20:00



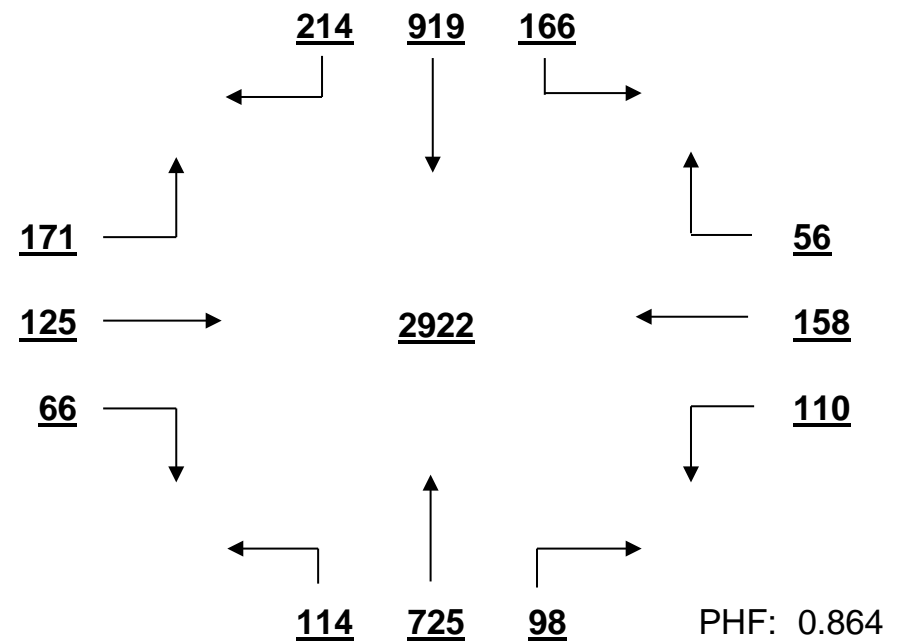
OVERALL PEAK HOUR VOLUME  
FROM 7:30 TO 8:30



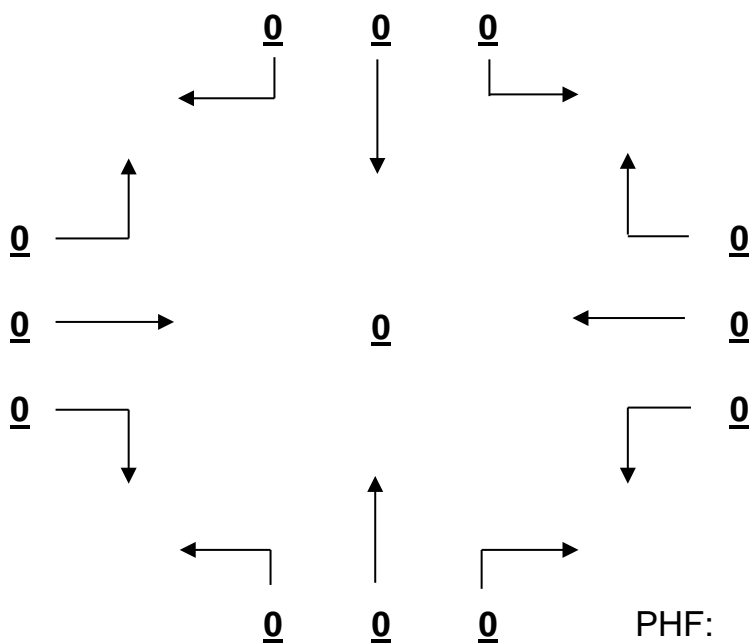
AM PEAK HOUR VOLUME (0:00-10:45)  
FROM 7:30 TO 8:30



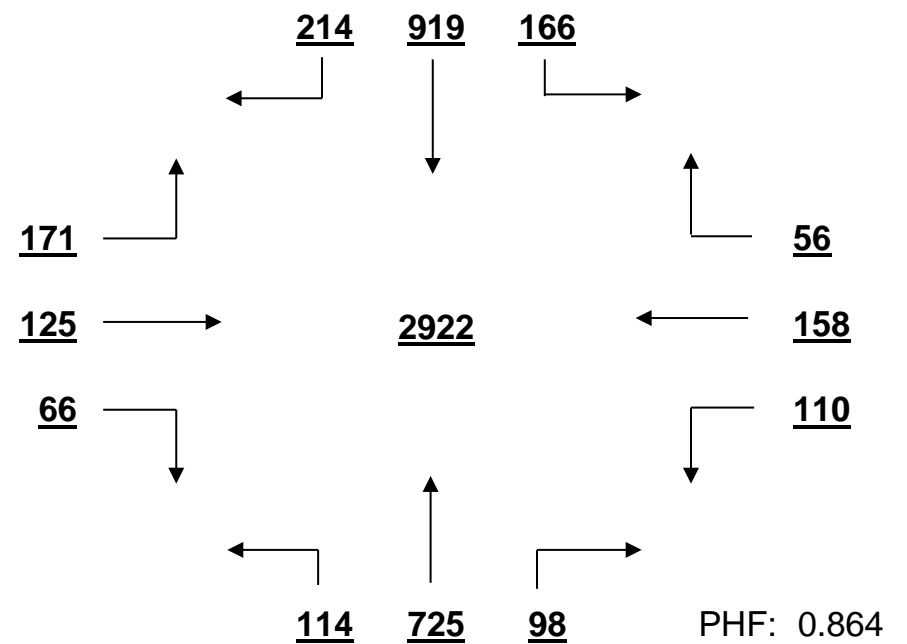
PM PEAK HOUR VOLUME (14:15-23:45)  
FROM 15:15 TO 16:15



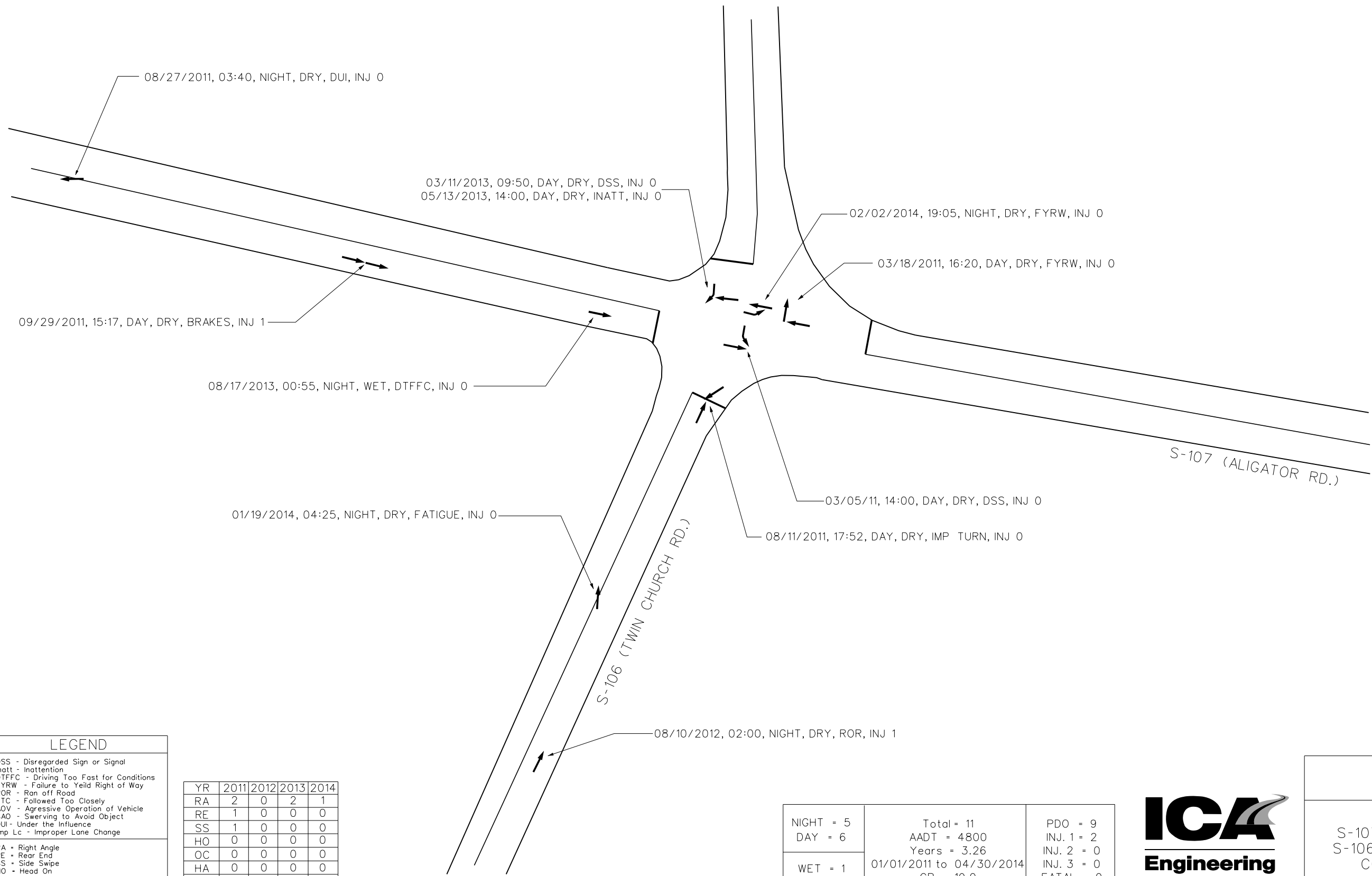
MID-DAY PEAK HOUR VOLUME (11:00-14:00)  
FROM 0:00 TO 0:00



OTHER HOUR VOLUME  
FROM 15:15 TO 16:15



## **ACCIDENT DATA**



**LEGEND**

DSS - Disregarded Sign or Signal  
 Inatt - Inattention  
 DTFFC - Driving Too Fast for Conditions  
 FYRW - Failure to Yield Right of Way  
 ROR - Ran off Road  
 FTC - Followed Too Closely  
 AOV - Agressive Operation of Vehicle  
 SAO - Swerving to Avoid Object  
 DUI - Under the Influence  
 Imp Lc - Improper Lane Change

RA - Right Angle  
 RE - Rear End  
 SS - Side Swipe  
 HO - Head On  
 OC - Out of Control  
 HA - Hit Animal  
 OTH - Other

YR	2011	2012	2013	2014
RA	2	0	2	1
RE	1	0	0	0
SS	1	0	0	0
HO	0	0	0	0
OC	0	0	0	0
HA	0	0	0	0
OTH	1	1	1	1
<b>Total</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>2</b>

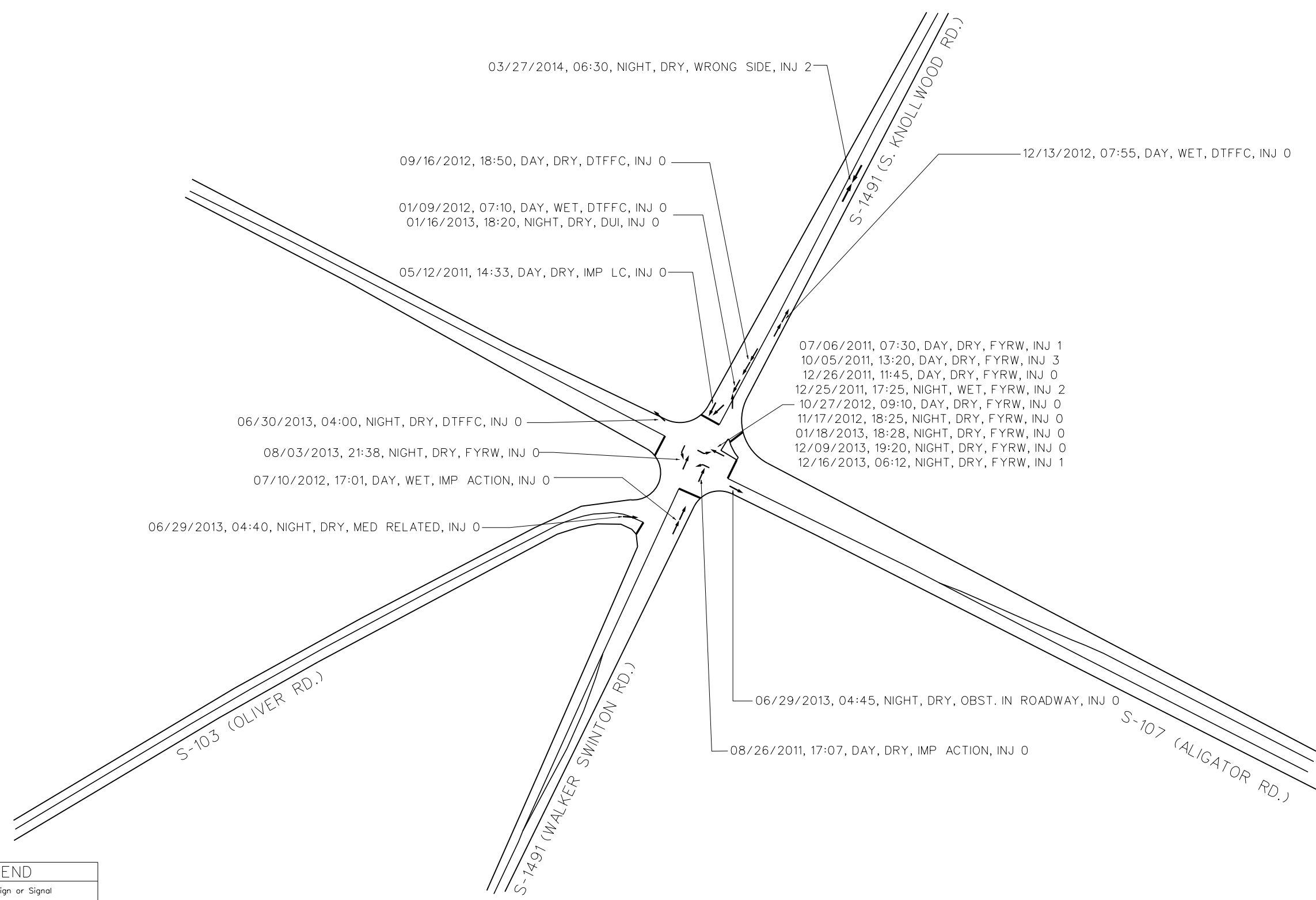
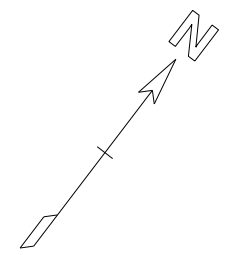
NIGHT = 5 DAY = 6	Total = 11 AADT = 4800 Years = 3.26 01/01/2011 to 04/30/2014 CR = 19.0	PDO = 9 INJ. 1 = 2 INJ. 2 = 0 INJ. 3 = 0 FATAL = 0
WET = 1 DRY = 10		



FLORENCE COUNTY

FIGURE 1  
 S-107 (ALLIGATOR RD.) /  
 S-106 (TWIN CHURCH RD.)  
 COLLISION DIAGRAM

NOT TO SCALE MARCH/2015



**LEGEND**

DSS - Disregarded Sign or Signal  
 Inatt - Inattention  
 DTFFC - Driving Too Fast for Conditions  
 FYRW - Failure to Yield Right of Way  
 ROR - Ran off Road  
 FTC - Followed Too Closely  
 AOV - Agressive Operation of Vehicle  
 SAO - Swerving to Avoid Object  
 DUI - Under the Influence  
 Imp Lc - Improper Lane Change

RA - Right Angle  
 RE - Rear End  
 SS - Side Swipe  
 HO - Head On  
 OC - Out of Control  
 HA - Hit Animal  
 OTH - Other

YR	2011	2012	2013	2014
RA	5	2	4	0
RE	0	2	0	0
SS	1	0	1	0
HO	0	1	0	0
OC	0	0	0	0
HA	0	0	0	1
OTH	0	1	3	0
Total	6	6	8	1

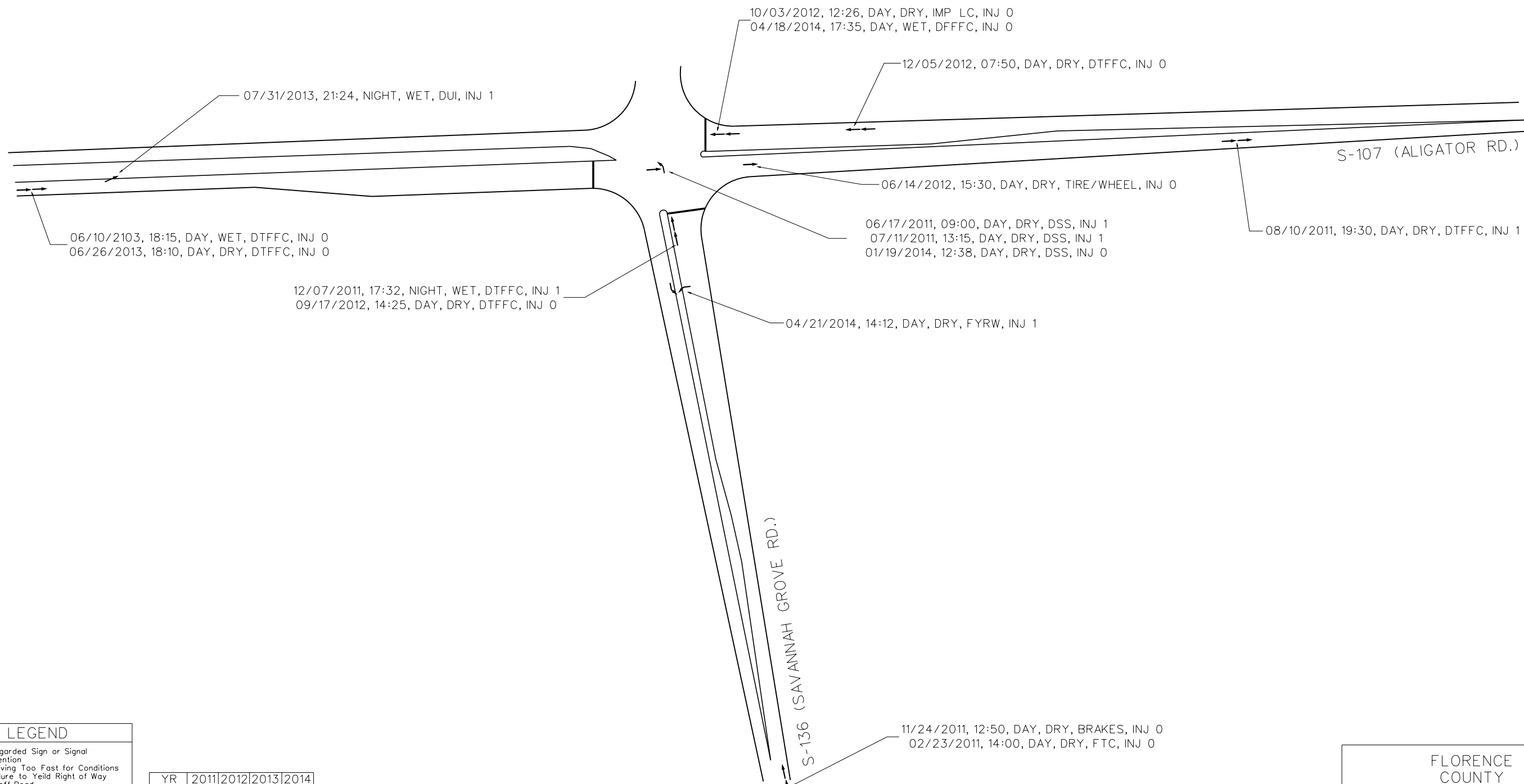
NIGHT = 11 DAY = 10	Total = 21 AADT = 12500 Years = 3.26 01/01/2011 to 04/30/2014 CR = 1.39	PDO = 16 INJ. 1 = 2 INJ. 2 = 2 INJ. 3 = 1 FATAL = 0
WET = 3 DRY = 18		



FLORENCE COUNTY

FIGURE 2  
 S-107 (ALLIGATOR RD.) /  
 S-103 (OLIVER RD.) /  
 S-1491 (S. KNOLLWOOD RD.)  
 COLLISION DIAGRAM

NOT TO SCALE MARCH/2015



**LEGEND**

DSS - Disregarded Sign or Signal  
 Inatt - Inattention  
 DTFFC - Driving Too Fast for Conditions  
 FYRW - Failure to Yield Right of Way  
 ROR - Ran off Road  
 FTC - Followed Too Closely  
 AOV - Agressive Operation of Vehicle  
 SAO - Swerving to Avoid Object  
 DUI - Under the Influence  
 Imp Lc - Improper Lane Change

RA - Right Angle  
 RE - Rear End  
 SS - Side Swipe  
 HO - Head On  
 OC - Out of Control  
 HA - Hit Animal  
 OTH - Other

YR	2011	2012	2013	2014
RA	2	0	0	2
RE	4	3	2	1
SS	0	0	0	0
HO	0	0	0	0
OC	0	0	0	0
HA	0	0	0	0
OTH	0	1	1	0
Total	6	4	3	3

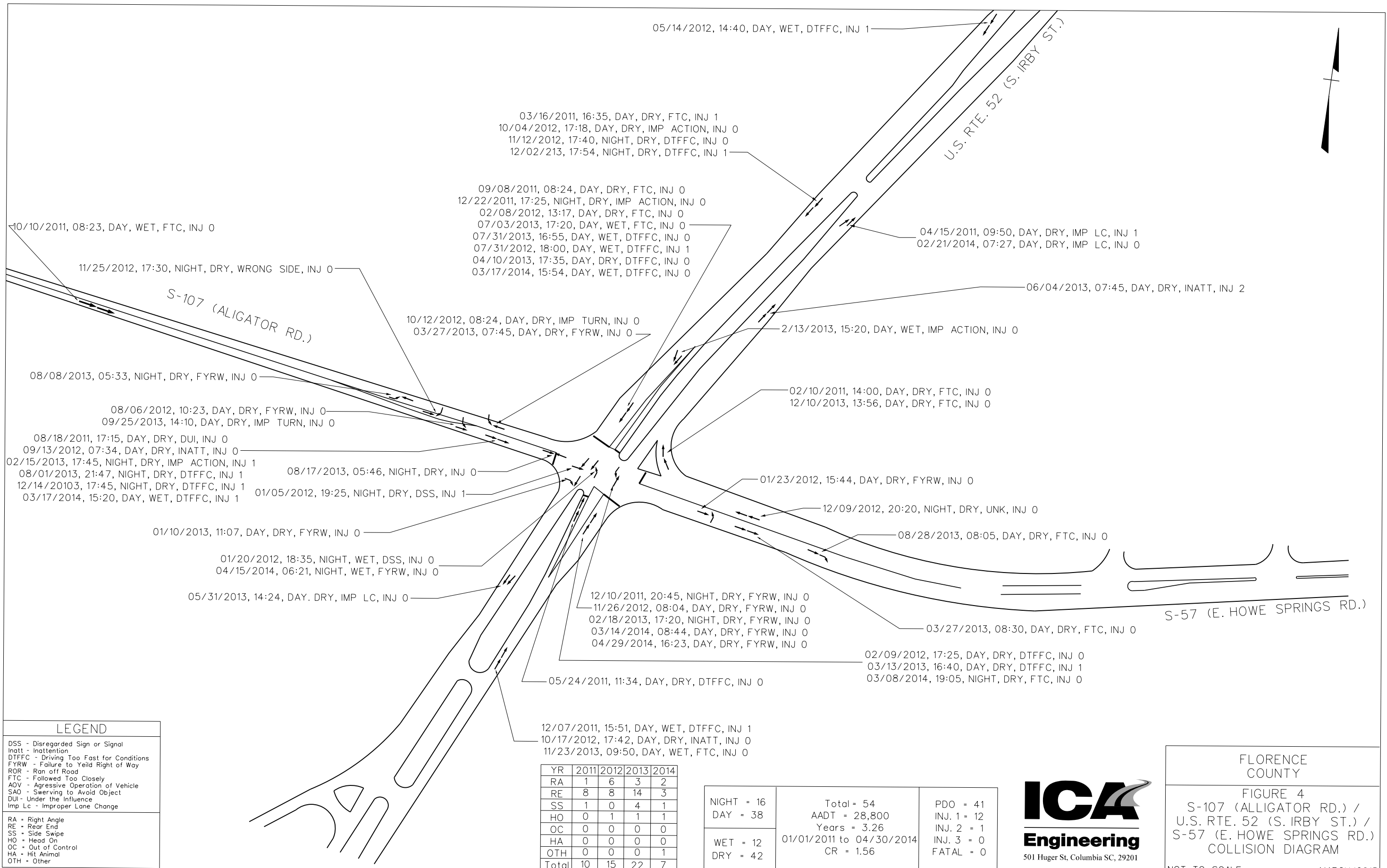
NIGHT = 2 DAY = 14	Total = 16 AADT = 9300 Years = 3.26	PDO = 10 INJ. 1 = 6 INJ. 2 = 0 INJ. 3 = 0 FATAL = 0
WET = 4 DRY = 12	01/01/2011 to 04/30/2014 CR = 1.43	



FLORENCE COUNTY

FIGURE 3  
 S-107 (ALLIGATOR RD.) /  
 S-136 (SAVANNAH GROVE RD.)  
 COLLISION DIAGRAM

NOT TO SCALE MARCH/2015



LEGEND	
DSS	- Disregarded Sign or Signal
Inatt	- Inattention
DTFFC	- Driving Too Fast for Conditions
FYRW	- Failure to Yield Right of Way
ROR	- Ran off Road
FTC	- Followed Too Closely
AOV	- Aggressive Operation of Vehicle
SAO	- Swerving to Avoid Object
DUI	- Under the Influence
Imp Lc	- Improper Lane Change
RA	- Right Angle
RE	- Rear End
SS	- Side Swipe
HO	- Head On
OC	- Out of Control
HA	- Hit Animal
OTH	- Other

12/07/2011, 15:51, DAY, WET, DTFFC, INJ 1  
 10/17/2012, 17:42, DAY, DRY, INATT, INJ 0  
 11/23/2013, 09:50, DAY, WET, FTC, INJ 0

YR	2011	2012	2013	2014
RA	1	6	3	2
RE	8	8	14	3
SS	1	0	4	1
HO	0	1	1	1
OC	0	0	0	0
HA	0	0	0	0
OTH	0	0	0	1
Total	10	15	22	7

NIGHT = 16	Total = 54 AADT = 28,800 Years = 3.26 CR = 1.56	PDO = 41 INJ. 1 = 12 INJ. 2 = 1 INJ. 3 = 0 FATAL = 0
DAY = 38		
WET = 12		
DRY = 42		



FLORENCE COUNTY  
 FIGURE 4  
 S-107 (ALLIGATOR RD.) /  
 U.S. RTE. 52 (S. IRBY ST.) /  
 S-57 (E. HOWE SPRINGS RD.)  
 COLLISION DIAGRAM  
 NOT TO SCALE MARCH/2015

## Methodology – AADT Estimation

<b>Intersections</b>	<b>AM+PM (vph)</b>	<b>Raw ADT = <math>\frac{1}{2}</math> (AM+PM)/K (vpd)</b>	<b>AADT = Raw ADT * Adjustment Factor</b>
Alligator Road (S-107) @ Twin Church Road	1053	5265	4800
Alligator Road (S-107) @ Knollwood/Walker Swinton Road	2781	13,905	12,500
Alligator Road (S-107) @ Savannah Grove Road	2063	10315	9300
Alligator Road (S-107) @ US 52/301 (S Irby St)	6384	31920	28,800

### Notes:

Based on counted daily traffic volumes the K-factor value is determined as 10%

Based on the information provided by SCDOT Road Data Services an adjustment factor of 0.9 was used to estimate AADT.



## Crash Summary

S- 107 (ALLIGATOR ROAD) from MPT 0.000 (S RON MCNAIR BLVD) to MPT 7.460 (W SMITH ST)

FLORENCE County

01/01/2011 - 04/30/2014 (3.3 years)

Length = 7.460 miles

AADT = 5,299

Functional Class = Urban -- Minor Arterial

### *Crashes by Injury Class*

Fatality Crashes	2
Injury Crashes	50
PDO Crashes	94
<b>Total Crashes</b>	<b>146</b>

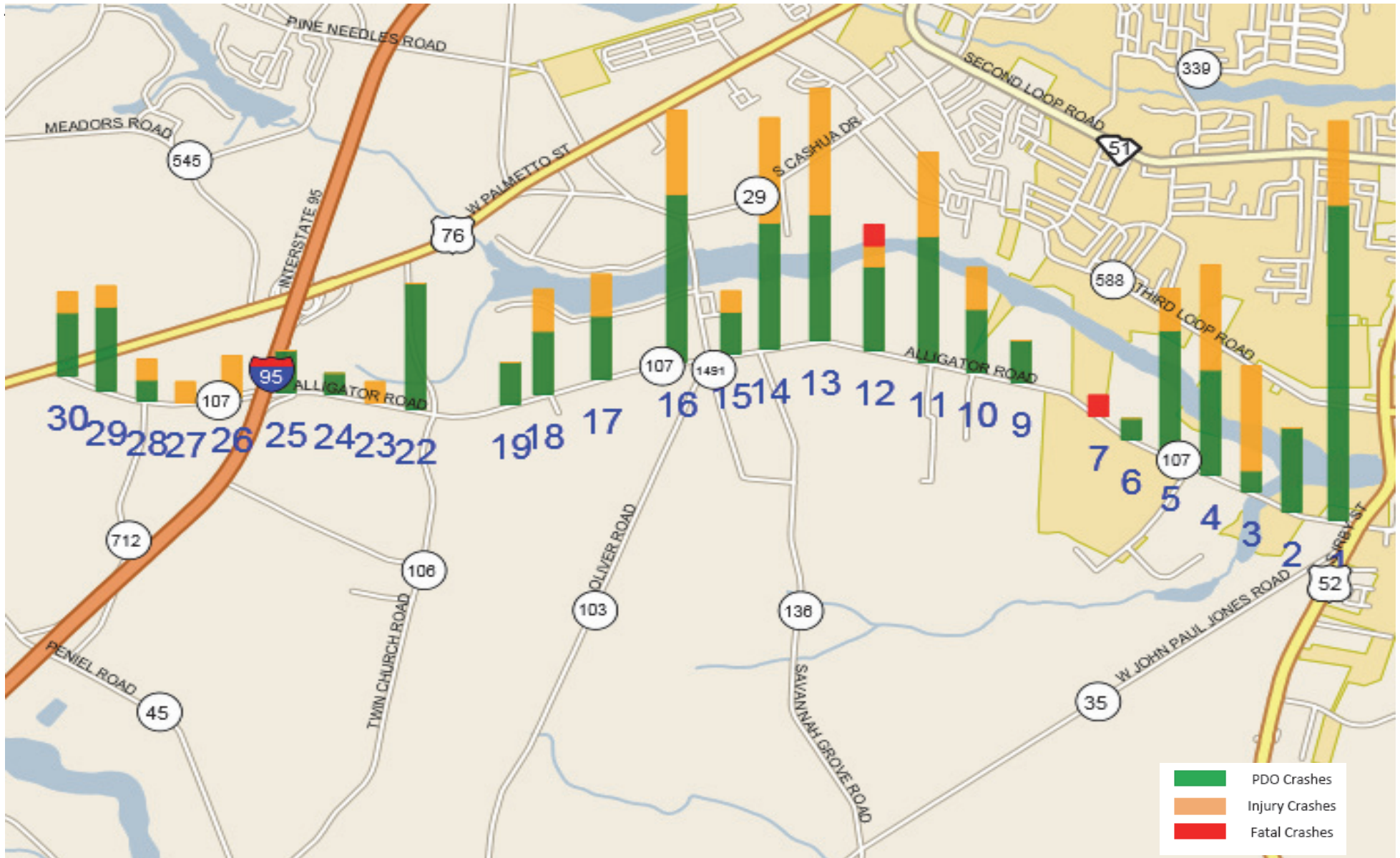
### *Crashes by Manner Of Collision*

Rear End	62
Angle	33
Sideswipe	6
Head On	2
Run Off Road	35
Other	8
<b>Total Crashes</b>	<b>146</b>

### *Special Contributing Factors*

Animal	3
Bicycle	0
Pedestrian	2

### Florence County - S-107 MPT 0.0 to MPT 7.46

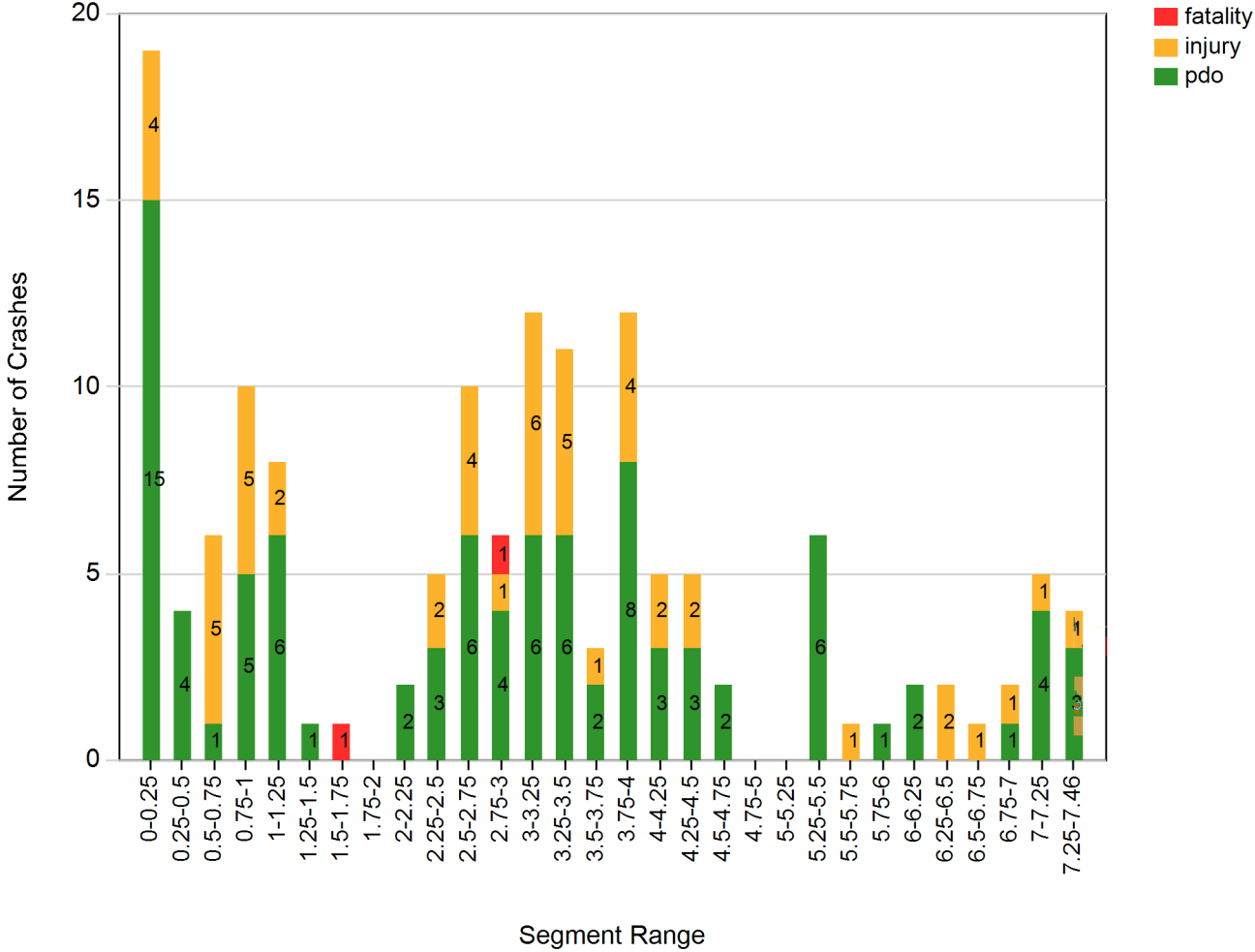


S- 107 (ALLIGATOR ROAD) from MPT 0.000 (S RON MCNAIR BLVD) to MPT 7.460 (W SMITH ST)

01/01/2011 - 04/30/2014 (3.3 years)

Length = 7.460 miles AADT = 5,299

Functional Class = Urban -- Minor Arterial



## Section Crashes

### MPT 0.000 to 0.250 ( Stack #1 )

**Total Crashes: 19   Light: 14   Dark: 5   Dry: 16   Wet: 3   Fatalities: 0   Injuries: 4   PDO: 15**

1	11029893	0.000	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	ANGLE
2	11149302	0.000	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
3	12064298	0.000	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
4	13009619	0.000	INJ1	DUSK	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
5	13037126	0.000	INJ0	DARK	DRY	MOTOR VEHICLE (STOPPED)	REAR END
6	13055991	0.000	INJ1	DARK			REAR END
7	11098271	0.003	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	SIDESWIPE SAME DIR
8	12057466	0.008	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
9	13035489	0.015	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
10	11545255	0.022	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
11	13589372	0.026	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	SIDESWIPE SAME DIR
12	11516295	0.034	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
13	13036406	0.036	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
14	12589872	0.042	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
15	13519288	0.049	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
16	14008188	0.060	INJ1	DAY	WET	MOTOR VEHICLE (STOPPED)	REAR END
17	12069671	0.066	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	HEAD ON
18	11121312	0.170	INJ0	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
19	11121313	0.170	INJ0	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 0.250 to 0.500 ( Stack #2 )

**Total Crashes: 4   Light: 3   Dark: 1   Dry: 3   Wet: 1   Fatalities: 0   Injuries: 0   PDO: 4**

1	14000754	0.317	INJ0	DAY	WET	MAIL BOX	NO COLLISION W/MV
2	14535125	0.333	INJ0	DARK	DRY	DITCH	NO COLLISION W/MV
3	13032322	0.399	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
4	12029463	0.481	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	SIDESWIPE SAME DIR

### MPT 0.500 to 0.750 ( Stack #3 )

**Total Crashes: 6   Light: 4   Dark: 2   Dry: 3   Wet: 3   Fatalities: 0   Injuries: 5   PDO: 1**

1	13512903	0.615	INJ1	DUSK	WET	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
2	11579237	0.632	INJ1	DAY	WET	MOTOR VEHICLE (STOPPED)	REAR END
3	12568285	0.655	INJ0	DARK	WET	ANIMAL (DEER ONLY)	NO COLLISION W/MV
4	12603734	0.684	INJ1	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
5	13575145	0.686	INJ2	DAY	DRY	HIGHWAY TRAFFIC SIGN POST	ANGLE
6	12581488	0.737	INJ1	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END

## Section Crashes

### MPT 0.750 to 1.000 ( Stack #4 )

**Total Crashes: 10   Light: 9   Dark: 1   Dry: 9   Wet: 1   Fatalities: 0   Injuries: 5   PDO: 5**

1	11007329	0.760	INJ1	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
2	11146029	0.768	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
3	12518110	0.769	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
4	12595438	0.769	INJ0	DARK	WET	MOTOR VEHICLE (STOPPED)	REAR END
5	11549373	0.775	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
6	12562844	0.925	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
7	12506255	0.934	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
8	14537531	0.967	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
9	13579969	0.974	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
10	12513115	0.987	INJ2	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE

### MPT 1.000 to 1.250 ( Stack #5 )

**Total Crashes: 8   Light: 7   Dark: 1   Dry: 5   Wet: 3   Fatalities: 0   Injuries: 2   PDO: 6**

1	11520998	1.004	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
2	13018366	1.013	INJ1	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
3	14536989	1.033	INJ0	DAY	DRY	DITCH	NO COLLISION W/MV
4	13055223	1.034	INJ2	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
5	12562304	1.062	INJ0	DAY	DRY	CARGO/EQUIP LOSS OR SHIFT	NO COLLISION W/MV
6	14509283	1.089	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
7	11548704	1.147	INJ0	DARK	DRY	DITCH	NO COLLISION W/MV
8	14505400	1.166	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 1.250 to 1.500 ( Stack #6 )

**Total Crashes: 1   Light: 1   Dark: 0   Dry: 1   Wet: 0   Fatalities: 0   Injuries: 0   PDO: 1**

1	12037776	1.333	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
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### MPT 1.500 to 1.750 ( Stack #7 )

**Total Crashes: 1   Light: 1   Dark: 0   Dry: 1   Wet: 0   Fatalities: 1   Injuries: 0   PDO: 0**

1	12535331	1.749	INJ4	DAWN	DRY	MOTOR VEHICLE (IN TRANSPORT)	HEAD ON
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### MPT 2.000 to 2.250 ( Stack #9 )

**Total Crashes: 2   Light: 2   Dark: 0   Dry: 2   Wet: 0   Fatalities: 0   Injuries: 0   PDO: 2**

1	12577519	2.137	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
2	13527940	2.245	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END

## Section Crashes

### MPT 2.250 to 2.500 ( Stack #10 )

**Total Crashes: 5   Light: 4   Dark: 1   Dry: 3   Wet: 2   Fatalities: 0   Injuries: 2   PDO: 3**

1	11583424	2.277	INJ1	DAY	DRY	OVERTURN/ROLLOVER	NO COLLISION W/MV
2	12529831	2.291	INJ1	DUSK	WET	MOTOR VEHICLE (STOPPED)	REAR END
3	12601168	2.408	INJ0	DAY	WET	MOTOR VEHICLE (STOPPED)	REAR END
4	13514160	2.473	INJ0	DARK	DRY	OTHER MOVABLE OBJECT	NO COLLISION W/MV
5	11909083	2.499	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 2.500 to 2.750 ( Stack #11 )

**Total Crashes: 10   Light: 9   Dark: 1   Dry: 7   Wet: 3   Fatalities: 0   Injuries: 4   PDO: 6**

1	13509959	2.512	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
2	13527060	2.512	INJ1	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
3	12514582	2.515	INJ1	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
4	13592080	2.532	INJ0	DAY	WET	MOTOR VEHICLE (STOPPED)	REAR END
5	12504618	2.591	INJ0	DARK	DRY	MOTOR VEHICLE (STOPPED)	REAR END
6	11564832	2.677	INJ2	DAY	DRY	TREE	NO COLLISION W/MV
7	13525734	2.683	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
8	12535345	2.686	INJ0	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
9	12565721	2.695	INJ1	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
10	12582216	2.722	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 2.750 to 3.000 ( Stack #12 )

**Total Crashes: 6   Light: 5   Dark: 1   Dry: 5   Wet: 1   Fatalities: 1   Injuries: 1   PDO: 4**

1	12561658	2.802	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
2	11547640	2.854	INJ4	DARK	DRY	PEDESTRIAN	NO COLLISION W/MV
3	11583515	2.889	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
4	11014261	2.892	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
5	12569628	2.907	INJ0	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
6	11567699	2.949	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END

### MPT 3.000 to 3.250 ( Stack #13 )

**Total Crashes: 12   Light: 7   Dark: 5   Dry: 10   Wet: 2   Fatalities: 0   Injuries: 6   PDO: 6**

1	11525165	3.020	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
2	12508376	3.036	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
3	13525113	3.042	INJ2	DARK	DRY	OVERTURN/ROLLOVER	NO COLLISION W/MV
4	12511543	3.069	INJ0	DARK	WET	DITCH	NO COLLISION W/MV
5	13532400	3.095	INJ1	DARK	DRY	TREE	NO COLLISION W/MV

## Section Crashes

6	12569636	3.100	INJ0	DAWN	DRY	MOTOR VEHICLE (IN TRANSPORT)	SIDESWIPE OPP DIR
7	14527169	3.112	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	SIDESWIPE SAME DIR
8	11901861	3.163	INJ1	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END
9	13023258	3.178	INJ0	DAY	DRY	OTHER NONCOLLISION	NO COLLISION W/MV
10	13013956	3.180	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
11	13005692	3.186	INJ1	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
12	12083813	3.188	INJ2	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 3.250 to 3.500 ( Stack #14 )

**Total Crashes: 11    Light: 11    Dark: 0    Dry: 10    Wet: 1    Fatalities: 0    Injuries: 5    PDO: 6**

1	13528867	3.271	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
2	12510697	3.285	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
3	11542780	3.307	INJ1	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
4	13523514	3.310	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
5	12594002	3.379	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
6	12536411	3.394	INJ0	DAY	DRY	EQUIPMENT FAILURE	NO COLLISION W/MV
7	12569637	3.397	INJ0	DAY	DRY	MOTOR VEHICLE (STOPPED)	REAR END
8	11527492	3.399	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
9	14532435	3.399	INJ0	DAY	WET	MOTOR VEHICLE (STOPPED)	REAR END
10	14503463	3.400	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
11	11533421	3.402	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE

### MPT 3.500 to 3.750 ( Stack #15 )

**Total Crashes: 3    Light: 2    Dark: 1    Dry: 1    Wet: 2    Fatalities: 0    Injuries: 1    PDO: 2**

1	13562381	3.548	INJ1	DARK	WET	OTHER	NO COLLISION W/MV
2	13549096	3.583	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
3	13542341	3.610	INJ0	DAY	WET	MOTOR VEHICLE (IN TRANSPORT)	REAR END

### MPT 3.750 to 4.000 ( Stack #16 )

**Total Crashes: 12    Light: 6    Dark: 6    Dry: 11    Wet: 1    Fatalities: 0    Injuries: 4    PDO: 8**

1	11590198	3.786	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
2	13549101	3.787	INJ0	DARK	DRY	UTILITY POLE	NO COLLISION W/MV
3	13503282	3.788	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
4	11549353	3.789	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
5	12587068	3.789	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
6	11533427	3.790	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
7	12577630	3.790	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
8	13621896	3.790	INJ1	DAWN	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE



## Section Crashes

9	11591059	3.791	INJ2	DARK	WET	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
10	13618648	3.792	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
11	11562494	3.793	INJ3	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
12	13549631	3.796	INJ0	DARK	DRY	OTHER (WALL, BUILDING, TUNNEL, ETC)	NO COLLISION W/MV

### MPT 4.000 to 4.250 ( Stack #17 )

**Total Crashes: 5   Light: 2   Dark: 3   Dry: 5   Wet: 0   Fatalities: 0   Injuries: 2   PDO: 3**

1	11559587	4.021	INJ1	DARK	DRY	DITCH	NO COLLISION W/MV
2	14517506	4.027	INJ0	DARK	DRY	DITCH	NO COLLISION W/MV
3	14501765	4.059	INJ0	DARK	DRY	DITCH	NO COLLISION W/MV
4	12500067	4.099	INJ0	DUSK	DRY	TREE	NO COLLISION W/MV
5	12561655	4.181	INJ1	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE

### MPT 4.250 to 4.500 ( Stack #18 )

**Total Crashes: 5   Light: 1   Dark: 4   Dry: 3   Wet: 2   Fatalities: 0   Injuries: 2   PDO: 3**

1	11568564	4.277	INJ0	DARK	DRY	ANIMAL (DEER ONLY)	NO COLLISION W/MV
2	13556676	4.289	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
3	14519228	4.301	INJ1	DARK	DRY	MAIL BOX	NO COLLISION W/MV
4	11549947	4.429	INJ1	DARK	WET	TREE	NO COLLISION W/MV
5	11549948	4.446	INJ0	DARK	WET	TREE	NO COLLISION W/MV

### MPT 4.500 to 4.750 ( Stack #19 )

**Total Crashes: 2   Light: 2   Dark: 0   Dry: 2   Wet: 0   Fatalities: 0   Injuries: 0   PDO: 2**

1	11562914	4.524	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	REAR END
2	12569627	4.636	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE

### MPT 5.250 to 5.500 ( Stack #22 )

**Total Crashes: 6   Light: 3   Dark: 3   Dry: 5   Wet: 1   Fatalities: 0   Injuries: 0   PDO: 6**

1	13515548	5.258	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
2	11008726	5.259	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
3	14507465	5.260	INJ0	DARK	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
4	11010550	5.261	INJ0	DAY	DRY	MOTOR VEHICLE (IN TRANSPORT)	ANGLE
5	13569692	5.264	INJ0	DARK	WET	HIGHWAY TRAFFIC SIGN POST	NO COLLISION W/MV
6	11550566	5.443	INJ0	DARK	DRY	HIGHWAY TRAFFIC SIGN POST	NO COLLISION W/MV



## Section Crashes

### MPT 5.500 to 5.750 ( Stack #23 )

**Total Crashes: 1   Light: 0   Dark: 1   Dry: 1   Wet: 0   Fatalities: 0   Injuries: 1   PDO: 0**

1 11530559 5.705 INJ1 DARK DRY ANIMAL (DEER ONLY) NO COLLISION W/MV

### MPT 5.750 to 6.000 ( Stack #24 )

**Total Crashes: 1   Light: 1   Dark: 0   Dry: 1   Wet: 0   Fatalities: 0   Injuries: 0   PDO: 1**

1 11002443 5.906 INJ0 DAY SNOW DITCH NO COLLISION W/MV

### MPT 6.000 to 6.250 ( Stack #25 )

**Total Crashes: 2   Light: 1   Dark: 1   Dry: 1   Wet: 1   Fatalities: 0   Injuries: 0   PDO: 2**

1 14532434 6.125 INJ0 DARK WET EMBANKMENT NO COLLISION W/MV

2 14515935 6.132 INJ0 DAY DRY FENCE NO COLLISION W/MV

### MPT 6.250 to 6.500 ( Stack #26 )

**Total Crashes: 2   Light: 1   Dark: 1   Dry: 2   Wet: 0   Fatalities: 0   Injuries: 2   PDO: 0**

1 12570489 6.471 INJ2 DARK DRY PEDESTRIAN SIDESWIPE OPP DIR

2 11536901 6.478 INJ1 DAY DRY DITCH NO COLLISION W/MV

### MPT 6.500 to 6.750 ( Stack #27 )

**Total Crashes: 1   Light: 0   Dark: 1   Dry: 1   Wet: 0   Fatalities: 0   Injuries: 1   PDO: 0**

1 12525143 6.533 INJ2 DARK DRY PEDESTRIAN NO COLLISION W/MV

### MPT 6.750 to 7.000 ( Stack #28 )

**Total Crashes: 2   Light: 2   Dark: 0   Dry: 1   Wet: 1   Fatalities: 0   Injuries: 1   PDO: 1**

1 13521596 6.884 INJ0 DAY WET MOTOR VEHICLE (IN TRANSPORT) ANGLE

2 13609302 6.895 INJ1 DAY DRY MAIL BOX NO COLLISION W/MV

### MPT 7.000 to 7.250 ( Stack #29 )

**Total Crashes: 5   Light: 2   Dark: 3   Dry: 1   Wet: 4   Fatalities: 0   Injuries: 1   PDO: 4**

1 11521484 7.067 INJ0 DARK WET DITCH NO COLLISION W/MV

2 12521617 7.088 INJ0 DARK WET OTHER NO COLLISION W/MV

3 12512372 7.101 INJ0 DAY WET DITCH NO COLLISION W/MV

4 12536407 7.177 INJ1 DAY WET DITCH NO COLLISION W/MV

5 13503346 7.179 INJ0 DARK DRY DITCH NO COLLISION W/MV

## Section Crashes

### MPT 7.250 to 7.460 ( Stack #30 )

**Total Crashes: 4    Light: 2    Dark: 2    Dry: 4    Wet: 0    Fatalities: 0    Injuries: 1    PDO: 3**

1	11522030	7.275	INJ0	DAY		DRY	DITCH		NO COLLISION W/MV
2	13514154	7.439	INJ0	DAY		DRY	DITCH		NO COLLISION W/MV
3	13617260	7.454	INJ1	DARK		DRY	MOTOR VEHICLE (STOPPED)		REAR END
4	13545986	7.456	INJ0	DARK		DRY	DITCH		NO COLLISION W/MV

# Crash Intersection Report

Monday, September 15, 2014

Florence County S- 107 and S- 103 and S- 1491

Page 1 of 1

01/01/2011 - 04/30/2014

OBS	ACCNO	DATE	HARMEVENT	MAC	FA	INJ	PDO	LIGHT	ROAD		BIR	BRN	BRA	ALSB	BDO	SIC	SRN	SRA	
									SRFCE	MPT									
1	<a href="#">11006455</a>	02/19/2011	DITCH	NOT COLLISION W/M	0	4	0	DARK (NO	DRY	1.650	S-	107	ALLIGATOR ROAE	1	S-	136			
2	<a href="#">11520818</a>	05/12/2011	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	0.887	S-	107	ALLIGATOR ROAE	0	S-	1775			
3	<a href="#">11533427</a>	07/06/2011	MOTOR VEHICLE (I	ANGLE 3	0	2	0	DAYLIGHT	DRY	3.790	S-	1491	S KNOLLWOOD R	0	S-	136			
4	<a href="#">11549353</a>	08/26/2011	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	3.789	S-	1491	S KNOLLWOOD R	0	S-	136			
5	<a href="#">11552287</a>	09/10/2011	MOTOR VEHICLE (I	SIDESWIPE OPPOSIT	0	0	1	DAYLIGHT	DRY	1.642	S-	107		100	S-	136			
6	<a href="#">11559587</a>	09/26/2011	DITCH	NOT COLLISION W/M	0	1	0	DARK (STR	DRY	4.021	S-	1491	KNOLLWOOD DR	39	L-				
7	<a href="#">11562494</a>	10/05/2011	MOTOR VEHICLE (I	ANGLE 1	0	1	0	DAYLIGHT	DRY	3.793	S-	1491	S KNOLLWOOD R	1	L-				
8	<a href="#">11590198</a>	12/26/2011	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	3.786	S-	1491	S KNOLLWOOD R	0	S-	136			
9	<a href="#">11591059</a>	12/25/2011	MOTOR VEHICLE (I	ANGLE 1	0	2	0	DARK (STR	WET	3.791	S-	1491	KNOLLWOOD RD	0	L-				
10	<a href="#">12500973</a>	01/09/2012	MOTOR VEHICLE (I	HEAD ON	0	0	1	DAYLIGHT	WET	0.869	S-	107	ALLIGATOR ROAE	2	L-				
11	<a href="#">12542982</a>	07/10/2012	MOTOR VEHICLE (S	BACKED INTO	0	0	1	DAYLIGHT	WET	0.900	S-	103	OLIVER ROAD	0	S-	107			
12	<a href="#">12564615</a>	09/16/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	0.884	S-	107	ALLIGATOR ROAE	1	L-				
13	<a href="#">12577630</a>	10/27/2012	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DAYLIGHT	DRY	3.790	S-	1491	S KNOLLWOOD R	0	S-	136			
14	<a href="#">12587068</a>	11/17/2012	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DARK (NO	DRY	3.789	S-	1491	S KNOLLWOOD R	0	S-	136			
15	<a href="#">12597133</a>	12/13/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	WET	0.862	S-	107	ALLIGATOR ROAE	3	L-				
16	<a href="#">13503282</a>	01/18/2013	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DARK (STR	DRY	3.788	S-	1491	S KNOLLWOOD R	0	S-	136			
17	<a href="#">13503332</a>	01/16/2013	MOTOR VEHICLE (S	SIDESWIPE OPPOSIT	0	0	1	DARK (STR	DRY	0.885	S-	107	ALLIGATOR ROAE	1	L-				
18	<a href="#">13521802</a>	04/05/2013	DITCH	NOT COLLISION W/M	0	0	1	DAYLIGHT	DRY	0.982	S-	1491	WALKER-SWINTC	493	L-				
19	<a href="#">13549101</a>	06/29/2013	UTILITY POLE	NOT COLLISION W/M	0	0	1	DARK (STR	DRY	3.787	S-	1491	S KNOLLWOOD R	10	S-	136			
20	<a href="#">13549631</a>	06/30/2013	OTHER (WALL, BUI	NOT COLLISION W/M	0	0	1	DARK (STR	DRY	3.796	S-	1491	S KNOLLWOOD R	1	L-				
21	<a href="#">13551374</a>	06/29/2013	UTILITY POLE	NOT COLLISION W/M	0	0	1	DAYLIGHT	DRY	0.010	S-	1491	WALKER-SWINTC	1	L-				
22	<a href="#">13566780</a>	08/03/2013	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DARK (NO	DRY	0.892	S-	107	ALLIGATOR ROAE	0	S-	103			
23	13618648	12/09/2013	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DARK (LIGH	DRY	3.792	S-	1491	S KNOLLWOOD R	0	L-				
24	13621896	12/16/2013	MOTOR VEHICLE (I	ANGLE 1	0	2	0	DAWN	DRY	3.790	S-	1491	S KNOLLWOOD R	0	L-				
25	14524454	03/27/2014	MOTOR VEHICLE (I	HEAD ON	0	2	0	DARK (LIGH	DRY	0.821	S-	107	ALLIGATOR ROAE	7	L-				
					<b>0</b>	<b>7</b>	<b>18</b>												

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OBS	ACCNO	DATE	HARMEVENT	MAC	FA	INJ	PDO	LIGHT	ROAD				BDO	SIC	SRN	SRA	
									SRFCE	MPT	BIR	BRN					BRA
1	<a href="#">11008726</a>	03/05/2011	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DAYLIGHT	DRY	5.259	S-	106	TWIN CHURCH RO	0	L-		
2	<a href="#">11010550</a>	03/18/2011	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	5.261	S-	106	TWIN CHURCH RO	0	L-		
3	11044579	05/11/2011	OTHER NONCOLLIS	NOT COLLISION W/M	0	1	0	DARK (STR	WET	1.010	S-	107	DUKE ST	0	US	521	
4	<a href="#">11530559</a>	07/03/2011	ANIMAL (DEER ONL	NOT COLLISION W/M	0	1	0	DARK (NO	DRY	5.705	S-	106		40	S-	95	
5	<a href="#">11541683</a>	08/11/2011	MOTOR VEHICLE (I	SIDESWIPE OPPOSIT	0	0	1	DAYLIGHT	DRY	1.014	S-	107	ALLIGATOR ROAC	0	L-		
6	<a href="#">11550566</a>	08/27/2011	HIGHWAY TRAFFIC	NOT COLLISION W/M	0	0	1	DARK (NO	DRY	5.443	S-	106		20	S-	1748	
7	<a href="#">11562914</a>	09/29/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	4.524	S-	106	TWIN CHURCH RO	60	L-	1491	
8	<a href="#">11580794</a>	11/26/2011	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	1.299	S-	107	ALLIGATOR ROAC	31	L-		
9	<a href="#">12552690</a>	08/10/2012	DITCH	NOT COLLISION W/M	0	1	0	DARK (NO	DRY	1.193	S-	107	ALLIGATOR ROAC	16	L-		
10	<a href="#">13503345</a>	01/18/2013	DITCH	NOT COLLISION W/M	0	1	0	DARK (NO	DRY	1.311	S-	107	ALLIGATOR ROAC	51	S-	1276	
11	<a href="#">13515548</a>	03/11/2013	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DAYLIGHT	DRY	5.258	S-	106	TWIN CHURCH RO	0	L-		
12	<a href="#">13523651</a>	04/10/2013	MAIL BOX	NOT COLLISION W/M	0	0	1	DARK (NO	DRY	1.317	S-	107	ALLIGATOR ROAC	51	S-	1276	
13	<a href="#">13535643</a>	05/13/2013	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DAYLIGHT	DRY	1.013	S-	107			US	76	
14	<a href="#">13569692</a>	08/17/2013	HIGHWAY TRAFFIC	NOT COLLISION W/M	0	0	1	DARK (NO	WET	5.264	S-	106	TWIN CHURCH RO	1	L-		
15	14503469	01/19/2014	MAIL BOX	NOT COLLISION W/M	0	0	1	DARK (NO	DRY	1.091	S-	107	ALLIGATOR ROAC	7	L-		
16	14507465	02/02/2014	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DARK (NO	DRY	5.260	S-	106	TWIN CHURCH RO	0	L-		
					0	4	12										

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OBS	ACCNO	DATE	HARMEVENT	MAC	FA	INJ	PDO	LIGHT	ROAD				BDO	SIC	SRN	SRA
									SRFCE	MPT	BIR	BRN				
1	11014261	02/19/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	2.892	S-	136		20	S-	1006
2	<a href="#">11527492</a>	06/17/2011	MOTOR VEHICLE (I	ANGLE 1	0	1	0	DAYLIGHT	DRY	3.399	S-	136	SAVANNAH GROV	0	L-	
3	<a href="#">11533421</a>	07/11/2011	MOTOR VEHICLE (I	ANGLE 2	0	2	0	DAYLIGHT	DRY	3.402	S-	136		0	S-	1491
4	<a href="#">11542780</a>	08/10/2011	MOTOR VEHICLE (S	REAR END	0	2	0	DAYLIGHT	DRY	3.307	S-	136	SAVANNAH GROV	11	L-	
5	<a href="#">11579970</a>	11/24/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	7.636	S-	107	ALLIGATOR ROAC	14	S-	1491
6	<a href="#">11585027</a>	12/07/2011	MOTOR VEHICLE (S	REAR END	0	2	0	DARK (STR	WET	7.776	S-	107	ALLIGATOR ROAC	2	S-	1491
7	<a href="#">11907229</a>	02/23/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	7.601	S-	107	ALLIGATOR ROAC	16	S-	1491
8	<a href="#">12536411</a>	06/14/2012	EQUIPMENT FAILUI	NOT COLLISION W/M	0	0	1	DAYLIGHT	DRY	3.394	S-	136	SAVANNAH GROV	1	L-	
9	<a href="#">12564062</a>	09/17/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	7.773	S-	107	ALLIGATOR ROAC	1	L-	
10	<a href="#">12569637</a>	10/03/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	3.397	S-	136	SAVANNAH GROV	0	L-	
11	<a href="#">12594002</a>	12/05/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	3.379	S-	136		10	L-	
12	<a href="#">13525113</a>	04/14/2013	OVERTURN/ROLLO	NOT COLLISION W/M	0	1	0	DARK (STR	DRY	3.042	S-	136	SAVANNAH GROV	64	L-	
13	<a href="#">13542341</a>	06/10/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	WET	3.610	S-	136	SAVANNAH GROV	15	S-	1491
14	<a href="#">13549096</a>	06/26/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	3.583	S-	136	SAVANNAH GROV	13	S-	1491
15	<a href="#">13562381</a>	07/31/2013	OTHER	NOT COLLISION W/M	0	1	0	DARK (NO	WET	3.548	S-	136		10	S-	1491
16	<a href="#">13575528</a>	08/27/2013	MOTOR VEHICLE (I	BACKED INTO	0	1	0	DAYLIGHT	DRY	7.472	S-	107	ALLIGATOR ROAC	29	L-	
17	14503463	01/19/2014	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	3.400	S-	136	SAVANNAH GROV	0	S-	1491
18	<a href="#">14532435</a>	04/18/2014	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	WET	3.399	S-	136	SAVANNAH GROV	0	L-	
19	<a href="#">14535102</a>	04/21/2014	MOTOR VEHICLE (I	ANGLE 3	0	1	0	DAYLIGHT	DRY	7.754	S-	107	ALLIGATOR ROAC	2	S-	1491
					0	8	11									

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OBS	ACCNO	DATE	HARMEVENT	MAC	FA	INJ	PDO	LIGHT	ROAD		BIR	BRN	BRA	ALSB	BDO	SIC	SRN	SRA
									SRFCE	MPT								
1	11013502	02/10/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	0.000	US	52	IRBY ST	1	S-	931		
2	11029874	03/16/2011	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	21.483	S-	107	ALLIGATOR RD	5	S-	740		
3	11029893	03/17/2011	MOTOR VEHICLE (S	ANGLE 2	0	0	1	DAYLIGHT	DRY	0.000	US	52	S IRBY ST	3	L-			
4	11035710	04/15/2011	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	21.464	S-	57	HOWE SPRINGS I	9	S-	740		
5	11053368	05/24/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.352	S-	107	ALLIGATOR RD	1	S-	35		
6	11110899	09/08/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.365	S-	107	ALLIGATOR RD	1	S-	740		
7	<a href="#">11121312</a>	10/10/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	WET	0.170	US	52	IRBY ST	20	L-			
8	<a href="#">11142991</a>	12/07/2011	MOTOR VEHICLE (I	REAR END	0	1	0	DAYLIGHT	WET	21.279	S-	57	E HOWE SPRING:	8	S-	35		
9	11143179	12/10/2011	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DARK (STR	DRY	21.379	S-	57	HOWE SPRINGS	0	S-	740		
10	<a href="#">11148822</a>	12/22/2011	MOTOR VEHICLE (I	REAR END	0	0	1	DUSK	DRY	21.361	S-	107	ALLIGATOR RD	1	S-	740		
11	<a href="#">11149302</a>	12/01/2011	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DAYLIGHT	DRY	0.000	US	52	S IRBY ST	5	L-			
12	<a href="#">11543500</a>	08/17/2011	MOTOR VEHICLE (I	REAR END	0	1	0	DAYLIGHT	DRY	20.239	S-	107		1	S-	552		
13	<a href="#">11545255</a>	08/18/2011	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	0.022	US	52	S IRBY ST	1	L-			
14	<a href="#">11583424</a>	12/03/2011	OVERTURN/ROLLO	NOT COLLISION W/M	0	1	0	DAYLIGHT	DRY	2.277	US	52		200	S-	136		
15	<a href="#">11903560</a>	01/30/2011	GUARDRAIL FACE	NOT COLLISION W/M	0	0	1	DAYLIGHT	DRY	20.522	S-	107		200	US	301		
16	12000562	01/23/2012	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	0.010	US	52	S IRBY ST	1	L-			
17	12004858	01/05/2012	MOTOR VEHICLE (I	ANGLE 2	0	1	0	DARK (STR	DRY	21.361	S-	107	ALLIGATOR RD	0	S-	35		
18	<a href="#">12025580</a>	02/08/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	21.364	S-	107	ALLIGATOR RD	8	S-	740		
19	<a href="#">12034413</a>	04/10/2012	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	21.920	S-	57		26	US	301		
20	<a href="#">12037815</a>	04/30/2012	ANIMAL (ALL OTHE	NOT COLLISION W/M	0	1	0	DARK (NO I	DRY	21.647	S-	107	ALLIGATOR RD	50	S-	740		
21	<a href="#">12039404</a>	05/14/2012	MOTOR VEHICLE (I	REAR END	0	1	0	DAYLIGHT	WET	21.548	S-	107	ALLIGATOR RD	20	S-	740		
22	<a href="#">12041300</a>	05/20/2012	MOTOR VEHICLE (I	ANGLE 3	0	1	0	DAYLIGHT	DRY	21.668	S-	57	HOWE SPRINGS I	10	S-	740		
23	<a href="#">12057466</a>	08/06/2012	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DAYLIGHT	DRY	0.008	US	52	IRBY ST	10	L-			
24	<a href="#">12064298</a>	09/13/2012	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	0.000	US	52	IRBY ST	10	L-			
25	<a href="#">12067734</a>	10/04/2012	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.500	S-	107	ALLIGATOR RD	1	S-	740		
26	<a href="#">12069671</a>	10/12/2012	MOTOR VEHICLE (I	HEAD ON	0	0	1	DAYLIGHT	DRY	0.066	US	52	IRBY ST.	8	L-			
27	<a href="#">12069689</a>	10/17/2012	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.260	S-	107	ALLGATOR RD.	1	S-	35		
28	<a href="#">12077578</a>	11/12/2012	MOTOR VEHICLE (I	REAR END	0	0	1	DUSK	DRY	21.960	S-	107	ALLUGATIR RD	50	S-	740		
29	<a href="#">12080183</a>	11/26/2012	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	21.369	S-	57	E HOWE SPRING:	1	S-	35		
30	<a href="#">12082556</a>	12/09/2012	MOTOR VEHICLE (I	REAR END	0	0	1	DARK (STR	DRY	0.000	US	52	S IRBY ST	2	L-			
31	<a href="#">12503476</a>	01/20/2012	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DARK (STR	WET	21.364	S-	57	E HOWE SPRING:	0	S-	740		
32	<a href="#">12506606</a>	02/09/2012	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.362	S-	57	E HOWE SPRING:	1	S-	35		
33	<a href="#">12589872</a>	11/25/2012	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DARK (NO I	DRY	0.042	US	52	S IRBY ST	3	S-	1719		
34	<a href="#">13000856</a>	01/10/2013	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	21.338	S-	107	ALLIGATOR RD	1	S-	35		
35	<a href="#">13005297</a>	02/13/2013	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	WET	21.366	S-	107	ALLIGATOR RD	30	S-	740		
36	<a href="#">13007472</a>	02/18/2013	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DUSK	DRY	21.460	S-	57	E HOWE SPRING:	0	S-	740		

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OBS	ACCNO	DATE	HARMEVENT	MAC	FA	INJ	PDO	LIGHT	ROAD		BIR	BRN	BRA	ALSB	BDO	SIC	SRN	SRA	
									SRFCE	MPT									
37	<a href="#">13009619</a>	02/15/2013	MOTOR VEHICLE (I	REAR END	0	1	0	DUSK	DRY	0.000	US	52	S. IRBY ST	1	L-				
38	<a href="#">13010154</a>	03/13/2013	MOTOR VEHICLE (I	REAR END	0	1	0	DAYLIGHT	DRY	21.363	S-	57	E HONE SPRINGE	0	S-	35			
39	<a href="#">13012468</a>	03/27/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	0.134	US	52	IRBY ST	1	S-	740			
40	<a href="#">13024878</a>	06/04/2013	MOTOR VEHICLE (I	REAR END	0	1	0	DAYLIGHT	DRY	21.426	S-	57	HOWE SPRINGS I	6	S-	740			
41	<a href="#">13024886</a>	05/31/2013	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	21.306	S-	107	ALLIGATOR RD	8	L-				
42	13031382	07/03/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	WET	21.361	S-	107	ALLIGATOR RD	2	L-				
43	13035478	07/31/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	WET	21.500	S-	107	ALLIGATOR	6	S-	740			
44	13035479	07/31/2013	MOTOR VEHICLE (I	REAR END	0	2	0	DAYLIGHT	WET	21.370	S-	107	ALLIGATOR RD	4	S-	740			
45	13035489	08/01/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DARK (STR	DRY	0.015	US	52	S IRBY ST	1	L-				
46	13036406	08/08/2013	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DARK (LIGH	DRY	0.036	US	52	S IRBY	1	L-				
47	13037126	08/17/2013	MOTOR VEHICLE (S	REAR END	0	0	1	DARK (LIGH	DRY	0.000	US	52	S IRBY ST	0	L-				
48	13039429	08/28/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	0.137	US	52	S IRBY ST	6	L-				
49	13053115	11/23/2013	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	WET	21.460	S-	57	E HOWE SPRING:	4	S-	35			
50	13053117	12/02/2013	MOTOR VEHICLE (I	REAR END	0	1	0	DARK (STR	DRY	21.524	S-	107	ALLIGATOR RD	17	S-	740			
51	13055229	12/10/2013	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	DRY	21.410	S-	57	HOWE SPRINGS I	1	S-	740			
52	13055991	12/14/2013		REAR END	0	2	0	DARK (STR		0.000	US	52	S IRBY ST	3	L-				
53	<a href="#">13512903</a>	02/23/2013	MOTOR VEHICLE (I	ANGLE 1	0	2	0	DUSK	WET	0.615	US	52	S IRBY ST	60	S-	1719			
54	<a href="#">13519288</a>	03/27/2013	MOTOR VEHICLE (I	ANGLE 2	0	0	1	DAYLIGHT	DRY	0.049	US	52		2	L-				
55	<a href="#">13523913</a>	04/10/2013	MOTOR VEHICLE (I	REAR END	0	0	1	DAYLIGHT	DRY	21.376	S-	57	E HOWE SPRING:	1	S-	740			
56	<a href="#">13589372</a>	09/25/2013	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	0.026	US	52	S IRBY ST	1	L-				
57	<a href="#">14004930</a>	02/21/2014	MOTOR VEHICLE (I	SIDESWIPE SAME DI	0	0	1	DAYLIGHT	DRY	21.522	S-	57	HOWE SPRINGS I	2	S-	740			
58	<a href="#">14007409</a>	03/08/2014	MOTOR VEHICLE (S	REAR END	0	0	1	DARK (LIGH	DRY	30.225	S-	57	HOWE SPRINGS I	0	S-	740			
59	<a href="#">14008173</a>	03/14/2014	MOTOR VEHICLE (I	ANGLE 3	0	0	1	DAYLIGHT	DRY	21.463	S-	57	HOWE SPRINGS I	0	S-	35			
60	<a href="#">14008187</a>	03/17/2014	MOTOR VEHICLE (S	REAR END	0	0	1	DAYLIGHT	WET	21.460	S-	107	ALLIGATOR RD	4	S-	740			
61	<a href="#">14008188</a>	03/17/2014	MOTOR VEHICLE (S	REAR END	0	1	0	DAYLIGHT	WET	0.060	US	52	S IRBY ST	6	L-				
62	<a href="#">14011982</a>	04/15/2014	MOTOR VEHICLE (I	HEAD ON	0	0	1	DARK (LIGH	WET	31.310	S-	107	ALLIGATOR RD	0	S-	35			
63	<a href="#">14536397</a>	04/29/2014	MOTOR VEHICLE (I	ANGLE 1	0	0	1	DAYLIGHT	DRY	21.461	S-	57	E HOWE SPRING:	0	S-	740			
					<b>0</b>	<b>15</b>	<b>48</b>												

## **ROADWAY SEGMENT ANALYSIS**



Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 138 veh/h  
Opposing direction volume, Vo 114 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.926
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	164 pc/h	137 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.1 mi/h  
Average travel speed, ATfSd 45.8 mi/h  
Percent Free Flow Speed, PFfS 89.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	155 pc/h	128 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	17.3	%	
Adjustment for no-passing zones, fnp	56.5		
Percent time-spent-following, PTSFd	48.2	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	77	veh-mi
Peak-hour vehicle-miles of travel, VMT60	276	veh-mi
Peak 15-min total travel time, TT15	1.7	veh-h
Capacity from ATS, CdATS	1574	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1574	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	45.8	mi/h
Percent time-spent-following, PTSFd (from above)	48.2	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	153.3
Effective width of outside lane, We	20.96
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.86
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - EB  
 From/To US 76 - Twin Church Rd  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	2.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	10	/mi

Analysis direction volume, Vd 125 veh/h  
 Opposing direction volume, Vo 105 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.926
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	149 pc/h	126 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 55.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 51.2 mi/h

Adjustment for no-passing zones, fnp 2.9 mi/h  
 Average travel speed, ATfSd 46.1 mi/h  
 Percent Free Flow Speed, PFfS 90.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	140	118	pc/h
Base percent time-spent-following,(note-4) BPTSFd	15.8	%	
Adjustment for no-passing zones, fnp	55.5		
Percent time-spent-following, PTSFd	45.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	69	veh-mi
Peak-hour vehicle-miles of travel, VMT60	250	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h
Capacity from ATS, CdATS	1574	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1574	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	46.1	mi/h
Percent time-spent-following, PTSFd (from above)	45.9	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	138.9
Effective width of outside lane, We	22.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.59
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 116 veh/h  
Opposing direction volume, Vo 138 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.7
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.926	0.935
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	139 pc/h	164 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.5 mi/h  
Average travel speed, ATSD 45.4 mi/h  
Percent Free Flow Speed, PFFS 88.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	130	155	pc/h
Base percent time-spent-following,(note-4) BPTSFd	14.8	%	
Adjustment for no-passing zones, fnp	56.7		
Percent time-spent-following, PTSFd	40.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	64	veh-mi
Peak-hour vehicle-miles of travel, VMT60	232	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h
Capacity from ATS, CdATS	1590	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1590	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	45.4	mi/h
Percent time-spent-following, PTSFd (from above)	40.7	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	128.9
Effective width of outside lane, We	22.72
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.39
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 105 veh/h  
Opposing direction volume, Vo 125 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.7
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.926	0.935
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	126 pc/h	149 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.3 mi/h  
Average travel speed, ATSD 45.8 mi/h  
Percent Free Flow Speed, PFFS 89.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	118 pc/h	140 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	13.5	%	
Adjustment for no-passing zones, fnp	55.5		
Percent time-spent-following, PTSFD	38.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	58	veh-mi
Peak-hour vehicle-miles of travel, VMT60	210	veh-mi
Peak 15-min total travel time, TT15	1.3	veh-h
Capacity from ATS, CdATS	1590	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1590	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	45.8	mi/h
Percent time-spent-following, PTSFD (from above)	38.9	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	116.7
Effective width of outside lane, We	23.60
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.14
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 114 veh/h  
Opposing direction volume, Vo 97 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.9
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.926	0.917
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	137 pc/h	118 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 51.2 mi/h

Adjustment for no-passing zones, fnp 2.8 mi/h  
Average travel speed, ATSD 46.4 mi/h  
Percent Free Flow Speed, PFFS 90.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	128	109	pc/h
Base percent time-spent-following,(note-4) BPTSFd	14.5	%	
Adjustment for no-passing zones, fnp	54.6		
Percent time-spent-following, PTSFd	44.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	63	veh-mi
Peak-hour vehicle-miles of travel, VMT60	228	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h
Capacity from ATS, CdATS	1559	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1559	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	46.4	mi/h
Percent time-spent-following, PTSFd (from above)	44.0	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	126.7
Effective width of outside lane, We	22.88
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.35
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - EB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 146 veh/h  
Opposing direction volume, Vo 123 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.926
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	173 pc/h	148 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.3 mi/h  
Average travel speed, ATfSd 45.5 mi/h  
Percent Free Flow Speed, PFfS 88.8 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	164	138	pc/h
Base percent time-spent-following,(note-4) BPTSFd	18.1	%	
Adjustment for no-passing zones, fnp	57.4		
Percent time-spent-following, PTSFd	49.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	81	veh-mi
Peak-hour vehicle-miles of travel, VMT60	292	veh-mi
Peak 15-min total travel time, TT15	1.8	veh-h
Capacity from ATS, CdATS	1590	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1590	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	45.5	mi/h
Percent time-spent-following, PTSFd (from above)	49.3	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	162.2
Effective width of outside lane, We	20.32
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.02
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To US 76 - Twin Church Rd  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	2.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	10	/mi

Analysis direction volume, Vd 97 veh/h  
Opposing direction volume, Vo 114 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.9	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.917	0.926
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	118 pc/h	137 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 55.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.1 mi/h  
Average travel speed, ATSD 46.1 mi/h  
Percent Free Flow Speed, PFFS 90.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	109 pc/h	128 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	12.6	%	
Adjustment for no-passing zones, fnp	54.6		
Percent time-spent-following, PTSFd	37.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	54	veh-mi
Peak-hour vehicle-miles of travel, VMT60	194	veh-mi
Peak 15-min total travel time, TT15	1.2	veh-h
Capacity from ATS, CdATS	1574	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1574	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	46.1	mi/h
Percent time-spent-following, PTSFd (from above)	37.7	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	107.8
Effective width of outside lane, We	24.24
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	3.94
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - WB  
 From/To US 76 - Twin Church Rd  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 123 veh/h  
 Opposing direction volume, Vo 146 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.7
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.926	0.935
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	148 pc/h	173 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 55.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 51.2 mi/h

Adjustment for no-passing zones, fnp 3.6 mi/h  
 Average travel speed, ATfSd 45.1 mi/h  
 Percent Free Flow Speed, PFFfS 88.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	138 pc/h	164 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	15.6	%	
Adjustment for no-passing zones, fnp	57.4		
Percent time-spent-following, PTSFD	41.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	246	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h
Capacity from ATS, CdATS	1603	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1603	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	45.1	mi/h
Percent time-spent-following, PTSFD (from above)	41.8	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	136.7
Effective width of outside lane, We	22.16
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.55
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period AM Peak  
 Highway Alligator Road - EB  
 From/To Twin Church Rd to Knoll Wood  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90	
Shoulder width	4.0 ft	% Trucks and buses	8	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	2.0 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	0	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	20	/mi

Analysis direction volume, Vd 148 veh/h  
 Opposing direction volume, Vo 146 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.6	1.7
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.954	0.947
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	172 pc/h	171 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 3.5 mi/h  
 Average travel speed, ATfSd 32.5 mi/h  
 Percent Free Flow Speed, PFfS 84.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	166 pc/h	164 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	18.3 %		
Adjustment for no-passing zones, fnp	61.0		
Percent time-spent-following, PTSFd	49.0 %		

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	82	veh-mi
Peak-hour vehicle-miles of travel, VMT60	296	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h
Capacity from ATS, CdATS	1622	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1622	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	32.5	mi/h
Percent time-spent-following, PTSFd (from above)	49.0	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	164.4
Effective width of outside lane, We	20.16
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.35
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - EB  
From/To Twin Church Rd to Knoll Wood  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	8 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 172 veh/h  
Opposing direction volume, Vo 175 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	199 pc/h	202 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 4.0 mi/h  
Average travel speed, ATfSd 31.6 mi/h  
Percent Free Flow Speed, PFfS 81.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	193 pc/h	196 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	20.9 %		
Adjustment for no-passing zones, fnp	64.7		
Percent time-spent-following, PTSFD	53.0 %		

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	96	veh-mi
Peak-hour vehicle-miles of travel, VMT60	344	veh-mi
Peak 15-min total travel time, TT15	3.0	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.6	mi/h
Percent time-spent-following, PTSFD (from above)	53.0	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	191.1
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.18
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Twin Church Rd to Knoll Wood  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	8 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 146 veh/h  
Opposing direction volume, Vo 148 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.6
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.947	0.954
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	171 pc/h	172 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 3.6 mi/h  
Average travel speed, ATfSd 32.5 mi/h  
Percent Free Flow Speed, PFfS 83.9 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	164	166	pc/h
Base percent time-spent-following,(note-4) BPTSFd	18.1	%	
Adjustment for no-passing zones, fnp	61.0		
Percent time-spent-following, PTSFd	48.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	81	veh-mi
Peak-hour vehicle-miles of travel, VMT60	292	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h
Capacity from ATS, CdATS	1622	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1622	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	32.5	mi/h
Percent time-spent-following, PTSFd (from above)	48.4	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	162.2
Effective width of outside lane, We	20.32
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.31
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - WB  
 From/To Twin Church Rd to Knoll Wood  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90	
Shoulder width	4.0 ft	% Trucks and buses	8	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	2.0 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	0	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	20	/mi

Analysis direction volume, Vd 175 veh/h  
 Opposing direction volume, Vo 172 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	202 pc/h	199 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 4.0 mi/h  
 Average travel speed, ATSD 31.6 mi/h  
 Percent Free Flow Speed, PFFS 81.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	196	193	pc/h
Base percent time-spent-following,(note-4) BPTSFD	21.2	%	
Adjustment for no-passing zones, fnp	64.7		
Percent time-spent-following, PTSFD	53.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	97	veh-mi
Peak-hour vehicle-miles of travel, VMT60	350	veh-mi
Peak 15-min total travel time, TT15	3.1	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.6	mi/h
Percent time-spent-following, PTSFD (from above)	53.8	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	194.4
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.19
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To Twin Church Rd to Knoll Wood  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90	
Shoulder width	4.0 ft	% Trucks and buses	8	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	2.0 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	0	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	20	/mi

Analysis direction volume, Vd 176 veh/h  
Opposing direction volume, Vo 173 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	203 pc/h	200 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 4.0 mi/h  
Average travel speed, ATSD 31.6 mi/h  
Percent Free Flow Speed, PFFS 81.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)		
PCE for trucks, ET	1.1	1.1		
PCE for RVs, ER	1.0	1.0		
Heavy-vehicle adjustment factor, fHV	0.992	0.992		
Grade adjustment factor,(note-1) fg	1.00	1.00		
Directional flow rate,(note-2) vi	197	194	pc/h	pc/h
Base percent time-spent-following,(note-4) BPTSFD	21.3	%		
Adjustment for no-passing zones, fnp	64.8			
Percent time-spent-following, PTSFD	53.9	%		

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C		
Volume to capacity ratio, v/c	0.12		
Peak 15-min vehicle-miles of travel, VMT15	98	veh-mi	
Peak-hour vehicle-miles of travel, VMT60	352	veh-mi	
Peak 15-min total travel time, TT15	3.1	veh-h	
Capacity from ATS, CdATS	1635	veh/h	
Capacity from PTSF, CdPTSF	1687	veh/h	
Directional Capacity	1635	veh/h	

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.6	mi/h
Percent time-spent-following, PTSFD (from above)	53.9	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	195.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.20
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - EB  
 From/To Twin Church Rd to Knoll Wood  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	8 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 205 veh/h  
 Opposing direction volume, Vo 209 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	237 pc/h	241 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 3.7 mi/h  
 Average travel speed, ATfSd 31.3 mi/h  
 Percent Free Flow Speed, PFFfS 80.8 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	230 pc/h	234 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	24.8	%	
Adjustment for no-passing zones, fnp	62.6		
Percent time-spent-following, PTSFD	55.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	114	veh-mi
Peak-hour vehicle-miles of travel, VMT60	410	veh-mi
Peak 15-min total travel time, TT15	3.6	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.3	mi/h
Percent time-spent-following, PTSFD (from above)	55.8	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	227.8
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.27
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Twin Church Rd to Knoll Wood  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90	
Shoulder width	4.0 ft	% Trucks and buses	8	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	2.0 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	0	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	20	/mi

Analysis direction volume, Vd 173 veh/h  
Opposing direction volume, Vo 176 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	200 pc/h	203 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 4.0 mi/h  
Average travel speed, ATfSd 31.6 mi/h  
Percent Free Flow Speed, PFfS 81.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	194 pc/h	197 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	21.0	%	
Adjustment for no-passing zones, fnp	64.8		
Percent time-spent-following, PTSFD	53.2	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	96	veh-mi
Peak-hour vehicle-miles of travel, VMT60	346	veh-mi
Peak 15-min total travel time, TT15	3.0	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.6	mi/h
Percent time-spent-following, PTSFD (from above)	53.2	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	192.2
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.18
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Twin Church Rd to Knoll Wood  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	8 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 209 veh/h  
Opposing direction volume, Vo 205 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	241 pc/h	237 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 3.8 mi/h  
Average travel speed, ATfSd 31.2 mi/h  
Percent Free Flow Speed, PFfS 80.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.992	0.992	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	234 pc/h	230 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	25.2	%	
Adjustment for no-passing zones, fnp	62.6		
Percent time-spent-following, PTSFD	56.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	116	veh-mi
Peak-hour vehicle-miles of travel, VMT60	418	veh-mi
Peak 15-min total travel time, TT15	3.7	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1687	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.2	mi/h
Percent time-spent-following, PTSFD (from above)	56.8	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	232.2
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.28
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	0.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 417 veh/h  
Opposing direction volume, Vo 563 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	473 pc/h	632 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.7 mi/h  
Average travel speed, ATSD 28.4 mi/h  
Percent Free Flow Speed, PFFS 73.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	463	626	pc/h
Base percent time-spent-following,(note-4) BPTSFD	50.7	%	
Adjustment for no-passing zones, fnp	35.4		
Percent time-spent-following, PTSFD	65.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	58	veh-mi
Peak-hour vehicle-miles of travel, VMT60	209	veh-mi
Peak 15-min total travel time, TT15	2.0	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.4	mi/h
Percent time-spent-following, PTSFD (from above)	65.8	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	463.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.34
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - EB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	0.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 395 veh/h  
Opposing direction volume, Vo 455 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.3	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.971	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	452 pc/h	516 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.2 mi/h  
Average travel speed, ATfSd 29.0 mi/h  
Percent Free Flow Speed, PFfS 75.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	439 pc/h	506 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	47.7	%	
Adjustment for no-passing zones, fnp	40.7		
Percent time-spent-following, PTSFD	66.6	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	55	veh-mi
Peak-hour vehicle-miles of travel, VMT60	198	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	29.0	mi/h
Percent time-spent-following, PTSFD (from above)	66.6	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	438.9
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.31
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	0.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 563 veh/h  
Opposing direction volume, Vo 417 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	632 pc/h	473 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.4 mi/h  
Average travel speed, ATsd 27.8 mi/h  
Percent Free Flow Speed, PFFS 71.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	626 pc/h	463 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	57.4	%	
Adjustment for no-passing zones, fnp	35.4		
Percent time-spent-following, PTSFD	77.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	78	veh-mi
Peak-hour vehicle-miles of travel, VMT60	282	veh-mi
Peak 15-min total travel time, TT15	2.8	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.8	mi/h
Percent time-spent-following, PTSFD (from above)	77.7	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	625.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.49
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	0.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 455 veh/h  
Opposing direction volume, Vo 386 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.971
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	516 pc/h	442 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.5 mi/h  
Average travel speed, ATSD 28.8 mi/h  
Percent Free Flow Speed, PFFS 74.3 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	506	429	pc/h
Base percent time-spent-following,(note-4) BPTSFD	51.1	%	
Adjustment for no-passing zones, fnp	40.7		
Percent time-spent-following, PTSFD	73.1	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	63	veh-mi
Peak-hour vehicle-miles of travel, VMT60	228	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h
Capacity from ATS, CdATS	1651	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1651	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.8	mi/h
Percent time-spent-following, PTSFD (from above)	73.1	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	505.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.38
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	0.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 490 veh/h  
Opposing direction volume, Vo 660 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	556 pc/h	741 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.4 mi/h  
Average travel speed, ATSD 27.3 mi/h  
Percent Free Flow Speed, PFFS 70.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	544 pc/h	733 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	56.8	%	
Adjustment for no-passing zones, fnp	30.7		
Percent time-spent-following, PTSFD	69.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	245	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.3	mi/h
Percent time-spent-following, PTSFD (from above)	69.9	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	544.4
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.42
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - EB  
 From/To Knoll Wood Rd - Savannah Grove  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	0.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 454 veh/h  
 Opposing direction volume, Vo 534 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	515 pc/h	599 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.8 mi/h  
 Average travel speed, ATSD 28.3 mi/h  
 Percent Free Flow Speed, PFFS 73.0 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	504	593	pc/h
Base percent time-spent-following,(note-4) BPTSFD	52.8	%	
Adjustment for no-passing zones, fnp	36.3		
Percent time-spent-following, PTSFD	69.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	63	veh-mi
Peak-hour vehicle-miles of travel, VMT60	227	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.3	mi/h
Percent time-spent-following, PTSFD (from above)	69.5	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	504.4
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.38
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Knoll Wood Rd - Savannah Grove  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	0.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 660 veh/h  
Opposing direction volume, Vo 490 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	741 pc/h	556 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h  
Average travel speed, ATfSd 26.6 mi/h  
Percent Free Flow Speed, PFfS 68.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	733	544	pc/h
Base percent time-spent-following,(note-4) BPTSFD	64.3	%	
Adjustment for no-passing zones, fnp	30.7		
Percent time-spent-following, PTSFD	81.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.44	
Peak 15-min vehicle-miles of travel, VMT15	92	veh-mi
Peak-hour vehicle-miles of travel, VMT60	330	veh-mi
Peak 15-min total travel time, TT15	3.5	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	26.6	mi/h
Percent time-spent-following, PTSFD (from above)	81.9	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	733.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.57
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - WB  
 From/To Knoll Wood Rd - Savannah Grove  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	0.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 534 veh/h  
 Opposing direction volume, Vo 454 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.990	0.980
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	599 pc/h	515 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h  
 Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width, (note-3) fLS 1.3 mi/h  
 Adj. for access point density, (note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.2 mi/h  
 Average travel speed, ATSD 27.9 mi/h  
 Percent Free Flow Speed, PFFS 72.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	593 pc/h	504 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	57.2	%	
Adjustment for no-passing zones, fnp	36.3		
Percent time-spent-following, PTSFD	76.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	74	veh-mi
Peak-hour vehicle-miles of travel, VMT60	267	veh-mi
Peak 15-min total travel time, TT15	2.7	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	0.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.9	mi/h
Percent time-spent-following, PTSFD (from above)	76.8	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	593.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.47
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period AM Peak  
 Highway Alligator Road - EB  
 From/To Savannah Grove - Ashford  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 456 veh/h  
 Opposing direction volume, Vo 590 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	517 pc/h	662 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.6 mi/h  
 Average travel speed, ATSD 27.9 mi/h  
 Percent Free Flow Speed, PFFS 72.2 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	507 pc/h	656 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	53.4	%	
Adjustment for no-passing zones, fnp	33.9		
Percent time-spent-following, PTSFD	68.2	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	127	veh-mi
Peak-hour vehicle-miles of travel, VMT60	456	veh-mi
Peak 15-min total travel time, TT15	4.5	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.9	mi/h
Percent time-spent-following, PTSFD (from above)	68.2	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	506.7
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.39
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - EB  
From/To Savannah Grove - Ashford  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 565 veh/h  
Opposing direction volume, Vo 495 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	634 pc/h	561 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h  
Average travel speed, ATSD 27.5 mi/h  
Percent Free Flow Speed, PFFS 70.9 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	628	550	pc/h
Base percent time-spent-following,(note-4) BPTSFD	58.8	%	
Adjustment for no-passing zones, fnp	34.3		
Percent time-spent-following, PTSFD	77.1	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	157	veh-mi
Peak-hour vehicle-miles of travel, VMT60	565	veh-mi
Peak 15-min total travel time, TT15	5.7	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.5	mi/h
Percent time-spent-following, PTSFD (from above)	77.1	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	627.8
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.49
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Savannah Grove - Ashford  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

----- Input Data -----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 590 veh/h  
Opposing direction volume, Vo 456 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.990	0.980
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	662 pc/h	517 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h  
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfs 45.0 mi/h  
Adj. for lane and shoulder width, (note-3) fLS 1.3 mi/h  
Adj. for access point density, (note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.2 mi/h  
Average travel speed, ATsd 27.4 mi/h  
Percent Free Flow Speed, PFFS 70.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	656	507	pc/h
Base percent time-spent-following,(note-4) BPTSFD	60.5	%	
Adjustment for no-passing zones, fnp	33.9		
Percent time-spent-following, PTSFD	79.6	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.39	
Peak 15-min vehicle-miles of travel, VMT15	164	veh-mi
Peak-hour vehicle-miles of travel, VMT60	590	veh-mi
Peak 15-min total travel time, TT15	6.0	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.4	mi/h
Percent time-spent-following, PTSFD (from above)	79.6	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	655.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.52
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Savannah Grove - Ashford  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 495 veh/h  
Opposing direction volume, Vo 565 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.980	0.990
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	561 pc/h	634 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h  
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width, (note-3) fLS 1.3 mi/h  
Adj. for access point density, (note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.7 mi/h  
Average travel speed, ATSD 27.7 mi/h  
Percent Free Flow Speed, PFFS 71.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	550	628	pc/h
Base percent time-spent-following,(note-4) BPTSFD	56.0	%	
Adjustment for no-passing zones, fnp	34.3		
Percent time-spent-following, PTSFD	72.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	138	veh-mi
Peak-hour vehicle-miles of travel, VMT60	495	veh-mi
Peak 15-min total travel time, TT15	5.0	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.7	mi/h
Percent time-spent-following, PTSFD (from above)	72.0	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	550.0
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.43
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period AM Peak  
 Highway Alligator Road - EB  
 From/To Savannah Grove - Ashford  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 535 veh/h  
 Opposing direction volume, Vo 690 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	600 pc/h	774 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.3 mi/h  
 Average travel speed, ATfSd 26.8 mi/h  
 Percent Free Flow Speed, PFfS 69.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	594	767	pc/h
Base percent time-spent-following,(note-4) BPTSFD	59.9	%	
Adjustment for no-passing zones, fnp	28.8		
Percent time-spent-following, PTSFD	72.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	149	veh-mi
Peak-hour vehicle-miles of travel, VMT60	535	veh-mi
Peak 15-min total travel time, TT15	5.6	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	26.8	mi/h
Percent time-spent-following, PTSFD (from above)	72.5	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	594.4
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.47
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Alligator Road - EB  
 From/To Savannah Grove - Ashford  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

----- Input Data -----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	20	/mi

Analysis direction volume, Vd 663 veh/h  
 Opposing direction volume, Vo 580 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.990	0.990
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	744 pc/h	651 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h  
 Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfs 45.0 mi/h  
 Adj. for lane and shoulder width, (note-3) fLS 1.3 mi/h  
 Adj. for access point density, (note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.6 mi/h  
 Average travel speed, ATsd 26.2 mi/h  
 Percent Free Flow Speed, PFFS 67.8 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	737	644	pc/h
Base percent time-spent-following,(note-4) BPTSFD	65.6	%	
Adjustment for no-passing zones, fnp	28.7		
Percent time-spent-following, PTSFD	80.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.44	
Peak 15-min vehicle-miles of travel, VMT15	184	veh-mi
Peak-hour vehicle-miles of travel, VMT60	663	veh-mi
Peak 15-min total travel time, TT15	7.0	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	26.2	mi/h
Percent time-spent-following, PTSFD (from above)	80.9	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	736.7
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.58
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Savannah Grove - Ashford  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 690 veh/h  
Opposing direction volume, Vo 535 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	774 pc/h	600 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.8 mi/h  
Average travel speed, ATsd 26.2 mi/h  
Percent Free Flow Speed, PFFS 67.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	767	594	pc/h
Base percent time-spent-following,(note-4) BPTSFD	66.1	%	
Adjustment for no-passing zones, fnp	28.8		
Percent time-spent-following, PTSFD	82.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.46	
Peak 15-min vehicle-miles of travel, VMT15	192	veh-mi
Peak-hour vehicle-miles of travel, VMT60	690	veh-mi
Peak 15-min total travel time, TT15	7.3	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	26.2	mi/h
Percent time-spent-following, PTSFD (from above)	82.3	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	766.7
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.60
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Savannah Grove - Ashford  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 580 veh/h  
Opposing direction volume, Vo 663 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	651 pc/h	744 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.4 mi/h  
Average travel speed, ATsd 26.5 mi/h  
Percent Free Flow Speed, PFFS 68.5 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	644 pc/h	737 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	62.1	%	
Adjustment for no-passing zones, fnp	28.7		
Percent time-spent-following, PTSFD	75.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.38	
Peak 15-min vehicle-miles of travel, VMT15	161	veh-mi
Peak-hour vehicle-miles of travel, VMT60	580	veh-mi
Peak 15-min total travel time, TT15	6.1	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	26.5	mi/h
Percent time-spent-following, PTSFD (from above)	75.5	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	644.4
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.51
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 455 veh/h  
Opposing direction volume, Vo 412 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	516 pc/h	467 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.4 mi/h  
Average travel speed, ATSD 28.7 mi/h  
Percent Free Flow Speed, PFFS 74.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	506	458	pc/h
Base percent time-spent-following,(note-4) BPTSFD	51.0	%	
Adjustment for no-passing zones, fnp	40.6		
Percent time-spent-following, PTSFD	72.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	316	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1138	veh-mi
Peak 15-min total travel time, TT15	11.0	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.7	mi/h
Percent time-spent-following, PTSFD (from above)	72.3	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	505.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.38
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - EB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 432 veh/h  
Opposing direction volume, Vo 449 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	490 pc/h	509 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.2 mi/h  
Average travel speed, ATfSd 28.7 mi/h  
Percent Free Flow Speed, PFfS 74.3 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	480	499	pc/h
Base percent time-spent-following,(note-4) BPTSFD	49.7	%	
Adjustment for no-passing zones, fnp	40.8		
Percent time-spent-following, PTSFD	69.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.29	
Peak 15-min vehicle-miles of travel, VMT15	300	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1080	veh-mi
Peak 15-min total travel time, TT15	10.4	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.7	mi/h
Percent time-spent-following, PTSFD (from above)	69.7	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	480.0
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.36
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - WB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 412 veh/h  
Opposing direction volume, Vo 455 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	467 pc/h	516 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFsd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.2 mi/h  
Average travel speed, ATsd 28.9 mi/h  
Percent Free Flow Speed, PFFS 74.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	458	506	pc/h
Base percent time-spent-following,(note-4) BPTSFD	49.0	%	
Adjustment for no-passing zones, fnp	40.6		
Percent time-spent-following, PTSFD	68.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	286	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1030	veh-mi
Peak 15-min total travel time, TT15	9.9	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.9	mi/h
Percent time-spent-following, PTSFD (from above)	68.3	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	457.8
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.33
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 449 veh/h  
Opposing direction volume, Vo 432 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	509 pc/h	490 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.3 mi/h  
Average travel speed, ATfSd 28.7 mi/h  
Percent Free Flow Speed, PFfS 74.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	499 pc/h	480 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	50.6	%	
Adjustment for no-passing zones, fnp	40.8		
Percent time-spent-following, PTSFd	71.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	312	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1123	veh-mi
Peak 15-min total travel time, TT15	10.9	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.7	mi/h
Percent time-spent-following, PTSFd (from above)	71.4	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	498.9
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.38
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Alligator Road - EB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 533 veh/h  
Opposing direction volume, Vo 482 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.980
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	598 pc/h	546 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h  
Average travel speed, ATfSd 27.8 mi/h  
Percent Free Flow Speed, PFfS 71.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	592 pc/h	536 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	56.6	%	
Adjustment for no-passing zones, fnp	36.0		
Percent time-spent-following, PTSFD	75.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	370	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1333	veh-mi
Peak 15-min total travel time, TT15	13.3	veh-h
Capacity from ATS, CdATS	1666	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1666	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.8	mi/h
Percent time-spent-following, PTSFD (from above)	75.5	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	592.2
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.46
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 505 veh/h  
Opposing direction volume, Vo 525 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	567 pc/h	589 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.8 mi/h  
Average travel speed, ATSD 27.9 mi/h  
Percent Free Flow Speed, PFFS 72.0 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	561 pc/h	583 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	55.7	%	
Adjustment for no-passing zones, fnp	36.0		
Percent time-spent-following, PTSFD	73.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	351	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1263	veh-mi
Peak 15-min total travel time, TT15	12.6	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.9	mi/h
Percent time-spent-following, PTSFD (from above)	73.4	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	561.1
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.44
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period AM Peak  
 Highway Alligator Road - WB  
 From/To Ashford - US 52/301  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 482 veh/h  
 Opposing direction volume, Vo 533 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.980	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	546 pc/h	598 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.8 mi/h  
 Average travel speed, ATSD 28.0 mi/h  
 Percent Free Flow Speed, PFFS 72.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	536	592	pc/h
Base percent time-spent-following,(note-4) BPTSFD	54.7	%	
Adjustment for no-passing zones, fnp	36.0		
Percent time-spent-following, PTSFD	71.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	335	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1205	veh-mi
Peak 15-min total travel time, TT15	12.0	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.0	mi/h
Percent time-spent-following, PTSFD (from above)	71.8	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	535.6
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.41
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Alligator Road - WB  
From/To Ashford - US 52/301  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	2.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	20 /mi

Analysis direction volume, Vd 525 veh/h  
Opposing direction volume, Vo 505 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.990	0.990
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	589 pc/h	567 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 5.0 mi/h

Free-flow speed, FFfSd 38.7 mi/h

Adjustment for no-passing zones, fnp 1.9 mi/h  
Average travel speed, ATfSd 27.8 mi/h  
Percent Free Flow Speed, PFFfS 71.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	583	561	pc/h
Base percent time-spent-following,(note-4) BPTSFD	56.9	%	
Adjustment for no-passing zones, fnp	36.0		
Percent time-spent-following, PTSFD	75.2	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	365	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1313	veh-mi
Peak 15-min total travel time, TT15	13.1	veh-h
Capacity from ATS, CdATS	1683	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1683	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	2.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	27.8	mi/h
Percent time-spent-following, PTSFD (from above)	75.2	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	583.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.46
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
 E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period AM Peak  
 Highway Twin Church Road - NB  
 From/To US 76 - Alligator Road  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	7 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 237 veh/h  
 Opposing direction volume, Vo 95 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.9
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.973	0.941
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	271 pc/h	112 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h  
 Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfS 45.0 mi/h  
 Adj. for lane and shoulder width, (note-3) fLS 1.3 mi/h  
 Adj. for access point density, (note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 41.2 mi/h

Adjustment for no-passing zones, fnp 2.6 mi/h  
 Average travel speed, ATfSd 35.6 mi/h  
 Percent Free Flow Speed, PFfS 86.5 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	265	106	pc/h
Base percent time-spent-following,(note-4) BPTSFd	27.3	%	
Adjustment for no-passing zones, fnp	48.3		
Percent time-spent-following, PTSFd	61.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	66	veh-mi
Peak-hour vehicle-miles of travel, VMT60	237	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h
Capacity from ATS, CdATS	1600	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1600	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	35.6	mi/h
Percent time-spent-following, PTSFd (from above)	61.8	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	263.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.02
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Twin Church Road - SB  
From/To US 76 - Alligator Road  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	10	/mi

Analysis direction volume, Vd 95 veh/h  
Opposing direction volume, Vo 237 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.9	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.941	0.973
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	112 pc/h	271 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 41.2 mi/h

Adjustment for no-passing zones, fnp 3.5 mi/h  
Average travel speed, ATSD 34.7 mi/h  
Percent Free Flow Speed, PFFS 84.2 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	106 pc/h	265 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	13.7	%	
Adjustment for no-passing zones, fnp	48.3		
Percent time-spent-following, PTSFD	27.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	26	veh-mi
Peak-hour vehicle-miles of travel, VMT60	95	veh-mi
Peak 15-min total travel time, TT15	0.7	veh-h
Capacity from ATS, CdATS	1654	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1654	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.7	mi/h
Percent time-spent-following, PTSFD (from above)	27.5	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	105.6
Effective width of outside lane, We	24.40
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	2.86
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period PM Peak  
Highway Twin Church Road - NB  
From/To US 76 - Alligator Road  
Jurisdiction Florence  
Analysis Year 2020  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	7 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 136 veh/h  
Opposing direction volume, Vo 255 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.953	0.973
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	159 pc/h	291 pc/h

Free-Flow Speed from Field Measurement:  
Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h  
Estimated Free-Flow Speed:  
Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h  
Free-flow speed, FFSd 41.2 mi/h  
Adjustment for no-passing zones, fnp 3.4 mi/h  
Average travel speed, ATSD 34.3 mi/h  
Percent Free Flow Speed, PFFS 83.3 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	152 pc/h	285 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	18.4	%	
Adjustment for no-passing zones, fnp	52.1		
Percent time-spent-following, PTSFD	36.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	38	veh-mi
Peak-hour vehicle-miles of travel, VMT60	136	veh-mi
Peak 15-min total travel time, TT15	1.1	veh-h
Capacity from ATS, CdATS	1654	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1654	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.3	mi/h
Percent time-spent-following, PTSFD (from above)	36.5	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----



Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	151.1
Effective width of outside lane, We	21.12
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	3.79
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Twin Church Road - SB  
 From/To US 76 - Alligator Road  
 Jurisdiction Florence  
 Analysis Year 2020  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90	
Shoulder width	4.0 ft	% Trucks and buses	7	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	1.0 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	0	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	10	/mi

Analysis direction volume, Vd 255 veh/h  
 Opposing direction volume, Vo 136 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.7
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.973	0.953
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	291 pc/h	159 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFfSd 41.2 mi/h

Adjustment for no-passing zones, fnp 3.3 mi/h  
 Average travel speed, ATfSd 34.4 mi/h  
 Percent Free Flow Speed, PFfS 83.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	285	152	pc/h
Base percent time-spent-following,(note-4) BPTSFd	29.0	%	
Adjustment for no-passing zones, fnp	52.1		
Percent time-spent-following, PTSFd	63.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.17	
Peak 15-min vehicle-miles of travel, VMT15	71	veh-mi
Peak-hour vehicle-miles of travel, VMT60	255	veh-mi
Peak 15-min total travel time, TT15	2.1	veh-h
Capacity from ATS, CdATS	1620	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1620	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.4	mi/h
Percent time-spent-following, PTSFd (from above)	63.0	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	283.3
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.06
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Twin Church Road - NB  
From/To US 76 - Alligator Road  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	7 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 281 veh/h  
Opposing direction volume, Vo 113 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.973	0.947
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	321 pc/h	133 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 41.2 mi/h

Adjustment for no-passing zones, fnp 2.9 mi/h  
Average travel speed, ATSD 34.7 mi/h  
Percent Free Flow Speed, PFFS 84.3 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	314 pc/h	126 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	31.4	%	
Adjustment for no-passing zones, fnp	47.8		
Percent time-spent-following, PTSFd	65.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	78	veh-mi
Peak-hour vehicle-miles of travel, VMT60	281	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h
Capacity from ATS, CdATS	1610	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1610	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.7	mi/h
Percent time-spent-following, PTSFd (from above)	65.5	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	312.2
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.10
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
Agency/Co. ICA  
Date Performed 04/21/2015  
Analysis Time Period AM Peak  
Highway Twin Church Road - SB  
From/To US 76 - Alligator Road  
Jurisdiction Florence  
Analysis Year 2040  
Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3		Peak hour factor, PHF	0.90	
Shoulder width	4.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	1.0	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	0	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	10	/mi

Analysis direction volume, Vd 113 veh/h  
Opposing direction volume, Vo 281 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.947	0.973
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	133 pc/h	321 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 41.2 mi/h

Adjustment for no-passing zones, fnp 3.2 mi/h  
Average travel speed, ATSD 34.5 mi/h  
Percent Free Flow Speed, PFFS 83.6 %



-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	126 pc/h	314 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	16.7	%	
Adjustment for no-passing zones, fnp	47.8		
Percent time-spent-following, PTSFD	30.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	31	veh-mi
Peak-hour vehicle-miles of travel, VMT60	113	veh-mi
Peak 15-min total travel time, TT15	0.9	veh-h
Capacity from ATS, CdATS	1654	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1654	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.5	mi/h
Percent time-spent-following, PTSFD (from above)	30.4	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	125.6
Effective width of outside lane, We	22.96
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	3.29
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Twin Church Road - NB  
 From/To US 76 - Alligator Road  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	7 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 161 veh/h  
 Opposing direction volume, Vo 303 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.6	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.960	0.973
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	186 pc/h	346 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 41.2 mi/h

Adjustment for no-passing zones, fnp 3.1 mi/h  
 Average travel speed, ATSD 34.0 mi/h  
 Percent Free Flow Speed, PFFS 82.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	180	339	pc/h
Base percent time-spent-following,(note-4) BPTSFD	23.0	%	
Adjustment for no-passing zones, fnp	51.3		
Percent time-spent-following, PTSFD	40.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	45	veh-mi
Peak-hour vehicle-miles of travel, VMT60	161	veh-mi
Peak 15-min total travel time, TT15	1.3	veh-h
Capacity from ATS, CdATS	1654	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1654	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.0	mi/h
Percent time-spent-following, PTSFD (from above)	40.8	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	178.9
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	4.82
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:  
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst SU  
 Agency/Co. ICA  
 Date Performed 04/21/2015  
 Analysis Time Period PM Peak  
 Highway Twin Church Road - SB  
 From/To US 76 - Alligator Road  
 Jurisdiction Florence  
 Analysis Year 2040  
 Description Alligator Road Widening

-----Input Data-----

Highway class	Class 3	Peak hour factor, PHF	0.90
Shoulder width	4.0 ft	% Trucks and buses	7 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	1.0 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	0 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	10 /mi

Analysis direction volume, Vd 303 veh/h  
 Opposing direction volume, Vo 161 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.6
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.973	0.960
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	346 pc/h	186 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h  
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 45.0 mi/h  
 Adj. for lane and shoulder width,(note-3) fLS 1.3 mi/h  
 Adj. for access point density,(note-3) fA 2.5 mi/h

Free-flow speed, FFSd 41.2 mi/h

Adjustment for no-passing zones, fnp 3.8 mi/h  
 Average travel speed, ATSD 33.3 mi/h  
 Percent Free Flow Speed, PFFS 80.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	339 pc/h	180 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	33.3	%	
Adjustment for no-passing zones, fnp	51.3		
Percent time-spent-following, PTSFD	66.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	84	veh-mi
Peak-hour vehicle-miles of travel, VMT60	303	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h
Capacity from ATS, CdATS	1632	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1632	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	1.0	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	33.3	mi/h
Percent time-spent-following, PTSFD (from above)	66.8	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	336.7
Effective width of outside lane, We	16.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.14
Bicycle LOS	E

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If  $v_i$  ( $v_d$  or  $v_o$ )  $\geq 1,700$  pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for  $v > 200$  veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



Phone: Fax:  
E-mail:

----- OPERATIONAL ANALYSIS -----

Analyst: SU  
Agency/Co: ICA  
Date: 4/28/2015  
Analysis Period: AM Peak  
Highway: Alligator Road  
From/To: Knoll Wood to Savannah Grove  
Jurisdiction: Florence  
Analysis Year: 2020  
Project ID: Alligator Road Widening

----- FREE-FLOW SPEED -----

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

----- VOLUME -----

	Direction	1		2	
Volume, V		418	vph	563	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		116		156	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		243	pcphpl	328	pcphpl

----- RESULTS -----

	Direction	1		2	
Flow rate, vp		243	pcphpl	328	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.4	pc/mi/ln	7.3	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	232.2	312.8
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	5.99	6.14
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: PM Peak  
 Highway: Alligator Road  
 From/To: Knoll Wood to Savannah Grove  
 Jurisdiction: Florence  
 Analysis Year: 2020  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

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	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		386	vph	455	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		107		126	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		225	pcphpl	265	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		225	pcphpl	265	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.0	pc/mi/ln	5.9	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	214.4	252.8
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	5.95	6.03
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:  
E-mail:

----- OPERATIONAL ANALYSIS -----

Analyst: SU  
Agency/Co: ICA  
Date: 4/28/2015  
Analysis Period: AM Peak  
Highway: Alligator Road  
From/To: Knoll Wood to Savannah Grove  
Jurisdiction: Florence  
Analysis Year: 2040  
Project ID: Alligator Road Widening

----- FREE-FLOW SPEED -----

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

----- VOLUME -----

	Direction	1		2	
Volume, V		490	vph	660	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		136		183	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		285	pcphpl	385	pcphpl

----- RESULTS -----

	Direction	1		2	
Flow rate, vp		285	pcphpl	385	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		6.3	pc/mi/ln	8.6	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	272.2	366.7
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.07	6.22
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: PM Peak  
 Highway: Alligator Road  
 From/To: Knoll Wood to Savannah Grove  
 Jurisdiction: Florence  
 Analysis Year: 2040  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

---

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		453	vph	535	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		126		149	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		264	pcphpl	312	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		264	pcphpl	312	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.9	pc/mi/ln	6.9	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	251.7	297.2
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.03	6.11
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.



Phone: Fax:  
E-mail:

----- OPERATIONAL ANALYSIS -----

Analyst: SU  
Agency/Co: ICA  
Date: 4/28/2015  
Analysis Period: AM Peak  
Highway: Alligator Road  
From/To: Savannah Grove to Ashford  
Jurisdiction: Florence  
Analysis Year: 2020  
Project ID: Alligator Road Widening

----- FREE-FLOW SPEED -----

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

----- VOLUME -----

	Direction	1		2	
Volume, V		456	vph	589	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		127		164	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		266	pcphpl	343	pcphpl

----- RESULTS -----

	Direction	1		2	
Flow rate, vp		266	pcphpl	343	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.9	pc/mi/ln	7.6	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	253.3	327.2
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.03	6.16
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: PM Peak  
 Highway: Alligator Road  
 From/To: Savannah Grove to Ashford  
 Jurisdiction: Florence  
 Analysis Year: 2020  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

---

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		565	vph	495	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		157		138	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		329	pcphpl	288	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		329	pcphpl	288	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		7.3	pc/mi/ln	6.4	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	313.9	275.0
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.14	6.08
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: AM Peak  
 Highway: Alligator Road  
 From/To: Savannah Grove to Ashford  
 Jurisdiction: Florence  
 Analysis Year: 2040  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

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	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

---

VOLUME

---

	Direction	1		2	
Volume, V		535	vph	690	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		149		192	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		312	pcphpl	402	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		312	pcphpl	402	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		6.9	pc/mi/ln	8.9	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	297.2	383.3
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.11	6.24
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:  
E-mail:

----- OPERATIONAL ANALYSIS -----

Analyst: SU  
Agency/Co: ICA  
Date: 4/28/2015  
Analysis Period: PM Peak  
Highway: Alligator Road  
From/To: Savannah Grove to Ashford  
Jurisdiction: Florence  
Analysis Year: 2040  
Project ID: Alligator Road Widening

----- FREE-FLOW SPEED -----

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

----- VOLUME -----

	Direction	1		2	
Volume, V		663	vph	580	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		184		161	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		386	pcphpl	338	pcphpl

----- RESULTS -----

	Direction	1		2	
Flow rate, vp		386	pcphpl	338	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		8.6	pc/mi/ln	7.5	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	368.3	322.2
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.22	6.16
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.



Phone: Fax:  
E-mail:

----- OPERATIONAL ANALYSIS -----

Analyst: SU  
Agency/Co: ICA  
Date: 4/28/2015  
Analysis Period: AM Peak  
Highway: Alligator Road  
From/To: Ashford to US 52/301  
Jurisdiction: Florence  
Analysis Year: 2020  
Project ID: Alligator Road Widening

----- FREE-FLOW SPEED -----

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

----- VOLUME -----

	Direction	1		2	
Volume, V		455	vph	412	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		126		114	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		265	pcphpl	240	pcphpl

----- RESULTS -----

	Direction	1		2	
Flow rate, vp		265	pcphpl	240	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.9	pc/mi/ln	5.3	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	252.8	228.9
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.03	5.98
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: PM Peak  
 Highway: Alligator Road  
 From/To: Ashford to US 52/301  
 Jurisdiction: Florence  
 Analysis Year: 2020  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

---

	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		433	vph	449	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		120		125	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		252	pcphpl	261	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		252	pcphpl	261	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		5.6	pc/mi/ln	5.8	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	240.6	249.4
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.01	6.03
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

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Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: AM Peak  
 Highway: Alligator Road - EB  
 From/To: Ashford to US 52/301  
 Jurisdiction: Florence  
 Analysis Year: 2040  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

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	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		532	vph	482	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		148		134	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		310	pcphpl	281	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		310	pcphpl	281	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		6.9	pc/mi/ln	6.2	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	295.6	267.8
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.11	6.06
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.

Phone:  
E-mail:

Fax:

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OPERATIONAL ANALYSIS

---

Analyst: SU  
 Agency/Co: ICA  
 Date: 4/28/2015  
 Analysis Period: PM Peak  
 Highway: Alligator Road  
 From/To: Ashford to US 52/301  
 Jurisdiction: Florence  
 Analysis Year: 2040  
 Project ID: Alligator Road Widening

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FREE-FLOW SPEED

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	Direction	1		2	
Lane width		12.0	ft	12.0	ft
Lateral clearance:					
Right edge		4.0	ft	4.0	ft
Left edge		6.0	ft	6.0	ft
Total lateral clearance		10.0	ft	10.0	ft
Access points per mile		20		20	
Median type		Divided		Divided	
Free-flow speed:		Base		Base	
FFS or BFFS		50.0	mph	50.0	mph
Lane width adjustment, FLW		0.0	mph	0.0	mph
Lateral clearance adjustment, FLC		0.4	mph	0.4	mph
Median type adjustment, FM		0.0	mph	0.0	mph
Access points adjustment, FA		5.0	mph	5.0	mph
Free-flow speed		44.6	mph	44.6	mph

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VOLUME

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	Direction	1		2	
Volume, V		506	vph	525	vph
Peak-hour factor, PHF		0.90		0.90	
Peak 15-minute volume, v15		141		146	
Trucks and buses		10	%	10	%
Recreational vehicles		0	%	0	%
Terrain type		Level		Level	
Grade		0.00	%	0.00	%
Segment length		0.00	mi	0.00	mi
Number of lanes		2		2	
Driver population adjustment, fP		1.00		1.00	
Trucks and buses PCE, ET		1.5		1.5	
Recreational vehicles PCE, ER		1.2		1.2	
Heavy vehicle adjustment, fHV		0.952		0.952	
Flow rate, vp		295	pcphpl	306	pcphpl

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RESULTS

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	Direction	1		2	
Flow rate, vp		295	pcphpl	306	pcphpl
Free-flow speed, FFS		44.6	mph	44.6	mph
Avg. passenger-car travel speed, S		45.0	mph	45.0	mph
Level of service, LOS		A		A	
Density, D		6.6	pc/mi/ln	6.8	pc/mi/ln

----- Bicycle Level of Service -----

Posted speed limit, Sp	45	45
Percent of segment with occupied on-highway parking	0	0
Pavement rating, P	3	3
Flow rate in outside lane, vOL	281.1	291.7
Effective width of outside lane, We	16.00	16.00
Effective speed factor, St	4.42	4.42
Bicycle LOS Score, BLOS	6.09	6.11
Bicycle LOS	F	F

Overall results are not computed when free-flow speed is less than 45 mph.



## **LOS ANALYSES**

- 2013 EXISTING CONDITIONS
  - 2020 NO-BUILD
  - 2040 NO-BUILD
    - 2020 BUILD
    - 2040 BUILD
- RIGHT TURN LANE ELIMINATION STUDY
- PRELIMINARY SIGNALIZATION STUDY

**APPENDIX**

**Traffic Analysis**

**2013 AM Peak Unsignalized Intersections**

**Intersection**

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	1	0	59	1	10	0	347	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	80	80	80	90	90	90
Heavy Vehicles, %	0	0	0	9	9	9	2	2	2
Mvmt Flow	0	4	0	74	1	12	0	386	70

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	620	649	173	616	614	421	173	0	0
Stage 1	193	193	-	421	421	-	-	-	-
Stage 2	427	456	-	195	193	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.218	-	-
Pot Cap-1 Maneuver	403	391	876	393	398	618	1404	-	-
Stage 1	813	745	-	597	577	-	-	-	-
Stage 2	610	572	-	791	728	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	391	387	876	387	394	618	1404	-	-
Mov Cap-2 Maneuver	391	387	-	387	394	-	-	-	-
Stage 1	813	738	-	597	577	-	-	-	-
Stage 2	596	572	-	779	721	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	14.4	16.2	0
HCM LOS	B	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1404	-	-	387	409	1089	-	-
HCM Lane V/C Ratio	-	-	-	0.01	0.214	0.009	-	-
HCM Control Delay (s)	0	-	-	14.4	16.2	8.3	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	9	156	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	90	90	90
Heavy Vehicles, %	5	5	5
Mvmt Flow	10	173	0

**Major/Minor Major2**

Conflicting Flow All	456	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.15	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.245	-	-
Pot Cap-1 Maneuver	1089	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1089	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach SB**

HCM Control Delay, s 0.5

HCM LOS

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	465	585	1	3	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	78	78	80	80
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	4	511	750	1	4	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	751	0	1271
Stage 1	-	-	751
Stage 2	-	-	520
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	854	-	187
Stage 1	-	-	470
Stage 2	-	-	601
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	854	-	186
Mov Cap-2 Maneuver	-	-	186
Stage 1	-	-	470
Stage 2	-	-	597

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	854	-	-	-	332
HCM Lane V/C Ratio	0.005	-	-	-	0.056
HCM Control Delay (s)	9.2	0	-	-	16.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

**Intersection**

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	10	456	1	0	530	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	80	80	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	11	485	1	0	662	12	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	675	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	916	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	916	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	916	-	-	1077	-	-	297
HCM Lane V/C Ratio	-	0.012	-	-	-	-	-	0.31
HCM Control Delay (s)	0	9	0	-	0	-	-	22.5
HCM Lane LOS	A	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1.3

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	24	0	57
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	92	88
Heavy Vehicles, %	5	2	5
Mvmt Flow	27	0	65

**Major/Minor**

	Minor2		
Conflicting Flow All	1176	1176	669
Stage 1	669	669	-
Stage 2	507	507	-
Critical Hdwy	7.15	6.52	6.25
Critical Hdwy Stg 1	6.15	5.52	-
Critical Hdwy Stg 2	6.15	5.52	-
Follow-up Hdwy	3.545	4.018	3.345
Pot Cap-1 Maneuver	166	191	452
Stage 1	442	456	-
Stage 2	543	539	-
Platoon blocked, %			
Mov Cap-1 Maneuver	164	188	452
Mov Cap-2 Maneuver	164	188	-
Stage 1	435	456	-
Stage 2	534	530	-

**Approach**

	SB
HCM Control Delay, s	22.5
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	481	530	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	78	78	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	540	679	1	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	681	0	1220
Stage 1	-	-	680
Stage 2	-	-	540
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	907	-	201
Stage 1	-	-	507
Stage 2	-	-	588
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	907	-	201
Mov Cap-2 Maneuver	-	-	201
Stage 1	-	-	507
Stage 2	-	-	588

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	907	-	-	-	454
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	13
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	467	0	3	537	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	77	77	77	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	508	0	4	697	0	4	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	697	0	0	508	0	0	1213	1213	508
Stage 1	-	-	-	-	-	-	508	508	-
Stage 2	-	-	-	-	-	-	705	705	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	899	-	-	1057	-	-	160	183	569
Stage 1	-	-	-	-	-	-	551	542	-
Stage 2	-	-	-	-	-	-	430	442	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	899	-	-	1057	-	-	159	182	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	182	-
Stage 1	-	-	-	-	-	-	551	542	-
Stage 2	-	-	-	-	-	-	427	439	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	28.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	159	899	-	-	1057	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-	0.004	-	-	-
HCM Control Delay (s)	28.2	0	-	-	8.4	0	-	0
HCM Lane LOS	D	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	0

**Major/Minor**                      **Minor2**

Conflicting Flow All	1213	1213	697
Stage 1	705	705	-
Stage 2	508	508	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	160	183	444
Stage 1	430	442	-
Stage 2	551	542	-
Platoon blocked, %			
Mov Cap-1 Maneuver	159	182	444
Mov Cap-2 Maneuver	159	182	-
Stage 1	430	439	-
Stage 2	551	542	-

**Approach**                      **SB**

HCM Control Delay, s	0
HCM LOS	A

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	469	8	1	509	24	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	77	77	91	91
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	510	9	1	661	26	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	518	1178
Stage 1	-	-	514
Stage 2	-	-	664
Critical Hdwy	-	4.13	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.227	3.5
Pot Cap-1 Maneuver	-	1043	213
Stage 1	-	-	605
Stage 2	-	-	516
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1043	213
Mov Cap-2 Maneuver	-	-	213
Stage 1	-	-	605
Stage 2	-	-	515

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	239	-	-	1043	-
HCM Lane V/C Ratio	0.133	-	-	0.001	-
HCM Control Delay (s)	22.4	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

**Intersection**

Int Delay, s/veh 2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	450	22	11	448	62	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	73	73
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	489	24	14	574	85	14

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	513	1104
Stage 1	-	-	501
Stage 2	-	-	603
Critical Hdwy	-	4.12	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.218	3.536
Pot Cap-1 Maneuver	-	1052	231
Stage 1	-	-	605
Stage 2	-	-	542
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1052	226
Mov Cap-2 Maneuver	-	-	226
Stage 1	-	-	605
Stage 2	-	-	531

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	28.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	247	-	-	1052	-
HCM Lane V/C Ratio	0.399	-	-	0.013	-
HCM Control Delay (s)	28.9	-	-	8.5	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.8	-	-	0	-

**Intersection**

Int Delay, s/veh 0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	502	6	9	409	13	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	71	71	73	73
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	584	7	13	576	18	42

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	591	1188
Stage 1	-	-	587
Stage 2	-	-	601
Critical Hdwy	-	4.12	6.45
Critical Hdwy Stg 1	-	-	5.45
Critical Hdwy Stg 2	-	-	5.45
Follow-up Hdwy	-	2.218	3.545
Pot Cap-1 Maneuver	-	985	205
Stage 1	-	-	550
Stage 2	-	-	542
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	985	201
Mov Cap-2 Maneuver	-	-	201
Stage 1	-	-	550
Stage 2	-	-	532

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	349	-	-	985	-
HCM Lane V/C Ratio	0.173	-	-	0.013	-
HCM Control Delay (s)	17.5	-	-	8.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	533	414	2	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	74	74	38	38
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	3	579	559	3	5	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	562	0	1147
Stage 1	-	-	561
Stage 2	-	-	586
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	1009	-	222
Stage 1	-	-	575
Stage 2	-	-	560
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1009	-	221
Mov Cap-2 Maneuver	-	-	221
Stage 1	-	-	575
Stage 2	-	-	558

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1009	-	-	-	340
HCM Lane V/C Ratio	0.003	-	-	-	0.039
HCM Control Delay (s)	8.6	0	-	-	16
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	532	0	3	410	1	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	75	75	69	69
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	560	0	4	547	1	30

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	560	1115
Stage 1	-	-	560
Stage 2	-	-	555
Critical Hdwy	-	4.12	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.218	3.5
Pot Cap-1 Maneuver	-	1011	232
Stage 1	-	-	576
Stage 2	-	-	579
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1011	231
Mov Cap-2 Maneuver	-	-	231
Stage 1	-	-	576
Stage 2	-	-	576

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	502	-	-	1011	-
HCM Lane V/C Ratio	0.064	-	-	0.004	-
HCM Control Delay (s)	12.7	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 5

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	146	291	615	142	37	42
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	86	86	63	63
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	200	399	715	165	59	67

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	715	0	1314
Stage 1	-	-	715
Stage 2	-	-	599
Critical Hdwy	4.11	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	890	-	164
Stage 1	-	-	488
Stage 2	-	-	517
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	890	-	127
Mov Cap-2 Maneuver	-	-	127
Stage 1	-	-	488
Stage 2	-	-	401

Approach	EB	WB	SE
HCM Control Delay, s	3.4	0	47.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	890	-	-	-	204
HCM Lane V/C Ratio	0.225	-	-	-	0.615
HCM Control Delay (s)	10.2	-	-	-	47.3
HCM Lane LOS	B	-	-	-	E
HCM 95th %tile Q(veh)	0.9	-	-	-	3.5



**Intersection**

Int Delay, s/veh 16.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	286	1531	4	116	872
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	88	88	74	74
Heavy Vehicles, %	1	1	3	3	4	4
Mvmt Flow	0	349	1740	5	157	1178

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2645	872	0
Stage 1	1742	-	-
Stage 2	903	-	-
Critical Hdwy	6.82	6.92	4.18
Critical Hdwy Stg 1	5.82	-	-
Critical Hdwy Stg 2	5.82	-	-
Follow-up Hdwy	3.51	3.31	2.24
Pot Cap-1 Maneuver	19	~ 296	348
Stage 1	128	-	-
Stage 2	358	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	10	~ 296	348
Mov Cap-2 Maneuver	10	-	-
Stage 1	128	-	-
Stage 2	196	-	-

Approach	WB	NB	SB
HCM Control Delay, s	147.1	0	2.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	296	348	-
HCM Lane V/C Ratio	-	-	1.178	0.45	-
HCM Control Delay (s)	-	-	147.1	23.6	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	15.2	2.2	-

**Notes**

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






















**APPENDIX**

**Traffic Analysis**

**2013 AM Peak Signalized Intersections**

HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

EXISTING  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	148	9	14	118	488	15	190	40	235	48	28
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	77	180	11	18	148	0	19	238	50	276	56	33
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	502	660	40	490	714	607	622	622	131	449	454	267
Arrive On Green	0.38	0.38	0.38	0.13	0.13	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1223	1721	105	1187	1863	1583	1303	1494	314	1076	1089	642
Grp Volume(v), veh/h	77	0	191	18	148	0	19	0	288	276	0	89
Grp Sat Flow(s),veh/h/ln	1223	0	1826	1187	1863	1583	1303	0	1807	1076	0	1731
Q Serve(g_s), s	2.8	0.0	4.3	0.8	4.3	0.0	0.5	0.0	6.6	14.4	0.0	1.9
Cycle Q Clear(g_c), s	7.1	0.0	4.3	5.1	4.3	0.0	2.4	0.0	6.6	21.0	0.0	1.9
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.17	1.00		0.37
Lane Grp Cap(c), veh/h	502	0	700	490	714	607	622	0	753	449	0	721
V/C Ratio(X)	0.15	0.00	0.27	0.04	0.21	0.00	0.03	0.00	0.38	0.61	0.00	0.12
Avail Cap(c_a), veh/h	502	0	700	490	714	607	622	0	753	449	0	721
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.83	0.83	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	12.7	20.4	18.0	0.0	11.5	0.0	12.1	19.4	0.0	10.8
Incr Delay (d2), s/veh	0.6	0.0	1.0	0.1	0.5	0.0	0.1	0.0	1.5	6.2	0.0	0.4
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(-26165%),veh/ln	1.0	0.0	2.4	0.3	2.3	0.0	0.2	0.0	3.6	5.0	0.0	1.0
LnGrp Delay(d),s/veh	15.8	0.0	13.7	20.5	18.6	0.0	11.6	0.0	13.6	25.6	0.0	11.1
LnGrp LOS	B		B	C	B		B		B	C		B
Approach Vol, veh/h		268			166			307			365	
Approach Delay, s/veh		14.3			18.8			13.5			22.1	
Approach LOS		B			B			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		23.0		25.0		23.0		25.0				
Max Q Clear Time (g_c+I1), s		9.1		23.0		7.1		8.6				
Green Ext Time (p_c), s		1.6		0.7		1.7		3.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			17.3									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
2: Savannah Grove Rd & Alligator Rd

EXISTING  
4/30/2015

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↗	↙	↑	↖	↗		
Volume (veh/h)	338	87	120	479	149	126		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	417	107	143	570	186	158		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	993	844	412	993	473	422		
Arrive On Green	0.18	0.18	0.53	0.53	0.27	0.27		
Sat Flow, veh/h	1863	1583	875	1863	1774	1583		
Grp Volume(v), veh/h	417	107	143	570	186	158		
Grp Sat Flow(s),veh/h/ln	1863	1583	875	1863	1774	1583		
Q Serve(g_s), s	12.0	3.4	7.8	12.3	5.2	4.9		
Cycle Q Clear(g_c), s	12.0	3.4	19.8	12.3	5.2	4.9		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	993	844	412	993	473	422		
V/C Ratio(X)	0.42	0.13	0.35	0.57	0.39	0.37		
Avail Cap(c_a), veh/h	993	844	412	993	473	422		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.87	0.87	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.5	12.9	15.9	9.4	18.0	17.9		
Incr Delay (d2), s/veh	1.1	0.3	2.3	2.4	2.4	2.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	6.5	1.6	2.1	6.8	2.9	2.4		
LnGrp Delay(d),s/veh	17.6	13.2	18.2	11.8	20.5	20.4		
LnGrp LOS	B	B	B	B	C	C		
Approach Vol, veh/h	524			713	344			
Approach Delay, s/veh	16.7			13.1	20.5			
Approach LOS	B			B	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		14.0				21.8		7.2
Green Ext Time (p_c), s		6.4				4.7		0.8
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			15.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/1/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	245	209	84	115	171	186	119	1125	185	254	491	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	253	215	87	146	216	0	137	1293	213	322	622	158
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	171	261	106	99	386	328	203	2503	1120	180	1891	846
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
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.00	0.11	0.71	0.71	0.55	0.55	0.55
Ln Grp Delay, s/veh	308.9	0.0	67.0	328.6	51.6	0.0	76.1	10.2	7.3	428.2	17.8	16.3
Ln Grp LOS	F		E	F	D		E	B	A	F	B	B
Approach Vol, veh/h		555			362			1643			1102	
Approach Delay, s/veh		177.3			163.3			15.3			137.5	
Approach LOS		F			F			B			F	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	6	5		8			
Case No			3.0		6.0	5.4	2.0		5.0			
Phs Duration (G+Y+Rc), s			105.0		35.0	83.0	22.0		35.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			99.0		29.0	77.0	16.0		29.0			
Max Allow Headway (MAH), s			4.6		4.7	6.8	4.6		4.7			
Max Q Clear (g_c+I1), s			25.6		31.0	79.0	12.4		31.0			
Green Ext Time (g_e), s			14.2		0.0	0.0	2.7		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.01		1.00	1.00	1.00		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	1	5		3			
Mvmt Sat Flow, veh/h					1161	337	1774		1073			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4	6			8			
Mvmt Sat Flow, veh/h			3539		1262	3438			1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14	16			18			
Mvmt Sat Flow, veh/h			1583		511	1538			1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	1	5	0	3			
Lane Assignment							(Prot)					
Lanes in Grp		0	0	0	1	1	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/1/2014

Grp Vol (v), veh/h	0	0	0	253	322	137	0	146
Grp Sat Flow (s), veh/h/ln	0	0	0	1161	337	1774	0	1073
Q Serve Time (g_s), s	0.0	0.0	0.0	14.4	53.4	10.4	0.0	6.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	29.0	77.0	10.4	0.0	29.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1161	337	0	0	1073
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	29.0	77.0	0.0	0.0	29.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	53.4	0.0	0.0	6.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.4	53.4	0.0	0.0	6.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	171	180	203	0	99
V/C Ratio (X)	0.00	0.00	0.00	1.48	1.79	0.68	0.00	1.47
Avail Cap (c_a), veh/h	0	0	0	171	180	203	0	99
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.9	50.9	59.5	0.0	68.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	243.9	377.2	16.6	0.0	260.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	308.9	428.2	76.1	0.0	328.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.6	6.9	5.1	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	11.6	18.8	0.9	0.0	7.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	18.2	25.8	6.0	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.64	1.49	0.88	0.00	1.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	20.5	35.5	0.0	0.0	11.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T			T			T
Lanes in Grp	0	2	0	0	2	0	0	1
Grp Vol (v), veh/h	0	1293	0	0	622	0	0	216
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	1719	0	0	1863
Q Serve Time (g_s), s	0.0	23.6	0.0	0.0	13.9	0.0	0.0	14.6
Cycle Q Clear Time (g_c), s	0.0	23.6	0.0	0.0	13.9	0.0	0.0	14.6
Lane Grp Cap (c), veh/h	0	2503	0	0	1891	0	0	386
V/C Ratio (X)	0.00	0.52	0.00	0.00	0.33	0.00	0.00	0.56
Avail Cap (c_a), veh/h	0	2503	0	0	1891	0	0	386
Upstream Filter (I)	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	0.0	17.3	0.0	0.0	49.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.5	0.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	0.0	17.8	0.0	0.0	51.6
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	0.0	6.6	0.0	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.2

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.8	0.0	0.0	6.7	0.0	0.0	7.7
%ile Storage Ratio (RQ%)	0.00	1.23	0.00	0.00	0.39	0.00	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		T+R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	213	0	302	158	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1773	1538	0	0	1583
Q Serve Time (g_s), s	0.0	6.4	0.0	22.8	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	22.8	7.2	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	1120	0	367	846	0	0	328
V/C Ratio (X)	0.00	0.19	0.00	0.82	0.19	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1120	0	367	846	0	0	328
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.9	0.0	53.0	15.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	14.0	0.5	0.0	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
Control Delay (d), s/veh	0.0	7.3	0.0	67.0	16.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	11.2	3.1	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.4	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.9	0.0	12.6	3.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.19	0.47	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	91.3
HCM 2010 LOS	F

**APPENDIX**

**Traffic Analysis**

**2013 PM Peak Unsignalized Intersections**



**Intersection**

Int Delay, s/veh 4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	3	0	106	4	21	0	244	90
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	81	81	81	90	90	90
Heavy Vehicles, %	0	0	0	1	1	1	4	4	4
Mvmt Flow	0	6	0	131	5	26	0	271	100

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	775	809	397	762	760	321	398	0	0
Stage 1	438	438	-	321	321	-	-	-	-
Stage 2	337	371	-	441	439	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.236	-	-
Pot Cap-1 Maneuver	318	317	657	323	337	722	1150	-	-
Stage 1	601	582	-	693	653	-	-	-	-
Stage 2	681	623	-	597	580	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	298	310	657	313	330	722	1150	-	-
Mov Cap-2 Maneuver	298	310	-	313	330	-	-	-	-
Stage 1	601	569	-	693	653	-	-	-	-
Stage 2	652	623	-	578	567	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	16.8	24.3	0
HCM LOS	C	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1150	-	-	310	345	1182	-	-
HCM Lane V/C Ratio	-	-	-	0.019	0.469	0.017	-	-
HCM Control Delay (s)	0	-	-	16.8	24.3	8.1	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	2.4	0.1	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	18	348	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	88	88
Heavy Vehicles, %	3	3	3
Mvmt Flow	20	395	2

Major/Minor	Major2		
Conflicting Flow All	371	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1182	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1182	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s 0.4

HCM LOS

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	12	511	447	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	38	38
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	13	562	476	2	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	478	0	1065
Stage 1	-	-	477
Stage 2	-	-	588
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1079	-	249
Stage 1	-	-	629
Stage 2	-	-	559
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1079	-	245
Mov Cap-2 Maneuver	-	-	245
Stage 1	-	-	629
Stage 2	-	-	549

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1079	-	-	-	592
HCM Lane V/C Ratio	0.012	-	-	-	0.013
HCM Control Delay (s)	8.4	0	-	-	11.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	42	471	2	3	427	17	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	89	89	89	58	58	58
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	46	512	2	3	480	19	5	0	7

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	499	0	0	514	0	0	1116	1110	513
Stage 1	-	-	-	-	-	-	604	604	-
Stage 2	-	-	-	-	-	-	512	506	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1060	-	-	1052	-	-	187	211	565
Stage 1	-	-	-	-	-	-	489	491	-
Stage 2	-	-	-	-	-	-	548	543	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1060	-	-	1052	-	-	168	197	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	197	-
Stage 1	-	-	-	-	-	-	459	461	-
Stage 2	-	-	-	-	-	-	517	541	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0.1	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	281	1060	-	-	1052	-	-	331
HCM Lane V/C Ratio	0.043	0.043	-	-	0.003	-	-	0.133
HCM Control Delay (s)	18.4	8.5	0	-	8.4	0	-	17.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	9	1	20
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	68	68	68
Heavy Vehicles, %	3	3	3
Mvmt Flow	13	1	29

**Major/Minor**

	Minor2		
Conflicting Flow All	1104	1101	489
Stage 1	496	496	-
Stage 2	608	605	-
Critical Hdwy	7.13	6.53	6.23
Critical Hdwy Stg 1	6.13	5.53	-
Critical Hdwy Stg 2	6.13	5.53	-
Follow-up Hdwy	3.527	4.027	3.327
Pot Cap-1 Maneuver	188	211	577
Stage 1	554	544	-
Stage 2	481	486	-
Platoon blocked, %			
Mov Cap-1 Maneuver	177	197	577
Mov Cap-2 Maneuver	177	197	-
Stage 1	520	542	-
Stage 2	446	456	-

**Approach**

	SB
HCM Control Delay, s	17.5
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	485	446	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	516	474	0	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	474	0	990
Stage 1	-	-	474
Stage 2	-	-	516
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1083	-	276
Stage 1	-	-	630
Stage 2	-	-	603
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1083	-	276
Mov Cap-2 Maneuver	-	-	276
Stage 1	-	-	630
Stage 2	-	-	603

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1083	-	-	-	276
HCM Lane V/C Ratio	-	-	-	-	0.014
HCM Control Delay (s)	0	-	-	-	18.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

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**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	472	16	10	436	1	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	35	35	35
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	0	513	17	11	469	1	6	0	14

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	470	0	0	530	0	0	1015	1013	522
Stage 1	-	-	-	-	-	-	522	522	-
Stage 2	-	-	-	-	-	-	493	491	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1086	-	-	1037	-	-	219	241	559
Stage 1	-	-	-	-	-	-	542	534	-
Stage 2	-	-	-	-	-	-	562	552	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1086	-	-	1037	-	-	215	238	559
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	238	-
Stage 1	-	-	-	-	-	-	542	534	-
Stage 2	-	-	-	-	-	-	550	544	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	384	1086	-	-	1037	-	-	598
HCM Lane V/C Ratio	0.052	-	-	-	0.01	-	-	0.007
HCM Control Delay (s)	14.9	0	-	-	8.5	0	-	11.1
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	4

**Major/Minor**

	Minor2		
Conflicting Flow All	1020	1021	469
Stage 1	491	491	-
Stage 2	529	530	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	217	238	598
Stage 1	563	552	-
Stage 2	537	530	-
Platoon blocked, %			
Mov Cap-1 Maneuver	209	235	598
Mov Cap-2 Maneuver	209	235	-
Stage 1	563	544	-
Stage 2	523	530	-

**Approach**

Approach	SB
HCM Control Delay, s	11.1
HCM LOS	B

**Minor Lane/Major Mvmt**



**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	458	12	7	436	5	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	95	95	60	60
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	487	13	7	459	8	12

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	500	968
Stage 1	-	-	494
Stage 2	-	-	474
Critical Hdwy	-	4.12	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.218	3.5
Pot Cap-1 Maneuver	-	1064	284
Stage 1	-	-	617
Stage 2	-	-	630
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1064	281
Mov Cap-2 Maneuver	-	-	281
Stage 1	-	-	617
Stage 2	-	-	624

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	402	-	-	1064	-
HCM Lane V/C Ratio	0.05	-	-	0.007	-
HCM Control Delay (s)	14.4	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	421	41	28	407	36	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	96	96	76	76
Heavy Vehicles, %	3	3	1	1	2	2
Mvmt Flow	453	44	29	424	47	33

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	497	957
Stage 1	-	-	475
Stage 2	-	-	482
Critical Hdwy	-	4.11	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.209	3.518
Pot Cap-1 Maneuver	-	1072	286
Stage 1	-	-	626
Stage 2	-	-	621
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1072	276
Mov Cap-2 Maneuver	-	-	276
Stage 1	-	-	626
Stage 2	-	-	599

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	18.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	353	-	-	1072	-
HCM Lane V/C Ratio	0.227	-	-	0.027	-
HCM Control Delay (s)	18.2	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	430	9	26	466	11	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	95	95	72	72
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	489	10	27	491	15	21

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	499	1039
Stage 1	-	-	494
Stage 2	-	-	545
Critical Hdwy	-	4.12	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.218	3.536
Pot Cap-1 Maneuver	-	1065	253
Stage 1	-	-	609
Stage 2	-	-	577
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1065	244
Mov Cap-2 Maneuver	-	-	244
Stage 1	-	-	609
Stage 2	-	-	557

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	364	-	-	1065	-
HCM Lane V/C Ratio	0.099	-	-	0.026	-
HCM Control Delay (s)	16	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	448	505	5	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	96	96	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	509	526	5	4	0

Major/Minor	Major1	Major2	Minor2
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Conflicting Flow All	531	0	-	0	1038	529
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	509	-
Critical Hdwy	4.13	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.227	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1031	-	-	-	258	554
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	608	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1031	-	-	-	258	554
Mov Cap-2 Maneuver	-	-	-	-	258	-
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	608	-

Approach	EB	WB	SB
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HCM Control Delay, s	0	0	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
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Capacity (veh/h)	1031	-	-	-	258
HCM Lane V/C Ratio	-	-	-	-	0.016
HCM Control Delay (s)	0	-	-	-	19.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	439	1	15	505	1	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	93	93	63	63
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	462	1	16	543	2	14

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	463	1038
Stage 1	-	-	463
Stage 2	-	-	575
Critical Hdwy	-	4.11	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.209	3.5
Pot Cap-1 Maneuver	-	1104	258
Stage 1	-	-	638
Stage 2	-	-	567
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1104	253
Mov Cap-2 Maneuver	-	-	253
Stage 1	-	-	638
Stage 2	-	-	555

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	530	-	-	1104	-
HCM Lane V/C Ratio	0.03	-	-	0.015	-
HCM Control Delay (s)	12	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

**Intersection**

Int Delay, s/veh 4.3

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	9	264	226	112	221	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	84	84	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	10	300	269	133	243	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	269	0	439
Stage 1	-	-	269
Stage 2	-	-	170
Critical Hdwy	4.13	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1289	-	565
Stage 1	-	-	781
Stage 2	-	-	849
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1289	-	561
Mov Cap-2 Maneuver	-	-	561
Stage 1	-	-	781
Stage 2	-	-	842

Approach	EB	WB	SE
HCM Control Delay, s	0.3	0	16.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1289	-	-	-	566
HCM Lane V/C Ratio	0.008	-	-	-	0.443
HCM Control Delay (s)	7.8	-	-	-	16.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.3

**Intersection**

Int Delay, s/veh 2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	140	911	0	247	1576
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	90	90	92	92
Heavy Vehicles, %	0	0	3	3	1	1
Mvmt Flow	0	184	1012	0	268	1713

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2405	506	0
Stage 1	1012	-	-
Stage 2	1393	-	-
Critical Hdwy	6.8	6.9	4.12
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	2.21
Pot Cap-1 Maneuver	28	517	687
Stage 1	317	-	-
Stage 2	199	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	17	517	687
Mov Cap-2 Maneuver	17	-	-
Stage 1	317	-	-
Stage 2	121	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	517	687	-
HCM Lane V/C Ratio	-	-	0.356	0.391	-
HCM Control Delay (s)	-	-	15.8	13.6	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.6	1.9	-

**APPENDIX**






















**Traffic Analysis**

**2013 PM Peak Signalized Intersections**



HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

EXISTING  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	161	12	22	167	274	17	77	13	369	182	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1881	1881	1881	1845	1845	1900	1881	1881	1900
Adj Flow Rate, veh/h	45	177	13	24	184	0	21	95	16	397	196	54
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	1	1	1	3	3	3	1	1	1
Cap, veh/h	395	509	37	382	564	480	588	770	130	722	710	196
Arrive On Green	0.30	0.30	0.30	0.40	0.40	0.00	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1183	1698	125	1200	1881	1599	1114	1540	259	1289	1421	391
Grp Volume(v), veh/h	45	0	190	24	184	0	21	0	111	397	0	250
Grp Sat Flow(s),veh/h/ln	1183	0	1823	1200	1881	1599	1114	0	1799	1289	0	1812
Q Serve(g_s), s	1.8	0.0	4.9	0.9	4.1	0.0	0.7	0.0	2.0	14.2	0.0	4.8
Cycle Q Clear(g_c), s	5.9	0.0	4.9	5.8	4.1	0.0	5.5	0.0	2.0	16.2	0.0	4.8
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.14	1.00		0.22
Lane Grp Cap(c), veh/h	395	0	547	382	564	480	588	0	899	722	0	906
V/C Ratio(X)	0.11	0.00	0.35	0.06	0.33	0.00	0.04	0.00	0.12	0.55	0.00	0.28
Avail Cap(c_a), veh/h	395	0	547	382	564	480	588	0	899	722	0	906
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.92	0.92	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	16.4	16.1	13.8	0.0	10.3	0.0	8.0	12.3	0.0	8.7
Incr Delay (d2), s/veh	0.6	0.0	1.7	0.3	1.4	0.0	0.1	0.0	0.3	3.0	0.0	0.8
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(-26165%),veh/ln	0.7	0.0	2.7	0.3	2.3	0.0	0.2	0.0	1.0	5.6	0.0	2.6
LnGrp Delay(d),s/veh	19.0	0.0	18.2	16.4	15.3	0.0	10.4	0.0	8.3	15.3	0.0	9.5
LnGrp LOS	B		B	B	B		B		A	B		A
Approach Vol, veh/h		235			208			132			647	
Approach Delay, s/veh		18.3			15.4			8.6			13.0	
Approach LOS		B			B			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		36.0		24.0		36.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		18.0		30.0		18.0		30.0				
Max Q Clear Time (g_c+I1), s		7.9		18.2		7.8		7.5				
Green Ext Time (p_c), s		1.5		2.8		1.5		3.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			14.0									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd

EXISTING  
 4/30/2015

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↗	↙	↑	↖	↗		
Volume (veh/h)	487	49	40	410	52	31		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1810	1810		
Adj Flow Rate, veh/h	518	52	43	436	72	43		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.72	0.72		
Percent Heavy Veh, %	2	2	2	2	5	5		
Cap, veh/h	993	844	356	993	460	410		
Arrive On Green	0.18	0.18	0.53	0.53	0.27	0.27		
Sat Flow, veh/h	1863	1583	838	1863	1723	1538		
Grp Volume(v), veh/h	518	52	43	436	72	43		
Grp Sat Flow(s),veh/h/ln	1863	1583	838	1863	1723	1538		
Q Serve(g_s), s	15.1	1.6	2.3	8.6	1.9	1.3		
Cycle Q Clear(g_c), s	15.1	1.6	17.5	8.6	1.9	1.3		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	993	844	356	993	460	410		
V/C Ratio(X)	0.52	0.06	0.12	0.44	0.16	0.10		
Avail Cap(c_a), veh/h	993	844	356	993	460	410		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.84	0.84	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	17.8	12.2	16.3	8.5	16.8	16.6		
Incr Delay (d2), s/veh	1.6	0.1	0.7	1.4	0.7	0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	8.3	0.7	0.6	4.7	1.0	0.6		
LnGrp Delay(d),s/veh	19.4	12.3	17.0	9.9	17.6	17.1		
LnGrp LOS	B	B	B	A	B	B		
Approach Vol, veh/h	570			479	115			
Approach Delay, s/veh	18.8			10.6	17.4			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		17.1				19.5		3.9
Green Ext Time (p_c), s		4.9				4.5		0.2
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			15.3					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	163	135	77	140	40	102	619	71	80	1191	286
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1863	1863	1863	1900	1900	1900	1881	1881	1881
Adj Flow Rate, veh/h	190	181	150	79	144	0	105	638	73	86	1281	308
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.97	0.97	0.97	0.97	0.97	0.97	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	2	2	2	0	0	0	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	279	219	182	124	428	364	290	2346	1050	336	1537	688
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
Prop Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.00	0.16	0.65	0.65	0.43	0.43	0.43
Ln Grp Delay, s/veh	47.6	0.0	49.9	58.9	32.6	0.0	40.9	7.7	6.5	25.4	30.8	22.2
Ln Grp LOS	D		D	E	C		D	A	A	C	C	C
Approach Vol, veh/h		521			223			816			1675	
Approach Delay, s/veh		49.1			41.9			11.9			28.9	
Approach LOS		D			D			B			C	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	6	5		8			
Case No			3.0		6.0	5.4	2.0		5.0			
Phs Duration (G+Y+Rc), s			71.0		29.0	49.0	22.0		29.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			65.0		23.0	43.0	16.0		23.0			
Max Allow Headway (MAH), s			4.9		4.7	4.7	4.9		4.7			
Max Q Clear (g_c+I1), s			9.5		23.4	33.8	7.2		25.0			
Green Ext Time (g_e), s			5.7		0.0	6.1	3.2		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.00		1.00	0.75	0.49		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	1	5		3			
Mvmt Sat Flow, veh/h					1251	743	1810		1045			
<b>Through Movement Data</b>												
Assigned Mvmt		2		4	6				8			
Mvmt Sat Flow, veh/h		3610		953	3574				1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14	16			18			
Mvmt Sat Flow, veh/h			1615		789	1599			1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	1	5	0	3			
Lane Assignment							(Prot)					
Lanes in Grp		0	0	0	1	1	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

Grp Vol (v), veh/h	0	0	0	190	86	105	0	79
Grp Sat Flow (s), veh/h/ln	0	0	0	1251	743	1810	0	1045
Q Serve Time (g_s), s	0.0	0.0	0.0	14.9	8.4	5.2	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.4	16.0	5.2	0.0	23.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1251	743	0	0	1045
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	23.0	43.0	0.0	0.0	23.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	16.5	35.5	0.0	0.0	4.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.9	8.4	0.0	0.0	4.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	279	336	290	0	124
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.26	0.36	0.00	0.64
Avail Cap (c_a), veh/h	0	0	0	279	336	290	0	124
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	41.1	23.5	37.5	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.6	1.8	3.5	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	47.6	25.4	40.9	0.0	58.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.2	1.7	2.6	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.2	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.7	1.9	2.9	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.82	0.11	0.41	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T			T			T
Lanes in Grp	0	2	0	0	2	0	0	1
Grp Vol (v), veh/h	0	638	0	0	1281	0	0	144
Grp Sat Flow (s), veh/h/ln	0	1805	0	0	1787	0	0	1863
Q Serve Time (g_s), s	0.0	7.5	0.0	0.0	31.8	0.0	0.0	6.5
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	0.0	31.8	0.0	0.0	6.5
Lane Grp Cap (c), veh/h	0	2347	0	0	1537	0	0	428
V/C Ratio (X)	0.00	0.27	0.00	0.00	0.83	0.00	0.00	0.34
Avail Cap (c_a), veh/h	0	2347	0	0	1537	0	0	428
Upstream Filter (I)	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.4	0.0	0.0	25.3	0.0	0.0	32.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	5.5	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.7	0.0	0.0	30.8	0.0	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	0.0	15.7	0.0	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	1.2	0.0	0.0	0.1

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	0.0	16.8	0.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.94	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data
























Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		T+R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	73	0	331	308	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1615	0	1742	1599	0	0	1583
Q Serve Time (g_s), s	0.0	1.7	0.0	18.1	13.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	18.1	13.6	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	1050	0	401	688	0	0	364
V/C Ratio (X)	0.00	0.07	0.00	0.83	0.45	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1050	0	401	688	0	0	364
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	36.6	20.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	13.3	2.1	0.0	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
Control Delay (d), s/veh	0.0	6.5	0.0	49.9	22.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	8.6	6.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	10.1	6.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.15	0.92	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St.

2015 PM School Peak  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	125	66	110	158	56	114	725	98	166	919	214
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	199	145	77	128	184	0	133	843	114	193	1069	249
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	249	277	147	212	450	383	237	2330	1042	269	1633	731
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.13	0.66	0.66	0.47	0.47	0.47
Sat Flow, veh/h	1195	1146	609	1154	1863	1583	1774	3539	1583	568	3438	1538
Grp Volume(v), veh/h	199	0	222	128	184	0	133	843	114	193	1069	249
Grp Sat Flow(s),veh/h/ln	1195	0	1755	1154	1863	1583	1774	1770	1583	568	1719	1538
Q Serve(g_s), s	19.0	0.0	13.2	13.0	10.0	0.0	8.4	12.8	3.2	39.1	28.4	12.2
Cycle Q Clear(g_c), s	29.0	0.0	13.2	26.2	10.0	0.0	8.4	12.8	3.2	51.9	28.4	12.2
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	424	212	450	383	237	2330	1042	269	1633	731
V/C Ratio(X)	0.80	0.00	0.52	0.60	0.41	0.00	0.56	0.36	0.11	0.72	0.65	0.34
Avail Cap(c_a), veh/h	249	0	424	212	450	383	237	2330	1042	269	1633	731
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	39.5	50.9	38.3	0.0	48.7	9.2	7.5	36.3	24.0	19.7
Incr Delay (d2), s/veh	16.5	0.0	1.2	4.7	0.6	0.0	9.3	0.4	0.2	15.2	2.1	1.3
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(-26165%),veh/ln	7.7	0.0	6.6	4.4	5.2	0.0	4.8	6.3	1.5	7.2	13.8	5.4
LnGrp Delay(d),s/veh	67.4	0.0	40.7	55.6	38.9	0.0	58.1	9.6	7.8	51.5	26.1	21.0
LnGrp LOS	E		D	E	D		E	A	A	D	C	C
Approach Vol, veh/h		421			312			1090			1511	
Approach Delay, s/veh		53.3			45.7			15.3			28.5	
Approach LOS		D			D			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		85.0		35.0	22.0	63.0		35.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		79.0		29.0	16.0	57.0		29.0				
Max Q Clear Time (g_c+I1), s		14.8		31.0	10.4	53.9		28.2				
Green Ext Time (p_c), s		7.1		0.0	2.8	2.3		0.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			28.9									
HCM 2010 LOS			C									

**APPENDIX**

**Traffic Analysis**

**2020 AM Peak Unsignalized Intersections**

**Intersection**

Intersection Delay, s/veh 1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	62	11	367	67	10	165
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	-	-	200	200	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	90	90
Heavy Vehicles, %	9	9	2	2	5	5
Mvmt Flow	78	14	408	74	11	183

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	522	204	0
Stage 1	408	-	-
Stage 2	114	-	-
Follow-up Headway	3.59	3.39	-
Pot Capacity-1 Maneuver	468	781	-
Stage 1	620	-	-
Stage 2	878	-	-
Time blocked-Platoon, %			-
Mov Capacity-1 Maneuver	463	781	-
Mov Capacity-2 Maneuver	526	-	-
Stage 1	620	-	-
Stage 2	869	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0.5
HCM LOS	B		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	553	1126	-
HCM Lane V/C Ratio	-	-	0.165	0.01	-
HCM Control Delay (s)	-	-	12.8	8.229	-
HCM Lane LOS			B	A	
HCM 95th %tile Q(veh)	-	-	0.587	0.03	-

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined



**Intersection**

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	492	619	1	3	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	78	78	80	80
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	4	541	794	1	4	16

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	795	0	1343
Stage 1	-	-	794
Stage 2	-	-	549
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	822	-	169
Stage 1	-	-	449
Stage 2	-	-	583
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	822	-	168
Mov Cap-2 Maneuver	-	-	168
Stage 1	-	-	449
Stage 2	-	-	579

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	17.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	822	-	-	-	313
HCM Lane V/C Ratio	0.005	-	-	-	0.064
HCM Control Delay (s)	9.4	0	-	-	17.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

**Intersection**

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	11	482	1	0	560	11	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	80	80	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	12	513	1	0	700	14	0	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	714	0	0	514	0	0	1278	1251	513
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	741	714	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	886	-	-	1052	-	-	144	174	565
Stage 1	-	-	-	-	-	-	532	526	-
Stage 2	-	-	-	-	-	-	411	438	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	886	-	-	1052	-	-	119	171	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	171	-
Stage 1	-	-	-	-	-	-	522	516	-
Stage 2	-	-	-	-	-	-	346	438	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	886	-	-	1052	-	-	275
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-	0.351
HCM Control Delay (s)	0	9.1	0	-	0	-	-	25
HCM Lane LOS	A	A	A	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1.5

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	25	0	60
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	92	88
Heavy Vehicles, %	5	2	5
Mvmt Flow	28	0	68

**Major/Minor**                      **Minor2**

Conflicting Flow All	1244	1244	707
Stage 1	707	707	-
Stage 2	537	537	-
Critical Hdwy	7.15	6.52	6.25
Critical Hdwy Stg 1	6.15	5.52	-
Critical Hdwy Stg 2	6.15	5.52	-
Follow-up Hdwy	3.545	4.018	3.345
Pot Cap-1 Maneuver	149	174	430
Stage 1	421	438	-
Stage 2	522	523	-
Platoon blocked, %			
Mov Cap-1 Maneuver	147	171	430
Mov Cap-2 Maneuver	147	171	-
Stage 1	413	438	-
Stage 2	512	513	-

**Approach**                      **SB**

HCM Control Delay, s	25
HCM LOS	D

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	509	560	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	78	78	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	572	718	1	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	719	0	1291
Stage 1	-	-	719
Stage 2	-	-	572
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	878	-	182
Stage 1	-	-	486
Stage 2	-	-	569
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	878	-	182
Mov Cap-2 Maneuver	-	-	182
Stage 1	-	-	486
Stage 2	-	-	569

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	878	-	-	-	432
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	13.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	494	0	3	568	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	77	77	77	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	537	0	4	738	0	4	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	738	0	0	537	0	0	1282	1282	537
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	745	745	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	868	-	-	1031	-	-	144	167	548
Stage 1	-	-	-	-	-	-	532	526	-
Stage 2	-	-	-	-	-	-	409	424	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	868	-	-	1031	-	-	143	166	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	166	-
Stage 1	-	-	-	-	-	-	532	526	-
Stage 2	-	-	-	-	-	-	406	421	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	30.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	143	868	-	-	1031	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-	0.004	-	-	-
HCM Control Delay (s)	30.9	0	-	-	8.5	0	-	0
HCM Lane LOS	D	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	0

**Major/Minor**

**Minor2**

Conflicting Flow All	1282	1282	738
Stage 1	745	745	-
Stage 2	537	537	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	144	167	421
Stage 1	409	424	-
Stage 2	532	526	-
Platoon blocked, %			
Mov Cap-1 Maneuver	143	166	421
Mov Cap-2 Maneuver	143	166	-
Stage 1	409	421	-
Stage 2	532	526	-

**Approach**

**SB**

HCM Control Delay, s	0
HCM LOS	A

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	496	8	1	538	25	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	77	77	91	91
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	539	9	1	699	27	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	548	1244
Stage 1	-	-	543
Stage 2	-	-	701
Critical Hdwy	-	4.13	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.227	3.5
Pot Cap-1 Maneuver	-	1016	194
Stage 1	-	-	586
Stage 2	-	-	496
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1016	194
Mov Cap-2 Maneuver	-	-	194
Stage 1	-	-	586
Stage 2	-	-	495

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	217	-	-	1016	-
HCM Lane V/C Ratio	0.152	-	-	0.001	-
HCM Control Delay (s)	24.5	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

**Intersection**

Int Delay, s/veh 2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	476	23	12	474	66	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	73	73
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	517	25	15	608	90	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	542	1168
Stage 1	-	-	530
Stage 2	-	-	638
Critical Hdwy	-	4.12	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.218	3.536
Pot Cap-1 Maneuver	-	1027	212
Stage 1	-	-	586
Stage 2	-	-	522
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1027	207
Mov Cap-2 Maneuver	-	-	207
Stage 1	-	-	586
Stage 2	-	-	511

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	33.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	227	-	-	1027	-
HCM Lane V/C Ratio	0.465	-	-	0.015	-
HCM Control Delay (s)	33.9	-	-	8.6	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.3	-	-	0	-



**Intersection**

Int Delay, s/veh 1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	531	6	10	432	14	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	71	71	73	73
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	617	7	14	608	19	45

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	624
Stage 1	-	-	621
Stage 2	-	-	637
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	5.45
Critical Hdwy Stg 2	-	-	5.45
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	957
Stage 1	-	-	530
Stage 2	-	-	521
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	957
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	530
Stage 2	-	-	510

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	323	-	-	957	-
HCM Lane V/C Ratio	0.199	-	-	0.015	-
HCM Control Delay (s)	18.9	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	564	438	2	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	74	74	38	38
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	3	613	592	3	5	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	595	0	1213
Stage 1	-	-	593
Stage 2	-	-	620
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	981	-	203
Stage 1	-	-	556
Stage 2	-	-	540
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	981	-	202
Mov Cap-2 Maneuver	-	-	202
Stage 1	-	-	556
Stage 2	-	-	537

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	981	-	-	-	317
HCM Lane V/C Ratio	0.003	-	-	-	0.042
HCM Control Delay (s)	8.7	0	-	-	16.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	563	0	3	434	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	75	75	69	69
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	593	0	4	579	1	32

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	593	1180
Stage 1	-	-	593
Stage 2	-	-	587
Critical Hdwy	-	4.12	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.218	3.5
Pot Cap-1 Maneuver	-	983	212
Stage 1	-	-	556
Stage 2	-	-	560
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	983	211
Mov Cap-2 Maneuver	-	-	211
Stage 1	-	-	556
Stage 2	-	-	557

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	480	-	-	983	-
HCM Lane V/C Ratio	0.069	-	-	0.004	-
HCM Control Delay (s)	13.1	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 6.4

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	154	308	650	150	39	44
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	86	86	63	63
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	211	422	756	174	62	70

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	756	0	1389
Stage 1	-	-	756
Stage 2	-	-	633
Critical Hdwy	4.11	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	859	-	147
Stage 1	-	-	467
Stage 2	-	-	497
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	859	-	111
Mov Cap-2 Maneuver	-	-	111
Stage 1	-	-	467
Stage 2	-	-	375

Approach	EB	WB	SE
HCM Control Delay, s	3.5	0	65
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	859	-	-	-	181
HCM Lane V/C Ratio	0.246	-	-	-	0.728
HCM Control Delay (s)	10.6	-	-	-	65
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1	-	-	-	4.6

**Intersection**

Int Delay, s/veh 23

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	302	1619	4	123	922
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	88	88	74	74
Heavy Vehicles, %	1	1	3	3	4	4
Mvmt Flow	0	368	1840	5	166	1246

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2797	922	0 0 1844 0
Stage 1	1842	-	- - - -
Stage 2	955	-	- - - -
Critical Hdwy	6.82	6.92	- - 4.18 -
Critical Hdwy Stg 1	5.82	-	- - - -
Critical Hdwy Stg 2	5.82	-	- - - -
Follow-up Hdwy	3.51	3.31	- - 2.24 -
Pot Cap-1 Maneuver	15	~ 274	- - 318 -
Stage 1	112	-	- - - -
Stage 2	337	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	7	~ 274	- - 318 -
Mov Cap-2 Maneuver	7	-	- - - -
Stage 1	112	-	- - - -
Stage 2	161	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	213.6	0	3.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	274	318	-
HCM Lane V/C Ratio	-	-	1.344	0.523	-
HCM Control Delay (s)	-	-	213.6	28.1	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	19	2.9	-

**Notes**

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






















**APPENDIX**

**Traffic Analysis**

**2020 AM Peak Signalized Intersections**

HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2020 AM NB  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	156	10	15	125	516	16	201	42	248	51	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	82	190	12	19	156	0	20	251	52	292	60	35
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	494	658	42	480	714	607	616	624	129	438	456	266
Arrive On Green	0.38	0.38	0.38	0.13	0.13	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1214	1717	108	1175	1863	1583	1295	1498	310	1062	1094	638
Grp Volume(v), veh/h	82	0	202	19	156	0	20	0	303	292	0	95
Grp Sat Flow(s),veh/h/ln	1214	0	1826	1175	1863	1583	1295	0	1808	1062	0	1732
Q Serve(g_s), s	3.0	0.0	4.6	0.9	4.5	0.0	0.6	0.0	7.0	16.0	0.0	2.0
Cycle Q Clear(g_c), s	7.5	0.0	4.6	5.5	4.5	0.0	2.6	0.0	7.0	23.0	0.0	2.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.17	1.00		0.37
Lane Grp Cap(c), veh/h	494	0	700	480	714	607	616	0	753	438	0	722
V/C Ratio(X)	0.17	0.00	0.29	0.04	0.22	0.00	0.03	0.00	0.40	0.67	0.00	0.13
Avail Cap(c_a), veh/h	494	0	700	480	714	607	616	0	753	438	0	722
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.81	0.81	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	12.8	20.6	18.1	0.0	11.6	0.0	12.3	20.3	0.0	10.8
Incr Delay (d2), s/veh	0.7	0.0	1.0	0.1	0.6	0.0	0.1	0.0	1.6	7.8	0.0	0.4
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(-26165%),veh/ln	1.1	0.0	2.5	0.3	2.4	0.0	0.2	0.0	3.8	5.6	0.0	1.0
LnGrp Delay(d),s/veh	16.1	0.0	13.9	20.8	18.7	0.0	11.7	0.0	13.9	28.2	0.0	11.2
LnGrp LOS	B		B	C	B		B		B	C		B
Approach Vol, veh/h		284			175			323			387	
Approach Delay, s/veh		14.5			18.9			13.7			24.0	
Approach LOS		B			B			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		23.0		25.0		23.0		25.0				
Max Q Clear Time (g_c+I1), s		9.5		25.0		7.5		9.0				
Green Ext Time (p_c), s		1.7		0.0		1.8		3.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			18.1									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd
























2020 AM NB  
 4/30/2015

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↗	↖	↑	↖	↗		
Volume (veh/h)	357	92	127	506	158	133		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	441	114	151	602	198	166		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	993	844	393	993	473	422		
Arrive On Green	0.18	0.18	0.53	0.53	0.27	0.27		
Sat Flow, veh/h	1863	1583	850	1863	1774	1583		
Grp Volume(v), veh/h	441	114	151	602	198	166		
Grp Sat Flow(s),veh/h/ln	1863	1583	850	1863	1774	1583		
Q Serve(g_s), s	12.7	3.6	8.8	13.4	5.5	5.2		
Cycle Q Clear(g_c), s	12.7	3.6	21.5	13.4	5.5	5.2		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	993	844	393	993	473	422		
V/C Ratio(X)	0.44	0.13	0.38	0.61	0.42	0.39		
Avail Cap(c_a), veh/h	993	844	393	993	473	422		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.84	0.84	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.8	13.0	16.8	9.7	18.2	18.0		
Incr Delay (d2), s/veh	1.2	0.3	2.8	2.7	2.7	2.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	6.9	1.7	2.4	7.4	3.1	2.6		
LnGrp Delay(d),s/veh	18.0	13.3	19.6	12.4	20.9	20.8		
LnGrp LOS	B	B	B	B	C	C		
Approach Vol, veh/h	555			753	364			
Approach Delay, s/veh	17.0			13.8	20.8			
Approach LOS	B			B	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		14.7				23.5		7.5
Green Ext Time (p_c), s		6.7				4.4		0.8
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			16.4					
HCM 2010 LOS			B					



HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	259	221	89	122	181	197	126	1190	196	269	519	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	267	228	92	154	229	0	145	1368	225	341	657	167
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	180	280	113	104	412	351	203	2452	1097	206	1842	824
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
Prop Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.00	0.11	0.69	0.69	0.54	0.54	0.54
Ln Grp Delay, s/veh	308.4	0.0	64.3	328.0	50.0	0.0	79.2	11.7	8.1	359.4	19.2	17.5
Ln Grp LOS	F		E	F	D		E	B	A	F	B	B
Approach Vol, veh/h		587			383			1738			1165	
Approach Delay, s/veh		175.3			161.8			16.9			118.5	
Approach LOS		F			F			B			F	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	5	6		8			
Case No			3.0		6.0	2.0	5.0		5.0			
Phs Duration (G+Y+Rc), s			103.0		37.0	22.0	81.0		37.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			97.0		31.0	16.0	75.0		31.0			
Max Allow Headway (MAH), s			5.9		4.8	3.8	5.9		4.8			
Max Q Clear (g_c+I1), s			29.1		33.0	13.0	77.0		33.0			
Green Ext Time (g_e), s			51.9		0.0	0.1	0.0		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.67		1.00	1.00	1.00		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	5	1		3			
Mvmt Sat Flow, veh/h					1147	1774	310		1055			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3539		1263		3438		1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1583		510		1538		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	5	1	0	3			
Lane Assignment					(Prot)							
Lanes in Grp		0	0	0	1	1	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

Grp Vol (v), veh/h	0	0	0	267	145	341	0	154
Grp Sat Flow (s), veh/h/ln	0	0	0	1147	1774	310	0	1055
Q Serve Time (g_s), s	0.0	0.0	0.0	15.7	11.0	69.9	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	31.0	11.0	75.0	0.0	31.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1147	0	310	0	1055
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	31.0	0.0	75.0	0.0	31.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.7	0.0	69.9	0.0	7.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.7	0.0	69.9	0.0	7.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	180	203	206	0	104
V/C Ratio (X)	0.00	0.00	0.00	1.48	0.72	1.66	0.00	1.48
Avail Cap (c_a), veh/h	0	0	0	180	203	206	0	104
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	64.4	59.8	43.8	0.0	68.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	244.0	19.4	315.6	0.0	259.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	308.4	79.2	359.4	0.0	328.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.0	5.4	8.0	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	12.2	1.1	18.1	0.0	7.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	19.2	6.5	26.0	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.78	0.94	1.50	0.00	1.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.7	0.0	33.8	0.0	12.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.4
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1368	0	0	0	657	0	229
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1719	0	1863
Q Serve Time (g_s), s	0.0	27.1	0.0	0.0	0.0	15.4	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	27.1	0.0	0.0	0.0	15.4	0.0	15.3
Lane Grp Cap (c), veh/h	0	2452	0	0	0	1842	0	412
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.36	0.00	0.56
Avail Cap (c_a), veh/h	0	2452	0	0	0	1842	0	412
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	0.0	0.0	18.7	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.5	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.7	0.0	0.0	0.0	19.2	0.0	50.0
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	0.0	0.0	7.3	0.0	7.9
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.2

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.4	0.0	0.0	0.0	7.4	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	1.40	0.00	0.00	0.00	0.43	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	225	0	320	0	167	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1773	0	1538	0	1583
Q Serve Time (g_s), s	0.0	7.1	0.0	24.0	0.0	7.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.1	0.0	24.0	0.0	7.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	1097	0	393	0	824	0	351
V/C Ratio (X)	0.00	0.21	0.00	0.82	0.00	0.20	0.00	0.00
Avail Cap (c_a), veh/h	0	1097	0	393	0	824	0	351
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.7	0.0	51.8	0.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	12.5	0.0	0.6	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
Control Delay (d), s/veh	0.0	8.1	0.0	64.3	0.0	17.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	11.7	0.0	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.2	0.0	13.1	0.0	3.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	0.20	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	85.8
HCM 2010 LOS	F

**APPENDIX**

**Traffic Analysis**

**2020 PM Peak Unsignalized Intersections**

**Intersection**

Intersection Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	112	22	258	95	19	368
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	-	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	88	88
Heavy Vehicles, %	1	1	4	4	3	3
Mvmt Flow	138	27	287	106	22	418

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	539	143	0
Stage 1	287	-	-
Stage 2	252	-	-
Follow-up Headway	3.51	3.31	-
Pot Capacity-1 Maneuver	475	882	-
Stage 1	739	-	-
Stage 2	770	-	-
Time blocked-Platoon, %			
Mov Capacity-1 Maneuver	467	882	-
Mov Capacity-2 Maneuver	554	-	-
Stage 1	739	-	-
Stage 2	757	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	0.4
HCM LOS	B		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	590	1265	-
HCM Lane V/C Ratio	-	-	0.28	0.017	-
HCM Control Delay (s)	-	-	13.5	7.895	-
HCM Lane LOS			B	A	
HCM 95th %tile Q(veh)	-	-	1.144	0.052	-

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

HCM 2010 TWSC  
 10: Alligator Rd & Garden Gate Way

4/22/2014

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	13	540	473	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	38	38
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	14	593	503	2	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	505	0	1126
Stage 1	-	-	504
Stage 2	-	-	622
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1055	-	229
Stage 1	-	-	611
Stage 2	-	-	539
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1055	-	224
Mov Cap-2 Maneuver	-	-	224
Stage 1	-	-	611
Stage 2	-	-	528

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1055	-	-	-	572
HCM Lane V/C Ratio	0.014	-	-	-	0.014
HCM Control Delay (s)	8.5	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	44	498	2	3	451	18	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	89	89	89	58	58	58
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	48	541	2	3	507	20	5	0	7

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	527	0	0	543	0	0	1178	1172	542
Stage 1	-	-	-	-	-	-	638	638	-
Stage 2	-	-	-	-	-	-	540	534	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1035	-	-	1026	-	-	169	194	544
Stage 1	-	-	-	-	-	-	468	474	-
Stage 2	-	-	-	-	-	-	530	528	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1035	-	-	1026	-	-	150	180	544
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	180	-
Stage 1	-	-	-	-	-	-	437	443	-
Stage 2	-	-	-	-	-	-	497	526	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0.1	19.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	256	1035	-	-	1026	-	-	301
HCM Lane V/C Ratio	0.047	0.046	-	-	0.003	-	-	0.156
HCM Control Delay (s)	19.8	8.6	0	-	8.5	0	-	19.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	10	1	21
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	68	68	68
Heavy Vehicles, %	3	3	3
Mvmt Flow	15	1	31

**Major/Minor**                      **Minor2**

Conflicting Flow All	1165	1163	517
Stage 1	524	524	-
Stage 2	641	639	-
Critical Hdwy	7.13	6.53	6.23
Critical Hdwy Stg 1	6.13	5.53	-
Critical Hdwy Stg 2	6.13	5.53	-
Follow-up Hdwy	3.527	4.027	3.327
Pot Cap-1 Maneuver	170	194	556
Stage 1	535	528	-
Stage 2	461	469	-
Platoon blocked, %			
Mov Cap-1 Maneuver	159	180	556
Mov Cap-2 Maneuver	159	180	-
Stage 1	500	526	-
Stage 2	425	438	-

**Approach**                      **SB**

HCM Control Delay, s	19.2
HCM LOS	C

**Minor Lane/Major Mvmt**



**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	513	472	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	546	502	0	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	502	0	1048
Stage 1	-	-	502
Stage 2	-	-	546
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1057	-	255
Stage 1	-	-	612
Stage 2	-	-	584
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1057	-	255
Mov Cap-2 Maneuver	-	-	255
Stage 1	-	-	612
Stage 2	-	-	584

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1057	-	-	-	255
HCM Lane V/C Ratio	-	-	-	-	0.016
HCM Control Delay (s)	0	-	-	-	19.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 2010 TWSC  
 16: Alligator Rd & Sunset Memory Gardens

4/22/2014

**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	499	17	11	461	1	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	35	35	35
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	0	542	18	12	496	1	6	0	14

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	497	0	0	561	0	0	1074	1072	552
Stage 1	-	-	-	-	-	-	552	552	-
Stage 2	-	-	-	-	-	-	522	520	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1062	-	-	1010	-	-	199	222	537
Stage 1	-	-	-	-	-	-	522	518	-
Stage 2	-	-	-	-	-	-	542	535	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1062	-	-	1010	-	-	195	218	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	218	-
Stage 1	-	-	-	-	-	-	522	518	-
Stage 2	-	-	-	-	-	-	530	526	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	358	1062	-	-	1010	-	-	578
HCM Lane V/C Ratio	0.056	-	-	-	0.012	-	-	0.007
HCM Control Delay (s)	15.7	0	-	-	8.6	0	-	11.3
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	4

**Major/Minor**                      **Minor2**

Conflicting Flow All	1079	1081	496
Stage 1	520	520	-
Stage 2	559	561	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	198	220	578
Stage 1	543	535	-
Stage 2	517	513	-
Platoon blocked, %			
Mov Cap-1 Maneuver	190	216	578
Mov Cap-2 Maneuver	190	216	-
Stage 1	543	526	-
Stage 2	503	513	-

**Approach**                      **SB**

HCM Control Delay, s	11.3
HCM LOS	B

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	484	13	7	461	5	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	95	95	60	60
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	515	14	7	485	8	12

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	529
Stage 1	-	-	522
Stage 2	-	-	500
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	6.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	-	5.4
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	3.5
Stage 1	-	-	1038
Stage 2	-	-	264
Platoon blocked, %	-	-	599
Mov Cap-1 Maneuver	-	-	613
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	1038
Stage 2	-	-	262
Stage 1	-	-	262
Stage 2	-	-	599
Stage 2	-	-	607

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	380	-	-	1038	-
HCM Lane V/C Ratio	0.053	-	-	0.007	-
HCM Control Delay (s)	15	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	445	43	30	430	38	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	96	96	76	76
Heavy Vehicles, %	3	3	1	1	2	2
Mvmt Flow	478	46	31	448	50	34

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	525	1012
Stage 1	-	-	502
Stage 2	-	-	510
Critical Hdwy	-	4.11	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.209	3.518
Pot Cap-1 Maneuver	-	1047	265
Stage 1	-	-	608
Stage 2	-	-	603
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1047	255
Mov Cap-2 Maneuver	-	-	255
Stage 1	-	-	608
Stage 2	-	-	579

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	19.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	329	-	-	1047	-
HCM Lane V/C Ratio	0.256	-	-	0.03	-
HCM Control Delay (s)	19.7	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	455	10	27	493	12	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	95	95	72	72
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	517	11	28	519	17	22

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	528	1099
Stage 1	-	-	523
Stage 2	-	-	576
Critical Hdwy	-	4.12	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.218	3.536
Pot Cap-1 Maneuver	-	1039	233
Stage 1	-	-	591
Stage 2	-	-	558
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1039	224
Mov Cap-2 Maneuver	-	-	224
Stage 1	-	-	591
Stage 2	-	-	537

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	-	-	1039	-
HCM Lane V/C Ratio	0.115	-	-	0.027	-
HCM Control Delay (s)	17	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	474	534	5	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	96	96	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	539	556	5	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	561	0	1098
Stage 1	-	-	559
Stage 2	-	-	539
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1005	-	238
Stage 1	-	-	576
Stage 2	-	-	589
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1005	-	238
Mov Cap-2 Maneuver	-	-	238
Stage 1	-	-	576
Stage 2	-	-	589

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1005	-	-	-	238
HCM Lane V/C Ratio	-	-	-	-	0.017
HCM Control Delay (s)	0	-	-	-	20.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	464	1	16	534	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	93	93	63	63
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	488	1	17	574	2	16

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	489	1098
Stage 1	-	-	489
Stage 2	-	-	609
Critical Hdwy	-	4.11	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.209	3.5
Pot Cap-1 Maneuver	-	1079	238
Stage 1	-	-	621
Stage 2	-	-	547
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1079	233
Mov Cap-2 Maneuver	-	-	233
Stage 1	-	-	621
Stage 2	-	-	534

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	513	-	-	1079	-
HCM Lane V/C Ratio	0.034	-	-	0.016	-
HCM Control Delay (s)	12.3	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



**Intersection**

Int Delay, s/veh 4.7

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	10	279	239	118	234	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	84	84	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	11	317	285	140	257	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	285	0	466
Stage 1	-	-	285
Stage 2	-	-	181
Critical Hdwy	4.13	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1271	-	544
Stage 1	-	-	768
Stage 2	-	-	838
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1271	-	539
Mov Cap-2 Maneuver	-	-	539
Stage 1	-	-	768
Stage 2	-	-	831

Approach	EB	WB	SE
HCM Control Delay, s	0.3	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1271	-	-	-	544
HCM Lane V/C Ratio	0.009	-	-	-	0.487
HCM Control Delay (s)	7.9	-	-	-	17.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.6

**Intersection**

Int Delay, s/veh 2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	148	963	0	261	1666
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	90	90	92	92
Heavy Vehicles, %	0	0	3	3	1	1
Mvmt Flow	0	195	1070	0	284	1811

Major/Minor	Minor1	Minor2	Major1	Major2	Major2	Major2
Conflicting Flow All	2543	535	0	0	1070	0
Stage 1	1070	-	-	-	-	-
Stage 2	1473	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	23	495	-	-	653	-
Stage 1	295	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	13	495	-	-	653	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	102	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	495	653	-
HCM Lane V/C Ratio	-	-	0.393	0.434	-
HCM Control Delay (s)	-	-	16.9	14.7	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.9	2.2	-






















**APPENDIX**

**Traffic Analysis**

**2020 PM Peak Signalized Intersections**

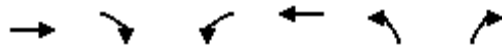
HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2020 PM NB  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	177	13	23	191	290	18	81	14	390	192	53
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1881	1881	1881	1845	1845	1900	1881	1881	1900
Adj Flow Rate, veh/h	47	195	14	25	210	0	22	100	17	419	206	57
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	1	1	1	3	3	3	1	1	1
Cap, veh/h	343	482	35	345	533	453	599	794	135	739	733	203
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.00	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1156	1701	122	1180	1881	1599	1101	1537	261	1282	1419	393
Grp Volume(v), veh/h	47	0	209	25	210	0	22	0	117	419	0	263
Grp Sat Flow(s),veh/h/ln	1156	0	1823	1180	1881	1599	1101	0	1799	1282	0	1812
Q Serve(g_s), s	2.1	0.0	5.6	1.1	5.4	0.0	0.7	0.0	2.0	15.1	0.0	4.9
Cycle Q Clear(g_c), s	7.5	0.0	5.6	6.6	5.4	0.0	5.6	0.0	2.0	17.1	0.0	4.9
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	343	0	517	345	533	453	599	0	929	739	0	936
V/C Ratio(X)	0.14	0.00	0.40	0.07	0.39	0.00	0.04	0.00	0.13	0.57	0.00	0.28
Avail Cap(c_a), veh/h	343	0	517	345	533	453	599	0	929	739	0	936
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	0.00	1.00	0.90	0.90	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	17.4	20.1	17.3	0.0	9.8	0.0	7.5	11.9	0.0	8.2
Incr Delay (d2), s/veh	0.8	0.0	2.3	0.4	2.0	0.0	0.1	0.0	0.3	3.1	0.0	0.7
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(-26165%),veh/ln	0.7	0.0	3.1	0.4	3.1	0.0	0.2	0.0	1.0	5.9	0.0	2.6
LnGrp Delay(d),s/veh	21.2	0.0	19.8	20.5	19.3	0.0	9.9	0.0	7.8	15.0	0.0	8.9
LnGrp LOS	C		B	C	B		A		A	B		A
Approach Vol, veh/h		256			235			139			682	
Approach Delay, s/veh		20.0			19.4			8.1			12.7	
Approach LOS		C			B			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		37.0		23.0		37.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		17.0		31.0		17.0		31.0				
Max Q Clear Time (g_c+I1), s		9.5		19.1		8.6		7.6				
Green Ext Time (p_c), s		1.4		3.0		1.5		3.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			14.8									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd
























2020 PM NB  
 4/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↑	↑	↑	↑	↑		
Volume (veh/h)	522	52	42	448	55	33		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1810	1810		
Adj Flow Rate, veh/h	555	55	45	477	76	46		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.72	0.72		
Percent Heavy Veh, %	2	2	2	2	5	5		
Cap, veh/h	993	844	331	993	460	410		
Arrive On Green	0.18	0.18	0.53	0.53	0.27	0.27		
Sat Flow, veh/h	1863	1583	808	1863	1723	1538		
Grp Volume(v), veh/h	555	55	45	477	76	46		
Grp Sat Flow(s),veh/h/ln	1863	1583	808	1863	1723	1538		
Q Serve(g_s), s	16.3	1.7	2.6	9.6	2.0	1.4		
Cycle Q Clear(g_c), s	16.3	1.7	19.0	9.6	2.0	1.4		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	993	844	331	993	460	410		
V/C Ratio(X)	0.56	0.07	0.14	0.48	0.17	0.11		
Avail Cap(c_a), veh/h	993	844	331	993	460	410		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.81	0.81	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	18.3	12.3	17.3	8.8	16.9	16.6		
Incr Delay (d2), s/veh	1.8	0.1	0.9	1.7	0.8	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	8.9	0.8	0.7	5.4	1.0	0.6		
LnGrp Delay(d),s/veh	20.1	12.4	18.2	10.4	17.7	17.2		
LnGrp LOS	C	B	B	B	B	B		
Approach Vol, veh/h	610			522	122			
Approach Delay, s/veh	19.4			11.1	17.5			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		18.3				21.0		4.0
Green Ext Time (p_c), s		5.2				4.6		0.2
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			15.8					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	181	172	143	81	148	42	108	655	75	85	1259	302
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1863	1863	1863	1900	1900	1900	1881	1881	1881
Adj Flow Rate, veh/h	201	191	159	84	153	0	111	675	77	91	1354	325
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.97	0.97	0.97	0.97	0.97	0.97	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	2	2	2	0	0	0	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	285	228	190	122	447	380	290	2310	1034	313	1501	672
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
Prop Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.16	0.64	0.64	0.42	0.42	0.42
Ln Grp Delay, s/veh	48.5	0.0	50.0	63.5	31.9	0.0	41.4	8.3	6.9	27.5	36.2	23.6
Ln Grp LOS	D		D	E	C		D	A	A	C	D	C
Approach Vol, veh/h		551			237			863			1770	
Approach Delay, s/veh		49.5			43.1			12.4			33.5	
Approach LOS		D			D			B			C	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	6	5		8			
Case No			3.0		6.0	5.4	2.0		5.0			
Phs Duration (G+Y+Rc), s			70.0		30.0	48.0	22.0		30.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			64.0		24.0	42.0	16.0		24.0			
Max Allow Headway (MAH), s			4.9		4.8	4.7	4.9		4.8			
Max Q Clear (g_c+I1), s			10.3		24.8	37.4	7.5		26.0			
Green Ext Time (g_e), s			6.2		0.0	3.6	3.3		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.00		1.00	1.00	0.55		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	1	5		3			
Mvmt Sat Flow, veh/h					1241	715	1810		1027			
<b>Through Movement Data</b>												
Assigned Mvmt		2		4	6				8			
Mvmt Sat Flow, veh/h		3610		950	3574				1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14	16			18			
Mvmt Sat Flow, veh/h			1615		791	1599			1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	1	5	0	3			
Lane Assignment							(Prot)					
Lanes in Grp		0	0	0	1	1	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

Grp Vol (v), veh/h	0	0	0	201	91	111	0	84
Grp Sat Flow (s), veh/h/ln	0	0	0	1241	715	1810	0	1027
Q Serve Time (g_s), s	0.0	0.0	0.0	16.0	9.7	5.5	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.8	17.9	5.5	0.0	24.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1241	715	0	0	1027
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	24.0	42.0	0.0	0.0	24.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	17.2	33.7	0.0	0.0	4.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	16.0	9.7	0.0	0.0	4.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	285	313	290	0	122
V/C Ratio (X)	0.00	0.00	0.00	0.70	0.29	0.38	0.00	0.69
Avail Cap (c_a), veh/h	0	0	0	285	313	290	0	122
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.9	25.2	37.6	0.0	48.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.6	2.3	3.8	0.0	15.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	48.5	27.5	41.4	0.0	63.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.5	1.9	2.7	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.2	0.3	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.1	2.1	3.1	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.87	0.12	0.44	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T			T			T
Lanes in Grp	0	2	0	0	2	0	0	1
Grp Vol (v), veh/h	0	675	0	0	1354	0	0	153
Grp Sat Flow (s), veh/h/ln	0	1805	0	0	1787	0	0	1863
Q Serve Time (g_s), s	0.0	8.3	0.0	0.0	35.4	0.0	0.0	6.8
Cycle Q Clear Time (g_c), s	0.0	8.3	0.0	0.0	35.4	0.0	0.0	6.8
Lane Grp Cap (c), veh/h	0	2310	0	0	1501	0	0	447
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.90	0.00	0.00	0.34
Avail Cap (c_a), veh/h	0	2310	0	0	1501	0	0	447
Upstream Filter (I)	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.0	0.0	0.0	27.1	0.0	0.0	31.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	9.1	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	0.0	0.0	36.2	0.0	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	0.0	17.3	0.0	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	1.9	0.0	0.0	0.1

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.2	0.0	0.0	19.2	0.0	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.00	1.07	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		T+R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	77	0	350	325	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1615	0	1742	1599	0	0	1583
Q Serve Time (g_s), s	0.0	1.8	0.0	19.1	14.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	19.1	14.8	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	1034	0	418	672	0	0	380
V/C Ratio (X)	0.00	0.07	0.00	0.84	0.48	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1034	0	418	672	0	0	380
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.8	0.0	36.1	21.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	13.9	2.5	0.0	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
Control Delay (d), s/veh	0.0	6.9	0.0	50.0	23.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	9.1	6.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.6	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	10.8	7.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.16	1.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
























Intersection Summary

HCM 2010 Ctrl Delay	31.4
HCM 2010 LOS	C



HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St

2020 NB PM School  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	125	66	110	158	56	114	725	98	166	919	214
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	207	151	80	133	191	0	138	877	119	201	1111	259
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	266	296	157	227	481	409	237	2271	1016	311	1576	705
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.00	0.13	0.64	0.64	0.46	0.46	0.46
Sat Flow, veh/h	1187	1148	608	1145	1863	1583	1774	3539	1583	547	3438	1538
Grp Volume(v), veh/h	207	0	231	133	191	0	138	877	119	201	1111	259
Grp Sat Flow(s),veh/h/ln	1187	0	1755	1145	1863	1583	1774	1770	1583	547	1719	1538
Q Serve(g_s), s	20.8	0.0	13.5	13.5	10.2	0.0	8.8	14.2	3.5	37.8	31.0	13.2
Cycle Q Clear(g_c), s	31.0	0.0	13.5	27.0	10.2	0.0	8.8	14.2	3.5	37.8	31.0	13.2
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	0	453	227	481	409	237	2271	1016	311	1576	705
V/C Ratio(X)	0.78	0.00	0.51	0.59	0.40	0.00	0.58	0.39	0.12	0.65	0.71	0.37
Avail Cap(c_a), veh/h	266	0	453	227	481	409	237	2271	1016	311	1576	705
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	0.0	38.0	49.5	36.8	0.0	48.9	10.2	8.3	27.8	26.0	21.2
Incr Delay (d2), s/veh	13.6	0.0	0.9	3.8	0.5	0.0	10.1	0.5	0.2	10.0	2.7	1.5
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(-26165%),veh/ln	7.8	0.0	6.7	4.5	5.3	0.0	5.0	7.0	1.6	6.6	15.2	5.8
LnGrp Delay(d),s/veh	63.2	0.0	39.0	53.4	37.3	0.0	59.0	10.7	8.6	37.8	28.7	22.6
LnGrp LOS	E		D	D	D		E	B	A	D	C	C
Approach Vol, veh/h		438			324			1134			1571	
Approach Delay, s/veh		50.4			43.9			16.4			28.9	
Approach LOS		D			D			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		83.0		37.0	22.0	61.0		37.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		77.0		31.0	16.0	55.0		31.0				
Max Q Clear Time (g_c+I1), s		16.2		33.0	10.8	39.8		29.0				
Green Ext Time (p_c), s		34.1		0.0	0.1	12.6		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			28.9									
HCM 2010 LOS			C									

**APPENDIX**

**Traffic Analysis**

**2040 AM Peak Unsignalized Intersections**

**Intersection**

Intersection Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	73	12	430	78	11	193
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	-	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	90	90
Heavy Vehicles, %	9	9	2	2	5	5
Mvmt Flow	91	15	478	87	12	214

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	610	239	0
Stage 1	478	-	-
Stage 2	132	-	-
Follow-up Headway	3.59	3.39	-
Pot Capacity-1 Maneuver	410	741	-
Stage 1	570	-	-
Stage 2	860	-	-
Time blocked-Platoon, %			-
Mov Capacity-1 Maneuver	405	741	-
Mov Capacity-2 Maneuver	480	-	-
Stage 1	570	-	-
Stage 2	850	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.5
HCM LOS	B		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	505	1060	-
HCM Lane V/C Ratio	-	-	0.21	0.012	-
HCM Control Delay (s)	-	-	14	8.436	-
HCM Lane LOS			B	A	
HCM 95th %tile Q(veh)	-	-	0.787	0.035	-

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	5	577	725	1	4	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	78	78	80	80
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	5	634	929	1	5	19

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	931	0	1575
Stage 1	-	-	930
Stage 2	-	-	645
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	731	-	122
Stage 1	-	-	387
Stage 2	-	-	526
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	731	-	121
Mov Cap-2 Maneuver	-	-	121
Stage 1	-	-	387
Stage 2	-	-	520

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	21.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	731	-	-	-	241
HCM Lane V/C Ratio	0.008	-	-	-	0.099
HCM Control Delay (s)	10	0	-	-	21.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

**Intersection**

Int Delay, s/veh 3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	12	565	1	0	657	12	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	80	80	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	13	601	1	0	821	15	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	836	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	798	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	798	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	798	-	-	975	-	-	209
HCM Lane V/C Ratio	-	0.016	-	-	-	-	-	0.549
HCM Control Delay (s)	0	9.6	0	-	0	-	-	41.4
HCM Lane LOS	A	A	A	-	A	-	-	E
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	2.9

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	30	0	71
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	92	88
Heavy Vehicles, %	5	2	5
Mvmt Flow	34	0	81

**Major/Minor**

	Minor2		
Conflicting Flow All	1456	1457	829
Stage 1	829	829	-
Stage 2	627	628	-
Critical Hdwy	7.15	6.52	6.25
Critical Hdwy Stg 1	6.15	5.52	-
Critical Hdwy Stg 2	6.15	5.52	-
Follow-up Hdwy	3.545	4.018	3.345
Pot Cap-1 Maneuver	106	130	366
Stage 1	361	385	-
Stage 2	466	476	-
Platoon blocked, %			
Mov Cap-1 Maneuver	104	127	366
Mov Cap-2 Maneuver	104	127	-
Stage 1	352	385	-
Stage 2	455	465	-

**Approach**

	SB
HCM Control Delay, s	41.4
HCM LOS	E

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	596	657	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	78	78	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	670	842	1	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	844	0	1513
Stage 1	-	-	843
Stage 2	-	-	670
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	788	-	133
Stage 1	-	-	426
Stage 2	-	-	512
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	788	-	133
Mov Cap-2 Maneuver	-	-	133
Stage 1	-	-	426
Stage 2	-	-	512

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	788	-	-	-	367
HCM Lane V/C Ratio	-	-	-	-	0.011
HCM Control Delay (s)	0	-	-	-	14.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	579	0	4	666	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	77	77	77	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	629	0	5	865	0	4	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	865	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	778	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	778	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	42.5
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	100	778	-	-	953	-	-	-
HCM Lane V/C Ratio	0.04	-	-	-	0.005	-	-	-
HCM Control Delay (s)	42.5	0	-	-	8.8	0	-	0
HCM Lane LOS	E	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-



**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	0

**Major/Minor**                      **Minor2**

Conflicting Flow All	1504	1504	865
Stage 1	875	875	-
Stage 2	629	629	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	101	123	356
Stage 1	347	370	-
Stage 2	474	478	-
Platoon blocked, %			
Mov Cap-1 Maneuver	100	122	356
Mov Cap-2 Maneuver	100	122	-
Stage 1	347	366	-
Stage 2	474	478	-

**Approach**                      **SB**

HCM Control Delay, s	0
HCM LOS	A

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	582	10	1	631	30	6
Conflicting Peds, #/hr	0	0	631	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	77	77	91	91
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	633	11	1	819	33	7

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1460
Stage 1	-	-	638
Stage 2	-	-	822
Critical Hdwy	-	4.13	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.227	3.5
Pot Cap-1 Maneuver	-	937	144
Stage 1	-	-	530
Stage 2	-	-	435
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	444	143
Mov Cap-2 Maneuver	-	-	143
Stage 1	-	-	530
Stage 2	-	-	433

Approach	EB	WB	NB
HCM Control Delay, s	0	0	43.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	133	-	-	444	-
HCM Lane V/C Ratio	0.297	-	-	0.003	-
HCM Control Delay (s)	43.1	-	-	13.1	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

**Intersection**

Int Delay, s/veh 5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	558	27	14	556	77	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	73	73
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	607	29	18	713	105	16

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	636
Stage 1	-	-	621
Stage 2	-	-	749
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	947
Stage 1	-	-	532
Stage 2	-	-	464
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	947
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	532
Stage 2	-	-	450

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	66
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	171	-	-	947	-
HCM Lane V/C Ratio	0.713	-	-	0.019	-
HCM Control Delay (s)	66	-	-	8.9	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	4.4	-	-	0.1	-

**Intersection**

Int Delay, s/veh 1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	622	7	11	507	16	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	71	71	73	73
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	723	8	15	714	22	52

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	731	1472
Stage 1	-	-	727
Stage 2	-	-	745
Critical Hdwy	-	4.12	6.45
Critical Hdwy Stg 1	-	-	5.45
Critical Hdwy Stg 2	-	-	5.45
Follow-up Hdwy	-	2.218	3.545
Pot Cap-1 Maneuver	-	873	138
Stage 1	-	-	473
Stage 2	-	-	464
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	873	134
Mov Cap-2 Maneuver	-	-	134
Stage 1	-	-	473
Stage 2	-	-	451

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	24.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	257	-	-	873	-
HCM Lane V/C Ratio	0.288	-	-	0.018	-
HCM Control Delay (s)	24.6	-	-	9.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	661	513	2	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	74	74	38	38
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	4	718	693	3	5	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	696	0	1422
Stage 1	-	-	695
Stage 2	-	-	727
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	900	-	152
Stage 1	-	-	499
Stage 2	-	-	482
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	900	-	151
Mov Cap-2 Maneuver	-	-	151
Stage 1	-	-	499
Stage 2	-	-	479

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	900	-	-	-	270
HCM Lane V/C Ratio	0.005	-	-	-	0.058
HCM Control Delay (s)	9	0	-	-	19.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	660	0	4	508	1	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	75	75	69	69
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	695	0	5	677	1	38

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	695	1383
Stage 1	-	-	695
Stage 2	-	-	688
Critical Hdwy	-	4.12	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.218	3.5
Pot Cap-1 Maneuver	-	901	160
Stage 1	-	-	499
Stage 2	-	-	503
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	901	159
Mov Cap-2 Maneuver	-	-	159
Stage 1	-	-	499
Stage 2	-	-	498

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	418	-	-	901	-
HCM Lane V/C Ratio	0.094	-	-	0.006	-
HCM Control Delay (s)	14.5	-	-	9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

**Intersection**

Int Delay, s/veh 20.7

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	181	361	763	176	46	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	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	86	86	63	63
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	248	495	887	205	73	83

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	887	0	1630
Stage 1	-	-	887
Stage 2	-	-	743
Critical Hdwy	4.11	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	768	-	103
Stage 1	-	-	406
Stage 2	-	-	436
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	768	-	~ 70
Mov Cap-2 Maneuver	-	-	~ 70
Stage 1	-	-	406
Stage 2	-	-	295

Approach	EB	WB	SE
HCM Control Delay, s	4	0	245.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	768	-	-	-	121
HCM Lane V/C Ratio	0.323	-	-	-	1.286
HCM Control Delay (s)	11.9	-	-	-	245.1
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1.4	-	-	-	10.1

**Notes**

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

**Intersection**

Int Delay, s/veh 54.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	355	1898	5	144	1081
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	88	88	74	74
Heavy Vehicles, %	1	1	3	3	4	4
Mvmt Flow	0	433	2157	6	195	1461

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	3280	1081	0	0	2163	0
Stage 1	2160	-	-	-	-	-
Stage 2	1120	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.18	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.24	-
Pot Cap-1 Maneuver	7	~ 215	-	-	237	-
Stage 1	75	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1	~ 215	-	-	237	-
Mov Cap-2 Maneuver	1	-	-	-	-	-
Stage 1	75	-	-	-	-	-
Stage 2	49	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 509	0	7.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	215	237	-
HCM Lane V/C Ratio	-	-	2.014	0.821	-
HCM Control Delay (s)	-	-	\$ 509	65	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	32.3	6.3	-

**Notes**

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
























**APPENDIX**

**Traffic Analysis**

**2040 AM Peak Signalized Intersections**

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

4/22/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	184	11	17	146	605	19	236	50	291	60	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	95	224	13	21	182	0	24	295	62	342	71	41
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	320	403	23	277	434	369	777	793	167	561	583	337
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
Prop Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.00	0.53	0.53	0.53	0.53	0.53	0.53
Ln Grp Delay, s/veh	20.5	0.0	18.3	20.2	17.0	0.0	6.6	0.0	8.1	18.0	0.0	6.3
Ln Grp LOS	C		B	C	B		A		A	B		A
Approach Vol, veh/h		332			203			381			454	
Approach Delay, s/veh		18.9			17.3			8.0			15.1	
Approach LOS		B			B			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		5.0			
Phs Duration (G+Y+Rc), s			42.1		17.9		42.1		17.9			
Change Period (Y+Rc), s			6.0		6.0		6.0		6.0			
Max Green (Gmax), s			27.0		21.0		27.0		21.0			
Max Allow Headway (MAH), s			4.9		4.6		4.9		4.6			
Max Q Clear (g_c+I1), s			7.9		10.0		23.1		8.7			
Green Ext Time (g_e), s			4.4		1.9		1.7		2.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.09		0.14		1.00		0.09			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1276		1185		1010		1139			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1493		1727		1098		1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			314		100		634		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment												
Lanes in Grp		0	1	0	1	0	1	0	1			

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Grp Vol (v), veh/h	0	24	0	95	0	342	0	21
Grp Sat Flow (s), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Q Serve Time (g_s), s	0.0	0.5	0.0	3.8	0.0	15.2	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	2.1	0.0	8.0	0.0	21.1	0.0	6.7
Perm LT Sat Flow (s_l), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.0	0.0	11.9	0.0	27.0	0.0	11.9
Perm LT Serve Time (g_u), s	0.0	25.4	0.0	7.6	0.0	21.1	0.0	6.0
Perm LT Q Serve Time (g_ps), s	0.0	0.5	0.0	3.8	0.0	15.2	0.0	0.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	777	0	320	0	561	0	277
V/C Ratio (X)	0.00	0.03	0.00	0.30	0.00	0.61	0.00	0.08
Avail Cap (c_a), veh/h	0	777	0	533	0	561	0	482
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.64
Uniform Delay (d1), s/veh	0.0	6.5	0.0	20.0	0.0	13.1	0.0	20.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.5	0.0	4.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.6	0.0	20.5	0.0	18.0	0.0	20.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	1.2	0.0	4.2	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	1.3	0.0	4.9	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.16	0.00	0.84	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	182
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	434
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	769
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	357	0	237	0	112	0	0
Grp Sat Flow (s), veh/h/ln	0	1807	0	1827	0	1733	0	1583
Q Serve Time (g_s), s	0.0	5.9	0.0	5.8	0.0	1.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	5.8	0.0	1.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	0.05	0.00	0.37	0.00	1.00
Lane Grp Cap (c), veh/h	0	960	0	426	0	920	0	369
V/C Ratio (X)	0.00	0.37	0.00	0.56	0.00	0.12	0.00	0.00
Avail Cap (c_a), veh/h	0	960	0	754	0	920	0	654
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.0	0.0	17.2	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	1.1	0.0	0.3	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
Control Delay (d), s/veh	0.0	8.1	0.0	18.3	0.0	6.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	2.9	0.0	0.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.2	0.0	3.0	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.29	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

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	→	↘	↙	←	↖	↗					
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	↑	↗	↙	↑	↖	↗					
Volume (veh/h)	419	108	149	594	185	156					
Number	4	14	3	8	5	12					
Initial Q, veh	0	0	0	0	0	0					
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00					
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00					
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863					
Adj Flow Rate, veh/h	517	133	177	707	231	195					
Adj No. of Lanes	1	1	1	1	1	1					
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80					
Percent Heavy Veh, %	2	2	2	2	2	2					
Opposing Right Turn Influence			Yes		Yes						
Cap, veh/h	984	837	336	984	478	427					
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00					
Prop Arrive On Green	0.17	0.17	0.53	0.53	0.27	0.27					
Ln Grp Delay, s/veh	18.1	13.4	21.5	13.1	21.7	21.6					
Ln Grp LOS	B	B	C	B	C	C					
Approach Vol, veh/h	650			884	426						
Approach Delay, s/veh	17.1			14.8	21.6						
Approach LOS	B			B	C						
Timer:		1	2	3	4	5	6	7	8		
Assigned Phs			2		4				8		
Case No			9.0		7.0				6.0		
Phs Duration (G+Y+Rc), s			22.6		37.4				37.4		
Change Period (Y+Rc), s			6.0		6.0				6.0		
Max Green (Gmax), s			16.0		32.0				32.0		
Max Allow Headway (MAH), s			4.0		4.8				4.8		
Max Q Clear (g_c+I1), s			8.5		17.0				29.6		
Green Ext Time (g_e), s			0.9		7.6				1.8		
Prob of Phs Call (p_c)			1.00		1.00				1.00		
Prob of Max Out (p_x)			0.19		0.50				1.00		
Left-Turn Movement Data											
Assigned Mvmt			5		7				3		
Mvmt Sat Flow, veh/h			1774		0				778		
Through Movement Data											
Assigned Mvmt			2		4				8		
Mvmt Sat Flow, veh/h			0		1863				1863		
Right-Turn Movement Data											
Assigned Mvmt			12		14				18		
Mvmt Sat Flow, veh/h			1583		1583				0		
Left Lane Group Data											
Assigned Mvmt		0	5	0	7	0	0	0	3		
Lane Assignment											
Lanes in Grp		0	1	0	0	0	0	0	1		

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

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Grp Vol (v), veh/h	0	231	0	0	0	0	0	177
Grp Sat Flow (s), veh/h/ln	0	1774	0	0	0	0	0	778
Q Serve Time (g_s), s	0.0	6.5	0.0	0.0	0.0	0.0	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	6.5	0.0	0.0	0.0	0.0	0.0	27.6
Perm LT Sat Flow (s_l), veh/h/ln	0	1774	0	0	0	0	0	778
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Time to First Blk (g_f), s	0.0	0.0	0.0	31.4	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	478	0	0	0	0	0	336
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.53
Avail Cap (c_a), veh/h	0	478	0	0	0	0	0	344
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.2	0.0	0.0	0.0	0.0	0.0	20.1
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.0	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.7	0.0	0.0	0.0	0.0	0.0	21.5
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	0.0	0.0	0.0	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.6	0.0	0.0	0.0	0.0	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	517	0	0	0	707
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	17.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	17.1
Lane Grp Cap (c), veh/h	0	0	0	984	0	0	0	984
V/C Ratio (X)	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.72
Avail Cap (c_a), veh/h	0	0	0	1004	0	0	0	1004
Upstream Filter (I)	0.00	0.00	0.00	0.77	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.7	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	0.0	0.0	13.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.7	0.0	0.0	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.8	0.0	0.0	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Right Lane Group Data
























Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	195	0	133	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	0	0	0
Q Serve Time (g_s), s	0.0	6.1	0.0	4.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.1	0.0	4.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	427	0	837	0	0	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.16	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	427	0	853	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.77	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	13.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.1	0.0	0.0	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
Control Delay (d), s/veh	0.0	21.6	0.0	13.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	1.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	1.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.21	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Intersection Summary

HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	304	259	104	143	212	231	148	1395	229	315	609	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	313	267	107	181	268	0	170	1603	263	399	771	196
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	212	289	116	125	426	362	405	2124	950	167	982	439
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
Prop Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.00	0.23	0.60	0.60	0.29	0.29	0.29
Ln Grp Delay, s/veh	270.2	0.0	52.9	273.8	27.3	0.0	26.2	12.8	7.4	676.5	29.3	23.7
Ln Grp LOS	F		D	F	C		C	B	A	F	C	C
Approach Vol, veh/h		687			449			2036			1366	
Approach Delay, s/veh		151.9			126.7			13.2			217.6	
Approach LOS		F			F			B			F	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	5	6		8			
Case No			3.0		6.0	2.0	5.0		5.0			
Phs Duration (G+Y+Rc), s			48.0		22.0	22.0	26.0		22.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			42.0		16.0	16.0	20.0		16.0			
Max Allow Headway (MAH), s			6.3		4.8	3.8	6.3		4.8			
Max Q Clear (g_c+I1), s			25.2		18.0	7.7	22.0		18.0			
Green Ext Time (g_e), s			16.4		0.0	0.3	0.0		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.98		1.00	0.02	1.00		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	5	1		3			
Mvmt Sat Flow, veh/h					1107	1774	237		1004			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3539		1266		3438		1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1583		507		1538		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	5	1	0	3			
Lane Assignment					(Prot)							
Lanes in Grp		0	0	0	1	1	1	0	1			



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Grp Vol (v), veh/h	0	0	0	313	170	399	0	181
Grp Sat Flow (s), veh/h/ln	0	0	0	1107	1774	237	0	1004
Q Serve Time (g_s), s	0.0	0.0	0.0	6.9	5.7	18.8	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.0	5.7	20.0	0.0	16.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1107	0	237	0	1004
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	16.0	0.0	20.0	0.0	16.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	6.9	0.0	18.8	0.0	1.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	6.9	0.0	18.8	0.0	1.6
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	212	405	167	0	125
V/C Ratio (X)	0.00	0.00	0.00	1.47	0.42	2.39	0.00	1.44
Avail Cap (c_a), veh/h	0	0	0	212	405	167	0	125
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.2	23.0	31.4	0.0	34.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	237.0	3.2	645.1	0.0	238.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	270.2	26.2	676.5	0.0	273.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.1	2.8	3.2	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	14.0	0.4	29.9	0.0	8.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	18.1	3.1	33.1	0.0	10.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.62	0.46	1.91	0.00	1.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	25.2	0.0	58.1	0.0	13.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.6	0.0	0.4
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	1603	0	0	0	771	0	268
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1719	0	1863
Q Serve Time (g_s), s	0.0	23.2	0.0	0.0	0.0	14.5	0.0	9.1
Cycle Q Clear Time (g_c), s	0.0	23.2	0.0	0.0	0.0	14.5	0.0	9.1
Lane Grp Cap (c), veh/h	0	2124	0	0	0	982	0	426
V/C Ratio (X)	0.00	0.75	0.00	0.00	0.00	0.78	0.00	0.63
Avail Cap (c_a), veh/h	0	2124	0	0	0	982	0	426
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.2	0.0	0.0	0.0	23.0	0.0	24.3
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	0.0	6.3	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.8	0.0	0.0	0.0	29.3	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	0.0	0.0	6.9	0.0	4.6
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.9	0.0	0.3

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.9	0.0	0.0	0.0	7.7	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	1.24	0.00	0.00	0.00	0.44	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	263	0	374	0	196	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1773	0	1538	0	1583
Q Serve Time (g_s), s	0.0	5.6	0.0	14.4	0.0	7.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	14.4	0.0	7.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	950	0	405	0	439	0	362
V/C Ratio (X)	0.00	0.28	0.00	0.92	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	950	0	405	0	439	0	362
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.7	0.0	26.4	0.0	20.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	26.5	0.0	3.3	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
Control Delay (d), s/veh	0.0	7.4	0.0	52.9	0.0	23.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	7.1	0.0	3.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	3.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	10.0	0.0	3.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.15	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	106.9
HCM 2010 LOS	F

**APPENDIX**

**Traffic Analysis**

**2040 PM Peak Unsignalized Intersections**

**Intersection**

Intersection Delay, s/veh 2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	131	26	303	112	22	432
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	-	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	88	88
Heavy Vehicles, %	1	1	4	4	3	3
Mvmt Flow	162	32	337	124	25	491

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	632	168	0
Stage 1	337	-	-
Stage 2	295	-	-
Follow-up Headway	3.51	3.31	-
Pot Capacity-1 Maneuver	415	850	-
Stage 1	698	-	-
Stage 2	733	-	-
Time blocked-Platoon, %			
Mov Capacity-1 Maneuver	406	850	-
Mov Capacity-2 Maneuver	508	-	-
Stage 1	698	-	-
Stage 2	718	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0.4
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	544	1212	-
HCM Lane V/C Ratio	-	-	0.356	0.021	-
HCM Control Delay (s)	-	-	15.2	8.033	-
HCM Lane LOS			C	A	
HCM 95th %tile Q(veh)	-	-	1.602	0.063	-

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	634	554	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	38	38
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	16	697	589	2	0	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	591	0	1320
Stage 1	-	-	590
Stage 2	-	-	730
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	980	-	175
Stage 1	-	-	558
Stage 2	-	-	481
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	980	-	170
Mov Cap-2 Maneuver	-	-	170
Stage 1	-	-	558
Stage 2	-	-	468

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	980	-	-	-	511
HCM Lane V/C Ratio	0.017	-	-	-	0.021
HCM Control Delay (s)	8.7	0	-	-	12.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

**Intersection**

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	52	584	2	4	529	21	4	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	89	89	89	58	58	58
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	57	635	2	4	594	24	7	0	9

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	618	0	0	637	0	0	1383	1376	636
Stage 1	-	-	-	-	-	-	749	749	-
Stage 2	-	-	-	-	-	-	634	627	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	957	-	-	947	-	-	122	146	481
Stage 1	-	-	-	-	-	-	407	422	-
Stage 2	-	-	-	-	-	-	471	479	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	957	-	-	947	-	-	104	132	481
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	132	-
Stage 1	-	-	-	-	-	-	370	383	-
Stage 2	-	-	-	-	-	-	432	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0.1	26.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	184	957	-	-	947	-	-	237
HCM Lane V/C Ratio	0.084	0.059	-	-	0.005	-	-	0.23
HCM Control Delay (s)	26.4	9	0	-	8.8	0	-	24.7
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.9

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	11	1	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	68	68	68
Heavy Vehicles, %	3	3	3
Mvmt Flow	16	1	37

**Major/Minor**

**Minor2**

Conflicting Flow All	1368	1365	606
Stage 1	615	615	-
Stage 2	753	750	-
Critical Hdwy	7.13	6.53	6.23
Critical Hdwy Stg 1	6.13	5.53	-
Critical Hdwy Stg 2	6.13	5.53	-
Follow-up Hdwy	3.527	4.027	3.327
Pot Cap-1 Maneuver	123	147	495
Stage 1	477	481	-
Stage 2	400	417	-
Platoon blocked, %			
Mov Cap-1 Maneuver	112	133	495
Mov Cap-2 Maneuver	112	133	-
Stage 1	433	478	-
Stage 2	357	379	-

**Approach**

**SB**

HCM Control Delay, s	24.7
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	601	553	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	639	588	0	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	588	0	1227
Stage 1	-	-	588
Stage 2	-	-	639
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	982	-	199
Stage 1	-	-	559
Stage 2	-	-	530
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	982	-	199
Mov Cap-2 Maneuver	-	-	199
Stage 1	-	-	559
Stage 2	-	-	530

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	982	-	-	-	199
HCM Lane V/C Ratio	-	-	-	-	0.02
HCM Control Delay (s)	0	-	-	-	23.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1



HCM 2010 TWSC  
 16: Alligator Rd & Sunset Memory Gardens

4/22/2014

**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	585	20	12	541	1	2	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	35	35	35
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	0	636	22	13	582	1	6	0	17

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	583	0	0	658	0	0	1257	1256	647
Stage 1	-	-	-	-	-	-	647	647	-
Stage 2	-	-	-	-	-	-	610	609	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	986	-	-	930	-	-	149	173	475
Stage 1	-	-	-	-	-	-	463	470	-
Stage 2	-	-	-	-	-	-	485	488	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	986	-	-	930	-	-	145	169	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	169	-
Stage 1	-	-	-	-	-	-	463	470	-
Stage 2	-	-	-	-	-	-	471	478	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	17.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	303	986	-	-	930	-	-	517
HCM Lane V/C Ratio	0.075	-	-	-	0.014	-	-	0.008
HCM Control Delay (s)	17.8	0	-	-	8.9	0	-	12
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	4

**Major/Minor**                      **Minor2**

Conflicting Flow All	1263	1266	582
Stage 1	608	608	-
Stage 2	655	658	-
Critical Hdwy	7.1	6.5	6.2
Critical Hdwy Stg 1	6.1	5.5	-
Critical Hdwy Stg 2	6.1	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	148	171	517
Stage 1	486	489	-
Stage 2	458	464	-
Platoon blocked, %			
Mov Cap-1 Maneuver	140	167	517
Mov Cap-2 Maneuver	140	167	-
Stage 1	486	479	-
Stage 2	441	464	-

**Approach**                      **SB**

HCM Control Delay, s	12
HCM LOS	B

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	568	15	9	541	6	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	95	95	60	60
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	604	16	9	569	10	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	612
Stage 1	-	-	612
Stage 2	-	-	588
Critical Hdwy	-	4.12	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.218	3.5
Pot Cap-1 Maneuver	-	960	497
Stage 1	-	-	545
Stage 2	-	-	559
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	960	497
Mov Cap-2 Maneuver	-	-	203
Stage 1	-	-	545
Stage 2	-	-	551

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	315	-	-	960	-
HCM Lane V/C Ratio	0.079	-	-	0.01	-
HCM Control Delay (s)	17.4	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

**Intersection**

Int Delay, s/veh 2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	522	51	35	505	45	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	96	96	76	76
Heavy Vehicles, %	3	3	1	1	2	2
Mvmt Flow	561	55	36	526	59	41

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	616
Stage 1	-	-	589
Stage 2	-	-	599
Critical Hdwy	-	-	4.11
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	-	2.209
Pot Cap-1 Maneuver	-	-	969
Stage 1	-	-	554
Stage 2	-	-	549
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	969
Mov Cap-2 Maneuver	-	-	197
Stage 1	-	-	554
Stage 2	-	-	520

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	26.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	-	-	969	-
HCM Lane V/C Ratio	0.38	-	-	0.038	-
HCM Control Delay (s)	26.8	-	-	8.9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.7	-	-	0.1	-

**Intersection**

Int Delay, s/veh 1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	533	11	32	578	14	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	95	95	72	72
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	606	12	34	608	19	26

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	618	1288
Stage 1	-	-	612
Stage 2	-	-	676
Critical Hdwy	-	4.12	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.218	3.536
Pot Cap-1 Maneuver	-	962	179
Stage 1	-	-	537
Stage 2	-	-	502
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	962	170
Mov Cap-2 Maneuver	-	-	170
Stage 1	-	-	537
Stage 2	-	-	475

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	20.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	272	-	-	962	-
HCM Lane V/C Ratio	0.169	-	-	0.035	-
HCM Control Delay (s)	20.9	-	-	8.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	556	626	6	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	96	96	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	632	652	6	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	658	0	1287
Stage 1	-	-	655
Stage 2	-	-	632
Critical Hdwy	4.13	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	925	-	183
Stage 1	-	-	521
Stage 2	-	-	534
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	925	-	183
Mov Cap-2 Maneuver	-	-	183
Stage 1	-	-	521
Stage 2	-	-	534

Approach	EB	WB	SB
HCM Control Delay, s	0	0	25.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	925	-	-	-	183
HCM Lane V/C Ratio	-	-	-	-	0.022
HCM Control Delay (s)	0	-	-	-	25.1
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	544	1	19	626	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	93	93	63	63
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	573	1	20	673	2	17

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	574	1287
Stage 1	-	-	573
Stage 2	-	-	714
Critical Hdwy	-	4.11	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.209	3.5
Pot Cap-1 Maneuver	-	1004	183
Stage 1	-	-	568
Stage 2	-	-	489
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1004	177
Mov Cap-2 Maneuver	-	-	177
Stage 1	-	-	568
Stage 2	-	-	473

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	450	-	-	1004	-
HCM Lane V/C Ratio	0.042	-	-	0.02	-
HCM Control Delay (s)	13.4	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

**Intersection**

Int Delay, s/veh 6.4

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	11	327	280	139	274	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	84	84	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	12	372	333	165	301	10

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	333	0	544
Stage 1	-	-	333
Stage 2	-	-	211
Critical Hdwy	4.13	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1221	-	489
Stage 1	-	-	731
Stage 2	-	-	810
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1221	-	484
Mov Cap-2 Maneuver	-	-	484
Stage 1	-	-	731
Stage 2	-	-	801

Approach	EB	WB	SE
HCM Control Delay, s	0.3	0	24.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1221	-	-	-	489
HCM Lane V/C Ratio	0.01	-	-	-	0.636
HCM Control Delay (s)	8	-	-	-	24.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	4.4



**Intersection**

Int Delay, s/veh 3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	174	1130	0	306	1954
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	90	90	92	92
Heavy Vehicles, %	0	0	3	3	1	1
Mvmt Flow	0	229	1256	0	333	2124

Major/Minor	Minor1	Minor2	Major1	Major2	Major2	Major2
Conflicting Flow All	2983	628	0	0	1256	0
Stage 1	1256	-	-	-	-	-
Stage 2	1727	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	11	431	-	-	555	-
Stage 1	235	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	4	431	-	-	555	-
Mov Cap-2 Maneuver	4	-	-	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	52	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	2.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	431	555	-
HCM Lane V/C Ratio	-	-	0.531	0.599	-
HCM Control Delay (s)	-	-	22.4	20.7	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	3	3.9	-






















**APPENDIX**

**Traffic Analysis**

**2040 PM Peak Signalized Intersections**

HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2040 PM NB  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	213	15	27	227	340	21	95	16	458	226	62
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1881	1881	1881	1845	1845	1900	1881	1881	1900
Adj Flow Rate, veh/h	56	234	16	30	249	0	26	117	20	492	243	67
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	1	1	1	3	3	3	1	1	1
Cap, veh/h	336	484	33	313	533	453	560	793	136	720	734	202
Arrive On Green	0.28	0.28	0.28	0.47	0.47	0.00	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1115	1707	117	1136	1881	1599	1055	1536	263	1259	1420	392
Grp Volume(v), veh/h	56	0	250	30	249	0	26	0	137	492	0	310
Grp Sat Flow(s),veh/h/ln	1115	0	1824	1136	1881	1599	1055	0	1798	1259	0	1812
Q Serve(g_s), s	2.6	0.0	6.8	1.2	5.4	0.0	0.9	0.0	2.4	20.1	0.0	6.0
Cycle Q Clear(g_c), s	7.9	0.0	6.8	8.0	5.4	0.0	6.9	0.0	2.4	22.5	0.0	6.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	336	0	517	313	533	453	560	0	929	720	0	936
V/C Ratio(X)	0.17	0.00	0.48	0.10	0.47	0.00	0.05	0.00	0.15	0.68	0.00	0.33
Avail Cap(c_a), veh/h	336	0	517	313	533	453	560	0	929	720	0	936
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.84	0.84	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	0.0	17.9	16.0	12.7	0.0	10.5	0.0	7.6	13.5	0.0	8.5
Incr Delay (d2), s/veh	1.1	0.0	3.2	0.5	2.5	0.0	0.2	0.0	0.3	5.2	0.0	0.9
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(-26165%),veh/ln	0.9	0.0	3.9	0.4	3.1	0.0	0.3	0.0	1.3	7.9	0.0	3.2
LnGrp Delay(d),s/veh	21.6	0.0	21.1	16.5	15.2	0.0	10.6	0.0	7.9	18.7	0.0	9.4
LnGrp LOS	C		C	B	B		B		A	B		A
Approach Vol, veh/h		306			279			163			802	
Approach Delay, s/veh		21.2			15.3			8.4			15.1	
Approach LOS		C			B			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		37.0		23.0		37.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		17.0		31.0		17.0		31.0				
Max Q Clear Time (g_c+I1), s		9.9		24.5		10.0		8.9				
Green Ext Time (p_c), s		1.7		2.5		1.6		4.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.6									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd

2040 PM NB  
 4/30/2015

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↗	↖	↑	↖	↗		
Volume (veh/h)	617	61	50	535	64	38		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1810	1810		
Adj Flow Rate, veh/h	656	65	53	569	89	53		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.72	0.72		
Percent Heavy Veh, %	2	2	2	2	5	5		
Cap, veh/h	993	844	269	993	460	410		
Arrive On Green	0.18	0.18	0.53	0.53	0.27	0.27		
Sat Flow, veh/h	1863	1583	729	1863	1723	1538		
Grp Volume(v), veh/h	656	65	53	569	89	53		
Grp Sat Flow(s),veh/h/ln	1863	1583	729	1863	1723	1538		
Q Serve(g_s), s	19.7	2.1	3.7	12.3	2.4	1.6		
Cycle Q Clear(g_c), s	19.7	2.1	23.4	12.3	2.4	1.6		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	993	844	269	993	460	410		
V/C Ratio(X)	0.66	0.08	0.20	0.57	0.19	0.13		
Avail Cap(c_a), veh/h	993	844	269	993	460	410		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.70	0.70	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	19.7	12.4	20.4	9.4	17.0	16.7		
Incr Delay (d2), s/veh	2.4	0.1	1.6	2.4	0.9	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	10.8	0.9	0.9	6.8	1.3	0.7		
LnGrp Delay(d),s/veh	22.1	12.5	22.1	11.8	18.0	17.4		
LnGrp LOS	C	B	C	B	B	B		
Approach Vol, veh/h	721			622	142			
Approach Delay, s/veh	21.2			12.7	17.7			
Approach LOS	C			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		21.7				25.4		4.4
Green Ext Time (p_c), s		5.3				3.8		0.3
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			17.3					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	212	202	167	95	174	50	126	768	88	99	1477	355
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1881	1881	1900	1863	1863	1863	1900	1900	1900	1881	1881	1881
Adj Flow Rate, veh/h	236	224	186	98	179	0	130	792	91	106	1588	382
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.97	0.97	0.97	0.97	0.97	0.97	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	2	2	2	0	0	0	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	289	254	211	100	497	422	241	2286	1023	345	1608	720
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
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.00	0.13	0.63	0.63	0.45	0.45	0.45
Ln Grp Delay, s/veh	65.6	0.0	60.0	143.3	36.1	0.0	56.9	10.8	8.7	24.1	52.3	26.6
Ln Grp LOS	E		E	F	D		E	B	A	C	D	C
Approach Vol, veh/h		646			277			1013			2076	
Approach Delay, s/veh		62.0			74.0			16.5			46.1	
Approach LOS		E			E			B			D	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4	5	6		8			
Case No			3.0		6.0	2.0	5.0		5.0			
Phs Duration (G+Y+Rc), s			82.0		38.0	22.0	60.0		38.0			
Change Period (Y+Rc), s			6.0		6.0	6.0	6.0		6.0			
Max Green (Gmax), s			76.0		32.0	16.0	54.0		32.0			
Max Allow Headway (MAH), s			4.8		4.8	3.8	4.8		4.8			
Max Q Clear (g_c+I1), s			14.4		34.0	10.0	54.8		34.0			
Green Ext Time (g_e), s			40.6		0.0	0.1	0.0		0.0			
Prob of Phs Call (p_c)			1.00		1.00	1.00	1.00		1.00			
Prob of Max Out (p_x)			0.51		1.00	0.13	1.00		1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt					7	5	1		3			
Mvmt Sat Flow, veh/h					1212	1810	632		972			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3610		952		3574		1863			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1615		790		1599		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	0	0	7	5	1	0	3			
Lane Assignment					(Prot)							
Lanes in Grp		0	0	0	1	1	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

Grp Vol (v), veh/h	0	0	0	236	130	106	0	98
Grp Sat Flow (s), veh/h/ln	0	0	0	1212	1810	632	0	972
Q Serve Time (g_s), s	0.0	0.0	0.0	22.6	8.0	13.3	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	32.0	8.0	13.3	0.0	32.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1212	0	632	0	972
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	32.0	0.0	54.0	0.0	32.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	22.6	0.0	54.0	0.0	4.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	22.6	0.0	13.3	0.0	4.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	289	241	345	0	100
V/C Ratio (X)	0.00	0.00	0.00	0.82	0.54	0.31	0.00	0.98
Avail Cap (c_a), veh/h	0	0	0	289	241	345	0	100
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	48.6	21.8	0.0	59.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	16.6	8.4	2.3	0.0	84.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	65.6	56.9	24.1	0.0	143.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.8	4.0	2.3	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.6	0.2	0.0	2.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.1	4.6	2.5	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.31	0.65	0.14	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	792	0	0	0	1588	0	179
Grp Sat Flow (s), veh/h/ln	0	1805	0	0	0	1787	0	1863
Q Serve Time (g_s), s	0.0	12.4	0.0	0.0	0.0	52.8	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	12.4	0.0	0.0	0.0	52.8	0.0	9.4
Lane Grp Cap (c), veh/h	0	2286	0	0	0	1608	0	497
V/C Ratio (X)	0.00	0.35	0.00	0.00	0.00	0.99	0.00	0.36
Avail Cap (c_a), veh/h	0	2286	0	0	0	1608	0	497
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	0.0	0.0	32.7	0.0	35.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	19.6	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	0.0	0.0	52.3	0.0	36.1
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.0	0.0	25.8	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	4.4	0.0	0.1

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.3	0.0	0.0	0.0	30.2	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.00	0.00	1.69	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data
























Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	91	0	410	0	382	0	0
Grp Sat Flow (s), veh/h/ln	0	1615	0	1742	0	1599	0	1583
Q Serve Time (g_s), s	0.0	2.6	0.0	27.1	0.0	20.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.6	0.0	27.1	0.0	20.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	1023	0	464	0	720	0	422
V/C Ratio (X)	0.00	0.09	0.00	0.88	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	1023	0	464	0	720	0	422
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	42.2	0.0	23.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	17.8	0.0	2.8	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
Control Delay (d), s/veh	0.0	8.7	0.0	60.0	0.0	26.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	13.0	0.0	9.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.3	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.0	15.3	0.0	9.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.23	0.00	1.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	43.1
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St.

2040 NB PM School  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	125	66	110	158	56	114	725	98	166	919	214
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	243	177	94	156	224	0	162	1028	139	235	1304	304
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	241	296	157	196	481	409	237	2271	1016	273	1576	705
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.00	0.13	0.64	0.64	0.46	0.46	0.46
Sat Flow, veh/h	1152	1146	609	1104	1863	1583	1774	3539	1583	465	3438	1538
Grp Volume(v), veh/h	243	0	271	156	224	0	162	1028	139	235	1304	304
Grp Sat Flow(s),veh/h/ln	1152	0	1755	1104	1863	1583	1774	1770	1583	465	1719	1538
Q Serve(g_s), s	18.8	0.0	16.2	14.8	12.2	0.0	10.5	17.6	4.1	55.0	39.7	16.0
Cycle Q Clear(g_c), s	31.0	0.0	16.2	31.0	12.2	0.0	10.5	17.6	4.1	55.0	39.7	16.0
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	0	453	196	481	409	237	2271	1016	273	1576	705
V/C Ratio(X)	1.01	0.00	0.60	0.80	0.47	0.00	0.68	0.45	0.14	0.86	0.83	0.43
Avail Cap(c_a), veh/h	241	0	453	196	481	409	237	2271	1016	273	1576	705
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	0.0	39.0	53.6	37.5	0.0	49.6	10.9	8.4	35.0	28.4	21.9
Incr Delay (d2), s/veh	60.3	0.0	2.2	20.2	0.7	0.0	15.0	0.7	0.3	28.0	5.1	1.9
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(-26165%),veh/ln	12.0	0.0	8.2	6.3	6.4	0.0	6.1	8.8	1.9	9.9	20.0	7.1
LnGrp Delay(d),s/veh	113.3	0.0	41.2	73.8	38.2	0.0	64.6	11.5	8.7	63.0	33.5	23.9
LnGrp LOS	F		D	E	D		E	B	A	E	C	C
Approach Vol, veh/h		514			380			1329			1843	
Approach Delay, s/veh		75.3			52.8			17.7			35.7	
Approach LOS		E			D			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		83.0		37.0	22.0	61.0		37.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		77.0		31.0	16.0	55.0		31.0				
Max Q Clear Time (g_c+I1), s		19.6		33.0	12.5	57.0		33.0				
Green Ext Time (p_c), s		42.1		0.0	0.1	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			36.4									
HCM 2010 LOS			D									



**APPENDIX**

**Traffic Analysis**

**2020 Build AM Peak Unsignalized Intersections**

**Intersection**

Int Delay, s/veh 1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	62	11	367	67	10	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	90	90
Heavy Vehicles, %	9	9	2	2	5	5
Mvmt Flow	78	14	408	74	11	183

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	522	204	0
Stage 1	408	-	-
Stage 2	114	-	-
Critical Hdwy	6.98	7.08	4.2
Critical Hdwy Stg 1	5.98	-	-
Critical Hdwy Stg 2	5.98	-	-
Follow-up Hdwy	3.59	3.39	2.25
Pot Cap-1 Maneuver	468	781	1126
Stage 1	620	-	-
Stage 2	878	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	463	781	1126
Mov Cap-2 Maneuver	526	-	-
Stage 1	620	-	-
Stage 2	869	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	526	781	1126	-
HCM Lane V/C Ratio	-	-	0.147	0.018	0.01	-
HCM Control Delay (s)	-	-	13	9.7	8.2	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	0	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	492	619	1	3	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	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	78	78	80	80
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	4	541	794	1	4	16

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	795	0	1073
Stage 1	-	-	794
Stage 2	-	-	279
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	816	-	218
Stage 1	-	-	411
Stage 2	-	-	749
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	816	-	217
Mov Cap-2 Maneuver	-	-	328
Stage 1	-	-	411
Stage 2	-	-	745

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	816	-	-	-	524
HCM Lane V/C Ratio	0.005	-	-	-	0.038
HCM Control Delay (s)	9.4	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	11	482	1	0	560	11	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	80	80	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	12	513	1	0	700	14	0	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	714	0	0	514	0	0	887	1251	257
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	350	714	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	882	-	-	1048	-	-	242	174	748
Stage 1	-	-	-	-	-	-	501	526	-
Stage 2	-	-	-	-	-	-	645	438	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	882	-	-	1048	-	-	214	172	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	214	172	-
Stage 1	-	-	-	-	-	-	494	519	-
Stage 2	-	-	-	-	-	-	575	438	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	882	-	-	1048	-	-	381
HCM Lane V/C Ratio	-	0.013	-	-	-	-	-	0.254
HCM Control Delay (s)	0	9.1	-	-	0	-	-	17.6
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	25	0	60
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	92	88
Heavy Vehicles, %	5	2	5
Mvmt Flow	28	0	68

**Major/Minor**                      **Minor2**

Conflicting Flow All	987	1244	357
Stage 1	707	707	-
Stage 2	280	537	-
Critical Hdwy	7.6	6.54	7
Critical Hdwy Stg 1	6.6	5.54	-
Critical Hdwy Stg 2	6.6	5.54	-
Follow-up Hdwy	3.55	4.02	3.35
Pot Cap-1 Maneuver	197	173	631
Stage 1	385	436	-
Stage 2	695	521	-
Platoon blocked, %			
Mov Cap-1 Maneuver	195	171	631
Mov Cap-2 Maneuver	195	171	-
Stage 1	380	436	-
Stage 2	686	514	-

**Approach**                      **SB**

HCM Control Delay, s	17.6
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	509	560	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	78	78	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	572	718	1	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	719	0	360
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.16	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.23	-	3.3
Pot Cap-1 Maneuver	872	-	642
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	872	-	642
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	872	-	-	-	642
HCM Lane V/C Ratio	-	-	-	-	0.006
HCM Control Delay (s)	0	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	494	0	3	568	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	77	77	77	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	537	0	4	738	0	4	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	738	0	0	537	0	0	914	1282	268
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	377	745	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	864	-	-	1027	-	-	231	167	736
Stage 1	-	-	-	-	-	-	501	526	-
Stage 2	-	-	-	-	-	-	622	424	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	864	-	-	1027	-	-	230	166	736
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	166	-
Stage 1	-	-	-	-	-	-	501	526	-
Stage 2	-	-	-	-	-	-	620	422	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	230	864	-	-	1027	-	-	-
HCM Lane V/C Ratio	0.017	-	-	-	0.004	-	-	-
HCM Control Delay (s)	20.9	0	-	-	8.5	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	0

**Major/Minor**

	Minor2		
Conflicting Flow All	1013	1282	369
Stage 1	745	745	-
Stage 2	268	537	-
Critical Hdwy	7.5	6.5	6.9
Critical Hdwy Stg 1	6.5	5.5	-
Critical Hdwy Stg 2	6.5	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	196	167	634
Stage 1	377	424	-
Stage 2	720	526	-
Platoon blocked, %			
Mov Cap-1 Maneuver	195	166	634
Mov Cap-2 Maneuver	195	166	-
Stage 1	377	422	-
Stage 2	720	526	-

**Approach**

	SB
HCM Control Delay, s	0
HCM LOS	A

**Minor Lane/Major Mvmt**



**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	496	8	1	538	25	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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	77	77	91	91
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	539	9	1	699	27	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	548	895
Stage 1	-	-	543
Stage 2	-	-	352
Critical Hdwy	-	4.16	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.23	3.5
Pot Cap-1 Maneuver	-	1011	284
Stage 1	-	-	552
Stage 2	-	-	689
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1011	284
Mov Cap-2 Maneuver	-	-	406
Stage 1	-	-	552
Stage 2	-	-	688

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	438	-	-	1011	-
HCM Lane V/C Ratio	0.075	-	-	0.001	-
HCM Control Delay (s)	13.9	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	476	23	12	474	66	11
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	73	73
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	517	25	15	608	90	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	542	865
Stage 1	-	-	530
Stage 2	-	-	335
Critical Hdwy	-	4.14	6.88
Critical Hdwy Stg 1	-	-	5.88
Critical Hdwy Stg 2	-	-	5.88
Follow-up Hdwy	-	2.22	3.54
Pot Cap-1 Maneuver	-	1023	289
Stage 1	-	-	549
Stage 2	-	-	691
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1023	285
Mov Cap-2 Maneuver	-	-	405
Stage 1	-	-	549
Stage 2	-	-	681

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	432	-	-	1023	-
HCM Lane V/C Ratio	0.244	-	-	0.015	-
HCM Control Delay (s)	16	-	-	8.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.9	-	-	0	-

**Intersection**

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	531	6	10	432	14	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	71	71	73	73
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	617	7	14	608	19	45

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	953
Stage 1	-	-	621
Stage 2	-	-	332
Critical Hdwy	-	4.14	6.9
Critical Hdwy Stg 1	-	-	5.9
Critical Hdwy Stg 2	-	-	5.9
Follow-up Hdwy	-	2.22	3.55
Pot Cap-1 Maneuver	-	953	252
Stage 1	-	-	490
Stage 2	-	-	690
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	953	248
Mov Cap-2 Maneuver	-	-	368
Stage 1	-	-	490
Stage 2	-	-	680

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	541	-	-	953	-
HCM Lane V/C Ratio	0.119	-	-	0.015	-
HCM Control Delay (s)	12.6	-	-	8.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	564	438	2	2	3
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	74	74	38	38
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	3	613	592	3	5	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	595	0	906
Stage 1	-	-	593
Stage 2	-	-	313
Critical Hdwy	4.14	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.22	-	3.5
Pot Cap-1 Maneuver	977	-	279
Stage 1	-	-	521
Stage 2	-	-	721
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	977	-	278
Mov Cap-2 Maneuver	-	-	397
Stage 1	-	-	521
Stage 2	-	-	719

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	977	-	-	-	538
HCM Lane V/C Ratio	0.003	-	-	-	0.024
HCM Control Delay (s)	8.7	-	-	-	11.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	563	0	3	434	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	75	75	69	69
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	593	0	4	579	1	32

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	593	890
Stage 1	-	-	593
Stage 2	-	-	297
Critical Hdwy	-	4.14	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.22	3.5
Pot Cap-1 Maneuver	-	979	286
Stage 1	-	-	521
Stage 2	-	-	734
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	979	285
Mov Cap-2 Maneuver	-	-	401
Stage 1	-	-	521
Stage 2	-	-	731

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	683	-	-	979	-
HCM Lane V/C Ratio	0.049	-	-	0.004	-
HCM Control Delay (s)	10.5	-	-	8.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 6.4

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	154	308	650	150	39	44
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	86	86	63	63
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	211	422	756	174	62	70

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	756	0	1389
Stage 1	-	-	756
Stage 2	-	-	633
Critical Hdwy	4.11	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	859	-	147
Stage 1	-	-	467
Stage 2	-	-	497
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	859	-	111
Mov Cap-2 Maneuver	-	-	111
Stage 1	-	-	467
Stage 2	-	-	375

Approach	EB	WB	SE
HCM Control Delay, s	3.5	0	65
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	859	-	-	-	181
HCM Lane V/C Ratio	0.246	-	-	-	0.728
HCM Control Delay (s)	10.6	-	-	-	65
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1	-	-	-	4.6

**Intersection**

Int Delay, s/veh 23

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	302	1619	4	123	922
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	88	88	74	74
Heavy Vehicles, %	1	1	3	3	4	4
Mvmt Flow	0	368	1840	5	166	1246

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2797	922	0 0 1844 0
Stage 1	1842	-	- - - -
Stage 2	955	-	- - - -
Critical Hdwy	6.82	6.92	- - 4.18 -
Critical Hdwy Stg 1	5.82	-	- - - -
Critical Hdwy Stg 2	5.82	-	- - - -
Follow-up Hdwy	3.51	3.31	- - 2.24 -
Pot Cap-1 Maneuver	15	~ 274	- - 318 -
Stage 1	112	-	- - - -
Stage 2	337	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	7	~ 274	- - 318 -
Mov Cap-2 Maneuver	7	-	- - - -
Stage 1	112	-	- - - -
Stage 2	161	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	213.6	0	3.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	274	318	-
HCM Lane V/C Ratio	-	-	1.344	0.523	-
HCM Control Delay (s)	-	-	213.6	28.1	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	19	2.9	-

**Notes**

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

**APPENDIX**






















**Traffic Analysis**

**2020 Build AM Peak Signalized Intersections**









HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2020 AM BUILD  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	156	10	15	125	516	16	201	42	248	51	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	82	190	12	19	156	0	20	251	52	292	60	35
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	517	658	42	480	714	607	616	624	129	438	456	266
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1214	1717	108	1175	1863	1583	1295	1498	310	1062	1094	638
Grp Volume(v), veh/h	82	0	202	19	156	0	20	0	303	292	0	95
Grp Sat Flow(s),veh/h/ln	1214	0	1826	1175	1863	1583	1295	0	1808	1062	0	1732
Q Serve(g_s), s	2.9	0.0	4.6	0.7	3.4	0.0	0.6	0.0	7.0	16.0	0.0	2.0
Cycle Q Clear(g_c), s	6.3	0.0	4.6	5.3	3.4	0.0	2.6	0.0	7.0	23.0	0.0	2.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.17	1.00		0.37
Lane Grp Cap(c), veh/h	517	0	700	480	714	607	616	0	753	438	0	722
V/C Ratio(X)	0.16	0.00	0.29	0.04	0.22	0.00	0.03	0.00	0.40	0.67	0.00	0.13
Avail Cap(c_a), veh/h	517	0	700	480	714	607	616	0	753	438	0	722
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	0.00	1.00	0.94	0.94	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	12.8	14.7	12.5	0.0	11.6	0.0	12.3	20.3	0.0	10.8
Incr Delay (d2), s/veh	0.7	0.0	1.0	0.1	0.7	0.0	0.1	0.0	1.6	7.8	0.0	0.4
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(-26165%),veh/ln	1.1	0.0	2.5	0.2	1.9	0.0	0.2	0.0	3.8	5.6	0.0	1.0
LnGrp Delay(d),s/veh	15.2	0.0	13.9	14.8	13.1	0.0	11.7	0.0	13.9	28.2	0.0	11.2
LnGrp LOS	B		B	B	B		B		B	C		B
Approach Vol, veh/h		284			175			323			387	
Approach Delay, s/veh		14.3			13.3			13.7			24.0	
Approach LOS		B			B			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		23.0		25.0		23.0		25.0				
Max Q Clear Time (g_c+I1), s		8.3		25.0		7.3		9.0				
Green Ext Time (p_c), s		1.8		0.0		1.8		3.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				17.2								
HCM 2010 LOS				B								
























HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd

2020 AM BUILD  
 4/30/2015

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Volume (veh/h)	357	92	127	506	158	133		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	441	114	151	602	198	166		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1652	739	423	1652	591	528		
Arrive On Green	0.15	0.15	0.47	0.47	0.33	0.33		
Sat Flow, veh/h	3632	1583	850	3632	1774	1583		
Grp Volume(v), veh/h	441	114	151	602	198	166		
Grp Sat Flow(s),veh/h/ln	1770	1583	850	1770	1774	1583		
Q Serve(g_s), s	6.6	3.7	8.3	6.6	5.0	4.7		
Cycle Q Clear(g_c), s	6.6	3.7	14.9	6.6	5.0	4.7		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1652	739	423	1652	591	528		
V/C Ratio(X)	0.27	0.15	0.36	0.36	0.33	0.31		
Avail Cap(c_a), veh/h	1652	739	423	1652	591	528		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.84	0.84	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.3	15.1	15.1	10.3	15.0	14.9		
Incr Delay (d2), s/veh	0.3	0.4	2.3	0.6	1.5	1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	3.3	1.7	2.2	3.3	2.7	2.3		
LnGrp Delay(d),s/veh	16.7	15.5	17.4	10.9	16.5	16.5		
LnGrp LOS	B	B	B	B	B	B		
Approach Vol, veh/h	555			753	364			
Approach Delay, s/veh	16.4			12.2	16.5			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		34.0				34.0		26.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		28.0				28.0		20.0
Max Q Clear Time (g_c+I1), s		8.6				16.9		7.0
Green Ext Time (p_c), s		7.3				5.4		1.0
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			14.5					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St.

2020 Build AM  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	259	221	89	122	181	197	126	1190	196	269	519	132
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	267	228	92	154	229	0	145	1368	225	341	657	167
Adj No. of Lanes	2	2	0	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	325	303	119	257	422	189	512	1560	698	462	1515	678
Arrive On Green	0.09	0.12	0.12	0.09	0.12	0.00	0.14	0.44	0.44	0.14	0.44	0.44
Sat Flow, veh/h	3442	2487	974	1774	3539	1583	1774	3539	1583	3343	3438	1538
Grp Volume(v), veh/h	267	160	160	154	229	0	145	1368	225	341	657	167
Grp Sat Flow(s),veh/h/ln	1721	1770	1691	1774	1770	1583	1774	1770	1583	1672	1719	1538
Q Serve(g_s), s	8.8	10.1	10.6	8.7	7.1	0.0	4.3	40.8	10.7	11.3	15.3	7.9
Cycle Q Clear(g_c), s	8.8	10.1	10.6	8.7	7.1	0.0	4.3	40.8	10.7	11.3	15.3	7.9
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	215	206	257	422	189	512	1560	698	462	1515	678
V/C Ratio(X)	0.82	0.74	0.78	0.60	0.54	0.00	0.28	0.88	0.32	0.74	0.43	0.25
Avail Cap(c_a), veh/h	357	275	263	263	520	233	512	1560	698	462	1515	678
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	49.1	49.3	40.0	48.0	0.0	12.5	29.5	21.1	47.8	22.4	20.3
Incr Delay (d2), s/veh	13.3	7.8	10.5	3.6	1.1	0.0	1.4	7.3	1.2	10.1	0.9	0.9
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(-26165%),veh/ln	4.8	5.4	5.6	4.5	3.5	0.0	2.3	21.3	4.9	5.9	7.4	3.5
LnGrp Delay(d),s/veh	64.7	56.9	59.8	43.6	49.1	0.0	13.8	36.8	22.3	57.9	23.3	21.2
LnGrp LOS	E	E	E	D	D		B	D	C	E	C	C
Approach Vol, veh/h		587			383			1738			1165	
Approach Delay, s/veh		61.2			46.9			33.0			33.1	
Approach LOS		E			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	20.1	22.0	57.0	16.9	19.8	22.0	57.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	11.0	18.0	16.0	51.0	12.0	17.0	16.0	51.0				
Max Q Clear Time (g_c+I1), s	10.7	12.6	6.3	17.3	10.8	9.1	13.3	42.8				
Green Ext Time (p_c), s	0.0	1.5	0.2	22.1	0.1	1.9	0.3	7.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			38.7									
HCM 2010 LOS			D									

**APPENDIX**

**Traffic Analysis**

**2020 Build PM Peak Unsignalized Intersections**

**Intersection**

Int Delay, s/veh 2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	112	22	258	95	19	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	88	88
Heavy Vehicles, %	1	1	4	4	3	3
Mvmt Flow	138	27	287	106	22	418

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	539	143	0 0 287 0
Stage 1	287	-	- - - -
Stage 2	252	-	- - - -
Critical Hdwy	6.82	6.92	- - 4.16 -
Critical Hdwy Stg 1	5.82	-	- - - -
Critical Hdwy Stg 2	5.82	-	- - - -
Follow-up Hdwy	3.51	3.31	- - 2.23 -
Pot Cap-1 Maneuver	475	882	- - 1265 -
Stage 1	739	-	- - - -
Stage 2	770	-	- - - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	467	882	- - 1265 -
Mov Cap-2 Maneuver	554	-	- - - -
Stage 1	739	-	- - - -
Stage 2	757	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	554	882	1265	-
HCM Lane V/C Ratio	-	-	0.25	0.031	0.017	-
HCM Control Delay (s)	-	-	13.6	9.2	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	1	0.1	0.1	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	13	540	473	2	0	3
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	38	38
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	14	593	503	2	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	505	0	829
Stage 1	-	-	504
Stage 2	-	-	325
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	1049	-	313
Stage 1	-	-	578
Stage 2	-	-	711
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1049	-	309
Mov Cap-2 Maneuver	-	-	428
Stage 1	-	-	578
Stage 2	-	-	702

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1049	-	-	-	753
HCM Lane V/C Ratio	0.014	-	-	-	0.01
HCM Control Delay (s)	8.5	-	-	-	9.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	44	498	2	3	451	18	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	89	89	89	58	58	58
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	48	541	2	3	507	20	5	0	7

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	527	0	0	543	0	0	899	1172	272
Stage 1	-	-	-	-	-	-	638	638	-
Stage 2	-	-	-	-	-	-	261	534	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1029	-	-	1022	-	-	237	194	732
Stage 1	-	-	-	-	-	-	436	474	-
Stage 2	-	-	-	-	-	-	727	528	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1029	-	-	1022	-	-	217	184	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	184	-
Stage 1	-	-	-	-	-	-	416	452	-
Stage 2	-	-	-	-	-	-	692	526	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0.1	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	363	1029	-	-	1022	-	-	407
HCM Lane V/C Ratio	0.033	0.046	-	-	0.003	-	-	0.116
HCM Control Delay (s)	15.3	8.7	-	-	8.5	-	-	15
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.4

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	10	1	21
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	68	68	68
Heavy Vehicles, %	3	3	3
Mvmt Flow	15	1	31

Major/Minor	Minor2		
Conflicting Flow All	890	1163	263
Stage 1	524	524	-
Stage 2	366	639	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	236	192	732
Stage 1	502	526	-
Stage 2	623	466	-
Platoon blocked, %			
Mov Cap-1 Maneuver	225	183	732
Mov Cap-2 Maneuver	225	183	-
Stage 1	479	524	-
Stage 2	588	444	-

Approach	SB
HCM Control Delay, s	15
HCM LOS	C

**Minor Lane/Major Mvmt**



**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	513	472	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	546	502	0	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	502	0	775
Stage 1	-	-	502
Stage 2	-	-	273
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	1052	-	339
Stage 1	-	-	579
Stage 2	-	-	754
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1052	-	339
Mov Cap-2 Maneuver	-	-	448
Stage 1	-	-	579
Stage 2	-	-	754

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1052	-	-	-	448
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	13.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	499	17	11	461	1	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	35	35	35
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	0	542	18	12	496	1	6	0	14

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	497	0	0	561	0	0	824	1072	280
Stage 1	-	-	-	-	-	-	552	552	-
Stage 2	-	-	-	-	-	-	272	520	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1056	-	-	1006	-	-	269	222	723
Stage 1	-	-	-	-	-	-	491	518	-
Stage 2	-	-	-	-	-	-	716	535	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1056	-	-	1006	-	-	265	219	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	219	-
Stage 1	-	-	-	-	-	-	491	518	-
Stage 2	-	-	-	-	-	-	704	529	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1056	-	-	1006	-	-	758
HCM Lane V/C Ratio	0.041	-	-	-	0.012	-	-	0.005
HCM Control Delay (s)	12.8	0	-	-	8.6	-	-	9.8
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	4

Major/Minor	Minor2		
Conflicting Flow All	791	1081	248
Stage 1	520	520	-
Stage 2	271	561	-
Critical Hdwy	7.5	6.5	6.9
Critical Hdwy Stg 1	6.5	5.5	-
Critical Hdwy Stg 2	6.5	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	284	220	758
Stage 1	512	535	-
Stage 2	717	513	-
Platoon blocked, %			
Mov Cap-1 Maneuver	276	217	758
Mov Cap-2 Maneuver	276	217	-
Stage 1	512	529	-
Stage 2	703	513	-

Approach	SB
HCM Control Delay, s	9.8
HCM LOS	A

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	484	13	7	461	5	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	95	95	60	60
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	515	14	7	485	8	12

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	779
Stage 1	-	-	522
Stage 2	-	-	257
Critical Hdwy	-	4.14	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.22	3.5
Pot Cap-1 Maneuver	-	1034	337
Stage 1	-	-	566
Stage 2	-	-	768
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1034	335
Mov Cap-2 Maneuver	-	-	443
Stage 1	-	-	566
Stage 2	-	-	763

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	579	-	-	1034	-
HCM Lane V/C Ratio	0.035	-	-	0.007	-
HCM Control Delay (s)	11.4	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

**Intersection**

Int Delay, s/veh 1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	445	43	30	430	38	26
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	96	96	76	76
Heavy Vehicles, %	3	3	1	1	2	2
Mvmt Flow	478	46	31	448	50	34

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	788
Stage 1	-	-	502
Stage 2	-	-	286
Critical Hdwy	-	4.12	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	2.21	3.52
Pot Cap-1 Maneuver	-	1045	328
Stage 1	-	-	573
Stage 2	-	-	737
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1045	318
Mov Cap-2 Maneuver	-	-	432
Stage 1	-	-	573
Stage 2	-	-	715

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	519	-	-	1045	-
HCM Lane V/C Ratio	0.162	-	-	0.03	-
HCM Control Delay (s)	13.3	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	455	10	27	493	12	16
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	95	95	72	72
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	517	11	28	519	17	22

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	839
Stage 1	-	-	523
Stage 2	-	-	316
Critical Hdwy	-	4.14	6.88
Critical Hdwy Stg 1	-	-	5.88
Critical Hdwy Stg 2	-	-	5.88
Follow-up Hdwy	-	2.22	3.54
Pot Cap-1 Maneuver	-	1035	300
Stage 1	-	-	554
Stage 2	-	-	706
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1035	292
Mov Cap-2 Maneuver	-	-	410
Stage 1	-	-	554
Stage 2	-	-	687

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	546	-	-	1035	-
HCM Lane V/C Ratio	0.071	-	-	0.027	-
HCM Control Delay (s)	12.1	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	474	534	5	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	96	96	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	539	556	5	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	561	0	828
Stage 1	-	-	559
Stage 2	-	-	269
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	999	-	313
Stage 1	-	-	542
Stage 2	-	-	758
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	999	-	313
Mov Cap-2 Maneuver	-	-	424
Stage 1	-	-	542
Stage 2	-	-	758

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	999	-	-	-	424
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	13.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	464	1	16	534	1	10
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	93	93	63	63
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	488	1	17	574	2	16

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	811
Stage 1	-	-	489
Stage 2	-	-	322
Critical Hdwy	-	4.12	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.21	3.5
Pot Cap-1 Maneuver	-	1078	321
Stage 1	-	-	588
Stage 2	-	-	713
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1078	316
Mov Cap-2 Maneuver	-	-	434
Stage 1	-	-	588
Stage 2	-	-	702

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	-	-	1078	-
HCM Lane V/C Ratio	0.024	-	-	0.016	-
HCM Control Delay (s)	10.2	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



**Intersection**

Int Delay, s/veh 4.7

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	10	279	239	118	234	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	84	84	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	11	317	285	140	257	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	285	0	466
Stage 1	-	-	285
Stage 2	-	-	181
Critical Hdwy	4.13	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1271	-	544
Stage 1	-	-	768
Stage 2	-	-	838
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1271	-	539
Mov Cap-2 Maneuver	-	-	539
Stage 1	-	-	768
Stage 2	-	-	831

Approach	EB	WB	SE
HCM Control Delay, s	0.3	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1271	-	-	-	544
HCM Lane V/C Ratio	0.009	-	-	-	0.487
HCM Control Delay (s)	7.9	-	-	-	17.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.6

**Intersection**

Int Delay, s/veh 2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	148	963	0	261	1666
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	90	90	92	92
Heavy Vehicles, %	0	0	3	3	1	1
Mvmt Flow	0	195	1070	0	284	1811

Major/Minor	Minor1	Minor2	Major1	Major2	Major2	Major2
Conflicting Flow All	2543	535	0	0	1070	0
Stage 1	1070	-	-	-	-	-
Stage 2	1473	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	23	495	-	-	653	-
Stage 1	295	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	13	495	-	-	653	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	295	-	-	-	-	-
Stage 2	102	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	495	653	-
HCM Lane V/C Ratio	-	-	0.393	0.434	-
HCM Control Delay (s)	-	-	16.9	14.7	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.9	2.2	-






















**APPENDIX**

**Traffic Analysis**

**2020 Build PM Peak Signalized Intersections**







HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2020 PM BUILD  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	177	13	23	191	290	18	81	14	390	192	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	52	216	16	29	239	0	22	101	18	459	226	62
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	229	347	26	221	381	324	682	917	163	832	830	228
Arrive On Green	0.20	0.20	0.20	0.34	0.34	0.00	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1125	1697	126	1144	1863	1583	1087	1540	274	1255	1395	383
Grp Volume(v), veh/h	52	0	232	29	239	0	22	0	119	459	0	288
Grp Sat Flow(s),veh/h/ln	1125	0	1822	1144	1863	1583	1087	0	1814	1255	0	1777
Q Serve(g_s), s	2.6	0.0	7.0	1.4	6.5	0.0	0.6	0.0	1.7	15.0	0.0	4.7
Cycle Q Clear(g_c), s	9.1	0.0	7.0	8.3	6.5	0.0	5.3	0.0	1.7	16.7	0.0	4.7
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	229	0	373	221	381	324	682	0	1080	832	0	1058
V/C Ratio(X)	0.23	0.00	0.62	0.13	0.63	0.00	0.03	0.00	0.11	0.55	0.00	0.27
Avail Cap(c_a), veh/h	299	0	486	292	497	422	682	0	1080	832	0	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.97	0.97	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	21.7	21.5	17.8	0.0	7.1	0.0	5.3	8.9	0.0	5.9
Incr Delay (d2), s/veh	0.5	0.0	1.7	0.3	1.6	0.0	0.1	0.0	0.2	2.6	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(-26165%),veh/ln	0.8	0.0	3.7	0.4	3.4	0.0	0.2	0.0	0.9	5.7	0.0	2.4
LnGrp Delay(d),s/veh	26.1	0.0	23.4	21.8	19.5	0.0	7.2	0.0	5.5	11.5	0.0	6.5
LnGrp LOS	C		C	C	B		A		A	B		A
Approach Vol, veh/h		284			268			141			747	
Approach Delay, s/veh		23.9			19.7			5.7			9.6	
Approach LOS		C			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.7		18.3		41.7		18.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		32.0		16.0		32.0		16.0				
Max Q Clear Time (g_c+I1), s		7.3		11.1		18.7		10.3				
Green Ext Time (p_c), s		4.3		1.2		3.5		1.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			13.9									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd

2020 PM BUILD  
 4/30/2015

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Volume (veh/h)	522	52	42	448	55	33		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	644	64	50	533	69	41		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1711	765	356	1711	562	501		
Arrive On Green	0.16	0.16	0.48	0.48	0.32	0.32		
Sat Flow, veh/h	3632	1583	738	3632	1774	1583		
Grp Volume(v), veh/h	644	64	50	533	69	41		
Grp Sat Flow(s),veh/h/ln	1770	1583	738	1770	1774	1583		
Q Serve(g_s), s	9.8	2.1	3.0	5.5	1.7	1.1		
Cycle Q Clear(g_c), s	9.8	2.1	12.7	5.5	1.7	1.1		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1711	765	356	1711	562	501		
V/C Ratio(X)	0.38	0.08	0.14	0.31	0.12	0.08		
Avail Cap(c_a), veh/h	1711	765	356	1711	562	501		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.76	0.76	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	17.1	13.9	14.9	9.4	14.6	14.4		
Incr Delay (d2), s/veh	0.5	0.2	0.8	0.5	0.4	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	4.9	0.9	0.7	2.8	0.9	0.5		
LnGrp Delay(d),s/veh	17.6	14.1	15.7	9.9	15.0	14.7		
LnGrp LOS	B	B	B	A	B	B		
Approach Vol, veh/h	708			583	110			
Approach Delay, s/veh	17.3			10.4	14.9			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.0				35.0		25.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		29.0				29.0		19.0
Max Q Clear Time (g_c+I1), s		11.8				14.7		3.7
Green Ext Time (p_c), s		7.0				6.4		0.2
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			14.2					
HCM 2010 LOS			B					
























HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St.

2020 Build PM  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	181	172	143	81	148	42	108	655	75	85	1259	302
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	187	177	147	103	187	0	124	753	86	108	1594	382
Adj No. of Lanes	2	2	0	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	207	235	184	182	410	183	312	1701	761	459	1653	739
Arrive On Green	0.06	0.12	0.12	0.05	0.12	0.00	0.14	0.48	0.48	0.14	0.48	0.48
Sat Flow, veh/h	3442	1892	1479	1774	3539	1583	1774	3539	1583	3343	3438	1538
Grp Volume(v), veh/h	187	165	159	103	187	0	124	753	86	108	1594	382
Grp Sat Flow(s),veh/h/ln	1721	1770	1602	1774	1770	1583	1774	1770	1583	1672	1719	1538
Q Serve(g_s), s	6.3	10.5	11.3	6.0	5.7	0.0	3.3	16.4	3.5	3.4	52.3	20.0
Cycle Q Clear(g_c), s	6.3	10.5	11.3	6.0	5.7	0.0	3.3	16.4	3.5	3.4	52.3	20.0
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	220	199	182	410	183	312	1701	761	459	1653	739
V/C Ratio(X)	0.90	0.75	0.80	0.56	0.46	0.00	0.40	0.44	0.11	0.24	0.96	0.52
Avail Cap(c_a), veh/h	207	273	247	182	516	231	312	1701	761	459	1653	739
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	49.2	49.6	43.4	48.1	0.0	22.5	20.0	16.6	44.8	29.3	20.9
Incr Delay (d2), s/veh	37.4	8.5	13.7	4.0	0.8	0.0	3.7	0.8	0.3	1.2	15.2	2.6
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(-26165%),veh/ln	4.1	5.7	5.8	3.1	2.9	0.0	2.3	8.1	1.6	1.6	28.3	9.0
LnGrp Delay(d),s/veh	91.8	57.8	63.2	47.3	48.9	0.0	26.2	20.8	16.9	46.0	44.5	23.5
LnGrp LOS	F	E	E	D	D		C	C	B	D	D	C
Approach Vol, veh/h		511			290			963			2084	
Approach Delay, s/veh		71.9			48.3			21.1			40.7	
Approach LOS		E			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	20.5	22.0	62.0	13.0	19.5	22.0	62.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	6.0	18.0	16.0	56.0	7.0	17.0	16.0	56.0				
Max Q Clear Time (g_c+I1), s	8.0	13.3	5.3	54.3	8.3	7.7	5.4	18.4				
Green Ext Time (p_c), s	0.0	1.2	0.2	1.6	0.0	2.0	0.2	27.2				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			40.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St

2020 Build PM School  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	125	66	110	158	56	114	725	98	166	919	214
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	207	151	80	133	191	0	138	877	119	201	1111	259
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	280	537	270	256	833	373	205	2400	1074	336	1786	799
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.00	0.12	0.68	0.68	0.52	0.52	0.52
Sat Flow, veh/h	1187	2281	1149	1145	3539	1583	1774	3539	1583	547	3438	1538
Grp Volume(v), veh/h	207	115	116	133	191	0	138	877	119	201	1111	259
Grp Sat Flow(s),veh/h/ln	1187	1770	1660	1145	1770	1583	1774	1770	1583	547	1719	1538
Q Serve(g_s), s	23.7	7.4	7.9	15.0	6.0	0.0	10.3	14.7	3.6	38.7	31.8	13.5
Cycle Q Clear(g_c), s	29.7	7.4	7.9	22.9	6.0	0.0	10.3	14.7	3.6	38.7	31.8	13.5
Prop In Lane	1.00		0.69	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	416	391	256	833	373	205	2400	1074	336	1786	799
V/C Ratio(X)	0.74	0.28	0.30	0.52	0.23	0.00	0.67	0.37	0.11	0.60	0.62	0.32
Avail Cap(c_a), veh/h	291	434	407	267	868	388	205	2400	1074	336	1786	799
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	43.4	43.6	53.0	42.8	0.0	58.8	9.5	7.8	25.3	23.7	19.3
Incr Delay (d2), s/veh	9.3	0.4	0.4	1.6	0.1	0.0	16.3	0.4	0.2	7.6	1.6	1.1
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(-26165%),veh/ln	8.5	3.7	3.7	4.8	3.0	0.0	6.0	7.3	1.6	6.5	15.5	6.0
LnGrp Delay(d),s/veh	64.1	43.7	44.0	54.6	43.0	0.0	75.2	10.0	8.0	33.0	25.3	20.3
LnGrp LOS	E	D	D	D	D		E	A	A	C	C	C
Approach Vol, veh/h		438			324			1134			1571	
Approach Delay, s/veh		53.4			47.8			17.7			25.5	
Approach LOS		D			D			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		100.0		38.6	22.0	78.0		38.6				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		94.0		34.0	16.0	72.0		34.0				
Max Q Clear Time (g_c+I1), s		16.7		31.7	12.3	40.7		24.9				
Green Ext Time (p_c), s		38.2		0.9	0.1	22.4		2.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				28.5								
HCM 2010 LOS				C								

**APPENDIX**

**Traffic Analysis**

**2040 Build AM Peak Unsignalized Intersections**



**Intersection**

Int Delay, s/veh 1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	73	12	430	78	11	193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	90	90
Heavy Vehicles, %	9	9	2	2	5	5
Mvmt Flow	91	15	478	87	12	214

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	610	239	0 0 478 0
Stage 1	478	-	- - - -
Stage 2	132	-	- - - -
Critical Hdwy	6.98	7.08	- - 4.2 -
Critical Hdwy Stg 1	5.98	-	- - - -
Critical Hdwy Stg 2	5.98	-	- - - -
Follow-up Hdwy	3.59	3.39	- - 2.25 -
Pot Cap-1 Maneuver	410	741	- - 1060 -
Stage 1	570	-	- - - -
Stage 2	860	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	405	741	- - 1060 -
Mov Cap-2 Maneuver	480	-	- - - -
Stage 1	570	-	- - - -
Stage 2	850	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	480	741	1060	-
HCM Lane V/C Ratio	-	-	0.19	0.02	0.012	-
HCM Control Delay (s)	-	-	14.3	10	8.4	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	0	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	5	577	725	1	4	15
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	78	78	80	80
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	5	634	929	1	5	19

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	931	0	465
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.16	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.23	-	3.3
Pot Cap-1 Maneuver	724	-	550
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	724	-	550
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	724	-	-	-	455
HCM Lane V/C Ratio	0.008	-	-	-	0.052
HCM Control Delay (s)	10	-	-	-	13.3
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

**Intersection**

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	12	565	1	0	657	12	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	80	80	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	13	601	1	0	821	15	0	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	836	0	0	602	0	0	1038	1463	301
Stage 1	-	-	-	-	-	-	627	627	-
Stage 2	-	-	-	-	-	-	411	836	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	794	-	-	971	-	-	188	130	701
Stage 1	-	-	-	-	-	-	443	479	-
Stage 2	-	-	-	-	-	-	594	385	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	794	-	-	971	-	-	160	128	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	128	-
Stage 1	-	-	-	-	-	-	436	471	-
Stage 2	-	-	-	-	-	-	511	385	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	794	-	-	971	-	-	307
HCM Lane V/C Ratio	-	0.016	-	-	-	-	-	0.374
HCM Control Delay (s)	0	9.6	-	-	0	-	-	23.6
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	1.7

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	30	0	71
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	92	88
Heavy Vehicles, %	5	2	5
Mvmt Flow	34	0	81

**Major/Minor**                      **Minor2**

Conflicting Flow All	1155	1457	418
Stage 1	829	829	-
Stage 2	326	628	-
Critical Hdwy	7.6	6.54	7
Critical Hdwy Stg 1	6.6	5.54	-
Critical Hdwy Stg 2	6.6	5.54	-
Follow-up Hdwy	3.55	4.02	3.35
Pot Cap-1 Maneuver	148	129	575
Stage 1	325	383	-
Stage 2	652	474	-
Platoon blocked, %			
Mov Cap-1 Maneuver	146	127	575
Mov Cap-2 Maneuver	146	127	-
Stage 1	320	383	-
Stage 2	641	466	-

**Approach**                      **SB**

HCM Control Delay, s	23.6
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	596	657	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	78	78	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	670	842	1	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	844	0	1178
Stage 1	-	-	843
Stage 2	-	-	335
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	782	-	187
Stage 1	-	-	388
Stage 2	-	-	702
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	782	-	187
Mov Cap-2 Maneuver	-	-	303
Stage 1	-	-	388
Stage 2	-	-	702

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	782	-	-	-	586
HCM Lane V/C Ratio	-	-	-	-	0.007
HCM Control Delay (s)	0	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	579	0	4	666	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	77	77	77	25	25	25
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	629	0	5	865	0	4	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	865	0	0	629	0	0	1072	1504	315
Stage 1	-	-	-	-	-	-	629	629	-
Stage 2	-	-	-	-	-	-	443	875	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	774	-	-	949	-	-	177	123	687
Stage 1	-	-	-	-	-	-	442	478	-
Stage 2	-	-	-	-	-	-	569	370	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	774	-	-	949	-	-	176	122	687
Mov Cap-2 Maneuver	-	-	-	-	-	-	176	122	-
Stage 1	-	-	-	-	-	-	442	478	-
Stage 2	-	-	-	-	-	-	566	368	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	25.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	176	774	-	-	949	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-	0.005	-	-	-
HCM Control Delay (s)	25.9	0	-	-	8.8	-	-	0
HCM Lane LOS	D	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	0

**Major/Minor**

**Minor2**

Conflicting Flow All	1190	1504	432
Stage 1	875	875	-
Stage 2	315	629	-
Critical Hdwy	7.5	6.5	6.9
Critical Hdwy Stg 1	6.5	5.5	-
Critical Hdwy Stg 2	6.5	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	145	123	577
Stage 1	315	370	-
Stage 2	676	478	-
Platoon blocked, %			
Mov Cap-1 Maneuver	144	122	577
Mov Cap-2 Maneuver	144	122	-
Stage 1	315	368	-
Stage 2	676	478	-

**Approach**

**SB**

HCM Control Delay, s	0
HCM LOS	A

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	582	10	1	631	30	6
Conflicting Peds, #/hr	0	0	631	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	77	77	91	91
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	633	11	1	819	33	7

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	953
Stage 1	-	-	638
Stage 2	-	-	412
Critical Hdwy	-	4.16	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.23	3.5
Pot Cap-1 Maneuver	-	931	263
Stage 1	-	-	494
Stage 2	-	-	643
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	441	125
Mov Cap-2 Maneuver	-	-	355
Stage 1	-	-	494
Stage 2	-	-	642

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	272	-	-	441	-
HCM Lane V/C Ratio	0.145	-	-	0.003	-
HCM Control Delay (s)	20.5	-	-	13.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-



**Intersection**

Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	558	27	14	556	77	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	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	78	78	73	73
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	607	29	18	713	105	16

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	636
Stage 1	-	-	621
Stage 2	-	-	392
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.88
Critical Hdwy Stg 2	-	-	5.88
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	943
Stage 1	-	-	493
Stage 2	-	-	646
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	943
Mov Cap-2 Maneuver	-	-	354
Stage 1	-	-	493
Stage 2	-	-	634

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	378	-	-	943	-
HCM Lane V/C Ratio	0.323	-	-	0.019	-
HCM Control Delay (s)	19	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.4	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	622	7	11	507	16	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	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	71	71	73	73
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	723	8	15	714	22	52

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	731
Stage 1	-	-	727
Stage 2	-	-	388
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.9
Critical Hdwy Stg 2	-	-	5.9
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	869
Stage 1	-	-	432
Stage 2	-	-	646
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	869
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	432
Stage 2	-	-	635

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	485	-	-	869	-
HCM Lane V/C Ratio	0.153	-	-	0.018	-
HCM Control Delay (s)	13.8	-	-	9.2	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	661	513	2	2	4
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	74	74	38	38
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	4	718	693	3	5	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	696	0	348
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	3.3
Pot Cap-1 Maneuver	896	-	654
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	896	-	654
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	896	-	-	-	504
HCM Lane V/C Ratio	0.005	-	-	-	0.031
HCM Control Delay (s)	9	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

**Intersection**

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	660	0	4	508	1	26
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	75	75	69	69
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	695	0	5	677	1	38

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	695	1044
Stage 1	-	-	695
Stage 2	-	-	349
Critical Hdwy	-	4.14	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.22	3.5
Pot Cap-1 Maneuver	-	897	228
Stage 1	-	-	462
Stage 2	-	-	691
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	897	227
Mov Cap-2 Maneuver	-	-	349
Stage 1	-	-	462
Stage 2	-	-	687

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	634	-	-	897	-
HCM Lane V/C Ratio	0.062	-	-	0.006	-
HCM Control Delay (s)	11.1	-	-	9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

**Intersection**

Int Delay, s/veh 20.7

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	181	361	763	176	46	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	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	86	86	63	63
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	248	495	887	205	73	83

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	887	0	1630
Stage 1	-	-	887
Stage 2	-	-	743
Critical Hdwy	4.11	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	768	-	103
Stage 1	-	-	406
Stage 2	-	-	436
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	768	-	~ 70
Mov Cap-2 Maneuver	-	-	~ 70
Stage 1	-	-	406
Stage 2	-	-	295

Approach	EB	WB	SE
HCM Control Delay, s	4	0	245.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	768	-	-	-	121
HCM Lane V/C Ratio	0.323	-	-	-	1.286
HCM Control Delay (s)	11.9	-	-	-	245.1
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	1.4	-	-	-	10.1

**Notes**

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

**Intersection**

Int Delay, s/veh 54.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	355	1898	5	144	1081
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	88	88	74	74
Heavy Vehicles, %	1	1	3	3	4	4
Mvmt Flow	0	433	2157	6	195	1461

Major/Minor	Minor1	Minor2	Major1	Major2	Major3	Major4
Conflicting Flow All	3280	1081	0	0	2163	0
Stage 1	2160	-	-	-	-	-
Stage 2	1120	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.18	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.24	-
Pot Cap-1 Maneuver	7	~ 215	-	-	237	-
Stage 1	75	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1	~ 215	-	-	237	-
Mov Cap-2 Maneuver	1	-	-	-	-	-
Stage 1	75	-	-	-	-	-
Stage 2	49	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 509	0	7.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	215	237	-
HCM Lane V/C Ratio	-	-	2.014	0.821	-
HCM Control Delay (s)	-	-	\$ 509	65	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	32.3	6.3	-

**Notes**

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






















**APPENDIX**

**Traffic Analysis**

**2040 Build AM Peak Signalized Intersections**

HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2040 AM BUILD  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	184	11	17	146	605	19	236	50	291	60	35
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	95	224	13	21	182	0	24	295	62	342	71	41
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	495	662	38	452	714	607	600	622	131	396	458	264
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1185	1727	100	1139	1863	1583	1276	1493	314	1010	1098	634
Grp Volume(v), veh/h	95	0	237	21	182	0	24	0	357	342	0	112
Grp Sat Flow(s),veh/h/ln	1185	0	1827	1139	1863	1583	1276	0	1807	1010	0	1733
Q Serve(g_s), s	3.6	0.0	5.5	0.8	4.0	0.0	0.7	0.0	8.6	16.4	0.0	2.4
Cycle Q Clear(g_c), s	7.6	0.0	5.5	6.3	4.0	0.0	3.1	0.0	8.6	25.0	0.0	2.4
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.17	1.00		0.37
Lane Grp Cap(c), veh/h	495	0	700	452	714	607	600	0	753	396	0	722
V/C Ratio(X)	0.19	0.00	0.34	0.05	0.25	0.00	0.04	0.00	0.47	0.86	0.00	0.16
Avail Cap(c_a), veh/h	495	0	700	452	714	607	600	0	753	396	0	722
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	0.00	1.00	0.92	0.92	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	13.1	15.3	12.6	0.0	11.9	0.0	12.7	23.4	0.0	10.9
Incr Delay (d2), s/veh	0.9	0.0	1.3	0.2	0.8	0.0	0.1	0.0	2.1	21.4	0.0	0.5
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(-26165%),veh/ln	1.3	0.0	3.0	0.3	2.2	0.0	0.3	0.0	4.7	8.0	0.0	1.2
LnGrp Delay(d),s/veh	16.1	0.0	14.4	15.5	13.4	0.0	12.0	0.0	14.9	44.8	0.0	11.4
LnGrp LOS	B		B	B	B		B		B	D		B
Approach Vol, veh/h		332			203			381			454	
Approach Delay, s/veh		14.9			13.6			14.7			36.5	
Approach LOS		B			B			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		23.0		25.0		23.0		25.0				
Max Q Clear Time (g_c+I1), s		9.6		27.0		8.3		10.6				
Green Ext Time (p_c), s		2.1		0.0		2.1		3.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			21.8									
HCM 2010 LOS			C									



HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd






















2040 AM BUILD  
 4/30/2015



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Volume (veh/h)	419	108	149	594	185	156		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	517	133	177	707	231	195		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1770	792	409	1770	532	475		
Arrive On Green	0.17	0.17	0.50	0.50	0.30	0.30		
Sat Flow, veh/h	3632	1583	778	3632	1774	1583		
Grp Volume(v), veh/h	517	133	177	707	231	195		
Grp Sat Flow(s),veh/h/ln	1770	1583	778	1770	1774	1583		
Q Serve(g_s), s	7.7	4.3	11.1	7.5	6.3	5.9		
Cycle Q Clear(g_c), s	7.7	4.3	18.8	7.5	6.3	5.9		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1770	792	409	1770	532	475		
V/C Ratio(X)	0.29	0.17	0.43	0.40	0.43	0.41		
Avail Cap(c_a), veh/h	1770	792	409	1770	532	475		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.68	0.68	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	15.7	14.3	15.3	9.4	16.9	16.8		
Incr Delay (d2), s/veh	0.3	0.3	3.3	0.7	2.6	2.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	3.8	2.0	2.7	3.8	3.5	2.9		
LnGrp Delay(d),s/veh	16.0	14.6	18.6	10.0	19.5	19.4		
LnGrp LOS	B	B	B	B	B	B		
Approach Vol, veh/h	650			884	426			
Approach Delay, s/veh	15.7			11.8	19.4			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.0				36.0		24.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		30.0				30.0		18.0
Max Q Clear Time (g_c+I1), s		9.7				20.8		8.3
Green Ext Time (p_c), s		9.1				5.6		1.0
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			14.7					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	184	11	17	146	605	19	236	50	291	60	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	95	224	13	21	182	0	24	295	62	342	71	41
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	368	699	40	345	735	329	772	753	158	559	554	320
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
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.00	0.50	0.50	0.50	0.50	0.50	0.50
Ln Grp Delay, s/veh	16.2	14.5	14.5	15.4	13.9	0.0	6.0	0.0	7.6	17.0	0.0	5.8
Ln Grp LOS	B	B	B	B	B		A		A	B		A
Approach Vol, veh/h		332			203			381			454	
Approach Delay, s/veh		15.0			14.1			7.5			14.2	
Approach LOS		B			B			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		5.0			
Phs Duration (G+Y+Rc), s			35.4		14.6		35.4		14.6			
Change Period (Y+Rc), s			6.0		6.0		6.0		6.0			
Max Green (Gmax), s			21.0		17.0		21.0		17.0			
Max Allow Headway (MAH), s			4.9		4.6		4.9		4.6			
Max Q Clear (g_c+I1), s			7.1		6.8		20.3		5.0			
Green Ext Time (g_e), s			3.9		1.8		0.4		2.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.21		0.17		1.00		0.09			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1276		1185		1010		1139			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1493		3368		1098		3539			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			314		194		634		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment												
Lanes in Grp		0	1	0	1	0	1	0	1			

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

Grp Vol (v), veh/h	0	24	0	95	0	342	0	21
Grp Sat Flow (s), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Q Serve Time (g_s), s	0.0	0.4	0.0	3.0	0.0	13.2	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	4.8	0.0	18.3	0.0	3.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	21.0	0.0	8.6	0.0	21.0	0.0	8.6
Perm LT Serve Time (g_u), s	0.0	19.6	0.0	6.9	0.0	15.9	0.0	6.3
Perm LT Q Serve Time (g_ps), s	0.0	0.4	0.0	3.0	0.0	13.2	0.0	0.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	772	0	368	0	559	0	345
V/C Ratio (X)	0.00	0.03	0.00	0.26	0.00	0.61	0.00	0.06
Avail Cap (c_a), veh/h	0	772	0	606	0	559	0	573
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.84
Uniform Delay (d1), s/veh	0.0	6.0	0.0	15.8	0.0	12.0	0.0	15.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.0	4.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.0	0.0	16.2	0.0	17.0	0.0	15.4
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	1.0	0.0	3.6	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	1.0	0.0	4.4	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.13	0.00	0.75	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	116	0	0	0	182
Grp Sat Flow (s), veh/h/ln	0	0	0	1752	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	2.3	0.0	0.0	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.3	0.0	0.0	0.0	1.8
Lane Grp Cap (c), veh/h	0	0	0	364	0	0	0	735
V/C Ratio (X)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.25
Avail Cap (c_a), veh/h	0	0	0	715	0	0	0	1445
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.84
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.5	0.0	0.0	0.0	13.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Right Lane Group Data**

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	357	0	121	0	112	0	0
Grp Sat Flow (s), veh/h/ln	0	1807	0	1810	0	1733	0	1583
Q Serve Time (g_s), s	0.0	5.1	0.0	2.4	0.0	1.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	2.4	0.0	1.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	0.11	0.00	0.37	0.00	1.00
Lane Grp Cap (c), veh/h	0	911	0	376	0	874	0	329
V/C Ratio (X)	0.00	0.39	0.00	0.32	0.00	0.13	0.00	0.00
Avail Cap (c_a), veh/h	0	911	0	739	0	874	0	646
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	14.0	0.0	5.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.5	0.0	0.3	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
Control Delay (d), s/veh	0.0	7.6	0.0	14.5	0.0	5.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	1.2	0.0	0.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	1.2	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.12	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Intersection Summary**

HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014

	→	↘	↙	←	↖	↗					
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	↑↑	↑	↙	↑↑	↙	↗					
Volume (veh/h)	419	108	149	594	185	156					
Number	4	14	3	8	5	12					
Initial Q, veh	0	0	0	0	0	0					
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00					
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00					
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863					
Adj Flow Rate, veh/h	517	133	177	707	231	195					
Adj No. of Lanes	2	1	1	2	1	1					
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80					
Percent Heavy Veh, %	2	2	2	2	2	2					
Opposing Right Turn Influence			Yes		Yes						
Cap, veh/h	1466	656	365	1466	609	544					
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00					
Prop Arrive On Green	0.14	0.14	0.41	0.41	0.34	0.34					
Ln Grp Delay, s/veh	15.5	14.2	17.5	10.9	14.1	14.0					
Ln Grp LOS	B	B	B	B	B	B					
Approach Vol, veh/h	650			884	426						
Approach Delay, s/veh	15.2			12.2	14.0						
Approach LOS	B			B	B						
Timer:		1	2	3	4	5	6	7	8		
Assigned Phs			2		4				8		
Case No			9.0		7.0				6.0		
Phs Duration (G+Y+Rc), s			23.5		26.5				26.5		
Change Period (Y+Rc), s			6.0		6.0				6.0		
Max Green (Gmax), s			17.0		21.0				21.0		
Max Allow Headway (MAH), s			4.0		4.8				4.8		
Max Q Clear (g_c+I1), s			6.9		8.6				19.0		
Green Ext Time (g_e), s			1.0		6.9				1.5		
Prob of Phs Call (p_c)			1.00		1.00				1.00		
Prob of Max Out (p_x)			0.05		0.55				1.00		
Left-Turn Movement Data											
Assigned Mvmt			5		7				3		
Mvmt Sat Flow, veh/h			1774		0				778		
Through Movement Data											
Assigned Mvmt			2		4				8		
Mvmt Sat Flow, veh/h			0		3632				3632		
Right-Turn Movement Data											
Assigned Mvmt			12		14				18		
Mvmt Sat Flow, veh/h			1583		1583				0		
Left Lane Group Data											
Assigned Mvmt		0	5	0	7	0	0	0	3		
Lane Assignment											
Lanes in Grp		0	1	0	0	0	0	0	1		

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014

Grp Vol (v), veh/h	0	231	0	0	0	0	0	177
Grp Sat Flow (s), veh/h/ln	0	1774	0	0	0	0	0	778
Q Serve Time (g_s), s	0.0	4.9	0.0	0.0	0.0	0.0	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	0.0	0.0	0.0	0.0	17.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1774	0	0	0	0	0	778
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Time to First Blk (g_f), s	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	609	0	0	0	0	0	365
V/C Ratio (X)	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.49
Avail Cap (c_a), veh/h	0	609	0	0	0	0	0	373
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.3	0.0	0.0	0.0	0.0	0.0	16.5
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.1	0.0	0.0	0.0	0.0	0.0	17.5
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	0.0	0.0	0.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	517	0	0	0	707
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	6.6	0.0	0.0	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.6	0.0	0.0	0.0	7.2
Lane Grp Cap (c), veh/h	0	0	0	1466	0	0	0	1466
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.48
Avail Cap (c_a), veh/h	0	0	0	1501	0	0	0	1501
Upstream Filter (I)	0.00	0.00	0.00	0.81	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.5	0.0	0.0	0.0	10.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Right Lane Group Data
























Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	195	0	133	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	0	0	0
Q Serve Time (g_s), s	0.0	4.6	0.0	3.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.6	0.0	3.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	544	0	656	0	0	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.20	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	544	0	672	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.81	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.2	0.0	14.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.1	0.0	0.0	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
Control Delay (d), s/veh	0.0	14.0	0.0	14.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	1.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.18	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Intersection Summary

HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	304	259	104	143	212	231	148	1395	229	315	609	155
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	313	267	107	181	268	0	170	1603	263	399	771	196
Adj No. of Lanes	2	2	0	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	321	334	131	224	415	186	470	1592	712	454	1547	692
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
Prop Arrive On Green	0.09	0.13	0.13	0.08	0.12	0.00	0.14	0.45	0.45	0.14	0.45	0.45
Ln Grp Delay, s/veh	96.3	62.5	66.3	64.3	52.0	0.0	15.4	56.6	22.9	70.8	24.1	21.5
Ln Grp LOS	F	E	E	E	D		B	F	C	E	C	C
Approach Vol, veh/h		687			449			2036			1366	
Approach Delay, s/veh		79.0			57.0			48.8			37.4	
Approach LOS		E			E			D			D	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		1.1	4.0	1.1	3.0	2.0	3.0	2.0	3.0			
Phs Duration (G+Y+Rc), s		15.0	21.8	22.0	59.0	17.0	19.8	22.0	59.0			
Change Period (Y+Rc), s		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0			
Max Green (Gmax), s		9.0	18.0	16.0	53.0	11.0	16.0	16.0	53.0			
Max Allow Headway (MAH), s		3.8	5.0	3.8	4.9	3.7	5.0	3.7	4.9			
Max Q Clear (g_c+I1), s		11.0	14.6	7.2	20.7	12.7	10.5	15.8	55.0			
Green Ext Time (g_e), s		0.0	1.2	0.3	25.2	0.0	1.8	0.0	0.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	1.00	0.01	0.71	1.00	0.91	1.00	1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		1774		1774		3442		3343				
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			2488		3438		3539		3539			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			972		1538		1583		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		1	0	3	0	5	0	7	0			
Lane Assignment		(Pr/Pm)		(Pr/Pm)		(Prot)		(Prot)				
Lanes in Grp		1	0	1	0	2	0	2	0			



HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

Grp Vol (v), veh/h	181	0	170	0	313	0	399	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1721	0	1672	0
Q Serve Time (g_s), s	9.0	0.0	5.2	0.0	10.7	0.0	13.8	0.0
Cycle Q Clear Time (g_c), s	9.0	0.0	5.2	0.0	10.7	0.0	13.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1004	0	579	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	13.8	0.0	53.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	3.2	0.0	34.3	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.2	0.0	7.8	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	224	0	470	0	321	0	454	0
V/C Ratio (X)	0.81	0.00	0.36	0.00	0.97	0.00	0.88	0.00
Avail Cap (c_a), veh/h	224	0	470	0	321	0	454	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.0	0.0	13.3	0.0	53.3	0.0	50.0	0.0
Incr Delay (d2), s/veh	19.3	0.0	2.2	0.0	43.1	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
Control Delay (d), s/veh	64.3	0.0	15.4	0.0	96.3	0.0	70.8	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	2.5	0.0	5.0	0.0	6.4	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.3	0.0	1.9	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.6	0.0	2.7	0.0	7.0	0.0	7.7	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.40	0.00	0.59	0.00	0.67	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	188	0	771	0	268	0	1603
Grp Sat Flow (s), veh/h/ln	0	1770	0	1719	0	1770	0	1770
Q Serve Time (g_s), s	0.0	12.1	0.0	18.7	0.0	8.5	0.0	53.0
Cycle Q Clear Time (g_c), s	0.0	12.1	0.0	18.7	0.0	8.5	0.0	53.0
Lane Grp Cap (c), veh/h	0	238	0	1547	0	415	0	1592
V/C Ratio (X)	0.00	0.79	0.00	0.50	0.00	0.65	0.00	1.01
Avail Cap (c_a), veh/h	0	270	0	1547	0	481	0	1592
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	49.4	0.0	23.0	0.0	49.7	0.0	32.4
Incr Delay (d2), s/veh	0.0	13.1	0.0	1.2	0.0	2.4	0.0	24.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.5	0.0	24.1	0.0	52.0	0.0	56.6
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	8.9	0.0	4.2	0.0	25.6
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.2	0.0	0.1	0.0	5.4

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.8	0.0	9.1	0.0	4.3	0.0	31.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.55	0.00	0.06	0.00	3.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	186	0	196	0	0	0	263
Grp Sat Flow (s), veh/h/ln	0	1691	0	1538	0	1583	0	1583
Q Serve Time (g_s), s	0.0	12.6	0.0	9.5	0.0	0.0	0.0	12.9
Cycle Q Clear Time (g_c), s	0.0	12.6	0.0	9.5	0.0	0.0	0.0	12.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.58	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	227	0	692	0	186	0	712
V/C Ratio (X)	0.00	0.82	0.00	0.28	0.00	0.00	0.00	0.37
Avail Cap (c_a), veh/h	0	258	0	692	0	215	0	712
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	49.6	0.0	20.4	0.0	0.0	0.0	21.4
Incr Delay (d2), s/veh	0.0	16.7	0.0	1.0	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.3	0.0	21.5	0.0	0.0	0.0	22.9
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	4.0	0.0	0.0	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.2	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.9	0.0	4.2	0.0	0.0	0.0	5.9
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.63	0.00	0.00	0.00	0.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	50.8
HCM 2010 LOS	D

**Intersection: 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd**

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	TR	L	TR
Maximum Queue (ft)	72	73	25	53	357	44	183	169	49
Average Queue (ft)	37	51	10	25	211	14	114	109	28
95th Queue (ft)	76	82	30	53	359	44	183	175	54
Link Distance (ft)		272		1413	1413		193		220
Upstream Blk Time (%)							0		
Queuing Penalty (veh)							0		
Storage Bay Dist (ft)	200		200			225		150	
Storage Blk Time (%)							0	4	
Queuing Penalty (veh)							0	4	

**Intersection: 2: Savannah Grove Rd & Alligator Rd**

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	R
Maximum Queue (ft)	75	73	31	119	53	138	168	116
Average Queue (ft)	48	63	16	69	35	73	97	53
95th Queue (ft)	75	77	38	125	60	139	173	114
Link Distance (ft)	1413	1413			2008	2008		226
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			225	200			250	
Storage Blk Time (%)								
Queuing Penalty (veh)								

**Network Summary**

Network wide Queuing Penalty: 4
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Intersection: 29: Alligator Rd & S. Irby St.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	T	L	T	T	R	L
Maximum Queue (ft)	184	189	165	173	144	106	104	249	610	575	250	143
Average Queue (ft)	124	135	98	112	85	61	60	157	486	451	164	117
95th Queue (ft)	233	239	185	190	153	118	111	309	673	646	328	154
Link Distance (ft)			1678	1678		1978	1978		705	705		
Upstream Blk Time (%)									3	2		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	300	300			200			175			175	300
Storage Blk Time (%)	1	1						0	45	39		
Queuing Penalty (veh)	1	2						0	66	88		

Intersection: 29: Alligator Rd & S. Irby St.

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	177	185	194	51
Average Queue (ft)	133	141	133	34
95th Queue (ft)	192	206	216	52
Link Distance (ft)	433	433	433	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				175
Storage Blk Time (%)			4	
Queuing Penalty (veh)			6	

**APPENDIX**

**Traffic Analysis**

**2040 Build PM Peak Unsignalized Intersections**

**Intersection**

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	131	26	303	112	22	432
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	200	200	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	88	88
Heavy Vehicles, %	1	1	4	4	3	3
Mvmt Flow	162	32	337	124	25	491

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	632	168	0
Stage 1	337	-	-
Stage 2	295	-	-
Critical Hdwy	6.82	6.92	4.16
Critical Hdwy Stg 1	5.82	-	-
Critical Hdwy Stg 2	5.82	-	-
Follow-up Hdwy	3.51	3.31	2.23
Pot Cap-1 Maneuver	415	850	1212
Stage 1	698	-	-
Stage 2	733	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	406	850	1212
Mov Cap-2 Maneuver	508	-	-
Stage 1	698	-	-
Stage 2	718	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	508	850	1212	-
HCM Lane V/C Ratio	-	-	0.318	0.038	0.021	-
HCM Control Delay (s)	-	-	15.4	9.4	8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	0.1	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	634	554	2	0	4
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	94	94	38	38
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	16	697	589	2	0	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	591	0	971
Stage 1	-	-	590
Stage 2	-	-	381
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	974	-	254
Stage 1	-	-	522
Stage 2	-	-	666
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	974	-	250
Mov Cap-2 Maneuver	-	-	377
Stage 1	-	-	522
Stage 2	-	-	655

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	974	-	-	-	706
HCM Lane V/C Ratio	0.017	-	-	-	0.015
HCM Control Delay (s)	8.8	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0

**Intersection**

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	52	584	2	4	529	21	4	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	89	89	89	58	58	58
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	57	635	2	4	594	24	7	0	9

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	618	0	0	637	0	0	1056	1376	318
Stage 1	-	-	-	-	-	-	749	749	-
Stage 2	-	-	-	-	-	-	307	627	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	951	-	-	943	-	-	182	146	684
Stage 1	-	-	-	-	-	-	375	422	-
Stage 2	-	-	-	-	-	-	683	479	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	951	-	-	943	-	-	162	137	684
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	137	-
Stage 1	-	-	-	-	-	-	353	397	-
Stage 2	-	-	-	-	-	-	642	477	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0.1	18.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	281	951	-	-	943	-	-	342
HCM Lane V/C Ratio	0.055	0.059	-	-	0.005	-	-	0.159
HCM Control Delay (s)	18.6	9	-	-	8.8	-	-	17.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	0.6



**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	11	1	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	68	68	68
Heavy Vehicles, %	3	3	3
Mvmt Flow	16	1	37

Major/Minor	Minor2		
Conflicting Flow All	1045	1365	309
Stage 1	615	615	-
Stage 2	430	750	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	182	145	684
Stage 1	443	478	-
Stage 2	571	415	-
Platoon blocked, %			
Mov Cap-1 Maneuver	171	136	684
Mov Cap-2 Maneuver	171	136	-
Stage 1	416	476	-
Stage 2	530	390	-

**Approach** SB

HCM Control Delay, s	17.5
HCM LOS	C

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	601	553	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	639	588	0	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	588	0	908
Stage 1	-	-	588
Stage 2	-	-	320
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	976	-	279
Stage 1	-	-	524
Stage 2	-	-	715
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	976	-	279
Mov Cap-2 Maneuver	-	-	398
Stage 1	-	-	524
Stage 2	-	-	715

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	976	-	-	-	398
HCM Lane V/C Ratio	-	-	-	-	0.01
HCM Control Delay (s)	0	-	-	-	14.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	585	20	12	541	1	2	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	35	35	35
Heavy Vehicles, %	3	3	3	2	2	2	0	0	0
Mvmt Flow	0	636	22	13	582	1	6	0	17

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	583	0	0	658	0	0	964	1256	329
Stage 1	-	-	-	-	-	-	647	647	-
Stage 2	-	-	-	-	-	-	317	609	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	981	-	-	926	-	-	213	173	673
Stage 1	-	-	-	-	-	-	431	470	-
Stage 2	-	-	-	-	-	-	674	488	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	981	-	-	926	-	-	210	171	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	171	-
Stage 1	-	-	-	-	-	-	431	470	-
Stage 2	-	-	-	-	-	-	661	481	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	434	981	-	-	926	-	-	712
HCM Lane V/C Ratio	0.053	-	-	-	0.014	-	-	0.006
HCM Control Delay (s)	13.8	0	-	-	8.9	-	-	10.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	25	25	25
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	0	4

**Major/Minor**

**Minor2**

Conflicting Flow All	926	1266	291
Stage 1	608	608	-
Stage 2	318	658	-
Critical Hdwy	7.5	6.5	6.9
Critical Hdwy Stg 1	6.5	5.5	-
Critical Hdwy Stg 2	6.5	5.5	-
Follow-up Hdwy	3.5	4	3.3
Pot Cap-1 Maneuver	227	171	712
Stage 1	454	489	-
Stage 2	673	464	-
Platoon blocked, %			
Mov Cap-1 Maneuver	219	169	712
Mov Cap-2 Maneuver	219	169	-
Stage 1	454	482	-
Stage 2	656	464	-

**Approach**

SB

HCM Control Delay, s	10.1
HCM LOS	B

**Minor Lane/Major Mvmt**

**Intersection**

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	522	51	35	505	45	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	96	96	76	76
Heavy Vehicles, %	3	3	1	1	2	2
Mvmt Flow	561	55	36	526	59	41

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	616
Stage 1	-	-	589
Stage 2	-	-	336
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.21
Pot Cap-1 Maneuver	-	-	967
Stage 1	-	-	517
Stage 2	-	-	696
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	967
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	517
Stage 2	-	-	670

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	466	-	-	967	-
HCM Lane V/C Ratio	0.215	-	-	0.038	-
HCM Control Delay (s)	14.8	-	-	8.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	533	11	32	578	14	19
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	95	95	72	72
Heavy Vehicles, %	3	3	2	2	4	4
Mvmt Flow	606	12	34	608	19	26

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	984
Stage 1	-	-	612
Stage 2	-	-	372
Critical Hdwy	-	4.14	6.88
Critical Hdwy Stg 1	-	-	5.88
Critical Hdwy Stg 2	-	-	5.88
Follow-up Hdwy	-	2.22	3.54
Pot Cap-1 Maneuver	-	958	242
Stage 1	-	-	498
Stage 2	-	-	661
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	958	233
Mov Cap-2 Maneuver	-	-	359
Stage 1	-	-	498
Stage 2	-	-	638

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	493	-	-	958	-
HCM Lane V/C Ratio	0.093	-	-	0.035	-
HCM Control Delay (s)	13	-	-	8.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	556	626	6	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	96	96	25	25
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	0	632	652	6	4	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	658	0	971
Stage 1	-	-	655
Stage 2	-	-	316
Critical Hdwy	4.16	-	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.23	-	3.5
Pot Cap-1 Maneuver	919	-	254
Stage 1	-	-	484
Stage 2	-	-	718
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	919	-	254
Mov Cap-2 Maneuver	-	-	372
Stage 1	-	-	484
Stage 2	-	-	718

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	919	-	-	-	372
HCM Lane V/C Ratio	-	-	-	-	0.011
HCM Control Delay (s)	0	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	544	1	19	626	1	11
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	93	93	63	63
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	573	1	20	673	2	17

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	950
Stage 1	-	-	573
Stage 2	-	-	377
Critical Hdwy	-	4.12	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.21	3.5
Pot Cap-1 Maneuver	-	1002	262
Stage 1	-	-	533
Stage 2	-	-	669
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1002	257
Mov Cap-2 Maneuver	-	-	384
Stage 1	-	-	533
Stage 2	-	-	656

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	668	-	-	1002	-
HCM Lane V/C Ratio	0.029	-	-	0.02	-
HCM Control Delay (s)	10.5	-	-	8.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



**Intersection**

Int Delay, s/veh 6.4

Movement	EBL	EBT	WBT	WBR	SEL	SER
Vol, veh/h	11	327	280	139	274	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	84	84	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	12	372	333	165	301	10

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	333	0	544
Stage 1	-	-	333
Stage 2	-	-	211
Critical Hdwy	4.13	-	6.6
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	2.227	-	3.5
Pot Cap-1 Maneuver	1221	-	489
Stage 1	-	-	731
Stage 2	-	-	810
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1221	-	484
Mov Cap-2 Maneuver	-	-	484
Stage 1	-	-	731
Stage 2	-	-	801

Approach	EB	WB	SE
HCM Control Delay, s	0.3	0	24.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SELn1
Capacity (veh/h)	1221	-	-	-	489
HCM Lane V/C Ratio	0.01	-	-	-	0.636
HCM Control Delay (s)	8	-	-	-	24.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	4.4

**Intersection**

Int Delay, s/veh 3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	174	1130	0	306	1954
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	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	90	90	92	92
Heavy Vehicles, %	0	0	3	3	1	1
Mvmt Flow	0	229	1256	0	333	2124

Major/Minor	Minor1	Minor2	Major1	Major2	Major2	Major2
Conflicting Flow All	2983	628	0	0	1256	0
Stage 1	1256	-	-	-	-	-
Stage 2	1727	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	11	431	-	-	555	-
Stage 1	235	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	4	431	-	-	555	-
Mov Cap-2 Maneuver	4	-	-	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	52	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	2.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	431	555	-
HCM Lane V/C Ratio	-	-	0.531	0.599	-
HCM Control Delay (s)	-	-	22.4	20.7	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	3	3.9	-






















**APPENDIX**

**Traffic Analysis**

**2040 Build PM Peak Signalized Intersections**







HCM 2010 Signalized Intersection Summary  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

2040 PM PEAK  
 4/30/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	213	15	27	227	340	21	95	16	458	226	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	62	260	18	34	284	0	26	119	20	539	266	73
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Cap, veh/h	234	394	27	222	430	366	605	885	149	778	794	218
Arrive On Green	0.23	0.23	0.23	0.39	0.39	0.00	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1080	1706	118	1097	1863	1583	1037	1555	261	1233	1394	383
Grp Volume(v), veh/h	62	0	278	34	284	0	26	0	139	539	0	339
Grp Sat Flow(s),veh/h/ln	1080	0	1824	1097	1863	1583	1037	0	1817	1233	0	1777
Q Serve(g_s), s	3.3	0.0	8.3	1.7	7.5	0.0	0.8	0.0	2.1	21.8	0.0	6.1
Cycle Q Clear(g_c), s	10.8	0.0	8.3	10.0	7.5	0.0	6.9	0.0	2.1	23.9	0.0	6.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.14	1.00		0.22
Lane Grp Cap(c), veh/h	234	0	421	222	430	366	605	0	1034	778	0	1011
V/C Ratio(X)	0.27	0.00	0.66	0.15	0.66	0.00	0.04	0.00	0.13	0.69	0.00	0.34
Avail Cap(c_a), veh/h	272	0	486	261	497	422	605	0	1034	778	0	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.95	0.95	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	20.9	20.9	16.5	0.0	8.7	0.0	6.0	11.6	0.0	6.9
Incr Delay (d2), s/veh	0.6	0.0	2.7	0.3	2.5	0.0	0.1	0.0	0.3	5.0	0.0	0.9
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(-26165%),veh/ln	1.0	0.0	4.5	0.5	4.1	0.0	0.3	0.0	1.1	8.3	0.0	3.2
LnGrp Delay(d),s/veh	26.1	0.0	23.6	21.2	19.0	0.0	8.9	0.0	6.3	16.7	0.0	7.8
LnGrp LOS	C		C	C	B		A		A	B		A
Approach Vol, veh/h		340			318			165			878	
Approach Delay, s/veh		24.1			19.2			6.7			13.2	
Approach LOS		C			B			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.1		19.9		40.1		19.9				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		32.0		16.0		32.0		16.0				
Max Q Clear Time (g_c+I1), s		8.9		12.8		25.9		12.0				
Green Ext Time (p_c), s		5.2		1.0		2.7		1.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.9									
HCM 2010 LOS			B									
























HCM 2010 Signalized Intersection Summary  
 2: Savannah Grove Rd & Alligator Rd

2040 PM PEAK  
 4/30/2015

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Volume (veh/h)	617	61	50	535	64	38		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	762	75	60	637	80	48		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1829	818	332	1829	503	449		
Arrive On Green	0.17	0.17	0.52	0.52	0.28	0.28		
Sat Flow, veh/h	3632	1583	654	3632	1774	1583		
Grp Volume(v), veh/h	762	75	60	637	80	48		
Grp Sat Flow(s),veh/h/ln	1770	1583	654	1770	1774	1583		
Q Serve(g_s), s	11.5	2.4	4.1	6.4	2.0	1.3		
Cycle Q Clear(g_c), s	11.5	2.4	15.6	6.4	2.0	1.3		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1829	818	332	1829	503	449		
V/C Ratio(X)	0.42	0.09	0.18	0.35	0.16	0.11		
Avail Cap(c_a), veh/h	1829	818	332	1829	503	449		
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.61	0.61	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.8	13.0	15.1	8.5	16.1	15.9		
Incr Delay (d2), s/veh	0.4	0.1	1.2	0.5	0.7	0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(-26165%),veh/ln	5.8	1.1	0.8	3.2	1.1	0.6		
LnGrp Delay(d),s/veh	17.2	13.2	16.3	9.1	16.8	16.4		
LnGrp LOS	B	B	B	A	B	B		
Approach Vol, veh/h	837			697	128			
Approach Delay, s/veh	16.9			9.7	16.6			
Approach LOS	B			A	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.0				37.0		23.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		31.0				31.0		17.0
Max Q Clear Time (g_c+I1), s		13.5				17.6		4.0
Green Ext Time (p_c), s		8.6				7.3		0.3
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			13.8					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	212	202	167	95	174	50	126	768	88	99	1477	355
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	219	208	172	120	220	0	145	883	101	125	1870	449
Adj No. of Lanes	2	2	0	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	229	239	188	155	401	179	237	1958	876	357	1902	851
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
Prop Arrive On Green	0.07	0.13	0.13	0.05	0.11	0.00	0.11	0.55	0.55	0.11	0.55	0.55
Ln Grp Delay, s/veh	116.4	92.5	105.1	79.8	64.5	0.0	49.7	20.7	8.1	64.9	49.8	23.5
Ln Grp LOS	F	F	F	E	E		D	C	A	E	D	C
Approach Vol, veh/h		599			340			1129			2444	
Approach Delay, s/veh		105.1			69.9			23.3			45.7	
Approach LOS		F			E			C			D	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	8	7			
Case No		1.1	4.0	1.2	3.0	2.0	3.0	3.0	2.0			
Phs Duration (G+Y+Rc), s		14.0	25.0	22.0	89.0	16.0	23.0	89.0	22.0			
Change Period (Y+Rc), s		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0			
Max Green (Gmax), s		8.0	19.0	16.0	83.0	10.0	17.0	83.0	16.0			
Max Allow Headway (MAH), s		3.8	5.1	3.8	4.6	3.7	5.1	5.1	4.6			
Max Q Clear (g_c+I1), s		10.0	19.2	9.5	81.9	11.5	10.8	24.3	7.2			
Green Ext Time (g_e), s		0.0	0.0	0.2	1.0	0.0	1.8	8.4	7.5			
Prob of Phs Call (p_c)		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	1.00	0.09	1.00	1.00	0.77	0.00	0.91			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt		1		3		5				7		
Mvmt Sat Flow, veh/h		1774		1774		3442				3343		
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6	8				
Mvmt Sat Flow, veh/h			1887		3438		3539	3539				
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16	18				
Mvmt Sat Flow, veh/h			1484		1538		1583	1583				
<b>Left Lane Group Data</b>												
Assigned Mvmt		1	0	3	0	5	0	0	7			
Lane Assignment		(Pr/Pm)		(Pr/Pm)		(Prot)			(Prot)			
Lanes in Grp		1	0	1	0	2	0	0	2			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

Grp Vol (v), veh/h	120	0	145	0	219	0	0	125
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1721	0	0	1672
Q Serve Time (g_s), s	8.0	0.0	7.5	0.0	9.5	0.0	0.0	5.2
Cycle Q Clear Time (g_c), s	8.0	0.0	7.5	0.0	9.5	0.0	0.0	5.2
Perm LT Sat Flow (s_l), veh/h/ln	999	0	157	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	17.0	0.0	63.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	155	0	237	0	229	0	0	357
V/C Ratio (X)	0.78	0.00	0.61	0.00	0.95	0.00	0.00	0.35
Avail Cap (c_a), veh/h	155	0	237	0	229	0	0	357
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	58.4	0.0	38.5	0.0	69.8	0.0	0.0	62.2
Incr Delay (d2), s/veh	21.5	0.0	11.2	0.0	46.6	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	79.8	0.0	49.7	0.0	116.4	0.0	0.0	64.9
1st-Term Q (Q1), veh/ln	1.1	0.0	5.7	0.0	4.5	0.0	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.7	0.0	1.5	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.0	0.0	6.4	0.0	6.0	0.0	0.0	2.5
%ile Storage Ratio (RQ%)	0.25	0.00	0.93	0.00	0.51	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	8	0
Lane Assignment		T		T		T	T	
Lanes in Grp	0	1	0	2	0	2	2	0
Grp Vol (v), veh/h	0	194	0	1870	0	220	883	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	1719	0	1770	1770	0
Q Serve Time (g_s), s	0.0	16.2	0.0	79.9	0.0	8.8	22.3	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	0.0	79.9	0.0	8.8	22.3	0.0
Lane Grp Cap (c), veh/h	0	224	0	1902	0	401	1958	0
V/C Ratio (X)	0.00	0.87	0.00	0.98	0.00	0.55	0.45	0.00
Avail Cap (c_a), veh/h	0	224	0	1902	0	401	1958	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	64.3	0.0	32.8	0.0	62.9	19.9	0.0
Incr Delay (d2), s/veh	0.0	28.2	0.0	17.0	0.0	1.6	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	92.5	0.0	49.8	0.0	64.5	20.7	0.0
1st-Term Q (Q1), veh/ln	0.0	7.9	0.0	37.7	0.0	4.3	10.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	4.5	0.0	0.1	0.2	0.0

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	42.1	0.0	4.4	11.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	2.53	0.00	0.06	1.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	18	0
Lane Assignment		T+R		R		R	R	
Lanes in Grp	0	1	0	1	0	1	1	0
Grp Vol (v), veh/h	0	186	0	449	0	0	101	0
Grp Sat Flow (s), veh/h/ln	0	1601	0	1538	0	1583	1583	0
Q Serve Time (g_s), s	0.0	17.2	0.0	27.6	0.0	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	0.0	17.2	0.0	27.6	0.0	0.0	3.2	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.93	0.00	1.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	203	0	851	0	179	876	0
V/C Ratio (X)	0.00	0.92	0.00	0.53	0.00	0.00	0.12	0.00
Avail Cap (c_a), veh/h	0	203	0	851	0	179	876	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	64.7	0.0	21.1	0.0	0.0	7.9	0.0
Incr Delay (d2), s/veh	0.0	40.4	0.0	2.3	0.0	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	105.1	0.0	23.5	0.0	0.0	8.1	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	11.7	0.0	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.6	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.9	0.0	12.3	0.0	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	1.82	0.00	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
























Intersection Summary

HCM 2010 Ctrl Delay	49.8
HCM 2010 LOS	D



HCM 2010 Signalized Intersection Summary  
 29: Alligator Rd & S. Irby St.

2040 Build PM School  
 4/27/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	125	66	110	158	56	114	725	98	166	919	214
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	243	177	94	156	224	0	162	1028	139	235	1304	304
Adj No. of Lanes	2	2	0	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	254	263	133	248	409	183	380	1379	617	563	1339	599
Arrive On Green	0.07	0.12	0.12	0.07	0.12	0.00	0.17	0.39	0.39	0.17	0.39	0.39
Sat Flow, veh/h	3442	2274	1154	1774	3539	1583	1774	3539	1583	3343	3438	1538
Grp Volume(v), veh/h	243	136	135	156	224	0	162	1028	139	235	1304	304
Grp Sat Flow(s),veh/h/ln	1721	1770	1659	1774	1770	1583	1774	1770	1583	1672	1719	1538
Q Serve(g_s), s	6.7	7.0	7.4	7.0	5.7	0.0	4.2	23.7	5.6	6.0	35.4	14.3
Cycle Q Clear(g_c), s	6.7	7.0	7.4	7.0	5.7	0.0	4.2	23.7	5.6	6.0	35.4	14.3
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	205	192	248	409	183	380	1379	617	563	1339	599
V/C Ratio(X)	0.96	0.66	0.70	0.63	0.55	0.00	0.43	0.75	0.23	0.42	0.97	0.51
Avail Cap(c_a), veh/h	254	298	279	248	596	267	380	1379	617	563	1339	599
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	40.2	40.4	35.0	39.7	0.0	17.4	24.9	19.4	35.3	28.5	22.1
Incr Delay (d2), s/veh	44.8	3.7	4.7	5.0	1.1	0.0	3.5	3.7	0.8	2.3	19.0	3.1
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(-26165%),veh/ln	4.8	3.6	3.7	0.9	2.8	0.0	2.4	12.3	2.6	2.9	20.2	6.6
LnGrp Delay(d),s/veh	88.7	43.9	45.1	40.0	40.8	0.0	20.9	28.6	20.2	37.6	47.6	25.1
LnGrp LOS	F	D	D	D	D		C	C	C	D	D	C
Approach Vol, veh/h		514			380			1329			1843	
Approach Delay, s/veh		65.4			40.5			26.8			42.6	
Approach LOS		E			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	17.0	22.0	43.0	13.0	17.0	22.0	43.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	16.0	16.0	37.0	7.0	16.0	16.0	37.0				
Max Q Clear Time (g_c+I1), s	9.0	9.4	6.2	37.4	8.7	7.7	8.0	25.7				
Green Ext Time (p_c), s	0.0	1.5	0.3	0.0	0.0	1.8	0.5	9.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			40.1									
HCM 2010 LOS			D									

**Intersection: 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd**

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	TR	L	TR
Maximum Queue (ft)	73	161	39	141	84	25	51	197	221
Average Queue (ft)	43	104	14	86	50	20	15	149	121
95th Queue (ft)	70	169	42	135	95	36	49	200	213
Link Distance (ft)		272		1413	1413		193		220
Upstream Blk Time (%)									0
Queuing Penalty (veh)									0
Storage Bay Dist (ft)	200		200			225		150	
Storage Blk Time (%)								8	0
Queuing Penalty (veh)								23	1

**Intersection: 2: Savannah Grove Rd & Alligator Rd**

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	R
Maximum Queue (ft)	74	96	31	53	74	111	47	21
Average Queue (ft)	68	80	12	33	47	70	24	12
95th Queue (ft)	78	95	36	53	92	106	49	29
Link Distance (ft)	1413	1413			2008	2008		226
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			225	200			250	
Storage Blk Time (%)								
Queuing Penalty (veh)								

**Network Summary**

Network wide Queuing Penalty: 24
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Intersection: 29: Alligator Rd & S. Irby St.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	T	L	T	T	R	L
Maximum Queue (ft)	134	150	140	186	118	86	90	175	289	217	42	67
Average Queue (ft)	101	117	97	142	76	63	60	116	209	156	23	29
95th Queue (ft)	161	181	156	209	128	101	101	201	303	236	57	75
Link Distance (ft)			1678	1678		1979	1979		596	596		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300			200			175			175	300
Storage Blk Time (%)								2	13	3		
Queuing Penalty (veh)								8	16	2		

Intersection: 29: Alligator Rd & S. Irby St.

Movement	SB	SB	SB	SB	B3	B3
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	85	421	417	250	9	13
Average Queue (ft)	58	341	335	197	2	3
95th Queue (ft)	106	450	458	338	18	19
Link Distance (ft)	433	433	433		674	674
Upstream Blk Time (%)		2	2			
Queuing Penalty (veh)		11	15			
Storage Bay Dist (ft)				175		
Storage Blk Time (%)				26		
Queuing Penalty (veh)				94		

**Intersection**

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	568	15	9	541	6	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	95	95	60	60
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	604	16	9	569	10	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	916
Stage 1	-	-	612
Stage 2	-	-	304
Critical Hdwy	-	4.14	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.22	3.5
Pot Cap-1 Maneuver	-	956	275
Stage 1	-	-	509
Stage 2	-	-	728
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	956	272
Mov Cap-2 Maneuver	-	-	390
Stage 1	-	-	509
Stage 2	-	-	721

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	528	-	-	956	-
HCM Lane V/C Ratio	0.047	-	-	0.01	-
HCM Control Delay (s)	12.2	-	-	8.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

**APPENDIX**






















**Traffic Analysis**

**2040 Build AM Peak Signalized Intersections**

**Other Considerations – Eliminating Dedicated Rights**

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	184	11	17	146	605	19	236	50	291	60	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	95	224	13	21	182	0	24	295	62	342	71	41
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	359	685	40	335	720	0	784	770	162	569	566	327
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
Prop Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.00	0.52	0.52	0.52	0.52	0.52	0.52
Ln Grp Delay, s/veh	16.8	15.0	15.0	15.9	14.4	0.0	5.9	0.0	7.4	16.4	0.0	5.6
Ln Grp LOS	B	B	B	B	B		A		A	B		A
Approach Vol, veh/h		332			203			381			454	
Approach Delay, s/veh		15.5			14.6			7.3			13.8	
Approach LOS		B			B			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			35.3		14.7		35.3		14.7			
Change Period (Y+Rc), s			6.0		6.0		6.0		6.0			
Max Green (Gmax), s			22.0		16.0		22.0		16.0			
Max Allow Headway (MAH), s			4.9		4.6		4.9		4.6			
Max Q Clear (g_c+I1), s			7.1		7.0		20.3		5.1			
Green Ext Time (g_e), s			4.0		1.7		0.8		1.9			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.18		0.24		1.00		0.13			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1276		1185		1010		1139			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1493		3368		1098		3632			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			314		194		634		0			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment												
Lanes in Grp		0	1	0	1	0	1	0	1			

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Grp Vol (v), veh/h	0	24	0	95	0	342	0	21
Grp Sat Flow (s), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Q Serve Time (g_s), s	0.0	0.4	0.0	3.1	0.0	13.2	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	5.0	0.0	18.3	0.0	3.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1276	0	1185	0	1010	0	1139
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.0	0.0	8.7	0.0	22.0	0.0	8.7
Perm LT Serve Time (g_u), s	0.0	20.6	0.0	6.8	0.0	16.9	0.0	6.2
Perm LT Q Serve Time (g_ps), s	0.0	0.4	0.0	3.1	0.0	13.2	0.0	0.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	784	0	359	0	569	0	335
V/C Ratio (X)	0.00	0.03	0.00	0.26	0.00	0.60	0.00	0.06
Avail Cap (c_a), veh/h	0	784	0	562	0	569	0	531
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.85
Uniform Delay (d1), s/veh	0.0	5.8	0.0	16.4	0.0	11.8	0.0	15.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.0	4.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.9	0.0	16.8	0.0	16.4	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	1.0	0.0	3.6	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	1.0	0.0	4.3	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.13	0.00	0.74	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	116	0	0	0	182
Grp Sat Flow (s), veh/h/ln	0	0	0	1752	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.8
Lane Grp Cap (c), veh/h	0	0	0	356	0	0	0	720
V/C Ratio (X)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.25
Avail Cap (c_a), veh/h	0	0	0	657	0	0	0	1327
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.85
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.5	0.0	0.0	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	14.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Right Lane Group Data**

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	357	0	121	0	112	0	0
Grp Sat Flow (s), veh/h/ln	0	1807	0	1810	0	1733	0	0
Q Serve Time (g_s), s	0.0	5.1	0.0	2.4	0.0	1.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	2.4	0.0	1.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	0.11	0.00	0.37	0.00	0.00
Lane Grp Cap (c), veh/h	0	932	0	368	0	893	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.33	0.00	0.13	0.00	0.00
Avail Cap (c_a), veh/h	0	932	0	679	0	893	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.2	0.0	14.5	0.0	5.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.5	0.0	0.3	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
Control Delay (d), s/veh	0.0	7.4	0.0	15.0	0.0	5.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	1.2	0.0	0.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	1.3	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.12	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Intersection Summary**

HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B



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 2: Savannah Grove Rd & Alligator Rd

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	→	↘	↙	←	↖	↗					
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	↑↑		↙	↑↑	↖	↗					
Volume (veh/h)	419	108	149	594	185	156					
Number	4	14	3	8	5	12					
Initial Q, veh	0	0	0	0	0	0					
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00					
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00					
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863					
Adj Flow Rate, veh/h	517	133	177	707	231	195					
Adj No. of Lanes	2	0	1	2	1	1					
Peak Hour Factor	0.81	0.81	0.84	0.84	0.80	0.80					
Percent Heavy Veh, %	2	2	2	2	2	2					
Opposing Right Turn Influence			Yes		Yes						
Cap, veh/h	1223	313	353	1550	570	509					
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00					
Prop Arrive On Green	0.14	0.14	0.44	0.44	0.32	0.32					
Ln Grp Delay, s/veh	15.9	15.9	18.4	10.0	15.3	15.3					
Ln Grp LOS	B	B	B	B	B	B					
Approach Vol, veh/h	650			884	426						
Approach Delay, s/veh	15.9			11.7	15.3						
Approach LOS	B			B	B						
Timer:		1	2	3	4	5	6	7	8		
Assigned Phs			2		4				8		
Case No			9.0		8.0				6.0		
Phs Duration (G+Y+Rc), s			22.2		27.8				27.8		
Change Period (Y+Rc), s			6.0		6.0				6.0		
Max Green (Gmax), s			16.0		22.0				22.0		
Max Allow Headway (MAH), s			4.0		4.9				4.9		
Max Q Clear (g_c+I1), s			7.1		10.4				21.2		
Green Ext Time (g_e), s			1.0		6.5				0.6		
Prob of Phs Call (p_c)			1.00		1.00				1.00		
Prob of Max Out (p_x)			0.10		0.62				1.00		
Left-Turn Movement Data											
Assigned Mvmt			5		7				3		
Mvmt Sat Flow, veh/h			1774		0				778		
Through Movement Data											
Assigned Mvmt			2		4				8		
Mvmt Sat Flow, veh/h			0		2885				3632		
Right-Turn Movement Data											
Assigned Mvmt			12		14				18		
Mvmt Sat Flow, veh/h			1583		715				0		
Left Lane Group Data											
Assigned Mvmt		0	5	0	7	0	0	0	3		
Lane Assignment											
Lanes in Grp		0	1	0	0	0	0	0	1		

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

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Grp Vol (v), veh/h	0	231	0	0	0	0	0	177
Grp Sat Flow (s), veh/h/ln	0	1774	0	0	0	0	0	778
Q Serve Time (g_s), s	0.0	5.1	0.0	0.0	0.0	0.0	0.0	10.7
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	0.0	0.0	0.0	0.0	19.2
Perm LT Sat Flow (s_l), veh/h/ln	0	1774	0	0	0	0	0	778
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7
Time to First Blk (g_f), s	0.0	0.0	0.0	21.8	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	570	0	0	0	0	0	353
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	570	0	0	0	0	0	356
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	0.0	0.0	0.0	0.0	17.3
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.3	0.0	0.0	0.0	0.0	0.0	18.4
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	0.0	0.0	0.0	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	0.0	0.0	0.0	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	327	0	0	0	707
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	8.4	0.0	0.0	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.4	0.0	0.0	0.0	7.0
Lane Grp Cap (c), veh/h	0	0	0	775	0	0	0	1550
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.46
Avail Cap (c_a), veh/h	0	0	0	781	0	0	0	1563
Upstream Filter (I)	0.00	0.00	0.00	0.84	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	15.6	0.0	0.0	0.0	9.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.9	0.0	0.0	0.0	10.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.1	0.0	0.0	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.2	0.0	0.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Right Lane Group Data























Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	195	0	323	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	0	1737	0	0	0	0
Q Serve Time (g_s), s	0.0	4.7	0.0	8.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	8.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.41	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	509	0	761	0	0	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.42	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	509	0	767	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.84	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.1	0.0	15.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.3	0.0	0.0	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
Control Delay (d), s/veh	0.0	15.3	0.0	15.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	4.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.4	0.0	4.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.07	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Intersection Summary

HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	304	259	104	143	212	231	148	1395	229	315	609	155
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	313	267	107	181	268	0	170	1603	263	399	771	196
Adj No. of Lanes	2	2	0	1	2	0	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	340	133	214	400	0	469	1682	752	424	1634	731
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
Prop Arrive On Green	0.10	0.14	0.14	0.07	0.11	0.00	0.13	0.48	0.48	0.13	0.48	0.48
Ln Grp Delay, s/veh	95.2	62.8	66.0	75.6	56.1	0.0	15.3	45.1	22.1	86.0	23.4	20.8
Ln Grp LOS	F	E	E	E	E		B	D	C	F	C	C
Approach Vol, veh/h		687			449			2036			1366	
Approach Delay, s/veh		78.4			64.0			39.7			41.3	
Approach LOS		E			E			D			D	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		1.1	4.0	1.1	3.0	2.0	4.0	2.0	3.0			
Phs Duration (G+Y+Rc), s		15.0	23.3	22.0	66.0	18.0	20.3	22.0	66.0			
Change Period (Y+Rc), s		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0			
Max Green (Gmax), s		9.0	21.0	16.0	60.0	12.0	18.0	16.0	60.0			
Max Allow Headway (MAH), s		3.8	5.0	3.8	4.9	3.7	5.0	3.7	4.9			
Max Q Clear (g_c+I1), s		11.0	15.5	7.3	21.2	13.4	11.2	16.9	56.9			
Green Ext Time (g_e), s		0.0	1.8	0.3	29.1	0.0	2.1	0.0	3.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	0.90	0.02	0.65	1.00	0.67	1.00	1.00			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		1774		1774		3442		3343				
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			2488		3438		3632		3539			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			972		1538		0		1583			
<b>Left Lane Group Data</b>												
Assigned Mvmt		1	0	3	0	5	0	7	0			
Lane Assignment		(Pr/Pm)		(Pr/Pm)		(Prot)		(Prot)				
Lanes in Grp		1	0	1	0	2	0	2	0			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

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Grp Vol (v), veh/h	181	0	170	0	313	0	399	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1721	0	1672	0
Q Serve Time (g_s), s	9.0	0.0	5.3	0.0	11.4	0.0	14.9	0.0
Cycle Q Clear Time (g_c), s	9.0	0.0	5.3	0.0	11.4	0.0	14.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1004	0	579	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	14.3	0.0	60.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	3.8	0.0	40.8	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.8	0.0	8.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	214	0	469	0	327	0	424	0
V/C Ratio (X)	0.85	0.00	0.36	0.00	0.96	0.00	0.94	0.00
Avail Cap (c_a), veh/h	214	0	469	0	327	0	424	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	49.7	0.0	13.1	0.0	56.9	0.0	54.7	0.0
Incr Delay (d2), s/veh	25.9	0.0	2.2	0.0	38.3	0.0	31.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.6	0.0	15.3	0.0	95.2	0.0	86.0	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.5	0.0	5.4	0.0	6.9	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.3	0.0	1.7	0.0	1.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.4	0.0	2.8	0.0	7.2	0.0	8.8	0.0
%ile Storage Ratio (RQ%)	0.44	0.00	0.41	0.00	0.61	0.00	0.76	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	2	0	2
Grp Vol (v), veh/h	0	188	0	771	0	268	0	1603
Grp Sat Flow (s), veh/h/ln	0	1770	0	1719	0	1770	0	1770
Q Serve Time (g_s), s	0.0	13.0	0.0	19.2	0.0	9.2	0.0	54.9
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	19.2	0.0	9.2	0.0	54.9
Lane Grp Cap (c), veh/h	0	242	0	1634	0	400	0	1682
V/C Ratio (X)	0.00	0.78	0.00	0.47	0.00	0.67	0.00	0.95
Avail Cap (c_a), veh/h	0	294	0	1634	0	505	0	1682
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.6	0.0	22.4	0.0	53.7	0.0	31.8
Incr Delay (d2), s/veh	0.0	10.2	0.0	1.0	0.0	2.4	0.0	13.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.8	0.0	23.4	0.0	56.1	0.0	45.1
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	9.1	0.0	4.5	0.0	26.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.2	0.0	0.1	0.0	3.1

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.0	0.0	9.3	0.0	4.6	0.0	29.8
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.56	0.00	0.06	0.00	3.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Right Lane Group Data**

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R				R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	186	0	196	0	0	0	263
Grp Sat Flow (s), veh/h/ln	0	1691	0	1538	0	0	0	1583
Q Serve Time (g_s), s	0.0	13.5	0.0	9.7	0.0	0.0	0.0	13.2
Cycle Q Clear Time (g_c), s	0.0	13.5	0.0	9.7	0.0	0.0	0.0	13.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.58	0.00	1.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	231	0	731	0	0	0	752
V/C Ratio (X)	0.00	0.80	0.00	0.27	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	281	0	731	0	0	0	752
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	52.9	0.0	19.9	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh	0.0	13.1	0.0	0.9	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.0	0.0	20.8	0.0	0.0	0.0	22.1
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	4.1	0.0	0.0	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.2	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.1	0.0	4.3	0.0	0.0	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.64	0.00	0.00	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Intersection Summary**

HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

**APPENDIX**























**Traffic Analysis**

**2040 Build PM Peak Signalized Intersections**

**Other Considerations – Eliminating Dedicated Rights**

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (veh/h)	51	200	15	27	207	340	21	95	16	458	226	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1881	1881	1900	1845	1845	1900	1881	1881	1900
Adj Flow Rate, veh/h	56	220	16	30	227	0	26	117	20	492	243	67
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.81	0.81	0.81	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	1	1	1	3	3	3	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	637	46	326	687	0	618	803	137	780	742	205
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
Prop Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.00	0.52	0.52	0.52	0.52	0.52	0.52
Ln Grp Delay, s/veh	16.7	15.3	15.3	16.3	14.9	0.0	7.3	0.0	5.5	13.1	0.0	6.7
Ln Grp LOS	B	B	B	B	B		A		A	B		A
Approach Vol, veh/h		292			257			163			802	
Approach Delay, s/veh		15.6			15.1			5.8			10.6	
Approach LOS		B			B			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			35.9		14.1		35.9		14.1			
Change Period (Y+Rc), s			6.0		6.0		6.0		6.0			
Max Green (Gmax), s			22.0		16.0		22.0		16.0			
Max Allow Headway (MAH), s			4.5		4.7		4.5		4.7			
Max Q Clear (g_c+I1), s			6.8		6.2		17.6		5.4			
Green Ext Time (g_e), s			4.1		1.9		1.9		2.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.16		0.20		1.00		0.16			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1055		1138		1259		1151			
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1536		3315		1420		3668			
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			263		239		392		0			
<b>Left Lane Group Data</b>												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment												
Lanes in Grp		0	1	0	1	0	1	0	1			



HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

Grp Vol (v), veh/h	0	26	0	56	0	492	0	30
Grp Sat Flow (s), veh/h/ln	0	1055	0	1138	0	1259	0	1151
Q Serve Time (g_s), s	0.0	0.6	0.0	1.9	0.0	13.9	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	4.8	0.0	4.2	0.0	15.6	0.0	3.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1055	0	1138	0	1259	0	1151
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	22.0	0.0	8.1	0.0	22.0	0.0	8.1
Perm LT Serve Time (g_u), s	0.0	17.9	0.0	5.8	0.0	20.3	0.0	5.7
Perm LT Q Serve Time (g_ps), s	0.0	0.6	0.0	1.9	0.0	13.9	0.0	1.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	618	0	327	0	780	0	326
V/C Ratio (X)	0.00	0.04	0.00	0.17	0.00	0.63	0.00	0.09
Avail Cap (c_a), veh/h	0	618	0	541	0	780	0	542
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.90
Uniform Delay (d1), s/veh	0.0	7.2	0.0	16.5	0.0	9.2	0.0	16.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	3.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.3	0.0	16.7	0.0	13.1	0.0	16.3
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.6	0.0	4.8	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.6	0.0	5.6	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.08	0.00	0.94	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	116	0	0	0	227
Grp Sat Flow (s), veh/h/ln	0	0	0	1752	0	0	0	1787
Q Serve Time (g_s), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	2.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	2.3
Lane Grp Cap (c), veh/h	0	0	0	337	0	0	0	687
V/C Ratio (X)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.33
Avail Cap (c_a), veh/h	0	0	0	666	0	0	0	1359
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	14.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	14.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

HCM 2010 Signalized Intersection Capacity Analysis  
 1: Walkertown Swinton Rd/Knollwood Rd & Alligator Rd

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Right Lane Group Data**

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	137	0	120	0	310	0	0
Grp Sat Flow (s), veh/h/ln	0	1798	0	1802	0	1812	0	0
Q Serve Time (g_s), s	0.0	1.7	0.0	2.4	0.0	4.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	2.4	0.0	4.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	0.13	0.00	0.22	0.00	0.00
Lane Grp Cap (c), veh/h	0	940	0	346	0	947	0	0
V/C Ratio (X)	0.00	0.15	0.00	0.35	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	940	0	685	0	947	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.2	0.0	14.7	0.0	5.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.6	0.0	0.9	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
Control Delay (d), s/veh	0.0	5.5	0.0	15.3	0.0	6.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	1.2	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	1.3	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.12	0.00	0.28	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

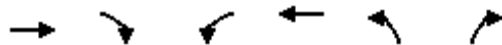
**Intersection Summary**

HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↵	↑↑	↵	↵
Volume (veh/h)	604	61	50	508	64	38
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1810	1810
Adj Flow Rate, veh/h	643	65	53	540	89	53
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.72	0.72
Percent Heavy Veh, %	2	2	2	2	5	5
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1191	120	285	1298	655	584
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.37	0.37	0.38	0.38
Ln Grp Delay, s/veh	17.6	17.6	17.5	11.4	10.0	9.7
Ln Grp LOS	B	B	B	B	B	A
Approach Vol, veh/h	708			593	142	
Approach Delay, s/veh	17.6			12.0	9.9	
Approach LOS	B			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		9.0		8.0				6.0
Phs Duration (G+Y+Rc), s		26.6		23.4				23.4
Change Period (Y+Rc), s		6.0		6.0				6.0
Max Green (Gmax), s		18.0		20.0				20.0
Max Allow Headway (MAH), s		4.0		4.8				4.8
Max Q Clear (g_c+I1), s		3.6		10.8				13.8
Green Ext Time (g_e), s		0.3		4.7				3.5
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.65				0.87

### Left-Turn Movement Data

Assigned Mvmt	5	7	3
Mvmt Sat Flow, veh/h	1723	0	738

### Through Movement Data

Assigned Mvmt	2	4	8
Mvmt Sat Flow, veh/h	0	3340	3632

### Right-Turn Movement Data

Assigned Mvmt	12	14	18
Mvmt Sat Flow, veh/h	1538	328	0

### Left Lane Group Data

Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment								
Lanes in Grp	0	1	0	0	0	0	0	1

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014

Grp Vol (v), veh/h	0	89	0	0	0	0	0	53
Grp Sat Flow (s), veh/h/ln	0	1723	0	0	0	0	0	738
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	0.0	0.0	3.0
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	0.0	0.0	11.8
Perm LT Sat Flow (s_l), veh/h/ln	0	1723	0	0	0	0	0	738
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Time to First Blk (g_f), s	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	655	0	0	0	0	0	285
V/C Ratio (X)	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.19
Avail Cap (c_a), veh/h	0	655	0	0	0	0	0	326
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	0.0	0.0	0.0	0.0	17.1
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	0.0	0.0	0.0	0.0	17.5
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	350	0	0	0	540
Grp Sat Flow (s), veh/h/ln	0	0	0	1770	0	0	0	1770
Q Serve Time (g_s), s	0.0	0.0	0.0	8.8	0.0	0.0	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.8	0.0	0.0	0.0	5.4
Lane Grp Cap (c), veh/h	0	0	0	649	0	0	0	1298
V/C Ratio (X)	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.42
Avail Cap (c_a), veh/h	0	0	0	747	0	0	0	1494
Upstream Filter (I)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.1	0.0	0.0	0.0	11.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.6	0.0	0.0	0.0	11.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.3	0.0	0.0	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

# HCM 2010 Signalized Intersection Capacity Analysis

## 2: Savannah Grove Rd & Alligator Rd

5/1/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	4.4	0.0	0.0	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Right Lane Group Data























Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	53	0	358	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1538	0	1805	0	0	0	0
Q Serve Time (g_s), s	0.0	1.0	0.0	8.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	8.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.18	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	584	0	662	0	0	0	0
V/C Ratio (X)	0.00	0.09	0.00	0.54	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	584	0	762	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.79	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.4	0.0	17.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.5	0.0	0.0	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
Control Delay (d), s/veh	0.0	9.7	0.0	17.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	4.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Intersection Summary

HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	212	202	167	95	174	50	126	768	88	99	1477	355
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1810	1810	1810
Adj Flow Rate, veh/h	219	208	172	120	220	0	145	883	101	125	1870	449
Adj No. of Lanes	2	2	0	1	2	0	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.79	0.79	0.79	0.87	0.87	0.87	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	229	239	188	155	401	0	237	1958	876	357	1902	851
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
Prop Arrive On Green	0.07	0.13	0.13	0.05	0.11	0.00	0.11	0.55	0.55	0.11	0.55	0.55
Ln Grp Delay, s/veh	116.4	92.5	105.1	79.8	64.5	0.0	49.7	20.7	8.1	64.9	49.8	23.5
Ln Grp LOS	F	F	F	E	E		D	C	A	E	D	C
Approach Vol, veh/h		599			340			1129			2444	
Approach Delay, s/veh		105.1			69.9			23.3			45.7	
Approach LOS		F			E			C			D	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	8	7			
Case No		1.1	4.0	1.2	3.0	2.0	4.0	3.0	2.0			
Phs Duration (G+Y+Rc), s		14.0	25.0	22.0	89.0	16.0	23.0	89.0	22.0			
Change Period (Y+Rc), s		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0			
Max Green (Gmax), s		8.0	19.0	16.0	83.0	10.0	17.0	83.0	16.0			
Max Allow Headway (MAH), s		3.8	5.1	3.8	4.6	3.7	5.1	5.1	4.6			
Max Q Clear (g_c+I1), s		10.0	19.2	9.5	81.9	11.5	10.8	24.3	7.2			
Green Ext Time (g_e), s		0.0	0.0	0.2	1.0	0.0	1.8	8.4	7.5			
Prob of Phs Call (p_c)		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prob of Max Out (p_x)		1.00	1.00	0.09	1.00	1.00	0.77	0.00	0.91			
<b>Left-Turn Movement Data</b>												
Assigned Mvmt		1		3		5				7		
Mvmt Sat Flow, veh/h		1774		1774		3442				3343		
<b>Through Movement Data</b>												
Assigned Mvmt			2		4		6	8				
Mvmt Sat Flow, veh/h			1887		3438		3632	3539				
<b>Right-Turn Movement Data</b>												
Assigned Mvmt			12		14		16	18				
Mvmt Sat Flow, veh/h			1484		1538		0	1583				
<b>Left Lane Group Data</b>												
Assigned Mvmt		1	0	3	0	5	0	0	7			
Lane Assignment		(Pr/Pm)		(Pr/Pm)		(Prot)			(Prot)			
Lanes in Grp		1	0	1	0	2	0	0	2			

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

Grp Vol (v), veh/h	120	0	145	0	219	0	0	125
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1721	0	0	1672
Q Serve Time (g_s), s	8.0	0.0	7.5	0.0	9.5	0.0	0.0	5.2
Cycle Q Clear Time (g_c), s	8.0	0.0	7.5	0.0	9.5	0.0	0.0	5.2
Perm LT Sat Flow (s_l), veh/h/ln	999	0	157	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	17.0	0.0	63.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	155	0	237	0	229	0	0	357
V/C Ratio (X)	0.78	0.00	0.61	0.00	0.95	0.00	0.00	0.35
Avail Cap (c_a), veh/h	155	0	237	0	229	0	0	357
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	58.4	0.0	38.5	0.0	69.8	0.0	0.0	62.2
Incr Delay (d2), s/veh	21.5	0.0	11.2	0.0	46.6	0.0	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	79.8	0.0	49.7	0.0	116.4	0.0	0.0	64.9
1st-Term Q (Q1), veh/ln	1.1	0.0	5.7	0.0	4.5	0.0	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.7	0.0	1.5	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.0	0.0	6.4	0.0	6.0	0.0	0.0	2.5
%ile Storage Ratio (RQ%)	0.25	0.00	0.93	0.00	0.51	0.00	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Middle Lane Group Data</b>								
Assigned Mvmt	0	2	0	4	0	6	8	0
Lane Assignment		T		T		T	T	
Lanes in Grp	0	1	0	2	0	2	2	0
Grp Vol (v), veh/h	0	194	0	1870	0	220	883	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	1719	0	1770	1770	0
Q Serve Time (g_s), s	0.0	16.2	0.0	79.9	0.0	8.8	22.3	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	0.0	79.9	0.0	8.8	22.3	0.0
Lane Grp Cap (c), veh/h	0	224	0	1902	0	401	1958	0
V/C Ratio (X)	0.00	0.87	0.00	0.98	0.00	0.55	0.45	0.00
Avail Cap (c_a), veh/h	0	224	0	1902	0	401	1958	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	64.3	0.0	32.8	0.0	62.9	19.9	0.0
Incr Delay (d2), s/veh	0.0	28.2	0.0	17.0	0.0	1.6	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	92.5	0.0	49.8	0.0	64.5	20.7	0.0
1st-Term Q (Q1), veh/ln	0.0	7.9	0.0	37.7	0.0	4.3	10.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	4.5	0.0	0.1	0.2	0.0

HCM 2010 Signalized Intersection Capacity Analysis  
 29: Alligator Rd & S. Irby St.

5/2/2014

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	42.1	0.0	4.4	11.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	2.53	0.00	0.06	1.17	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	18	0
Lane Assignment		T+R		R			R	
Lanes in Grp	0	1	0	1	0	0	1	0
Grp Vol (v), veh/h	0	186	0	449	0	0	101	0
Grp Sat Flow (s), veh/h/ln	0	1601	0	1538	0	0	1583	0
Q Serve Time (g_s), s	0.0	17.2	0.0	27.6	0.0	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	0.0	17.2	0.0	27.6	0.0	0.0	3.2	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.93	0.00	1.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	203	0	851	0	0	876	0
V/C Ratio (X)	0.00	0.92	0.00	0.53	0.00	0.00	0.12	0.00
Avail Cap (c_a), veh/h	0	203	0	851	0	0	876	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	64.7	0.0	21.1	0.0	0.0	7.9	0.0
Incr Delay (d2), s/veh	0.0	40.4	0.0	2.3	0.0	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	105.1	0.0	23.5	0.0	0.0	8.1	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	11.7	0.0	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.6	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.9	0.0	12.3	0.0	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	1.82	0.00	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	49.8
HCM 2010 LOS	D



**APPENDIX**

**Traffic Analysis**

**Other Considerations – Signal Warrant Evaluation**

**Twin Church Road at Alligator Road**

**SIGNAL WARRANT ANALYSIS**

Alligator Rd AT Twin Church Rd

Date: 3/5/2015

Minor Street Volume, percent of total = 44.4%  
 Percent of Left Turns from Minor Street = 26.9%  
 Percent of Right Turns from Minor Street = 14.4%  
 Percent of Minor Street Right Turns to Remove from Warrant Analysis = 0%  
 WARRANT BASIS = 70%

**Warrant No. 1 - Vehicular Volume is not met**

Condition A - Minimum Vehicular Volume is not met

Average Major Street % of Warrant 126.4 / 350 = 36%	Average Minor Street % of Warrant 68.0 / 105 = 65%
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Hourly percent of warrant

	15:00 - 16:00	16:00 - 17:00	17:00 - 18:00	18:00 - 19:00	19:00 - 20:00	20:00 - 21:00	21:00 - 22:00	22:00 - 23:00
Major St.	59%	84%	88%	58%	0%	0%	0%	0%
Minor St.	120%	143%	168%	88%	0%	0%	0%	0%

Condition B - Interruption to Continuous Traffic is not met

Average Major Street % of Warrant 126.4 / 525 = 24%	Average Minor Street % of Warrant 68.0 / 53 = 130%
--	---

Hourly percent of warrant

	15:00 - 16:00	16:00 - 17:00	17:00 - 18:00	18:00 - 19:00	19:00 - 20:00	20:00 - 21:00	21:00 - 22:00	22:00 - 23:00
Major St.	39%	56%	59%	39%	0%	0%	0%	0%
Minor St.	240%	286%	335%	175%	0%	0%	0%	0%

80% Combination of Conditions A & B is not applicable

**Warrant No. 2 - Four Hour Vehicular Volume is not met**

Hourly percent of warrant

	15:00 - 16:00	16:00 - 17:00	17:00 - 18:00	18:00 - 19:00	19:00 - 20:00	20:00 - 21:00	21:00 - 22:00	22:00 - 23:00
Minor St.	49%	71%	86%	36%	0%	0%	0%	0%

**Warrant No. 3 - Peak Hour is not met**

Percent of warrant	Percent of warrant
Overall Peak Hour: 17:00 - 18:00	Higher Volume Side Street Peak Hour: 16:30 - 17:30
Minor St. 55%	Minor St. 54%

**Warrant No. 4 - Pedestrian Volume is not met**

Major Street	Minor Street
0.1 / 100 = 0%	0.0 / 100 = 0%

Hourly percent of warrant

	15:00 - 16:00	16:00 - 17:00	17:00 - 18:00	18:00 - 19:00	19:00 - 20:00	20:00 - 21:00	21:00 - 22:00	22:00 - 23:00
Major St.	1%	0%	0%	0%	0%	0%	0%	0%
Minor St.	0%	0%	0%	0%	0%	0%	0%	0%

**Warrant No. 7 - Crash Experience (Requires 3 criteria analysis by engineering)**

Total Number: 11 From: 1/1/2011 to 4/1/2014

Accident Rate 1.68 per million entering vehicles

Types of Accidents	No.	/	Avg.		No.	/	Avg.
Right Angle	5	/	1.5	Rear End	1	/	0.3
Lost Control	0	/	0.0	Side Swipe	1	/	0.3
Left Turn	0	/	0.0	Other	4	/	1.2

**SIGNAL WARRANT ANALYSIS**

Alligator Rd AT Twin Church Rd

Date: 3/5/2015

Minor Street Volume, percent of total = 45.3%  
 Percent of Left Turns from Minor Street = 21.1%  
 Percent of Right Turns from Minor Street = 18.5%  
 Percent of Minor Street Right Turns to Remove from Warrant Analysis = 0%  
 WARRANT BASIS = 70%

**Warrant No. 1 - Vehicular Volume is not met**

Condition A - Minimum Vehicular Volume is not met

Average Major Street % of Warrant 184.6 / 350 = 53%	Average Minor Street % of Warrant 80.6 / 105 = 77%
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Hourly percent of warrant

	7:00 - 8:00	8:00 - 9:00	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00
Major St.	78%	59%	40%	38%	49%	50%	47%	62%
Minor St.	175%	96%	74%	50%	68%	73%	70%	81%

Condition B - Interruption to Continuous Traffic is not met

Average Major Street % of Warrant 184.6 / 525 = 35%	Average Minor Street % of Warrant 80.6 / 53 = 154%
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Hourly percent of warrant

	7:00 - 8:00	8:00 - 9:00	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00
Major St.	52%	39%	27%	25%	32%	33%	31%	42%
Minor St.	350%	192%	149%	101%	135%	147%	141%	162%

80% Combination of Conditions A & B is not applicable

**Warrant No. 2 - Four Hour Vehicular Volume is not met**

Hourly percent of warrant

	7:00 - 8:00	8:00 - 9:00	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00
Minor St.	83%	40%	27%	18%	26%	28%	27%	34%

**Warrant No. 3 - Peak Hour is not met**

Percent of warrant	Percent of warrant
Overall Peak Hour: 7:15 - 8:15	Higher Volume Side Street Peak Hour: 7:00 - 8:00
Minor St. 56%	Minor St. 54%

**Warrant No. 4 - Pedestrian Volume is not met**

Major Street	Minor Street
0.0 / 100 = 0%	0.0 / 100 = 0%

Hourly percent of warrant

	7:00 - 8:00	8:00 - 9:00	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00
Major St.	0%	0%	0%	0%	0%	0%	0%	0%
Minor St.	0%	0%	0%	0%	0%	0%	0%	0%

**Warrant No. 7 - Crash Experience (Requires 3 criteria analysis by engineering)**

Total Number: 11 From: 1/1/2011 to 4/30/2014

Accident Rate 1.66 per million entering vehicles

Types of Accidents	No.	/	Avg.		No.	/	Avg.
Right Angle	5	/	1.5	Rear End	1	/	0.3
Lost Control	0	/	0.0	Side Swipe	1	/	0.3
Left Turn	0	/	0.0	Other	4	/	1.2

**APPENDIX**

**Traffic Analysis**

**Other Considerations – Roundabout Analysis**

**Twin Church Road at Alligator Road**

# DELAY (CONTROL)

Average control delay per vehicle, or average pedestrian delay (seconds)

## Site: Twin Church Road at Alligator Road

Twin Church Road at Alligator Road

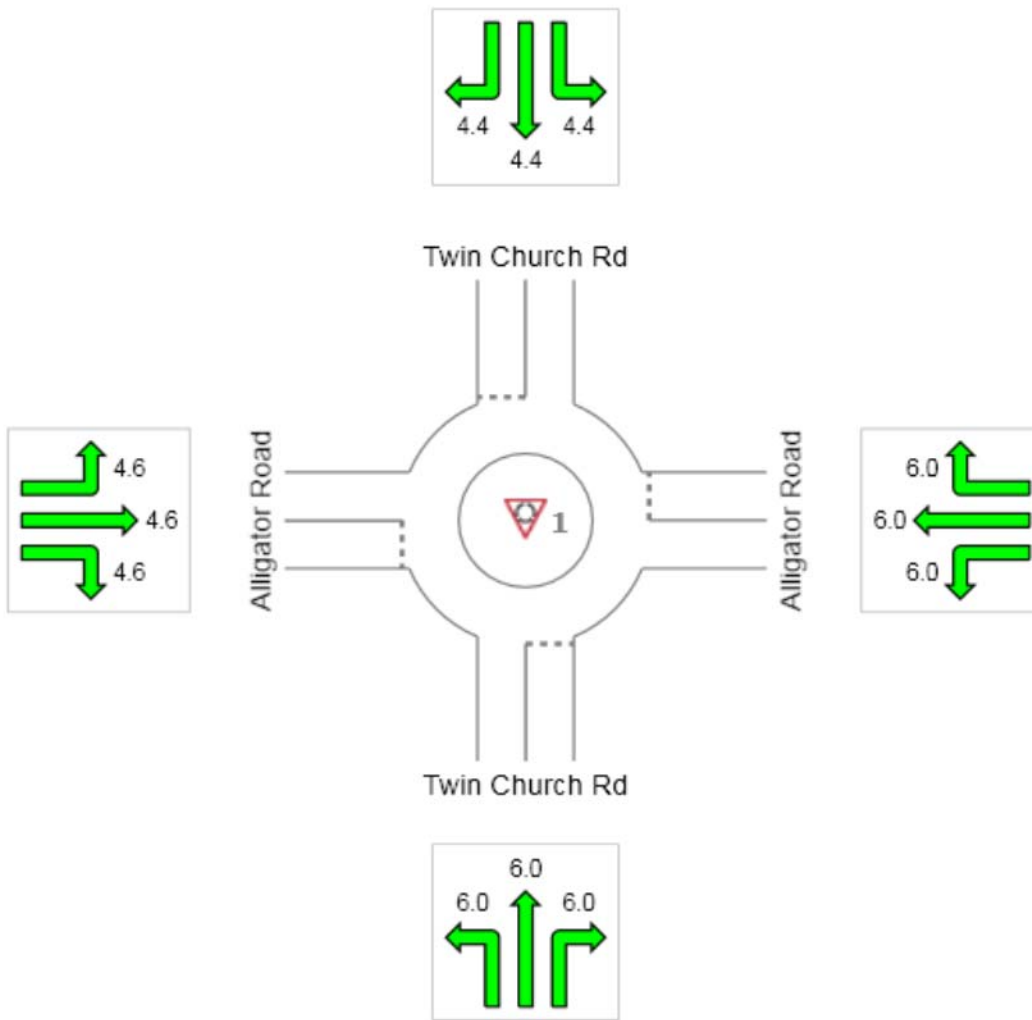
2020 AM BUILD

Roundabout

Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 100.0 %

### All Movement Classes

	South	East	North	West	Intersection
	6.0	6.0	4.4	4.6	5.5
LOS	A	A	A	A	A



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

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

Roundabout Level of Service Method: Same as Sign Control

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

# DELAY (CONTROL)

Average control delay per vehicle, or average pedestrian delay (seconds)

## Site: Twin Church Road at Alligator Road

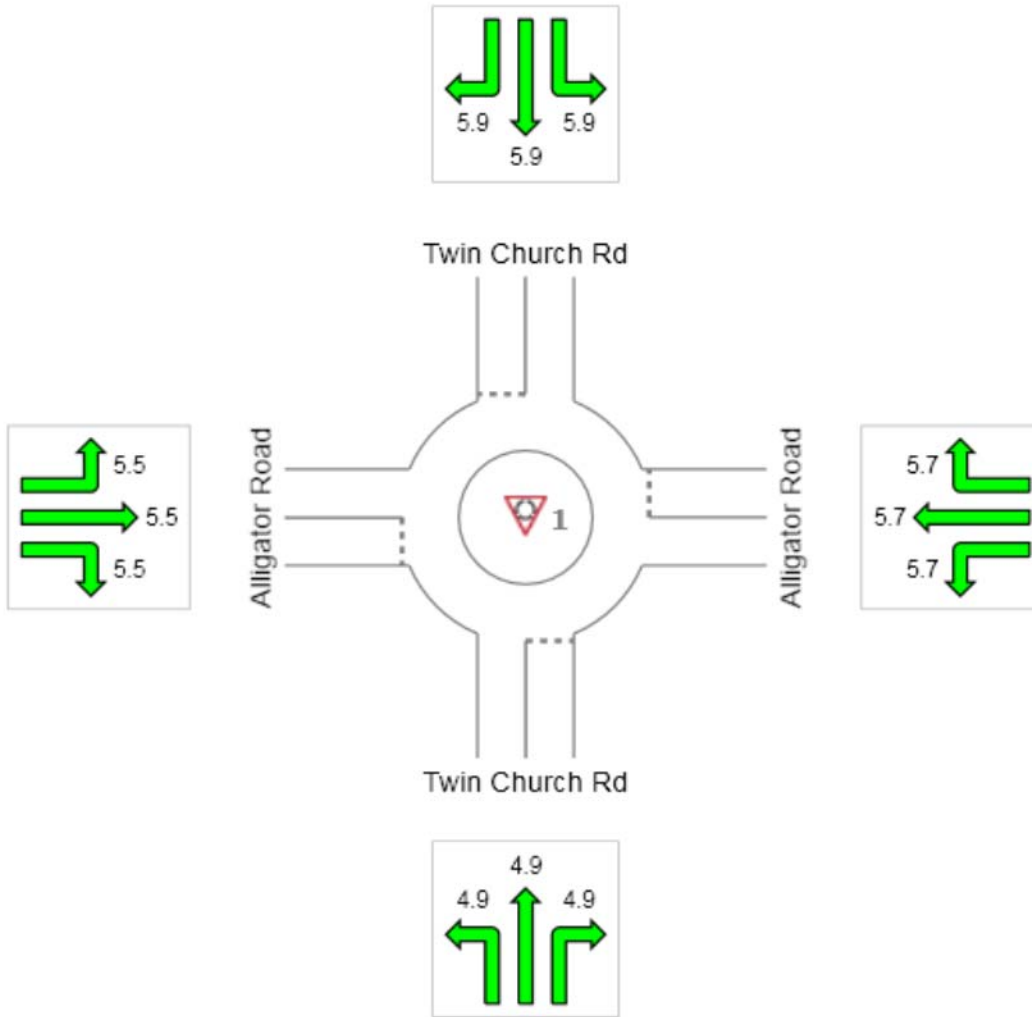
Twin Church Road at Alligator Road  
2020 PM BUILD

Roundabout

Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 100.0 %

### All Movement Classes

	South	East	North	West	Intersection
	4.9	5.7	5.9	5.5	5.6
LOS	A	A	A	A	A



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

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

Roundabout Level of Service Method: Same as Sign Control

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

# DELAY (CONTROL)

Average control delay per vehicle, or average pedestrian delay (seconds)

## Site: Twin Church Road at Alligator Road

Twin Church Road at Alligator Road

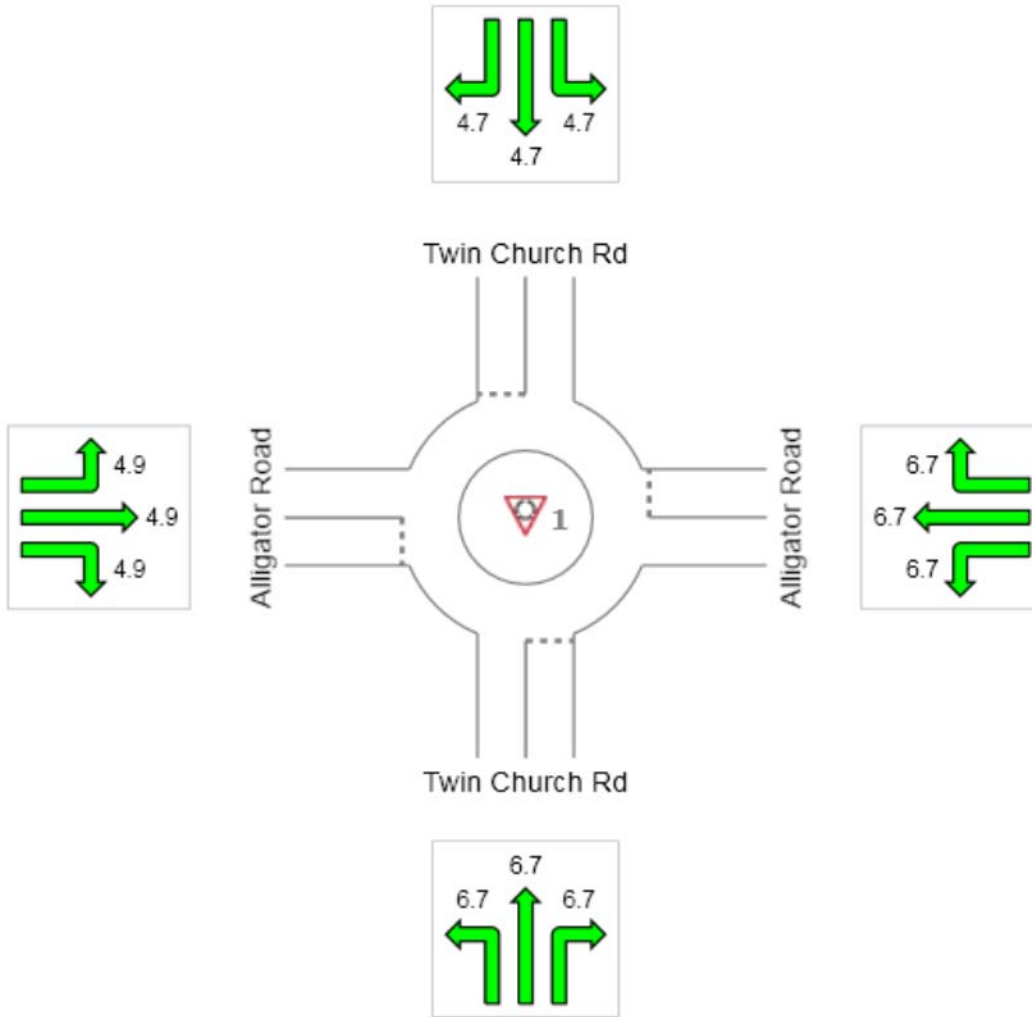
2040 AM BUILD

Roundabout

Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 100.0 %

### All Movement Classes

	South	East	North	West	Intersection
	6.7	6.7	4.7	4.9	6.1
LOS	A	A	A	A	A



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

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

Roundabout Level of Service Method: Same as Sign Control

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

# DELAY (CONTROL)

Average control delay per vehicle, or average pedestrian delay (seconds)

## Site: Twin Church Road at Alligator Road

Twin Church Road at Alligator Road

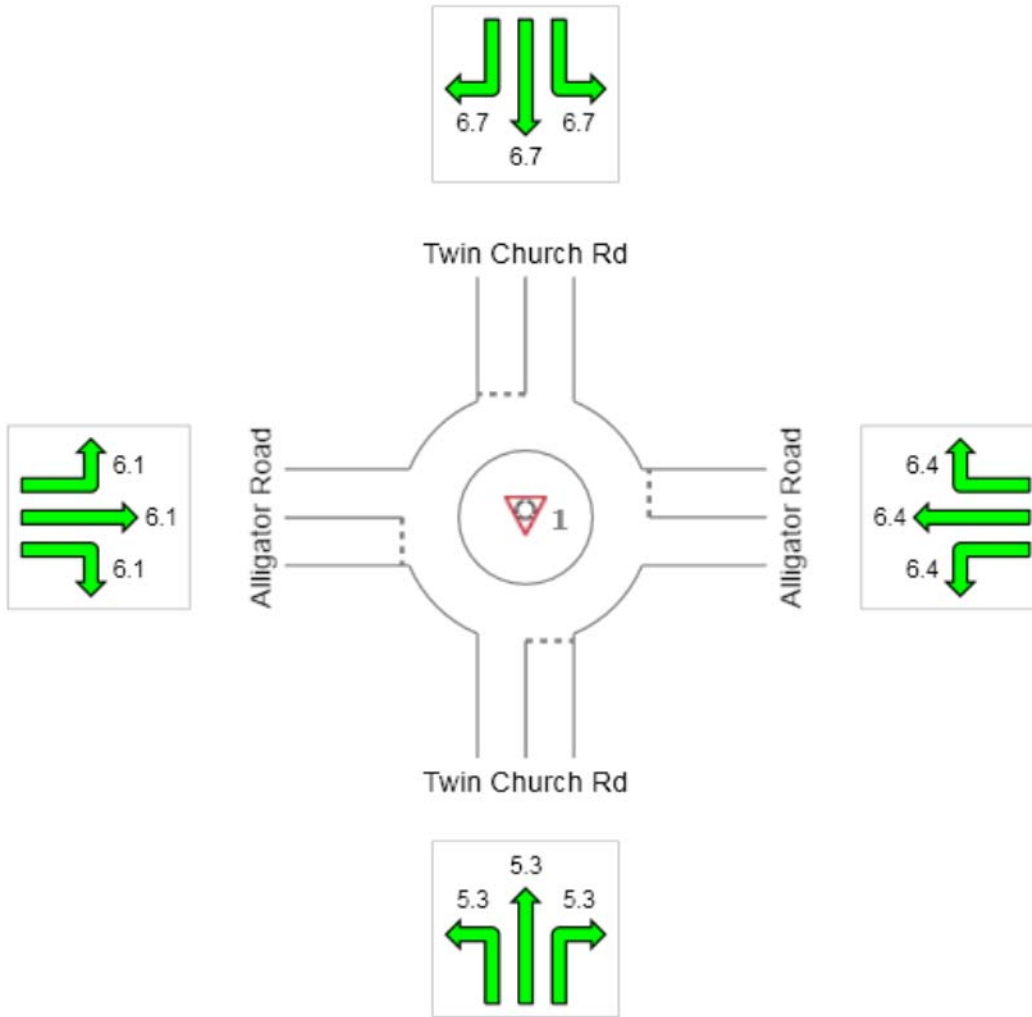
2040 PM BUILD

Roundabout

Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 100.0 %

### All Movement Classes

	South	East	North	West	Intersection
	5.3	6.4	6.7	6.1	6.3
LOS	A	A	A	A	A



Colour code based on Level of Service



Level of Service Method: Delay & v/c (HCM 2010)

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

Roundabout Level of Service Method: Same as Sign Control

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



**APPENDIX**

**Traffic Analysis**

**2040 Build AM Peak Unsignalized Intersections**

**Other Considerations – Adding Signalization**

Lanes, Volumes, Timings  
32: US 52/301 (S Irby St) & E Redbud Ln

5/20/2014



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	355	1898	5	144	1081
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	0.865					
Flt Protected					0.950	
Satd. Flow (prot)	1627	0	3505	0	1736	3471
Flt Permitted					0.040	
Satd. Flow (perm)	1627	0	3505	0	73	3471
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	123					
Link Speed (mph)	35		50			50
Link Distance (ft)	2483		768			193
Travel Time (s)	48.4		10.5			2.6
Peak Hour Factor	0.82	0.82	0.88	0.88	0.74	0.74
Heavy Vehicles (%)	1%	1%	3%	3%	4%	4%
Adj. Flow (vph)	0	433	2157	6	195	1461
Shared Lane Traffic (%)						
Lane Group Flow (vph)	433	0	2163	0	195	1461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	NA		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0

Lanes, Volumes, Timings  
 32: US 52/301 (S Irby St) & E Redbud Ln

5/20/2014



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	22.0		22.0		10.0	22.0
Total Split (s)	34.0		99.0		17.0	116.0
Total Split (%)	22.7%		66.0%		11.3%	77.3%
Maximum Green (s)	28.0		93.0		11.0	110.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)	5.0		5.0			5.0
Flash Dont Walk (s)	11.0		11.0			11.0
Pedestrian Calls (#/hr)	0		0			0
Act Effect Green (s)	28.0		93.0		110.0	110.0
Actuated g/C Ratio	0.19		0.62		0.73	0.73
v/c Ratio	1.07		1.00		1.11	0.57
Control Delay	106.2		46.4		141.5	10.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	106.2		46.4		141.5	10.3
LOS	F		D		F	B
Approach Delay	106.2		46.4			25.7
Approach LOS	F		D			C
Queue Length 50th (ft)	~365		1053		~168	313
Queue Length 95th (ft)	#489		#1224		#236	261
Internal Link Dist (ft)	2403		688			113
Turn Bay Length (ft)						
Base Capacity (vph)	403		2173		175	2545
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	1.07		1.00		1.11	0.57

Intersection Summary

Area Type: Other  
 Cycle Length: 150  
 Actuated Cycle Length: 150  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.11  
 Intersection Signal Delay: 44.5  
 Intersection LOS: D  
 Intersection Capacity Utilization 97.6%  
 ICU Level of Service F  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Lanes, Volumes, Timings  
32: US 52/301 (S Irby St) & E Redbud Ln

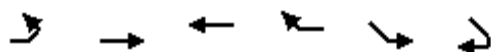
5/20/2014

Splits and Phases: 32: US 52/301 (S Irby St) & E Redbud Ln



Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

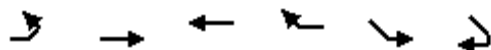
5/20/2014



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Volume (vph)	181	361	763	176	46	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	75				75	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Fr <sub>t</sub>				0.850	0.928	
Fl <sub>t</sub> Protected	0.950				0.977	
Satd. Flow (prot)	1787	3574	1863	1583	1723	0
Fl <sub>t</sub> Permitted	0.089				0.977	
Satd. Flow (perm)	167	3574	1863	1583	1723	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				205	55	
Link Speed (mph)		35	35		35	
Link Distance (ft)		2130	300		2483	
Travel Time (s)		41.5	5.8		48.4	
Peak Hour Factor	0.73	0.73	0.86	0.86	0.63	0.63
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	248	495	887	205	73	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	495	887	205	156	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	NA	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		

Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

5/20/2014



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Detector Phase	5	2	6	6	4	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	22.0	22.0	22.0	22.0	
Total Split (s)	14.0	68.0	54.0	54.0	22.0	
Total Split (%)	15.6%	75.6%	60.0%	60.0%	24.4%	
Maximum Green (s)	8.0	62.0	48.0	48.0	16.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	Min	
Walk Time (s)		5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	56.4	56.4	42.1	42.1	10.3	
Actuated g/C Ratio	0.71	0.71	0.53	0.53	0.13	
v/c Ratio	0.86	0.19	0.89	0.22	0.58	
Control Delay	47.1	4.2	30.0	2.2	31.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.1	4.2	30.0	2.2	31.2	
LOS	D	A	C	A	C	
Approach Delay		18.5	24.8		31.2	
Approach LOS		B	C		C	
Queue Length 50th (ft)	68	34	358	0	51	
Queue Length 95th (ft)	#144	50	#636	26	64	
Internal Link Dist (ft)		2050	220		2403	
Turn Bay Length (ft)	200					
Base Capacity (vph)	287	2849	1158	1061	400	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.86	0.17	0.77	0.19	0.39	

Intersection Summary

Area Type: Other  
 Cycle Length: 90  
 Actuated Cycle Length: 78.9  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay: 22.9  
 Intersection LOS: C  
 Intersection Capacity Utilization 70.9%  
 ICU Level of Service C  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

5/20/2014

Splits and Phases: 31: Alligator Rd & E Redbud Ln



**APPENDIX**

**Traffic Analysis**

**2040 Build PM Peak Unsignalized Intersections**

**Other Considerations – Adding Signalization**



Lanes, Volumes, Timings  
 32: US 52/301 (S Irby St) & E Redbud Ln

5/20/2014



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	174	1130	0	306	1954
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	0.865					
Flt Protected					0.950	
Satd. Flow (prot)	1627	0	3505	0	1736	3471
Flt Permitted					0.114	
Satd. Flow (perm)	1627	0	3505	0	208	3471
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	389					
Link Speed (mph)	35		50			50
Link Distance (ft)	2483		768			193
Travel Time (s)	48.4		10.5			2.6
Peak Hour Factor	0.82	0.82	0.88	0.88	0.74	0.74
Heavy Vehicles (%)	1%	1%	3%	3%	4%	4%
Adj. Flow (vph)	0	212	1284	0	414	2641
Shared Lane Traffic (%)						
Lane Group Flow (vph)	212	0	1284	0	414	2641
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	NA		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0

Lanes, Volumes, Timings  
 32: US 52/301 (S Irby St) & E Redbud Ln

5/20/2014



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	22.0		22.0		10.0	22.0
Total Split (s)	22.0		56.0		32.0	88.0
Total Split (%)	20.0%		50.9%		29.1%	80.0%
Maximum Green (s)	16.0		50.0		26.0	82.0
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		None	Min
Walk Time (s)	5.0		5.0			5.0
Flash Dont Walk (s)	11.0		11.0			11.0
Pedestrian Calls (#/hr)	0		0			0
Act Effect Green (s)	5.5		53.1		82.0	82.0
Actuated g/C Ratio	0.06		0.53		0.82	0.82
v/c Ratio	0.46		0.69		0.79	0.92
Control Delay	3.4		20.1		30.6	13.8
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	3.4		20.1		30.6	13.8
LOS	A		C		C	B
Approach Delay	3.4		20.1			16.1
Approach LOS	A		C			B
Queue Length 50th (ft)	0		315		151	466
Queue Length 95th (ft)	0		389		180	298
Internal Link Dist (ft)	2403		688			113
Turn Bay Length (ft)						
Base Capacity (vph)	588		1871		570	2860
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.36		0.69		0.73	0.92

Intersection Summary

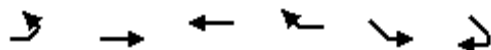
Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 99.5  
 Natural Cycle: 110  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay: 16.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 74.8%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 32: US 52/301 (S Irby St) & E Redbud Ln



Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

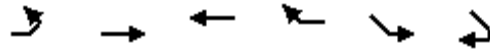
5/20/2014



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Volume (vph)	11	327	280	139	274	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	75				75	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt				0.850	0.996	
Flt Protected	0.950				0.954	
Satd. Flow (prot)	1787	3574	1863	1583	1805	0
Flt Permitted	0.337				0.954	
Satd. Flow (perm)	634	3574	1863	1583	1805	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				162	3	
Link Speed (mph)		35	35		35	
Link Distance (ft)		2130	300		2483	
Travel Time (s)		41.5	5.8		48.4	
Peak Hour Factor	0.73	0.73	0.86	0.86	0.63	0.63
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	15	448	326	162	435	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	448	326	162	449	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	NA	
Protected Phases	5	2	6		4	
Permitted Phases	2			6		

Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

5/20/2014



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Detector Phase	5	2	6	6	4	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	10.0	22.0	22.0	22.0	22.0	
Total Split (s)	10.0	34.0	24.0	24.0	26.0	
Total Split (%)	16.7%	56.7%	40.0%	40.0%	43.3%	
Maximum Green (s)	4.0	28.0	18.0	18.0	20.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	Min	
Walk Time (s)		5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effect Green (s)	14.2	14.2	12.8	12.8	15.5	
Actuated g/C Ratio	0.33	0.33	0.30	0.30	0.36	
v/c Ratio	0.05	0.37	0.58	0.27	0.68	
Control Delay	9.8	11.6	18.7	4.6	19.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	9.8	11.6	18.7	4.6	19.6	
LOS	A	B	B	A	B	
Approach Delay		11.6	14.0		19.6	
Approach LOS		B	B		B	
Queue Length 50th (ft)	2	40	60	0	77	
Queue Length 95th (ft)	9	58	161	32	142	
Internal Link Dist (ft)		2050	220		2403	
Turn Bay Length (ft)	200					
Base Capacity (vph)	327	2500	838	801	903	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.05	0.18	0.39	0.20	0.50	

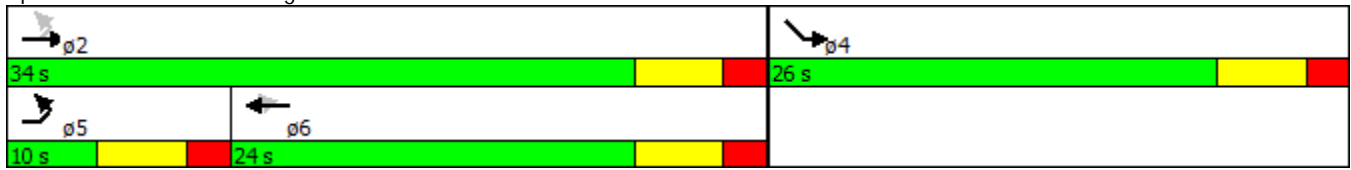
Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	42.5
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	15.0
Intersection LOS:	B
Intersection Capacity Utilization:	40.5%
ICU Level of Service:	A
Analysis Period (min):	15

Lanes, Volumes, Timings  
31: Alligator Rd & E Redbud Ln

5/20/2014

Splits and Phases: 31: Alligator Rd & E Redbud Ln



## **HISTORICAL GROWTH DATA**

## Barbian, Maddy

---

**From:** Graves, Tyson  
**Sent:** Tuesday, January 28, 2014 10:26 AM  
**To:** Hall, Wayne  
**Cc:** Barbian, Maddy  
**Subject:** RE: Houston, We have a problem..

Okay, we will go with the 0.8%.

Thanks,

Tyson

-----Original Message-----

From: Hall, Wayne  
Sent: Tuesday, January 28, 2014 10:24 AM  
To: Graves, Tyson  
Cc: Barbian, Maddy  
Subject: FW: Houston, We have a problem..

FYI. It looks like you have two choices on the growth rate. I'll follow up on the design year question later this week.

-----Original Message-----

From: Phillips, Henry [<mailto:PhillipsMH@scdot.org>]  
Sent: Tuesday, January 28, 2014 10:19 AM  
To: Hall, Wayne  
Subject: Fwd: Houston, We have a problem..

Sent from my iPhone

Begin forwarded message:

From: "Dennis, Michael A" <[DennisMA@scdot.org](mailto:DennisMA@scdot.org)<<mailto:DennisMA@scdot.org>>>  
Date: January 28, 2014 at 10:11:38 AM EST  
To: "Phillips, Henry" <[PhillipsMH@scdot.org](mailto:PhillipsMH@scdot.org)<<mailto:PhillipsMH@scdot.org>>>  
Cc: "Altman, Ann-Marie" <[AltmanAM@scdot.org](mailto:AltmanAM@scdot.org)<<mailto:AltmanAM@scdot.org>>>  
Subject: RE: Houston, We have a problem..

For a widening job such as this, I think using the 0.8% would be better than 0.5% b/c even though the road currently is not "over capacity" there probably is a sense of that by the residents in the area and this may be keeping some traffic off of the road. Therefore, 0.8% or a good round 1% would be fine also.

Michael

From: Phillips, Henry  
Sent: Tuesday, January 28, 2014 9:54 AM  
To: Dennis, Michael A  
Cc: Altman, Ann-Marie  
Subject: Fwd: Houston, We have a problem..

Thoughts?

Sent from my iPhone

Begin forwarded message:

From: "Hall, Wayne" <[whall@icaeng.com](mailto:whall@icaeng.com)<<mailto:whall@icaeng.com>>>

Date: January 28, 2014 at 9:46:12 AM EST

To: "Phillips, Henry" <[PhillipsMH@scdot.org](mailto:PhillipsMH@scdot.org)<<mailto:PhillipsMH@scdot.org>>>

Cc: "Graves, Tyson" <[tgraves@icaeng.com](mailto:tgraves@icaeng.com)<<mailto:tgraves@icaeng.com>>>, "Barbian, Maddy" <[mbarbian@icaeng.com](mailto:mbarbian@icaeng.com)<<mailto:mbarbian@icaeng.com>>>

Subject: RE: Houston, We have a problem..

Henry,

When we calculate the growth rate based on Alligator Road counts along with some nearby counts, we come up with a growth rate of 0.5%. I want to be sure that we use the growth rate that y'all are comfortable with. With that said, we will use the 0.8% based on Michael's email below. Please let me know if this is the way you would like for us to proceed. Also, we are proposing to use 2038 as the design year based on Wilson's construction obligation schedule of 2018. Are you okay with this? We are open to a conference call next week if need be.

Thanks,

From: Phillips, Henry [<mailto:PhillipsMH@scdot.org>]

Sent: Tuesday, January 28, 2014 8:51 AM

To: Hall, Wayne

Subject: FW: Houston, We have a problem..

See if this helps guide you. We're closed today.

Henry Phillips

South Carolina Department of Transportation Environmental Management Division

955 Park Street

Columbia, South Carolina 29202

Direct Line: 803-737-1872

[phillipsmh@scdot.org](mailto:phillipsmh@scdot.org)<<mailto:phillipsmh@scdot.org>>

From: Dennis, Michael A

Sent: Monday, January 27, 2014 2:32 PM

To: Phillips, Henry

Subject: FW: Houston, We have a problem..

I just talked to Stacy Eargle in Traffic and Station 123 is wrong on the map and ICA shouldn't use that station or that number to calculate anything. Also, I got the SCDOT #'s for the 3 station on S-107 and they are as follows.

265 – 8,300

267 – 2,200

275 – 8,000

The 265 # is quite a bit lower than the count they got w/ their 24 hour count. Also, we have not been putting 2% growth on anything in the state for several years now b/c the numbers have been up and down a lot. I looked at the model and half of the road nearest US 52 is showing around 10,000 vpd and that is w/ 107 widened to 4 lanes. Using the volume the SCDOT got for station 265 and 10,300 vpd from the model, the growth rate is 0.8%, which is probably more in line w/ the growth instead of the 2%.

Michael

From: Dennis, Michael A



Sent: Monday, January 27, 2014 2:18 PM  
To: Eargle, Stacy A  
Subject: Houston, We have a problem..

Please call me when you get this.

[\[cid:image001.png@01CF1C0D.8EC32520\]](#)

[\[cid:image002.png@01CF1C0D.8EC32520\]](#)

HISTORICAL TRAFFIC COUNT DATA AADT

ALLIGATOR ROAD PROJECT

YEAR	119	121	123	148	149	261	263	265	267	269	275	583
2006	20900	21200	28000	10800	9900	2300	1250	7100	2400	1950	8100	8800
2007	20900	21100	27900	10800	9900	2300	1300	7300	2400	2000	8500	8800
2008	22000	20800	27700	10800	9900	2300	1300	8100	2500	2000	8700	8700
2009	20000	20400	26900	9800	9000	2200	1200	7800	2400	1900	7900	8400
2010	21600	22400	29500	10200	9400	1900	1350	7700	2400	2200	7900	8400
2011	21800	22800	29800	9900	9100	1800	1250	7700	2300	2100	7900	8300
2012	21500	22500	29400	10000	9100	1850	1300	8100	2500	2000	8500	8300

Avg. Gr 2.26% 3.72% 0.90% -4.44% -0.81% -3.41% 0.90% 5.35% 0.78% 0.67% 0.95% -0.96%

Average Growth Rate: 0.49%

Average Growth Rate, counts directly on Alligator Rd: 2%

- 265 Alligator Road, just east of South Point Road
- 123 Alligator Road, west of US 52
- 121 US 52, just north of Alligator Road
- 275 Alligator Road, just east of Redbud Ln
- 119 US 52, south of Alligator Road
- 583 Walker Swinton Rd, just north of Alligator Road
- 148 US 76, South of Alligator Road
- 149 US 76, north of Alligator Road
- 267 Alligator Road, east of I-95
- 261 Twin Church Road, south of Alligator Rd
- 263 Oliver Road, south of Alligator Road
- 269 Savannah Grove Road, south of Alligator Road

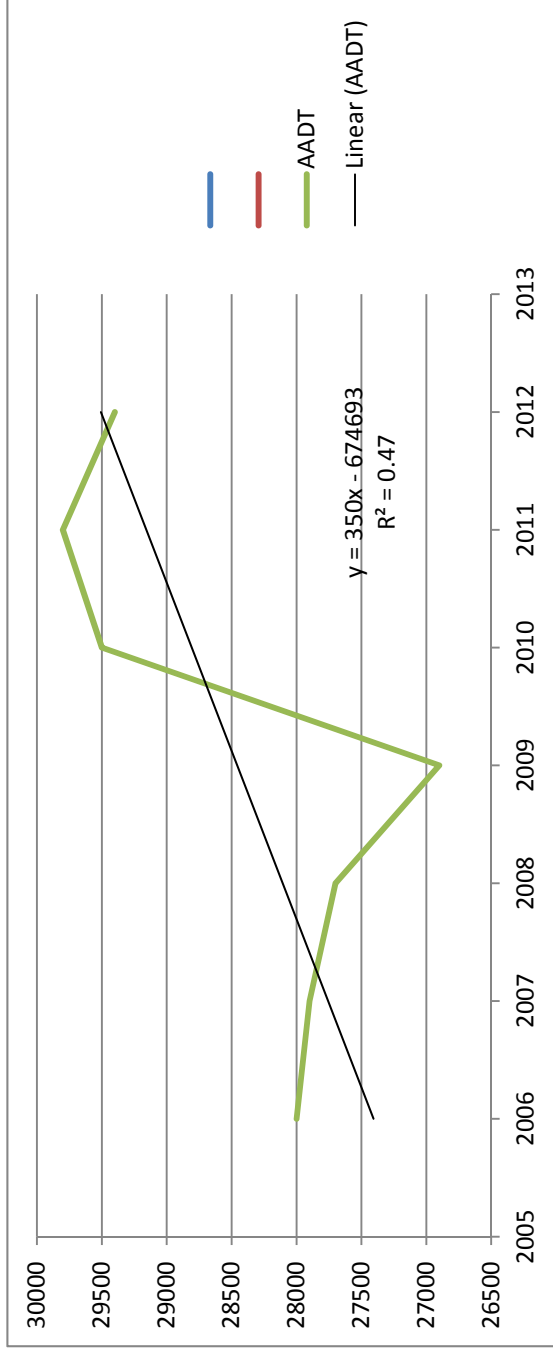
Station: 123

County: Florence

Location: Alligator Road, west of US 52

Year	AADT	% Growth
2006	28000	
2007	27900	-0.36%
2008	27700	-0.72%
2009	26900	-2.89%
2010	29500	9.67%
2011	29800	1.02%
2012	29400	-1.34%

Average % Growth: 0.90%



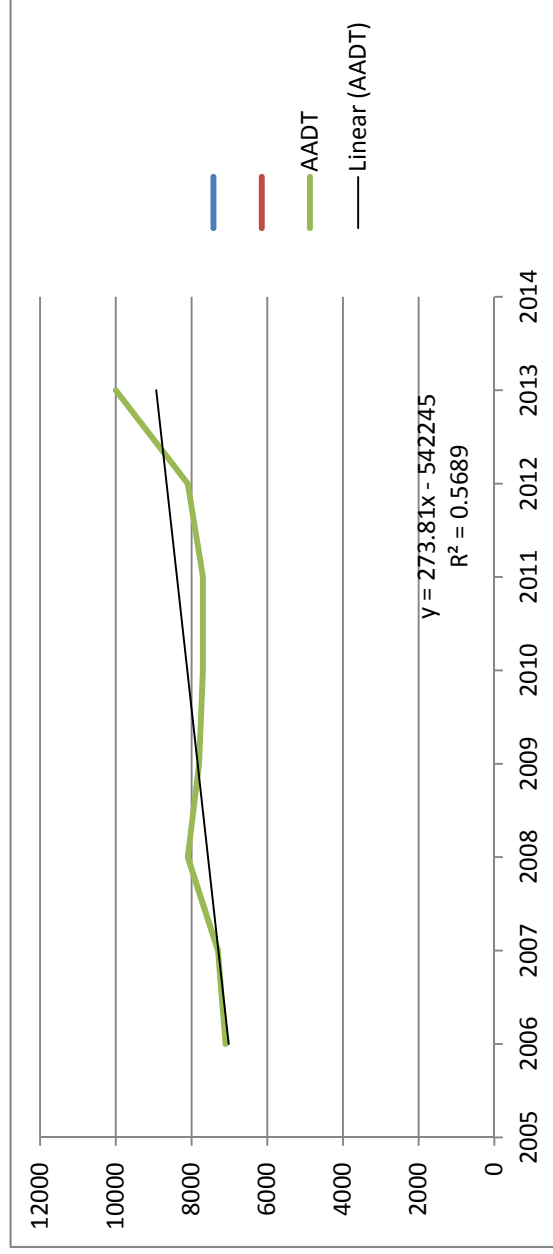
Station: 265

County: Florence

Location: Alligator Road, just east of South Point Road

Year	AADT	% Growth
2006	7100	
2007	7300	2.82%
2008	8100	10.96%
2009	7800	-3.70%
2010	7700	-1.28%
2011	7700	0.00%
2012	8100	5.19%
2013	10000	23.46%

Average % Growth: 5.35%



Station: 267

County: Florence

Location: Alligator Road, east of I-95

Year	AADT	% Growth
2006	2400	
2007	2400	0.00%
2008	2500	4.17%
2009	2400	-4.00%
2010	2400	0.00%
2011	2300	-4.17%
2012	2500	8.70%

Average % Growth: 0.78%



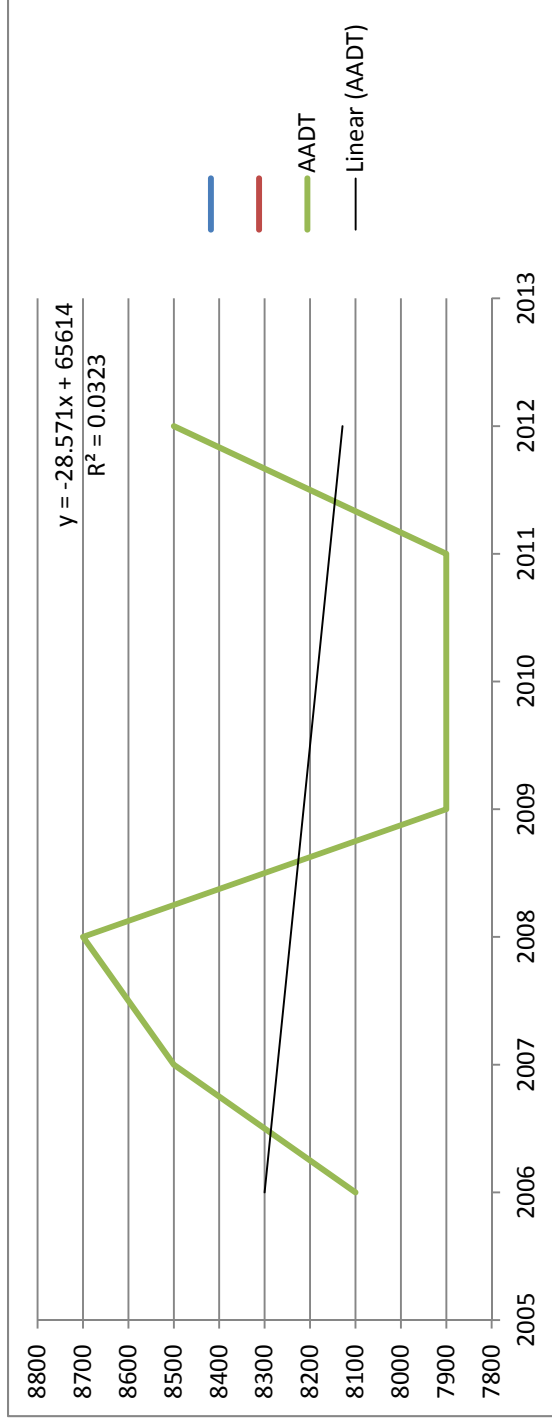
Station: 275

County: Florence

Location: Alligator Road, just east of Redbud Ln

Year	AADT	% Growth
2006	8100	
2007	8500	4.94%
2008	8700	2.35%
2009	7900	-9.20%
2010	7900	0.00%
2011	7900	0.00%
2012	8500	7.59%

Average % Growth: 0.95%



AADT Truck Stats

Location	Northbound			Southbound			Rounded
	Total	SU	Comb	Total	SU	Comb	
<b>US 76</b>							
A	5.03%	3.08%	1.96%	13.41%	11.76%	1.65%	
B	8.72%	7.57%	1.16%	3.81%	2.91%	0.90%	
<b>Average - 24 Hour T</b>						<b>7.74%</b>	<b>8.0%</b>
<b>Average - SU</b>						<b>6.33%</b>	<b>6.5%</b>
<b>Average - Comb</b>						<b>1.42%</b>	<b>1.5%</b>
<b>Alligator Road</b>							
C	7.97%	5.34%	2.62%	6.66%	4.83%	1.83%	
D	4.38%	3.11%	1.27%	15.20%	13.78%	1.42%	
E	6.13%	4.80%	1.33%	3.92%	2.98%	0.94%	
<b>Average - 24 Hour T</b>						<b>7.38%</b>	<b>7.5%</b>
<b>Average - SU</b>						<b>5.81%</b>	<b>6.0%</b>
<b>Average - Comb</b>						<b>1.57%</b>	<b>2.0%</b>
<b>US 52/301</b>							
F	6.54%	3.57%	2.97%	7.97%	4.13%	3.83%	
G	16.11%	10.62%	5.49%	8.35%	4.69%	3.66%	
<b>Average - 24 Hour T</b>						<b>9.74%</b>	<b>10.0%</b>
<b>Average - SU</b>						<b>5.75%</b>	<b>6.0%</b>
<b>Average - Comb</b>						<b>3.99%</b>	<b>4.0%</b>



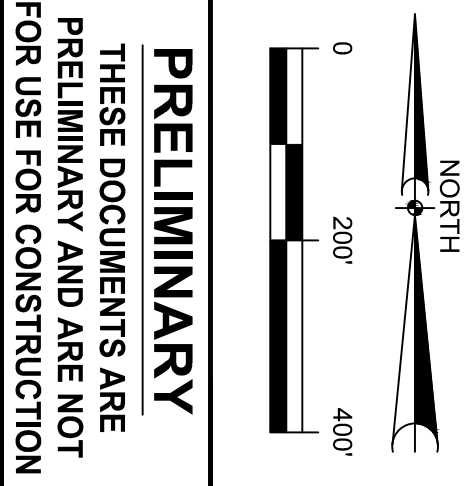


**PARKING ANALYSIS:**

Lot#1 =	150 spaces
Lot#2 =	224 spaces
Lot#3 =	224 spaces
Lot#4 =	42 spaces (future)
Lot#5 =	138 spaces (future)
<b>TOTAL =</b>	<b>778 spaces</b>
Ratio =	51.8 spaces per field

plus 24 Bus Spaces

**NOTES:**  
Soccer Field Size: 225' x 360'



**PRELIMINARY**  
THESE DOCUMENTS ARE  
PRELIMINARY AND ARE NOT  
FOR USE FOR CONSTRUCTION

PROJECT <b>CITY OF FLORENCE SOCCER COMPLEX</b>	SHEET TITLE <b>MASTER PLAN OPTION 1 RENDERING</b>	 101 Research Drive Columbia, South Carolina 29203 Telephone (803) 254-4400 : Fax (803) 771-6676 www.aecom.com	APPROVALS PROJECT ENG: BET DESIGNED BY: OTHERS DRAWN BY: SSJ CHECKED BY: BET APPROVED: BET	REVISIONS			
				DATE: MAR. 2, 2015	SCALE: 1"=200'	SIGNATURE	DATE



## APPENDIX B

### Natural Resources Technical Memorandum



## Natural Resource Technical Memorandum

Road S-107 (Alligator Road) Widening from US  
52 to US 76

SCDOT Project ID No. P042321

*Florence County SC*

September 16, 2016



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**Appendix B:** Protected Species List for Florence County, SC

## 1.0 Introduction and Project Description

HDR|ICA Engineering (HDR|ICA) has been contracted by the S.C. Department of Transportation (SCDOT) to provide professional engineering support services for the proposed widening of S-107 (Alligator Road) from US 52 to US 76 located in Florence County. Specifically, the project would widen the existing two-lane ditch section to a combination of a three-lane ditch section and a five-lane curb and gutter roadway for a distance of 7.5 miles. In addition, the project would include various intersection improvements, including the realignment of John Paul Jones at US 52 near the eastern terminus. An approximate 415 acre project study area (PSA) has been identified to include the anticipated improvements with a general corridor approximately 500 feet wide. Existing right-of-way varies along the corridor, but generally extends a total of 66 feet along the Alligator Road.

The purpose of this assessment is to: evaluate the project area to determine the potential presence and location of any jurisdictional waters of the U.S. (WOUS) regulated under the Clean Water Act; and to determine the presence, or potential presence, of any protected species that are listed as threatened, endangered, or proposed for listing pursuant to Section 7 of the Endangered Species Act of 1973 (50 CFR Part 402). The following assessment was conducted utilizing a variety of methods, including a review of available mapping, literature research, and field investigations as documented. In addition, Figures 1-5 are enclosed as Appendix A and illustrate the project location, topography, national wetland inventory, soils, and delineated WOUS.

### 1.1 Project Setting

Within the PSA, Alligator Road is primarily an east-west route located just south of Florence, SC. Alligator Road crosses over I-95 and provides direct access between US 76 and US 52, which both serve as major routes for local traffic. The proximity of Alligator Road to the City of Florence has resulted in recent growth along the corridor, along with an increase in existing traffic volumes which are projected to continue to increase.

The project is located along the southern edge of the Southeastern Plains ecoregion, just north of the Coastal Plain ecoregion. The Southeastern Plains are generally characterized by relatively flat to rolling topography and is a major agricultural zone with deep, well drained soils. The PSA is located within the *Jeffries Creek Watershed* (03040201-09) which consists of approximately 137,000 acres, with the majority of the area comprised of agricultural and forested land uses.

The PSA includes a variety of mapped soils including: Coxville fine sandy loam (hydric), Duplin fine sandy loam (non-hydric), Goldsboro loamy sand (hydric), Lynchburg sandy loam (hydric), Norfolk loamy sand (hydric), Orangeburg loamy sand (non-hydric), and Wagram sand (non-hydric). The Flood Insurance Rate Maps (FIRM) #45041C0143E, effective December 16, 2014, documents that the project area includes portions of a special flood hazard area (Zone AE) associated with Alligator Branch.

### 1.2 Project Area Description

The 415 acre PSA is largely comprised of transportation/utility right-of-way, agricultural land uses, undeveloped land, and mixed residential/commercial land uses. The existing roadway and transportation right-of-way comprise approximately 24% of the project study area, agricultural and undeveloped areas comprise approximately 34% with the remaining comprised

primarily of mixed residential, commercial, and institutional developments. As such, the following natural habitats and communities were identified along portions of the project area.

- Riverine
- Palustrine Forested Wetlands
- Mixed Upland Forests
- Agricultural
- Disturbed Habitat

### Riverine

The PSA includes portions of various first and second order tributaries to Forest Lake/Middle Swamp. These systems vary in size and hydrologic regime depending upon watershed size, surrounding landuses, and previous impacts. The PSA includes a total of 2,253 linear feet (LF) of tributaries, including 669 LF of perennial and 1,584 LF of seasonal tributaries. The tributaries are generally surrounded by undeveloped forested areas, residential land uses, and/or agricultural land uses. The substrate is largely silt/sand, with available habitat dependent upon flow regime.

The tributaries, including Alligator Branch, generally flow northwards to Forest Lake/Middle Swamp, which drains to Jeffries Creek approximately 8 miles downstream of Forest Lake. Jeffries Creek ultimately drains to the Great Pee Dee River approximately 20 miles from the confluence with Middle Swamp. The South Carolina Department of Health and Environmental Control (SCDHEC) classifies Middle Swamp and it's tributaries as "Freshwaters (FW)" with "site-specific" standards for dissolved oxygen (not less than 4 mg/l) and pH (5.0-8.5).<sup>1</sup>

SCDHEC defines these Freshwaters as:

*Freshwater: "suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of flora and fauna."*<sup>2</sup>

SCDHEC maintains an ambient surface water quality monitoring station (PD-230) along Middle Swamp at SC 51, approximately 2.5 river miles downstream of the PSA. At this location, the required standards for dissolved oxygen and *E. coli* are not maintained. As such, this portion of Middle Swamp and it's tributaries are listed in the *State of South Carolina's 2014 303(d) List* of impaired waters as aquatic life uses (i.e. DO excursions) and recreational uses (*E.coli* excursions) are not maintained.<sup>3</sup>

### Palustrine Forested Wetlands

The PSA includes 9.54 acres of palustrine forested wetlands, including Alligator Branch. The vegetative communities and available habitat vary largely depending upon landscape position. The main drainage and swamp of Alligator Branch constitutes 4.27 acres. Within the PSA, Alligator Branch is a ponded/backwater swamp system, with various habitats including open water, emergent, and forested, including snags. As such, there was no observed single thread

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<sup>1</sup> SCDHEC, <http://www.scdhec.gov/Agency/docs/water-regs/R.61-69.pdf>, last accessed August 29, 2016.

<sup>2</sup> SCDHEC, <http://www.scdhec.gov/Agency/docs/water-regs/R.61-68.pdf>, last accessed August 29, 2016.

<sup>3</sup> SCDHEC, [http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_14-303d.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_14-303d.pdf), last accessed August 29, 2016.

stream or obvious low flow channel with bed and bank. The main drainage includes *Salix nigra* (black willow), *Nyssa aquatica* (water tupolo) and various snags with the forested fringe areas dominated by *Acer rubrum* (red maple), *Liquidambar styraciflua* (sweetgum), *Nyssa sylvatica* (black gum), *Carpinus caroliniana* (ironwood), *Morella cerifera* (wax myrtle), *Arundinaria gigantea* (giant cane), and *Saururus cernuus* (lizard's-tail). The other wetland areas include small stream forests wetlands that are directly associated with a tributary and/or a larger wetland complex associated with offsite waters. The vegetation along this areas is dominated by sweetgum, red maple, *Quercus nigra* (water oak), *Q.* (willow oak), *Pinus taeda* (loblolly pine), *Smilax rotundifolia* (horsebrier), *Ligustrum sinense* (Chinese privet), and giant cane. Hydrologic conditions along these areas vary from surface water to geomorphic positions, with hydric soils indicated by a depleted matrix. The wetland areas transition to upland areas and/or are bordered by agricultural or disturbed lands uses. These wetlands function primarily as filtration, flood storage, and riparian buffers, while providing habitat for common birds, mammals, and reptiles.

### Mixed Upland Forest

The PSA includes numerous areas of undeveloped, upland forests dominated by loblolly pine, water oak, and sweetgum. Many of these areas have been logged and are actively managed for timber production; therefore the age structure of these areas varies from <3 years to >20 years. These areas are generally associated with larger areas that extend off site. These areas provide habitat and travel corridors for various common birds and mammals but are largely fragmented as a result of existing infrastructure and development.

### Agricultural

The PSA includes various agricultural lands that are being actively farmed for row crops. As such, these lands are routinely maintained, planted, and manipulated. In addition, there are various ditches along these areas that provide drainage and conveyance to maintain desirable conditions.

### Disturbed Habitat

The PSA consists of various disturbed land uses including transportation facilities, residential/commercial developments, and utility corridors, which comprised approximately 66% of the total area. The existing transportation facilities include roadway fill embankments, maintained shoulders/slopes, drainage features, and impervious materials associated with the travel ways. There are also various underground and overhead utilities within and adjacent to this right-of-way. As such, this right-of-way is maintained to ensure the integrity of the facility, including routine mowing/spraying to prevent vegetative obstructions and safety concerns. There are also various residential, commercial, and institutional developments throughout the corridor. These areas have impacted the natural landscape through clearing, grading, filling, paving, landscaping, and vertical building construction. As such, these areas do not include any natural systems, and provide very minimal habitat.

## **2.0 Waters of the U.S.**

The project area was evaluated to determine the potential presence of any jurisdictional WOUS. This evaluation included a review of available mapping, specifically the National Wetland Inventory (NWI) maps, soil surveys, USGS topographic quadrangles (*Timmonsville, Florence West*) and 2006 NAPP false-color infrared aerial photography. The review of initial mapping

identified Alligator Branch along with potential wetlands and other WOUS located within the PSA. Various site visits have been conducted throughout project development, with the most recent conducted in September 2015 to further evaluate and document the potential WOUS. The field evaluations confirmed waters associated with Alligator Branch, along with various wetlands and tributaries located within the project boundary. These areas have been field delineated and surveyed. It was determined that the 415 acre PSA includes 2,253 LF of jurisdictional tributaries and approximately 9.54 acres of jurisdictional wetlands. These findings are subject to final review and determination by the U.S. Army Corps of Engineers (USACE).

## **2.1 Linear Systems**

### Tributary-Perennial 1:

Tributary 1 (309 LF) is a second order, unnamed perennial tributary to Forest Lake/Middle Swamp as depicted on the *Timmonsville* USGS Topographic Quadrangle. The tributary flows northward through Alligator Road and Jack Proctor Road via pipes, and eventually flows into a third order, unnamed tributary of Forest Lake/Middle Swamp approximately 1,300 feet downstream of the PSA. Middle Swamp eventually drains to Jeffries Creek approximately 8 miles downstream of Forest Lake, with ultimate connection to the Great Pee Dee River. Tributary 1 has been extensively channelized as a result of agricultural land uses in the proximity of the PSA, with various agricultural ditches draining to the tributary within and beyond the PSA. Tributary 1 consists of an approximate 25-foot wide channel with 6-8 foot banks, with flowing water observed during the various site visits. Other characteristics of this feature include an absence of vegetation within the channel, sand substrate, a clear impressed line in the bank, and scour. The tributary is bounded by upland forested, agricultural and residential land uses with no abutting/adjacent wetlands. Tributary 1 is assumed a “relatively permanent water” (RPW) and subject to all applicable USACE regulations.

### Tributary - Seasonal 2:

Tributary 2 (962 LF) is a second order, unnamed seasonal tributary to Forest Lake/Middle Swamp as depicted on the *Florence West* USGS Topographic Quadrangle. The tributary flows northward through Alligator Road via a pipe, and eventually flows into a third order, unnamed tributary of Forest Lake/Middle Swamp approximately 300 feet downstream of the PSA. Middle Swamp eventually drains to Jeffries Creek approximately 8 miles downstream of Forest Lake, with ultimate connection to the Great Pee Dee River. Portions of Tributary 2 are influenced by on/offsite agricultural land uses and drainage patterns. Tributary 2 consists of a bed and bank, with a channel width of approximately 3-4 feet and a bank height of 4-6 feet, with intermittent flow observed during the various site visits. The upstream portion of the reach (i.e. south of Alligator Road) consisted of various emergent vegetation along the channel bottom and side slopes, with minimal indicators of continuous flow. The downstream section exhibited steep banks with sand substrate, absence of vegetation, scour, and a clear impressed line in the bank. The tributary is bounded by upland forested, agricultural and residential land uses with no abutting/adjacent wetlands. Tributary 2 is assumed a “seasonal relatively permanent water” (sRPW) based on the observed conditions during the various site visits, and subject to all applicable USACE regulations.

Tributary - Perennial 3:

Tributary 3 (360 LF) is a second order, unnamed perennial tributary to Forest Lake/Middle Swamp as depicted on the *Timmons ville* USGS Topographic Quadrangle. The tributary flows northward through Alligator Road via a pipe. The tributary is dammed approximately 1,400 feet downstream of the PSA, and just upstream of the confluence with a third order, unnamed tributary of Forest Lake/Middle Swamp. As such, a portion of the reach (mainly downstream) within the PSA is impacted by backwater from this dam. Middle Swamp eventually drains to Jeffries Creek approximately 8 miles downstream of Forest Lake, with ultimate connection to the Great Pee Dee River. Tributary 3 has been channelized and impacted by on/offsite agricultural land uses and drainage patterns. Tributary 3 consists of a bed and bank, with a channel width up to 25 feet, bank height of 4-6 feet, and flowing/standing water observed during the various site visits. Other characteristics of this feature include an absence of vegetation within the channel, sand substrate, and a clear impressed line in the bank. The tributary is bounded by upland forested, agricultural and residential land uses with no abutting/adjacent wetlands. Tributary 3 is assumed a RPW based on the observed conditions during the various site visits, and subject to all applicable USACE regulations.

Tributary - Seasonal 4:

Tributary 4 (366 LF) is a second order unnamed tributary to Forest Lake/Middle Swamp as depicted on the *Timmons ville* USGS Topographic Quadrangle. The tributary flows northward through Alligator Road via a pipe. The tributary drains to another unnamed tributary approximately 1,200 feet downstream of the PSA, and 1,600 feet upstream from Forest Lake. Forest Lake Drains to Middle Swamp, which eventually drains to Jeffries Creek approximately 8 miles downstream of Forest Lake, with ultimate connection to the Great Pee Dee River. Tributary 4 has been channelized and impacted by on/offsite agricultural land uses and drainage patterns. Tributary 4 consists of a bed and bank, with a channel width up to 4 feet, bank height of 3-5 feet, and intermittent flow observed during the various site visits. Other characteristics of this feature include presence of emergent wetland vegetation within the channel. The tributary is bounded by upland forested, agricultural and residential land uses with no abutting/adjacent wetlands. Tributary 4 is assumed a sRPW based on the observed conditions during the various site visits, and subject to all applicable USACE regulations.

Tributary - Seasonal 5:

Tributary 5 (256 LF) is a first order unnamed seasonal tributary to Middle Swamp as depicted on the *Timmons ville* USGS Topographic Quadrangle. The tributary originates north of Alligator Road with flow provided from a pipe outfall. The area to the south of Alligator Road includes a closed piped system with a catch basin, and open ditches draining into this system from the east and west. The tributary drains to Middle Swamp approximately 2,500 feet downstream of the PSA. Middle Swamp eventually drains to Jeffries Creek approximately 6.5 miles downstream, with ultimate connection to the Great Pee Dee River. Tributary 5 has been channelized and impacted by on/offsite agricultural and residential land uses, along with existing drainage patterns. Tributary 5 consists of a bed and bank, with a channel width up to 4 feet, bank height of 4-5 feet, and intermittent flow observed during the various site visits. Other characteristics of this feature include presence of emergent wetland vegetation within the channel. The tributary is primarily bounded by residential land uses with no abutting/adjacent wetlands. Tributary 5 is assumed a sRPW based on the observed conditions during the various site visits, and subject to all applicable USACE regulations.



## 2.2 Wetlands

### Wetland A:

Wetland A (0.62 acres) is a palustrine forested wetland that is located immediately south of the existing roadway at the intersection with US 76. Wetland A is dominated by sweetgum, *Acer rubrum* (red maple), *Quercus nigra* (water oak), *Smilax rotundifolia* (horsetail), Chinese privet, and *Wisteria frutescens* (American wisteria). The soils in this area are mapped Coxville fine sandy loam, with hydric conditions indicated in the field by a depleted matrix. Hydrology indicators within the project area include areas of water-stained leaves, *Sphagnum* line on trees, and a sparsely vegetated concave surface. The wetland appears to drain southeastward, and previously impacted by timber practices, overhead utility and agricultural drainage patterns. The adjacent upland areas do not exhibit hydric soil indicators (i.e. high chroma soils). Wetland A is considered a jurisdictional wetland due to association with a larger off site system.

### Wetland B:

Wetland B (0.25 acres) is a palustrine forested wetland that is located immediately north of the existing roadway, and is bordered to the east and west by upland/residential areas. Wetland B is dominated by sweetgum, red maple, water oak, willow oak, loblolly pine, Chinese privet, giant cane, horsetail, and American wisteria. The soils in this area are mapped Coxville fine sandy loam, with hydric conditions indicated in the field by a depleted matrix. Hydrology indicators within the project area include areas of water-stained leaves, depression, and landscape position. The wetland appears to drain northward beyond the PSA, with eventual connection to Tributary 2 through various ditches. Wetland B is considered a jurisdictional wetland due to association with Tributary 2, a RPW, which eventually drains to a “traditional navigable water” (TNW).

### Wetland C:

Wetland C (0.49 acres) is a palustrine forested wetland that is located immediately south and north of the existing roadway, and is bordered to the east and west by upland/agricultural land uses. Wetland C is a small stream forest headwater wetland dominated by sweetgum, red maple, water oak, willow oak, *Smilax* spp., *Toxicodendron radicans* (poison ivy), and *Vitis rotundifolia* (grape). The soils in this area are mapped Goldsboro loamy sand, with hydric conditions indicated in the field by a depleted matrix. Hydrology indicators within the project area include areas of water-stained leaves, drainage patterns, concave surface, and moss lines on trees. Minor ponding and various drainage patterns were observed, with hydrologic connection maintained through Alligator Road via a concrete pipe. There was no defined single channel with bed and bank, with water sheet flowing over the majority of the area and draining to the crossline pipe. The wetland drains beyond the PSA, with apparent connection to an unnamed tributary to Forest Lake. Wetland C is considered a jurisdictional wetland due to assumed connection with a RPW that eventually drains to a TNW.

### Wetland D:

Wetland D (1.48 acres) is a scrub shrub wetland that is located immediately south of the existing roadway, and is bordered to the east and west by undeveloped upland areas. Specifically, Wetland D is located along an approximate 3-4 year old clear cut, previously dominated by a hardwood/pine forest. Currently, the area is dominated by red maple, sweetgum, and water oak shrubs, along with *Saccharum* spp. (plumegrass), *Scirpus cyperinus*

(woolgrass), and *Carex* spp. The soils in this area are mapped Coxville fine sandy loam, with hydric conditions indicated in the field by a depleted below dark surface. Hydrology indicators within the project area include areas of water-stained leaves and drainages patterns, with surface water observed during several of the site visits. The wetland appears to drain southward beyond the PSA, and is associated with a larger wetland complex with indirect connection (i.e. ditching, surface flow, etc.) to Alligator Branch. Wetland D is considered a jurisdictional wetland due to the assumed association with Alligator Branch, which eventually drains to a TNW.

Wetland E:

Wetland E (4.27 acres) is primarily a forested wetland and includes the main drainage/swamp of Alligator Branch along with fringe wetlands. An existing 70 foot long bridge located along Alligator Road spans the majority of this drainage. Within the PSA, Alligator Branch is a ponded/backwater swamp system, with various habitats including open water, emergent, and forested, including snags. As such, there was no observed single thread stream or obvious low flow channel with bed and bank. The main drainage includes black willow, water tupolo and various snags with the forested fringe areas dominated by red maple, sweetgum, black gum, ironwood, wax myrtle, giant cane, and lizard's-tail. The soils in this area are mapped Wehadkee and Johnston soils and Wagram sand, with hydric conditions indicated in the field by a depleted matrix. Hydrology indicators within the project area include surface water, water-stained leaves, drainages patterns and geomorphic position. Wetland E includes the main drainage of Alligator Branch and abutting areas, which drains northward to Middle Swamp. Therefore, Wetland E is considered a jurisdictional wetland due to eventual connection a TNW.

Wetland F:

Wetland F (1.0 acres) is a scrub shrub wetland located just south of the John Paul Jones and US 301 intersection along the southeast section of the PSA. The area was recently clearcut, with vegetation dominated by *Juncus* spp. and wool grass. The soils are mapped Lynchburg sandy loam, with hydric soils indicated in the field by a depleted matrix. Hydrology indicators are limited, and does not appear to drain off site or be directly associated with a larger wetland complex or direct connection with any apparent linear features. Based on historical mapping, this area may have been isolated from a larger system by the development and agricultural land uses within the areas.

Wetland G:

Wetland G (1.43 acres) is a forested wetland located between Walker Swinton Road and Oliver Road, just south of Alligator Road. The area is bordered by upland residential/agricultural land uses. Wetland G is dominated by loblolly pine, sweetgum, red maple, *Magnolia virginiana* (sweetbay), *Vaccinium* spp. and *Smilax* spp. The soils are mapped Coxville fine sandy loam, with hydric conditions indicated in the field by a depleted matrix. Hydrology indicators within the project area include concave surface and water stained leaves. Wetland G does not appear to drain off site or be directly associated with a larger wetland complex or direct connection with any apparent linear features. Based on historical mapping, this area may have been isolated from a larger system by the development and agricultural land uses within the areas.

### 3.0 Federally Protected Species

The project area was evaluated for the potential presence of any federally protected species currently listed for Florence County. A list of protected species for Florence County was obtained from the U.S. Fish and Wildlife Service, which was last updated on February 24, 2015 and is included as Appendix B. In addition, the S.C. Department of Natural Resources (SCDNR), S.C. Rare, Threatened & Endangered Species Inventory was reviewed for potential occurrences.<sup>4</sup> The SCDOT also distributed Letters of Intent (LOI) to the various resources agencies, with any input appropriately coordinated and included in project development. Lastly, field observations were conducted within the project area during the various extensive field investigations between May 2013 and September 2015. The following is a list of the federally protected species and a summary of the findings.

<u>Category</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
<b>Bird</b>	American wood stork	<i>Mycteria americana</i>	Threatened
	Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA*
	Red-cockaded woodpecker	<i>Picoides borealis</i>	Endangered
<b>Fish</b>	Atlantic sturgeon	<i>Acipenser oxyrinchus</i>	Endangered
	Shortnose sturgeon	<i>Acipenser brevirostrum</i>	Endangered
<b>Plant</b>	American chaffseed	<i>Schwalbea americana</i>	Endangered
	Canby's dropwort	<i>Oxypolis canbyi</i>	Endangered

\* Federally protected under the Bald and Golden Eagle Protection Act.

#### 3.1 BGEPA

##### Haliaeetus leucocephalus, Bald eagle:

The bald eagle is a large raptor that averages three feet from head to tail and weighs approximately 10-12 pounds, and can have a 7-foot wingspan. The bald eagle is characterized by a white head and tail with a dark brown body, and may take 5 to 6 years before obtaining the adult plumage. Fish are the primary food source; therefore nesting and foraging habitat are generally located near estuaries, bays, lakes, or other large, open water areas (USFWS, 1993).

A review of the “South Carolina’s Bald Eagles – Nest Locations” maintained by SCDNR concludes that there is a documented bald eagle nesting site (N451-Y2016) located along Middle Swamp, approximately 3,330 feet north of the project corridor<sup>5</sup>. The nesting site is not visible from the roadway, and is separated with a wooded buffer. The distance from the project boundary to this site exceeds the recommendations as documented in the National Bald Eagle Management Guidelines (USFWS, 2007). While, bald eagles may occur along the site as an occasional transient, no individuals, nests, or suitable nesting/foraging habitat were observed within the project area during the various site visits. As such, the project is expected to have “no effect” on the bald eagle.

<sup>4</sup> SCDNR, <http://www.dnr.sc.gov/species/pdf/Florence2014.pdf>, last accessed August 29, 2016.

<sup>5</sup> SCDNR, <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>, last accessed August 30, 2016.

### 3.2 Federally Endangered

#### *Picoides borealis*, Red-cockaded Woodpecker:

The red-cockaded woodpecker (RCW) is characterized by black and white horizontal stripes on the back, white cheeks and underparts, and a black cap and stripe on the side of the neck and throat. In addition, the males have a small red spot on each side of the black cap. The RCW is 7-8 inches long with a 13-14 inch wingspan, and are dependent upon open old growth pine stands. Nesting habitat generally requires trees 80-120 years old, while stands older than 30 years provide suitable foraging habitat. Historically, long leaf pine stands are most commonly used, but others may be acceptable. Understory requirements are most often maintained with prescribed burning (USFWS, 1993).

A review of the SC Rare, Threatened, and Endangered Species Inventory concludes that there are known occurrences of RCW in Florence County. However, no individuals or suitable habitat were observed along the project area during the various site visits. As documented, the project area does include various stands of loblolly pine, but the areas have been intensely managed for timber productions with the majority of the area on site <10 years, including very recent clearcutting. Therefore, the project is expected to have “no effect” on the red-cockaded woodpecker.

#### *Acipenser oxyrinchus*, Atlantic Sturgeon:

The Atlantic sturgeon is a large anadromous fish that occurs in the major rivers along the Atlantic coast from Florida to Canada. They are considered the largest fish inhabiting freshwaters on the Atlantic Coast and can reach lengths of 8 feet. They are characterized by a long, v-shaped snout with the mouth positioned on the bottom; fleshy barbels; bony scutes on head, back, and sides with 2 pairs of scutes between the anal and caudal fin and 6-9 scutes on top between behind the dorsal fin; blue/black on top and white below; differs from the shortnose sturgeon by having a longer, more v-shaped snout with different number/location of scutes (NatureServe). Individuals spawn (fall and spring) in freshwater riverine habitats with clean, hard substrates, generally hard clay, rubble, gravel, or shell. After spawning, adults migrate downstream and inhabit near shore areas of coastal rivers, bays and sounds. Juveniles generally spend winter and fall at mouths of rivers, but may spend several years continuously in freshwater. Adults generally inhabit areas below or near the freshwater-saltwater interface, while spawning occurs further upstream.

The proposed project area does not include riverine waters suitable for Atlantic Sturgeon, or located within the close proximity to such waters. The project area ultimately drains to the Great Pee Dee River approximately 20 river miles downstream (east). Therefore, the project is expected to have “no effect” on the Atlantic Sturgeon.

#### *Acipenser brevirostrum*, Shortnose Sturgeon:

The shortnose sturgeon is an anadromous fish that occurs in the major rivers along the Atlantic coast from Georgia to Canada. They are considered a small sturgeon that reaches a maximum length of approximately 3 feet. They are characterized by a blunt, v-shaped snout with the mouth positioned on the bottom; fleshy barbels; bony scutes on head, back, and sides; dark brown to black on top; brown to yellow on sides; and white below (NatureServe). Adults generally inhabit areas below or near the freshwater-saltwater interface, while spawning occurs further upstream. Spawning generally occurs from mid-February to March, and typically occurs

along freshwater channel habitats with clean, hard substrates with low to moderate flow and limited sedimentation. They generally prefer deep water habitats with a soft, vegetated bottom (*SCDNR-Sturgeon*).

The proposed project area does not include riverine waters suitable for shortnose sturgeon, or located within the close proximity to such waters. The project area ultimately drains to the Great Pee Dee River approximately 20 river miles downstream (east). Therefore, the project is expected to have “**no effect**” on the Shortnose Sturgeon.

*Schwalbea americana*, American Chaffseed:

American Chaffseed is an erect perennial herb with unbranched stems with large, purplish-yellow, tubular flowers, with the entire plant densely but minutely hairy. The leaves are alternate, lance shaped to elliptic, and stalkless. The flowering period occurs from April to June in the southern region. The fruits are long, narrow capsules enclosed in a sac-like structure that mature from early summer in the south. The American chaffseed occurs in sandy, acidic, seasonally moist to dry soils, and are generally found in open habitats. Historically, the chaffseed existed on savannas and pinelands through the coastal plain that was maintained by naturally occurring fires. The surviving populations still occur in areas that are subject to frequent fire, but can also thrive with strategic mowing (USFWS, 1995).

A review of the SC Rare, Threatened, and Endangered Species Inventory concludes that there are known occurrences of American chaffseed in Florence County. However, no individuals or suitable habitat were observed along the project area during the various site visits. Specifically, the project area does not include the unique habitat management of frequent fires or strategic mowing required to support American chaffseed. Therefore, the project is expected to have “**no effect**” on American chaffseed.

*Oxypolis canbyi*, Canby’s Dropwort:

The Canby’s dropwort is a perennial herb with an erect stem that normally grows to 31 – 47 inches. The stems usually branch well above the mid-stem, and the leaves are described as ‘quill-like’. They have a five-part flower with white petals and green to reddish sepals that appear in August and September. Canby’s dropwort is found in a variety of coastal plain habitats including pond cypress savannahs, Carolina bays, and wet pine savannahs. The following soil types have been documented to support Canby’s dropwort: Rembert loam, Portsmouth loam, McColl loam, Grady loam, Coxville fine sandy loam, and Rains loam. The plant appears to prefer areas that are wet throughout most of the year, with open or no canopy or areas that are frequently burned (USFWS, 1990).

A review of the SC Rare, Threatened, and Endangered Species Inventory concludes that there are known occurrences of Canby’s dropwort in Florence County. However, no individuals or suitable habitat were observed along the project area during the various site visits. Specifically, the project area does not include the unique habitat types that generally support Canby’s dropwort. The PSA does include soils mapped as Coxville fine sandy loam, but the majority of these soils have been previously impacted through development and/or silviculture practices. This includes Wetland D, which was recently clearcut at the time of the initial 2013 site visit. Therefore, the project is expected to have “**no effect**” on Canby’s dropwort.

### 3.3 Federally Threatened

#### Mycteria americana, American Wood Stork

The wood stork is characterized by its gray/black featherless head, white body, black tail, and the black trailing edges of the wings. The wood stork stands between 33-45 inches tall, can have a wingspan greater than 60 inches, and is one of the largest wading birds in South Carolina. Wood storks nest in colonies, and generally prefer tree tops (mainly cypress and blackgum) over or adjacent to water in the forested swamps of the coastal plain. Foraging habitat consists of open, shallow water where they feed primarily on small fish. This includes various freshwater marshes, swamps, lagoons, ponds, flooded pastures, ditches and tidal creeks. The degradation and loss of feeding habitat is a major cause of their decline. Due to this, nesting wood storks may travel long distances (i.e. 30-40 miles) from the colony to suitable feeding habitat, while non-breeding individuals may travel even further (SCDNR, Wood Stork).

A review of the SC Rare, Threatened, and Endangered Species Inventory (last updated June 11, 2014) concludes that there have been non known occurrences of the wood stork documented in Florence County. However, the project area includes limited open, flooded areas that could provide feeding habitat for the wood stork. Specifically, these areas include the open waters associated with Alligator Branch which include shallow areas that provide suitable feeding habitat. In addition, this area includes various snags and forested areas that could provide temporary roosting habitat. As proposed, the project would construct a new bridge over Alligator Branch along the existing alignment. This design would minimize permanent impacts to Alligator Branch. Temporary impacts to available feeding habitat may occur during construction, but would be minimized through implementation of best management practices. Due to the availability of potential feeding habitat along with the proposed construction activities, the project “**may affect, but not likely to adversely affect**” the wood stork. No individuals were observed along the project area during the various field reviews.

### 3.4 At Risk Species (ARS)

In addition to the above listed species, the USFWS has identified 18 “at-risk species” (ARS) species for Florence County. ARS are those that have either been proposed for listing, are candidates for listing, or have been petitioned for listing. The ARS listing is provided for conservation actions in an effort to keep these species from becoming listed under the Endangered Species Act. Therefore, there are no existing federal protections associated with ARS.

The following provides the list of ARS for Florence County:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
American eel	<i>Anguilla rostrata</i>	ARS
Blueback herring	<i>Alosa aestivalis</i>	ARS
Robust redhorse	<i>Moxostoma robustum</i>	ARS
Tri-colored bat	<i>Perimyotis subflavus</i>	ARS
Bay boneset	<i>Eupatorium paludicola</i>	ARS
Boykin’s lobelia	<i>Lobelia boykinii</i>	ARS
Carolina-birds-in-a-nest	<i>Macbridea caroliniana</i>	ARS
Evergreen quillwort	<i>Isoetes heyemalis</i>	ARS
Georgia leadplant	<i>Amorpha georgiana var. georgiana</i>	ARS

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Yellow pond lily	<i>Nuphar lutea ssp. sagittifolia</i>	ARS
Spotted turtle	<i>Clemmys guttata</i>	ARS

The habitat requirements associated with these species includes various unique habitats, including but not limited to: riverine, pine flatwoods, wet savannahs, forested swamps, and dry, fallow habitats. The project area includes very limited habitat for support of these species.

#### 4.0 Conclusion

The 415 acre project area associated with the proposed Alligator Road Widening project comprised of various land uses and habitats, including the existing transportation facility, palustrine forested wetlands, small streams, forested uplands, agricultural, and residential/disturbed areas. Specifically, the project area consists of approximately 9.54 acres of wetlands, along with 2,253 LF of other waters of the US. This includes 669 LF of perennial tributaries and 1,584 LF of seasonal/intermittent tributaries that drain northward from the PSA to Forest Lake/Middle Swamp. Middle Swamp eventually drains to Jeffries Creek approximately 8 miles downstream of Forest Lake, with ultimate connection to the Great Pee Dee River. The wetland areas include a portion of Alligator Branch, which is a ponded/backwater swamp system with various habitats including open water, emergent, and forested wetland within the PSA. The delineated boundaries and jurisdictional status/determination of these areas is based upon final review and verification by the Charleston District USACE.

The review of the habitat requirements and previous records for the federally listed species for Florence County, along with the field observations, conclude that there is very low potential for the presence of any federally protected species due to the lack of suitable habitat, the existing land uses along the project area, and scope of improvements. However, limited suitable habitat was identified for the wood stork. As such, a **“may affect, but not likely to adversely affect”** determination is recommended for the wood stork with a **“no effect”** determination recommended for the remaining species listed for Florence County.

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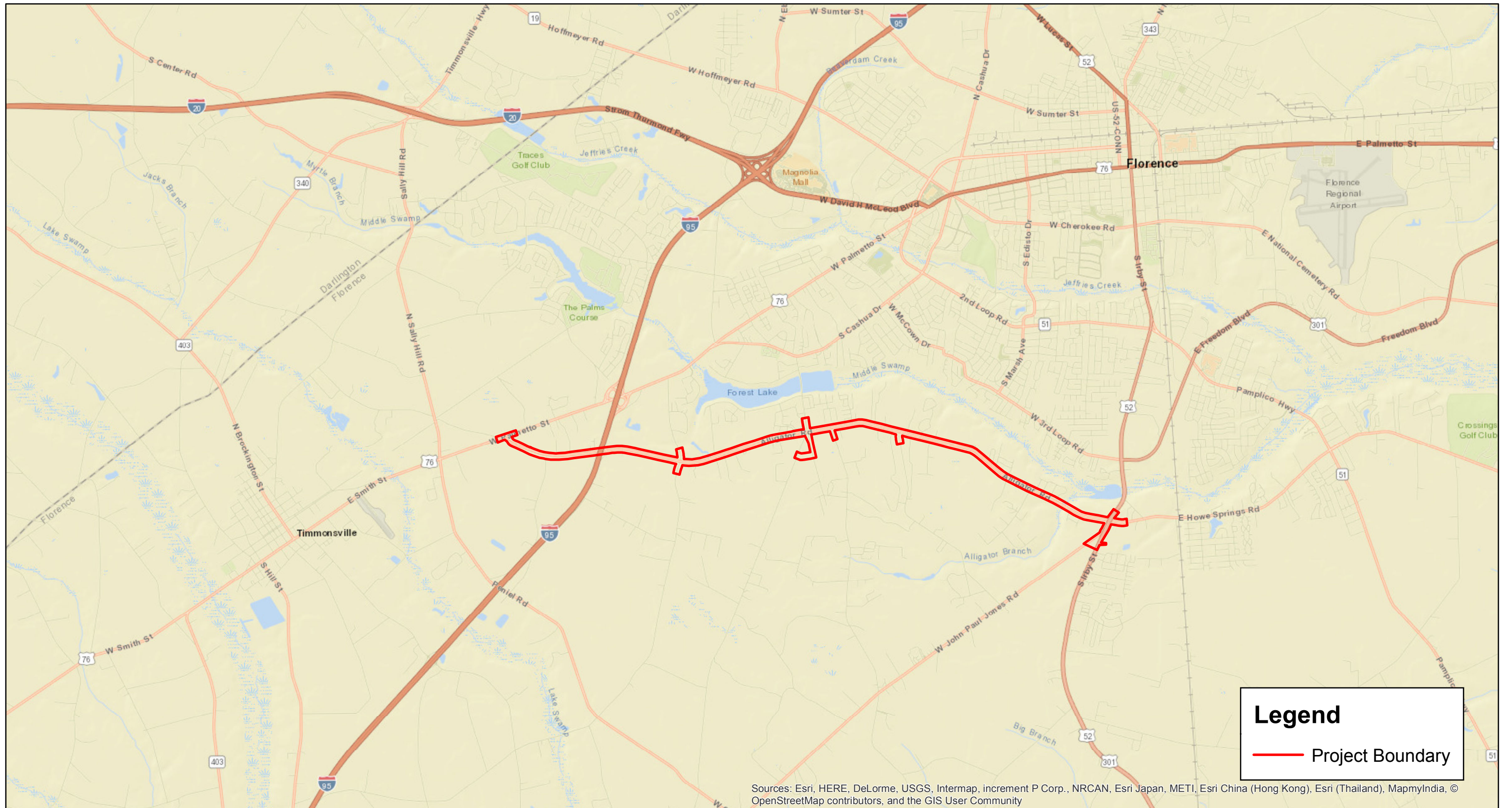
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# Appendix A

## Figures



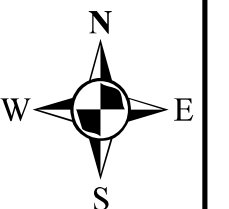
**Legend**

— Project Boundary

Prepared:  
9/8/2016  
By:



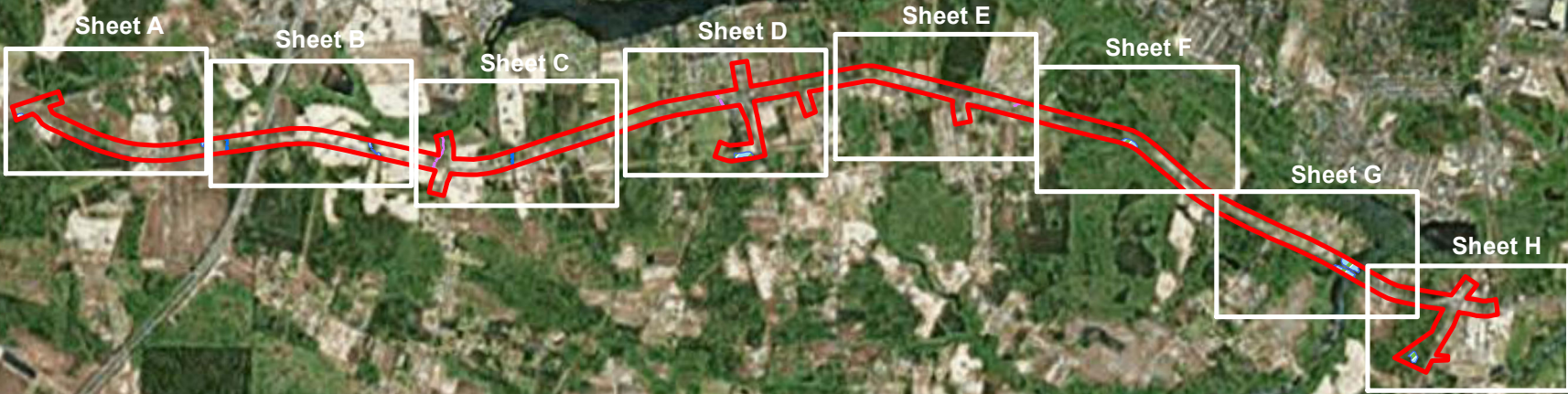
**Figure 1: Project Location**  
**Alligator Road Widening**  
**Florence, SC**





Project Summary:  
Total Project Area = 451.12 Ac.(19,650,708 SF)  
Wetland Area = 9.54 Ac. (415,562 SF)  
Tributary-Perennial = 669 LF  
Tributary-Seasonal = 1,584 LF

**Legend**  
— Project Boundary  
Wetlands



Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, IC

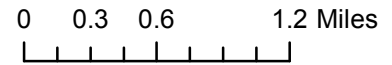
Note:  
Sheet layout is applicable for Figures 2, 4 and 5

Prepared:  
9/8/2016  
By:



## Figure 2 Sheet Layout

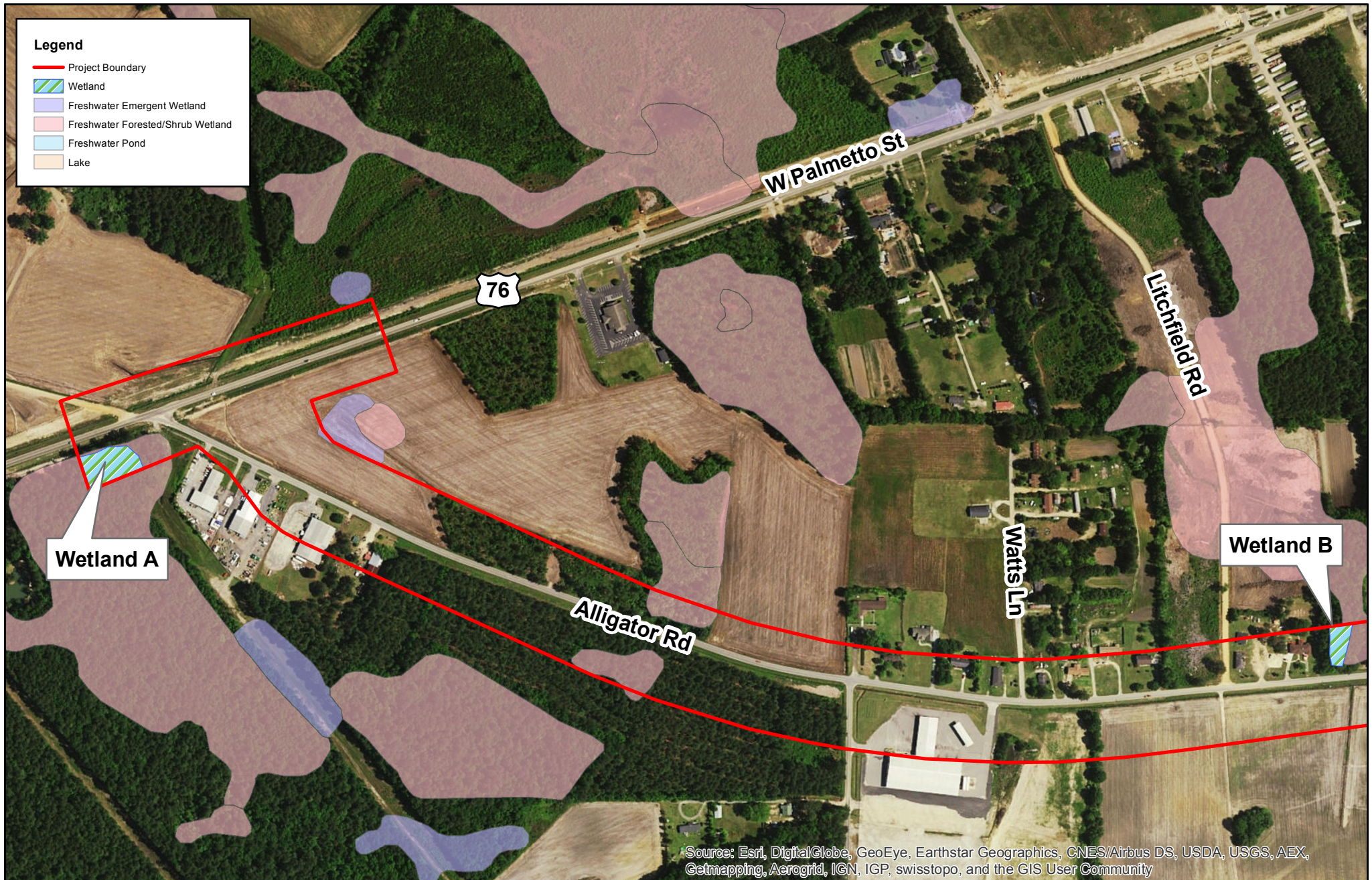
Alligator Rd Widening  
Florence County, SC





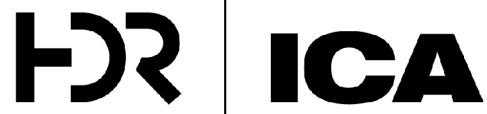
**Legend**

- Project Boundary
- Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake

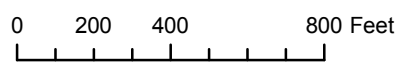


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:



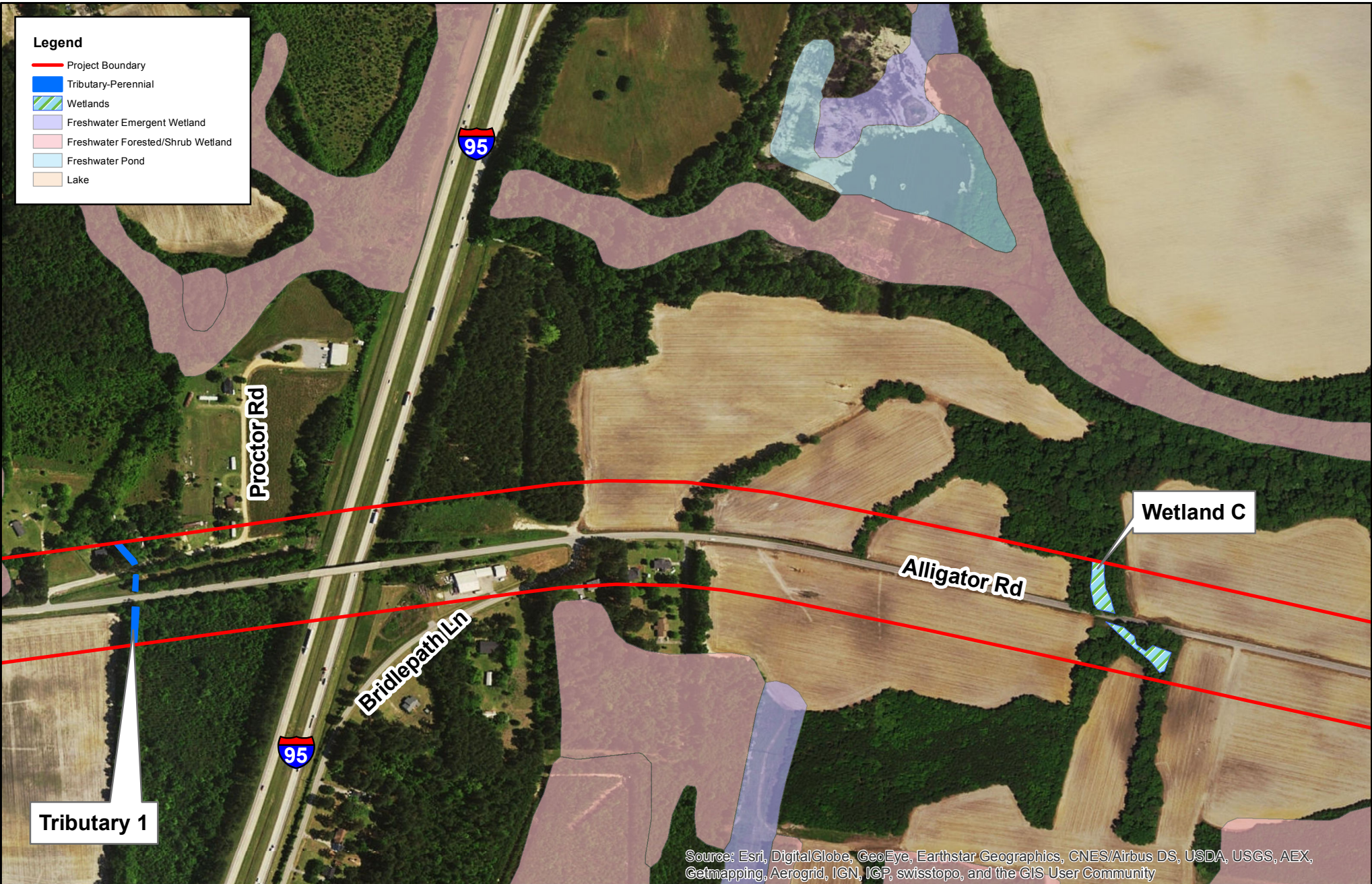
**Figure 2a: Aerial and NWI**  
**Alligator Rd Widening**  
**Florence County, SC**





**Legend**

- Project Boundary
- Tributary-Perennial
- Wetlands
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:

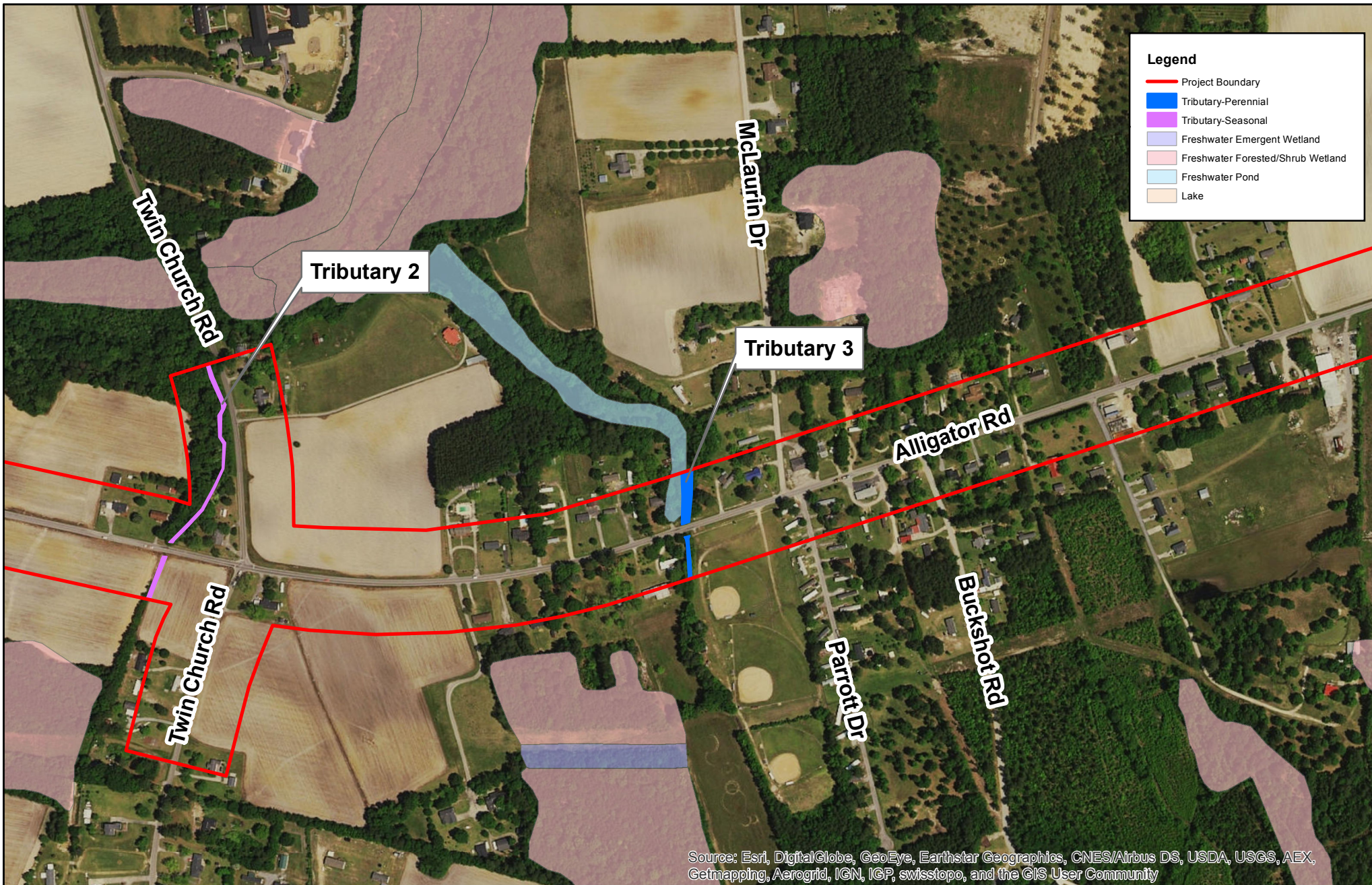


**Figure 2b: Aerial and NWI**  
**Alligator Rd Widening**  
**Florence County, SC**

0 200 400 800 Feet





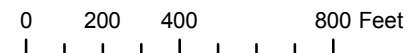


Prepared:  
9/8/2016  
By:



**Figure 2c: Aerial and NWI**

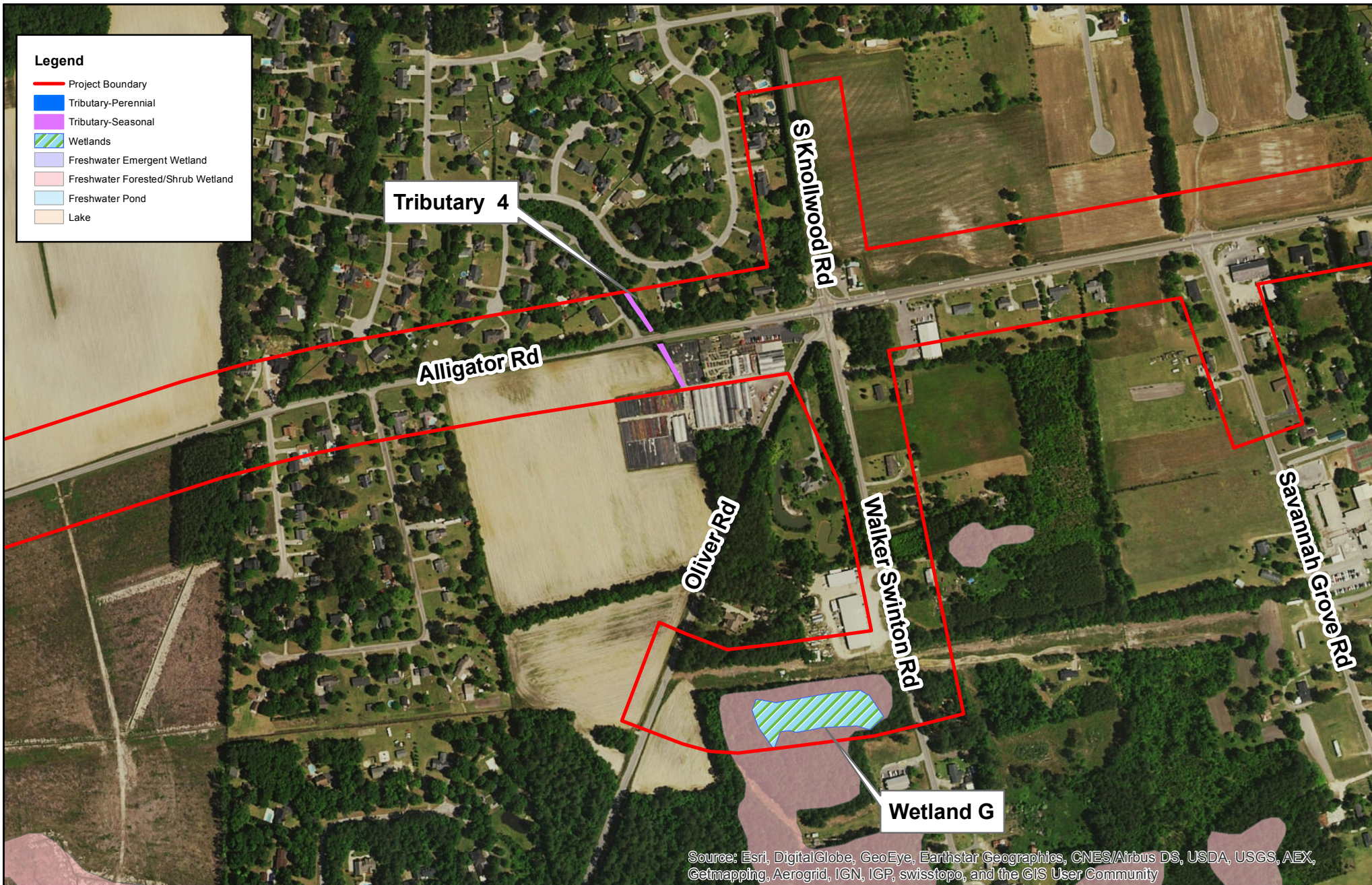
**Alligator Rd Widening  
Florence County, SC**





**Legend**

- Project Boundary
- Tributary-Perennial
- Tributary-Seasonal
- Wetlands
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake



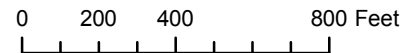
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:

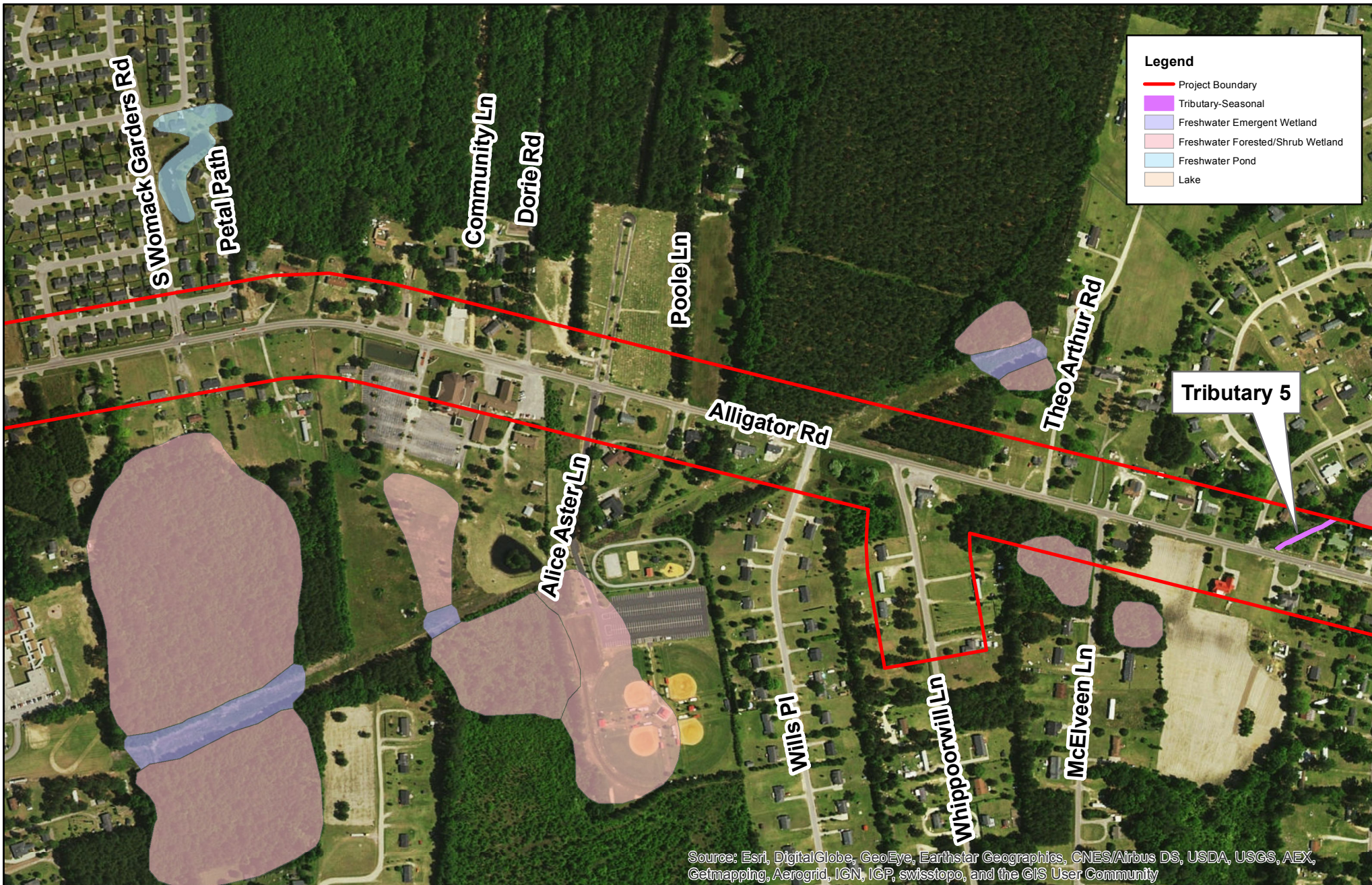


**Figure 2d: Aerial and NWI**

**Alligator Rd Widening  
Florence County, SC**







**Legend**

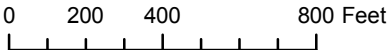
- Project Boundary
- Tributary-Seasonal
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

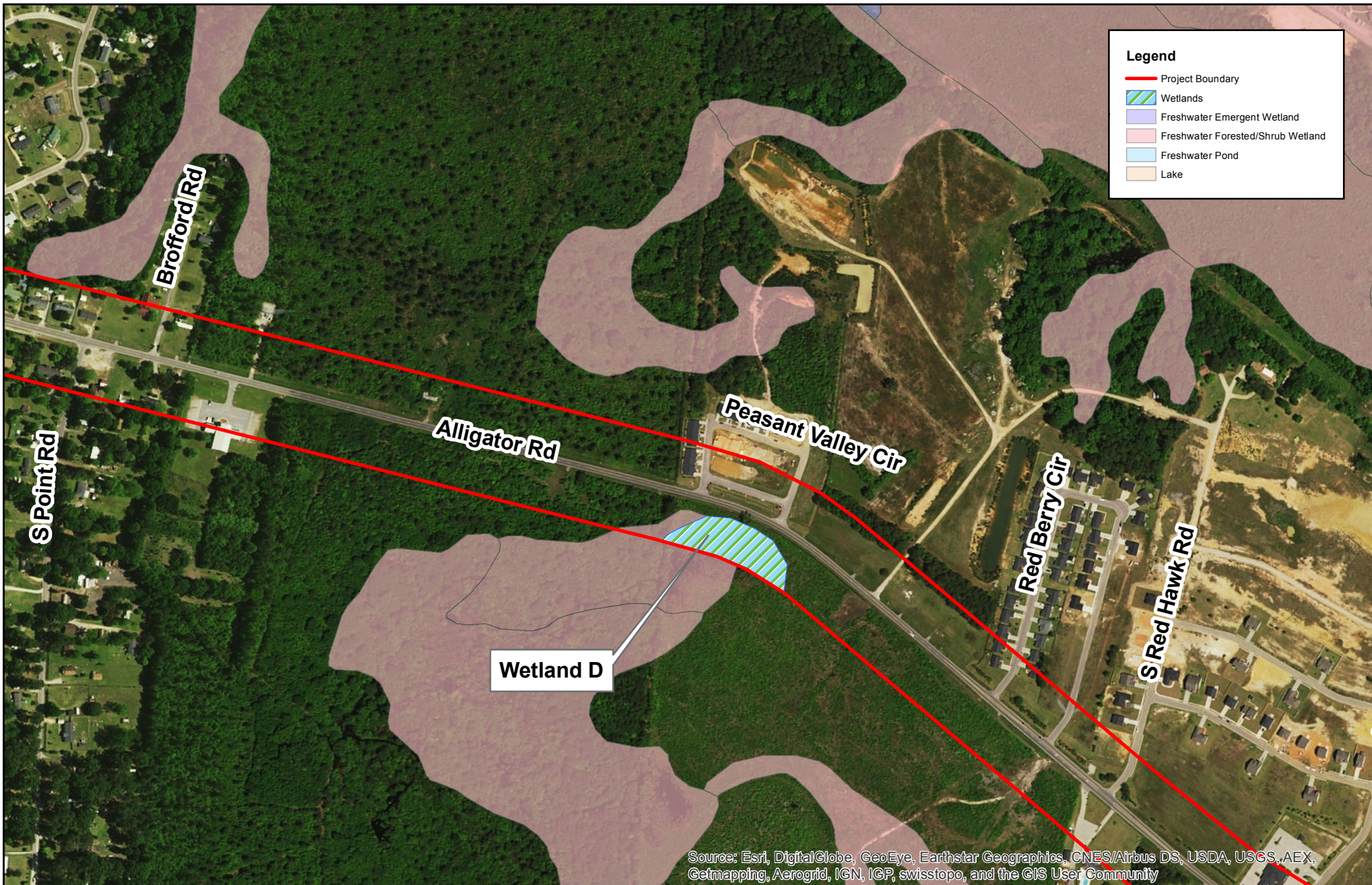
Prepared:  
9/8/2016  
By:



**Figure 2e: Aerial and NWI**  
**Alligator Rd Widening**  
**Florence County, SC**



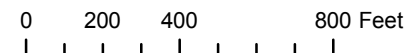




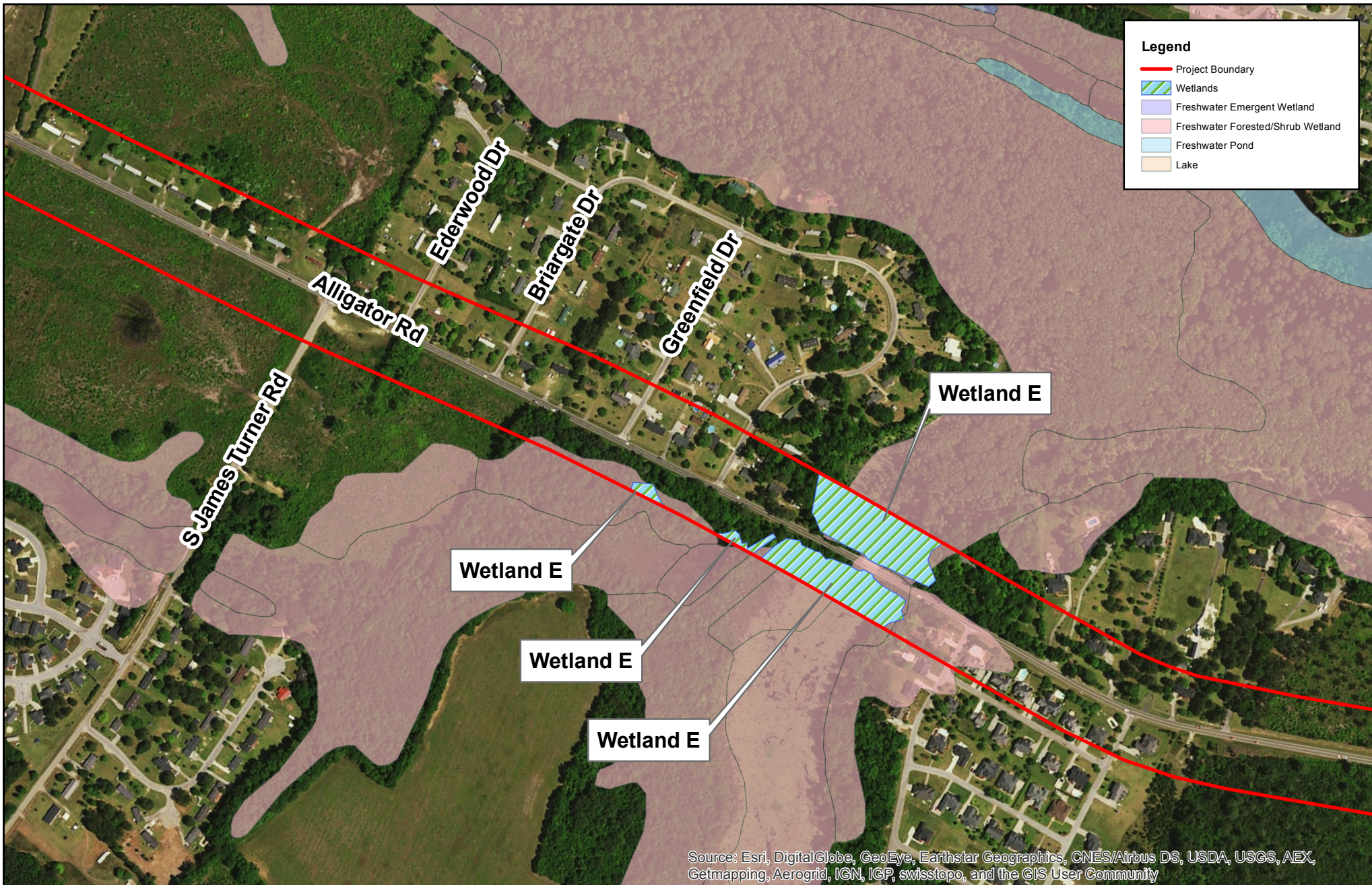
Prepared:  
9/8/2016  
By:



**Figure 2f: Aerial and NWI**  
Alligator Rd Widening  
Florence County, SC



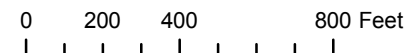




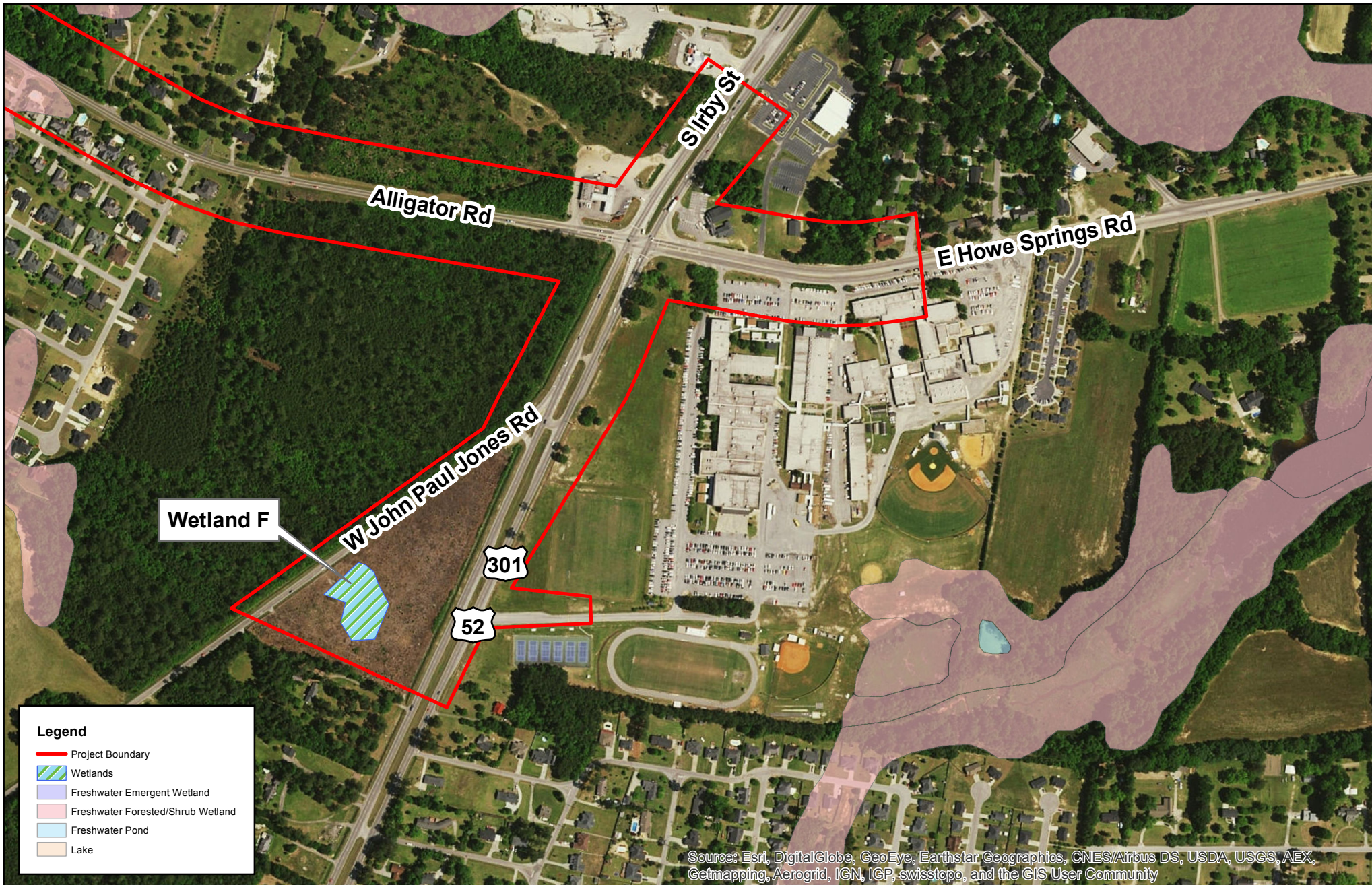
Prepared:  
9/8/2016  
By:



**Figure 2g: Aerial and NWI**  
**Alligator Rd Widening**  
**Florence County, SC**



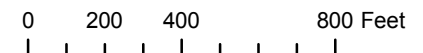




Prepared:  
9/8/2016  
By:

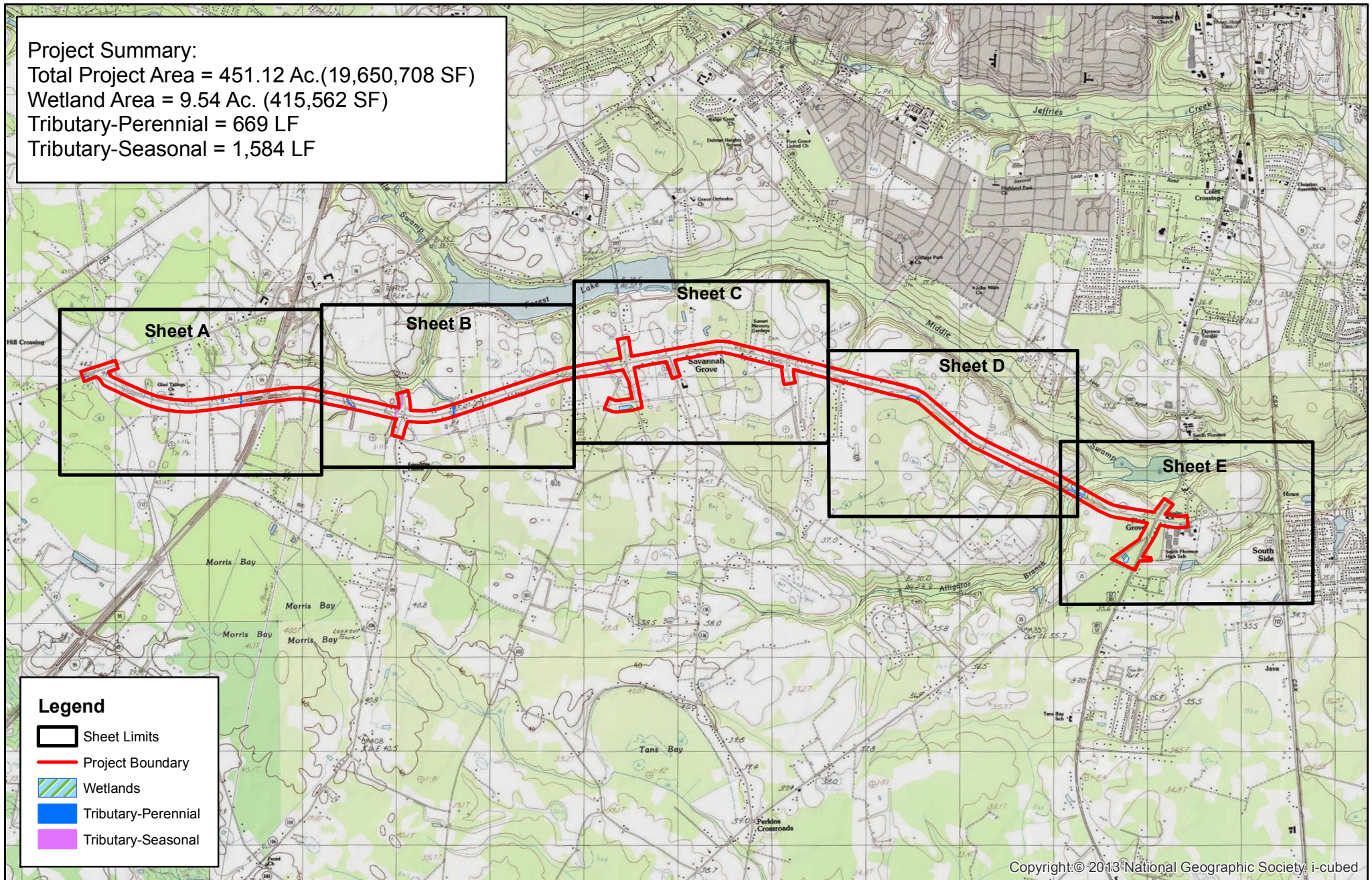


**Figure 2h: Aerial and NWI**  
**Alligator Rd Widening**  
**Florence County, SC**





Project Summary:  
 Total Project Area = 451.12 Ac. (19,650,708 SF)  
 Wetland Area = 9.54 Ac. (415,562 SF)  
 Tributary-Perennial = 669 LF  
 Tributary-Seasonal = 1,584 LF

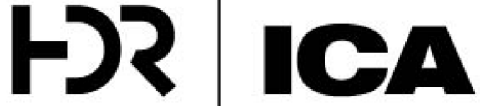


**Legend**

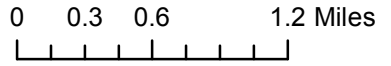
- Sheet Limits
- Project Boundary
- Wetlands
- Tributary-Perennial
- Tributary-Seasonal

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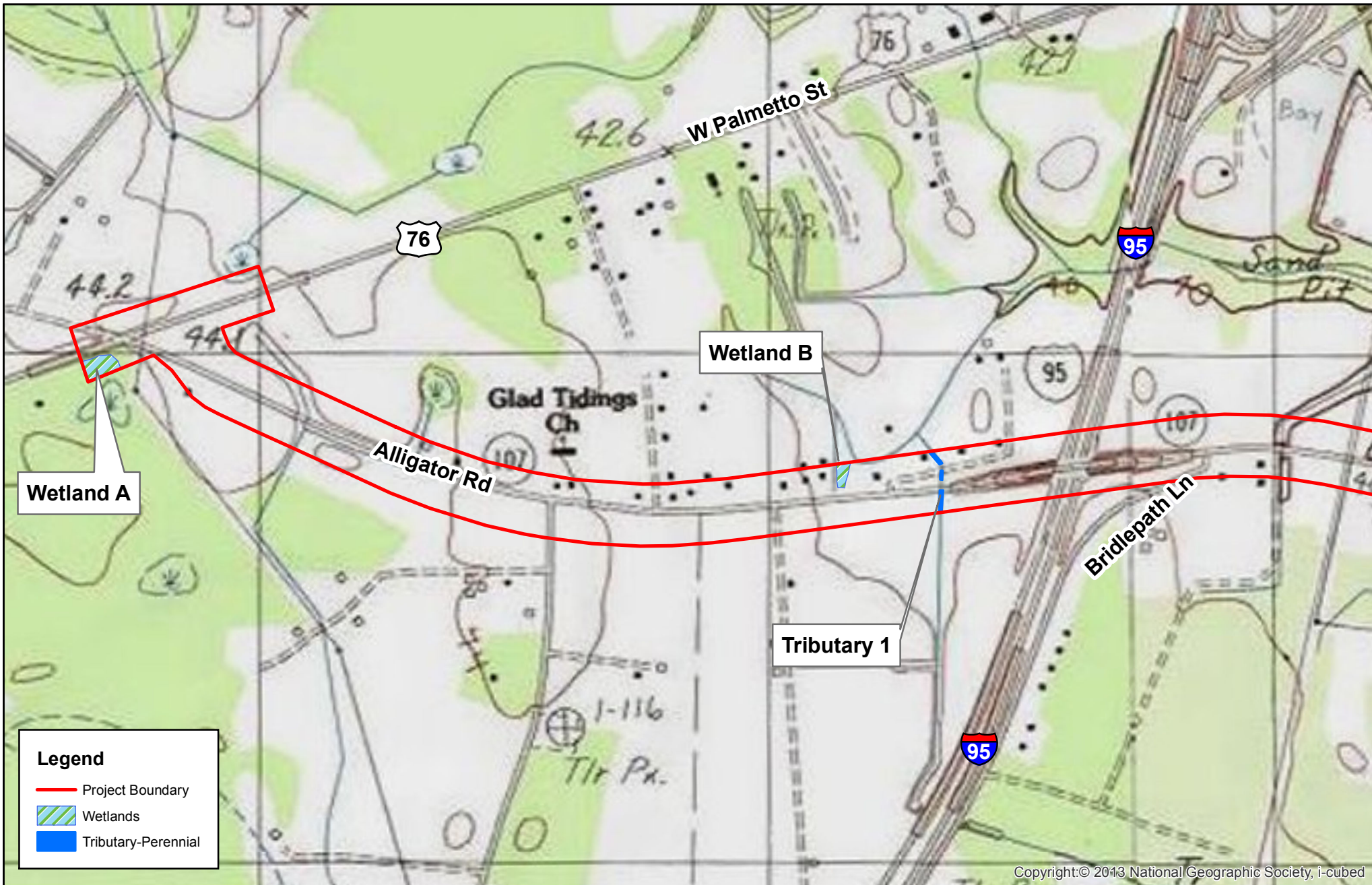
Prepared:  
 9/8/2016  
 By:



**Figure 3 Master: Topographic**  
**Alligator Rd Widening**  
**Florence County, SC**







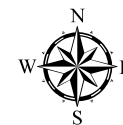
Prepared:  
9/8/2016  
By:



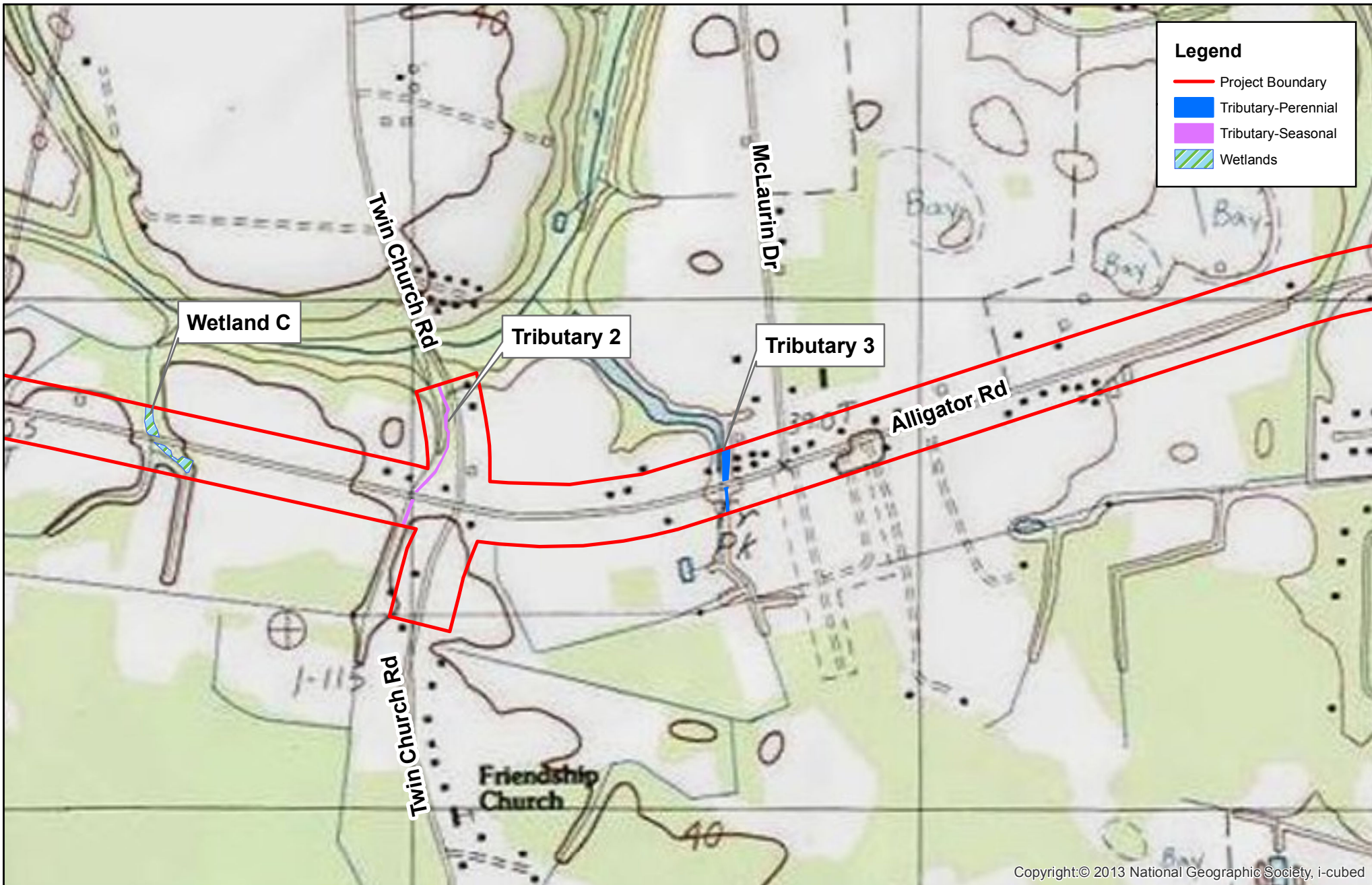
**Figure 3a: Topographic**

**Alligator Rd Widening  
Florence County, SC**

0 300 600 1,200 Feet





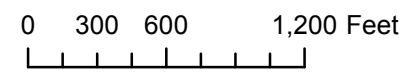


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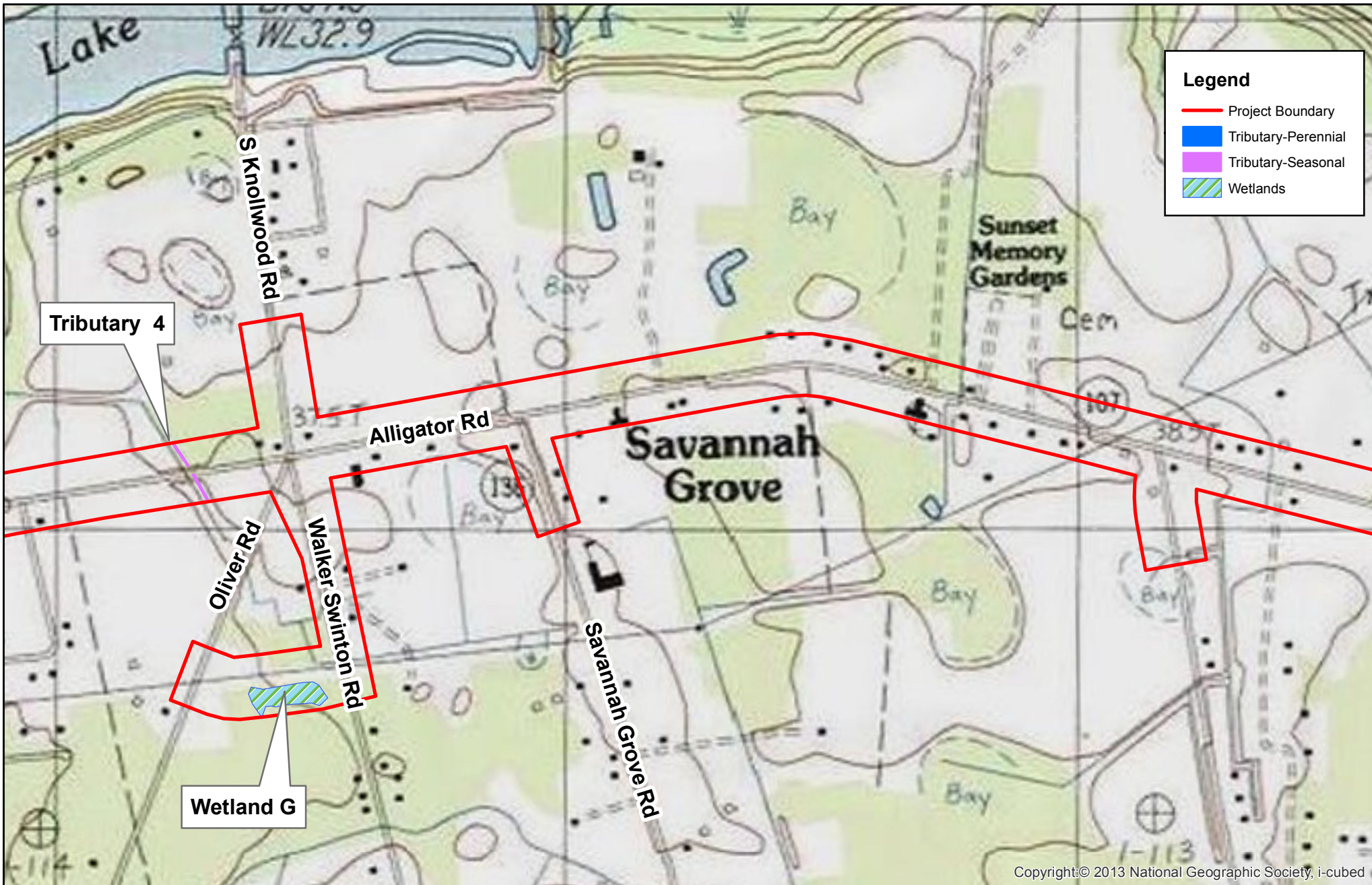
Prepared:  
9/8/2016  
By:



**Figure 3b: Topographic**  
**Alligator Rd Widening**  
**Florence County, SC**





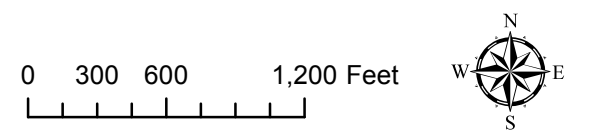


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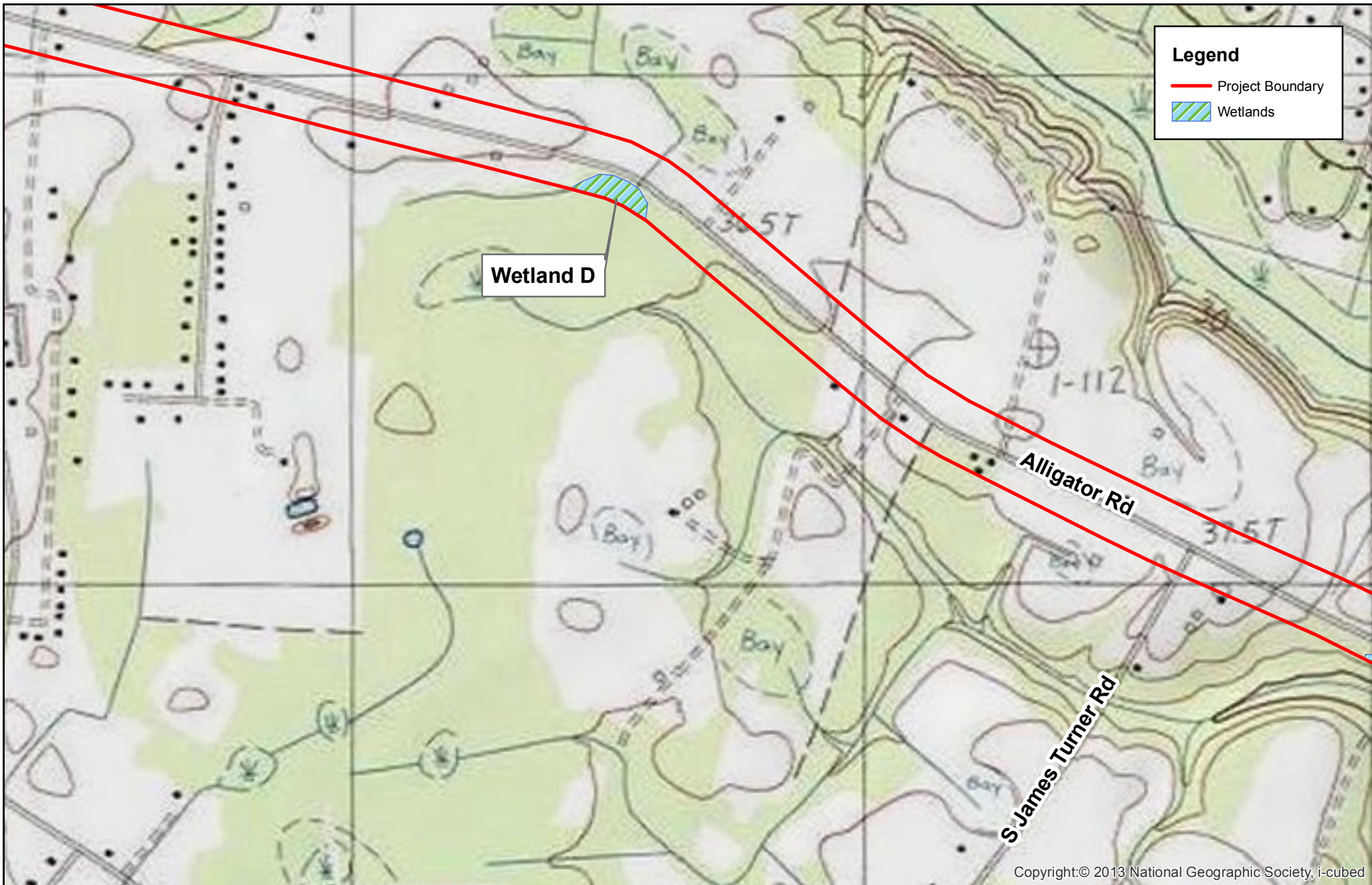
Prepared:  
9/8/2016  
By:



**Figure 3c: Topographic**  
**Alligator Rd Widening**  
**Florence County, SC**







Prepared:  
9/8/2016  
By:



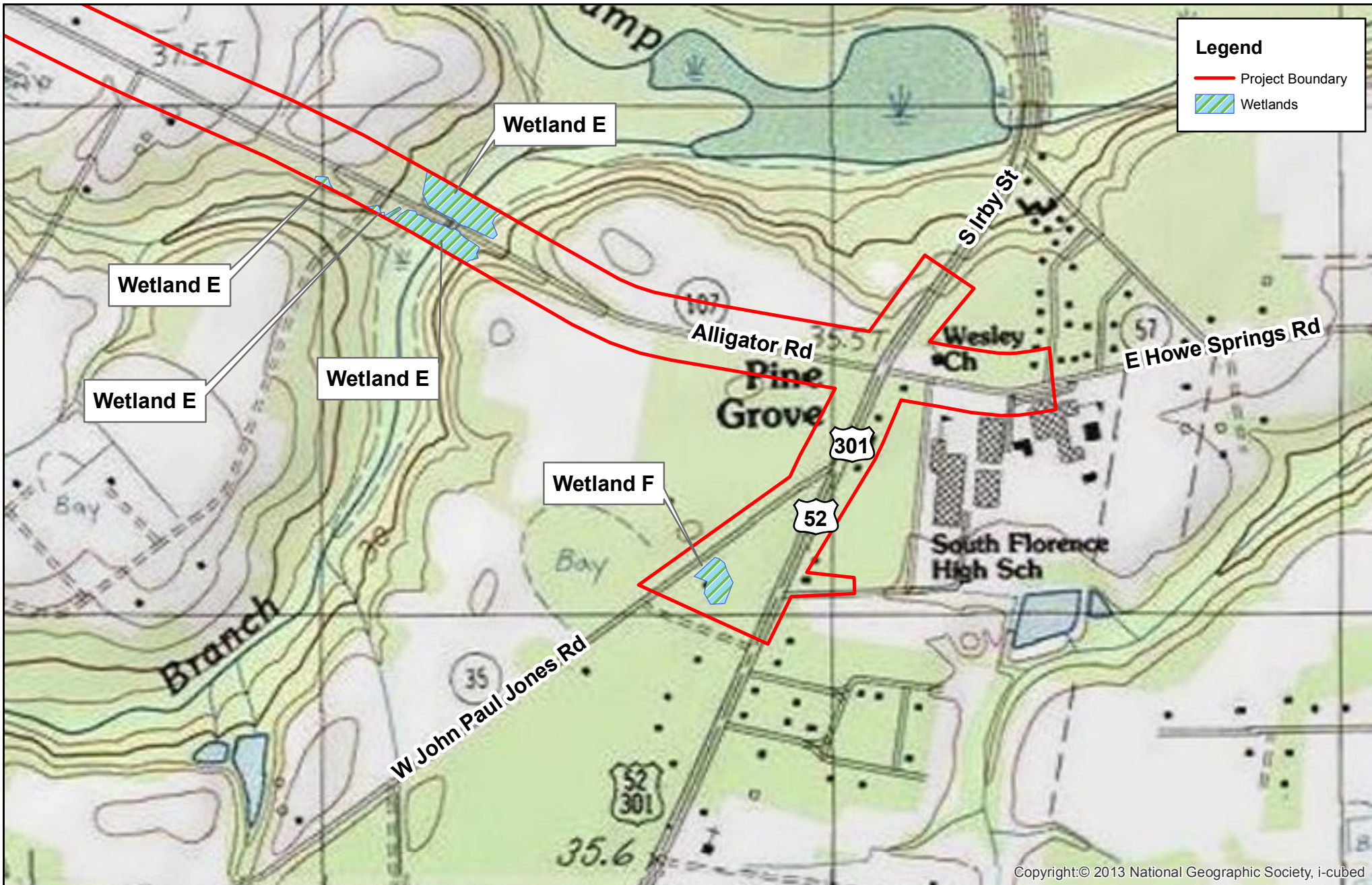
**Figure 3d: Topographic**

**Alligator Rd Widening  
Florence County, SC**

0 300 600 1,200 Feet







Prepared:  
9/8/2016  
By:



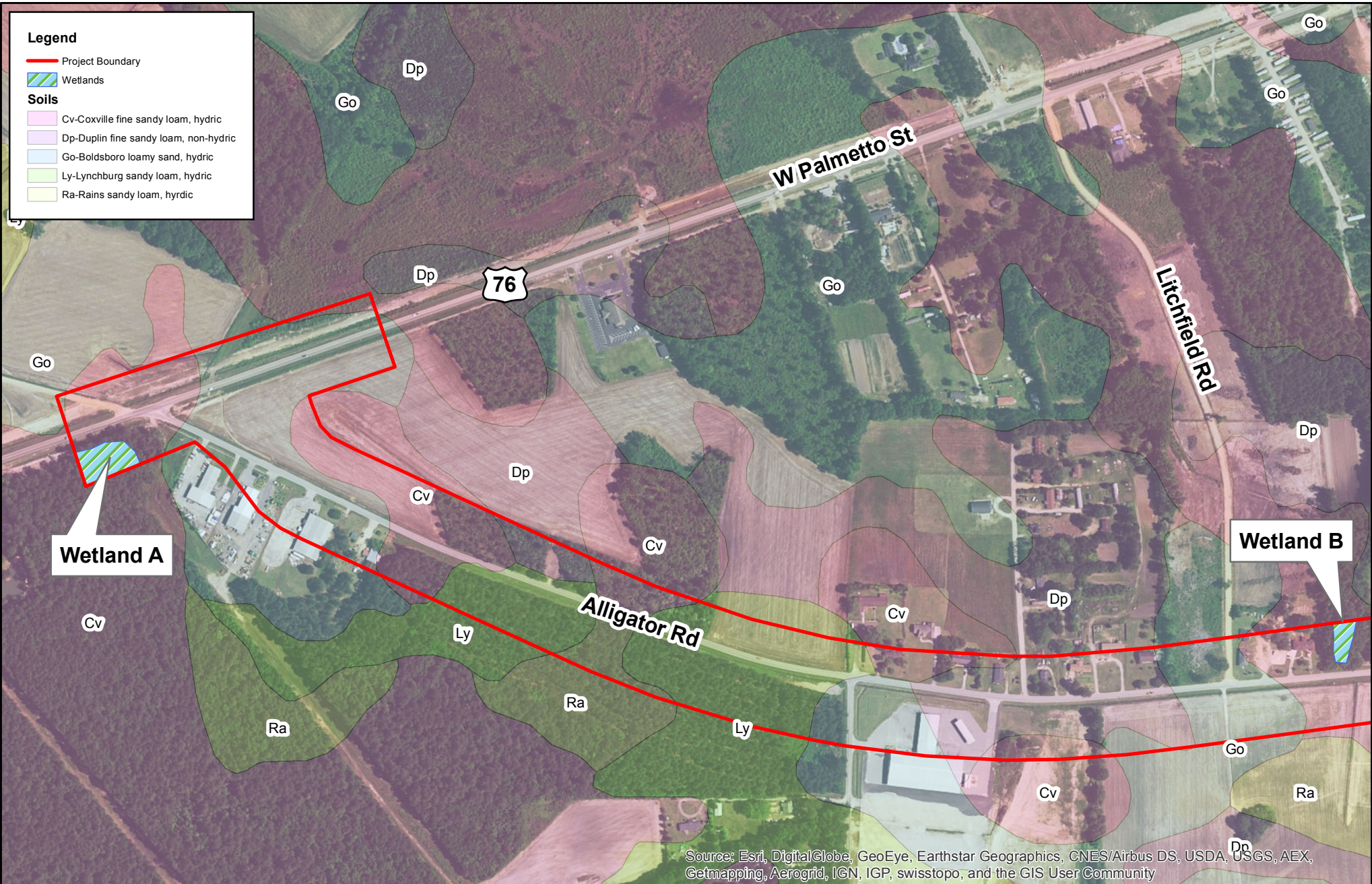
**Figure 3e: Topographic**

**Alligator Rd Widening  
Florence County, SC**

0 300 600 1,200 Feet



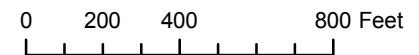




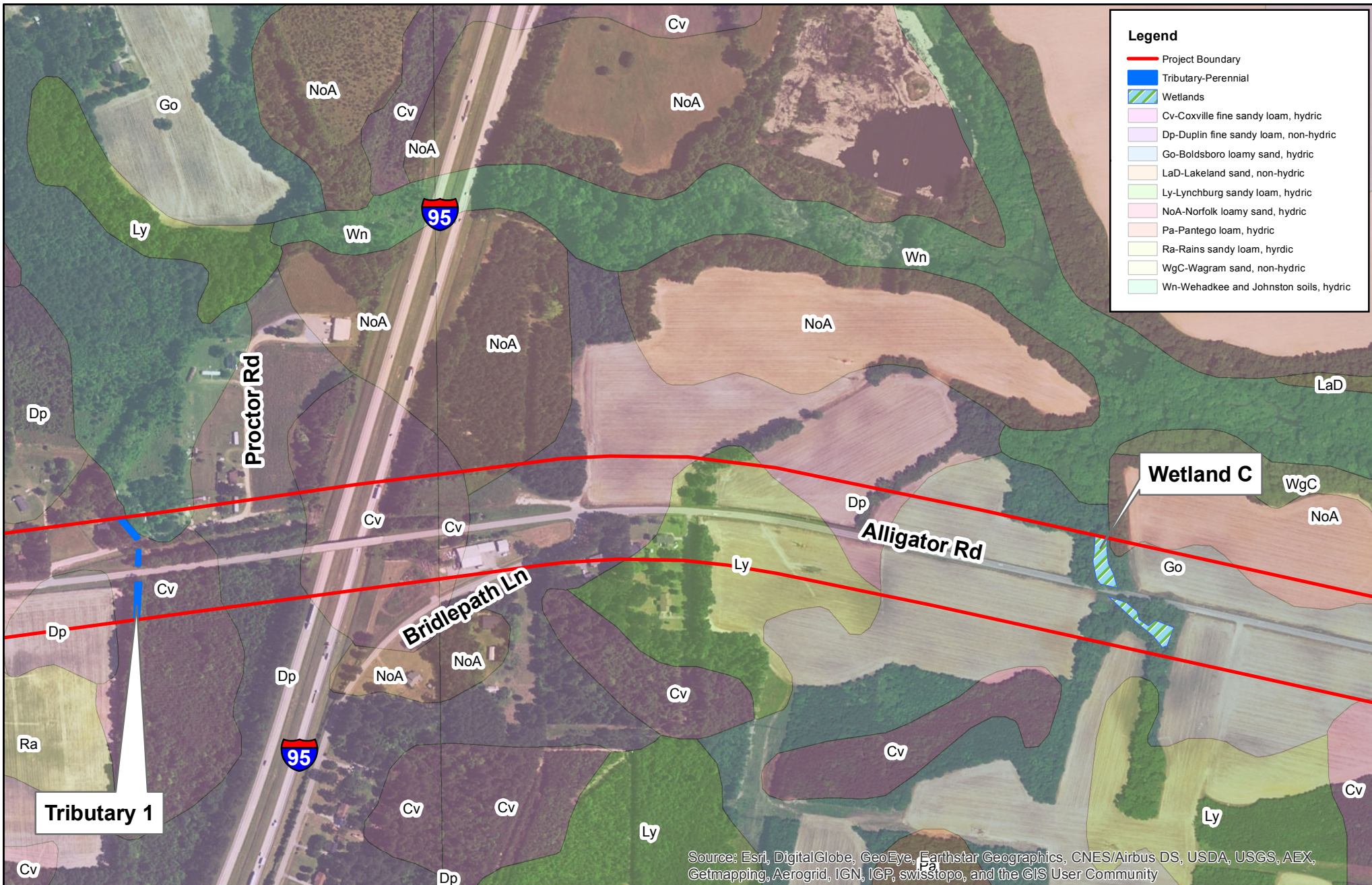
Prepared:  
9/8/2016  
By:



**Figure 4a: Soils**  
Alligator Rd Widening  
Florence County, SC







**Legend**

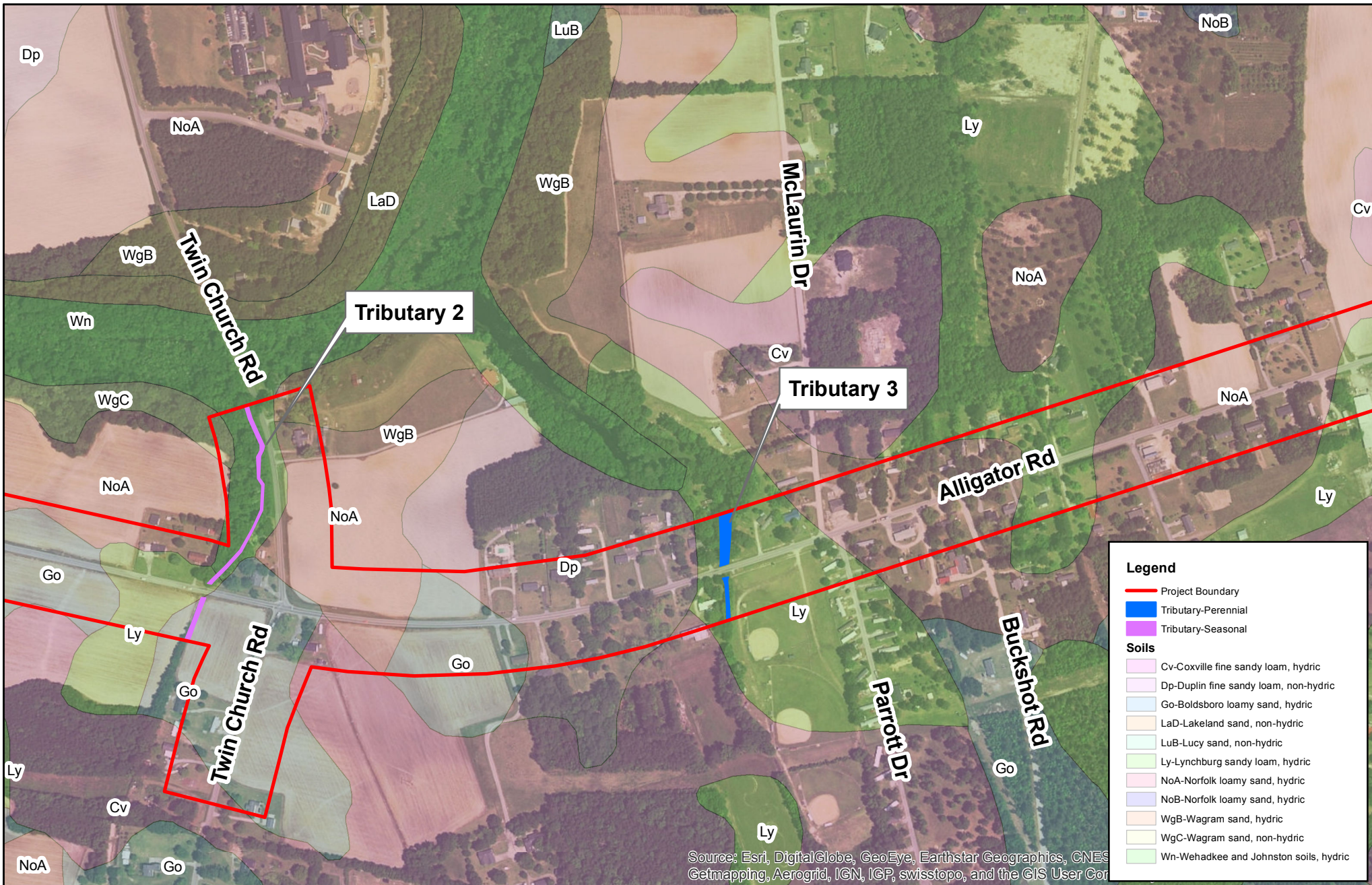
- Project Boundary
- Tributary-Perennial
- Wetlands
- Cv-Coxville fine sandy loam, hydric
- Dp-Duplin fine sandy loam, non-hydric
- Go-Boldsboro loamy sand, hydric
- LaD-Lakeland sand, non-hydric
- Ly-Lynchburg sandy loam, hydric
- NoA-Norfolk loamy sand, hydric
- Pa-Pantego loam, hydric
- Ra-Rains sandy loam, hydric
- WgC-Wagram sand, non-hydric
- Wn-Wehadkee and Johnston soils, hydric

Prepared:  
9/8/2016  
By:

**Figure 4b: Soils**  
**Alligator Rd Widening**  
**Florence County, SC**

0    200    400    800 Feet

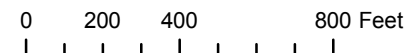




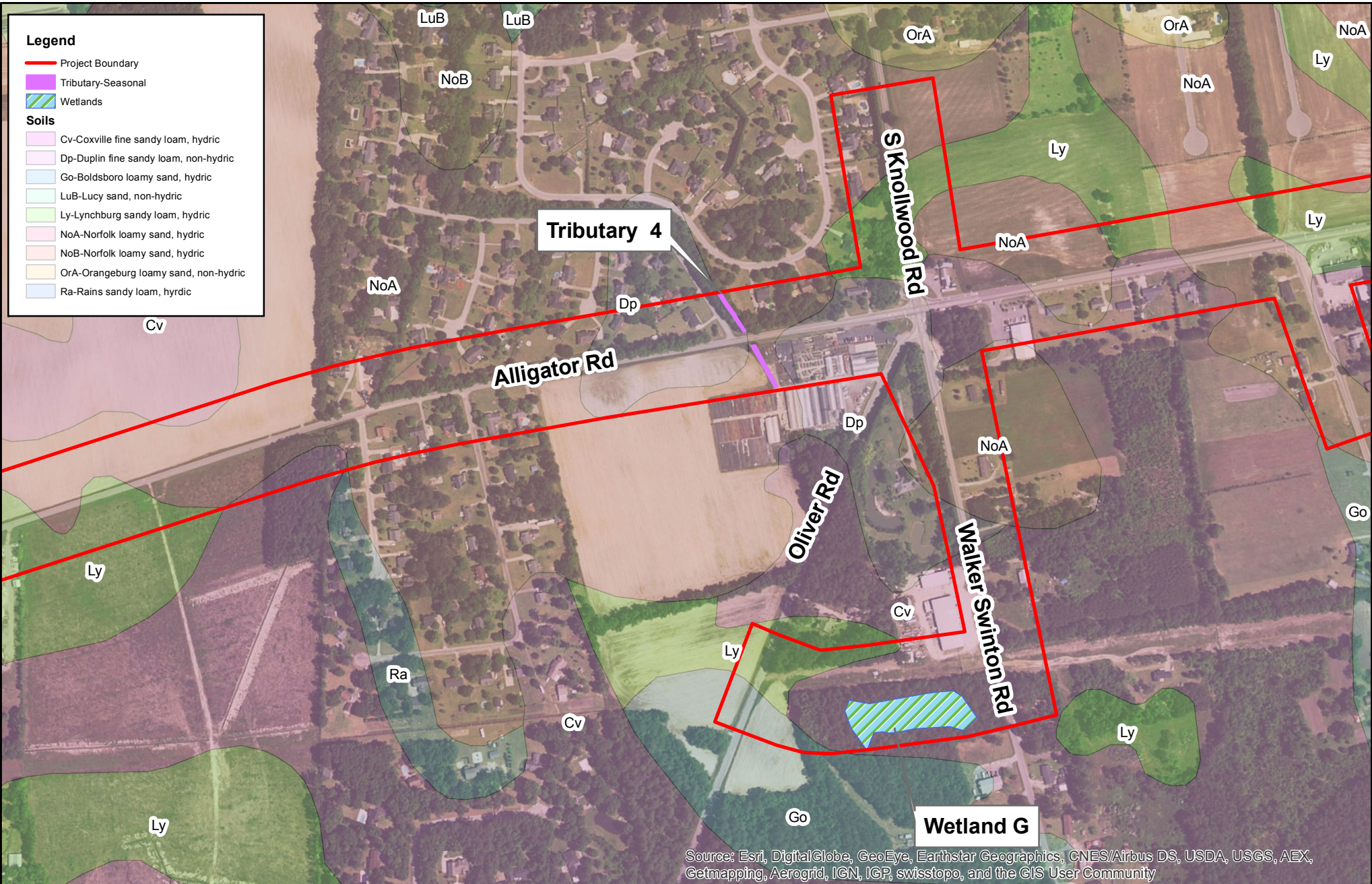
Prepared:  
9/8/2016  
By:



**Figure 4c: Soils**  
**Alligator Rd Widening**  
**Florence County, SC**



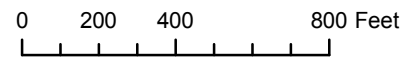




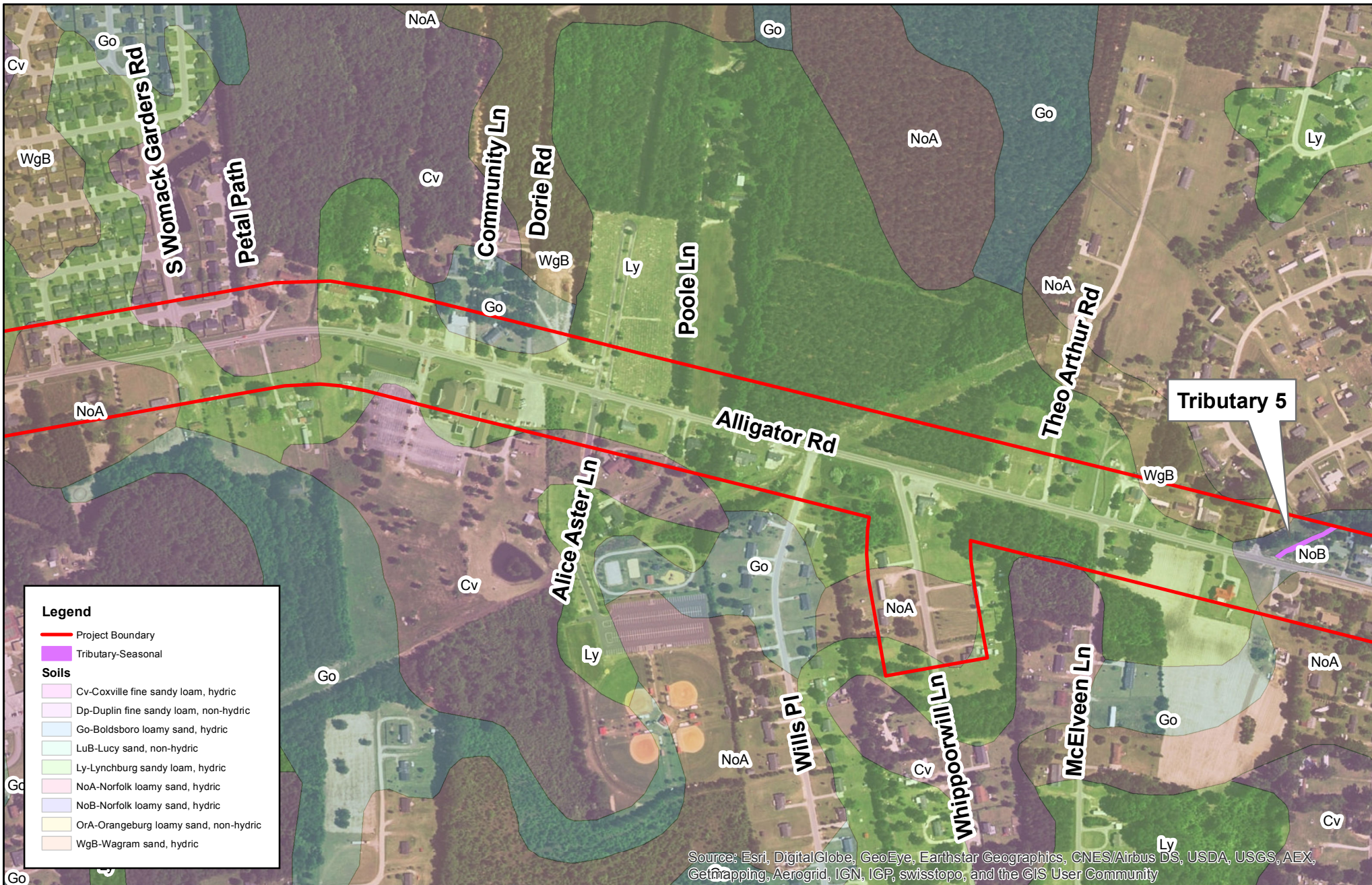
Prepared:  
9/8/2016  
By:



**Figure 4d: Soils**  
Alligator Rd Widening  
Florence County, SC



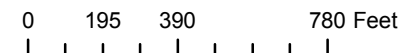




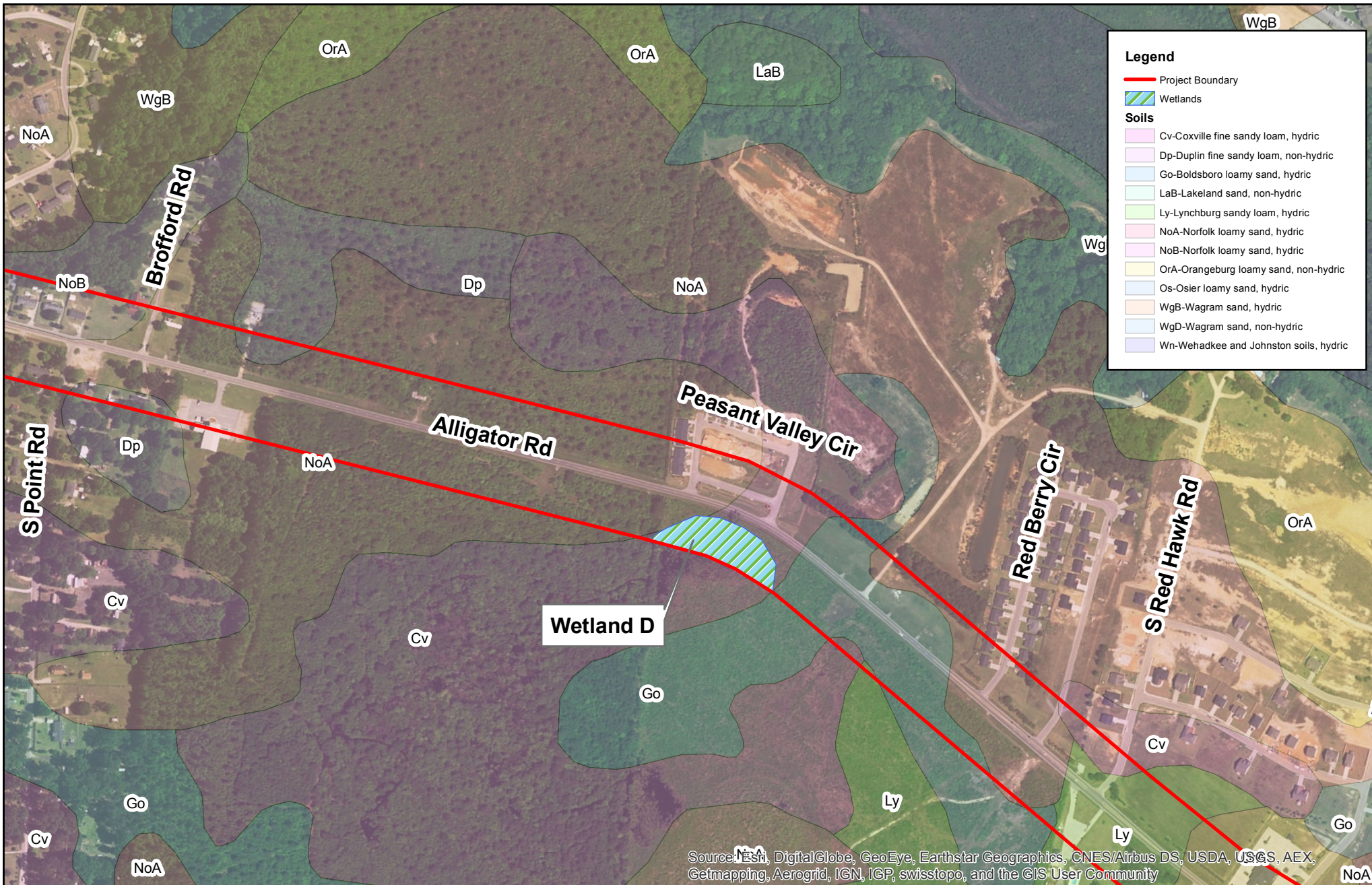
Prepared:  
9/8/2016  
By:



**Figure 4e: Soils**  
**Alligator Rd Widening**  
**Florence County, SC**







**Legend**

- Project Boundary
- Wetlands

**Soils**

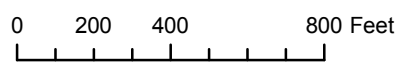
- Cv-Coxville fine sandy loam, hydric
- Dp-Duplin fine sandy loam, non-hydric
- Go-Boldsboro loamy sand, hydric
- LaB-Lakeland sand, non-hydric
- Ly-Lynchburg sandy loam, hydric
- NoA-Norfolk loamy sand, hydric
- NoB-Norfolk loamy sand, hydric
- OrA-Orangeburg loamy sand, non-hydric
- Os-Osier loamy sand, hydric
- WgB-Wagram sand, hydric
- WgD-Wagram sand, non-hydric
- Wn-Wehadkee and Johnston soils, hydric

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

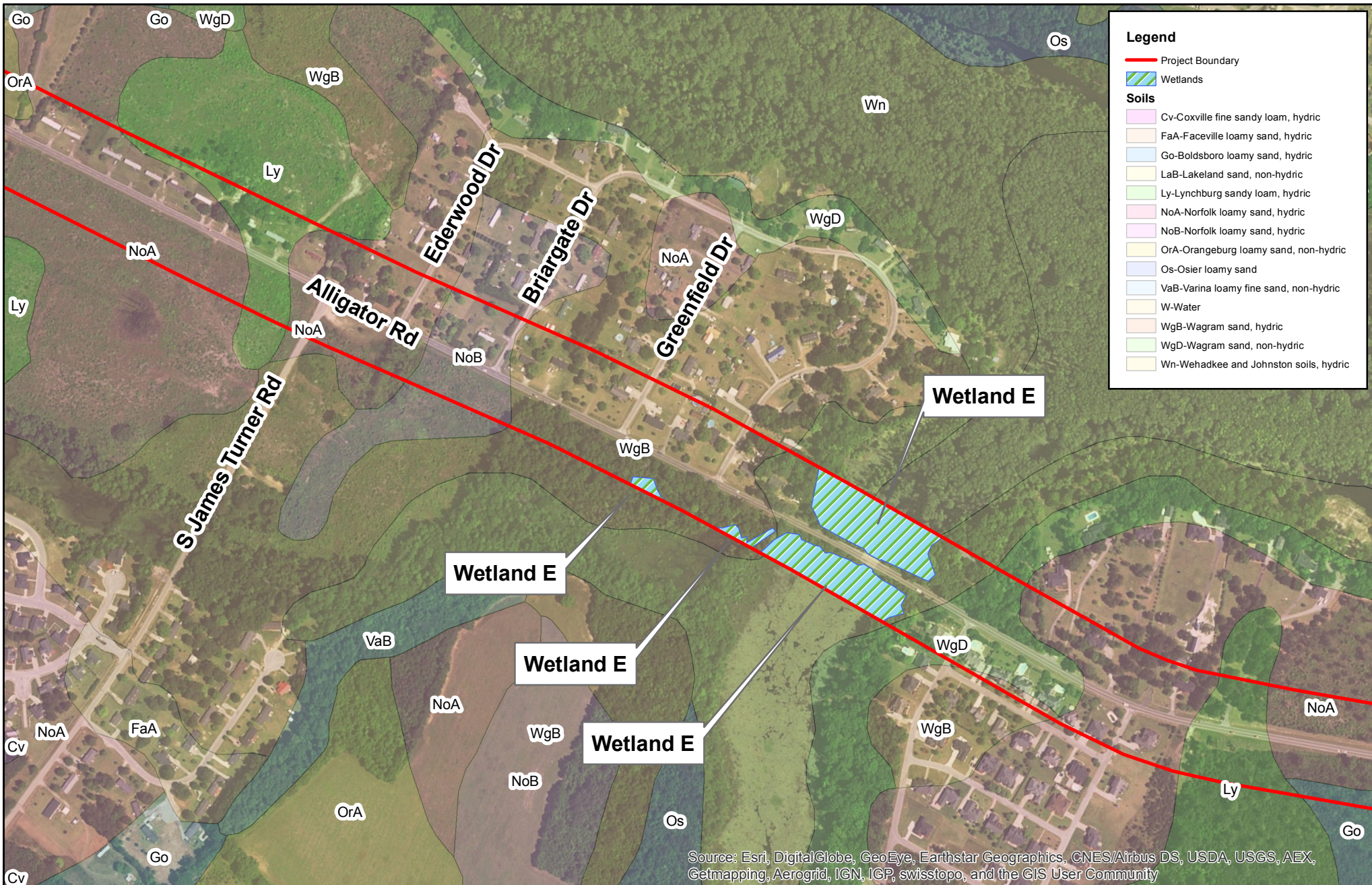
Prepared:  
9/8/2016  
By:



**Figure 4f: Soils**  
Alligator Rd Widening  
Florence County, SC







**Legend**

- Project Boundary
- Wetlands

**Soils**

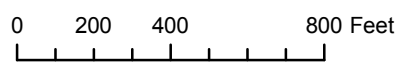
- Cv-Coxville fine sandy loam, hydric
- FaA-Faceville loamy sand, hydric
- Go-Boldsboro loamy sand, hydric
- LaB-Lakeland sand, non-hydric
- Ly-Lynchburg sandy loam, hydric
- NoA-Norfolk loamy sand, hydric
- NoB-Norfolk loamy sand, hydric
- OrA-Orangeburg loamy sand, non-hydric
- Os-Osier loamy sand
- VaB-Varina loamy fine sand, non-hydric
- W-Water
- WgB-Wagram sand, hydric
- WgD-Wagram sand, non-hydric
- Wn-Wehadkee and Johnston soils, hydric

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:



**Figure 4g: Soils**  
Alligator Rd Widening  
Florence County, SC





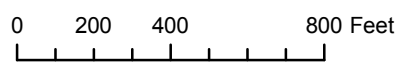


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:



**Figure 4h: Soils**  
Alligator Rd Widening  
Florence County, SC





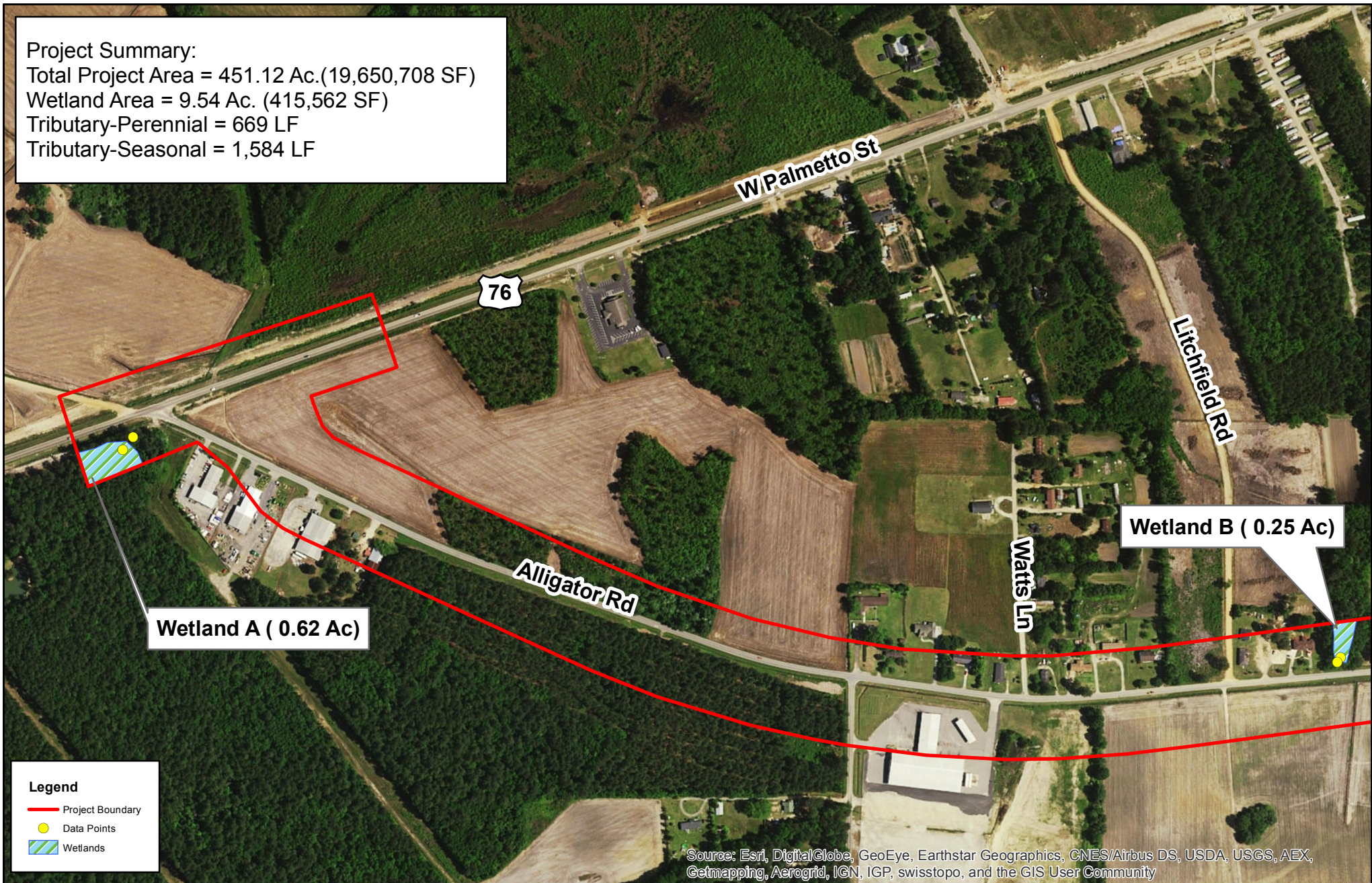
**Project Summary:**

Total Project Area = 451.12 Ac. (19,650,708 SF)

Wetland Area = 9.54 Ac. (415,562 SF)

Tributary-Perennial = 669 LF

Tributary-Seasonal = 1,584 LF



**Legend**

- Project Boundary
- Data Points
- Wetlands

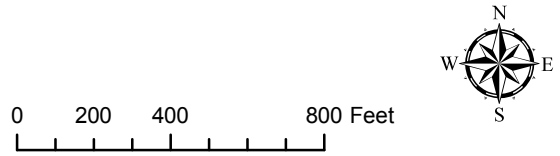
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:



**Figure 5a: Jurisdictional Features**

Alligator Rd Widening  
Florence County, SC





**Legend**

- Project Boundary
- Data Points
- Wetlands
- Tributary-Perennial

Project Summary:  
Total Project Area = 451.12 Ac.(19,650,708 SF)  
Wetland Area = 9.54 Ac. (415,562 SF)  
Tributary-Perennial = 669 LF  
Tributary-Seasonal = 1,584 LF

Tributary-Perennial 1  
( 309 LF)

Proctor Rd

Bridlepath Ln

Alligator Rd

Wetland C ( 0.25 Ac)

Wetland C ( 0.24 Ac)

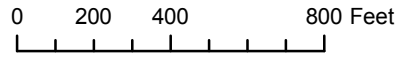
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
9/8/2016  
By:



**Figure 5b: Jurisdictional Features**

Alligator Rd Widening  
Florence County, SC





Project Summary:  
 Total Project Area = 451.12 Ac.(19,650,708 SF)  
 Wetland Area = 9.54 Ac. (415,562 SF)  
 Tributary-Perennial = 669 LF  
 Tributary-Seasonal = 1,584 LF

Tributary-Seasonal 2  
 (962 LF)

Tributary-Perennial 3  
 (360 LF)

Twin Church Rd

McLaurin Dr

Alligator Rd

Twin Church Rd

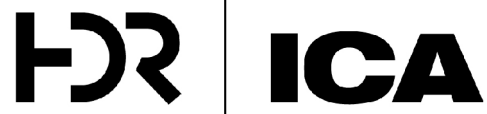
Parrott Dr

Buckshot Rd

**Legend**  
 — Project Boundary  
 — Tributary-Perennial  
 — Tributary-Seasonal

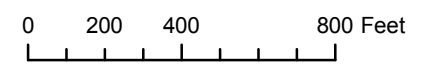
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
 9/8/2016  
 By:

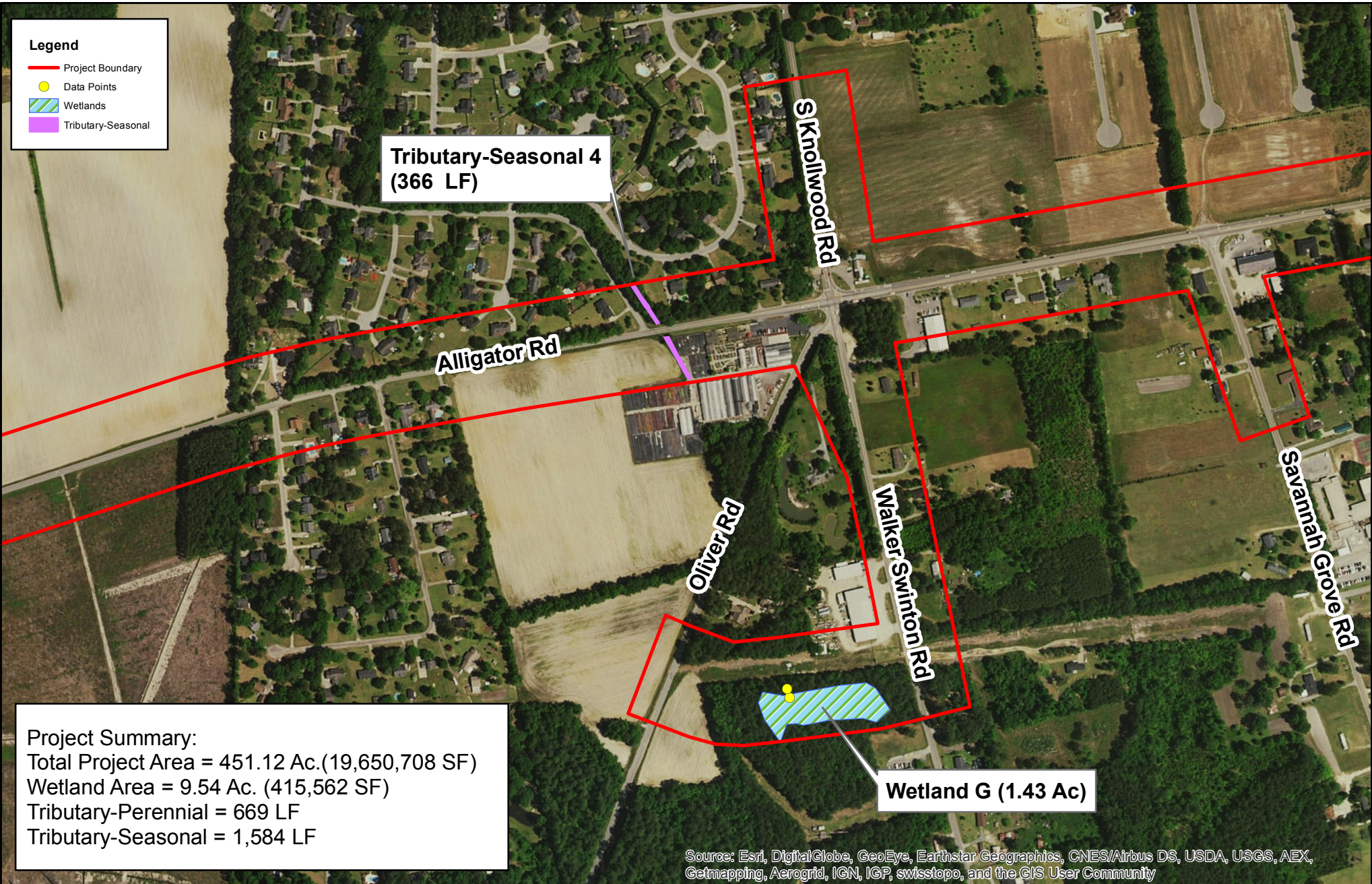


**Figure 5c: Jurisdictional Features**

Alligator Rd Widening  
 Florence County, SC





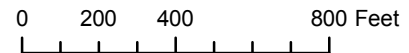


Prepared:  
9/8/2016  
By:



**Figure 5d: Jurisdictional Features**

**Alligator Rd Widening  
Florence County, SC**





Project Summary:  
 Total Project Area = 451.12 Ac. (19,650,708 SF)  
 Wetland Area = 9.54 Ac. (415,562 SF)  
 Tributary-Perennial = 669 LF  
 Tributary-Seasonal = 1,584 LF

Tributary-Seasonal 5  
 (256 LF)

**Legend**  
 — Project Boundary  
 — Perennial-Seasonal

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
 9/8/2016  
 By:



**Figure 5e: Jurisdictional Features**

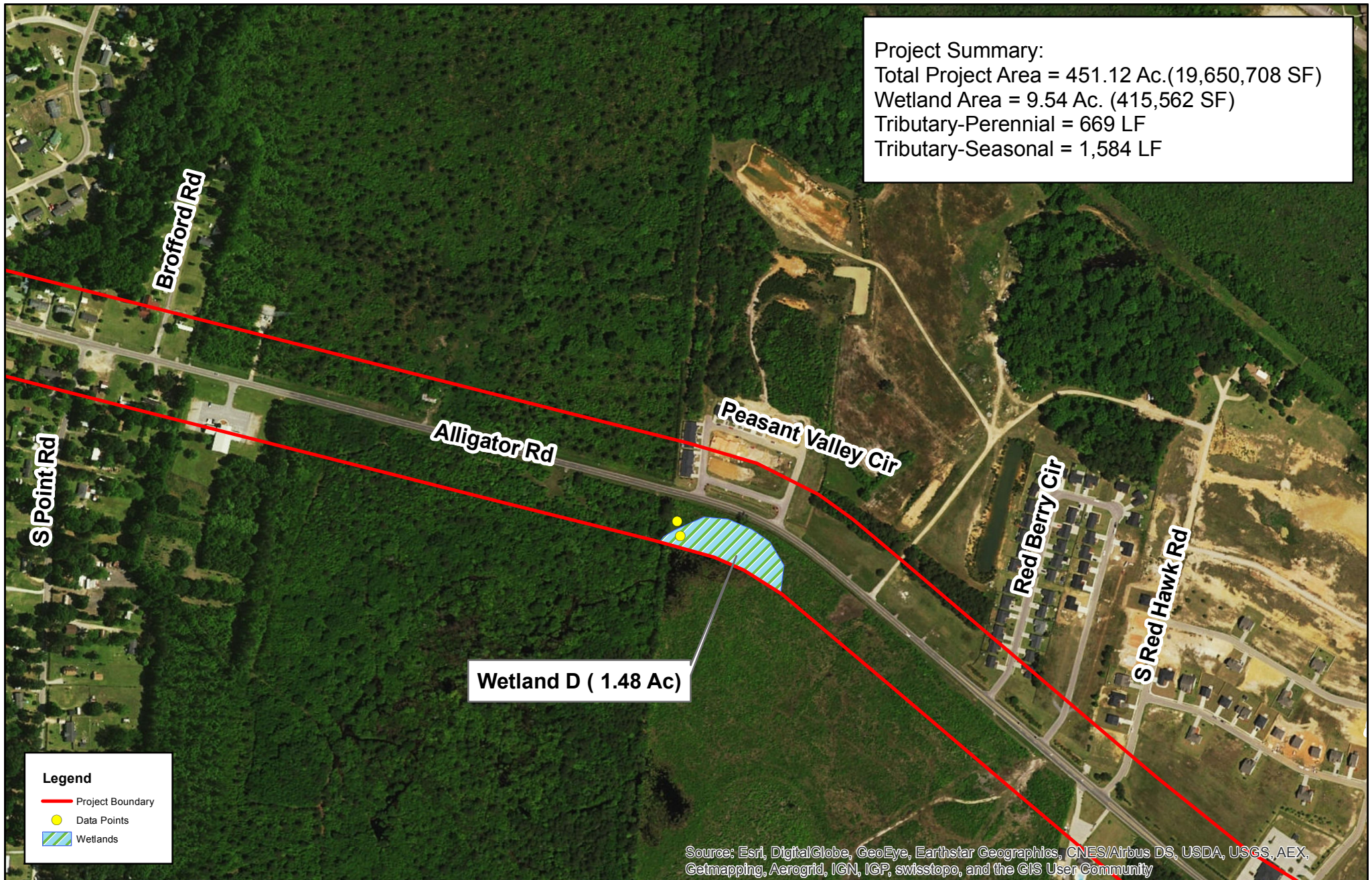
Alligator Rd Widening  
 Florence County, SC

0 200 400 800 Feet





Project Summary:  
 Total Project Area = 451.12 Ac. (19,650,708 SF)  
 Wetland Area = 9.54 Ac. (415,562 SF)  
 Tributary-Perennial = 669 LF  
 Tributary-Seasonal = 1,584 LF



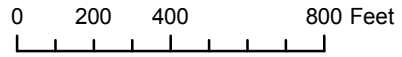
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
 9/8/2016  
 By:



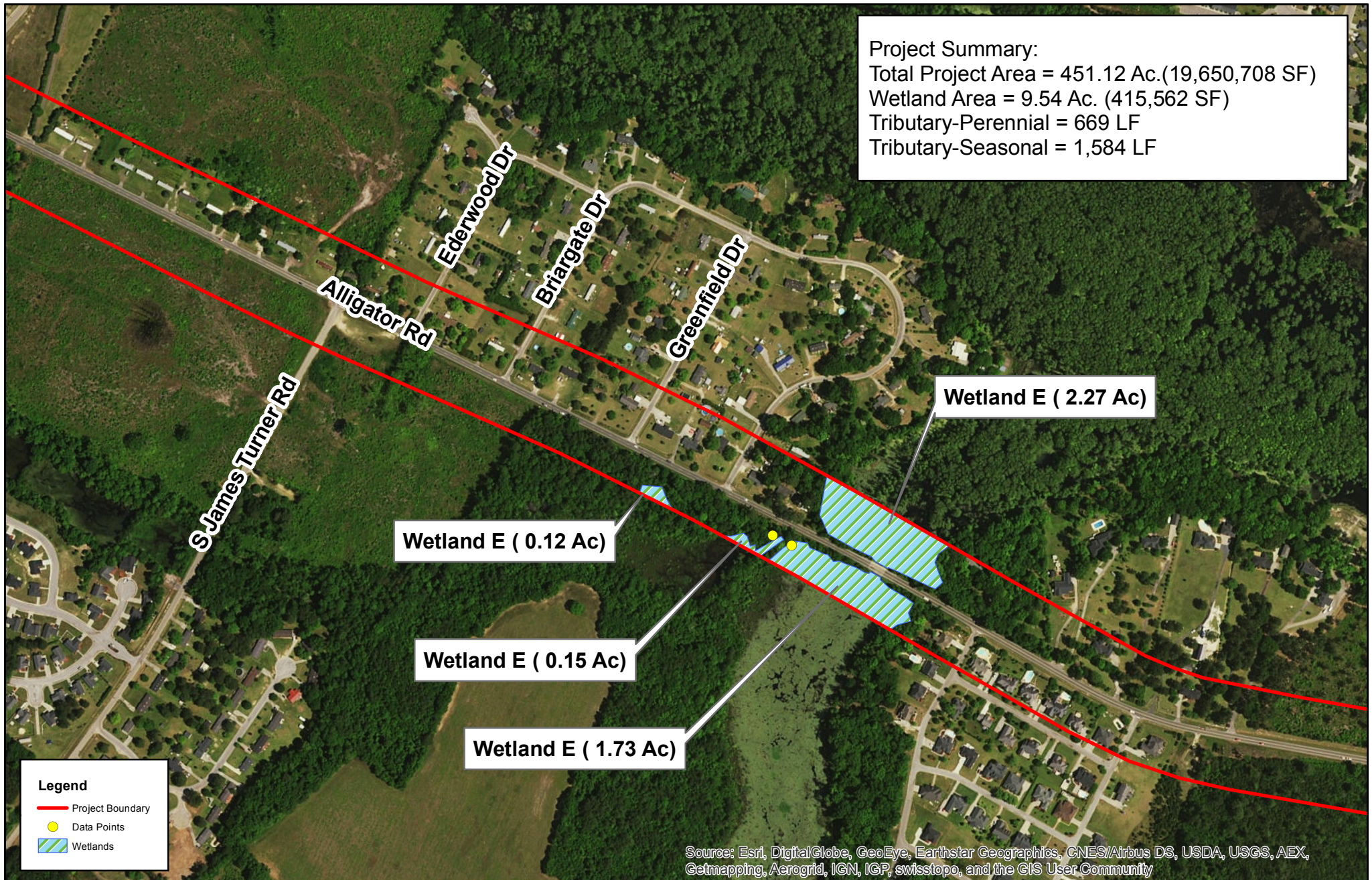
**Figure 5f: Jurisdictional Features**

Alligator Rd Widening  
 Florence County, SC





Project Summary:  
 Total Project Area = 451.12 Ac.(19,650,708 SF)  
 Wetland Area = 9.54 Ac. (415,562 SF)  
 Tributary-Perennial = 669 LF  
 Tributary-Seasonal = 1,584 LF



**Legend**

- Project Boundary
- Data Points
- Wetlands

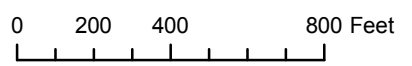
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared:  
 9/8/2016  
 By:

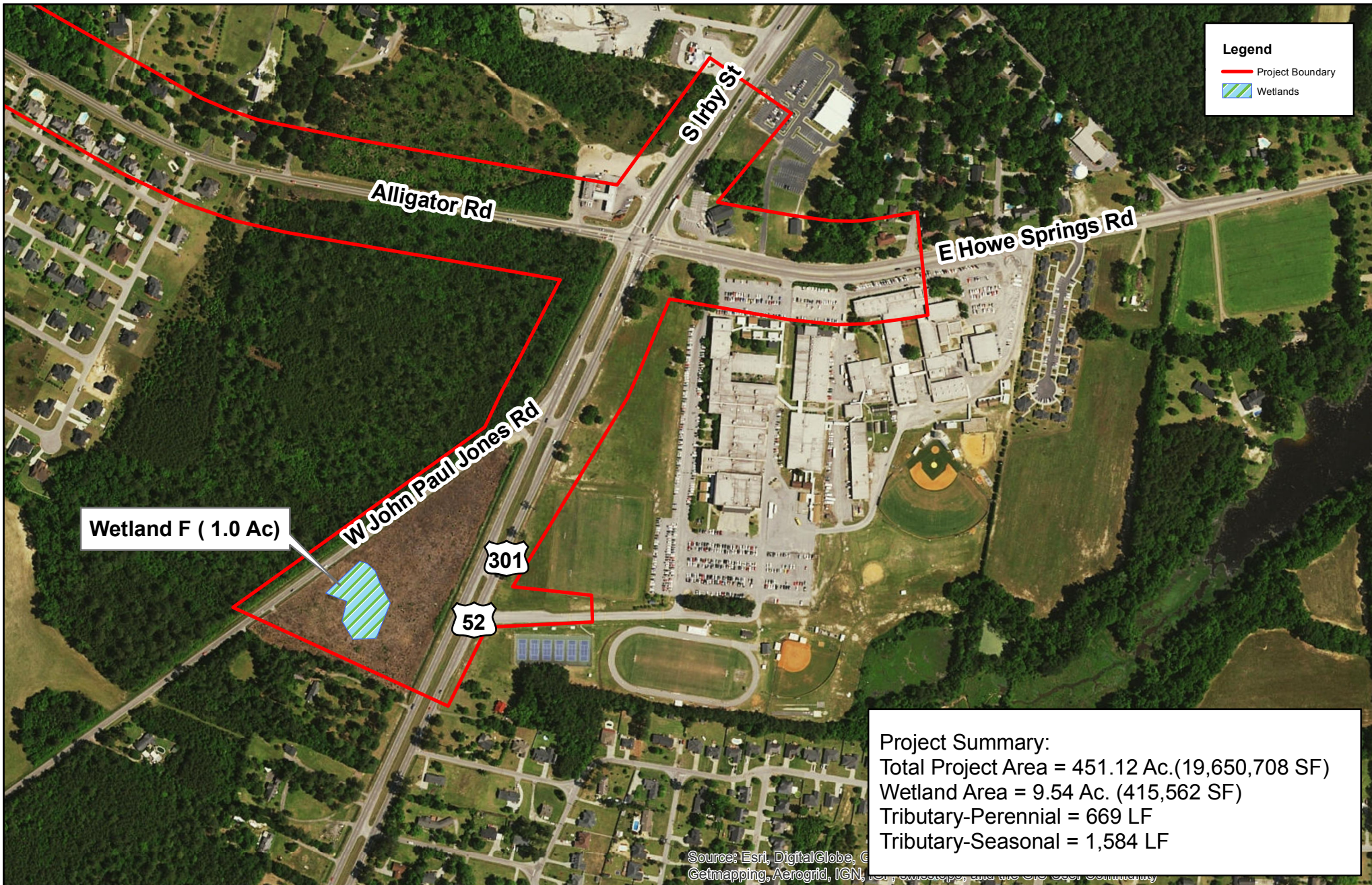


**Figure 5g: Jurisdictional Features**

Alligator Rd Widening  
 Florence County, SC





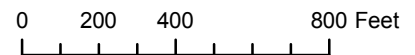


Prepared:  
9/8/2016  
By:



**Figure 5h: Jurisdictional Features**

Alligator Rd Widening  
Florence County, SC





## **Appendix B**

### Species List – Florence County

## South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species - Florence County

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
<b>Amphibian</b>	None Found			
<b>Bird</b>	American wood stork (T)	<i>Mycteria americana</i>	February 15-September 1	Nesting season
	Bald eagle (BGEPA)	<i>Haliaeetus leucocephalus</i>	October 1-May 15	Nesting season
	Red-cockaded woodpecker (E)	<i>Picoides borealis</i>	April 1-July 31	Nesting season
<b>Crustacean</b>	None Found			
<b>Fish</b>	American eel (ARS)	<i>Anguilla rostrata</i>	March 1-May 30; October 1-December 15	Temperature dependent: normally (17-20°C); can be found between 13-25°C
	Atlantic sturgeon* (E)	<i>Acipenser oxyrinchus*</i>	February 1-April 30	Spawning migration
	Blueback herring (ARS)	<i>Alosa aestivalis</i>	Mid-January-mid May	Peak: March-April
	Robust redhorse (ARS)	<i>Moxostoma robustum</i>	Late April-early May	Temperature dependent: 16-24°C
	Shortnose sturgeon* (E)	<i>Acipenser brevirostrum*</i>	February 1-April 30	Spawning migration
<b>Insect</b>	None Found			
<b>Mammal</b>	Tri-colored bat (ARS*)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
<b>Mollusk</b>	None Found			
<b>Plant</b>	American chaffseed (E)	<i>Schwalbea americana</i>	May-August	1-2 months after a fire
	Bay boneset (ARS)	<i>Eupatorium paludicola</i>	August-September	
	Boykin's lobelia (ARS)	<i>Lobelia boykinii</i>	May-July/August	
	Canby's dropwort (E)	<i>Oxypolis canbyi</i>	Mid-July-September	
	Carolina-birds-in-a-nest (ARS)	<i>Macbridea caroliniana</i>	July-November	
	Evergreen quillwort (ARS)	<i>Isoetes heyemalis</i>	Late June-July	
	Georgia leadplant (ARS)	<i>Amorpha georgiana var. georgiana</i>	Late April-October	
	Yellow pond lily (ARS)	<i>Nuphar lutea ssp. sagittifolia</i>	April-October	
<b>Reptile</b>	Spotted turtle (ARS)	<i>Clemmys guttata</i>	February-mid April	

\* Contact National Marine Fisheries Service (NMFS) for more information on this species

\*\* The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species

ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.

ARS\* Species that are either former Candidate Species or are emerging conservation priority species

BGEPA Federally protected under the Bald and Golden Eagle Protection Act

C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species

CH Critical Habitat

E Federally Endangered

P or P - CH Proposed for listing or critical habitat in the Federal Register

S/A Federally protected due to similarity of appearance to a listed species

T Federally Threatened

These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

For a list of State endangered, threatened, and species of concern, please visit <https://www.dnr.sc.gov/species/index.html>.

## APPENDIX C

### Farmland Conversion Impact Rating Form

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>	3. Date of Land Evaluation Request	4. Sheet 1 of _____
---	------------------------------------	---------------------

1. Name of Project	5. Federal Agency Involved
--------------------	----------------------------

2. Type of Project	6. County and State
--------------------	---------------------

<b>PART II (To be completed by NRCS)</b>	1. Date Request Received by NRCS	2. Person Completing Form
--	----------------------------------	---------------------------

3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated   Average Farm Size
---	--

5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ %	7. Amount of Farmland As Defined in FPPA Acres: _____ %
------------------	---	--

8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
--	---	---

<b>PART III (To be completed by Federal Agency)</b>	<b>Alternative Corridor For Segment</b>			
	Corridor A	Corridor B	Corridor C	Corridor D

A. Total Acres To Be Converted Directly				
---	--	--	--	--

B. Total Acres To Be Converted Indirectly, Or To Receive Services				
---	--	--	--	--

C. Total Acres In Corridor				
----------------------------	--	--	--	--

<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
--	--	--	--	--

A. Total Acres Prime And Unique Farmland				
--	--	--	--	--

B. Total Acres Statewide And Local Important Farmland				
---	--	--	--	--

C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
---	--	--	--	--

D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
--	--	--	--	--

<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>				
--	--	--	--	--

<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points			
--	----------------	--	--	--

1. Area in Nonurban Use	15			
-------------------------	----	--	--	--

2. Perimeter in Nonurban Use	10			
------------------------------	----	--	--	--

3. Percent Of Corridor Being Farmed	20			
-------------------------------------	----	--	--	--

4. Protection Provided By State And Local Government	20			
--	----	--	--	--

5. Size of Present Farm Unit Compared To Average	10			
--	----	--	--	--

6. Creation Of Nonfarmable Farmland	25			
-------------------------------------	----	--	--	--

7. Availability Of Farm Support Services	5			
--	---	--	--	--

8. On-Farm Investments	20			
------------------------	----	--	--	--

9. Effects Of Conversion On Farm Support Services	25			
---	----	--	--	--

10. Compatibility With Existing Agricultural Use	10			
--	----	--	--	--

TOTAL CORRIDOR ASSESSMENT POINTS	160			
----------------------------------	-----	--	--	--

<b>PART VII (To be completed by Federal Agency)</b>				
---	--	--	--	--

Relative Value Of Farmland (From Part V)	100			
--	-----	--	--	--

Total Corridor Assessment (From Part VI above or a local site assessment)	160			
---	-----	--	--	--

<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>			
--	------------	--	--	--

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?  YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---	-----------------------	--

5. Reason For Selection:	
--------------------------	--

Signature of Person Completing this Part:	DATE
---	------

**NOTE: Complete a form for each segment with more than one Alternate Corridor**

## APPENDIX D

### Location and Hydraulic Design of Encroachments of Floodplain Checklist

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

COUNTY: Florence

DATE: 09/28/2016

ROAD #: S-107

STREAM CROSSING: Alligator Branch

Purpose & Need for the Project:

The purpose of the proposed Alligator Road project is to improve the operational efficiency of the roadway to accommodate existing and future traffic conditions. The secondary purpose is to enhance local connectivity around the City of Florence.

I. FEMA Acknowledgement

Is this project located in a regulated FEMA Floodway?  Yes  No

Panel Number: 143 of 565 Effective Date: 12/16/2014 (See Attached)

II. FEMA Floodmap Investigation

FEMA Flood Profile Sheet Number 02P illustrates the existing 100 year flood:

- Passes under the existing low chord elevation.
 Is in contact with the existing low chord elevation.
 Overtops the existing bridge finished grade elevation.

III. No Rise/CLOMR Preliminary Determination

Preliminary assessment indicates this project may be constructed to meet the "No-Rise" requirements. A detailed hydraulic analysis will be performed to verify this assessment.

Justification: A preliminary detailed study has been performed by utilizing and updating the modeling performed by FEMA for this area. The proposed bridge is not expected to increase the water surface.

Preliminary assessmnet indicates this project may require a CLOMR/LOMR. Impacts will be determined by a detailed hydraulic analysis.

Justification:

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

IV. Preliminary Bridge Assessment

A. Locate Existing Plans

a. Bridge Plans  Yes File No. \_\_\_\_\_ Sheet No. \_\_\_\_\_ (See Attached)  No

b. Road Plans  Yes File No. 21.19 4B Sheet No. 16 (See Attached)  No

B. Historical Highwater Data

a. USGS Gage  Yes Gage No. \_\_\_\_\_ Results: \_\_\_\_\_  No

b. SCDOT/USGS Documented Highwater Elevations  Yes Results: \_\_\_\_\_  No

c. Existing Plans  Yes See Above  No

V. Field Review

A. Existing Bridge

Length: 66 ft. Width: 36 ft. Max. span Length: 22 ft.

Alignment:  Tangent  Curved

Bridge Skewed:  Yes  No Angle: <5 degrees

End Abutment Type: Spillthrough

Riprap on End Fills:  Yes  No Condition: Good

Superstructure Type: Concrete

Substructure Type: Concrete piles

Utilities Present:  Yes  No Describe:

Debris Accumulation on Bridge: Percent Blocked Horizontally: 2 % Percent Blocked Vertically: \_\_\_\_\_ %

Hydraulic Problems:  Yes  No Describe:



**BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM**

V. Field Review (cont.)

B. Hydraulic Features

a. Scour Present:  Yes  No Location: at piers and beneath bridge

b. Distance from F.G. to Normal Water Elevation: 5 ft.

c. Distance from Low Steel to Normal Water Elev.: 6 ft.

d. Distance from F.G. to High Water Elevation: N/A ft.

e. Distance from Low Steel to High Water Elev.: N/A ft.

f. Channel Banks Stable:  Yes  No

Describe: Heavy vegetation along banks

g. Soil Type: Sandy

h. Exposed Rock:  Yes  No Location: \_\_\_\_\_

i. Give Description and Location of any structures or other property that could be damaged due to additional backwater.

No structures nearby. Swampy Floodplain.

C. Existing Roadway Geometry

a. Can the existing roadway be closed for an On-Alignment Bridge Replacement  
 Yes  No

Describe:  
No close detour

If "yes", does the existing vertical and horizontal curves meet the proposed design speed criteria?

\_\_\_\_\_

If "No", will the proposed bridge be:

Staged Constructed  
 Replaced on New Alignment

**BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM**

VI. Field Review (cont.)

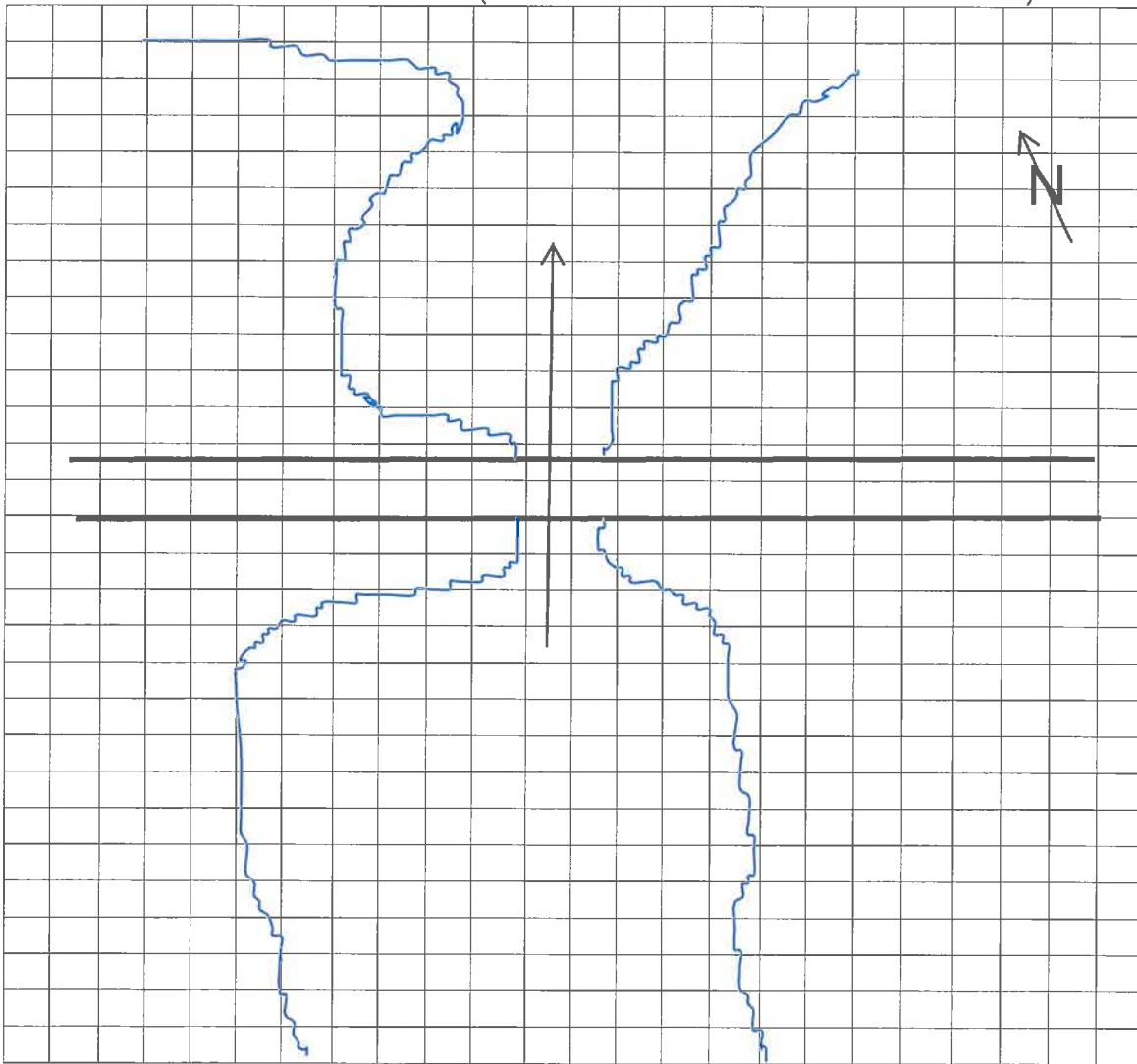
A. Proposed Bridge Recommendation:

Length: +/-70 ft.      Width: 82 ft.      Elevation: Low 93.3 ft.

Span Arrangement: +/- 20-30-20

Notes: The low chord must be raised slightly. The bridge must be lengthened  
minimally to mitigate for the extra bridge width.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BRIDGE SITE DIAGRAM: (Show North Arrow and Direction of Flow)



Performed By: Lauren Warmuth, PE

Page 4 of 4 



INDEX OF SHEETS		SHEET SUBTOTALS
SHEET NO.	DESCRIPTION	
1	TITLE SHEET	1
2	SUMMARY OF ESTIMATED QUANTITIES	1
3-4	TYPICAL SECTIONS	2
5	REFERENCE SHEET	1
6-18	PLAN AND PROFILE	13
19	EROSION CONTROL DATA SHEET	1
TOTAL		19

# SCDOT

South Carolina Department of Transportation

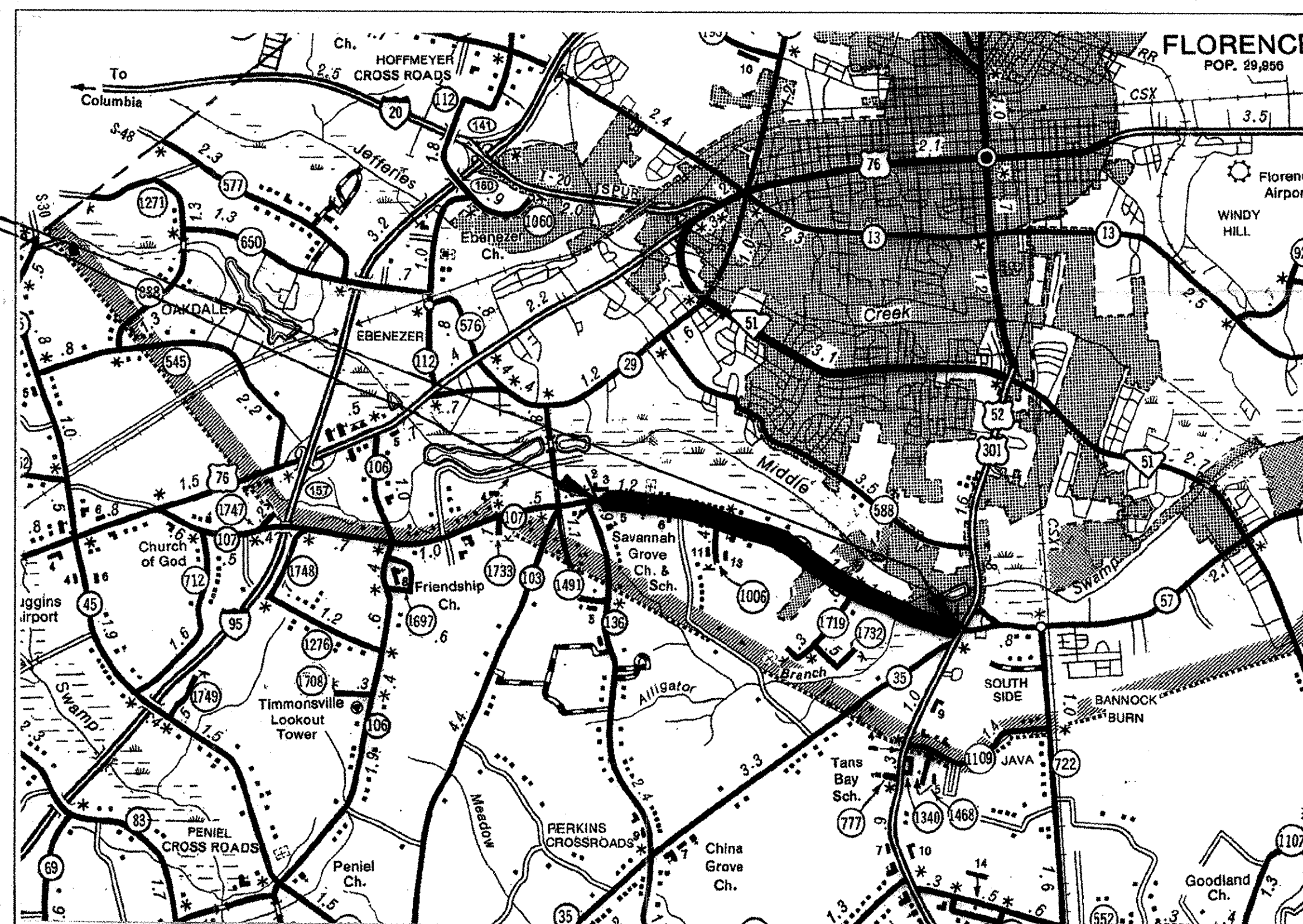
## PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

### FLORENCE

FILE 21.194B PROJ. CRS-CR21

IMPROVEMENTS ON ROAD S-107 (ALLIGATOR)

FILE 21.2004 S-107  
SURVEY STA 22+50 TO STA 199+07



Design Reference for these plans is the:  
2001  
AASHTO "A Policy on Geometric Design of Highways and Streets"

NPDES PERMIT INFORMATION  
NPDES Disturbed  
Area = 17.74 Acres  
Approximate Location of Roadway is:  
Longitude 37° 09' 10"  
Latitude 79° 49' 45"

RAILROAD INVOLVEMENT  
YES / NO

Hydraulic and NPDES Design provided by:  
SCDOT  
Designs are on file with the SCDOT Hydraulic Section

PROGRAM DEVELOPMENT ENGINEER  
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER  
DATE

ROAD ENGINEER-DESIGN  
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER  
NO. 7220  
JOHNSON L. JOHNSON  
FOR RIGHT OF WAY: 6-23-2005  
FOR CONSTRUCTION: 6-23-2005  
DATE

APPROVED FOR  
MAYOR: Frank E. Wall 8-8-06  
COUNCIL MEMBERS:  
8-8-05  
8-8-05  
8-8-05  
8-8-05  
8-8-05  
8-8-05  
CLERK: Dianna M. Rawson 8-8-05

TRAFFIC DATE  
2003 ADT 6900  
TRUCKS 4%

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA  
CALL 1-800-922-0983  
PALMETTO UTILITY PROTECTION SERVICE

ROAD S-22-107  
START PROJECT STA. 22+50  
END PROJECT STA. 199+07

	S-107	TOTAL	MILES
NET LENGTH OF ROADWAY	3.344	3.344	
NET LENGTH OF BRIDGES	0.000	0.000	
NET LENGTH OF PROJECTS	3.344	3.344	
LENGTH OF EXCEPTIONS	0.000	0.000	
GROSS LENGTH OF PROJECT	3.344	3.344	

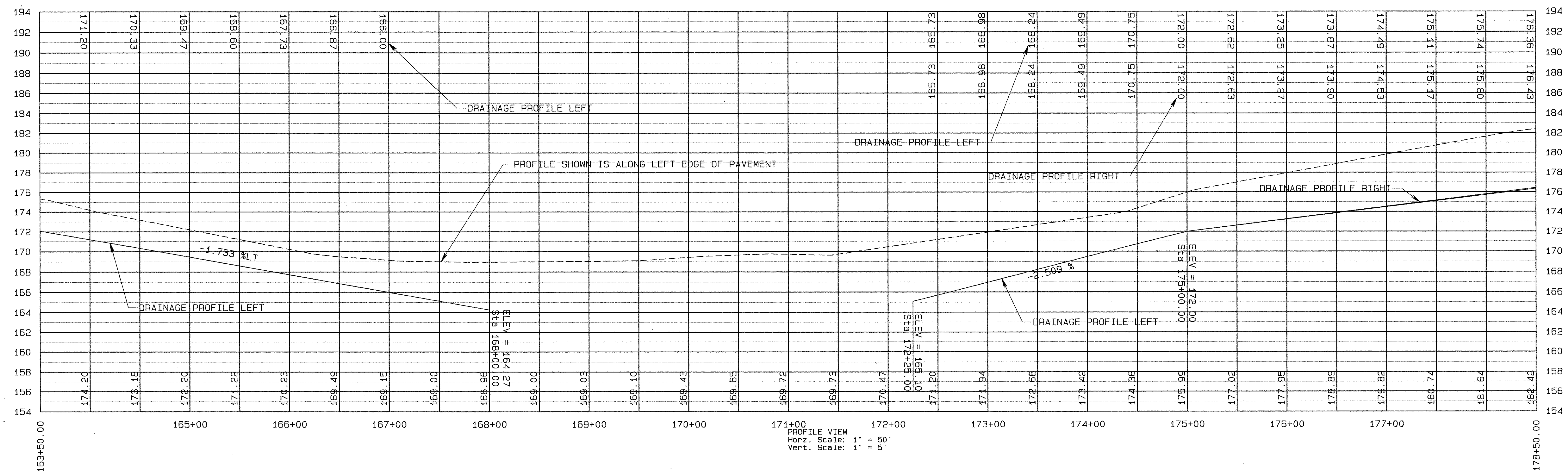
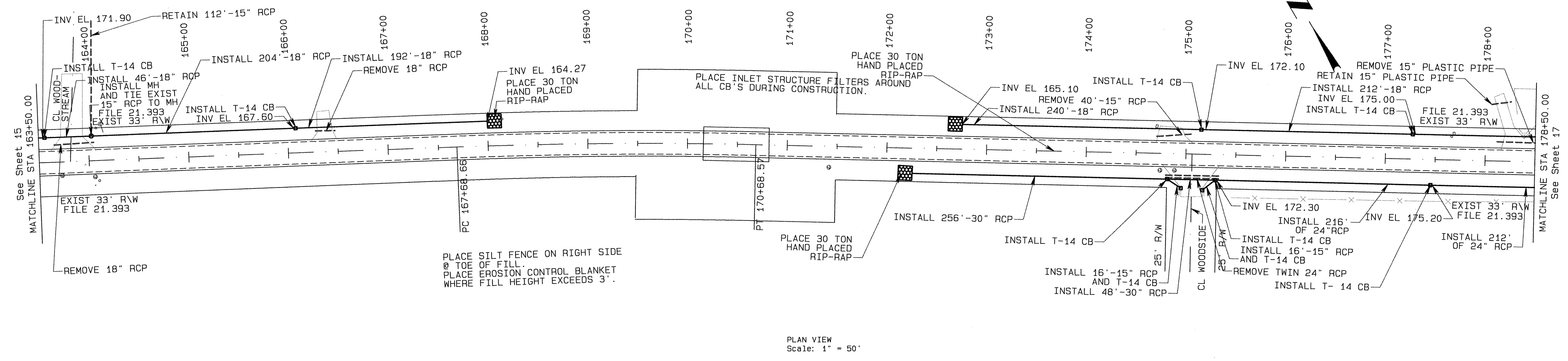
EQUALITIES IN STATIONING  
NONE

NOTE: ALL WORKMANSHIP AND MATERIAL ON THIS PROJECT TO CONFORM WITH SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION), AND BOOK OF STANDARD DRAWINGS FOR ROAD CONSTRUCTION (LATEST PUBLISHED ENGLISH REVISION).



FED. RD. DIV. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	SC	FLORENCE	21.1948	STP-RIS4(034)	S-107	16	19

163+65.50	-17.3	"TOP18" "RCD+"	164+12.79	-34.8	WM	174+79.97	21.3	"TOP24" "RCP+"
163+72.67	19.3	MV	164+15.12	-28.1	GLY	174+84.89	16.4	MV
164+03.00	-25.4	"TOP15" "RCP--"	166+27.93	-21.5	"TOP18" "RCP+"	175+04.85	-20.2	"TOP15" "RCP--"
164+05.07	-18.5	"TOP18" "RCD--"	166+47.24	-21.1	"TOP18" "RCP--"	175+35.92	23.6	"TOP24" "RCP--"
164+05.62	24.0	FH	168+14.55	-26.7	CTV	175+35.96	21.0	"TOP24" "RCP--"
164+05.72	15.8	MV	171+42.25	21.0	WV	177+66.12	-23.5	TPED
164+07.13	-140.2	"TOP15" "RCP+"	174+70.15	-26.0	WM	177+68.53	-25.0	1.5x2.5CTV
164+07.93	-32.9	TPED	174+70.49	-17.2	"TOP15" "RCP+"	178+05.68	-56.9	"TOP15" "CMPX2+"
164+09.78	19.7	CTV	174+74.24	16.7	MV	178+14.99	-19.3	"TOP15" "ABS+"
164+11.95	-35.7	FOC	174+75.11	29.9	FH	178+25.05	-59.9	"TOP15" "CMPX2--"
164+12.48	-36.7	PP	174+79.91	23.9	"TOP24" "RCP+"			





**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (CBFEs) shown on this map apply only to landward of 1/2 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the FIS report for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Lambert Conformal Conic, The State of South Carolina FIPS 3900. The horizontal datum was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NCEM, NAD83  
National Geodetic Survey  
SANDS #9202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (202) 713-3242 or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was provided in digital format by Florence County, South Carolina.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to the more detailed stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contain authoritative hydraulic data) may reflect stream channel details that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

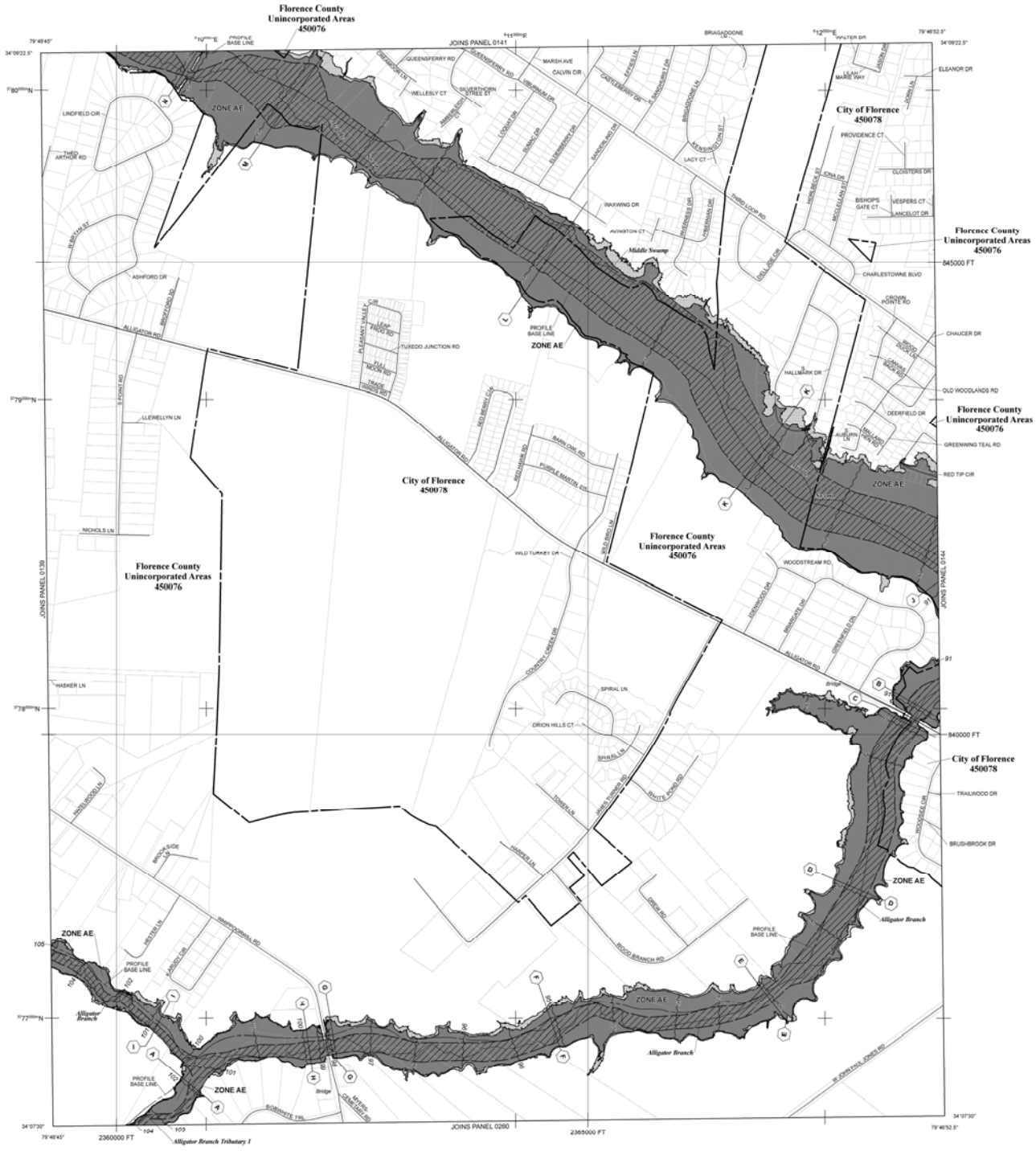
Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information and questions about this map, available products associated with this FIRM including historic versions of the FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Mapping Information Exchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service website at <http://www.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

The "profile base lines" depicted on this map represent the hydraulic modeling boundaries that match the flood profiles in the FIS report. As a result of improved topographic data, the "profile base line", in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.



<http://www.dnr.state.sc.us/>



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AV, A99, X, and Y. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

**ZONE A**  
No Base Flood Elevations determined.

**ZONE AE**  
Base Flood Elevations determined.

**ZONE AH**  
Flood depths of 1 to 3 feet (cavalry areas of ponds); Base Flood Elevations determined.

**ZONE AO**  
Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depth determined. For areas of actual flood flooding, velocities also determined.

**ZONE AR**  
Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently abandoned. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

**ZONE A99**  
Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.

**ZONE AV**  
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

**ZONE V**  
Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

Other Flood Areas

**OTHER FLOOD AREAS**

**ZONE X**  
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with otherwise areas less than 1 square mile, and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE D**  
Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE U**  
Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain boundary  
Floodway boundary  
Zone D boundary  
CBRS and OPA boundary  
Boundary, Shading, Special Flood Hazard Area Zones and boundaries showing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities  
Base Flood Elevation line and value; elevation in feet\*  
Base Flood Elevation value where uniform within zone; elevation in feet\*  
\*As referenced to the North American Datum of 1988

Class section line  
Tangent line  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere  
47°00'00" Universal Transverse Mercator grid tick, zone 17  
5000000 FT grid values; South Carolina State three coordinate system (SPSCoE = 3902), Lambert projection  
Bench mark (see explanation in notes to users section of this FIRM panel)  
MAP REPOSITORIES  
Refer to Map Repositories List on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
December 16, 2014

EFFECTIVE DATES OF REVISIONS TO THIS PANEL  
December 16, 2014 - to update corporate limits, to change Base Flood Elevations, to add Base Flood Elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to update roads and road names, to reflect updated topographic information, and to change boundary.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-645-6242.

MAP SCALE 1" = 500'

**NFIP**

**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0143E

**FIRM**

**FLOOD INSURANCE RATE MAP**

**FLORENCE COUNTY, SOUTH CAROLINA AND INCORPORATED AREAS**

PANEL 143 OF 565  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS	COMMUNITY	NUMBER	PANEL	SUFFIX
FLORENCE COUNTY	450076	0143	E	
FLORENCE CITY OF	450078	0143	E	

MAP NUMBER 450410143E  
MAP REVISED DECEMBER 16, 2014  
Federal Emergency Management Agency

**APPENDIX E**  
**Interim Guidance Update on Mobile Source**  
**Air Toxic Analysis in NEPA**



# Air Quality

Transportation & Toxic Air Pollutants



## Memorandum

U.S. Department of Transportation  
Federal Highway Administration

**Subject:** INFORMATION: Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA

**From:**  
*Original Signed by:* April Marchese  
Director, Office of Natural Environment

**Date:** December 6, 2012

**Reply to:** HEPN-10

**To:**  
Division Administrators  
Federal Lands Highway Division Engineers

---

### PURPOSE

The purpose of this memorandum is to update the September 2009 interim guidance that advised Federal Highway (FHWA) Division offices on when and how to analyze Mobile Source Air Toxics (MSAT) under the National Environmental Policy Act (NEPA) review process for highway projects.

This update reflects recent changes in methodology for conducting emissions analysis and updates of research in the MSAT arena. The U.S. Environmental Protection Agency (EPA) released the latest emission model, the Motor Vehicle Emissions Simulator (MOVES) in 2010, and started a 2-year grace period to phase in the requirement of using MOVES for transportation conformity analysis. On February 8, 2011, EPA issued guidance on Using the MOVES and Emission FACTors (EMFAC) Models in NEPA Evaluation that recommended the same grace period be applied to project-level emissions analysis for NEPA purposes. At the end of this grace period, i.e. beginning December 20, 2012, project sponsors should use MOVES to conduct emissions analysis for NEPA purposes. To prepare for this transition, FHWA is updating the September 2009 Interim Guidance to incorporate the analysis conducted using MOVES. Based on FHWA's analysis using MOVES2010b, the latest version of MOVES, diesel particulate matter (diesel PM) has become the dominant MSAT of concern. We have also provided an update on the status of scientific research on air toxics. The update supersedes the September 2009 Interim Guidance and should be referenced as a whole in NEPA documentation.

### BACKGROUND

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk

Information System (IRIS) (<http://www.epa.gov/iris/>). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (<http://www.epa.gov/ttn/atw/nata1999/>). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

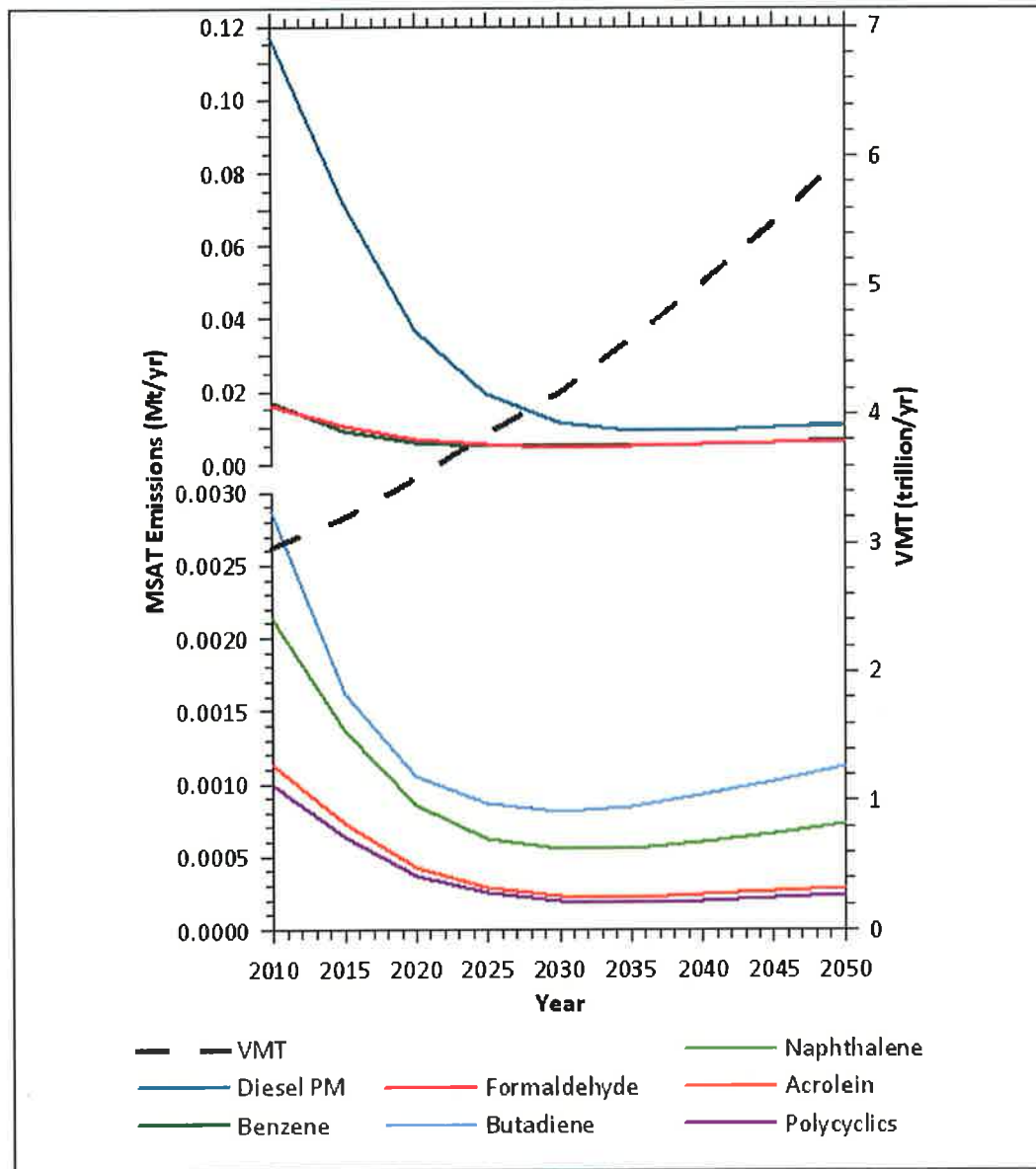
### **Motor Vehicle Emissions Simulator (MOVES)**

According to EPA, MOVES improves upon the previous MOBILE model in several key aspects: MOVES is based on a vast amount of in-use vehicle data collected and analyzed since the latest release of MOBILE, including millions of emissions measurements from light-duty vehicles. Analysis of this data enhanced EPA's understanding of how mobile sources contribute to emissions inventories and the relative effectiveness of various control strategies. In addition, MOVES accounts for the significant effects that vehicle speed and temperature have on PM emissions estimates, whereas MOBILE did not. MOVES2010b includes all air toxic pollutants in NATA that are emitted by mobile sources. EPA has incorporated more recent data into MOVES2010b to update and enhance the quality of MSAT emission estimates. These data reflect advanced emission control technology and modern fuels, plus additional data for older technology vehicles.

Based on an FHWA analysis using EPA's MOVES2010b model, as shown in Figure 1, even if vehicle-miles travelled (VMT) increases by 102 percent as assumed from 2010 to 2050, a combined reduction of 83 percent in the total annual emissions for the priority MSAT is projected for the same time period.

#### **Figure 1: NATIONAL MSAT EMISSION TRENDS 1999 - 2050 FOR VEHICLES OPERATING ON ROADWAYS USING EPA's MOVES2010b MODEL**





Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors  
 Source: EPA MOVES2010b model runs conducted during May - June 2012 by FHWA.

The implications of MOVES on MSAT emissions estimates compared to MOBILE are: lower estimates of total MSAT emissions; significantly lower benzene emissions; significantly higher diesel PM emissions, especially for lower speeds. Consequently, diesel PM is projected to be the dominant component of the emissions total.

### MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA.

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

## NEPA CONTEXT

The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. The NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA are contained in regulation at 23 CFR Part 771.

## CONSIDERATION OF MSAT IN NEPA DOCUMENTS

The FHWA developed a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances:

1. No analysis for projects with no potential for meaningful MSAT effects;
2. Qualitative analysis for projects with low potential MSAT effects; or
3. Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

For projects warranting MSAT analysis, the seven priority MSAT should be analyzed.

(1) Projects with No Meaningful Potential MSAT Effects, or Exempt Projects.

The types of projects included in this category are:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117(c) (subject to consideration whether unusual circumstances exist under 23 CFR 771.117(b));
- Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117(c), or are exempt from conformity requirements under the Clean Air Act pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. Documentation sufficient to demonstrate that the project qualifies as a categorical exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is recommended.<sup>1</sup> However, the project record should document the basis for the determination of "no meaningful potential impacts" with a brief description of the factors considered. Example language, which must be modified to correspond with local and project-specific circumstances, is provided in Appendix A.

(2) Projects with Low Potential MSAT Effects

The types of projects included in this category are those that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility

that is likely to meaningfully increase MSAT emissions. This category covers a broad range of projects.

We anticipate that most highway projects that need an MSAT assessment will fall into this category. Any projects not meeting the criteria in category (1) or category (3) below should be included in this category. Examples of these types of projects are minor widening projects; new interchanges, replacing a signalized intersection on a surface street; or projects where design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT).

For these projects, a qualitative assessment of emissions projections should be conducted. This qualitative assessment would compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, including no-build, based on VMT, vehicle mix, and speed. It would also discuss national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by EPA. Because the emission effects of these projects typically are low, we expect there would be no appreciable difference in overall MSAT emissions among the various alternatives.

Appendix B includes example language for a qualitative assessment, with specific examples for four types of projects: (1) a minor widening project; (2) a new interchange connecting an existing roadway with a new roadway; (3) a new interchange connecting new roadways; and (4) minor improvements or expansions to intermodal centers or other projects that affect truck traffic. The information provided in Appendix B must be modified to reflect the local and project-specific situation.

In addition to the qualitative assessment, a NEPA document for this category of projects must include a discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts, in compliance with the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22(b)). This discussion should explain how current scientific techniques, tools, and data are not sufficient to accurately estimate human health impacts that could result from a transportation project in a way that would be useful to decision-makers. Also in compliance with 40 CFR 150.22(b), it should contain information regarding the health impacts of MSAT. See Appendix C.

### (3) Projects with Higher Potential MSAT Effects

This category includes projects that have the potential for meaningful differences in MSAT emissions among project alternatives. We expect a limited number of projects to meet this two-pronged test. To fall into this category, a project should:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location, involving a significant number of diesel vehicles for new projects or accommodating with a significant increase in the number of diesel vehicles for expansion projects; or
- Create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000<sup>2</sup> or greater by the design year;  
And also
- Proposed to be located in proximity to populated areas.

Projects falling within this category should be more rigorously assessed for impacts. If a project falls within this category, you should contact the Office of Natural Environment (HEPN) and the Office of Project Development and Environmental Review (HEPE) in FHWA Headquarters for assistance in developing a specific approach for assessing impacts. This approach would include a quantitative analysis to forecast local-specific emission trends of the priority MSAT for each alternative, to use as a basis of comparison. This analysis also may address the potential for cumulative impacts, where appropriate, based on local conditions. How and when cumulative impacts should be considered would be addressed as part of the assistance outlined above. The

NEPA document for this project should also include relevant language on unavailable information described in Appendix C.

If the analysis for a project in this category indicates meaningful differences in levels of MSAT emissions among alternatives, mitigation options should be identified and considered. See Appendix E for information on mitigation strategies.

You should also consult with HEPN and HEPE if you have a project that does not fall within any of the types of projects listed above, but you think has the potential to substantially increase future MSAT emissions.

## CONCLUSION

What we know about mobile source air toxics is still evolving. As the science progresses FHWA will continue to revise and update this guidance. FHWA is working with Stakeholders, EPA and others to better understand the strengths and weaknesses of developing analysis tools and the applicability on the project level decision documentation process. FHWA wanted to make project sponsors aware of the implications of the transition to the MOVES model and that we will be issuing updates to this interim guidance when necessary. Additional background information on MSAT-related research is provided in Appendix D.

The FHWA Headquarters and Resource Center staff Victoria Martinez (787) 766-5600 X231, Bruce Bender (202) 366-2851, and Michael Claggett (505) 820-2047, are available to provide information and technical assistance, support any necessary analysis, and limit project delays. All MSAT analysis beginning on or after December 20, 2012, should use the MOVES model. Any MSAT analysis initiated prior to that date may continue to operate under the previous guidance and utilize MOBILE6.2. We are available to answer questions from project sponsors as we transition to MOVES.

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## APPENDICIES

Appendix A - Prototype Language for Exempt Projects

Appendix B - Prototype Language for Qualitative Project Level MSAT Analysis

Appendix C - The Council on Environmental Quality (CEQ) Provisions Covering Incomplete or Unavailable Information (40 CFR 1502.22) including a discussion of unavailable information for project-specific MSAT Health Impacts Analysis

Appendix D - FHWA Sponsored Mobile Source Air Toxics Research Efforts

Appendix E - MSAT Mitigation Strategies

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<sup>1</sup> The types of projects categorically excluded under 23 CFR 771.117(d) or exempt from certain conformity requirements under 40 CFR 93.127 does not warrant an automatic exemption from an MSAT analysis, but they usually will have no meaningful impact.

<sup>2</sup> Using EPA's MOVES2010b emissions model, FHWA staff determined that this range of AADT would result in emissions significantly lower than the Clean Air Act definition of a major hazardous air pollutant (HAP) source, i.e., 25 tons/yr. for all HAPs or 10 tons/yr. for any single HAP. Variations in conditions such as congestion or vehicle mix could warrant a different range for AADT; if this range does not seem appropriate for your project, please consult with the contacts from HEPN and HEPE identified in this memorandum.



# Air Quality

## Transportation & Toxic Air Pollutants

### Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA - Appendix B

The information in this Appendix is for projects with low potential MSAT effects - any non-exempt project that does not meet the threshold criteria for higher potential effects, as described in the interim guidance, should be considered for treatment provided here. The types of projects that fall into this category are those that improve operations of highways, or freight facilities without adding substantial new capacity. Examples include minor widening projects or new interchanges replacing signalized intersection on surface streets.

The following are some examples of qualitative MSAT analyses for different types of projects. Each project is different, and some projects may contain elements covered in more than one of the examples below. Analysts can use the example language as a starting point, but should tailor it to reflect the unique circumstances of the project being considered. The following factors should be considered when crafting a qualitative analysis:

- For projects on an existing alignment, MSAT are expected to decline due to the effect of new EPA engine and fuel standards.
- Projects that result in increased travel speeds will reduce MSAT emissions per VMT basis, although previously, the effect of speed changes on diesel particulate matter was not accounted for in the MOBILE6.2 model, however, MOVES does provide this estimation and should be accounted for accordingly. This speed benefit may be offset somewhat by increased VMT if the more efficient facility attracts additional vehicle trips.
- Projects that facilitate new development may generate additional MSAT emissions from new trips, truck deliveries, and parked vehicles (due to evaporative emissions). However, these may also be activities that are attracted from elsewhere in the metro region; thus, on a regional scale there may be no net change in emissions.
- Projects that create new travel lanes, relocate lanes, or relocate economic activity closer to homes, schools, businesses, and other populated areas may increase concentrations of MSAT at those locations relative to No Action.

**Other elements related to a qualitative analysis are a** discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts and a discussion of any MSAT mitigation measures that may be associated with the project.

#### INTRODUCTORY LANGUAGE FOR QUALITATIVE ANALYSIS FOR ALL PROJECTS

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at: [www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm](http://www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm)

#### **(1) Minor Widening Project**

***(For purposes of this scenario, minor highway widening projects are those in which the design year traffic is predicted to be less than 140,000 - 150,000 AADT. Widening projects that surpass these criteria are subject to a quantitative analysis.)***

For each alternative in this EIS/EA (*specify*), the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Refer to Table \_\_\_\_ (*specify*). This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2010b model, emissions of all of the priority MSAT decrease as speed increases. Because the estimated VMT under each of the Alternatives are nearly the same, varying by less than \_\_\_\_ (*specify*) percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

*(The following paragraph may apply if the project includes plans to construct travel lanes closer to populated areas.)*

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built at \_\_\_\_ (*specify location*), under Alternatives \_\_\_\_ (*specify*), and along \_\_\_\_ (*specify route*) under Alternatives \_\_\_\_ (*specify*). However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

## ***(2) New Interchange Connecting an Existing Roadway with a New Roadway***

*(This scenario is oriented toward projects where a new roadway segment connects to an existing limited access highway. The purpose of the roadway is primarily to meet regional travel needs, e.g., by providing a more direct route between locations.)*

For each alternative in this EIS/EA (*specify*), the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. Because the VMT estimated for the No Build Alternative is higher than for any of the Build Alternatives, higher levels of MSAT are not expected from any of the Build Alternatives compared to the No Build. Refer to Table \_\_\_\_ (*specify*). In addition, because the estimated VMT under each of the Build Alternatives are nearly the same, varying by less than \_\_\_\_ (*specify*) percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great

(even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations.

Under each alternative there may be localized areas where VMT would increase, and other areas where VMT would decrease. Therefore, it is possible that localized increases and decreases in MSAT emissions may occur. The localized increases in MSAT emissions would likely be most pronounced along the new roadway sections that would be built at \_\_\_\_\_ (*specify location*), under Alternatives \_\_\_\_\_ (*specify*), and along \_\_\_\_\_ (*specify route*) under Alternatives \_\_\_\_\_ (*specify*). However, even if these increases do occur, they too will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations.

In sum, under all Build Alternatives in the design year it is expected there would be reduced MSAT emissions in the immediate area of the project, relative to the No Build Alternative, due to the reduced VMT associated with more direct routing, and due to EPA's MSAT reduction programs.

### **(3) New Interchange Connecting New Roadways**

*(This scenario is oriented toward interchange projects developed in response to or in anticipation of economic development, e.g., a new interchange to serve a new shopping/residential development. Projects from the previous example may also have economic development associated with them, so some of this language may also apply.)*

For each alternative in this EIS/EA (*specify*), the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the interchange facilitates new development that attracts trips that would not otherwise occur in the area. Refer to Table \_\_\_\_ (*specify*). This increase in VMT means MSAT under the Build Alternatives would probably be higher than the No Build Alternative in the study area. There could also be localized differences in MSAT from indirect effects of the project such as associated access traffic, emissions of evaporative MSAT (e.g., benzene) from parked cars, and emissions of diesel particulate matter from delivery trucks (*modify depending on the type and extent of the associated development*). Travel to other destinations would be reduced with subsequent decreases in emissions at those locations.

Because the estimated VMT under each of the Build Alternatives are nearly the same, varying by less than \_\_\_\_ (*specify*) percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various Build Alternatives. For all Alternatives, emissions are virtually certain to be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future than they are today.

*(The following discussion would apply to new interchanges in areas already developed to some degree. For new construction in anticipation of economic development in rural or largely undeveloped areas, this discussion would be applicable only to populated areas, such as residences, schools, and businesses.)*

The travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT would be higher under certain Alternatives than others. The localized differences in MSAT concentrations would likely be most pronounced along the new/expanded roadway sections that would be built at \_\_\_\_\_ (*specify location*), under Alternatives \_\_\_\_\_ (*specify*), and along \_\_\_\_\_ (*specify route*) under Alternatives \_\_\_\_\_ (*specify*). However, the magnitude and the duration of these potential increases cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. Further, under all Alternatives, overall future MSAT are expected to be substantially lower than today due to implementation of EPA's vehicle and fuel regulations.



In sum, under all Build Alternatives in the design year it is expected there would be slightly higher MSAT emissions in the study area relative to the No Build Alternative due to increased VMT. There also could be increases in MSAT levels in a few localized areas where VMT increases. However, EPA's vehicle and fuel regulations will bring about significantly lower MSAT levels for the area in the future than today.

***(4) Minor Improvements or Expansions to Intermodal Centers or Other Projects that Affect Truck Traffic***

*(The description for these types of projects depends on the nature of the project. The key factor from an MSAT standpoint is the change in truck and rail activity and the resulting change in MSAT emissions patterns.)*

For each alternative in this EIS/EA (*specify*), the amount of MSAT emitted would be proportional to the amount of truck vehicle miles traveled (VMT) and rail activity, assuming that other variables (such as travel not associated with the intermodal center) are the same for each alternative. The truck VMT and rail activity estimated for each of the Build Alternatives are higher than that for the No Build Alternative, because of the additional activity associated with the expanded intermodal center. Refer to Table \_\_\_\_ (*specify*). This increase in truck VMT and rail activity associated with the Build Alternatives would lead to higher MSAT emissions (particularly diesel particulate matter) in the vicinity of the intermodal center. The higher emissions could be offset somewhat by two factors: 1) the decrease in regional truck traffic due to increased use of rail for inbound and outbound freight; and 2) increased speeds on area highways due to the decrease in truck traffic. The extent to which these emissions decreases will offset intermodal center-related emissions increases is not known.

Because the estimated truck VMT and rail activity under each of the Build Alternatives are nearly the same, varying by less than \_\_\_\_ (*specify*) percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the EPA-projected reductions are so significant (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future as well.

*(The following discussion may apply if the intermodal center is close to other development.)*

The additional freight activity contemplated as part of the project alternatives will have the effect of increasing diesel emissions in the vicinity of nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT would be higher than under the No Build alternative. The localized differences in MSAT concentrations would likely be most pronounced under Alternatives \_\_\_\_\_ (*specify*). However, as discussed above, the magnitude and the duration of these potential differences cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific health impacts. Even though there may be differences among the Alternatives, on a region-wide basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time that in almost all cases the MSAT levels in the future will be significantly lower than today.

*(Insert a description of any emissions-reduction activities that are associated with the project, such as truck and train idling limitations or technologies, such as auxiliary power units; alternative fuels or engine retrofits for container-handling equipment, etc.)*

In sum, all Build Alternatives in the design year are expected to be associated with higher levels of MSAT emissions in the study area, relative to the No Build Alternative, along with some benefit from improvements in speeds and reductions in region-wide truck traffic. There also could be slightly higher differences in MSAT levels among Alternatives in a few localized areas where freight activity occurs closer to homes, schools, and businesses. Under all alternatives, MSAT levels are likely to decrease over time due to nationally mandated cleaner vehicles and fuels.

**MSAT MITIGATION STRATEGIES**



Although there is no obligation to identify and consider MSAT mitigation strategies as part of a **qualitative analysis, such strategies may be part of a project's design. Refer to the examples provided in (4) Minor Improvements or Expansions to Intermodal Centers or Other Projects that Affect Truck Traffic, or Appendix E.** For these and similar circumstances, MSAT mitigation strategies should be discussed as part of a qualitative analysis.

**CEQ PROVISIONS COVERING INCOMPLETE OR UNAVAILABLE INFORMATION (40 CFR 1502.22)**

The introductory language for qualitative analysis should be followed by a 40 CFR 1502 assessment of incomplete or unavailable information. Refer to Appendix C for details.

Back to [Memo](#).

**APPENDIX F**  
**Traffic Noise Analysis Report**

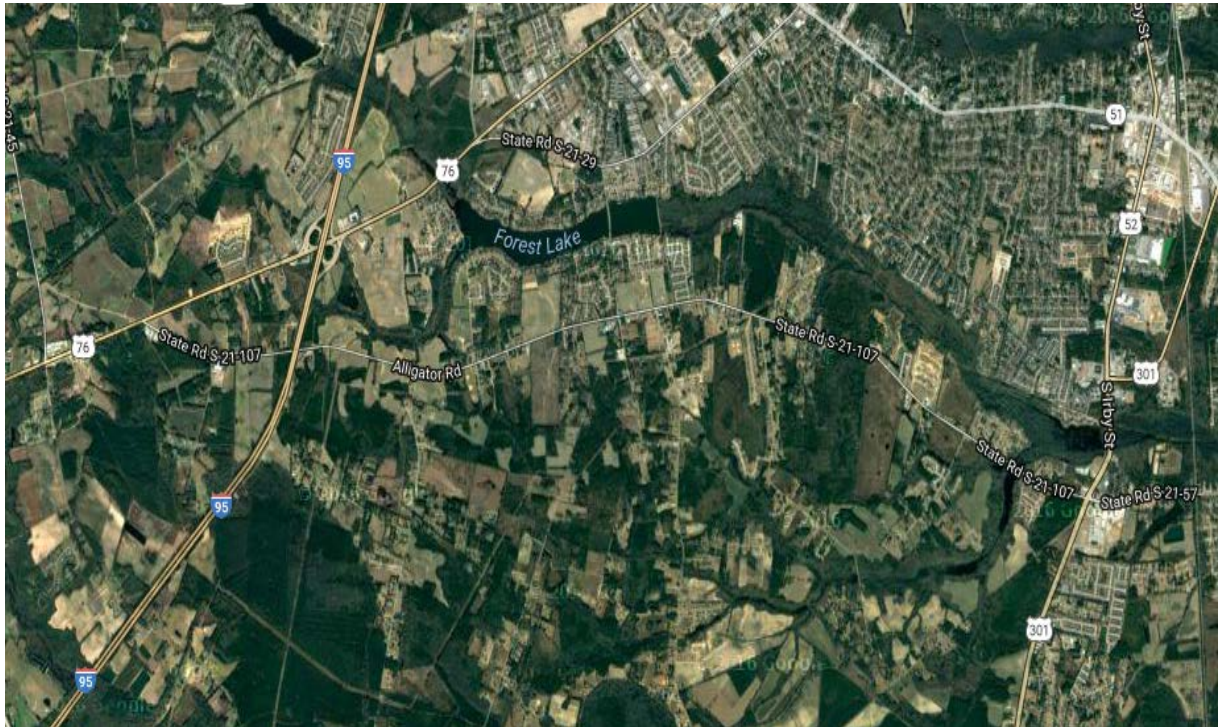


# Traffic Noise Analysis Report

## Alligator Road Widening Project

### Florence County, South Carolina

Alligator Road Widening Project



Prepared By:



October 2016

## **I. HIGHWAY TRAFFIC NOISE ANALYSIS**

### **A. Introduction**

The Code of Federal Regulations (CFR) Section 23, Part 772 contains the FHWA traffic noise standards. The SCDOT has implemented these standards in its Traffic Noise Abatement Policy. A traffic noise analysis is required for proposed Federal-aid highway projects that will construct a highway on new location or physically alter an existing highway, which will significantly change either the horizontal or vertical alignment of the road or increase the number of through-traffic lanes. Traffic noise impacts are predicted for this project. Noise abatement measures have been considered for reducing or eliminating the traffic noise impacts in accordance SCDOT's Traffic Noise Abatement Policy.

An analysis was performed on Alligator Road in Florence County, South Carolina to determine the effect of the project on traffic noise levels in the immediate area. This investigation includes an inventory of existing noise sensitive land uses, and a field survey of background (existing) noise levels in the project study area. It also includes a comparison of the predicted noise levels and the background noise levels to determine if traffic noise impacts can be expected resulting from the proposed project. Traffic noise impacts are predicted for this project.

### **B. Project Description**

The SCDOT proposes to widen Alligator Road from two to five travel lanes from US 52 to Knollwood Road and from two to three lanes between Knollwood and US 76 for a total distance of approximately 7.5 miles (Figure 1). The project involves adding additional travel lanes and a dedicated center turn lane along with complimentary intersection improvements. Included in the improvements is a new bridge over I-95 that would be constructed just north of the existing bridge. The purpose of the project is to improve the operational efficiency of Alligator Road by increasing the capacity.

### **C. Characteristics of Noise**

Noise is basically defined as unwanted sound. It is emitted from many sources including airplanes, factories, railroads, commercial businesses, and highway vehicles. Highway traffic noise is usually a composite of noises from engine exhaust, drive train, and tire-roadway interaction. Of these sources, tire noise is typically the most offensive at unimpeded travel speeds.

The magnitude of noise is usually described by its sound pressure. Since the range of sound pressure varies greatly, a logarithmic scale is used to relate sound pressures to some common reference level, usually the decibel (dB). Sound pressures described in decibels are called sound pressure levels and are often defined in terms of frequency

# Alligator Road (S-107) Widening

City of Florence  
Florence County, S.C.

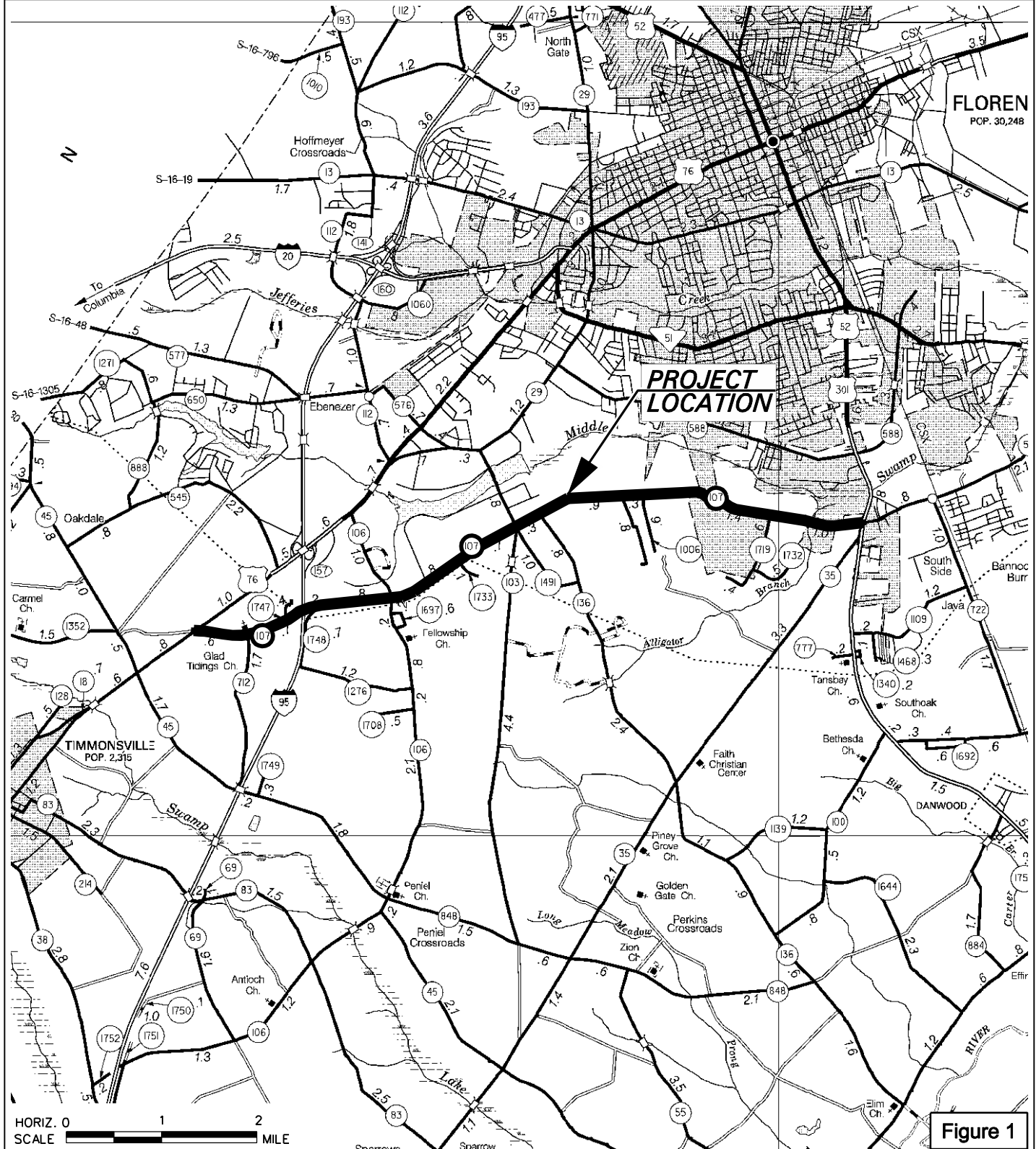
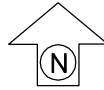
Shaded Area Indicates  
County Location in SC



Approximate Location of Project is:

Longitude 79° 50' 09"

Latitude 34° 08' 58"



4/30/2013 J:\Alligator Road\Drawings\Figure 1\_Location Map(18.5x11).dgn

HORIZ. 0 1 2  
SCALE MILE

**Figure 1**

weighted scales (A, B, C, or D). The weighted-A decibel scale is used almost exclusively in vehicle noise measurements because it places the most emphasis on the frequency range to which the human ear is most sensitive (1,000-6,000 Hertz). Sound levels measured using a weighted-A decibel scale are often expressed as dBA. Throughout this report, all noise levels will be expressed in dBA's.

Most individuals are exposed to fairly high noise levels from many sources as they go about their daily activities. Sound levels experienced by individuals on a daily basis are listed in Table 1.

**Table 1 – Daily Sounds**

140	Shotgun blast, jet 100' away at takeoff	PAIN
	Motor test chamber	HUMAN EAR PAIN THRESHOLD
130	-----	
	Firecrackers	
120	Severe thunder, pneumatic jackhammer	
	Hockey crowd	
	Amplified rock music	UNCOMFORTABLY LOUD
110	-----	
	Textile loom	
100	Subway train, elevated train, farm tractor	
	Power lawn mower, newspaper press	
	Heavy city traffic, noisy factory	LOUD
90	-----	
D	Diesel truck 40 mph at 50' away	
E	80	Crowded restaurant, garbage disposal
C		Average factory, vacuum cleaner
I		Passenger car 50 mph at 50' away
B	70	-----
E		Quiet typewriter
L	60	Singing birds, window air-conditioner
S		Quiet automobile
		Normal conversation, average office
50	-----	QUIET
	Household refrigerator	
	Quiet office	VERY QUIET
40	-----	
	Average home	
30	Dripping faucet	
	Whisper at 5' away	
20	Light rainfall, rustle of leaves	
		AVERAGE PERSON'S THRESHOLD OF HEARING
	Whisper	JUST AUDIBLE
10	-----	
0		THRESHOLD FOR ACUTE HEARING

Sources: World Book, Rand McNally Atlas of the Human Body, Encyclopedia America, "Industrial Noise and Hearing Conversation" by J. B. Olishifski and E. R. Harford (Researched by N. Jane Hunt and published in the Chicago Tribune in an illustrated graphic by Tom Heinz.)

The degree of disturbance or annoyance of unwanted sound depends essentially on three things:

1. The amount and nature of the intruding noise.
2. The relationship between the background noise and the intruding noise.
3. The type of activity occurring when the noise is heard.

In considering the first of these factors, it is important to note that individuals have different sensitivity to noise. Loud noises disturb some individuals more than others and some individuals become upset if an unwanted noise persists. The time patterns of noise also enter into an individual's judgment of whether or not a noise is offensive. For example, noises that occur during sleeping hours are usually considered to be more offensive than the same noises in the daytime.

With regard to the second factor, individuals tend to judge the annoyance of an unwanted noise in terms of its relationship to noise from other sources (background noise). The blowing of a car horn at night when background noise levels are approximately 45 dBA would generally be more objectionable than the blowing in the afternoon when background noises might be 55 dBA.

The third factor is related to the interference of noise with activities of individuals. In a 60 dBA environment, normal conversation would be possible while sleep might be difficult. Work activities requiring high levels of concentration may be interrupted by loud noises while activities requiring manual effort may not be interrupted to the same degree.

Over time, particularly if the noises occur at predicted intervals and are expected, individuals tend to accept the noises that intrude into their lives. Attempts have been made to regulate many of these types of noises including airplane noise, factory noise, railroad noise, and highway noise. In relation to highway traffic noise, methods of analysis and control have developed rapidly over the past few years.

#### **D. Noise Abatement Criteria**

The FHWA has developed NAC and procedures to be used in the planning and design of highways to determine whether highway noise levels are or are not compatible with various land uses. The abatement criteria and procedures are set forth in the aforementioned Federal reference (Title 23 CFR Part 772). A summary of the noise abatement criteria for various land uses is presented in Table 2.

**Table 2 – FHWA Noise Abatement Criteria**

Activity Category	Activity Criteria <sup>2\</sup>		Evaluation Location	Activity Description
	Leq(h)	L10(h)		
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its purpose.
B <sup>3\</sup>	67	70	Exterior	Residential
C <sup>3\</sup>	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings
D	52	55	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E <sup>3\</sup>	72	75	Exterior	Motels, hotels, offices, restaurant/bars, and other developed lands, properties or activities not included in A-D or F
F	--	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	--	--	--	Undeveloped lands that are not permitted

<sup>1\</sup> Either Leq(h) or L10(h) (but not both) may be used on a project

<sup>2\</sup> The Leq(h) and L10(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement measures

<sup>3\</sup> Includes undeveloped lands permitted for this activity category

Activity Category A consists of tracts of land that are locally significant for their serenity and quiet surroundings. Activity Category B consists of residential properties. Activity Category C consists of exterior locations of public outdoor areas, places of worship, cemeteries, recreational areas, etc. Activity Category D consists primarily of the same activities as Activity Category C but is for interior locations. Activity Category E



consists of hotel/motels, offices, restaurants, and other developed land with activities not included in Activity Categories A-D. Activity F consists of agricultural lands, airports, and commercial/industrial facilities. Activity G is for undeveloped lands not presently permitted. Activity Categories adjacent to the project are mostly residential category (B).

Sound pressure levels in this report are referred to as Leq(h). The hourly Leq, or equivalent sound level, is the level of constant sound in a one-hour time period that would have the same energy as a time-varying sound. In other words, the fluctuating sound levels of traffic noise are represented in terms of a steady noise level with the same energy content.

**E. Existing Noise Levels**

Existing noise measurements were taken in the vicinity of the project to quantify the existing acoustic environment and to provide a base for assessing the impact of noise level increases. For all locations, the measurement device was set at approximately 60 inches above the existing ground elevation. The location of the nine measurement sites, existing Leq(h) traffic noise levels, and the type of ground conditions identified at each site can be found in Table 3.

**Table 3 - Existing Noise Levels [Leq(h)]**

Site-Rec.	Location	Description	Noise Level (dBA)
1	409 Danielle Run	Grass	58.4
2	699 Alligator Road	Grass	59.8
3	3246 Pleasant Valley Circle	Grass	59.9
4	2411 Alligator Road	Grass	58.9
5	2921 Cross Vine Drive	Grass	58.9
6	3022 Alligator Road	Grass	58.9
7	3302 Alligator Road	Grass	55.2
8	4055 Alligator Road	Grass	55.8
9	1210 Alligator Road	Grass	56.8

Note: See Attachments for noise measurement data sheets.

The existing roadway and traffic conditions were used with the current traffic noise prediction model (TNM version 2.5, February 2004) to calculate existing noise levels for comparison with actual measured noise levels. Project-related traffic noise level increases are based upon the existing loudest-hour noise levels. See Table 4 for traffic counts during field measurements. All measurements were performed on April 1, 2014.

**Table 4 - Field Noise Measurements**

Site-Rec.	Time Period	Hourly Traffic Based on Concurrent Traffic Counts										Measured Leq
		Eastbound Lanes					Westbound Lanes					
		Autos	MT	HT	Bus	MC	Autos	MT	HT	Bus	MC	
1	9:43AM-10:03AM	79	1	1	0	0	62	0	4	0	0	58.4
2	10:21AM-10:41AM	67	1	5	0	0	60	2	5	0	0	59.8
3	10:59AM-11:19AM	55	2	1	1	0	61	0	2	1	0	59.9
4	11:32AM-11:52AM	75	4	3	0	0	79	2	1	0	1	58.9
5	12:04PM-12:24PM	77	0	3	0	0	78	1	2	0	0	58.9
6	12:36PM-12:56PM	98	0	2	0	2	87	3	3	0	0	58.9
7	1:59PM-2:19PM	32	0	1	0	0	28	1	0	0	0	55.2
8	2:37PM-2:57PM	22	0	4	0	0	33	0	2	1	0	55.8
9	3:28PM-3:48PM	120	1	4	0	1	127	1	2	1	0	56.8

MT = Medium Trucks; HT = Heavy Trucks; MC = Motorcycles - Data was obtained on October 29, 2015.

Table 5 shows the comparison of field measurements versus modeled noise levels. The calculated noise levels for the measurement sites range from 54.3 to 61.4 dBA. The difference between field measured and calculated noise levels at all nine locations is 3 dBA or less, validating the results of the TNM model.

**Table 5 - Existing TNM Calculated Noise Levels vs. Field Measurements**

Site-Receiver	Location	Field Measurement Noise Level (dBA)	TNM Calculated Noise Level (dBA)	Difference (dBA)
1	409 Danielle Run	58.4	61.4	3.0
2	699 Alligator Road	59.8	58.0	1.8
3	3246 Pleasant Valley Circle	59.9	57.0	2.9
4	2411 Alligator Road	58.9	58.6	0.3
5	2921 Cross Vine Drive	58.9	61.0	2.1
6	3022 Alligator Road	58.9	60.1	1.2
7	3302 Alligator Road	55.2	54.3	0.9
8	4055 Alligator Road	55.8	58.5	2.7
9	1210 Alligator Road	56.8	58.5	1.7

Difference = Measured Leq minus Modeled Leq

## **F. Procedure for Predicting Future Noise Levels**

Based on the SCDOT Traffic Noise Abatement Policy, a preliminary noise analysis is required for all build alternatives and under consideration in a project's NEPA document. The preliminary analysis models the most conservative noise environment to determine if there will be noise impacts, and if there are, the feasibility and reasonableness of noise abatement to mitigate the impacts. Once a preferred alternative has been identified, a detailed noise analysis is required for any noise abatement that was recommended for that alternative in the preliminary analysis.

Traffic noise is not constant; it varies in time depending upon the number, speed, type, and frequency of vehicles that pass by a given receiver. Furthermore, since traffic noise emissions are different for various types of vehicles, the TNM model distinguishes between the source emissions from the following vehicle types: automobiles, medium trucks, heavy trucks, buses, and motorcycles. The TNM traffic noise prediction model uses the number and type of vehicles on the planned roadway, their speeds, the physical characteristics of the road (curves, hills, depressed, elevated, etc.), receiver location and height, and, if applicable, barrier type, barrier ground elevation, and barrier top elevation.

Preliminary designs, aerial photography, and contour mapping were used to model the proposed roadway and receiver elevations and represent the topographical conditions. The noise predictions made in this report are highway-related noise predictions for the traffic conditions during the year 2040. They do not include other noises related to the excessive background noises (trains, airplanes and construction, etc.) that were measured during the existing conditions.

According to FHWA guidance, the predictions documented in this report are based upon the proposed roadway alignment design and traffic conditions for the year 2040 that result in the loudest predicted hourly-equivalent traffic noise levels for each receiver. Traffic noise level and location spreadsheets are included in the Attachments and contain a list of all receivers in close proximity to the project along with aerials showing the receiver locations, and summarize the loudest hour equivalent noise levels for the Existing, No-Build, and Build conditions in the year 2040 under traffic conditions within the project site. The land uses of receivers were determined by field observations and reviewing available GIS parcel data. Table 6 lists the traffic data used in the analysis build conditions. This data is based on field observations and data obtained from SCDOT.

**Table 6 - Traffic Data for Noise Analysis**

Roadway Section	Speed (mph)	Two Way Design Hourly Traffic	One Way Hourly Traffic (vph)	Hourly Volume Cars (vph)	Hourly Volume Medium Trucks (vph)	Hourly Heavy Trucks (vph)
<b>2015 Traffic Computations</b>						
US 52 to Knollwood	45	984	492	477	10	5
Knollwood to US 76	45	456	228	220	5	3
<b>2040 Traffic Computations</b>						
US 52 to Knollwood	45	1200	600	582	12	6
Knollwood to US 76	45	557	279	270	6	3

- mph = miles per hour
- vph = vehicles per hour
- Design hourly traffic volumes obtained using 10% of average daily traffic provided by SCDOT.

**G. Traffic Noise Impacts and Noise Thresholds**

Traffic noise impacts occur when the predicted traffic noise levels either: (a) approach or exceed the FHWA noise abatement criteria (“approach” meaning within 1 dBA of the value listed in Table 2), or (b) substantially exceed the existing noise levels. According to the SCDOT Traffic Noise Abatement Policy, a 15 dBA increase is deemed to be a “substantial increase.” Consideration for noise abatement measures must be given to receivers that fall in either category. The results of the noise analysis indicate that traffic related noise impacts would occur to 35 receivers under the 2040 Build Alternative. However, 21 receivers would be impacted under the 2040 No-Build Alternative. No receivers in the project area would substantially exceed the FHWA noise abatement criteria. Table 7 summarizes the noise analysis results.

**Table 7: Noise Impact Analysis**

ROADWAY LOCATION	TOTAL NO. OF RECEIVERS	APPROXIMATE # OF IMPACTED RECEIVERS ACCORDING TO TITLE 23 CFR PART 772 / SCDOT POLICY				
		A	B	C	D	E
<b>2040 Year No-Build Alternative</b>						
Alligator Road	249	---	20	1	---	---
<b>Total</b>	249	---	20	1	---	---
<b>2040 Year Build Alternative</b>						
Alligator road	249	---	33	2	---	---
<b>Total</b>	249	---	33	2	---	---

**II. TRAFFIC NOISE ABATEMENT MEASURES**

Residences and businesses will have direct access to Alligator Road with the proposed widening. Each impacted property has a nearby driveway that accesses Alligator Road or

an intersecting road. Most impacts in the project are within 100 feet of the proposed roadway. At this distance, an effective barrier would be approximately 800 feet long with no breaks in access. One or more access breaks would be required at any impacted receiver in the project area, making a barrier incapable of providing at least a 5 dBA noise reduction to be feasible. For these reasons, noise barriers are not feasible for reducing or eliminating noise impacts for this project.

### **III. CONSTRUCTION NOISE**

The major construction elements of this project are expected to be earth removal, hauling, grading, and paving. General construction noise impacts, such as temporary speech interference for passers-by and those individuals living or working near the project, can be expected particularly from paving operations and earth moving equipment during construction. However, considering the relatively short-term nature of construction noise and the likely limitation of construction to daytime hours, these impacts are not expected to be substantial. The contractor would be required to comply with applicable local noise ordinances and OSHA regulations concerning noise attenuation devices on construction equipment.

### **IV. FLORENCE COUNTY PLANNING OFFICIAL**

Florence County Planning Commission  
180 North Irby Street  
Florence, S.C. 29501

### **V. PUBLIC INVOLVMENT**

As per requirements listed in the SC Department of Transportation's (SCDOT) Traffic Noise Abatement Policy, when traffic noise impacts are identified, noise abatement shall be considered and evaluated for feasibility and reasonableness. If abatement measures are found to be both feasible and reasonable then the SCDOT is required to solicit the viewpoints of all of the benefited receivers and document a decision on either desiring or not desiring the noise abatement measure.

Residences and businesses will have direct access to Alligator Road with the proposed widening. Each impacted property has a nearby driveway that accesses Alligator Road or an intersecting road. Most impacts in the project are within 100 feet of the proposed roadway. At this distance, an effective barrier would be approximately 800 feet long with no breaks in access. One or more access breaks would be required at any impacted receiver in the project area, making a barrier incapable of providing at least a 5 dBA noise reduction to be feasible. For these reasons, noise barriers are not feasible for reducing or eliminating noise impacts for this project.

## **VI. SUMMARY**

The results of the noise analysis indicate that traffic related noise impacts would occur to 35 receivers under the 2040 Build Alternative. However, 21 receivers would be impacted under the 2040 No-Build Alternative. No receivers in the project area would substantially exceed the FHWA noise abatement criteria. One or more access breaks would be required at any impacted receiver in the project area, making a barrier incapable of providing at least a 5 dBA noise reduction to be feasible.

This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772.

# **APPENDIX**

## Traffic Noise Impacts and Locations





**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
1	Residential	B	67	1	59	No	60	No	61	No	2
2	Residential	B	67	1	61	No	62	No	64	No	3
3	Residential	B	67	1	58	No	59	No	63	No	5
4	Residential	B	67	1	55	No	56	No	60	No	5
5	Residential	B	67	1	64	No	65	No	70	Yes	6
6	Residential	B	67	1	63	No	64	No	69	Yes	6
7	Residential	B	67	1	59	No	60	No	63	No	4
8	Residential	B	67	1	63	No	63	No	68	Yes	5
9	Residential	B	67	1	62	No	63	No	68	Yes	6
10	Residential	B	67	1	59	No	60	No	64	No	5
11	Residential	B	67	1	59	No	60	No	65	No	6
12	Residential	B	67	1	58	No	59	No	63	No	5
13	Residential	B	67	1	64	No	65	No	70	Yes	6
14	Residential	B	67	1	61	No	62	No	66	Yes	5
15	Residential	B	67	1	61	No	62	No	67	Yes	6
16	Residential	B	67	1	62	No	63	No	67	Yes	5
17	Residential	B	67	1	62	No	62	No	67	Yes	5
18	Residential	B	67	1	62	No	63	No	66	Yes	4
19	Residential	B	67	1	63	No	63	No	66	Yes	3
20	Residential	B	67	1	62	No	63	No	65	No	3
21	Residential	B	67	1	61	No	62	No	63	No	2
22	Residential	B	67	1	62	No	63	No	64	No	2
23	Residential	B	67	1	62	No	63	No	65	No	3
24	Residential	B	67	1	63	No	64	No	65	No	2
25	Residential	B	67	1	62	No	63	No	65	No	3
26	Residential	B	67	1	62	No	63	No	65	No	3
27	Residential	B	67	1	62	No	63	No	64	No	2
28	Residential	B	67	1	62	No	63	No	65	No	3
29	Places of Worship	C	67	1	61	No	62	No	66	Yes	5
30	Residential	B	67	1	56	No	57	No	60	No	3
31	Residential	B	67	1	59	No	60	No	63	No	4
32	Residential	B	67	1	52	No	53	No	56	No	4
33	Residential	B	67	1	56	No	57	No	60	No	4



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
34	Residential	B	67	1	53	No	54	No	57	No	4
35	Residential	B	67	1	60	No	61	No	63	No	3
36	Residential	B	67	1	54	No	54	No	57	No	3
37	Residential	B	67	1	58	No	59	No	61	No	3
38	Residential	B	67	1	58	No	58	No	61	No	3
39	Residential	B	67	1	63	No	64	No	66	Yes	3
40	Residential	B	67	1	65	No	66	Yes	67	Yes	2
41	Residential	B	67	1	65	No	65	No	67	Yes	2
42	Residential	B	67	1	63	No	64	No	66	Yes	3
43	Residential	B	67	1	58	No	59	No	62	No	4
44	Commercial	E	72	1	62	No	63	No	65	No	3
45	Commercial	E	72	1	61	No	62	No	64	No	3
46	Residential	B	67	1	61	No	62	No	64	No	3
47	Commercial	E	72	1	63	No	64	No	66	No	3
48	Residential	B	67	1	56	No	56	No	60	No	3
49	Commercial	E	72	1	58	No	59	No	62	No	4
50	Residential	B	67	1	60	No	61	No	63	No	3
51	Residential	B	67	1	67	Yes	68	Yes	69	Yes	2
52	Residential	B	67	1	66	Yes	67	Yes	66	Yes	0
53	Commercial	E	72	1	63	No	64	No	66	No	3
54	Commercial	E	72	1	54	No	55	No	58	No	4
55	Commercial	E	72	1	60	No	61	No	64	No	4
56	Commercial	E	72	1	59	No	60	No	63	No	3
57	Residential	B	67	1	60	No	61	No	63	No	3
58	Commercial	E	72	1	60	No	60	No	63	No	3
59	Residential	B	67	1	55	No	56	No	58	No	3
60	Residential	B	67	1	54	No	55	No	56	No	2
61	Residential	B	67	1	67	Yes	68	Yes	67	Yes	0
62	Residential	B	67	1	55	No	56	No	57	No	2
63	Residential	B	67	1	67	Yes	68	Yes	67	Yes	0
64	Residential	B	67	1	55	No	56	No	57	No	2
65	Residential	B	67	1	67	Yes	67	Yes	66	Yes	1
66	Residential	B	67	1	66	Yes	67	Yes	66	Yes	0
67	Residential	B	67	1	55	No	56	No	57	No	2



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
68	Residential	B	67	1	67	Yes	68	Yes	67	Yes	0
69	Residential	B	67	1	54	No	55	No	57	No	3
70	Residential	B	67	1	67	Yes	68	Yes	67	Yes	0
71	Residential	B	67	1	55	No	56	No	58	No	3
72	Residential	B	67	1	67	Yes	67	Yes	66	Yes	1
73	Residential	B	67	1	54	No	55	No	57	No	3
74	Residential	B	67	1	67	Yes	68	Yes	66	Yes	1
75	Residential	B	67	1	55	No	55	No	57	No	2
76	Residential	B	67	1	67	Yes	68	Yes	67	Yes	0
77	Residential	B	67	1	54	No	55	No	57	No	3
78	Residential	B	67	1	68	Yes	69	Yes	68	Yes	0
79	Residential	B	67	1	57	No	58	Yes	60	No	3
80	Residential	B	67	1	53	No	54	No	56	No	3
81	Commercial	E	72	1	65	No	60	No	66	No	1
82	Commercial	E	72	1	60	No	60	No	63	No	3
83	Commercial	E	72	1	57	No	58	No	61	No	4
84	Commercial	E	72	1	54	No	55	No	60	No	6
85	Commercial	E	72	1	56	No	66	No	60	No	4
86	Commercial	E	72	1	65	No	57	No	66	No	3
87	Residential	B	67	1	60	No	61	No	63	No	3
88	Residential	B	67	1	54	No	55	No	59	No	5
89	Residential	B	67	1	54	No	55	No	59	No	5
90	Residential	B	67	1	60	No	61	No	64	No	4
91	Residential	B	67	1	52	No	53	No	56	No	4
92	Residential	B	67	1	50	No	51	No	55	No	5
93	Residential	B	67	1	57	No	57	No	60	No	3
94	Residential	B	67	1	59	No	60	No	62	No	3
95	Residential	B	67	1	56	No	57	No	60	No	4
96	Residential	B	67	1	49	No	50	No	54	No	5
97	Residential	B	67	1	51	No	52	No	56	No	5
98	Residential	B	67	1	58	No	58	No	61	No	3
99	Residential	B	67	1	57	No	58	No	60	No	3
100	Residential	B	67	1	52	No	53	No	56	No	4
101	Residential	B	67	1	53	No	54	No	57	No	4



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
102	Commercial	E	72	1	53	No	53	No	57	No	4
103	Residential	B	67	1	53	No	53	No	57	No	4
104	Residential	B	67	1	55	No	56	No	59	No	4
105	Commercial	E	72	1	56	No	57	No	60	No	4
106	Residential	B	67	1	56	No	57	No	60	No	4
107	Residential	B	67	1	57	No	58	No	61	No	4
108	Residential	B	67	1	56	No	57	No	60	No	4
109	Residential	B	67	1	59	No	60	No	63	No	4
110	Residential	B	67	1	54	No	55	No	58	No	4
111	Residential	B	67	1	59	No	60	No	63	No	4
112	Residential	B	67	1	62	No	63	No	65	No	3
113	Residential	B	67	1	58	No	59	No	62	No	4
114	Residential	B	67	1	50	No	50	No	55	No	5
115	Residential	B	67	1	59	No	60	No	63	No	4
116	Residential	B	67	1	57	No	58	No	61	No	4
117	Residential	B	67	1	59	No	60	No	63	No	4
118	Residential	B	67	1	50	No	51	No	55	No	5
119	Residential	B	67	1	54	No	55	No	59	No	5
120	Residential	B	67	1	55	No	55	No	59	No	4
121	Residential	B	67	1	60	No	60	No	63	No	3
122	Residential	B	67	1	53	No	54	No	57	No	4
123	Residential	B	67	1	50	No	51	No	55	No	5
124	Residential	B	67	1	55	No	56	No	59	No	4
125	Residential	B	67	1	58	No	58	No	61	No	3
126	Residential	B	67	1	52	No	53	No	56	No	4
127	Residential	B	67	1	64	No	65	No	65	No	1
128	Residential	B	67	1	58	No	59	No	60	No	2
129	Residential	B	67	1	60	No	60	No	62	No	2
130	Residential	B	67	1	52	No	52	No	54	No	2
131	Residential	B	67	1	50	No	50	No	54	No	4
132	Residential	B	67	1	51	No	52	Yes	56	No	5
133	Residential	B	67	1	53	No	54	No	57	No	4
134	Residential	B	67	1	60	No	61	No	64	No	4
135	Residential	B	67	1	58	No	59	No	60	No	2



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
136	Residential	B	67	1	57	No	58	No	57	No	0
137	Residential	B	67	1	58	No	59	No	58	No	0
138	Residential	B	67	1	64	No	65	No	63	No	1
139	Residential	B	67	1	65	No	66	Yes	64	No	1
140	Residential	B	67	1	58	No	59	No	57	No	1
141	Residential	B	67	1	52	No	53	No	53	No	1
142	Residential	B	67	1	60	No	60	No	59	No	1
143	Residential	B	67	1	50	No	51	No	52	No	2
144	Residential	B	67	1	66	Yes	67	Yes	66	Yes	0
145	Residential	B	67	1	61	No	62	No	62	No	1
146	Residential	B	67	1	61	No	62	No	62	No	1
147	Residential	B	67	1	64	No	65	No	65	No	1
148	Residential	B	67	1	62	No	63	No	63	No	1
149	Residential	B	67	1	62	No	62	No	62	No	0
150	Residential	B	67	1	61	No	62	No	62	No	1
151	Residential	B	67	1	64	No	65	No	63	No	1
152	Residential	B	67	1	55	No	55	No	57	No	2
153	Residential	B	67	1	59	No	60	No	62	No	3
154	Residential	B	67	1	59	No	60	No	61	No	2
155	Residential	B	67	1	54	No	55	No	58	No	4
156	Places of Worship	C	67	1	55	No	56	No	60	No	5
157	Residential	B	67	1	66	Yes	67	Yes	68	Yes	2
158	Residential	B	67	1	58	No	59	No	62	No	4
159	Residential	B	67	1	55	No	56	No	60	No	5
160	Residential	B	67	1	57	No	57	No	60	No	3
161	Residential	B	67	1	59	No	60	No	62	No	3
162	Residential	B	67	1	58	No	59	No	62	No	4
163	Residential	B	67	1	60	No	60	No	63	No	3
164	Residential	B	67	1	59	No	60	No	63	No	4
165	Residential	B	67	1	62	No	63	No	65	No	3
166	Commercial	E	72	1	64	No	65	No	66	No	2
167	Commercial	E	72	1	67	No	68	No	71	No	4
168	Residential	B	67	1	63	No	64	No	67	Yes	4
169	Residential	B	67	1	64	No	65	No	69	Yes	5



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
170	Residential	B	67	1	64	No	65	No	69	Yes	5
171	Places of Worship	C	67	1	65	No	66	Yes	68	Yes	3
172	Residential	B	67	1	64	No	65	No	67	Yes	3
173	Residential	B	67	1	57	No	58	No	61	No	4
174	Residential	B	67	1	53	No	54	No	58	No	5
175	Residential	B	67	1	54	No	55	No	59	No	5
176	Residential	B	67	1	57	No	58	No	61	No	4
177	Residential	B	67	1	57	No	58	No	62	No	5
178	Residential	B	67	1	56	No	57	No	61	No	5
179	Residential	B	67	1	55	No	56	No	60	No	5
180	Residential	B	67	1	61	No	62	No	65	No	4
181	Residential	B	67	1	59	No	60	No	63	No	4
182	Residential	B	67	1	53	No	54	No	58	No	5
183	Residential	B	67	1	63	No	63	No	65	No	2
184	Commercial	E	72	1	60	No	60	No	62	No	2
185	Residential	B	67	1	54	No	55	No	59	No	5
186	Residential	B	67	1	61	No	61	No	62	No	1
187	Residential	B	67	1	61	No	62	No	62	No	2
188	Residential	B	67	1	56	No	57	No	60	No	4
189	Residential	B	67	1	60	No	61	No	61	No	2
190	Residential	B	67	1	60	No	61	No	62	No	2
191	Commercial	E	72	1	56	No	57	No	60	No	4
192	Commercial	E	72	1	60	No	61	No	62	No	2
193	Residential	B	67	1	58	No	59	No	59	No	1
194	Residential	B	67	1	58	No	59	No	59	No	1
195	Residential	B	67	1	58	No	59	No	60	No	2
196	Residential	B	67	1	58	No	59	No	59	No	1
197	Residential	B	67	1	61	No	62	No	61	No	0
198	Residential	B	67	1	52	No	53	No	54	No	2
199	Residential	B	67	1	59	No	60	No	60	No	1
200	Commercial	E	72	1	56	No	57	No	57	No	1
201	Residential	B	67	1	59	No	60	No	60	No	1
202	Residential	B	67	1	53	No	54	No	55	No	2
203	Residential	B	67	1	50	No	51	No	53	No	3



**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
204	Residential	B	67	1	53	No	54	No	55	No	2
205	Commercial	E	72	1	60	No	60	No	60	No	0
206	Residential	B	67	1	63	No	64	No	63	No	0
207	Residential	B	67	1	60	No	60	No	60	No	0
208	Residential	B	67	1	62	No	63	No	62	No	0
209	Residential	B	67	1	57	No	57	No	58	No	1
210	Commercial	E	72	1	64	No	65	No	64	No	0
211	Commercial	E	72	1	57	No	58	No	59	No	2
212	Residential	B	67	1	53	No	54	No	55	No	2
213	Residential	B	67	1	58	No	59	Yes	59	No	1
214	Residential	B	67	1	59	No	59	No	60	No	1
215	Residential	B	67	1	61	No	62	No	61	No	0
216	Residential	B	67	1	50	No	51	No	54	No	4
217	Commercial	E	72	1	62	No	63	No	62	No	0
218	Residential	B	67	1	52	No	53	No	55	No	3
219	Residential	B	67	1	53	No	54	No	56	No	3
220	Residential	B	67	1	64	No	65	No	64	No	0
221	Residential	B	67	1	54	No	55	No	56	No	2
222	Residential	B	67	1	51	No	52	No	54	No	3
223	Residential	B	67	1	49	No	50	No	53	No	4
224	Residential	B	67	1	66	Yes	67	Yes	65	No	1
225	Residential	B	67	1	56	No	57	No	58	No	2
226	Residential	B	67	1	51	No	52	No	55	No	4
227	Residential	B	67	1	50	No	50	No	53	No	3
228	Residential	B	67	1	59	No	60	No	60	No	1
229	Residential	B	67	1	52	No	53	No	54	No	2
230	Residential	B	67	1	52	No	53	No	53	No	1
231	Residential	B	67	1	55	No	56	No	57	No	2
232	Residential	B	67	1	57	No	57	No	59	No	2
233	Residential	B	67	1	59	No	60	No	59	No	0
234	Residential	B	67	1	56	No	57	No	56	No	0
235	Residential	B	67	1	54	No	55	No	54	No	0
236	Commercial	E	72	1	58	No	59	No	56	No	2
237	Commercial	E	72	1	58	No	59	No	63	No	5





**Predicted Traffic Noise Levels - Alligator Road - Florence County - From US 52 to US 76**

RECEIVER INFORMATION					2015 EXISTING		2040 NO-BUILD ALTERNATIVE		2040 BUILD ALTERNATIVE		DIFFERENCE
Receiver ID #	LAND USE	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) CATEGORY	23 CFR PART 772 NOISE ABATEMENT CRITERIA (NAC) (dBA)	EQUIVALENT NO. OF RECEIVERS	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	ESTIMATED Leq (dBA)	NOISE IMPACT (YES/NO)	2040 BUILD - 2015 EXIST [Leq (dBA)]
238	Commercial	E	72	1	58	No	59	No	60	No	2
239	Commercial	E	72	1	59	No	59	No	61	No	2
240	Commercial	E	72	1	58	No	59	No	59	No	1
241	Commercial	E	72	1	59	No	59	No	58	No	1
242	Residential	B	67	1	51	No	49	No	54	No	3
243	Residential	B	67	1	51	No	49	No	54	No	3
244	Residential	B	67	1	51	No	49	No	54	No	3
245	Residential	B	67	1	52	No	49	No	55	No	3
246	Residential	B	67	1	52	No	49	No	54	No	2
247	Residential	B	67	1	52	No	50	No	54	No	2
248	Residential	B	67	1	52	No	49	No	54	No	2
249	Residential	B	67	1	51	No	48	No	53	No	3



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 1 OF 8



1" = 300'

	IMPACTED
	NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 2 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 3 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 4 OF 8

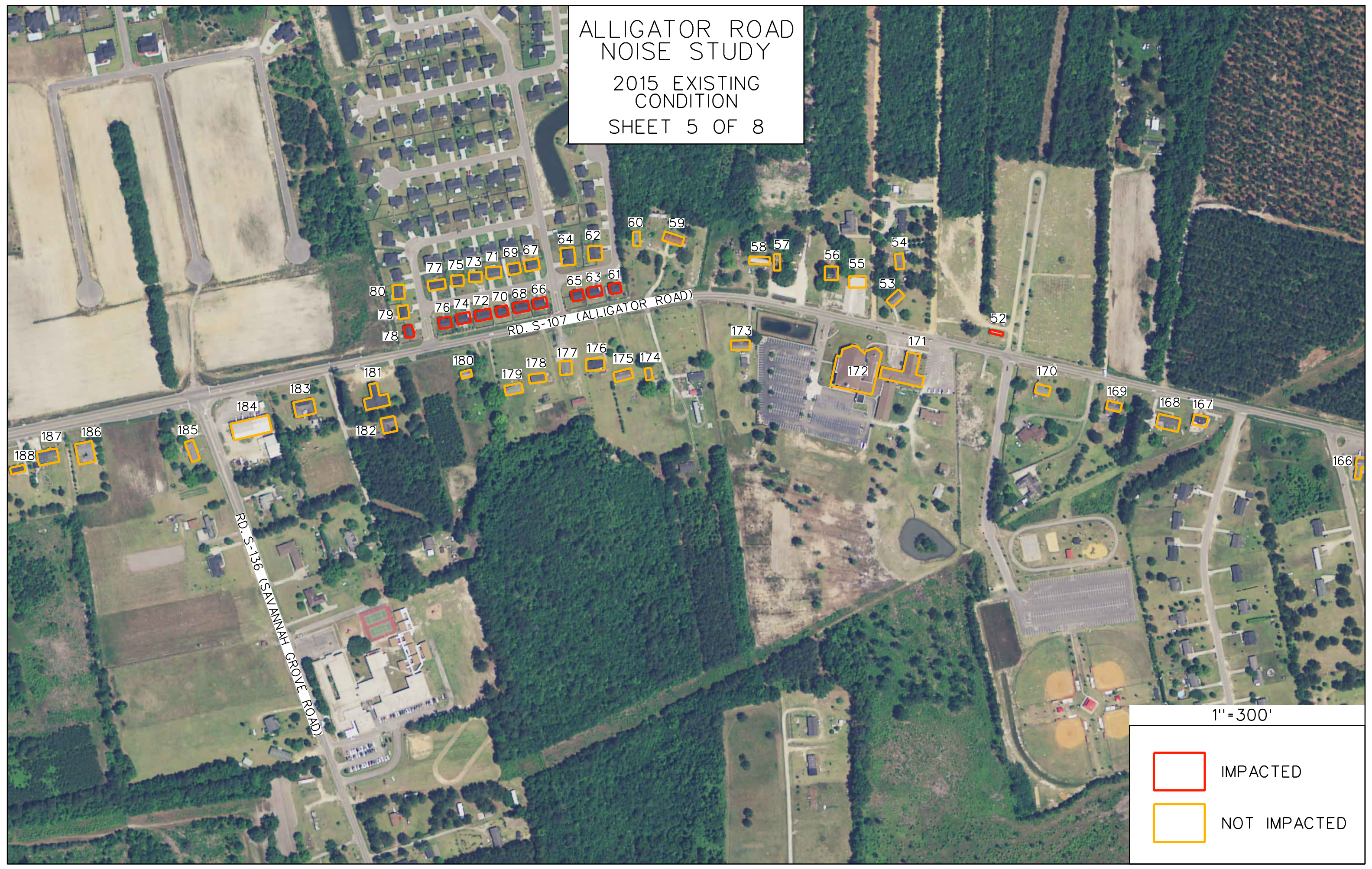


1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 5 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 6 OF 8





ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 7 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2015 EXISTING  
CONDITION  
SHEET 8 OF 8



IMPACTED



NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 1 OF 8



1" = 300'

	IMPACTED
	NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 2 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 3 OF 8

RD. S-106 (TWIN CHURCH ROAD SOUTH)

RD. S-107 (ALLIGATOR ROAD)

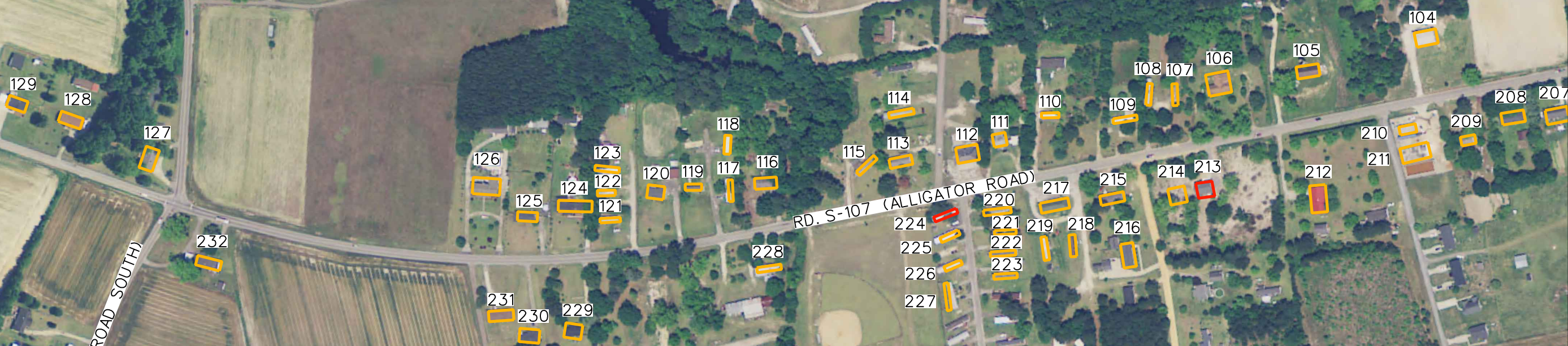
1" = 300'



IMPACTED



NOT IMPACTED





ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 4 OF 8



1" = 300'



IMPACTED



NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 5 OF 8





ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 6 OF 8



51

50

49

48

47

46

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44

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157

165

164

163

162

161

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159

158

156



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 7 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 8 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 1 OF 8





ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 2 OF 8



1" = 300'

- IMPACTED
- NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 3 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 4 OF 8





ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 5 OF 8





ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 6 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 7 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



ALLIGATOR ROAD  
NOISE STUDY  
2040 NO BUILD  
CONDITION  
SHEET 8 OF 8



1" = 300'

-  IMPACTED
-  NOT IMPACTED



## 2015 Existing Noise Levels

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

29 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road  
Existing Conditions US 52 to Knollwood  
INPUT HEIGHTS

RUN:

BARRIER DESIGN:

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver

Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				Type Impact	With Barrier			
				LAeq1h		Increase over existing			Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dBA
				Calculated	Crit'n dBA	Calculated	Crit'n Sub'l Inc dB			Calculated	Goal dB	
R1	8	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R2	9	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R3	10	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
R4	11	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R5	13	1	0.0	63.9	66	63.9	15	----	63.9	0.0	8	-8.0
R6	14	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R7	15	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R8	16	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R9	17	1	0.0	62.4	66	62.4	15	----	62.4	0.0	8	-8.0
R10	18	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R11	19	1	0.0	59.4	66	59.4	15	----	59.4	0.0	8	-8.0
R12	20	1	0.0	58.2	66	58.2	15	----	58.2	0.0	8	-8.0
R13	21	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R14	22	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R15	23	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R16	24	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R17	25	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R18	26	1	0.0	62.1	66	62.1	15	----	62.1	0.0	8	-8.0
R19	27	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0
R20	28	1	0.0	62.1	66	62.1	15	----	62.1	0.0	8	-8.0
R21	29	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R22	30	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R23	31	1	0.0	62.4	66	62.4	15	----	62.4	0.0	8	-8.0
R24	32	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R25	33	1	0.0	61.9	66	61.9	15	----	61.9	0.0	8	-8.0
R26	34	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R27	35	1	0.0	61.8	66	61.8	15	----	61.8	0.0	8	-8.0
R28	36	1	0.0	62.4	66	62.4	15	----	62.4	0.0	8	-8.0
R29	37	1	0.0	61.0	66	61.0	15	----	61.0	0.0	8	-8.0
R30	38	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0
R31	43	1	0.0	59.4	66	59.4	15	----	59.4	0.0	8	-8.0
R32	44	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R33	45	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R34	46	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R35	48	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R36	49	1	0.0	53.6	66	53.6	15	----	53.6	0.0	8	-8.0
R37	50	1	0.0	57.8	66	57.8	15	----	57.8	0.0	8	-8.0
R38	51	1	0.0	57.6	66	57.6	15	----	57.6	0.0	8	-8.0
R39	52	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R40	53	1	0.0	64.6	66	64.6	15	----	64.6	0.0	8	-8.0
R41	54	1	0.0	64.5	66	64.5	15	----	64.5	0.0	8	-8.0
R42	55	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R43	56	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R44	57	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R45	58	1	0.0	60.7	66	60.7	15	----	60.7	0.0	8	-8.0
R46	59	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R47	60	1	0.0	62.7	66	62.7	15	----	62.7	0.0	8	-8.0
R48	61	1	0.0	55.6	66	55.6	15	----	55.6	0.0	8	-8.0
R49	62	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R50	63	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R51	64	1	0.0	66.7	66	66.7	15	Snd Lvl	66.7	0.0	8	-8.0
R52	65	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R53	66	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R54	67	1	0.0	53.7	66	53.7	15	----	53.7	0.0	8	-8.0
R55	68	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R56	69	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R57	70	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R58	71	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R59	72	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R60	73	1	0.0	54.2	66	54.2	15	----	54.2	0.0	8	-8.0
R61	74	1	0.0	67.0	66	67.0	15	Snd Lvl	67.0	0.0	8	-8.0
R62	75	1	0.0	55.4	66	55.4	15	----	55.4	0.0	8	-8.0
R63	76	1	0.0	67.0	66	67.0	15	Snd Lvl	67.0	0.0	8	-8.0
R64	77	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R65	78	1	0.0	66.5	66	66.5	15	Snd Lvl	66.5	0.0	8	-8.0
R66	79	1	0.0	66.2	66	66.2	15	Snd Lvl	66.2	0.0	8	-8.0
R67	80	1	0.0	54.7	66	54.7	15	----	54.7	0.0	8	-8.0
R68	81	1	0.0	66.6	66	66.6	15	Snd Lvl	66.6	0.0	8	-8.0
R69	82	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R70	83	1	0.0	67.2	66	67.2	15	Snd Lvl	67.2	0.0	8	-8.0
R71	84	1	0.0	54.7	66	54.7	15	----	54.7	0.0	8	-8.0
R72	85	1	0.0	66.5	66	66.5	15	Snd Lvl	66.5	0.0	8	-8.0
R73	86	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R74	87	1	0.0	66.6	66	66.6	15	Snd Lvl	66.6	0.0	8	-8.0
R75	88	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R76	89	1	0.0	66.7	66	66.7	15	Snd Lvl	66.7	0.0	8	-8.0
R77	90	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R78	91	1	0.0	68.3	66	68.3	15	Snd Lvl	68.3	0.0	8	-8.0
R79	92	1	0.0	57.1	66	57.1	15	----	57.1	0.0	8	-8.0
R80	93	1	0.0	53.0	66	53.0	15	----	53.0	0.0	8	-8.0
R81	95	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R82	96	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R83	97	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R86	99	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R85	100	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R87	101	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R88	102	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R89	103	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R90	105	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R91	106	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R93	107	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R92	108	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R94	109	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R95	110	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R96	111	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R97	112	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R98	113	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R99	114	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R100	115	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R101	144	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R102	145	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R103	146	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R104	147	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R105	148	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R106	149	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R107	150	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R108	151	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R109	152	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R110	153	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R111	154	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R112	155	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R113	156	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R114	157	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R115	158	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R116	159	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R117	160	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R118	161	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R119	162	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R120	163	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R121	164	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R122	165	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R123	166	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R124	167	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R125	168	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R126	169	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R127	170	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R128	171	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R129	172	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R130	174	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R131	175	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R132	176	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R133	177	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R135	179	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R136	180	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R137	181	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R138	182	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R139	183	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R140	184	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R141	185	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R142	186	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R143	187	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R144	189	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R145	190	1	0.0	60.9	66	60.9	15	----	60.9	0.0	8	-8.0
R146	191	1	0.0	60.9	66	60.9	15	----	60.9	0.0	8	-8.0
R147	192	1	0.0	64.2	66	64.2	15	----	64.2	0.0	8	-8.0
R148	193	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R149	194	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R150	195	1	0.0	61.2	66	61.2	15	----	61.2	0.0	8	-8.0
R151	196	1	0.0	63.6	66	63.6	15	----	63.6	0.0	8	-8.0
R152	197	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R153	199	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R154	200	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R155	201	1	0.0	54.1	66	54.1	15	----	54.1	0.0	8	-8.0
R156	202	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R157	203	1	0.0	66.1	66	66.1	15	Snd Lvl	66.1	0.0	8	-8.0
R158	204	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
R159	205	1	0.0	55.1	66	55.1	15	----	55.1	0.0	8	-8.0
R160	206	1	0.0	56.6	66	56.6	15	----	56.6	0.0	8	-8.0
R161	207	1	0.0	59.0	66	59.0	15	----	59.0	0.0	8	-8.0
R162	208	1	0.0	58.3	66	58.3	15	----	58.3	0.0	8	-8.0
R163	209	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R164	210	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R165	211	1	0.0	62.1	66	62.1	15	----	62.1	0.0	8	-8.0
R166	213	1	0.0	63.6	66	63.6	15	----	63.6	0.0	8	-8.0
R167	214	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	8	-8.0
R168	215	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R169	216	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R170	217	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R171	218	1	0.0	65.4	66	65.4	15	----	65.4	0.0	8	-8.0
R172	219	1	0.0	63.9	66	63.9	15	----	63.9	0.0	8	-8.0
R173	220	1	0.0	57.1	66	57.1	15	----	57.1	0.0	8	-8.0
R174	221	1	0.0	53.2	66	53.2	15	----	53.2	0.0	8	-8.0
R175	222	1	0.0	53.7	66	53.7	15	----	53.7	0.0	8	-8.0
R176	223	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0
R177	224	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R178	225	1	0.0	56.1	66	56.1	15	----	56.1	0.0	8	-8.0
R179	226	1	0.0	55.0	66	55.0	15	----	55.0	0.0	8	-8.0
R180	227	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R181	228	1	0.0	59.4	66	59.4	15	----	59.4	0.0	8	-8.0
R182	230	1	0.0	53.2	66	53.2	15	----	53.2	0.0	8	-8.0
R183	231	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0



RESULTS: SOUND LEVELS

Alligator Road

R184	232	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R185	233	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R186	234	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R187	235	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R188	236	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R189	237	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R190	238	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R191	239	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R192	241	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R193	242	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R194	243	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R195	244	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R196	245	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R197	246	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R198	247	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R199	248	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R200	250	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R201	251	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R202	252	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R203	253	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R204	254	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R205	255	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R206	256	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R207	257	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R208	258	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R209	266	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R210	271	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R211	272	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R212	273	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R213	274	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R214	275	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R215	276	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R216	278	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R217	279	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R218	280	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R219	281	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R220	282	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R221	283	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R222	284	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R223	285	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R224	286	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R225	287	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R226	288	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R227	289	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R228	290	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R229	302	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R230	303	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R231	304	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R232	305	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R233	306	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R234	307	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R235	308	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R236	309	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R237	310	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R238	311	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R239	312	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R240	313	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R241	314	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R242	316	1	0.0	51.0	66	51.0	15	----	51.0	0.0	8	-8.0
R243	317	1	0.0	51.0	66	51.0	15	----	51.0	0.0	8	-8.0
R244	318	1	0.0	51.1	66	51.1	15	----	51.1	0.0	8	-8.0
R245	319	1	0.0	51.6	66	51.6	15	----	51.6	0.0	8	-8.0
R246	320	1	0.0	51.5	66	51.5	15	----	51.5	0.0	8	-8.0
R247	321	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R248	322	1	0.0	51.5	66	51.5	15	----	51.5	0.0	8	-8.0
R249	323	1	0.0	50.7	66	50.7	15	----	50.7	0.0	8	-8.0
<b>Dwelling Units</b>	<b># DUs</b>	<b>Noise Reduction</b>										
		<b>Min</b>	<b>Avg</b>	<b>Max</b>								
		<b>dB</b>	<b>dB</b>	<b>dB</b>								
All Selected	249	0.0	0.0	0.0								
All Impacted	15	0.0	0.0	0.0								
All that meet NR Goal	0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

29 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Existing Conditions Knollwood to US 76

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				Type Impact	With Barrier			
				LAeq1h		Increase over existing			Calculated LAeq1h	Noise Reduction		Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n			Calculated	Goal	
dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB		
R1	8	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R2	9	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R3	10	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R4	11	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R5	13	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R6	14	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R7	15	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R8	16	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R9	17	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R10	18	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R11	19	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R12	20	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R13	21	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R14	22	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R15	23	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R16	24	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R17	25	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R18	26	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R19	27	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R20	28	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R21	29	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R22	30	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R23	31	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R24	32	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R25	33	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R26	34	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R27	35	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R28	36	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R29	37	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R30	38	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R31	43	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R32	44	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R33	45	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R34	46	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R35	48	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R36	49	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R37	50	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R38	51	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R39	52	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R40	53	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R41	54	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R42	55	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R43	56	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R44	57	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R45	58	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R46	59	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R47	60	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R48	61	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R49	62	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R50	63	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R51	64	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R52	65	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R53	66	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R54	67	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R55	68	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R56	69	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R57	70	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R58	71	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R59	72	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R60	73	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R61	74	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R62	75	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R63	76	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R64	77	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R65	78	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R66	79	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R67	80	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R68	81	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R69	82	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R70	83	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R71	84	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R72	85	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R73	86	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R74	87	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R75	88	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R76	89	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R77	90	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R78	91	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R79	92	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R80	93	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R81	95	1	0.0	65.2	66	65.2	15	----	65.2	0.0	8	-8.0
R82	96	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R83	97	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	54.1	66	54.1	15	----	54.1	0.0	8	-8.0
R86	99	1	0.0	55.7	66	55.7	15	----	55.7	0.0	8	-8.0
R85	100	1	0.0	65.0	66	65.0	15	----	65.0	0.0	8	-8.0
R87	101	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R88	102	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R89	103	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R90	105	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R91	106	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R93	107	1	0.0	49.8	66	49.8	15	----	49.8	0.0	8	-8.0
R92	108	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0
R94	109	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R95	110	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R96	111	1	0.0	49.4	66	49.4	15	----	49.4	0.0	8	-8.0
R97	112	1	0.0	51.2	66	51.2	15	----	51.2	0.0	8	-8.0
R98	113	1	0.0	57.6	66	57.6	15	----	57.6	0.0	8	-8.0
R99	114	1	0.0	56.8	66	56.8	15	----	56.8	0.0	8	-8.0
R100	115	1	0.0	52.0	66	52.0	15	----	52.0	0.0	8	-8.0
R101	144	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R102	145	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R103	146	1	0.0	52.6	66	52.6	15	----	52.6	0.0	8	-8.0
R104	147	1	0.0	55.0	66	55.0	15	----	55.0	0.0	8	-8.0
R105	148	1	0.0	56.3	66	56.3	15	----	56.3	0.0	8	-8.0
R106	149	1	0.0	56.2	66	56.2	15	----	56.2	0.0	8	-8.0
R107	150	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R108	151	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R109	152	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R110	153	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R111	154	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R112	155	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R113	156	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R114	157	1	0.0	49.6	66	49.6	15	----	49.6	0.0	8	-8.0
R115	158	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R116	159	1	0.0	57.2	66	57.2	15	----	57.2	0.0	8	-8.0
R117	160	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R118	161	1	0.0	49.8	66	49.8	15	----	49.8	0.0	8	-8.0
R119	162	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R120	163	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R121	164	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R122	165	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R123	166	1	0.0	49.9	66	49.9	15	----	49.9	0.0	8	-8.0
R124	167	1	0.0	55.0	66	55.0	15	----	55.0	0.0	8	-8.0
R125	168	1	0.0	57.7	66	57.7	15	----	57.7	0.0	8	-8.0
R126	169	1	0.0	52.3	66	52.3	15	----	52.3	0.0	8	-8.0
R127	170	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R128	171	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R129	172	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R130	174	1	0.0	52.2	66	52.2	15	----	52.2	0.0	8	-8.0
R131	175	1	0.0	49.7	66	49.7	15	----	49.7	0.0	8	-8.0
R132	176	1	0.0	51.2	66	51.2	15	----	51.2	0.0	8	-8.0
R133	177	1	0.0	52.9	66	52.9	15	----	52.9	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	59.9	66	59.9	15	----	59.9	0.0	8	-8.0
R135	179	1	0.0	58.3	66	58.3	15	----	58.3	0.0	8	-8.0
R136	180	1	0.0	57.4	66	57.4	15	----	57.4	0.0	8	-8.0
R137	181	1	0.0	58.3	66	58.3	15	----	58.3	0.0	8	-8.0
R138	182	1	0.0	63.9	66	63.9	15	----	63.9	0.0	8	-8.0
R139	183	1	0.0	65.1	66	65.1	15	----	65.1	0.0	8	-8.0
R140	184	1	0.0	57.8	66	57.8	15	----	57.8	0.0	8	-8.0
R141	185	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R142	186	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R143	187	1	0.0	50.1	66	50.1	15	----	50.1	0.0	8	-8.0
R144	189	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R145	190	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R146	191	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R147	192	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R148	193	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R149	194	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R150	195	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R151	196	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R152	197	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R153	199	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R154	200	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R155	201	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R156	202	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R157	203	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R158	204	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R159	205	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R160	206	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R161	207	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R162	208	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R163	209	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R164	210	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R165	211	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R166	213	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R167	214	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R168	215	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R169	216	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R170	217	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R171	218	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R172	219	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R173	220	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R174	221	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R175	222	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R176	223	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R177	224	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R178	225	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R179	226	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R180	227	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R181	228	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R182	230	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R183	231	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0



## RESULTS: SOUND LEVELS

## Alligator Road

R184	232	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R185	233	1	0.0	53.9	66	53.9	15	----	53.9	0.0	8	-8.0
R186	234	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R187	235	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R188	236	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R189	237	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R190	238	1	0.0	60.1	66	60.1	15	----	60.1	0.0	8	-8.0
R191	239	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0
R192	241	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R193	242	1	0.0	57.8	66	57.8	15	----	57.8	0.0	8	-8.0
R194	243	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R195	244	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R196	245	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R197	246	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R198	247	1	0.0	52.2	66	52.2	15	----	52.2	0.0	8	-8.0
R199	248	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R200	250	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0
R201	251	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R202	252	1	0.0	52.9	66	52.9	15	----	52.9	0.0	8	-8.0
R203	253	1	0.0	50.3	66	50.3	15	----	50.3	0.0	8	-8.0
R204	254	1	0.0	53.0	66	53.0	15	----	53.0	0.0	8	-8.0
R205	255	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R206	256	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R207	257	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R208	258	1	0.0	62.3	66	62.3	15	----	62.3	0.0	8	-8.0
R209	266	1	0.0	56.6	66	56.6	15	----	56.6	0.0	8	-8.0
R210	271	1	0.0	64.2	66	64.2	15	----	64.2	0.0	8	-8.0
R211	272	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R212	273	1	0.0	52.8	66	52.8	15	----	52.8	0.0	8	-8.0
R213	274	1	0.0	58.3	66	58.3	15	----	58.3	0.0	8	-8.0
R214	275	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R215	276	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R216	278	1	0.0	50.4	66	50.4	15	----	50.4	0.0	8	-8.0
R217	279	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R218	280	1	0.0	52.3	66	52.3	15	----	52.3	0.0	8	-8.0
R219	281	1	0.0	53.3	66	53.3	15	----	53.3	0.0	8	-8.0
R220	282	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R221	283	1	0.0	54.2	66	54.2	15	----	54.2	0.0	8	-8.0
R222	284	1	0.0	51.2	66	51.2	15	----	51.2	0.0	8	-8.0
R223	285	1	0.0	49.3	66	49.3	15	----	49.3	0.0	8	-8.0
R224	286	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R225	287	1	0.0	56.2	66	56.2	15	----	56.2	0.0	8	-8.0
R226	288	1	0.0	51.3	66	51.3	15	----	51.3	0.0	8	-8.0
R227	289	1	0.0	49.5	66	49.5	15	----	49.5	0.0	8	-8.0
R228	290	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R229	302	1	0.0	52.1	66	52.1	15	----	52.1	0.0	8	-8.0
R230	303	1	0.0	52.0	66	52.0	15	----	52.0	0.0	8	-8.0
R231	304	1	0.0	55.3	66	55.3	15	----	55.3	0.0	8	-8.0
R232	305	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0
R233	306	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0

**RESULTS: SOUND LEVELS**

**Alligator Road**

R234	307	1	0.0	56.2	66	56.2	15	----	56.2	0.0	8	-8.0
R235	308	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R236	309	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
R237	310	1	0.0	58.2	66	58.2	15	----	58.2	0.0	8	-8.0
R238	311	1	0.0	58.2	66	58.2	15	----	58.2	0.0	8	-8.0
R239	312	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R240	313	1	0.0	57.8	66	57.8	15	----	57.8	0.0	8	-8.0
R241	314	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
R242	316	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R243	317	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R244	318	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R245	319	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R246	320	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R247	321	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R248	322	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R249	323	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
<b>Dwelling Units</b>	<b># DUs</b>	<b>Noise Reduction</b>										
		<b>Min</b>	<b>Avg</b>	<b>Max</b>								
		<b>dB</b>	<b>dB</b>	<b>dB</b>								
All Selected	249	0.0	0.0	0.0								
All Impacted	1	0.0	0.0	0.0								
All that meet NR Goal	0	0.0	0.0	0.0								

## 2040 No-Build Noise Levels

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

29 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Future No Build - Knollwood to US 52

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver

Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				Type Impact	With Barrier			
				LAeq1h		Increase over existing			Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dBA
				Calculated	Crit'n dBA	Calculated	Crit'n Sub'l Inc dB			Calculated	Goal dB	
R1	8	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R2	9	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R3	10	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R4	11	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R5	13	1	0.0	64.7	66	64.7	15	----	64.7	0.0	8	-8.0
R6	14	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R7	15	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R8	16	1	0.0	63.4	66	63.4	15	----	63.4	0.0	8	-8.0
R9	17	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R10	18	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R11	19	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R12	20	1	0.0	59.1	66	59.1	15	----	59.1	0.0	8	-8.0
R13	21	1	0.0	64.9	66	64.9	15	----	64.9	0.0	8	-8.0
R14	22	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R15	23	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R16	24	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R17	25	1	0.0	63.1	66	63.1	15	----	63.1	0.0	8	-8.0
R18	26	1	0.0	63.0	66	63.0	15	----	63.0	0.0	8	-8.0
R19	27	1	0.0	63.3	66	63.3	15	----	63.3	0.0	8	-8.0
R20	28	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R21	29	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R22	30	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R23	31	1	0.0	63.3	66	63.3	15	----	63.3	0.0	8	-8.0
R24	32	1	0.0	63.5	66	63.5	15	----	63.5	0.0	8	-8.0
R25	33	1	0.0	62.7	66	62.7	15	----	62.7	0.0	8	-8.0
R26	34	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R27	35	1	0.0	62.7	66	62.7	15	----	62.7	0.0	8	-8.0
R28	36	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R29	37	1	0.0	61.8	66	61.8	15	----	61.8	0.0	8	-8.0
R30	38	1	0.0	56.8	66	56.8	15	----	56.8	0.0	8	-8.0
R31	43	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R32	44	1	0.0	52.8	66	52.8	15	----	52.8	0.0	8	-8.0
R33	45	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R34	46	1	0.0	53.9	66	53.9	15	----	53.9	0.0	8	-8.0
R35	48	1	0.0	61.2	66	61.2	15	----	61.2	0.0	8	-8.0
R36	49	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R37	50	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R38	51	1	0.0	58.4	66	58.4	15	----	58.4	0.0	8	-8.0
R39	52	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R40	53	1	0.0	65.5	66	65.5	15	----	65.5	0.0	8	-8.0
R41	54	1	0.0	65.4	66	65.4	15	----	65.4	0.0	8	-8.0
R42	55	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R43	56	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R44	57	1	0.0	63.0	66	63.0	15	----	63.0	0.0	8	-8.0
R45	58	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R46	59	1	0.0	61.9	66	61.9	15	----	61.9	0.0	8	-8.0
R47	60	1	0.0	63.6	66	63.6	15	----	63.6	0.0	8	-8.0
R48	61	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R49	62	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R50	63	1	0.0	60.9	66	60.9	15	----	60.9	0.0	8	-8.0
R51	64	1	0.0	67.6	66	67.6	15	Snd Lvl	67.6	0.0	8	-8.0
R52	65	1	0.0	67.2	66	67.2	15	Snd Lvl	67.2	0.0	8	-8.0
R53	66	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R54	67	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R55	68	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R56	69	1	0.0	60.1	66	60.1	15	----	60.1	0.0	8	-8.0
R57	70	1	0.0	60.5	66	60.5	15	----	60.5	0.0	8	-8.0
R58	71	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R59	72	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R60	73	1	0.0	55.1	66	55.1	15	----	55.1	0.0	8	-8.0
R61	74	1	0.0	67.9	66	67.9	15	Snd Lvl	67.9	0.0	8	-8.0
R62	75	1	0.0	56.2	66	56.2	15	----	56.2	0.0	8	-8.0
R63	76	1	0.0	67.9	66	67.9	15	Snd Lvl	67.9	0.0	8	-8.0
R64	77	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R65	78	1	0.0	67.3	66	67.3	15	Snd Lvl	67.3	0.0	8	-8.0
R66	79	1	0.0	67.1	66	67.1	15	Snd Lvl	67.1	0.0	8	-8.0
R67	80	1	0.0	55.5	66	55.5	15	----	55.5	0.0	8	-8.0
R68	81	1	0.0	67.5	66	67.5	15	Snd Lvl	67.5	0.0	8	-8.0
R69	82	1	0.0	55.3	66	55.3	15	----	55.3	0.0	8	-8.0
R70	83	1	0.0	68.1	66	68.1	15	Snd Lvl	68.1	0.0	8	-8.0
R71	84	1	0.0	55.6	66	55.6	15	----	55.6	0.0	8	-8.0
R72	85	1	0.0	67.4	66	67.4	15	Snd Lvl	67.4	0.0	8	-8.0
R73	86	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R74	87	1	0.0	67.5	66	67.5	15	Snd Lvl	67.5	0.0	8	-8.0
R75	88	1	0.0	55.3	66	55.3	15	----	55.3	0.0	8	-8.0
R76	89	1	0.0	67.5	66	67.5	15	Snd Lvl	67.5	0.0	8	-8.0
R77	90	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R78	91	1	0.0	69.2	66	69.2	15	Snd Lvl	69.2	0.0	8	-8.0
R79	92	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R80	93	1	0.0	53.9	66	53.9	15	----	53.9	0.0	8	-8.0
R81	95	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R82	96	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R83	97	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R86	99	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R85	100	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R87	101	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R88	102	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R89	103	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R90	105	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R91	106	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R93	107	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R92	108	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R94	109	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R95	110	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R96	111	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R97	112	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R98	113	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R99	114	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R100	115	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R101	144	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R102	145	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R103	146	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R104	147	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R105	148	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R106	149	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R107	150	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R108	151	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R109	152	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R110	153	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R111	154	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R112	155	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R113	156	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R114	157	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R115	158	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R116	159	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R117	160	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R118	161	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R119	162	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R120	163	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R121	164	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R122	165	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R123	166	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R124	167	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R125	168	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R126	169	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R127	170	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R128	171	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R129	172	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R130	174	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R131	175	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R132	176	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R133	177	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0



RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R135	179	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R136	180	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R137	181	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R138	182	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R139	183	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R140	184	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R141	185	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R142	186	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R143	187	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R144	189	1	0.0	67.2	66	67.2	15	Snd Lvl	67.2	0.0	8	-8.0
R145	190	1	0.0	61.8	66	61.8	15	----	61.8	0.0	8	-8.0
R146	191	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R147	192	1	0.0	65.0	66	65.0	15	----	65.0	0.0	8	-8.0
R148	193	1	0.0	63.1	66	63.1	15	----	63.1	0.0	8	-8.0
R149	194	1	0.0	62.4	66	62.4	15	----	62.4	0.0	8	-8.0
R150	195	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R151	196	1	0.0	64.5	66	64.5	15	----	64.5	0.0	8	-8.0
R152	197	1	0.0	55.4	66	55.4	15	----	55.4	0.0	8	-8.0
R153	199	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R154	200	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R155	201	1	0.0	54.9	66	54.9	15	----	54.9	0.0	8	-8.0
R156	202	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R157	203	1	0.0	66.9	66	66.9	15	Snd Lvl	66.9	0.0	8	-8.0
R158	204	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R159	205	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0
R160	206	1	0.0	57.4	66	57.4	15	----	57.4	0.0	8	-8.0
R161	207	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R162	208	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R163	209	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R164	210	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R165	211	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R166	213	1	0.0	64.5	66	64.5	15	----	64.5	0.0	8	-8.0
R167	214	1	0.0	67.6	66	67.6	15	Snd Lvl	67.6	0.0	8	-8.0
R168	215	1	0.0	63.6	66	63.6	15	----	63.6	0.0	8	-8.0
R169	216	1	0.0	64.5	66	64.5	15	----	64.5	0.0	8	-8.0
R170	217	1	0.0	64.9	66	64.9	15	----	64.9	0.0	8	-8.0
R171	218	1	0.0	66.3	66	66.3	15	Snd Lvl	66.3	0.0	8	-8.0
R172	219	1	0.0	64.7	66	64.7	15	----	64.7	0.0	8	-8.0
R173	220	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R174	221	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R175	222	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R176	223	1	0.0	57.6	66	57.6	15	----	57.6	0.0	8	-8.0
R177	224	1	0.0	58.2	66	58.2	15	----	58.2	0.0	8	-8.0
R178	225	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R179	226	1	0.0	55.8	66	55.8	15	----	55.8	0.0	8	-8.0
R180	227	1	0.0	61.9	66	61.9	15	----	61.9	0.0	8	-8.0
R181	228	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R182	230	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R183	231	1	0.0	63.3	66	63.3	15	----	63.3	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R184	232	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R185	233	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R186	234	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R187	235	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R188	236	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R189	237	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R190	238	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R191	239	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R192	241	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R193	242	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R194	243	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R195	244	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R196	245	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R197	246	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R198	247	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R199	248	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R200	250	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R201	251	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R202	252	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R203	253	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R204	254	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R205	255	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R206	256	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R207	257	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R208	258	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R209	266	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R210	271	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R211	272	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R212	273	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R213	274	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R214	275	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R215	276	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R216	278	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R217	279	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R218	280	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R219	281	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R220	282	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R221	283	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R222	284	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R223	285	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R224	286	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R225	287	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R226	288	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R227	289	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R228	290	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R229	302	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R230	303	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R231	304	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R232	305	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R233	306	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

**RESULTS: SOUND LEVELS**

**Alligator Road**

R234	307	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R235	308	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R236	309	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R237	310	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R238	311	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R239	312	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R240	313	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R241	314	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R242	316	1	0.0	51.8	66	51.8	15	----	51.8	0.0	8	-8.0
R243	317	1	0.0	51.8	66	51.8	15	----	51.8	0.0	8	-8.0
R244	318	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R245	319	1	0.0	52.4	66	52.4	15	----	52.4	0.0	8	-8.0
R246	320	1	0.0	52.3	66	52.3	15	----	52.3	0.0	8	-8.0
R247	321	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R248	322	1	0.0	52.3	66	52.3	15	----	52.3	0.0	8	-8.0
R249	323	1	0.0	51.5	66	51.5	15	----	51.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	249	0.0	0.0	0.0
All Impacted	16	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

29 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road  
Future No Build - Knollwood to US 76

RUN:

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				Type Impact	With Barrier			
				LAeq1h		Increase over existing			Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dBA
				Calculated	Crit'n dBA	Calculated	Crit'n Sub'l Inc dB			Calculated	Goal dB	
R1	8	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R2	9	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R3	10	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R4	11	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R5	13	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R6	14	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R7	15	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R8	16	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R9	17	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R10	18	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R11	19	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R12	20	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R13	21	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R14	22	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R15	23	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R16	24	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R17	25	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R18	26	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R19	27	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R20	28	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R21	29	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R22	30	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R23	31	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R24	32	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R25	33	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R26	34	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R27	35	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R28	36	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R29	37	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R30	38	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R31	43	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R32	44	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R33	45	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R34	46	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R35	48	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R36	49	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R37	50	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R38	51	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R39	52	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R40	53	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R41	54	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R42	55	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R43	56	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R44	57	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R45	58	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R46	59	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R47	60	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R48	61	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R49	62	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R50	63	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R51	64	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R52	65	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R53	66	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R54	67	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R55	68	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R56	69	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R57	70	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R58	71	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R59	72	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R60	73	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R61	74	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R62	75	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R63	76	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R64	77	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R65	78	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R66	79	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R67	80	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R68	81	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R69	82	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R70	83	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R71	84	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R72	85	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R73	86	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R74	87	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R75	88	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R76	89	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R77	90	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R78	91	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R79	92	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R80	93	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R81	95	1	0.0	66.0	66	66.0	15	Snd Lvl	66.0	0.0	8	-8.0
R82	96	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R83	97	1	0.0	57.7	66	57.7	15	----	57.7	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	54.8	66	54.8	15	----	54.8	0.0	8	-8.0
R86	99	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R85	100	1	0.0	65.8	66	65.8	15	----	65.8	0.0	8	-8.0
R87	101	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R88	102	1	0.0	55.1	66	55.1	15	----	55.1	0.0	8	-8.0
R89	103	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R90	105	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R91	106	1	0.0	52.6	66	52.6	15	----	52.6	0.0	8	-8.0
R93	107	1	0.0	50.5	66	50.5	15	----	50.5	0.0	8	-8.0
R92	108	1	0.0	57.4	66	57.4	15	----	57.4	0.0	8	-8.0
R94	109	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R95	110	1	0.0	56.8	66	56.8	15	----	56.8	0.0	8	-8.0
R96	111	1	0.0	50.1	66	50.1	15	----	50.1	0.0	8	-8.0
R97	112	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R98	113	1	0.0	58.4	66	58.4	15	----	58.4	0.0	8	-8.0
R99	114	1	0.0	57.6	66	57.6	15	----	57.6	0.0	8	-8.0
R100	115	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R101	144	1	0.0	53.8	66	53.8	15	----	53.8	0.0	8	-8.0
R102	145	1	0.0	53.4	66	53.4	15	----	53.4	0.0	8	-8.0
R103	146	1	0.0	53.3	66	53.3	15	----	53.3	0.0	8	-8.0
R104	147	1	0.0	55.8	66	55.8	15	----	55.8	0.0	8	-8.0
R105	148	1	0.0	57.1	66	57.1	15	----	57.1	0.0	8	-8.0
R106	149	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0
R107	150	1	0.0	57.8	66	57.8	15	----	57.8	0.0	8	-8.0
R108	151	1	0.0	57.1	66	57.1	15	----	57.1	0.0	8	-8.0
R109	152	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R110	153	1	0.0	54.8	66	54.8	15	----	54.8	0.0	8	-8.0
R111	154	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R112	155	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R113	156	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R114	157	1	0.0	50.3	66	50.3	15	----	50.3	0.0	8	-8.0
R115	158	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0
R116	159	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
R117	160	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R118	161	1	0.0	50.5	66	50.5	15	----	50.5	0.0	8	-8.0
R119	162	1	0.0	55.2	66	55.2	15	----	55.2	0.0	8	-8.0
R120	163	1	0.0	55.4	66	55.4	15	----	55.4	0.0	8	-8.0
R121	164	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R122	165	1	0.0	53.8	66	53.8	15	----	53.8	0.0	8	-8.0
R123	166	1	0.0	50.6	66	50.6	15	----	50.6	0.0	8	-8.0
R124	167	1	0.0	55.7	66	55.7	15	----	55.7	0.0	8	-8.0
R125	168	1	0.0	58.4	66	58.4	15	----	58.4	0.0	8	-8.0
R126	169	1	0.0	53.0	66	53.0	15	----	53.0	0.0	8	-8.0
R127	170	1	0.0	64.8	66	64.8	15	----	64.8	0.0	8	-8.0
R128	171	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R129	172	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R130	174	1	0.0	52.2	66	52.2	15	----	52.2	0.0	8	-8.0
R131	175	1	0.0	50.3	66	50.3	15	----	50.3	0.0	8	-8.0
R132	176	1	0.0	51.8	66	51.8	15	----	51.8	0.0	8	-8.0
R133	177	1	0.0	53.5	66	53.5	15	----	53.5	0.0	8	-8.0



RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R135	179	1	0.0	59.0	66	59.0	15	----	59.0	0.0	8	-8.0
R136	180	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R137	181	1	0.0	59.1	66	59.1	15	----	59.1	0.0	8	-8.0
R138	182	1	0.0	64.7	66	64.7	15	----	64.7	0.0	8	-8.0
R139	183	1	0.0	65.9	66	65.9	15	----	65.9	0.0	8	-8.0
R140	184	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
R141	185	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R142	186	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R143	187	1	0.0	50.7	66	50.7	15	----	50.7	0.0	8	-8.0
R144	189	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R145	190	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R146	191	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R147	192	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R148	193	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R149	194	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R150	195	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R151	196	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R152	197	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R153	199	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R154	200	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R155	201	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R156	202	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R157	203	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R158	204	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R159	205	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R160	206	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R161	207	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R162	208	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R163	209	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R164	210	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R165	211	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R166	213	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R167	214	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R168	215	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R169	216	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R170	217	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R171	218	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R172	219	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R173	220	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R174	221	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R175	222	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R176	223	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R177	224	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R178	225	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R179	226	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R180	227	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R181	228	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R182	230	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R183	231	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R184	232	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R185	233	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R186	234	1	0.0	61.4	66	61.4	15	----	61.4	0.0	8	-8.0
R187	235	1	0.0	61.6	66	61.6	15	----	61.6	0.0	8	-8.0
R188	236	1	0.0	57.1	66	57.1	15	----	57.1	0.0	8	-8.0
R189	237	1	0.0	60.5	66	60.5	15	----	60.5	0.0	8	-8.0
R190	238	1	0.0	60.9	66	60.9	15	----	60.9	0.0	8	-8.0
R191	239	1	0.0	56.6	66	56.6	15	----	56.6	0.0	8	-8.0
R192	241	1	0.0	61.0	66	61.0	15	----	61.0	0.0	8	-8.0
R193	242	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R194	243	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R195	244	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R196	245	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R197	246	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R198	247	1	0.0	52.9	66	52.9	15	----	52.9	0.0	8	-8.0
R199	248	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R200	250	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0
R201	251	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R202	252	1	0.0	53.6	66	53.6	15	----	53.6	0.0	8	-8.0
R203	253	1	0.0	50.9	66	50.9	15	----	50.9	0.0	8	-8.0
R204	254	1	0.0	53.7	66	53.7	15	----	53.7	0.0	8	-8.0
R205	255	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R206	256	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R207	257	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R208	258	1	0.0	63.1	66	63.1	15	----	63.1	0.0	8	-8.0
R209	266	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R210	271	1	0.0	65.0	66	65.0	15	----	65.0	0.0	8	-8.0
R211	272	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R212	273	1	0.0	53.5	66	53.5	15	----	53.5	0.0	8	-8.0
R213	274	1	0.0	59.1	66	59.1	15	----	59.1	0.0	8	-8.0
R214	275	1	0.0	59.4	66	59.4	15	----	59.4	0.0	8	-8.0
R215	276	1	0.0	61.6	66	61.6	15	----	61.6	0.0	8	-8.0
R216	278	1	0.0	51.0	66	51.0	15	----	51.0	0.0	8	-8.0
R217	279	1	0.0	63.0	66	63.0	15	----	63.0	0.0	8	-8.0
R218	280	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R219	281	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R220	282	1	0.0	64.8	66	64.8	15	----	64.8	0.0	8	-8.0
R221	283	1	0.0	54.9	66	54.9	15	----	54.9	0.0	8	-8.0
R222	284	1	0.0	51.9	66	51.9	15	----	51.9	0.0	8	-8.0
R223	285	1	0.0	50.0	66	50.0	15	----	50.0	0.0	8	-8.0
R224	286	1	0.0	67.1	66	67.1	15	Snd Lvl	67.1	0.0	8	-8.0
R225	287	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R226	288	1	0.0	52.0	66	52.0	15	----	52.0	0.0	8	-8.0
R227	289	1	0.0	50.1	66	50.1	15	----	50.1	0.0	8	-8.0
R228	290	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R229	302	1	0.0	52.9	66	52.9	15	----	52.9	0.0	8	-8.0
R230	303	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R231	304	1	0.0	56.1	66	56.1	15	----	56.1	0.0	8	-8.0
R232	305	1	0.0	57.4	66	57.4	15	----	57.4	0.0	8	-8.0
R233	306	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0

**RESULTS: SOUND LEVELS**

**Alligator Road**

R234	307	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0
R235	308	1	0.0	54.7	66	54.7	15	----	54.7	0.0	8	-8.0
R236	309	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R237	310	1	0.0	59.0	66	59.0	15	----	59.0	0.0	8	-8.0
R238	311	1	0.0	58.9	66	58.9	15	----	58.9	0.0	8	-8.0
R239	312	1	0.0	59.3	66	59.3	15	----	59.3	0.0	8	-8.0
R240	313	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
R241	314	1	0.0	59.3	66	59.3	15	----	59.3	0.0	8	-8.0
R242	316	1	0.0	48.6	66	48.6	15	----	48.6	0.0	8	-8.0
R243	317	1	0.0	48.6	66	48.6	15	----	48.6	0.0	8	-8.0
R244	318	1	0.0	48.7	66	48.7	15	----	48.7	0.0	8	-8.0
R245	319	1	0.0	49.2	66	49.2	15	----	49.2	0.0	8	-8.0
R246	320	1	0.0	49.1	66	49.1	15	----	49.1	0.0	8	-8.0
R247	321	1	0.0	49.5	66	49.5	15	----	49.5	0.0	8	-8.0
R248	322	1	0.0	49.1	66	49.1	15	----	49.1	0.0	8	-8.0
R249	323	1	0.0	48.3	66	48.3	15	----	48.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	249	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

## 2040 Build Noise Levels

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

28 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Future Five Lane

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				Type Impact	With Barrier			
				LAeq1h		Increase over existing			Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dBA
				Calculated	Crit'n dBA	Calculated	Crit'n Sub'l Inc dB			Calculated	Goal dB	
R1	8	1	0.0	61.4	66	61.4	15	----	61.4	0.0	8	-8.0
R2	9	1	0.0	64.1	66	64.1	15	----	64.1	0.0	8	-8.0
R3	10	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R4	11	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R5	13	1	0.0	70.0	66	70.0	15	Snd Lvl	70.0	0.0	8	-8.0
R6	14	1	0.0	68.7	66	68.7	15	Snd Lvl	68.7	0.0	8	-8.0
R7	15	1	0.0	63.4	66	63.4	15	----	63.4	0.0	8	-8.0
R8	16	1	0.0	68.3	66	68.3	15	Snd Lvl	68.3	0.0	8	-8.0
R9	17	1	0.0	68.3	66	68.3	15	Snd Lvl	68.3	0.0	8	-8.0
R10	18	1	0.0	64.0	66	64.0	15	----	64.0	0.0	8	-8.0
R11	19	1	0.0	64.7	66	64.7	15	----	64.7	0.0	8	-8.0
R12	20	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R13	21	1	0.0	70.3	66	70.3	15	Snd Lvl	70.3	0.0	8	-8.0
R14	22	1	0.0	66.1	66	66.1	15	Snd Lvl	66.1	0.0	8	-8.0
R15	23	1	0.0	66.9	66	66.9	15	Snd Lvl	66.9	0.0	8	-8.0
R16	24	1	0.0	66.7	66	66.7	15	Snd Lvl	66.7	0.0	8	-8.0
R17	25	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	8	-8.0
R18	26	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R19	27	1	0.0	65.9	66	65.9	15	----	65.9	0.0	8	-8.0
R20	28	1	0.0	64.9	66	64.9	15	----	64.9	0.0	8	-8.0
R21	29	1	0.0	63.3	66	63.3	15	----	63.3	0.0	8	-8.0
R22	30	1	0.0	64.4	66	64.4	15	----	64.4	0.0	8	-8.0
R23	31	1	0.0	65.0	66	65.0	15	----	65.0	0.0	8	-8.0
R24	32	1	0.0	65.2	66	65.2	15	----	65.2	0.0	8	-8.0
R25	33	1	0.0	64.6	66	64.6	15	----	64.6	0.0	8	-8.0
R26	34	1	0.0	64.7	66	64.7	15	----	64.7	0.0	8	-8.0
R27	35	1	0.0	64.2	66	64.2	15	----	64.2	0.0	8	-8.0
R28	36	1	0.0	64.8	66	64.8	15	----	64.8	0.0	8	-8.0
R29	37	1	0.0	65.9	66	65.9	15	----	65.9	0.0	8	-8.0
R30	38	1	0.0	60.3	66	60.3	15	----	60.3	0.0	8	-8.0
R31	43	1	0.0	62.7	66	62.7	15	----	62.7	0.0	8	-8.0
R32	44	1	0.0	56.3	66	56.3	15	----	56.3	0.0	8	-8.0
R33	45	1	0.0	59.7	66	59.7	15	----	59.7	0.0	8	-8.0

## RESULTS: SOUND LEVELS

## Alligator Road

R34	46	1	0.0	56.6	66	56.6	15	----	56.6	0.0	8	-8.0
R35	48	1	0.0	63.1	66	63.1	15	----	63.1	0.0	8	-8.0
R36	49	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0
R37	50	1	0.0	61.4	66	61.4	15	----	61.4	0.0	8	-8.0
R38	51	1	0.0	61.4	66	61.4	15	----	61.4	0.0	8	-8.0
R39	52	1	0.0	65.8	66	65.8	15	----	65.8	0.0	8	-8.0
R40	53	1	0.0	67.1	66	67.1	15	Snd Lvl	67.1	0.0	8	-8.0
R41	54	1	0.0	67.1	66	67.1	15	Snd Lvl	67.1	0.0	8	-8.0
R42	55	1	0.0	65.6	66	65.6	15	----	65.6	0.0	8	-8.0
R43	56	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R44	57	1	0.0	65.2	66	65.2	15	----	65.2	0.0	8	-8.0
R45	58	1	0.0	63.9	66	63.9	15	----	63.9	0.0	8	-8.0
R46	59	1	0.0	64.1	66	64.1	15	----	64.1	0.0	8	-8.0
R47	60	1	0.0	65.5	66	65.5	15	----	65.5	0.0	8	-8.0
R48	61	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R49	62	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R50	63	1	0.0	63.4	66	63.4	15	----	63.4	0.0	8	-8.0
R51	64	1	0.0	68.6	66	68.6	15	Snd Lvl	68.6	0.0	8	-8.0
R52	65	1	0.0	66.1	66	66.1	15	Snd Lvl	66.1	0.0	8	-8.0
R53	66	1	0.0	65.7	66	65.7	15	----	65.7	0.0	8	-8.0
R54	67	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R55	68	1	0.0	63.5	66	63.5	15	----	63.5	0.0	8	-8.0
R56	69	1	0.0	63.0	66	63.0	15	----	63.0	0.0	8	-8.0
R57	70	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R58	71	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R59	72	1	0.0	57.6	66	57.6	15	----	57.6	0.0	8	-8.0
R60	73	1	0.0	56.1	66	56.1	15	----	56.1	0.0	8	-8.0
R61	74	1	0.0	66.6	66	66.6	15	Snd Lvl	66.6	0.0	8	-8.0
R62	75	1	0.0	57.2	66	57.2	15	----	57.2	0.0	8	-8.0
R63	76	1	0.0	66.6	66	66.6	15	Snd Lvl	66.6	0.0	8	-8.0
R64	77	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R65	78	1	0.0	66.2	66	66.2	15	Snd Lvl	66.2	0.0	8	-8.0
R66	79	1	0.0	66.2	66	66.2	15	Snd Lvl	66.2	0.0	8	-8.0
R67	80	1	0.0	57.4	66	57.4	15	----	57.4	0.0	8	-8.0
R68	81	1	0.0	66.5	66	66.5	15	Snd Lvl	66.5	0.0	8	-8.0
R69	82	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R70	83	1	0.0	67.0	66	67.0	15	Snd Lvl	67.0	0.0	8	-8.0
R71	84	1	0.0	57.7	66	57.7	15	----	57.7	0.0	8	-8.0
R72	85	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R73	86	1	0.0	57.2	66	57.2	15	----	57.2	0.0	8	-8.0
R74	87	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R75	88	1	0.0	57.2	66	57.2	15	----	57.2	0.0	8	-8.0
R76	89	1	0.0	66.5	66	66.5	15	Snd Lvl	66.5	0.0	8	-8.0
R77	90	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R78	91	1	0.0	68.4	66	68.4	15	Snd Lvl	68.4	0.0	8	-8.0
R79	92	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R80	93	1	0.0	55.9	66	55.9	15	----	55.9	0.0	8	-8.0
R81	95	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R82	96	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R83	97	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0



RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R86	99	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R85	100	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R87	101	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R88	102	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R89	103	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R90	105	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R91	106	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R93	107	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R92	108	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R94	109	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R95	110	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R96	111	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R97	112	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R98	113	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R99	114	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R100	115	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R101	144	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R102	145	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R103	146	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R104	147	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R105	148	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R106	149	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R107	150	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R108	151	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R109	152	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R110	153	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R111	154	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R112	155	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R113	156	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R114	157	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R115	158	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R116	159	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R117	160	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R118	161	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R119	162	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R120	163	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R121	164	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R122	165	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R123	166	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R124	167	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R125	168	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R126	169	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R127	170	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R128	171	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R129	172	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R130	174	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R131	175	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R132	176	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R133	177	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R135	179	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R136	180	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R137	181	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R138	182	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R139	183	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R140	184	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R141	185	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R142	186	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R143	187	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R144	189	1	0.0	66.4	66	66.4	15	Snd Lvl	66.4	0.0	8	-8.0
R145	190	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R146	191	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R147	192	1	0.0	64.5	66	64.5	15	----	64.5	0.0	8	-8.0
R148	193	1	0.0	62.9	66	62.9	15	----	62.9	0.0	8	-8.0
R149	194	1	0.0	62.2	66	62.2	15	----	62.2	0.0	8	-8.0
R150	195	1	0.0	61.8	66	61.8	15	----	61.8	0.0	8	-8.0
R151	196	1	0.0	63.4	66	63.4	15	----	63.4	0.0	8	-8.0
R152	197	1	0.0	56.7	66	56.7	15	----	56.7	0.0	8	-8.0
R153	199	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R154	200	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R155	201	1	0.0	58.4	66	58.4	15	----	58.4	0.0	8	-8.0
R156	202	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R157	203	1	0.0	68.1	66	68.1	15	Snd Lvl	68.1	0.0	8	-8.0
R158	204	1	0.0	61.8	66	61.8	15	----	61.8	0.0	8	-8.0
R159	205	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R160	206	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R161	207	1	0.0	62.1	66	62.1	15	----	62.1	0.0	8	-8.0
R162	208	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R163	209	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0
R164	210	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0
R165	211	1	0.0	64.8	66	64.8	15	----	64.8	0.0	8	-8.0
R166	213	1	0.0	66.2	66	66.2	15	Snd Lvl	66.2	0.0	8	-8.0
R167	214	1	0.0	71.0	66	71.0	15	Snd Lvl	71.0	0.0	8	-8.0
R168	215	1	0.0	67.3	66	67.3	15	Snd Lvl	67.3	0.0	8	-8.0
R169	216	1	0.0	68.6	66	68.6	15	Snd Lvl	68.6	0.0	8	-8.0
R170	217	1	0.0	69.0	66	69.0	15	Snd Lvl	69.0	0.0	8	-8.0
R171	218	1	0.0	68.4	66	68.4	15	Snd Lvl	68.4	0.0	8	-8.0
R172	219	1	0.0	66.5	66	66.5	15	Snd Lvl	66.5	0.0	8	-8.0
R173	220	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R174	221	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
R175	222	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R176	223	1	0.0	61.3	66	61.3	15	----	61.3	0.0	8	-8.0
R177	224	1	0.0	61.9	66	61.9	15	----	61.9	0.0	8	-8.0
R178	225	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R179	226	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R180	227	1	0.0	65.3	66	65.3	15	----	65.3	0.0	8	-8.0
R181	228	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R182	230	1	0.0	57.9	66	57.9	15	----	57.9	0.0	8	-8.0
R183	231	1	0.0	65.0	66	65.0	15	----	65.0	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R184	232	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R185	233	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R186	234	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R187	235	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R188	236	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R189	237	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R190	238	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R191	239	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R192	241	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R193	242	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R194	243	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R195	244	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R196	245	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R197	246	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R198	247	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R199	248	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R200	250	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R201	251	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R202	252	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R203	253	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R204	254	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R205	255	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R206	256	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R207	257	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R208	258	1	0.0	27.5	66	27.5	15	----	27.5	0.0	8	-8.0
R209	266	1	0.0	27.4	66	27.4	15	----	27.4	0.0	8	-8.0
R210	271	1	0.0	27.2	66	27.2	15	----	27.2	0.0	8	-8.0
R211	272	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R212	273	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R213	274	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R214	275	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R215	276	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R216	278	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R217	279	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R218	280	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R219	281	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R220	282	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R221	283	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R222	284	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R223	285	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R224	286	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R225	287	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R226	288	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R227	289	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R228	290	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R229	302	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R230	303	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R231	304	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R232	305	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R233	306	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R234	307	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R235	308	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R236	309	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R237	310	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R238	311	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R239	312	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R240	313	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R241	314	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R242	316	1	0.0	53.8	66	53.8	15	----	53.8	0.0	8	-8.0
R243	317	1	0.0	53.8	66	53.8	15	----	53.8	0.0	8	-8.0
R244	318	1	0.0	54.1	66	54.1	15	----	54.1	0.0	8	-8.0
R245	319	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R246	320	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R247	321	1	0.0	54.4	66	54.4	15	----	54.4	0.0	8	-8.0
R248	322	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R249	323	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
<b>Dwelling Units</b>	<b># DUs</b>	<b>Noise Reduction</b>										
		<b>Min</b>	<b>Avg</b>	<b>Max</b>								
		<b>dB</b>	<b>dB</b>	<b>dB</b>								
All Selected	249	0.0	0.0	0.0								
All Impacted	33	0.0	0.0	0.0								
All that meet NR Goal	0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

28 July 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road  
Future Three Lane  
INPUT HEIGHTS

RUN:

BARRIER DESIGN:

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver													
Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				With Barrier					
				LAeq1h		Increase over existing		Type Impact	Calculated		Noise Reduction		Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc		LAeq1h	Calculated	Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
R1	8	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R2	9	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R3	10	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R4	11	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R5	13	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R6	14	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R7	15	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R8	16	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R9	17	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R10	18	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R11	19	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R12	20	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R13	21	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R14	22	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R15	23	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R16	24	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R17	25	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R18	26	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R19	27	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R20	28	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R21	29	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R22	30	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R23	31	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R24	32	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R25	33	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R26	34	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R27	35	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R28	36	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R29	37	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R30	38	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R31	43	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R32	44	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	
R33	45	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0	

RESULTS: SOUND LEVELS

Alligator Road

R34	46	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R35	48	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R36	49	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R37	50	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R38	51	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R39	52	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R40	53	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R41	54	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R42	55	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R43	56	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R44	57	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R45	58	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R46	59	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R47	60	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R48	61	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R49	62	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R50	63	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R51	64	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R52	65	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R53	66	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R54	67	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R55	68	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R56	69	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R57	70	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R58	71	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R59	72	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R60	73	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R61	74	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R62	75	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R63	76	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R64	77	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R65	78	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R66	79	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R67	80	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R68	81	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R69	82	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R70	83	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R71	84	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R72	85	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R73	86	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R74	87	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R75	88	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R76	89	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R77	90	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R78	91	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R79	92	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R80	93	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R81	95	1	0.0	65.5	66	65.5	15	----	65.5	0.0	8	-8.0
R82	96	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0
R83	97	1	0.0	61.2	66	61.2	15	----	61.2	0.0	8	-8.0



RESULTS: SOUND LEVELS

Alligator Road

R84	98	1	0.0	59.8	66	59.8	15	----	59.8	0.0	8	-8.0
R86	99	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R85	100	1	0.0	65.5	66	65.5	15	----	65.5	0.0	8	-8.0
R87	101	1	0.0	63.3	66	63.3	15	----	63.3	0.0	8	-8.0
R88	102	1	0.0	58.7	66	58.7	15	----	58.7	0.0	8	-8.0
R89	103	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R90	105	1	0.0	63.8	66	63.8	15	----	63.8	0.0	8	-8.0
R91	106	1	0.0	56.2	66	56.2	15	----	56.2	0.0	8	-8.0
R93	107	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R92	108	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R94	109	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R95	110	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R96	111	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R97	112	1	0.0	55.5	66	55.5	15	----	55.5	0.0	8	-8.0
R98	113	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R99	114	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R100	115	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R101	144	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0
R102	145	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R103	146	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0
R104	147	1	0.0	59.0	66	59.0	15	----	59.0	0.0	8	-8.0
R105	148	1	0.0	60.1	66	60.1	15	----	60.1	0.0	8	-8.0
R106	149	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R107	150	1	0.0	60.8	66	60.8	15	----	60.8	0.0	8	-8.0
R108	151	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R109	152	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R110	153	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R111	154	1	0.0	62.6	66	62.6	15	----	62.6	0.0	8	-8.0
R112	155	1	0.0	65.3	66	65.3	15	----	65.3	0.0	8	-8.0
R113	156	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R114	157	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R115	158	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R116	159	1	0.0	61.0	66	61.0	15	----	61.0	0.0	8	-8.0
R117	160	1	0.0	63.1	66	63.1	15	----	63.1	0.0	8	-8.0
R118	161	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R119	162	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
R120	163	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R121	164	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R122	165	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R123	166	1	0.0	54.6	66	54.6	15	----	54.6	0.0	8	-8.0
R124	167	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R125	168	1	0.0	61.0	66	61.0	15	----	61.0	0.0	8	-8.0
R126	169	1	0.0	56.3	66	56.3	15	----	56.3	0.0	8	-8.0
R127	170	1	0.0	65.2	66	65.2	15	----	65.2	0.0	8	-8.0
R128	171	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R129	172	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R130	174	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R131	175	1	0.0	54.0	66	54.0	15	----	54.0	0.0	8	-8.0
R132	176	1	0.0	55.6	66	55.6	15	----	55.6	0.0	8	-8.0
R133	177	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0

RESULTS: SOUND LEVELS

Alligator Road

R134	178	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R135	179	1	0.0	60.4	66	60.4	15	----	60.4	0.0	8	-8.0
R136	180	1	0.0	57.2	66	57.2	15	----	57.2	0.0	8	-8.0
R137	181	1	0.0	57.7	66	57.7	15	----	57.7	0.0	8	-8.0
R138	182	1	0.0	63.2	66	63.2	15	----	63.2	0.0	8	-8.0
R139	183	1	0.0	63.8	66	63.8	15	----	63.8	0.0	8	-8.0
R140	184	1	0.0	56.9	66	56.9	15	----	56.9	0.0	8	-8.0
R141	185	1	0.0	52.8	66	52.8	15	----	52.8	0.0	8	-8.0
R142	186	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R143	187	1	0.0	52.2	66	52.2	15	----	52.2	0.0	8	-8.0
R144	189	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R145	190	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R146	191	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R147	192	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R148	193	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R149	194	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R150	195	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R151	196	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R152	197	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R153	199	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R154	200	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R155	201	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R156	202	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R157	203	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R158	204	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R159	205	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R160	206	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R161	207	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R162	208	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R163	209	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R164	210	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R165	211	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R166	213	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R167	214	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R168	215	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R169	216	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R170	217	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R171	218	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R172	219	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R173	220	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R174	221	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R175	222	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R176	223	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R177	224	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R178	225	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R179	226	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R180	227	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R181	228	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R182	230	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R183	231	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS

Alligator Road

R184	232	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R185	233	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R186	234	1	0.0	61.6	66	61.6	15	----	61.6	0.0	8	-8.0
R187	235	1	0.0	61.7	66	61.7	15	----	61.7	0.0	8	-8.0
R188	236	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R189	237	1	0.0	61.3	66	61.3	15	----	61.3	0.0	8	-8.0
R190	238	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R191	239	1	0.0	60.0	66	60.0	15	----	60.0	0.0	8	-8.0
R192	241	1	0.0	61.5	66	61.5	15	----	61.5	0.0	8	-8.0
R193	242	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0
R194	243	1	0.0	59.3	66	59.3	15	----	59.3	0.0	8	-8.0
R195	244	1	0.0	59.5	66	59.5	15	----	59.5	0.0	8	-8.0
R196	245	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
R197	246	1	0.0	60.9	66	60.9	15	----	60.9	0.0	8	-8.0
R198	247	1	0.0	53.5	66	53.5	15	----	53.5	0.0	8	-8.0
R199	248	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R200	250	1	0.0	57.3	66	57.3	15	----	57.3	0.0	8	-8.0
R201	251	1	0.0	59.9	66	59.9	15	----	59.9	0.0	8	-8.0
R202	252	1	0.0	55.1	66	55.1	15	----	55.1	0.0	8	-8.0
R203	253	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R204	254	1	0.0	55.3	66	55.3	15	----	55.3	0.0	8	-8.0
R205	255	1	0.0	60.1	66	60.1	15	----	60.1	0.0	8	-8.0
R206	256	1	0.0	62.5	66	62.5	15	----	62.5	0.0	8	-8.0
R207	257	1	0.0	60.2	66	60.2	15	----	60.2	0.0	8	-8.0
R208	258	1	0.0	62.0	66	62.0	15	----	62.0	0.0	8	-8.0
R209	266	1	0.0	58.2	66	58.2	15	----	58.2	0.0	8	-8.0
R210	271	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R211	272	1	0.0	58.8	66	58.8	15	----	58.8	0.0	8	-8.0
R212	273	1	0.0	55.1	66	55.1	15	----	55.1	0.0	8	-8.0
R213	274	1	0.0	59.4	66	59.4	15	----	59.4	0.0	8	-8.0
R214	275	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R215	276	1	0.0	61.1	66	61.1	15	----	61.1	0.0	8	-8.0
R216	278	1	0.0	53.6	66	53.6	15	----	53.6	0.0	8	-8.0
R217	279	1	0.0	62.1	66	62.1	15	----	62.1	0.0	8	-8.0
R218	280	1	0.0	54.9	66	54.9	15	----	54.9	0.0	8	-8.0
R219	281	1	0.0	55.7	66	55.7	15	----	55.7	0.0	8	-8.0
R220	282	1	0.0	63.7	66	63.7	15	----	63.7	0.0	8	-8.0
R221	283	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R222	284	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
R223	285	1	0.0	52.7	66	52.7	15	----	52.7	0.0	8	-8.0
R224	286	1	0.0	65.4	66	65.4	15	----	65.4	0.0	8	-8.0
R225	287	1	0.0	58.1	66	58.1	15	----	58.1	0.0	8	-8.0
R226	288	1	0.0	54.5	66	54.5	15	----	54.5	0.0	8	-8.0
R227	289	1	0.0	53.1	66	53.1	15	----	53.1	0.0	8	-8.0
R228	290	1	0.0	59.9	66	59.9	15	----	59.9	0.0	8	-8.0
R229	302	1	0.0	53.7	66	53.7	15	----	53.7	0.0	8	-8.0
R230	303	1	0.0	53.2	66	53.2	15	----	53.2	0.0	8	-8.0
R231	304	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R232	305	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
R233	306	1	0.0	59.2	66	59.2	15	----	59.2	0.0	8	-8.0

**RESULTS: SOUND LEVELS**

**Alligator Road**

R234	307	1	0.0	56.4	66	56.4	15	----	56.4	0.0	8	-8.0
R235	308	1	0.0	53.9	66	53.9	15	----	53.9	0.0	8	-8.0
R236	309	1	0.0	56.0	66	56.0	15	----	56.0	0.0	8	-8.0
R237	310	1	0.0	62.8	66	62.8	15	----	62.8	0.0	8	-8.0
R238	311	1	0.0	59.6	66	59.6	15	----	59.6	0.0	8	-8.0
R239	312	1	0.0	60.6	66	60.6	15	----	60.6	0.0	8	-8.0
R240	313	1	0.0	59.3	66	59.3	15	----	59.3	0.0	8	-8.0
R241	314	1	0.0	57.7	66	57.7	15	----	57.7	0.0	8	-8.0
R242	316	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R243	317	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R244	318	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R245	319	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R246	320	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R247	321	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R248	322	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
R249	323	1	0.0	0.0	66	0.0	15	inactive	0.0	0.0	8	0.0
<b>Dwelling Units</b>	<b># DUs</b>	<b>Noise Reduction</b>										
		<b>Min</b>	<b>Avg</b>	<b>Max</b>								
		<b>dB</b>	<b>dB</b>	<b>dB</b>								
All Selected	249	0.0	0.0	0.0								
All Impacted	0	0.0	0.0	0.0								
All that meet NR Goal	0	0.0	0.0	0.0								

# Noise Measurement Data Sheets

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road Widening</b>	Site #: 1	Date: April 1, 2014
Site Description: Residential	Site Location: 409 Danielle Run	
Start Time: 9:43 am	Duration: 20 minutes	$L_{eq}$ : 55.0

Site Sketch: (Plan View)



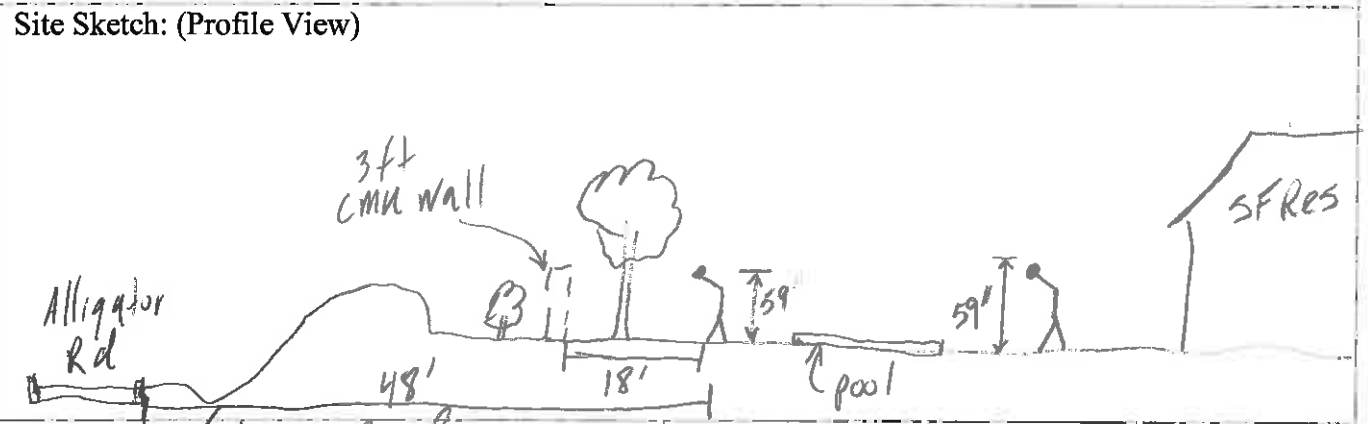
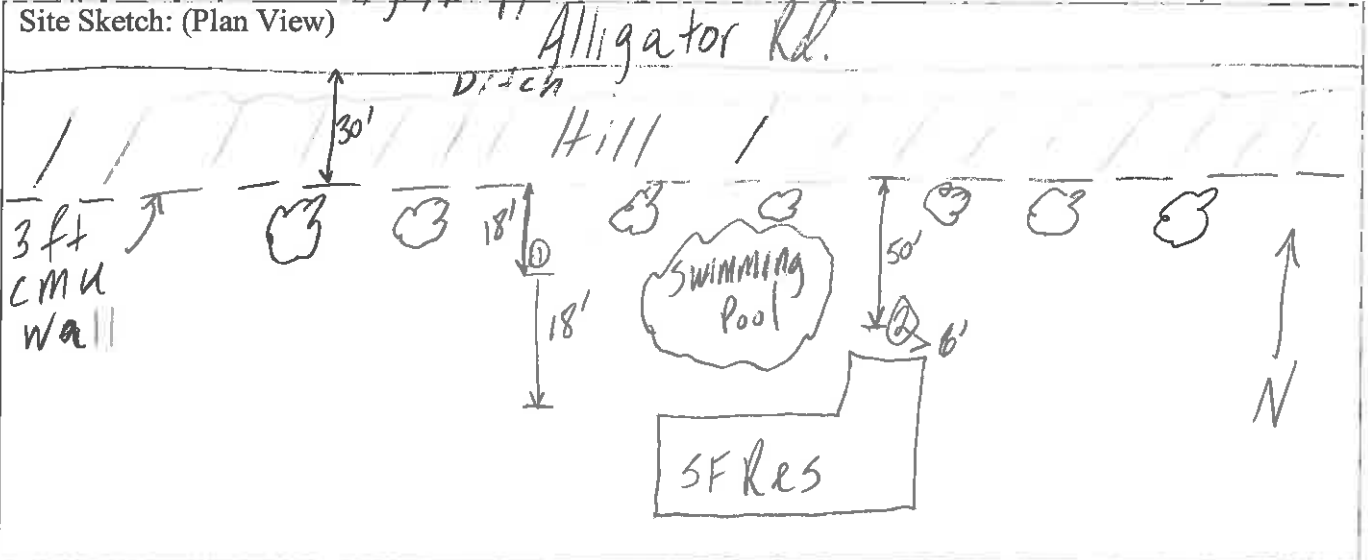
Notes: Birds, Neighborhood Cars

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 79, West Bound – 62
Medium Trucks:	East Bound – 1, West Bound – 0
Heavy Trucks:	East Bound – 1, West Bound – 4
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 0, West Bound – 0



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST1</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>409 Daniel Run</b>	
Start Time: <b>9:43</b>	End Time: <b>10:03</b>	Calibration Level - Start: <b>9:18</b>	<b>113.8/21.4   113.8/26.4</b>
Temperature: <b>54</b>	Wind Speed: <b>±1</b>	Cloud Cover: <b>High, wispy</b>	
		$L_{eq}$ : <b>58.4</b>	<b>55.0</b>
		$L_{min}$ : <b>39.3</b>	<b>36.9</b>
		$L_{max}$ : <b>74.8</b>	<b>72.9</b>
		Calibration Level - End:	



Road Name: <b>Notes: Birks</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
Typical Section: <b>2-Lane</b>	Autos:	<b>79</b>	<b>62</b>
Speed Limit: <b>45</b>	Medium Trucks:	<b>1</b>	<b>0</b>
	Heavy Trucks:	<b>1</b>	<b>4</b>
	Buses:	<b>0</b>	<b>0</b>
	Motorcycles:	<b>0</b>	<b>0</b>

## TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road Widening</b>	Site #: 2	Date: April 1, 2014
Site Description: Residential	Site Location: 699 Alligator Road	
Start Time: 10:21 am	Duration: 20 minutes	$L_{eq}$ : 59.8

Site Sketch: (Plan View)

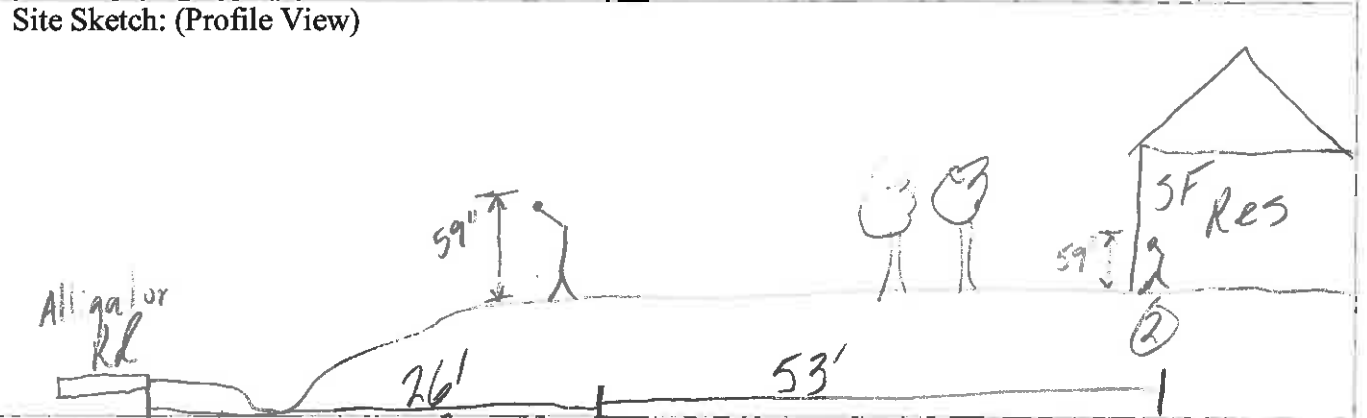
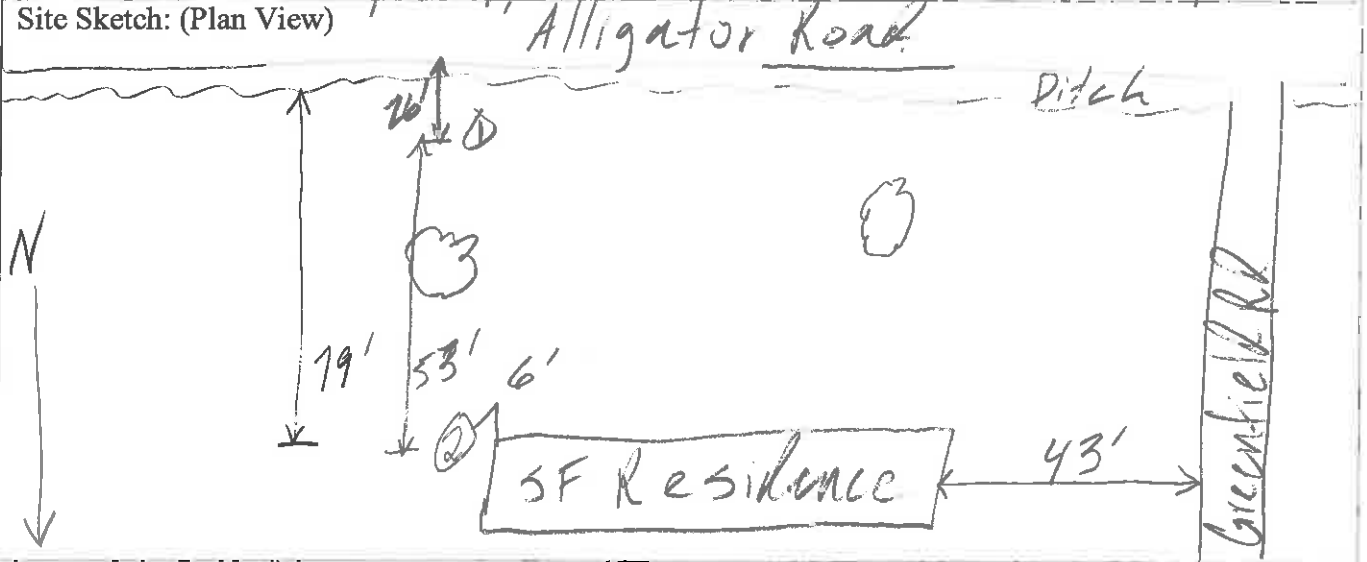


Notes: Birds

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 67, West Bound –60
Medium Trucks:	East Bound – 1, West Bound – 2
Heavy Trucks:	East Bound – 5, West Bound – 5
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 0, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST2</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>699 Alligator Road</b>	
Start Time: <b>10:21</b>	<del>Calibration Level - Start</del>	<b>① 140</b>	<b>② 118</b>
End Time: <b>10:41</b>	L <sub>eq</sub> :	<b>68.5</b>	<b>59.8</b>
Temperature: <b>60</b>	L <sub>min</sub> :	<b>39.6</b>	<b>35.9</b>
Wind Speed: <b>±1 mph</b>	L <sub>max</sub> :	<b>87.1</b>	<b>76.0</b>
Cloud Cover: <b>High, wispy</b>	Calibration Level - End:		



Road Name: <b>Alligator Rd</b>	Notes: <b>Birds</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
Typical Section: <b>2-Lane</b>		Autos:	<b>67</b>	<b>60</b>
Speed Limit: <b>45</b>		Medium Trucks:	<b>1</b>	<b>2</b>
		Heavy Trucks:	<b>5</b>	<b>5</b>
		Buses:	<b>0</b>	<b>0</b>
		Motorcycles:	<b>0</b>	<b>0</b>



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road Widening</b>	Site #: 3	Date: April 1, 2014
Site Description: Residential	Site Location: 3246 Pleasant Valley Circle	
Start Time: 10:59 am	Duration: 20 minutes	$L_{eq}$ : 66.4

Site Sketch: (Plan View)

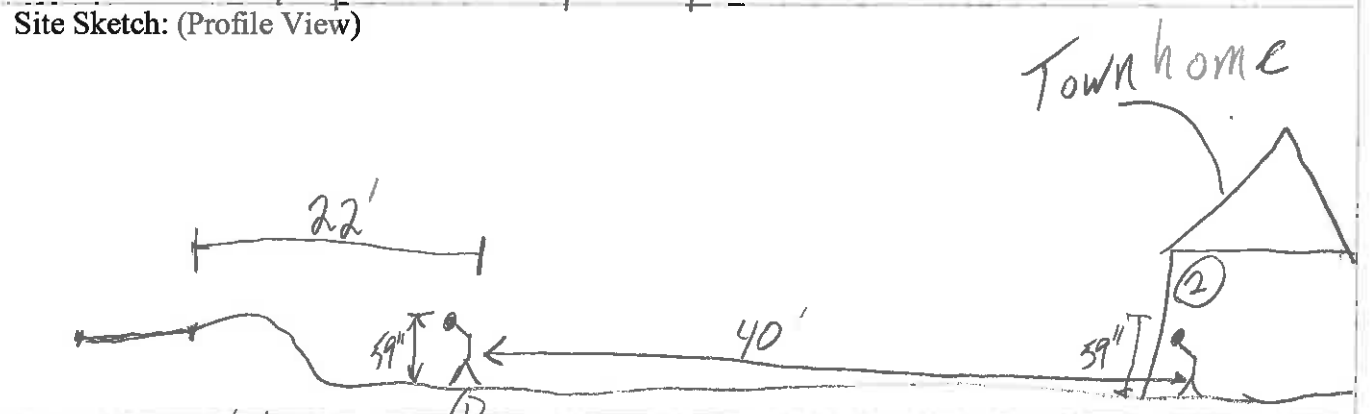
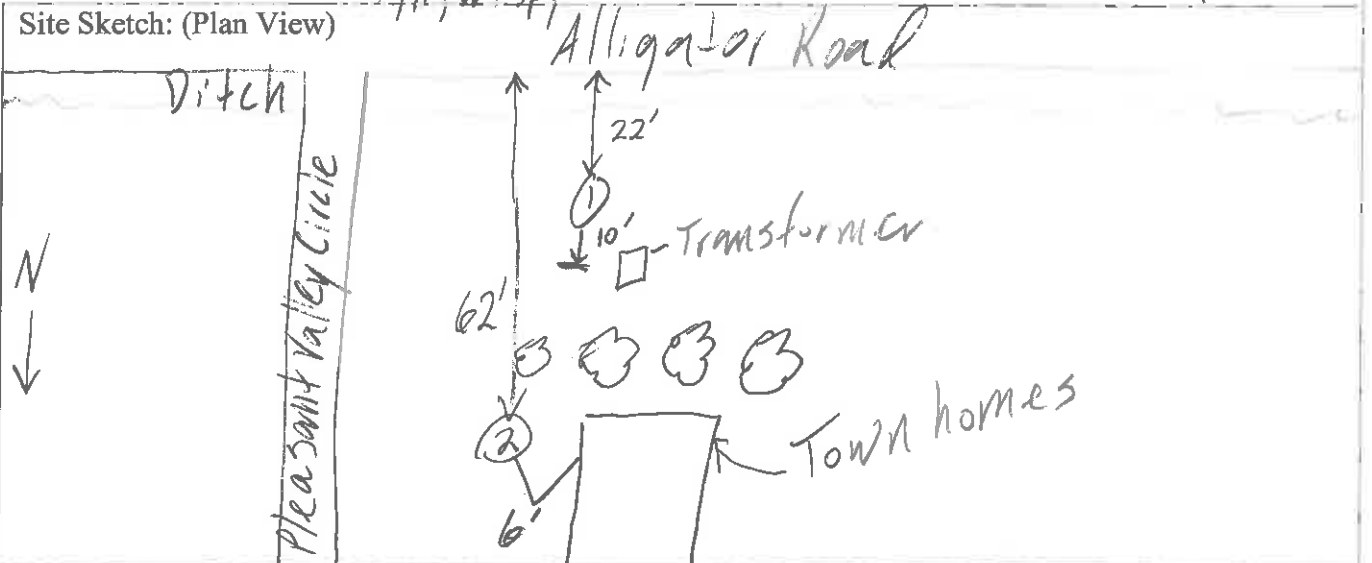


Notes: Birds, Transformer, Phone Ringing at 19<sup>th</sup> minute

Traffic Counts	Alligator Road
Autos:	East Bound – 55, West Bound – 61
Medium Trucks:	East Bound – 2, West Bound – 0
Heavy Trucks:	East Bound – 1, West Bound – 2
Buses:	East Bound – 1, West Bound – 1
Motorcycles:	East Bound – 0, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST3</b>	Date: 4-1-14	
Site Description: <b>Town homes</b>		Site Location: <b>3246 Pleasant Valley Circle</b>		
Start Time:	<b>10:59</b>	<del>End Time:</del>	<b>140</b>	<b>118</b>
End Time:	<b>11:19</b>	L <sub>eq</sub> :	<b>66.4</b>	<b>61.2</b>
Temperature:	<b>64</b>	L <sub>min</sub> :	<b>35.1</b>	<b>33.3</b>
Wind Speed:	<b>± 1 mph</b>	L <sub>max</sub> :	<b>87.3</b>	<b>82.0</b>
Cloud Cover:	<b>High, wispy</b>	Calibration Level - End:		



~~Road Name~~ Notes:  
Birds, transformer, phone ring at 19th minute

Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
Autos:	<b>55</b>	<b>61</b>
Medium Trucks:	<b>2</b>	<b>0</b>
Heavy Trucks:	<b>1</b>	<b>2</b>
Buses:	<b>0</b>	<b>1</b>
Motorcycles:	<b>0</b>	<b>0</b>

Typical Section:  
**2-lane**

Speed Limit: **45**



## TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road Widening</b>	Site #: 4	Date: April 1, 2014
Site Description: Residential	Site Location: 2411 Alligator Road	
Start Time: 11:32 am	Duration: 20 minutes	$L_{eq}$ : 58.9

Site Sketch: (Plan View)



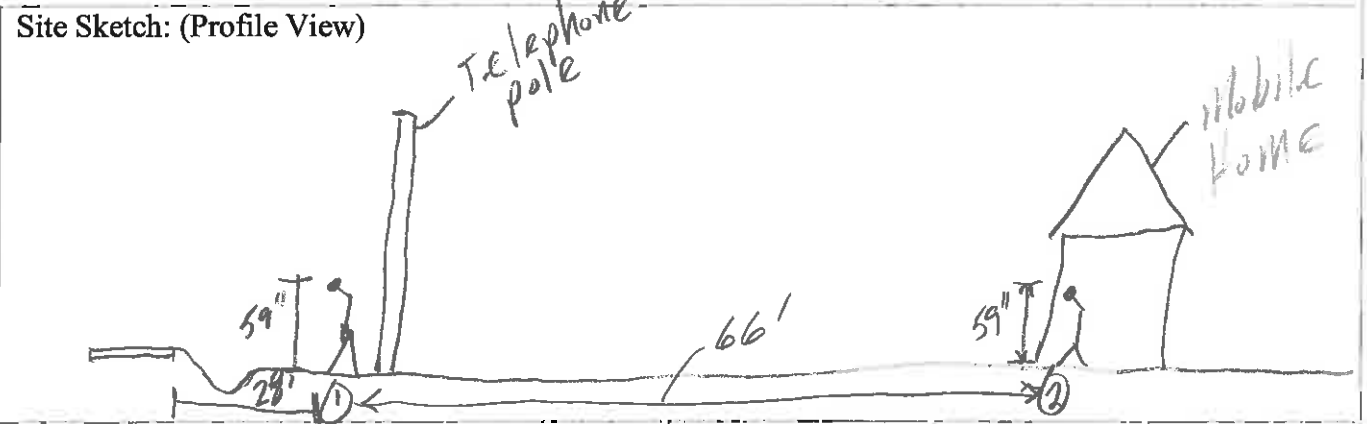
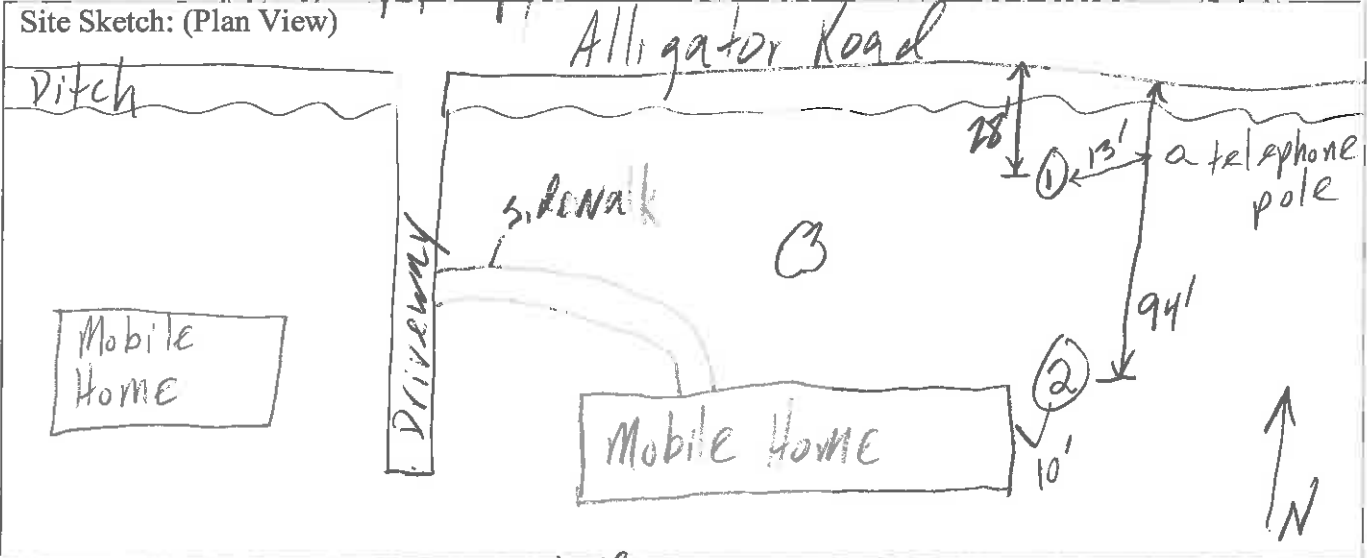
Notes: Birds

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 75, West Bound – 79
Medium Trucks:	East Bound – 4, West Bound – 2
Heavy Trucks:	East Bound – 3, West Bound – 1
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 0, West Bound – 1



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST4</b>	Date: <b>4-1-14</b>
Site Description: <b>Mobile Home</b>		Site Location: <b>2411 Alligator Road</b>	
Start Time:	<b>11:32</b>	Calibration Level - Start:	<b>D140 @ 118</b>
End Time:	<b>11:52</b>	L <sub>eq</sub> :	<b>66.6 58.9</b>
Temperature:	<b>73</b>	L <sub>min</sub> :	<b>38.6 38.1</b>
Wind Speed:	<b>± 1 mph</b>	L <sub>max</sub> :	<b>86.6 79.3</b>
Cloud Cover:	<b>High, wispy</b>	Calibration Level - End:	



<del>Notes:</del> <b>Notes:</b> <b>Birds</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
	Autos:	<b>75</b>	<b>79</b>
Typical Section: <b>2-Lane</b>	Medium Trucks:	<b>4</b>	<b>2</b>
	Heavy Trucks:	<b>3</b>	<b>1</b>
Speed Limit: <b>45 mph</b>	Buses:	<b>0</b>	<b>0</b>
	Motorcycles:	<b>0</b>	<b>1</b>

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: Alligator Road Widening	Site #: 5	Date: April 1, 2014
Site Description: Residential	Site Location: 2921 Cross Vine Drive	
Start Time: 12:04 am	Duration: 20 minutes	L <sub>eq</sub> : 58.9

Site Sketch: (Plan View)

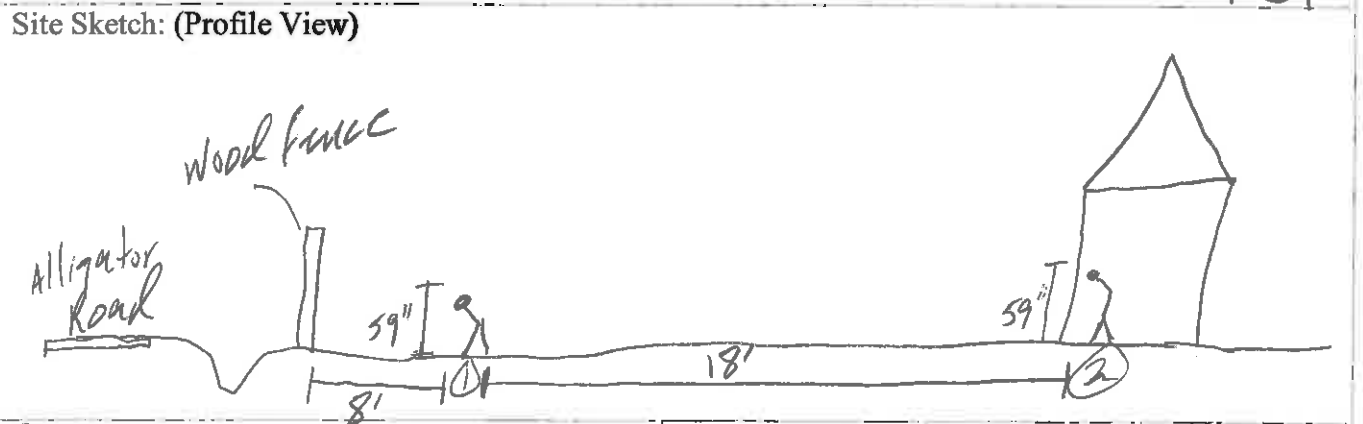
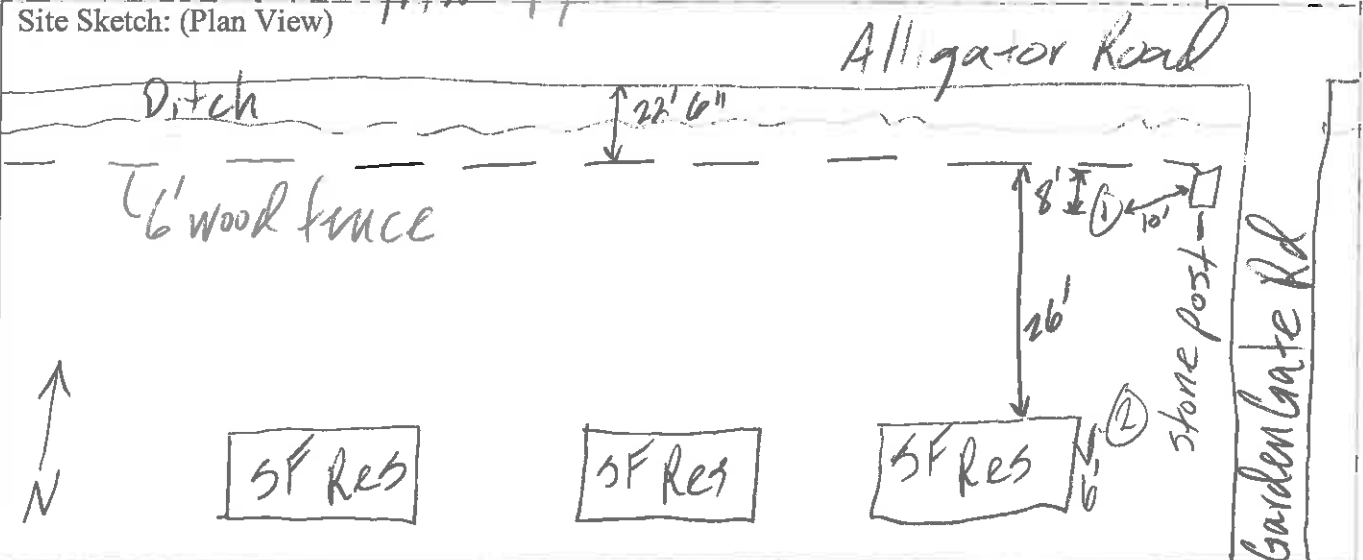


Notes: Birds

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 77, West Bound – 78
Medium Trucks:	East Bound – 0, West Bound – 1
Heavy Trucks:	East Bound – 3, West Bound – 2
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 0, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST5</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>2921 Cross Vine Drive</b>	
Start Time: <b>12:04</b>	<del>Calibration Level - Start</del>	<b>0140</b>	<b>0118</b>
End Time: <b>12:24</b>	L <sub>eq</sub> :	<b>58.9</b>	<b>58.9</b>
Temperature: <b>73</b>	L <sub>min</sub> :	<b>31.8</b>	<b>36.9</b>
Wind Speed: <b>0 mph</b>	L <sub>max</sub> :	<b>77.3</b>	<b>77.8</b>
Cloud Cover: <b>High, wispy</b>	Calibration Level - End:		



Road Name: <b>Birds, No Breeze</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
	Autos:	<b>77</b>	<b>78</b>
Typical Section: <b>2 Lane</b>	Medium Trucks:	<b>0</b>	<b>1</b>
	Heavy Trucks:	<b>3</b>	<b>3</b>
Speed Limit: <b>45</b>	Buses:	<b>0</b>	<b>0</b>
	Motorcycles:	<b>0</b>	<b>0</b>



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: Alligator Road Widening	Site #:6	Date: April 1, 2014
Site Description: Residential	Site Location: 3022 Alligator Road	
Start Time: 12:36 pm	Duration: 20 minutes	L <sub>eq</sub> : 58.9

Site Sketch: (Plan View)

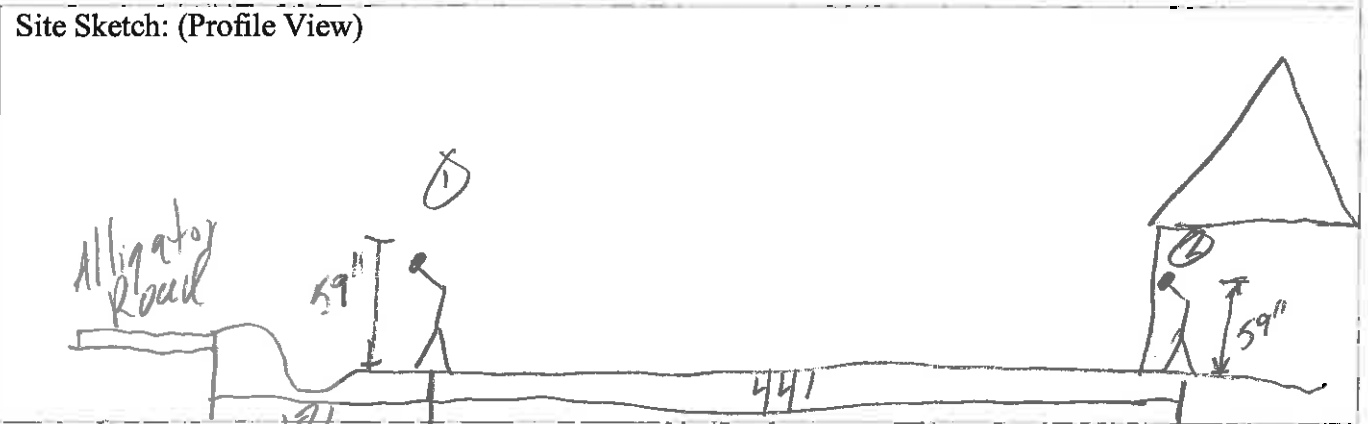
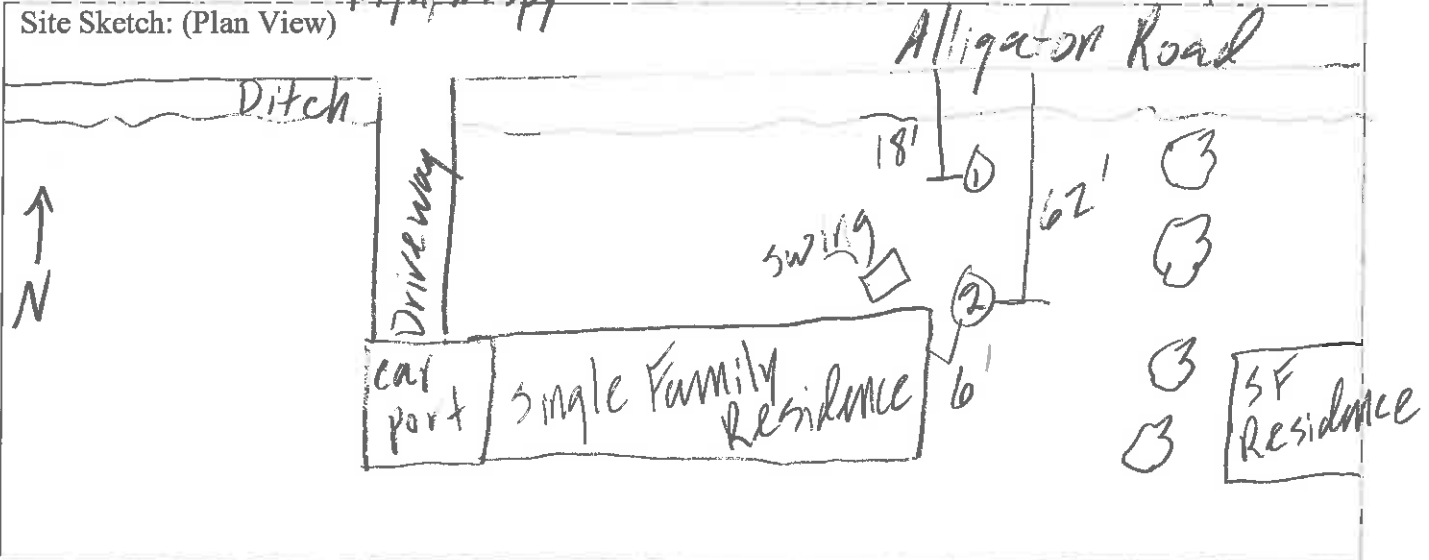


Notes: Birds, Distant Airplanes

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 98, West Bound – 87
Medium Trucks:	East Bound – 0, West Bound – 3
Heavy Trucks:	East Bound – 2, West Bound – 3
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 2, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST6</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>3022 Alligator Road</b>	
Start Time: <b>12:36</b>	Calibration Level - Start: <b>1140</b>	<b>118</b>	
End Time: <b>12:56</b>	L <sub>eq</sub> : <b>66.5</b>	<b>58.9</b>	
Temperature: <b>75</b>	L <sub>min</sub> : <b>38.3</b>	<b>36.5</b>	
Wind Speed: <b>± 0 mph</b>	L <sub>max</sub> : <b>85.4</b>	<b>76.7</b>	
Cloud Cover: <b>High, wispy</b>	Calibration Level - End:		



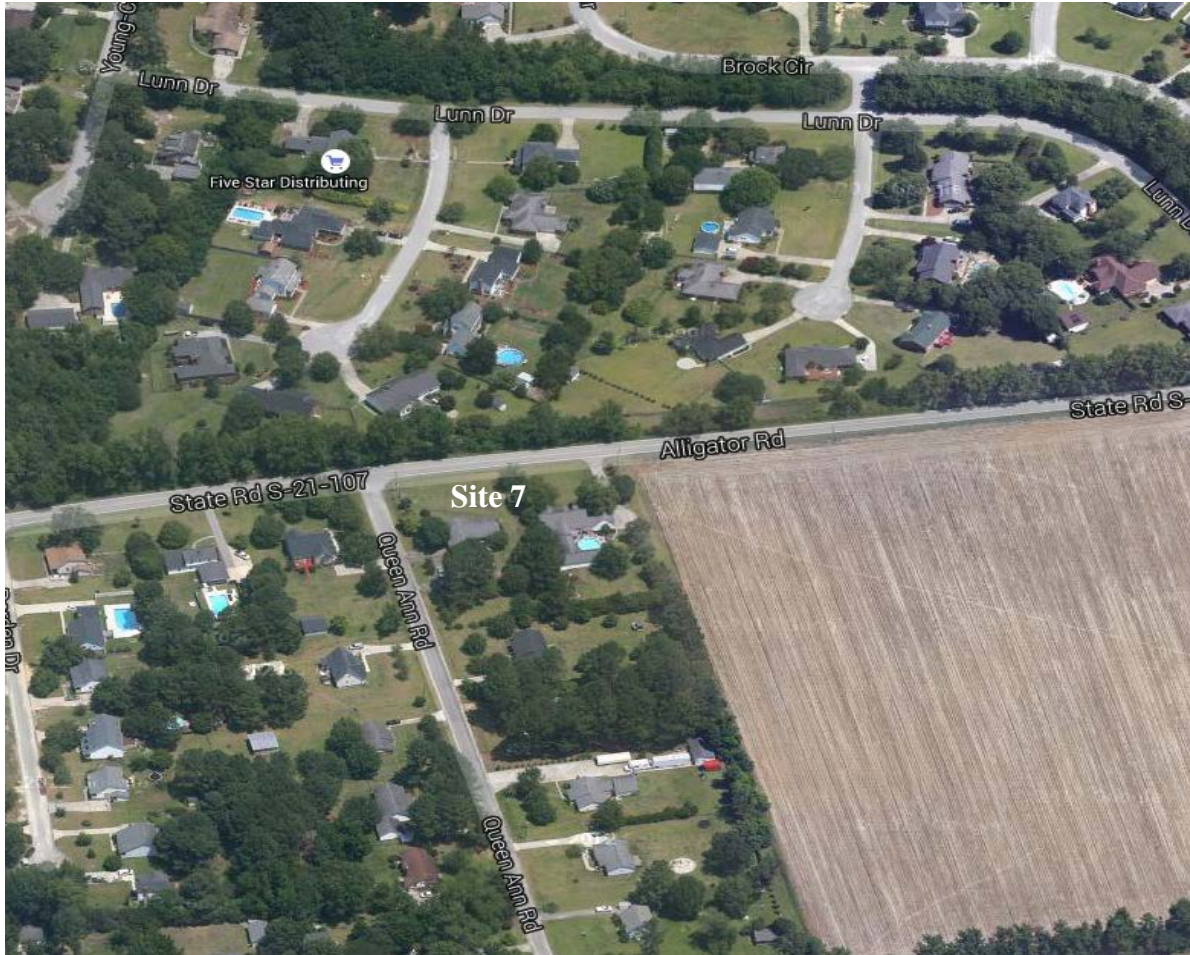
Road Name: <b>18'</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
Notes: <b>Birds, distant airplanes</b>	Autos:	<b>98</b>	<b>87</b>
Typical Section: <b>2-lane</b>	Medium Trucks:	<b>0</b>	<b>3</b>
Speed Limit: <b>45</b>	Heavy Trucks:	<b>2</b>	<b>3</b>
	Buses:	<b>0</b>	<b>0</b>
	Motorcycles:	<b>2</b>	<b>0</b>



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: Alligator Road Widening	Site #:7	Date: April 1, 2014
Site Description: Residential	Site Location: 3302 Alligator Road	
Start Time: 1:59 pm	Duration: 20 minutes	L <sub>eq</sub> : 55.2

Site Sketch: (Plan View)



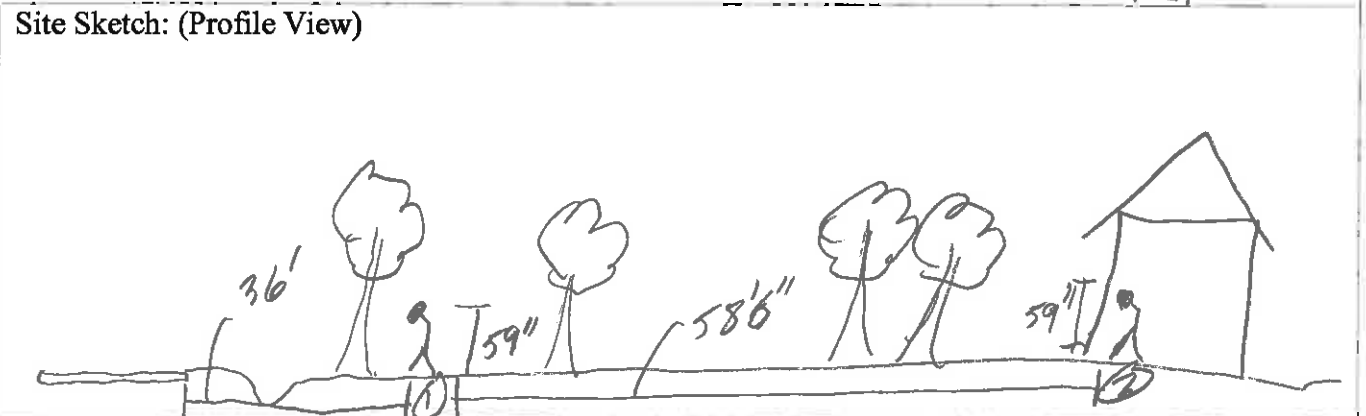
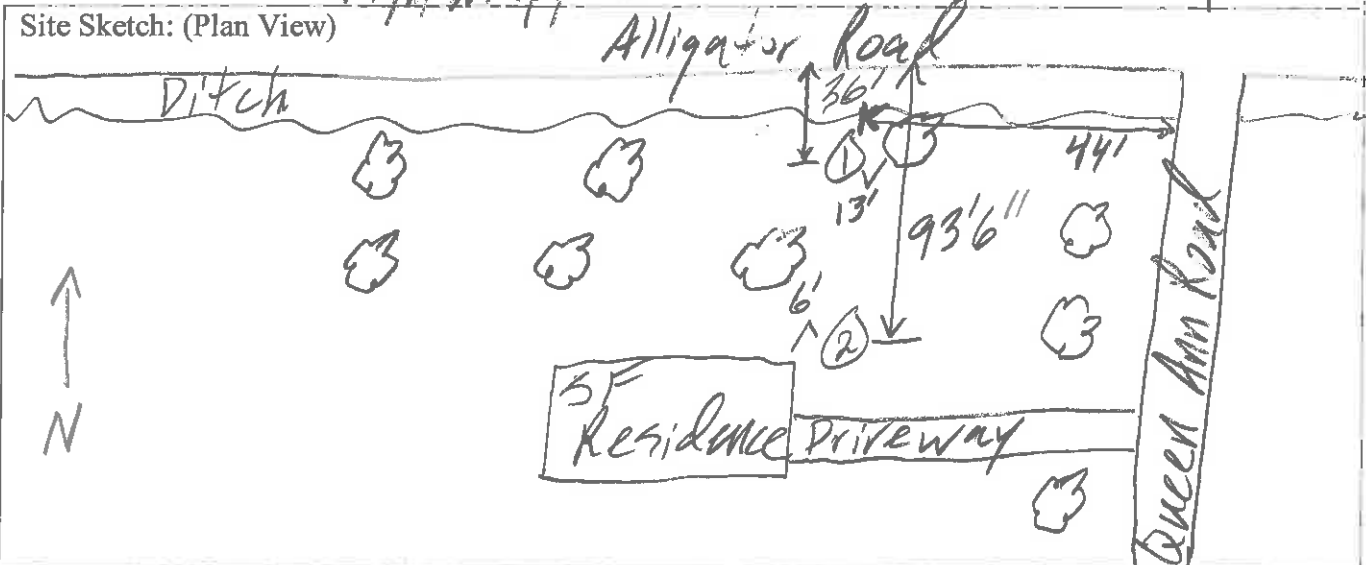
Notes: Birds, Distant Lawn Mower

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound –32, West Bound – 28
Medium Trucks:	East Bound – 0, West Bound – 1
Heavy Trucks:	East Bound – 1, West Bound – 0
Buses:	East Bound – 0, West Bound – 0
Motorcycles:	East Bound – 0, West Bound – 0



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST7</b>	Date: 4-1-14
Site Description: <i>Single Family Residence</i>		Site Location: <i>3302 Alligator Road</i>	
Start Time:	<i>13:59</i>	Calibration Level - Start:	① <i>140</i> ② <i>118</i>
End Time:	<i>14:19</i>	L <sub>eq</sub> :	<i>61.0</i> <i>55.2</i>
Temperature:	<i>80</i>	L <sub>min</sub> :	<i>33.2</i> <i>32.6</i>
Wind Speed:	<i>± 2 mph</i>	L <sub>max</sub> :	<i>78.8</i> <i>71.6</i>
Cloud Cover:	<i>High wispy</i>	Calibration Level - End:	

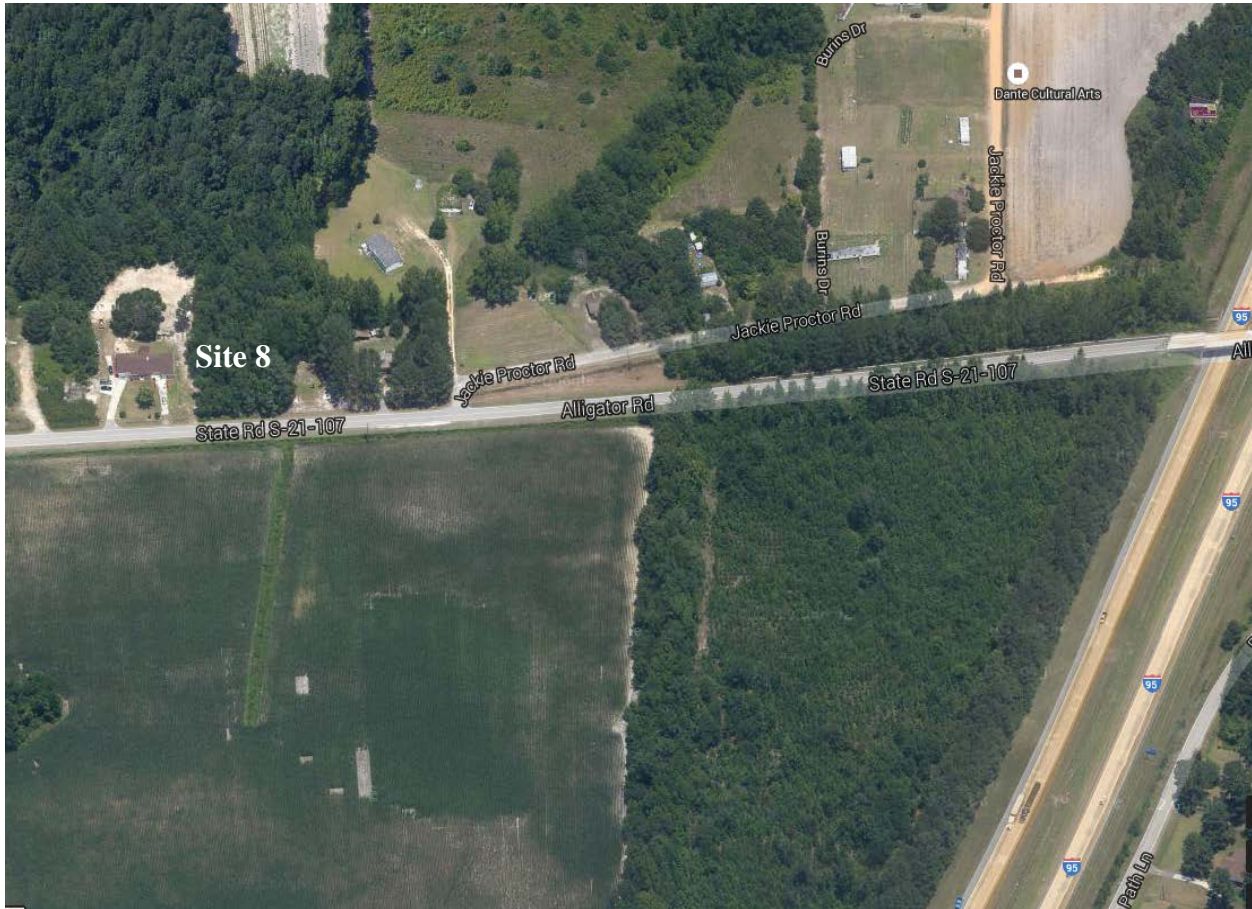


Road Name: <i>Distant lawn mower, birds</i>	Traffic Counts	Direction (NB/ <u>EB</u> )	Direction (SB/ <u>WB</u> )
	Autos:	<i>32</i>	<i>28</i>
Typical Section: <i>2-lane</i>	Medium Trucks:	<i>0</i>	<i>1</i>
	Heavy Trucks:	<i>1</i>	<i>0</i>
Speed Limit: <i>45</i>	Buses:	<i>0</i>	<i>0</i>
	Motorcycles:	<i>0</i>	<i>0</i>

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: Alligator Road Widening	Site #:8	Date: April 1, 2014
Site Description: Residential	Site Location: 4055 Alligator Road	
Start Time: 2:37 pm	Duration: 20 minutes	L <sub>eq</sub> : 55.8

Site Sketch: (Plan View)

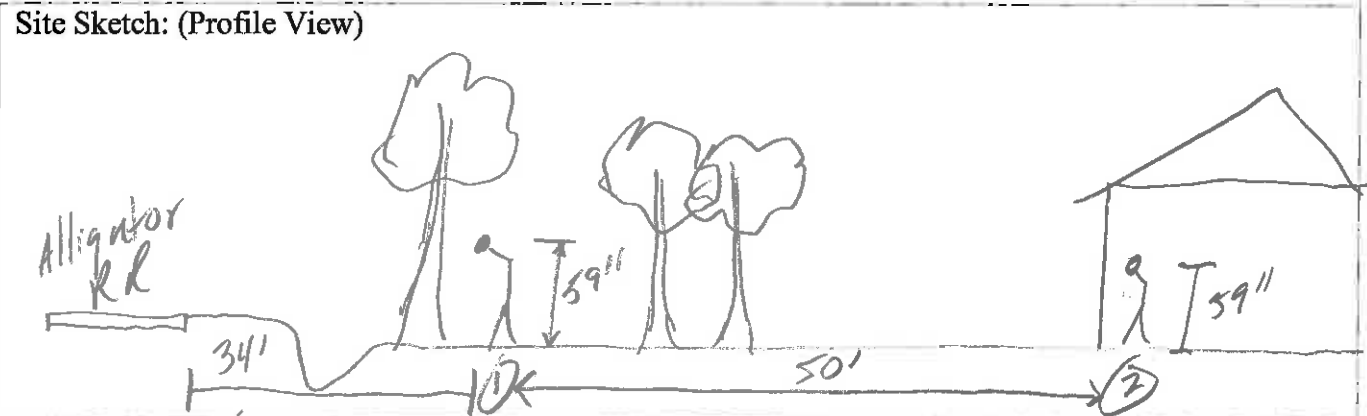
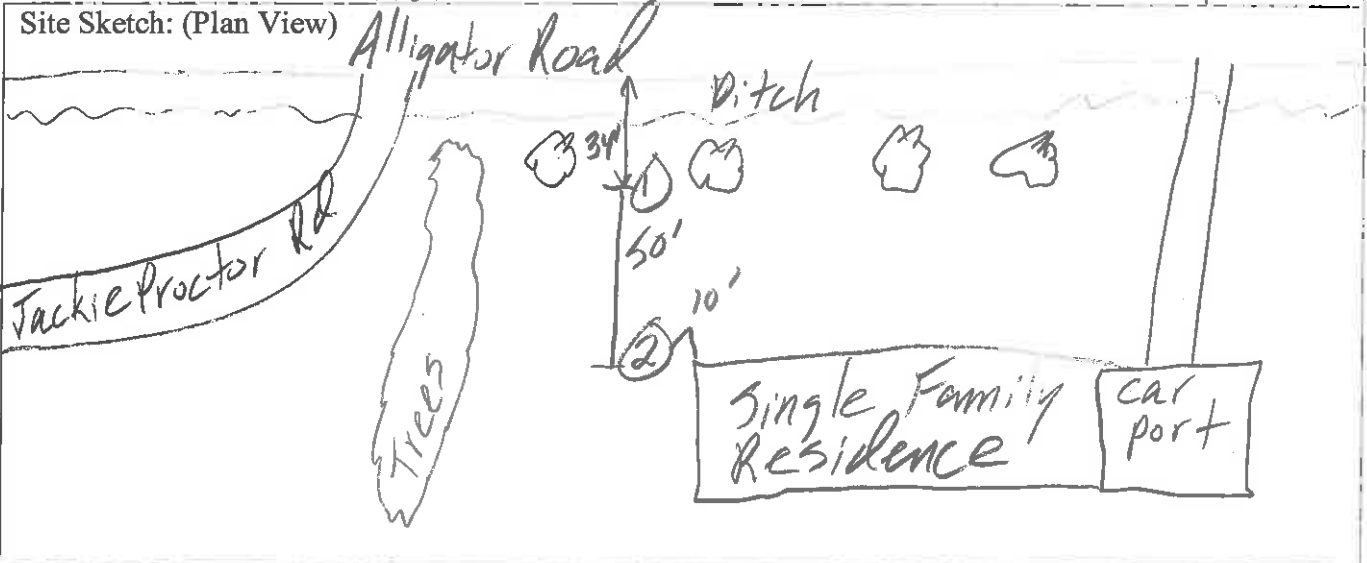


Notes: Pedestrian Voices

Traffic Counts	Alligator Road
Autos:	East Bound – 22, West Bound – 33
Medium Trucks:	East Bound – 0, West Bound – 0
Heavy Trucks:	East Bound – 4, West Bound – 2
Buses:	East Bound – 0, West Bound – 1
Motorcycles:	East Bound – 0, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>5T8</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>4055 Alligator Road</b>	
Start Time: <b>14:37</b>	Calibration Level - Start: <b>1140</b>	<b>1118</b>	
End Time: <b>14:57</b>	L <sub>eq</sub> : <b>63.3</b>	<b>55.8</b>	
Temperature: <b>80</b>	L <sub>min</sub> : <b>41.9</b>	<b>40.3</b>	
Wind Speed: <b>Gust to ±5</b>	L <sub>max</sub> : <b>82.1</b>	<b>73.7</b>	
Cloud Cover: <b>None</b>	Calibration Level - End:		



Road Name: <b>Notes:</b> <b>Pedestrian voices</b>	Traffic Counts	Direction (NB/EB)	Direction (SB/WB)
	Autos:	<b>22</b>	<b>33</b>
Typical Section: <b>2-lane</b>	Medium Trucks:	<b>0</b>	<b>0</b>
	Heavy Trucks:	<b>4</b>	<b>2</b>
Speed Limit: <b>45</b>	Buses:	<b>0</b>	<b>1</b>
	Motorcycles:	<b>0</b>	<b>0</b>



# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: Alligator Road Widening	Site #:9	Date: April 1, 2014
Site Description: Residential	Site Location: 1210 Alligator Road	
Start Time: 3:17 pm	Duration: 20 minutes	L <sub>eq</sub> : 56.8

Site Sketch: (Plan View)

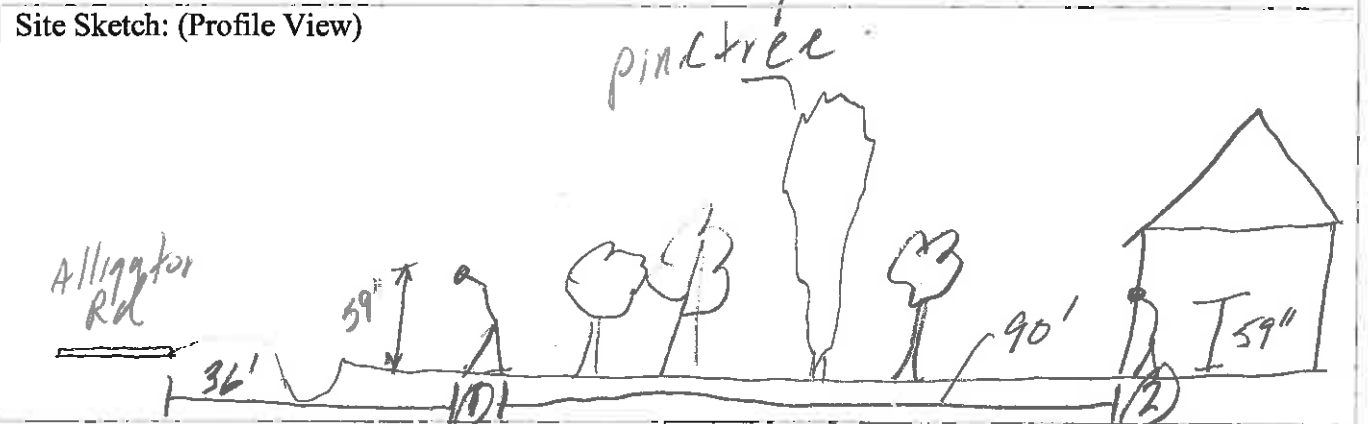
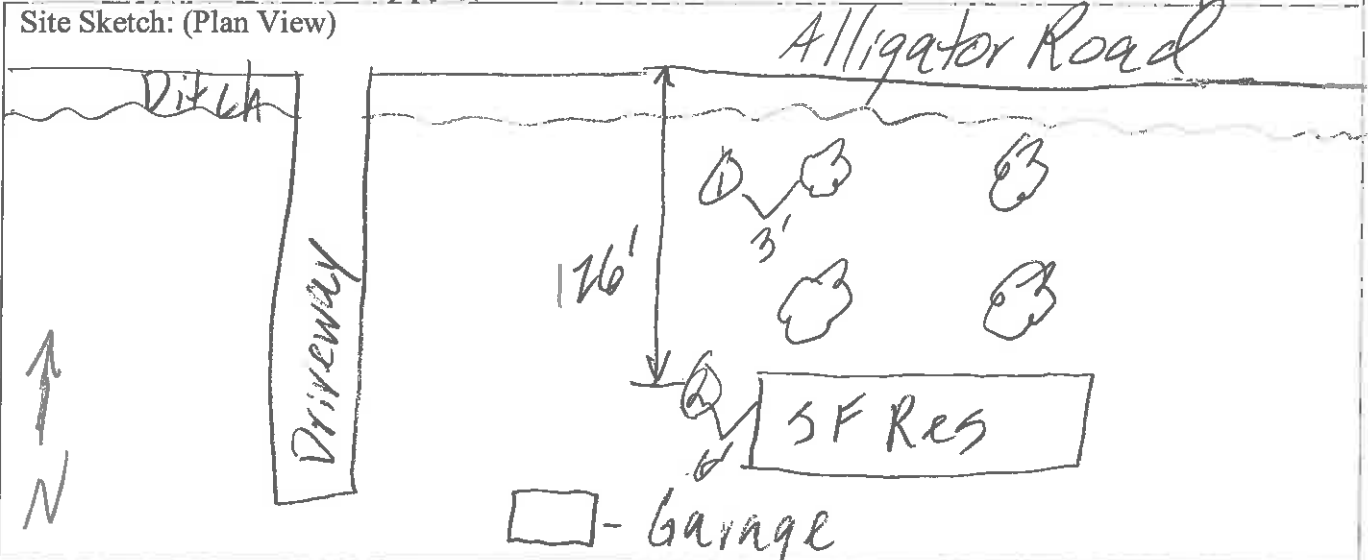


Notes: Birds, Distant Prop Plane

Traffic Counts	<b>Alligator Road</b>
Autos:	East Bound – 120, West Bound – 127
Medium Trucks:	East Bound – 1, West Bound – 1
Heavy Trucks:	East Bound – 4, West Bound – 2
Buses:	East Bound – 1, West Bound – 0
Motorcycles:	East Bound – 1, West Bound – 0

# TRAFFIC NOISE FIELD MEASUREMENT WORKSHEET

Project Name: <b>Alligator Road</b>		Site #: <b>ST9</b>	Date: <b>4-1-14</b>
Site Description: <b>Single Family Residence</b>		Site Location: <b>1210 Alligator Road</b>	
Start Time: <b>3:28</b>	Calibration Level - Start: <b>1140</b>	<b>1118</b>	
End Time: <b>3:48</b>	Leq: <b>66.7</b>	<b>56.8</b>	
Temperature: <b>84</b>	Lmin: <b>31.8</b>	<b>37.1</b>	
Wind Speed: <b>Gust to 4</b>	Lmax: <b>92.6</b>	<b>81.3</b>	
Cloud Cover: <b>None</b>	Calibration Level - End:		



Road Name: <b>Distant prop plane, birds</b>	Traffic Counts	Direction (NB/ <b>EB</b> )	Direction (SB/ <b>WB</b> )
Typical Section: <b>2-Lane</b>	Autos:	<b>120</b>	<b>127</b>
Speed Limit: <b>45</b>	Medium Trucks:	<b>1</b>	<b>1</b>
	Heavy Trucks:	<b>4</b>	<b>2</b>
	Buses:	<b>0</b>	<b>1</b>
	Motorcycles:	<b>1</b>	<b>0</b>

# Traffic Data



### Traffic Data for Noise Analysis

Roadway Section	Speed (mph)	Two Way Design Hourly Traffic	One Way Hourly Traffic (vph)	Hourly Volume Cars (vph)	Hourly Volume Medium Trucks (vph)	Hourly Heavy Trucks (vph)
<b>2015 Traffic Computations</b>						
US 52 to Knollwood	45	984	492	477	10	5
Knollwood to US 76	45	456	228	220	5	3
<b>2040 Traffic Computations</b>						
US 52 to Knollwood	45	1200	600	582	12	6
Knollwood to US 76	45	557	279	270	6	3

# TNM Validation

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road  
Site 1 Validation  
INPUT HEIGHTS

RUN:

BARRIER DESIGN:

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h dBA	No Barrier				With Barrier				
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dB
				Calculated dBA	Crit'n dBA	Calculated dB	Crit'n Sub'l Inc dB			Calculated dB	Goal dB	
R147	192	1	0.0	61.4	66	61.4	15	----	61.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 2 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				With Barrier				
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	
			dB	dB	dB	dB		dB	dB	dB	dB	
R10	18	1	0.0	58.0	66	58.0	15	----	58.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 3 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver													
Name	No.	#DUs	Existing LAeq1h	No Barrier				Type Impact	With Barrier				
				LAeq1h		Increase over existing			Calculated LAeq1h	Noise Reduction		Calculated minus Goal	
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal		
			dB	dB	dB	dB		dB	dB	dB	dB		
R35	48	1	0.0	57.0	66	57.0	15	----	57.0	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 4 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				With Barrier				
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	
dB	dB	dB	dB	dB	dB	dB	dB	dB	dB			
R45	58	1	0.0	58.6	66	58.6	15	----	58.6	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
		dB	dB	dB								
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							



RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 5 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				With Barrier				
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
R76	89	1	0.0	61.0	66	61.0	15	----	61.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 6 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver													
Name	No.	#DUs	Existing LAeq1h	No Barrier				Type Impact	With Barrier				
				LAeq1h		Increase over existing			Calculated LAeq1h	Noise Reduction		Calculated minus Goal	
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal		
			dB	dB	dB	dB		dB	dB	dB	dB		
R188	236	1	0.0	60.1	66	60.1	15	----	60.1	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0	0.0	0.0								
All Impacted		0	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 7 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				With Barrier				
				LAeq1h Calculated	Crit'n	Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal
						Calculated	Crit'n Sub'l Inc			Calculated	Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
R195	244	1	0.0	54.3	66	54.3	15	----	54.3	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 8 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h  dBA	No Barrier				With Barrier				
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h dBA	Noise Reduction		Calculated minus Goal dB
				Calculated dBA	Crit'n dBA	Calculated dB	Crit'n Sub'l Inc dB			Calculated dB	Goal dB	
R134	178	1	0.0	58.5	66	58.5	15	---	58.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Alligator Road

ICA Engineering, Inc.  
Wayne Hall

27 September 2016  
TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

Alligator Road

RUN:

Site 9 Validation

BARRIER DESIGN:

INPUT HEIGHTS

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with approval of FHWA.

ATMOSPHERICS:

68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier				With Barrier				
				LAeq1h Calculated	Crit'n	Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		Calculated minus Goal
						Calculated	Crit'n Sub'l Inc			Calculated	Goal	
			dB	dB	dB	dB		dB	dB	dB	dB	
R154	200	1	0.0	58.5	66	58.5	15	----	58.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

# SCDOT Feasibility and Reasonableness Worksheet



# SCDOT Feasibility and Reasonableness Worksheet

Date: \_\_\_\_\_

**Project Name**

**Highway Traffic Noise Abatement Measure**

## Feasibility

Number of Impacted Receivers

Number of Benefited Receivers

Percentage of Impacted Receivers that would achieve a 5 dBA reduction from the proposed noise abatement measure

Is the proposed noise abatement measure acoustically feasible?

NOTE:SCDOT Policy indicates that 75% of the impacted receivers must achieve at least a 5 dBA reduction for it to be acoustically feasible.  Yes  No

Would any of the following issues limit the ability of the abatement measure to achieve the noise reduction goal?

- |                        |                              |                             |
|------------------------|------------------------------|-----------------------------|
| Topography             | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Safety                 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Drainage               | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Utilities              | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Maintenance            | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Access                 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Exposed Height of Wall | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**If "Yes" was marked for any of the questions above, please explain below.**

## Reasonableness

According to 23 CFR 772.13(d)(2)(iv) the abatement measure must collectively achieve each of these criteria to be reasonable. Therefore if any of the three mandatory reasonable factors are not achieved, then the abatement measure is determined NOT to be reasonable. When completing the form it is not necessary to detail each of the criteria if one was determined not to be reasonable.

### #1: Noise Reduction Design Goal

Number of Benefited Receivers

Number of Benefited Receivers that achieve at least an 8 dBA reduction

Percentage of Benefited Receivers that would achieve at least a 8 dBA reduction from the proposed noise abatement measure. NOTE: SCDOT Policy indicates that 80% of the benefited receivers must achieve at least a 8 dBA reduction for it to be reasonable.

Is the proposed noise abatement measure acoustically feasible?  Yes  No

*If "Yes" is marked, continue to #2. If "No" is marked, then abatement is determined NOT to be reasonable.*

### #2: Cost Effectiveness

Estimated cost per square foot for noise abatement measure

Estimated construction cost for noise abatement measure

Estimated cost per Benefited Receiver

Based on the SCDOT policy of \$30,000 per Benefited Receiver, would the abatement measure be reasonable? NOTE: SCDOT Policy states that the preliminary noise analysis is based on \$35.00 per square foot and a more project-specific construction cost should be applied at a cost per square foot basis during the detailed noise abatement evaluation.  Yes  No

*If "Yes" is marked, continue to #3. If "No" is marked, then abatement is determined NOT to be reasonable.*

### #3: Viewpoints of the property owners and residents of the benefited receivers

Number of Benefited Receivers (same as above)

Number of Benefited Receivers in **support** of noise abatement measure

Percentage of Benefited Receivers in **support** of noise abatement measure

Number of Benefited Receivers **opposed** to noise abatement measure

Percentage of Benefited Receivers **opposed** to noise abatement measure

Number of Benefited Receivers **that did not respond** to solicitation on noise abatement measure

Percentage of Benefited Receivers **that did not respond** to solicitation on noise abatement measure

Based on the viewpoints of the property owners and residents of the Benefited Receivers, would the abatement measure be reasonable? NOTE: SCDOT Policy indicates that the noise abatement shall be constructed unless greater than 50% of the benefited receptors are opposed to noise abatement.  Yes  No

**APPENDIX G**  
Hazardous Material/Waste Site Assessment

# Alligator Road (S-21-107) Widening Project

Florence County, South Carolina

## Hazardous Material / Waste Site Assessment

June 27, 2013

ARM Job #16-311-13

Prepared For

Florence & Hutcheson, Inc.  
Columbia, South Carolina



---

1210 1<sup>st</sup> STREET SOUTH EXTENSION / COLUMBIA, SC 29209 / phone 803-783-3314 fax 803-783-2587

# Alligator Road (S-21-107) Widening Project

Florence County, South Carolina

## Hazardous Material / Waste Site Assessment

June 27, 2013

ARM Job #16-311-13

Prepared For

Florence & Hutcheson, Inc.  
Columbia, South Carolina

Report Compiled By:



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Richard Ciccolella  
Project Manager

Reviewed By:



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Richard Pittenger  
Sr. Project Manager / Principal

**ARM** ENVIRONMENTAL  
SERVICES, INC.

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1210 1<sup>st</sup> STREET SOUTH EXTENSION / COLUMBIA, SC 29209 / phone 803-783-3314 fax 803-783-2587

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## 1.0 SCOPE OF SERVICES

Pursuant to authorization received from Florence & Hutcheson, Inc., ARM Environmental Services, Inc. (ARM) has conducted a hazardous material / waste site assessment of the Alligator Road (S-107) Project Corridor area, located in Florence County, South Carolina. The study area consists of an area beginning at the intersection of Alligator Road and US 76 and proceeding approximately 7.5 miles east along Alligator Road to the intersection of Alligator Road and US 52. The project includes the replacement of the Alligator Road bridge over Interstate 95 (I-95) in the western portion of the corridor, and the Alligator Road bridge over Alligator Swamp, in the eastern portion of the corridor. The site location is indicated on Figure 1 through Figure 6 in Appendix A. The study area will be referred to in the remainder of this report as the "Project Corridor".

The purpose of this assessment was to identify any potential hazardous waste sites located in or in the immediate vicinity of the Project Corridor, so that the location of such properties can be factored into the construction planning process. The site evaluation procedures conducted during the assessment are summarized below:

- Review of Federal and State lists of environmentally regulated sites, in an effort to identify those sites with documented contamination, and also those sites considered as potential sources of contamination;
- Interview of state regulatory Department of Health and Environmental Control (DHEC) personnel regarding sites located in the Project Corridor vicinity;
- Review of site background information, including aerial photographs and interviews of persons familiar with previous activities in the area;
- Physical inspection and photographic documentation of the site conditions in the Project Corridor area to identify potential sources of contamination; and
- Development of a report summarizing the assessment findings and providing appropriate site location information.

The assessment findings and corresponding regulatory data are summarized on the following pages of this report. Site location maps, color photographs, and descriptions of the regulatory databases are included in the appendices.

## **2.0 SITE RECONNAISSANCE**

On May 31, 2013, ARM personnel conducted a physical inspection of the Project Corridor, and also those conditions on properties located within or adjacent to the Project Corridor, as readily accessible. The pertinent information collected during the assessment process is summarized in the following sections.

### **2.1 Site Description**

**Site Location** – The Project Corridor is located along Alligator Road, approximately 4 miles southwest of downtown Florence, in Florence County, South Carolina. The site location is also indicated on the Project Corridor Site Location Maps included as Figure 1 through Figure 6 in Appendix A.

**General Site Description** – The Project Corridor consists of a study area beginning at the intersection of Alligator Road and US 76 and proceeding approximately 7.5 miles east along Alligator Road to the intersection of Alligator Road and US 52. The Project Corridor includes the Alligator Road bridge over I-95 in the western portion of the corridor, and the Alligator Road bridge over Alligator Swamp, in the eastern portion of the corridor.

The Project Corridor is located in the northwestern portion of Florence County, in eastern South Carolina. Based on the USGS 7.5 minute Timmonsville and Florence West Quad maps, topography in the vicinity of the Project Corridor is varied, but generally level. Surface drainage and groundwater likely flow generally toward Middle Swamp, which parallels Alligator Road and is located approximately 2,500 feet north of the Project Corridor. At the eastern end of the Project Corridor, Alligator Branch flows from the south to the northeast, across Alligator Road, to Middle Swamp. At the western end of the Project Corridor, an unnamed tributary to Middle Swamp flows to the east, paralleling Alligator Road, then turning north toward Forest Lake, an impoundment of Middle Swamp. Several smaller tributaries to Middle Swamp are also located to the north of the Project Corridor.

## 2.2 Historical Review

### Aerial Photographs

ARM reviewed United States Geological Survey (USGS) aerial photographs, dated 1957, 1964, 1977, 1981, 1983, 1989, and 1999. The aerial photographs were provided by EDR. Additionally, aerial photographs, dated 2005, 2006 and 2011 available from GoogleEarth, were reviewed. The conditions in the aerial photographs appeared as follows:

1957 – The Project Corridor appears very rural, agricultural, and wooded / undeveloped. Very sparse residential development is located throughout the area. The Atkinson Grocery gas station is apparent at the northwest corner of Alligator Road and Walker Swinton Road.

1964 - The Project Corridor area appears very rural and agricultural. Very sparse residential development is located throughout the area. The Atkinson Grocery gas station is apparent at the northwest corner of Alligator Road and Walker Swinton Road.

1977, 1981 – The Project Corridor appears similar to the conditions in the 1964 photographs, with slightly more development occurring over time. However, details along the corridor are more difficult to discern. I-95 becomes apparent in the 1970s.

1983 – A gas station is now evident at the northeast corner of Alligator Road and McLauren Road. The current location of Florence Transmissions appears developed as an automotive repair facility. An automotive repair facility is also apparent at the current location of the Dollar General Store. A gas station is possibly present at the southeast corner of Alligator Road and Whippoorwill Road.

1989 – The western end of the Project Corridor is developed with the Weaver Engineering, John Deere, and Home Resource Center buildings. A gas station is evident at the southeastern corner of Alligator Road and South Point Road. The rest of the corridor appears similar to the 1983 photographs.

1999 – The Tadco automotive repair facility is evident near the western end of the Project Corridor. The garden center is now evident at the southwest corner of Alligator Road and Walker Swinton Road. The rest of the corridor appears similar to the 1989 photographs.

2005, 2006, 2011 – The conditions in the Project Corridor appear similar to current conditions. The small contracting property, located near the intersection of Alligator Road and I-95 does not appear developed until the 2006 photograph.

No evidence of significant industry or landfilling was evident in the Project Corridor area on any of the aerial photographs reviewed.

### **USGS Maps**

The USGS 15 minute Florence West, SC Quad, dated 1940, the USGS 7.5 minute Timmons ville Quad, dated 1986 and the USGS 7.5 minute Florence West Quad were also reviewed. On the 1940 map, Alligator Road is present and the Project Corridor appears to be primarily rural with very light development in the area. I-95 is not present. US 76 and US 52 are present at either ends of the Project Corridor. No significant industry or landfills are evident.

On the 1986 maps, the Project Corridor area appears similar to the conditions in the earlier map; however, slightly more residential development is now apparent. No significant industry or landfills are evident in the immediate vicinity of the Project Corridor.

### **2.3 Potential Environmental Hazards**

The various environmental hazards typically identified in a corridor study area are described in the following paragraphs. The specific hazard sites identified during the assessment are listed in the Summary section of this report.

*Underground Storage Tanks* - The most prevalent source of potential site contamination typically encountered on roadway improvement projects is underground storage tanks (USTs). UST systems have a significant potential for leakage, depending primarily on the age, size and construction quality of the tank

system. Leakage from UST systems often results in soil and groundwater contamination.

*Above-Ground Storage Tanks* - Above-ground storage tanks (ASTs) also present the potential for soil and groundwater contamination. However, depending on the size and condition of the tank, the extent of contamination is often limited to the shallow soils located adjacent to the tank.

*Maintenance / Service Activities* - Many of the materials handled by automotive maintenance / service businesses are considered hazardous. Site contamination routinely occurs from the storage, mishandling or disposal of such materials.

*Industrial Processes* - As with automotive maintenance / service activities, industrial activities often incorporate hazardous materials. The relatively high volume of materials handled, and potential on-site disposal of hazardous materials is of particular concern on industrial facilities.

*Disposal Facilities* - Solid waste disposal facilities or wastewater treatment facilities are often associated with subsurface contamination. Any waste disposal areas, including isolated areas on which waste materials have been dumped, are evaluated in order to determine whether a significant risk of adverse site impact is present

### **3.0 REGULATORY REVIEW**

Federal and State regulatory databases were reviewed to further identify any known sources of contamination located on, or adjacent to the Project Corridor. The Federal records searched during this assessment included sites which handle or dispose of hazardous materials, and sites which otherwise have been identified to have air, soil or groundwater contamination. The State records reviewed included hazardous waste sites, landfills, and sites with registered or leaking underground storage tanks. The pertinent regulatory information is summarized for each site.

The regulatory databases reviewed during this assessment are listed below and a description of the databases is included in the appendix of this report.

### 3.1 Federal Databases

NPL	National Priorities List
CERCLIS	EPA Comprehensive Environmental Response, Cleanup and Liability Information System
CERCLIS NFRAP	CERCLIS No Further Remedial Action Planned
RCRA CORRACTS	Resource Conservation and Recovery Act Facilities that have been notified by the EPA to undertake corrective action under RCRA
RCRA TSD	RCRA Non-CORRACTS Treatment/Storage/Disposal Facilities
RCRA Generators AULs	RCRA generators of hazardous waste Activity and use limitations – legal or physical restrictions or limitations on use (property)
ERNS	Emergency Response Notification System

### 3.2 State Databases

SHWS	State Hazardous Waste Sites
Equivalent NPL	State Equivalent NPL
Equivalent CERCLIS	State Equivalent CERCLIS
SWF/LF	Landfill/Solid Waste
LUST	Leaking Underground Storage Tank sites
RUST	Registered Underground Storage Tank sites
AULs	Activity and use limitations
Voluntary Cleanup Sites	
Brownfield Sites	

### 3.3 Local Regulatory Information

The DHEC Environmental Quality Control (EQC) – Region 4, Florence office was contacted regarding known environmental concerns in the Project Corridor area. Mr. Jason Lambert was provided a site location map for the Project Corridor. Mr. Lambert was not able to provide comments by the time of this report.

The information collected during the review of the regulatory databases is provided in the following section, Summary of Findings.



## 4.0 SUMMARY OF FINDINGS

### 4.1 Documented Contamination Sites

Based on the outlined methods of investigation, the following sites with documented contamination were identified within the research distances of the Project Corridor.

- Former Atkinson Grocery, located on Alligator Road, adjacent to the north of the Project Corridor.

General Site Information – This site is a former retail gasoline station. One monitoring well was observed at the site. The approximate location of the site is indicated on Figure 4.

Regulatory Status – LUST Site, DHEC ID #03435. A release from a UST system was reported on July 25, 1989. Two 550 gallon gasoline USTs have been removed from the site. The former dispenser island is located approximately 80 feet north of the centerline of Alligator Road. No USTs are currently registered as active at the site.

- Dad-D-O Grocery (former Gause's Grocery), located at 2426 Alligator Road, adjacent to the north of the Project Corridor.

General Site Information – This site is a former retail gasoline station. One monitoring well was observed at the site, approximately 90 feet south of the centerline of Alligator Road. Historical aerial photographs show the dispenser area to have been located approximately 45 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 4.

Regulatory Status – LUST Site, DHEC ID #03452. A release from a UST system was reported on April 25, 1997. The release received a letter of no further action (NFA) on November 30, 1998. An NFA letter indicates that DHEC will not require further assessment or remediation of the site as the conditions pertain to the documented release. Two 2,000 gallon

gasoline USTs were removed from the site on February 20, 1997. No USTs are currently registered as active at the site.

## 4.2 Potential Contamination Sites

Based on the outlined methods of investigation, the following sites with potential contamination were identified within the research distances of the Project Corridor.

- Sparrow & Kennedy – John Deere Dealer, located at 4328 Alligator Road, adjacent to the southwest of the Project Corridor.

General Site Information – The site is a John Deere tractor, mower, and supply dealer. A maintenance shop is located to the south of the dealer sales portion of the building. Typical handling of small quantities of fuel, lubricants, and other maintenance related items occurs on site. The maintenance shop and yard portion of the property are located approximately 150 feet southwest of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 2.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Tadco Re-Builders, located at 4302 Alligator Road, adjacent to the southwest of the Project Corridor.

General Site Information – The site is small automotive maintenance facility. Typical handling of fuel, lubricants, and other maintenance related items occurs on site. The maintenance shop and yard portion of the property are located approximately 100 feet southwest of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 2.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Small Contracting Business, located at 2237 Bridle Path Lane, adjacent to the southwest of the Project Corridor.

General Site Information – The site appears to be a small contracting business. The property includes a small shop/warehouse and a storage shed. Construction related materials, such as lumber, bricks, scrap metal, and cinderblocks are located adjacent to the buildings. No obvious evidence of USTs or ASTs was noted. The facility was closed at the time of the site inspection, and therefore, access was limited. Other construction related supplies such as paints, varnishes, and/or small quantities of fuel may be stored onsite. The buildings and materials storage at the property are located approximately 60 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 2.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Vacant Lot, located at the southeastern corner of I-95 at Alligator Road, adjacent to the southwest of the Project Corridor.

General Site Information – The site is an undeveloped, cleared property that has been used for stockpiling soil and construction debris. No obvious soil staining or distressed vegetation was noted; however, the origin of the soil is not known. The construction debris is primarily scrap lumber. The site may be associated with the adjacent contracting business described above. The debris and soil piles are located approximately 120 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 2.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Farm Shed, located along Alligator Road, adjacent to the south of the Project Corridor.

General Site Information – The site is a maintenance / storage shed for a farm operation. The site includes farm materials, equipment, various containers of maintenance related materials, vehicles in various states of repair, and an old truck. Light maintenance of machinery / vehicles likely occurs on this site. The shed is located approximately 180 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Former Gas Station, located at the northeastern corner of Alligator Road and McLauren Drive, adjacent to the north of the Project Corridor.

General Site Information – The site is a former gas station. Two approximate 2,000 gallon ASTs are located on the north side of the building, approximately 145 feet north of the centerline of Alligator Road. Based on the apparent product line location (seam of patched concrete), the former dispenser location appears to have been located approximately 60 feet north of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Small Private Garage, located on Alligator Road, adjacent to the north of the Project Corridor.

General Site Information – The building at the site appears to be used as a small garage / storage building for junked items. Based on the appearance of the building, equipment maintenance and small quantity fuel storage possibly occur onsite. The building is located approximately

120 feet north of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Small Private Garage, located on Alligator Road, adjacent to the north of the Project Corridor.

General Site Information – The building at the site appears to be used as a small garage / storage building and/or for a small contracting business. Based on the appearance of the building, equipment maintenance and small quantity fuel storage possibly occur onsite. The building is located approximately 145 feet north of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- City of Florence Water Treatment Plant, located on Alligator Road, adjacent to the south of the Project Corridor.

General Site Information – The site is a water treatment plant. A backup generator with an approximate 1,000 gallon tank for fuel is located at the site, approximately 35 feet south of the centerline of Alligator Road. No staining of the pavement at the base of the tank was evident. An AST for aqueous ammonia is also located approximately 40 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Florence Transmission and Marine Service, located at 3376 Alligator Road, adjacent to the south of the Project Corridor.

General Site Information – The site is an automotive and marine service facility. Typical handling of fuel, lubricants, and other maintenance related items occurs on site. No heavy staining of the parking area was noted. The maintenance shop is located approximately 125 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 3.

Regulatory Status – The site was not included on an environmental regulatory database. The site was included on an EDR supplemental database that lists possible historical auto station sites (an EDR database that includes potential gas station or automotive repair sites).

- Antique Store, located at the northeast corner of Alligator Road and Knollwood Road, adjacent to the north of the Project Corridor.

General Site Information – The site is a corner lot with an L-shaped collection of small buildings. The business was not open at the time of the corridor reconnaissance; however, one of the buildings appeared to be used as a small antique store. One local resident indicated that the site may have been the former location of a gas station. However, another local resident did not recall the site ever being a gas station. One groundwater monitoring well was noted on the site. It is not currently known if this monitoring well is related to the site itself, or to the former Atkinson Grocery, located across Knollwood Road to the west of the site. The approximate location of the site is indicated on Figure 4.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.



- Dollar General, located at 3040 Alligator Road, adjacent to the south of the Project Corridor.

General Site Information – The site is currently a Dollar General Store, which appears to have been built within the last ten years. The site is the former location of Players Garage and Body Shop; however, the address for Players was 3043 Alligator Road. Typical handling of fuel, lubricants, and other maintenance related items would have occurred on site. Based on historical aerial photographs, the garage and yard was previously located approximately 125 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 4.

Regulatory Status – The site was not included on an environmental regulatory database. The site was included on an EDR supplemental database that lists possible historical auto station sites (an EDR database that includes potential gas station or automotive repair sites).

- Garage Facility, located at 2330 Savannah Grove Road, approximately 150 feet south of the Project Corridor.

General Site Information – The site includes a yard and a large garage style building. The site has been used as a small carwash and has likely been used for automotive maintenance. The site is attached to a small strip shopping center that fronts Alligator Road. Local residents did not recall the strip shopping center as a former gas station site. The approximate location of the site is indicated on Figure 4.

Regulatory Status – The site was not included on an environmental regulatory database. An EDR supplemental database that lists possible historical cleaners sites includes a listing for 2326 Savannah Grove Road. Based on area addresses, this likely includes this site. The EDR listings included the East Main Laundromat from 2003 to 2009. The owner and area residents, however, did not indicate the past presence of a drycleaners.

- Former Gas Station, located at the southeast corner of Alligator Road and South Point Road, adjacent to the south of the Project Corridor.

General Site Information – The site is a vacant lot and is the former location of a gas station. The former station burned down apparently within the last ten years. Evidence of a former dispenser island is located approximately 60 feet south of the centerline of Alligator Road. Two small metal caps in the pavement are possibly the UST fill ports and are located approximately 85 feet south of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 5.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Severance Welding and Steel Fabrication, located on Alligator Road, approximately 375 feet southwest of the Project Corridor.

General Site Information – The site is a welding and steel fabrication shop, located behind a residence, approximately 375 feet south of the centerline of Alligator Road. Typical materials at such a shop may include cutting fluids, welding gases, degreasers, lubricants and paints; however, the shop is set well off the road. The approximate location of the site is indicated on Figure 5.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Save More, located at 3099 South Irby Street, adjacent to the north of the Project Corridor.

General Site Information – The site is an active gas station. The closest dispenser island is located approximately 90 feet north of the centerline of Alligator Road. Three USTs are located approximately 180 feet north of the centerline of Alligator Road. The approximate location of the site is indicated on Figure 6.

Regulatory Status – RUST Site, DHEC ID #03435. One 12,000 gallon gasoline UST, one 10,000 gallon gasoline UST, and one 4,000 gallon diesel UST are currently in use and registered at the site. No releases from the UST system have been reported.

- Concrete Supply Company, located at 3041 South Irby Street, approximately 650 feet north of the Project Corridor.

General Site Information – The site is a large concrete plant. Three large fuel ASTs are located at the site. No evidence of USTs was noted. The approximate location of the site is indicated on Figure 6.

Regulatory Status – The site was not indicated on any of the regulatory databases reviewed for this assessment.

- Additional Information
  - Based on the apparent age of the residences and other structures, it is possible that some of these structures would have small heating oil USTs or ASTs. If any of these properties will be considered for acquisition, further inspection for the potential presence of USTs or ASTs may be warranted.
  - No obvious indications of environmental impact due to electrical transformer leakage or sewer system components were noted during this investigation. However, it should be noted that further coordination with utility companies might be warranted prior to relocating/removing electrical transformers and or relocating sewer system components.
  - Asbestos containing materials (ACMs) may be present in structures located in the Project Corridor. Asbestos surveys of any buildings to be demolished should be conducted in accordance with Asbestos Hazard Emergency Response Act (AHERA) standards, as required by DHEC prior to building demolition. Any ACMs should be handled in accordance with state and federal regulations.

- Lead based paint (LBP) may be present in structures located in the Project Corridor. OSHA requires that workers be protected from exposure to airborne lead. Therefore, precautions should be exercised to prevent exposure to airborne lead in the event that this project would involve the demolition or renovation of structures with LBP.

## **5.0 SUMMARY**

This report represents a substantial review of the previous and current conditions of the Project Corridor in reference to the presence of documented and potential hazardous material sites.

Based on the findings of this assessment and the available information, the Former Atkinson Grocery, the Dad-D-O Grocery (former Gause's Grocery), the former gas station at the corner of Alligator Road and McLauren Drive, the antique store, the former gas station at the corner of Alligator Road and South Point Road, and the Save More site are considered to represent a moderate to high potential for subsurface contamination to the Project Corridor.

Based on the findings of this assessment and the available information, the other referenced sites are considered to represent a low to moderate potential for subsurface contamination to the Project Corridor. However, any properties to be partially or wholly acquired, or any sites where highway or related construction will occur, may require further inspection and assessment.

Upon completion of preliminary engineering plans, it may be warranted to conduct detailed investigations of those suspect sites potentially impacted by the roadway improvements, or any portion of the Project Corridor that has the potential to have been adversely impacted by any of the referenced environmental sites. The determination of areas that may warrant Phase II Assessment services should be site specific, based on hydrogeologic conditions, distance from specific environmental concerns, and other relative factors. Specific Phase II Assessment recommendations can be formulated upon review of preliminary engineering and right of way plans.

## **6.0 SUPPLEMENTAL INFORMATION – BRIDGE ASBESTOS & LEAD BASED PAINT SUMMARY**

ARM also conducted Asbestos and Lead Based Paint Surveys of the bridge structures to be replaced for this project. The Asbestos and Lead Based Paint Survey reports have been provided as separate documents. A summary of the survey results is provided below:

### **Alligator Road Bridge Over I-95**

- Asbestos containing transite drain pipes were found to be located along the sides of the bridge deck.
- Lead based paint is present on the steel tie rods, plates, bridge shoes, and associated metal bolts.

### **Alligator Road Bridge Over Alligator Swamp**

- No materials suspected to contain asbestos were found to be present on the bridge structure.
- No painted surfaces were found to be present on the bridge structure, and therefore, no lead based paint is present.

The complete survey reports are provided as separate documents. If the structures are to be demolished, a copy of the asbestos reports and notifications of demolition must be submitted to the South Carolina Department of Health and Environmental Control at least ten working days prior to the initiation of demolition activities.

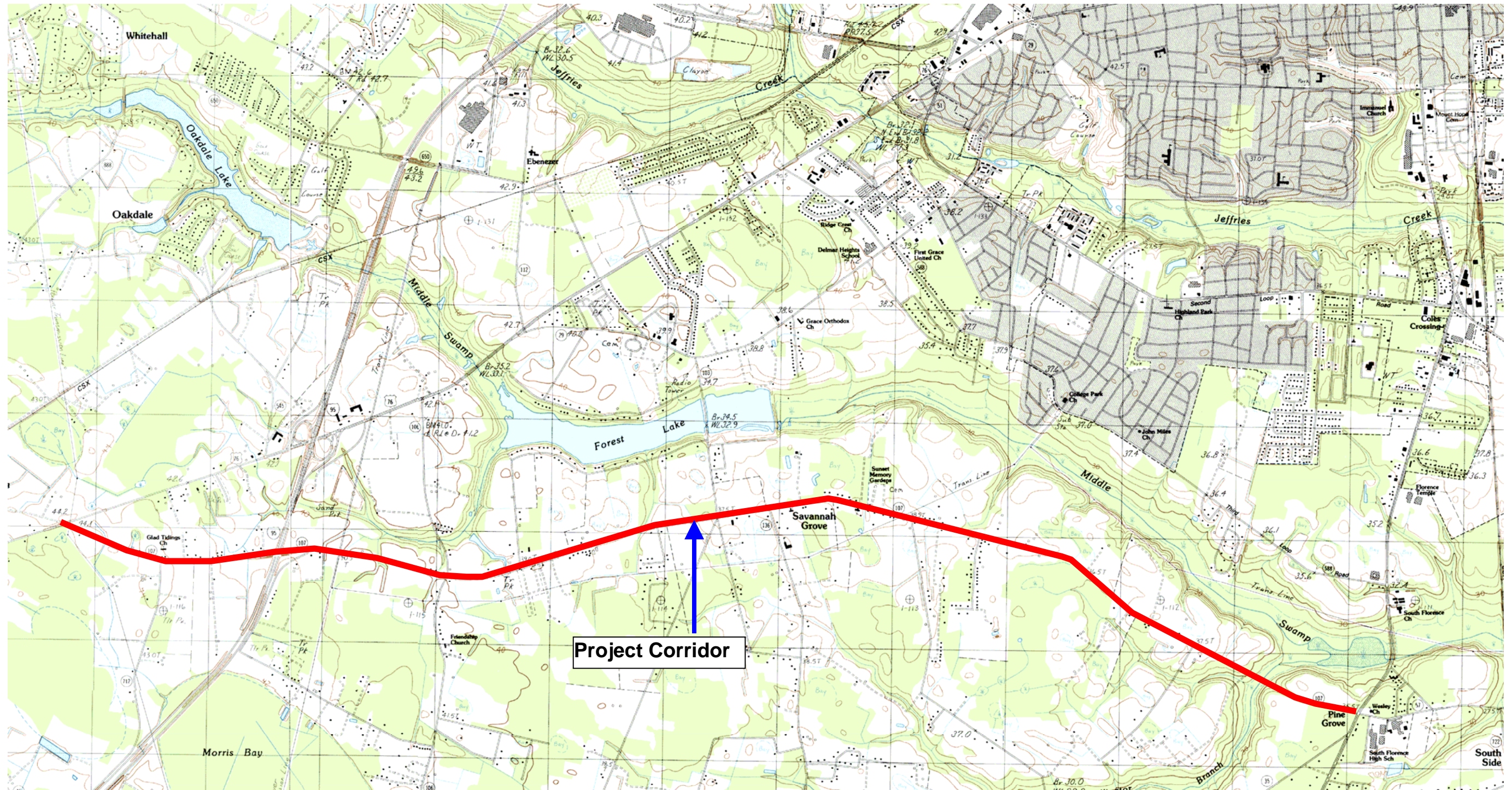
## **7.0 WARRANTY**

Services provided by ARM in this environmental assessment have been conducted in accordance with generally accepted environmental practices. This report has been generated solely for the use of the client. The information presented in this report is based only upon our site observations at the time of the site reconnaissance and data generated during our site reconnaissance. We cannot be responsible for the accuracy of information provided by others; however, we have no reason to suspect that any of the information provided is inaccurate. We accept no responsibility of damages or claims resulting from past or future environmental impact to the site caused by on or off-site activities or contamination, nor do we accept responsibility for subsequent remediation. This study is intended to be a non-biased assessment of on-site environmental conditions. No other warranties, either expressed or implied, are made.

## **Appendix A**

### Site Location Maps





**Project**  
 Hazardous Material / Waste Site Assessment  
 Alligator Road  
 Widening Project  
 Florence County, South Carolina

**Figure 1**  
 Project Corridor Site Location Map

**Scale**  
 1 inch ~ 3,000 feet

**Date**  
 May 2013







<p><b>Project</b>          Hazardous Material / Waste Site Assessment          Alligator Road          Widening Project          Florence County, South Carolina</p>		<p><b>Figure 2</b>          Project Corridor Site Location Map</p>	
<p><b>Scale</b>          1 inch ~ 860 feet</p>	<p><b>Date</b>          May 2013</p>		





<p><b>Project</b>          Hazardous Material / Waste Site Assessment          Alligator Road          Widening Project          Florence County, South Carolina</p>		<p><b>Figure 3</b>          Project Corridor Site Location Map</p>	
<p><b>Scale</b>          1 inch ~ 860 feet</p>	<p><b>Date</b>          May 2013</p>		





<p><b>Project</b>          Hazardous Material / Waste Site Assessment          Alligator Road          Widening Project          Florence County, South Carolina</p>		<p><b>Figure 4</b>          Project Corridor Site Location Map</p>
<p><b>Scale</b>          1 inch ~ 860 feet</p>	<p><b>Date</b>          May 2013</p>	





<p><b>Project</b>          Hazardous Material / Waste Site Assessment          Alligator Road          Widening Project          Florence County, South Carolina</p>		<p><b>Figure 5</b>          Project Corridor Site Location Map</p>
<p><b>Scale</b>          1 inch ~ 860 feet</p>	<p><b>Date</b>          May 2013</p>	<p><b>ARM</b> ENVIRONMENTAL SERVICES, INC.</p>





<b>Project</b> Hazardous Material / Waste Site Assessment Alligator Road Widening Project Florence County, South Carolina		<b>Figure 6</b> Project Corridor Site Location Map	
<b>Scale</b> 1 inch ~ 860 feet	<b>Date</b> May 2013		

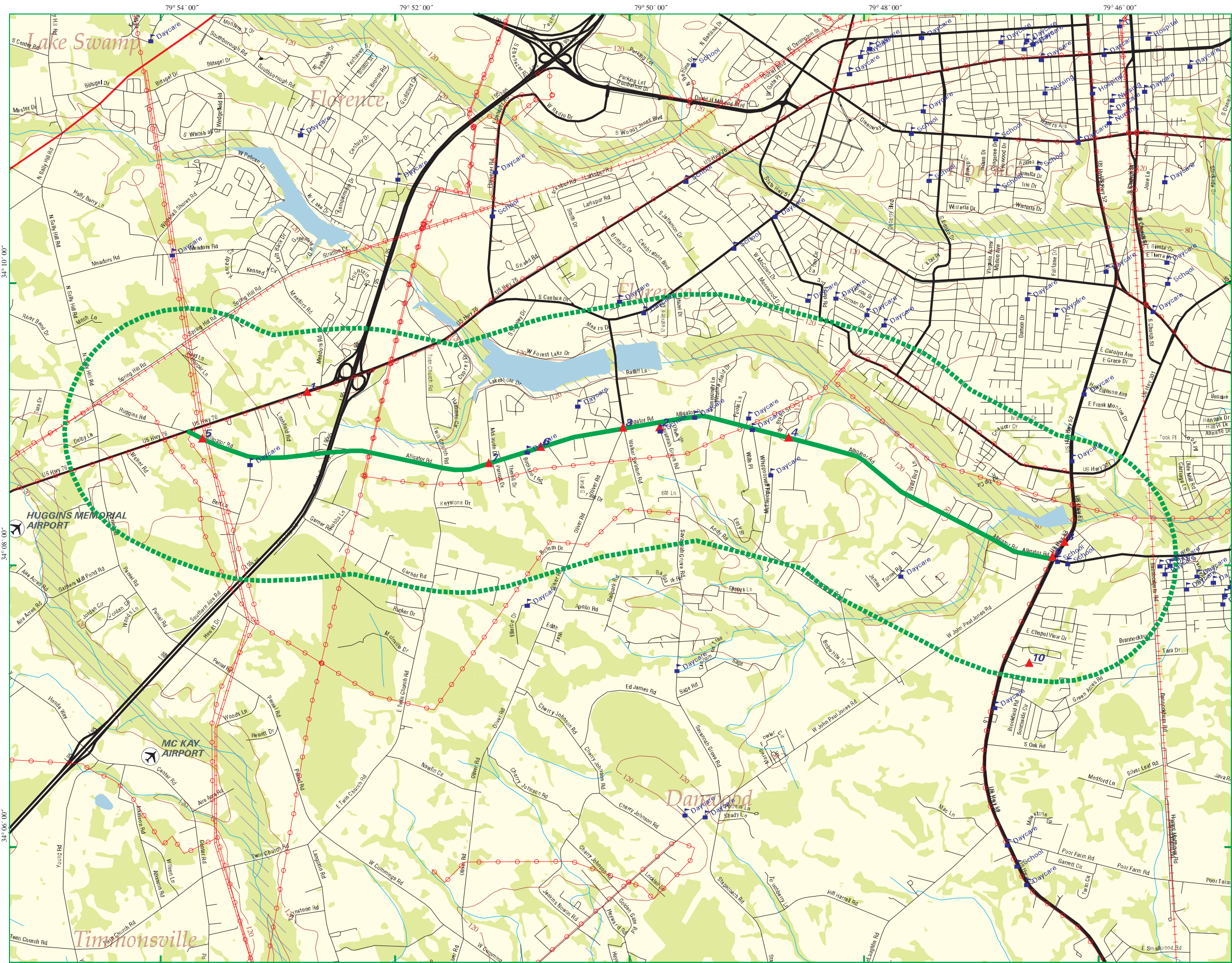
## **Appendix B**















### Regulatory Databases

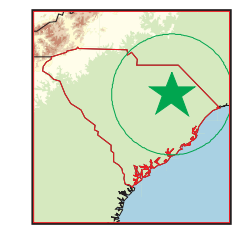


# EDR DataMap® Corridor Study

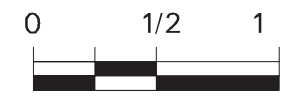
## Alligator Road, Florence SC



-  Listed Sites
-  Earthquake Epicenters (Richter 5 or greater)
-  Search Boundary
-  Roads
-  Major Roads
-  Waterways
-  Railroads
-  Contour Lines
-  Pipelines
-  Powerlines
-  Fault Lines
-  Water
-  Superfund Sites
-  Federal DOD Sites
-  Indian Reservations BIA
-  100-Yr Flood Zones
-  National Wetland Inventory



Effingham, SC



Scale in Miles



**Alligator Road, Florence SC**  
Effingham, SC 29541

Inquiry Number: 3615819.1s  
May 30, 2013

## EDR DataMap™ Corridor Study

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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# EXECUTIVE SUMMARY

## TARGET PROPERTY INFORMATION

### ADDRESS

EFFINGHAM, SC 29541  
EFFINGHAM, SC 29541

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

## FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
LIENS 2	CERCLA Lien Information
CORRACTS	Corrective Action Report
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA NonGen / NLR	RCRA - Non Generators
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
DOT OPS	Incident and Accident Data
US CDL	Clandestine Drug Labs
US BROWNFIELDS	A Listing of Brownfields Sites
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
LUCIS	Land Use Control Information System
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System

## EXECUTIVE SUMMARY

PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US HIST CDL.....	National Clandestine Laboratory Register
PCB TRANSFORMER.....	PCB Transformer Registration Database
FEDERAL FACILITY.....	Federal Facility Site Information listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
PRP.....	Potentially Responsible Parties
2020 COR ACTION.....	2020 Corrective Action Program List
COAL ASH DOE.....	Steam-Electric Plant Operation Data
FEMA UST.....	Underground Storage Tank Listing
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem

### STATE AND LOCAL RECORDS

ALLSITES.....	Site Assessment & Remediation Public Record Database
RCR.....	Registry of Conditional Remedies
SWF/LF.....	Permitted Landfills List
UIC.....	Underground Injection Wells Listing
SWRCY.....	Solid Waste Recycling Facilities
AST.....	Aboveground Storage Tank List
SPILLS.....	Spills Database List
AUL.....	Land Use Controls
VCP.....	Voluntary Cleanup Sites
DRYCLEANERS.....	Drycleaner Database
BROWNFIELDS.....	Brownfields Sites Listing
CDL.....	Clandestine Drug Lab Sites
NPDES.....	Waste Water Treatment Facilities Listing
AIRS.....	Permitted Airs Facility Listing
COAL ASH.....	Coal Ash Disposal Sites

### TRIBAL RECORDS

INDIAN RESERV.....	Indian Reservations
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
INDIAN LUST.....	Leaking Underground Storage Tanks on Indian Land
INDIAN UST.....	Underground Storage Tanks on Indian Land
INDIAN VCP.....	Voluntary Cleanup Priority Listing

### EDR PROPRIETARY RECORDS

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
--------------	---

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## EXECUTIVE SUMMARY

### FEDERAL RECORDS

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 02/12/2013 has revealed that there are 2 RCRA-CESQG sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b>FLORENCE CAREER CENTER</b>	<b>126 EAST HOWE SPRINGS R</b>	<b>9</b>	<b>8</b>
<b>CITY OF FLORENCE PROJECT IMPAC</b>	<b>3200 S IRBY ST</b>	<b>9</b>	<b>11</b>

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 10/23/2011 has revealed that there are 5 FINDS sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
GAUSE S GROCERY	2426 ALLIGATOR RD	4	6
MGL DEVELOPMENT	4340 ALLIGATOR RD	5	7
PARROTT S MHP	3542 ALLIGATOR RD	7	8
<b>FLORENCE CAREER CENTER</b>	<b>126 EAST HOWE SPRINGS R</b>	<b>9</b>	<b>8</b>
<b>CITY OF FLORENCE PROJECT IMPAC</b>	<b>3200 S IRBY ST</b>	<b>9</b>	<b>11</b>

### STATE AND LOCAL RECORDS

SHWS: State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

A review of the SHWS list, as provided by EDR, and dated 03/20/2013 has revealed that there is 1 SHWS site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
JESCO	235 E INDUSTRIAL PARK B	10	14



## EXECUTIVE SUMMARY

GWCI: Groundwater Contamination Inventory Cases. Any site that has groundwater contamination over a federal MCL.

A review of the GWCI list, as provided by EDR, and dated 07/01/2008 has revealed that there is 1 GWCI site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b>BULL MART 1</b>	<b>3952 W PALMETTO</b>	<b>1</b>	<b>3</b>

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health & Environmental Control's Leaking UST list.

A review of the LUST list, as provided by EDR, and dated 02/05/2013 has revealed that there are 2 LUST sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b>BULL MART 1</b>	<b>3952 W PALMETTO</b>	<b>1</b>	<b>3</b>
<b>GAUSE'S GROCERY</b>	<b>2426 ALLIGATOR RD</b>	<b>4</b>	<b>6</b>
No Action Required: 11/30/98			

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health & Environmental Control's list: Comprehensive Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 11/26/2012 has revealed that there are 3 UST sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<b>BULL MART 1</b>	<b>3952 W PALMETTO</b>	<b>1</b>	<b>3</b>
<b>GAUSE'S GROCERY</b>	<b>2426 ALLIGATOR RD</b>	<b>4</b>	<b>6</b>
<b>SAVE MORE</b>	<b>3099 S IRBY ST</b>	<b>9</b>	<b>13</b>

### **EDR PROPRIETARY RECORDS**

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US

## EXECUTIVE SUMMARY

Hist Auto Stat sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
Not reported	3043 ALLIGATOR RD	3	5
Not reported	3376 ALLIGATOR RD	6	8
Not reported	3099 S IRBY ST	8	8

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
Not reported	2326 SAVANNAH GROVE RD	2	5

## **EXECUTIVE SUMMARY**

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
<b><u>FEDERAL RECORDS</u></b>	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
CERCLIS	0
CERC-NFRAP	0
LIENS 2	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	2
RCRA NonGen / NLR	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	0
FUDS	0
LUCIS	0
CONSENT	0
ROD	0
UMTRA	0
DEBRIS REGION 9	0
ODI	0
US MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	0
PADS	0
MLTS	0
RADINFO	0
FINDS	5
RAATS	0
RMP	0
COAL ASH EPA	0
SCRD DRYCLEANERS	0
US HIST CDL	0
PCB TRANSFORMER	0
FEDERAL FACILITY	0
US FIN ASSUR	0
EPA WATCH LIST	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
PRP	0
2020 COR ACTION	0
COAL ASH DOE	0
FEMA UST	0
LEAD SMELTERS	0
US AIRS	0
 <b><u>STATE AND LOCAL RECORDS</u></b>	
SHWS	1
GWCI	1
ALLSITES	0
RCR	0
SWF/LF	0
UIC	0
SWRCY	0
LUST	2
UST	3
AST	0
SPILLS	0
AUL	0
VCP	0
DRYCLEANERS	0
BROWNFIELDS	0
CDL	0
NPDES	0
AIRS	0
COAL ASH	0
 <b><u>TRIBAL RECORDS</u></b>	
INDIAN RESERV	0
INDIAN ODI	0
INDIAN LUST	0
INDIAN UST	0
INDIAN VCP	0
 <b><u>EDR PROPRIETARY RECORDS</u></b>	
EDR MGP	0
EDR US Hist Auto Stat	3
EDR US Hist Cleaners	1

NOTES:

Sites may be listed in more than one database

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Distance (ft.)	Site	Database(s)	EPA ID Number

<b>1</b>	<b>BULL MART 1</b> <b>3952 W PALMETTO</b> <b>FLORENCE, SC 29501</b>	<b>GWCI</b> <b>LUST</b> <b>UST</b>	<b>U003621590</b> <b>N/A</b>
----------	---	--	---------------------------------

SC GWIC:

Bureau:	BLWM
EAP ID:	Not reported
Solid Waste Permit #:	Not reported
Bureau of Land & Waste Management File #:	Not reported
Permit Number:	03527
WPC Permit:	Not reported
Program:	DUST
Contamination:	PETRO
Petroleum Products:	True
Volatile Organic Compounds:	False
Metals:	False
Nitrates or Potential to Nitrate:	False
Pesticides & Herbicides:	False
Polychlorinated Biphenyls:	False
Base, Neutral, & Acid Extractables:	False
Phenols:	False
Radionuclides Over Max Contaminant Levels:	False
Sources Not In Other Categories:	False
Source:	UST
Underground Storage Tanks:	True
Pits, Ponds, & Lagoons:	False
Spills & Leaks:	False
Landfills:	False
Aboveground Storage Tank:	False
Spray Irrigation:	False
Single-Event Spill:	False
Unpermitted Disposal:	False
Septic Tank/Tile Field:	False
Substances Not In Other Categories:	False
Sources of Contamination Undetermined:	False
Assessment:	No
Monitoring:	No
Remediation:	Yes
Surface Impact:	No
Drinking Water Well Impact:	No

Remarks: Site ID # 03527. RBCA Classification 1D2. Free Product recovery only.

LUST:

Facility ID:	03527
Release Number:	1
Facility Status:	free product recovery only
Substance:	PETRO
Owner:	HERBERT ANDERSON
<b>NFA Date:</b>	<b>Not reported</b>
Date Confirmed:	09/01/95
Report Date:	06/30/93
Rank:	3BA

LUST DETAIL:

Release Date:	06/30/1993
Cleanup Complete Date:	Not reported
RP Name:	HERBERT JR & WARD ANDERSON
RP Address:	4250 BLITSGEL DR
RP City:	FLORENCE



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

**BULL MART 1 (Continued)**

**U003621590**

RP State: SC  
 RP Zip: 29501-8900  
 SCRBCA Class Code: CLASS3BA  
 Depth to Ground Water: 8.429  
 Ground Water Flow Direction: E  
 Project Manager: RIVERS, MIKE S  
 Release Fin Type Code: With SUPERB

UST:

Facility ID: 3527  
 Owner: ANDERSON  
 Owner Contact: CRAIG STATLER  
 Owner Address: 3366 W PALMETTO ST  
 Owner City,St,Zip: FLORENCE, SC 29501  
 Owner Phone: 843-495-0628  
 Contact: CRAIG STATLER  
 Contact Tel: 843-665-2618

Tank ID: 1  
 Capacity: 3000  
 Product: RUL  
 Calcage: 15  
**Status: Extended out of use**

Tank ID: 2  
 Capacity: 8000  
 Product: RUL  
 Calcage: 20  
**Status: Currently in use**

Tank ID: 3  
 Capacity: 8000  
 Product: PREM  
 Calcage: 20  
**Status: Currently in use**

Tank ID: 4  
 Capacity: 10000  
 Product: Diesel  
 Calcage: 5  
**Status: Currently in use**

Tank ID: 5  
 Capacity: 4000  
 Product: Kerosene  
 Calcage: 5  
**Status: Currently in use**

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

2

EDR US Hist Cleaners

1015023965  
 N/A

**2326 SAVANNAH GROVE RD  
 EFFINGHAM, SC 29541**

EDR Historical Cleaners:

Name: EAST MAIN LAUNDRYMAT INC  
 Year: 2003  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDRYMAT INC  
 Year: 2004  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDROMAT INC  
 Year: 2005  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDROMAT INC  
 Year: 2006  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDROMAT INC  
 Year: 2007  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDROMAT INC  
 Year: 2008  
 Address: 2326 SAVANNAH GROVE RD

Name: EAST MAIN LAUNDROMAT INC  
 Year: 2009  
 Address: 2326 SAVANNAH GROVE RD

3

EDR US Hist Auto Stat

1015406965  
 N/A

**3043 ALLIGATOR RD  
 FLORENCE, SC 29501**

EDR Historical Auto Stations:

Name: PLAYERS GARAGE & BODY SHOP  
 Year: 1999  
 Address: 3043 ALLIGATOR RD

Name: PLAYERS GARAGE & BODY SHOP  
 Year: 2000  
 Address: 3043 ALLIGATOR RD

Name: PLAYERS GARAGE & BODY SHOP  
 Year: 2001  
 Address: 3043 ALLIGATOR RD

Name: PLAYERS GARAGE & BODY SHOP  
 Year: 2002  
 Address: 3043 ALLIGATOR RD

Name: PLAYERSGARAGE & BODY SHOP  
 Year: 2003  
 Address: 3043 ALLIGATOR RD

Name: PLAYERSGARAGE & BODY SHOP  
 Year: 2004

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Distance (ft.)	Site	Database(s)	EPA ID Number

**(Continued)**

**1015406965**

Address:	3043 ALLIGATOR RD
Name:	PLAYERS GARAGE & BODY SHOP
Year:	2006
Address:	3043 ALLIGATOR RD
Name:	PLAYERS GARAGE & BODY SHOP
Year:	2007
Address:	3043 ALLIGATOR RD
Name:	PLAYERS GARAGE & BODY SHOP
Year:	2008
Address:	3043 ALLIGATOR RD
Name:	PLAYERS GARAGE & BODY SHOP
Year:	2009
Address:	3043 ALLIGATOR RD

**4 GAUSE S GROCERY  
2426 ALLIGATOR RD  
EFFINGHAM, SC 29541**

**FINDS 1007244573  
N/A**

FINDS:

Registry ID: 110017163932

Environmental Interest/Information System

SC-EFIS (South Carolina - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas. The EFIS was developed by the state of South Carolina and Maine joined their system in 2004.

**4 GAUSE'S GROCERY  
2426 ALLIGATOR RD  
EFFINGHAM, SC 29541**

**LUST U002323365  
UST N/A**

LUST:

Facility ID:	03452
Release Number:	1
Facility Status:	currently inactive
Substance:	PETRO
Owner:	JOHN P & BETTY GAUSE
<b>NFA Date:</b>	<b>11/30/98</b>
Date Confirmed:	05/19/97
Report Date:	04/25/97
Rank:	4BC

LUST DETAIL:

Release Date:	04/25/1997
Cleanup Complete Date:	11/30/1998
RP Name:	JOHN P & BETTY GAUSE
RP Address:	3349 LAKESHORE DR
RP City:	FLORENCE

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number  
 EPA ID Number

Database(s)

**GAUSE'S GROCERY (Continued)**

**U002323365**

RP State: SC  
 RP Zip: 29501  
 SCRBCA Class Code: CLASS4BC  
 Depth to Ground Water: Not reported  
 Ground Water Flow Direction: Not reported  
 Project Manager: DUBOIS, PAMELA M  
 Release Fin Type Code: Qualifies for Fund with Deductible

UST:

Facility ID: 3452  
 Owner: JOHN P & BETTY GAUSE  
 Owner Contact: BETTY GAUSE  
 Owner Address: 3349 LAKESHORE DR  
 Owner City,St,Zip: FLORENCE, SC 29501  
 Owner Phone: 803-667-4788  
 Contact: BETTY GAUSE  
 Contact Tel: Not reported

Tank ID: 1  
 Capacity: 2000  
 Product: Gasoline  
 Calcage: 10  
**Status: Abandoned**

Tank ID: 2  
 Capacity: 2000  
 Product: Gasoline  
 Calcage: 10  
**Status: Abandoned**

**5 MGL DEVELOPMENT  
 4340 ALLIGATOR RD  
 TIMMONSVILLE, SC 29161**

**FINDS 1007240229  
 N/A**

FINDS:

Registry ID: 110017118536

Environmental Interest/Information System

SC-EFIS (South Carolina - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas. The EFIS was developed by the state of South Carolina and Maine joined their system in 2004.

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site  
 Database(s)  
 EDR ID Number  
 EPA ID Number

6 **3376 ALLIGATOR RD** **FLORENCE, SC 29501** **EDR US Hist Auto Stat** **1015434833**  
**N/A**

EDR Historical Auto Stations:

Name: AUTO SHIFT TRANSMISSION  
 Year: 2004  
 Address: 3376 ALLIGATOR RD

Name: AUTO SHIFT TRANSMISSIONMARINE  
 Year: 2010  
 Address: 3376 ALLIGATOR RD

7 **PARROTT S MHP** **3542 ALLIGATOR RD** **FLORENCE, SC 29501** **FINDS** **1008008883**  
**N/A**

FINDS:

Registry ID: 110002175379

Environmental Interest/Information System

SC-EFIS (South Carolina - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas. The EFIS was developed by the state of South Carolina and Maine joined their system in 2004.

8 **3099 S IRBY ST** **FLORENCE, SC 29505** **EDR US Hist Auto Stat** **1015411512**  
**N/A**

EDR Historical Auto Stations:

Name: SOUTH FLRNC EXXON JAMES WLSN D  
 Year: 2003  
 Address: 3099 S IRBY ST

Name: SOUTH FLORENCE EXXON  
 Year: 2010  
 Address: 3099 S IRBY ST

9 **FLORENCE CAREER CENTER** **126 EAST HOWE SPRINGS ROAD** **FLORENCE, SC 29505** **RCRA-CESQG** **1004780430**  
**FINDS** **SCD987577079**

RCRA-CESQG:

Date form received by agency: 10/09/1990  
 Facility name: FLORENCE CAREER CENTER  
 Facility address: 126 EAST HOWE SPRINGS ROAD  
 FLORENCE, SC 29505  
 EPA ID: SCD987577079  
 Mailing address: EAST HOWE SPRINGS ROAD  
 FLORENCE, SC 29505  
 Contact: GRANT COX

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number  
 EPA ID Number

Database(s)

**FLORENCE CAREER CENTER (Continued)**

**1004780430**

Contact address: 126 EAST HOWE SPRINGS ROAD  
 FLORENCE, SC 29505

Contact country: US

Contact telephone: (803) 664-8465

Contact email: Not reported

EPA Region: 04

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

**Owner/Operator Summary:**

Owner/operator name: FLORENCE SCHOOL DISTRICT #1

Owner/operator address: 319 S DARGAN STREET  
 FLORENCE, SC 29506

Owner/operator country: Not reported

Owner/operator telephone: (803) 669-4141

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Furnace exemption: No

Used oil fuel burner: No

Used oil processor: No

User oil refiner: No

Used oil fuel marketer to burner: No

Used oil Specification marketer: No

Used oil transfer facility: No

Used oil transporter: No

**Hazardous Waste Summary:**

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

**FLORENCE CAREER CENTER (Continued)**

**1004780430**

WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F001  
 Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002  
 Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003  
 Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005  
 Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

**FINDS:**

Registry ID: 110002252017

**Environmental Interest/Information System**

US Geographic Names Information System (GNIS) is the official vehicle for geographic names used by the federal government and the source for applying geographic names to federal maps and other printed and electronic documents.

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number  
 EPA ID Number

Database(s)

**FLORENCE CAREER CENTER (Continued)**

**1004780430**

SC-EFIS (South Carolina - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas. The EFIS was developed by the state of South Carolina and Maine joined their system in 2004.

NCES (National Center for Education Statistics) is the primary federal entity for collecting and analyzing data related to education in the United States and other nations and the institute of education sciences.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

9

**CITY OF FLORENCE PROJECT IMPACT  
 3200 S IRBY ST  
 FLORENCE, SC 29505**

**RCRA-CESQG 1001485887  
 FINDS SCR000002568**

RCRA-CESQG:

Date form received by agency: 03/06/2001  
 Facility name: CITY OF FLORENCE PROJECT IMPACT  
 Facility address: 3200 S IRBY ST  
 FLORENCE, SC 29505  
 EPA ID: SCR000002568  
 Mailing address: S IRBY ST  
 FLORENCE, SC 29505  
 Contact: SCOTTY DAVIS  
 Contact address: 180 N IRBY ST RM 102  
 FLORENCE, SC 29501  
 Contact country: US  
 Contact telephone: (843) 665-3175  
 Contact email: Not reported  
 EPA Region: 04  
 Land type: County  
 Classification: Conditionally Exempt Small Quantity Generator  
 Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number  
 EPA ID Number

Database(s)

**CITY OF FLORENCE PROJECT IMPACT (Continued)**

**1001485887**

**Owner/Operator Summary:**

Owner/operator name: FLORENCE COUNTY SCHOOLS DIST 1  
 Owner/operator address: 319 S DARGAN ST  
 FLORENCE, SC 29506  
 Owner/operator country: Not reported  
 Owner/operator telephone: (843) 665-3175  
 Legal status: County  
 Owner/Operator Type: Owner  
 Owner/Op start date: 01/01/0001  
 Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: No  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No

**Historical Generators:**

Date form received by agency: 04/08/1999  
 Facility name: CITY OF FLORENCE PROJECT IMPACT  
 Classification: Not a generator, verified

**Hazardous Waste Summary:**

Waste code: 7777  
 Waste name: 7777

Violation Status: No violations found

**Evaluation Action Summary:**

Evaluation date: 04/08/1999  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

**FINDS:**

Registry ID: 110002252026

**Environmental Interest/Information System**

US Geographic Names Information System (GNIS) is the official vehicle for geographic names used by the federal government and the source for applying geographic names to federal maps and other printed and electronic documents.

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)Site

EDR ID Number  
 EPA ID Number

Database(s)

**CITY OF FLORENCE PROJECT IMPACT (Continued)**

**1001485887**

SC-EFIS (South Carolina - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas. The EFIS was developed by the state of South Carolina and Maine joined their system in 2004.

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9

**SAVE MORE  
 3099 S IRBY ST  
 FLORENCE, SC 29505**

**UST U003714916  
 N/A**

UST:

Facility ID: 18516  
 Owner: REY PETROLEUM LLC  
 Owner Contact: ANN DILLARD  
 Owner Address: 4485 TENCH RD STE 850  
 Owner City,St,Zip: SUWANEE, GA 30024-6741  
 Owner Phone: 678-541-0750  
 Contact: ANN DILLARD  
 Contact Tel: 843-664-0410

Tank ID: 1  
 Capacity: 12000  
 Product: RUL  
 Calcage: 0  
**Status: Currently in use**

Tank ID: 2  
 Capacity: 10000  
 Product: PREM  
 Calcage: 0  
**Status: Currently in use**

Tank ID: 3  
 Capacity: 4000  
 Product: Diesel  
 Calcage: 0  
**Status: Currently in use**

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Distance (ft.)	Site	Database(s)	EPA ID Number

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10	<b>JESCO</b> <b>235 E INDUSTRIAL PARK BLVD</b> <b>FLORENCE, SC 29505</b>	<b>SHWS</b>	<b>S109362455</b> <b>N/A</b>
	SHWS:		
	EPA ID:	SCS123457135	

## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CARTERSVILLE	U003519909	CARTERSVILLE GRO	USHY 76	29161	UST
EFFINGHAM	U004018661	W LEE MOTORS	RT 1		UST
EFFINGHAM	U003523118	LAWHONS CASH & CARRY	RT 1		LUST, UST
EFFINGHAM	U003522574	J C DORRELL	RT 1		LUST, UST
EFFINGHAM	U003558168	KRAFT DAIRY	RT 2	29541	UST
EFFINGHAM	U003558325	PEE DEE	RT 2	29541	UST
EFFINGHAM	1007235839	FLORENCE COUNTY PUBLIC WORKS	PO BOX 38	29541	FINDS
EFFINGHAM	1007236385	COUNTRY CLUB OF SC	FLORENCE COUNTY PUBLIC WORKS RT1	29541	FINDS
EFFINGHAM	1007224633	FLORENCE CO LANDFILL	FLORENCE COUNTY PW RT 2	29541	FINDS
EFFINGHAM	U003508290	JETT STOP	33157 N GOVERNOR WILLIAMS HWY	29541	LUST, UST
EFFINGHAM	U004018701	DANNYS GROCERY	HWY	29541	GWCI, LUST, UST
EFFINGHAM	U003519609	BUBBAS PIT STOP	USHY 52 S	29541	UST
FLORENCE	1007236189	FLORENCE FLEA MKT REST	RTE 1 PO BOX 41	29501	FINDS
FLORENCE	U003519509	BOYDS 301 GULF	RT 1 E	29501	GWCI
FLORENCE	1006573033	UNITED PARCEL SERVICE FLORENCE	ROUTE 10 BOX 21	29501	FINDS
FLORENCE	1003868431	FLORENCE COUNTY LANDFILL	HWY 149	29501	CERC-NFRAP, GWCI
FLORENCE	1004780086	AAA TRANSMISSIONS OF FLORENCE INC	HWY 301 S	29501	RCRA-CESQG, FINDS
FLORENCE	1004780277	FRANCIS MARION COLLEGE	76 HWY 301	29501	RCRA-CESQG, FINDS
FLORENCE	U004154235	SC 51 RIGHT OF WAY	SC 51	29501	UST
FLORENCE	1004780785	FLORENCE DARLINGTON TECH	HWY 52 N	29501	RCRA-CESQG
FLORENCE	1005853403	FLORENCE DARLINGTON TECH	HIGHWAY 52 NORTH	29501	FINDS
FLORENCE	1004780228	GREGORY POOLE EQUIPMENT CO	HWY 52 N	29501	RCRA-CESQG
FLORENCE	1004779674	WHEATON BODY SHOP	HWY 52	29501	RCRA-CESQG, FINDS
FLORENCE	U003522456	IMC FERTILIZER INC	HWY 52N	29501	UST
FLORENCE	1007226411	FLORENCE CONV CENTER	RT 8 BOX 88	29501	FINDS
FLORENCE	U004140917	BRABHAM OIL CO FLORENCE	I 95 & HWY 76	29501	LUST, UST
FLORENCE	1005851259	RAMADA INN OF FLORENCE	I 95 & US 52	29501	FINDS
FLORENCE	1012218860	THE FLORENCE MORNING NEWS	PO BOX 100528	29501	FINDS
FLORENCE	1012093042	FLORENCE CONCRETE:FLORENCE	BOX 5506,DARLINGTON HW Y	29501	FINDS
FLORENCE	1007230473	FLORENCE/MAIN PLANT	BOX AA CITY/CNTY COMPLEX	29501	FINDS
FLORENCE	1005851295	SHERATON MOTOR INN/FLORENCE	BOX 3806 I95 AND 76	29501	FINDS
FLORENCE	1005851087	FLORENCE/MCCOWN ST WTP	PO BOX RR	29501	FINDS
FLORENCE	1005851085	FLORENCE/G E WTP	PO BOX RR	29501	FINDS
FLORENCE	1005851084	FLORENCE/EAST FLORENCE WTP	PO BOX RR	29501	FINDS
FLORENCE	1005851083	FLORENCE/DARLINGTON ST WTP	PO BOX RR	29501	FINDS
FLORENCE	1005851081	FLORENCE/PINE ST WTP	PO BOX RR	29501	FINDS
FLORENCE	1007247820	FLORENCE REST AREA	PO BOX 111	29501	FINDS
FLORENCE	1010350638	FLORENCE CONCRETE PRODUCTS	1517 N CASHUA DR	29501	FINDS
FLORENCE	1012053286	SSC INC - FLORENCE SVC	1600 W DARLINGTON ST	29501	SSTS
FLORENCE	1005852154	FLORENCE CONCRETE PRODUCTS INCORPORATED	DARLINGTON HIGHWAY	29501	FINDS
FLORENCE	1005789958	CSX TRANSPORTATION FLORENCE	807 E DAY ST	29501	FINDS
FLORENCE	1007837814	THE CITY OF FLORENCE	DEPT OF PUBLIC UTILITIES	29501	FINDS
FLORENCE	1007245111	FLORENCE COUNTY LANDFILL	DRAWER G CITY CO COMPLEX	29501	FINDS



## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FLORENCE	1012262840	FLORENCE/MAIN PLANT	END OF STOCKADE RD	29501	FINDS
FLORENCE	S111680903	FLORENCE/MAIN PLANT	END OF STOCKADE RD	29501	NPDES
FLORENCE	1007230476	FLORENCE/TARA VILLAGE SD	FLOR DRAWER EE CITY/CO COMPLEX	29501	FINDS
FLORENCE	1007230475	FLORENCE/OAKDALE-SPRINGDALE SD	FLOR DRAWER EE CITY/CO COMPLEX	29501	FINDS
FLORENCE	1007230474	FLORENCE/NORTH AREA PLANT	FLOR DRAWER EE CITY/CO COMPLEX	29501	FINDS
FLORENCE	1007227630	FLORENCE/AIRPORT PLANT	FLOR DRAWER EE CITY/CO COMPLEX	29501	FINDS
FLORENCE	1007227625	FLORENCE/PARKWOOD PLANT	FLOR DRAWER EE CITY/CO COMPLEX	29501	FINDS
FLORENCE	1014624177	FLORENCE MILL, PAPER MILL RD	FLORENCE MILL PAPER MILL RD	29501	PCB TRANSFORMER
FLORENCE	1014630592	FLORENCE MILL, PAPER MILL RD	FLORENCE MILL PAPER MILL RD	29501	PCB TRANSFORMER
FLORENCE	1005790226	SOUTH FLORENCE HIGH SCHOOL	S FLORENCE HIGH 109 W PINE ST	29501	FINDS
FLORENCE	1005851082	FLORENCE CO/TV RD COMMERCIAL	FLORENCE CO WATER & SEWER	29501	FINDS
FLORENCE	1007829699	PHYSICIANS SURGERY CENTER OF FLORENCE LLC	FREEDOM MEDICAL PLAZA	29505	FINDS
FLORENCE	1005927993	DUPONT - FLORENCE	U.S. HIGHWAY 301 N	29501	TSCA
FLORENCE	1011605876	KOPPERS IND, INC: FLORENCE	280 KOPPERS STREET FLORENCE SC 29501	29501	ICIS
FLORENCE	U004018678	AVIS RENT A CAR	MARION HWY	29501	UST
FLORENCE	1005852177	FLORENCE CITY OF	1000 MCCURDY RD	29501	FINDS
FLORENCE	1003869424	CITY OF FLORENCE/CAMLIN LANDFILL	MECHANICSVILLE RD	29501	CERC-NFRAP, SHWS
FLORENCE	1007245288	FLORENCE NAT L CEMETERY	803 E NAT L CEM RD	29501	FINDS
FLORENCE	1007233942	SC DEPT OF DISABILITIES & SPECIAL NEEDS	714 NATIONAL CEMETERY RD	29501	FINDS
FLORENCE	1012135565	FLORENCE CO/FLORENCE CO MINE	OFF STATE HWY 24	29541	FINDS
FLORENCE	1014961160	CVS PHARMACY 7609	3306 PALMETTO ST W	29501	RCRA-SQG
FLORENCE	U004154231	BOYDS 301 GULF	6219 E PALMETTO ST	29501	LUST, UST
FLORENCE	U003558358	POSTON PACKING	PAMPLICO HWY	29505	UST
FLORENCE	1014908572	ROCK-TENN CP, LLC - FLORENCE MILL	PAPER MILL RD	29501	FINDS
FLORENCE	1009308340	STONE CONTAINER CORP - FLORENCE MILL	7320 PAPER MILL ROAD	29501	TSCA
FLORENCE	1005791384	WEST FLORENCE HI SCHOOL/DIST 1	W PINE ST	29501	FINDS
FLORENCE	U003520307	COASTAL COCA COLA BOTTLING CO	PISGAH ROAD OFF HWY	29501	LUST, UST
FLORENCE	1014198682	DUPONT TEIJIN FILMS - FLORENCE PLANT	6901 DU PONT DR	29501	TSCA
FLORENCE	S109362456	OLD FLORENCE CITY DUMP	QUAIL ARBOR CIRCLE NEAR JEFFRI CRK	29501	SHWS
FLORENCE	U003526670	WICKES LUMBER CO	HWY RD	29501	LUST, UST
FLORENCE	U003521526	MCLAUGHLIN	301 S	29501	GWCI, RCR, LUST, UST
FLORENCE	S109362457	SECOND LOOP ROAD SITE	1521 SECOND LOOP RD	29505	SHWS, BROWNFIELDS
FLORENCE	1014908613	CITY OF FLORENCE REGIONAL WASTEWATER MANAGEMENT FAC	1000 STOCKADE RD	29501	FINDS
FLORENCE	S109515585	FLORENCE, CITY OF WASTEWATER	STOCKADE DR	29501	AIRS
FLORENCE	1005532631	FLORENCE/LUCAS ST WTP	HWY US 52	29501	FINDS
FLORENCE	1015736385	DUPONT EI FLORENCE MYLAR PLT	USHY 301 N	29501	CERC-NFRAP, PADS
FLORENCE COUNTY	S108979354	FLORENCE COUNTY LANDFILL	HWY 25, 4.5 MILES S OF HWY 76		RCR
MARION	U001541947	BELLSOUTH SERVICE	HWY 34 SC 41 S	29501	UST
TIMMONSVILLE	U003521545	FRED ANDERSON STA	RT 1	29161	UST
TIMMONSVILLE	1007225205	LAKE SWAMP GROCERY	RT 2	29161	FINDS, RCR
TIMMONSVILLE	U003524194	GREGGS GROCERY	RT 2	29161	UST
TIMMONSVILLE	U004018102	TRANSMISSION REPAIR SHOP	HWY 76	29161	LUST, UST
TIMMONSVILLE	U004179505	CUSAACS CASH & CARRY	3315 OLANTA HWY	29161	LUST, UST
TIMMONSVILLE	U003930646	CUSTOM TIRE & WHEEL	W PALMETTO ST	29161	LUST, UST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## FEDERAL RECORDS

### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

### NPL Site Boundaries

#### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

### DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

## CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/04/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Quarterly

## CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/05/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 05/09/2013
	Data Release Frequency: Quarterly

## LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/25/2013	Telephone: 202-564-6023
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

## CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/12/2013	Source: EPA
Date Data Arrived at EDR: 02/21/2013	Telephone: 800-424-9346
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 05/02/2013
Number of Days to Update: 6	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Quarterly

## RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

## RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

## US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

## ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/17/2013	Telephone: 202-267-2180
Date Made Active in Reports: 02/15/2013	Last EDR Contact: 04/02/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 01/03/2013	Telephone: 202-366-4555
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 04/02/2013
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/07/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Varies

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/12/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 59

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Quarterly

## US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012  
Date Data Arrived at EDR: 12/11/2012  
Date Made Active in Reports: 12/20/2012  
Number of Days to Update: 9

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 03/26/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Semi-Annually

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Semi-Annually

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 03/11/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Varies

## LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005  
Date Data Arrived at EDR: 12/11/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 31

Source: Department of the Navy  
Telephone: 843-820-7326  
Last EDR Contact: 05/20/2013  
Next Scheduled EDR Contact: 09/02/2013  
Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 01/15/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012	Source: EPA
Date Data Arrived at EDR: 03/13/2013	Telephone: 703-416-0223
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 03/13/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Annually

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010	Source: Department of Energy
Date Data Arrived at EDR: 10/07/2011	Telephone: 505-845-0011
Date Made Active in Reports: 03/01/2012	Last EDR Contact: 05/28/2013
Number of Days to Update: 146	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Varies

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/29/2013
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: No Update Planned

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 04/18/2013	Telephone: 303-231-5959
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 03/06/2013
Number of Days to Update: 22	Next Scheduled EDR Contact: 06/17/2013
	Data Release Frequency: Semi-Annually

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 09/01/2011	Telephone: 202-566-0250
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 05/29/2013
Number of Days to Update: 131	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006	Source: EPA
Date Data Arrived at EDR: 09/29/2010	Telephone: 202-260-5521
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 03/28/2013
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/08/2013
	Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/28/2013
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/28/2013
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/10/2011	Telephone: 202-564-5088
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 04/15/2013
Number of Days to Update: 61	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012	Source: EPA
Date Data Arrived at EDR: 01/16/2013	Telephone: 202-566-0500
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/19/2013
Number of Days to Update: 114	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Annually

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/15/2011	Telephone: 301-415-7169
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 03/11/2013
Number of Days to Update: 60	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Quarterly

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/11/2013	Telephone: 202-343-9775
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/11/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/23/2011  
Date Data Arrived at EDR: 12/13/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 79

Source: EPA  
Telephone: (404) 562-9900  
Last EDR Contact: 03/12/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Quarterly

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012  
Date Data Arrived at EDR: 05/25/2012  
Date Made Active in Reports: 07/10/2012  
Number of Days to Update: 46

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 04/19/2013  
Number of Days to Update: 52

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 02/26/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Biennially

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011  
Date Data Arrived at EDR: 05/18/2012  
Date Made Active in Reports: 05/25/2012  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 05/17/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/15/2013	Telephone: 202-566-1917
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 05/20/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Quarterly

## US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 11/19/2008	Telephone: 202-307-1000
Date Made Active in Reports: 03/30/2009	Last EDR Contact: 03/23/2009
Number of Days to Update: 131	Next Scheduled EDR Contact: 06/22/2009
	Data Release Frequency: No Update Planned

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 05/03/2013
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

## COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 04/18/2013
Number of Days to Update: 76	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Varies

## FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 04/18/2013
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2011	Telephone: N/A
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 03/15/2013
Number of Days to Update: 77	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 04/10/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/14/2013	Telephone: 703-603-8787
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 04/08/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/01/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/01/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 05/06/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Varies

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/02/2012  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 69

Source: EPA  
Telephone: 202-564-6023  
Last EDR Contact: 04/04/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 02/18/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 81

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## STATE AND LOCAL RECORDS

### SHWS: Site Assessment Section Project List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 03/20/2013  
Date Data Arrived at EDR: 03/28/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 43

Source: Department of Health and Environmental Control  
Telephone: 803-734-5376  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Annually

### ALLSITES: Site Assessment & Remediation Public Record Database

The South Carolina Department of Health and Environmental Control is pleased to have the Public Record for your review. The purpose of this database is two-fold. First, it will provide to communities another form of notice of cleanup activity, allowing them to have more information about assessment and cleanup activities in their area and in the State. Second, it can assist those seeking to redevelop brownfield properties within South Carolina.

Date of Government Version: 02/01/2013  
Date Data Arrived at EDR: 03/28/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 43

Source: Department of Health & Environmental Control  
Telephone: 803-896-4000  
Last EDR Contact: 04/05/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

### GWCI: Groundwater Contamination Inventory

An inventory of all groundwater contamination cases in the state.

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 11/06/2008  
Date Made Active in Reports: 11/19/2008  
Number of Days to Update: 13

Source: Department of Health and Environmental Control  
Telephone: 803-898-3798  
Last EDR Contact: 04/15/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCR: Registry of Conditional Remedies

The Bureau of Land and Waste Management established this Registry to help monitor and maintain sites that have conditional remedies. A Conditional Remedy is an environmental remedy that includes certain qualifications. These qualifications are divided into two major categories: Remedies requiring Land Use Controls and Conditional No Further Actions.

Date of Government Version: 09/19/2012  
Date Data Arrived at EDR: 09/20/2012  
Date Made Active in Reports: 10/22/2012  
Number of Days to Update: 32

Source: Department of Health & Environmental Control  
Telephone: 803-896-4000  
Last EDR Contact: 03/22/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Varies

## SWF/LF: Permitted Landfills List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/29/2013  
Date Data Arrived at EDR: 03/29/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 42

Source: Department of Health and Environmental Control  
Telephone: 803-734-5165  
Source: Department of Health and Environmental Control, GIS Section  
Telephone: 803-896-4084  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Varies

## UIC: Underground Injection Wells Listing

A listing of underground injection wells locations.

Date of Government Version: 04/02/2013  
Date Data Arrived at EDR: 04/04/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 36

Source: Department of Health & Environmental Control  
Telephone: 803-898-3799  
Last EDR Contact: 05/13/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Varies

## SWRCY: Solid Waste Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 03/06/2012  
Date Data Arrived at EDR: 03/09/2012  
Date Made Active in Reports: 04/04/2012  
Number of Days to Update: 26

Source: Department of Health & Environmental Control  
Telephone: 803-896-8985  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

## LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 02/05/2013  
Date Data Arrived at EDR: 02/07/2013  
Date Made Active in Reports: 04/02/2013  
Number of Days to Update: 54

Source: Department of Health and Environmental Control  
Telephone: 803-898-4350  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Quarterly

## UST: Comprehensive Underground Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/26/2012  
Date Data Arrived at EDR: 11/28/2012  
Date Made Active in Reports: 12/05/2012  
Number of Days to Update: 7

Source: Department of Health and Environmental Control  
Telephone: 803-896-7957  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank List  
Registered Aboveground Storage Tanks.

Date of Government Version: 03/25/2004  
Date Data Arrived at EDR: 08/04/2004  
Date Made Active in Reports: 09/23/2004  
Number of Days to Update: 50

Source: Department of Health and Environmental Control  
Telephone: 803-898-4350  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

SPILLS: Spill List

Spills and releases of petroleum and hazardous chemicals reported to the Oil & Chemical Emergency Response division.

Date of Government Version: 01/22/2013  
Date Data Arrived at EDR: 01/24/2013  
Date Made Active in Reports: 02/01/2013  
Number of Days to Update: 8

Source: Department of Health and Environmental Control  
Telephone: 803-898-4111  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

AUL: Land Use Controls

The term Land Use Controls or "LUCs" encompass institutional controls, such as those involved in real estate interests, governmental permitting, zoning, public advisories, deed notices, and other legal restrictions. The term also includes restrictions on access, whether achieved by means of engineered barriers (e.g., fence or concrete pad) or by human means (e.g., the presence of security guards). Additionally, the term includes both affirmative measures to achieve the desired restrictions (e.g., night lighting of an area) and prohibitive directives (e.g., restrictions on certain types of wells for the duration of the corrective action). Considered altogether, the LUCs for a facility will provide a tool for how the property should be used in order to maintain the level of protectiveness that one or more corrective actions were designed to achieve.

Date of Government Version: 10/13/2008  
Date Data Arrived at EDR: 10/14/2008  
Date Made Active in Reports: 11/19/2008  
Number of Days to Update: 36

Source: Department of Health & Environmental Control  
Telephone: 803-896-4049  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites

Sites participating in the Voluntary Cleanup Program. Once staff and a non-responsible party have agreed upon an approved scope of work for a site investigation and/or remediation, the party enters into a voluntary cleanup contract. Staff oversees the cleanup efforts to ensure that activities are performed to our satisfaction. Upon completion of the negotiated work in the voluntary cleanup contract, the non-responsible party receives State Superfund liability protection.

Date of Government Version: 09/19/2012  
Date Data Arrived at EDR: 09/20/2012  
Date Made Active in Reports: 10/22/2012  
Number of Days to Update: 32

Source: Department of Health and Environmental Control  
Telephone: 803-896-4049  
Last EDR Contact: 03/22/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Database

The Drycleaning Facility Restoration Trust Fund database is used to access, prioritize and cleanup contaminated registered drycleaning sites.

Date of Government Version: 12/01/2010  
Date Data Arrived at EDR: 02/11/2011  
Date Made Active in Reports: 03/15/2011  
Number of Days to Update: 32

Source: Department of Health & Environmental Control  
Telephone: 803-898-3882  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## BROWNFIELDS: Brownfields Sites Listing

The Brownfields component of the Voluntary Cleanup Program allows a non-responsible party to acquire a contaminated property with State Superfund liability protection for existing contamination by agreeing to perform an environmental assessment and/or remediation.

Date of Government Version: 02/26/2013  
Date Data Arrived at EDR: 02/27/2013  
Date Made Active in Reports: 04/02/2013  
Number of Days to Update: 34

Source: Department of Health & Environmental Control  
Telephone: 803-896-4069  
Last EDR Contact: 05/08/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

## CDL: Clandestine Drug Lab Sites

A listing of clandestine drug lab site locations.

Date of Government Version: 01/24/2012  
Date Data Arrived at EDR: 01/26/2012  
Date Made Active in Reports: 02/24/2012  
Number of Days to Update: 29

Source: Department of Health & Environmental Control  
Telephone: 803-896-4288  
Last EDR Contact: 05/23/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Varies

## NPDES: Waste Water Treatment Facilities Listing

A listing of waste water treatment facility locations.

Date of Government Version: 12/21/2012  
Date Data Arrived at EDR: 12/21/2012  
Date Made Active in Reports: 02/01/2013  
Number of Days to Update: 42

Source: Department of Health & Environmental Control  
Telephone: 803-898-4300  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Varies

## AIRS: Permitted Airs Facility Listing

A listing of permitted air facilities.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 03/08/2012  
Date Made Active in Reports: 04/04/2012  
Number of Days to Update: 27

Source: Department of Health & Environmental Control  
Telephone: 803-898-4279  
Last EDR Contact: 03/19/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

## COAL ASH: Coal Ash Disposal Sites

A listing of sites with coal ash ponds.

Date of Government Version: 07/31/2009  
Date Data Arrived at EDR: 08/07/2009  
Date Made Active in Reports: 08/17/2009  
Number of Days to Update: 10

Source: Department of Health & Environmental Control  
Telephone: 803-898-3964  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Varies

## TRIBAL RECORDS

### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Semi-Annually

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 05/03/2013
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6271
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-8677
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012	Source: EPA Region 1
Date Data Arrived at EDR: 11/01/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 05/01/2013
Number of Days to Update: 162	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2013	Telephone: 415-972-3372
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 11/07/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 156	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-9424
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012	Source: EPA Region 5
Date Data Arrived at EDR: 08/03/2012	Telephone: 312-886-6136
Date Made Active in Reports: 11/05/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 94	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6137
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013	Source: EPA Region 9
Date Data Arrived at EDR: 02/26/2013	Telephone: 415-972-3368
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 45	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 10/02/2012	Telephone: 617-918-1102
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/05/2013
Number of Days to Update: 14	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Varies

## INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

## EDR PROPRIETARY RECORDS

### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: N/A  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: N/A  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/18/2013  
Date Data Arrived at EDR: 02/18/2013  
Date Made Active in Reports: 03/21/2013  
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 05/21/2013  
Next Scheduled EDR Contact: 09/02/2013  
Data Release Frequency: Annually

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 07/19/2012  
Date Made Active in Reports: 08/28/2012  
Number of Days to Update: 40

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2013  
Date Data Arrived at EDR: 02/07/2013  
Date Made Active in Reports: 03/15/2013  
Number of Days to Update: 36

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 05/09/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Annually

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 07/23/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 57

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 04/23/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 06/22/2012  
Date Made Active in Reports: 07/31/2012  
Number of Days to Update: 39

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/28/2013  
Next Scheduled EDR Contact: 09/09/2013  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 07/19/2012  
Date Made Active in Reports: 09/27/2012  
Number of Days to Update: 70

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Child Day Care List

Source: Department of Social Services

Telephone: 803-898-7345

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetlands Inventory

Source: Department of Natural Resources

Telephone: 803-734-9494

## **STREET AND ADDRESS INFORMATION**

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## **Appendix C**

### Corridor Photographs



Photograph 1 – View of the former Atkinson Grocery, located at Alligator Road and Knollwood Road.



Photograph 2 – View of Dad-D-O Grocery (former Gause's Grocery).



Photograph 3 – View of Sparrow & Kennedy – John Deere dealer.



Photograph 4 – View of Tadco Rebuilders site.





Photograph 5 – View of small unidentified contracting business, located at near Alligator Road and I-95.



Photograph 6– View of vacant lot near Alligator Road and I-95. Construction debris present on this lot.





Photograph 7 – View of farm shed located along the Project Corridor.



Photograph 8– View of former gas station located at Alligator Road and McLauren Drive.



Photograph 9 – View of small private garage located along the Project Corridor.



Photograph 10– View of small private garage located along the Project Corridor.





Photograph 11 – View of City of Florence Water Treatment Plant.



Photograph 12– View of Florence Transmission and Marine Service.



Photograph 13 – View of antique store property located across Knollwood Road from the former Atkinson Grocery site.



Photograph 14– View of Dollar General site.



Photograph 15 – View of small garage facility located on Savannah Grove Road, near Alligator Road.



Photograph 16– View of former gas station site at the intersection of Alligator Road and South Point Road.





Photograph 17 – View of Save More gas station site, located at Alligator Road and US 52.

Alligator Road (S-21-107) Bridge  
Over I-95  
Florence County, South Carolina

Asbestos and Lead-Based Paint  
Survey Report

F&H Job Number 1114201

ARM Project #16-311-13

June 27, 2013

Prepared For:

Florence & Hutcheson  
Columbia, South Carolina

Yes, Asbestos was found

No, Asbestos was not found

Yes, Lead-Based Paint was found

No, Lead-Based Paint was not found





Alligator Road (S-21-107) Bridge  
Over I-95

Florence County, South Carolina

Asbestos and Lead-Based Paint  
Survey Report

F&H Job Number 1114201

ARM Project #16-311-13

June 27, 2013

Prepared For:

Florence & Hutcheson  
Columbia, South Carolina

Report Compiled By:



Richard Ciccolella  
Project Manager

Report Reviewed By:



Sid Havird  
ASBESTOS CONSULTANT/  
BUILDING INSPECTOR  
SCDHEC LICENSE #00258



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## **ASBESTOS AND LEAD-BASED PAINT SURVEY**

On June 12, 2013 ARM Environmental Services, Inc. performed an asbestos and lead-based paint survey at a bridge located in Florence County, South Carolina. The S-21-107 (Alligator Road) Bridge over Interstate 95 (I-95) as shown in Appendix A, Figure 1. The site consists of one highway bridge. The bridge structure identification number is 217010700200. The asbestos survey has been conducted in accordance with the Asbestos Hazard Emergency Response Act (AHERA) guidelines, as required by the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) prior to renovation or demolition of public or commercial structures. The lead-based paint survey was performed to identify lead-based paint (LBP) on the bridge.

### **BRIDGE MATERIALS**

No construction records were available to determine the building materials used in construction of the structure. The bridge was constructed in 1966. All accessible structural components, including columns, piers, bridge deck, end bents, and buffer materials were examined.

Photographs of the site are shown in Appendix F. The bridge deck of the structure consists of pre-cast concrete deck sections. The bridge deck sections are resting on concrete beams, which are located on concrete pier caps. The concrete pier caps are supported by concrete piers. Steel tie rods are also located at each deck section. Concrete guardrails are located on the bridge structure. Galvanized metal guardrails also extend alongside the roadway at either end of the bridge. The bridge structure is estimated to be 300 feet long and 30 feet wide. The materials located on the bridge structure that were suspected to contain asbestos are described below:

- Black asphaltic joint material located between the concrete deck sections.
- Transite drain pipes located within the bridge deck sections.
- Black asphaltic buffer material at the bridge abutments.

### **ASBESTOS SURVEY**

Samples of the suspect materials were collected and submitted for laboratory analysis for Polarized Light Microscopy (PLM). One sample of the material was also collected for transmission electron microscopy (TEM) confirmation analysis in the event that the PLM analysis indicated less than 1 percent asbestos. The sample locations are shown in Appendix A, Figure 2. The results of the laboratory analysis are presented in Table 1 on the following page.

**Table 1: Asbestos Sample Analytical Data**

Sample Number	Suspect Material	Material Locations	Analytical Results*	Estimated Material Quantity
A-1, A-2, A-3	Joint Material	Between Concrete Deck Sections	No Asbestos Detected (PLM and TEM)	150 Linear Feet
B-1, B-2, B-3	Transite Drain Pipe	Edges of bridge deck sections	<b>40% Chrysotile Asbestos</b>	14 Linear Feet (14 drain pipes)
C-1, C-2, C-3	Abutment Buffer	At bridge abutments	No Asbestos Detected (PLM and TEM)	70 Linear Feet

\***Asbestos Content:** USEPA and SCDHEC regulations (No. 61-86.1) define asbestos containing material as any material greater than one percent asbestos. OSHA recommends that a negative exposure assessment (NEA) be conducted to establish appropriate personal protection equipment needed (if any) for all persons that might disturb asbestos materials.

The laboratory results are included in Appendix C of this report.

Materials found to contain greater than 1% asbestos are further described in Table 2 below.

**Table 2: Asbestos Containing Material Summary <sup>A</sup>**

Material Description	Building Material Location	Friable <sup>B</sup> / Non-friable	Material Condition	Potential For Future Disturbance <sup>C</sup>	Approx. Quantity
Transite Drain Pipes	Edges of Bridge Deck Sections	Non-friable	Good	Low	14 Linear Feet

<sup>A</sup> ACM as defined by EPA and DHEC. **See Table 1 for any materials found to contain <1% asbestos.**

<sup>B</sup> Friable: Describes a material which, when dry, can be crumbled, pulverized, or reduced to powder with hand pressure.

<sup>C</sup> Potential disturbance is based upon utilization of structure in current condition. Renovation or demolition activities will increase the potential disturbance of each material.

## ASBESTOS CONCLUSIONS / RECOMMENDATIONS

An asbestos inspection was performed for a structure, the S-21-107 (Alligator Road) Bridge over I-95 in Florence County, South Carolina. **Based on the results of this survey, one asbestos containing material (the transite drain pipes) was found to be present on the bridge structure.** The results of this asbestos survey are limited to the sampled and assumed materials, which are considered to be representative of the homogeneous areas from which the samples were collected. **In the event that any suspect asbestos containing materials that were not addressed in this survey are encountered, the materials should be presumed to contain asbestos until laboratory analysis can be conducted.** If the structure is to be demolished or

renovated, a copy of this report and a notification of demolition or renovation forms must be submitted to the South Carolina Department of Health and Environmental Control at least ten working days prior to these activities taking place. Copies of the DHEC regulatory requirements for renovations and demolition are included in Appendix E of this report.

## LEAD-BASED PAINT SURVEY

ARM personnel conducted a lead-based paint survey of accessible painted bridge materials on June 12, 2013. The LBP inspection was conducted using a Niton XLP-300A X-Ray Fluorescence (XRF) Analyzer (Serial #17307) to measure the lead content of surface coatings on representative bridge building components. A homogenous bridge building component is a building material that is uniform in color, texture, and appears identical in every respect. EPA guidelines define lead-based paint as any paint with equal to or greater than 1.0 milligram of lead per square centimeter of painted surface ( $\text{mg}/\text{cm}^2$ ) when measured by X-ray Fluorescence. In this survey, the limit for lead in paint was decreased to 0.7 milligrams of lead per square centimeter of painted surface when measured by the XRF since the structure may be slated for renovation or demolition. All waste debris coated with lead-based paint equal to or greater than  $0.7\text{mg}/\text{cm}^2$  must be disposed of in an approved Class Two (C&D) or Class Three (MSWLF) landfill or approved metal recycler.

The bridge structure has steel tie rods, plates, bridge shoes and associated bolts that are coated with paint. The XRF results of the bridge materials found to **contain lead-based paint greater than or equal to  $0.7\text{ mg}/\text{cm}^2$**  are summarized in Table 3 below.

**Table 3: Positive Lead-Based Paint Bridge Building Material Summary**

Sample Number	Material Description	Material Location	Color	Material Condition	LEAD Content $\text{mg}/\text{cm}^2$
Reading 4	Steel Anchor Plate	Side of Bridge Decks	Silver	Poor	<b>10.10</b>
Reading 5	Steel Anchor Plate	Side of Bridge Decks	Silver	Poor	<b>10.00</b>
Reading 10	Bridge Shoe	Between Concrete Beam and Concrete Pier Cap	Brown	Poor	<b>1.30</b>

**Lead Content:** EPA guidelines define lead-based paint as any paint with equal to or greater than 1.0 milligram of lead per square centimeter of painted surface ( $\text{mg}/\text{cm}^2$ ) when measured by X-ray Fluorescence. DHEC guidelines define lead-based paint as any paint with equal to or greater than  $0.7\text{ mg}/\text{cm}^2$  when measured by X-ray Fluorescence. The OSHA Lead in Construction Standard, 29 CFR 1926.62 is applied if any lead is present in the sample.

The results of these analyses indicate that the painted steel plates (and associated tie rods and bolts) and the bridge shoes (and associated bolts) are coated with lead-based paint. The XRF data results are presented in Appendix D. Photographs of the site are located in Appendix F.

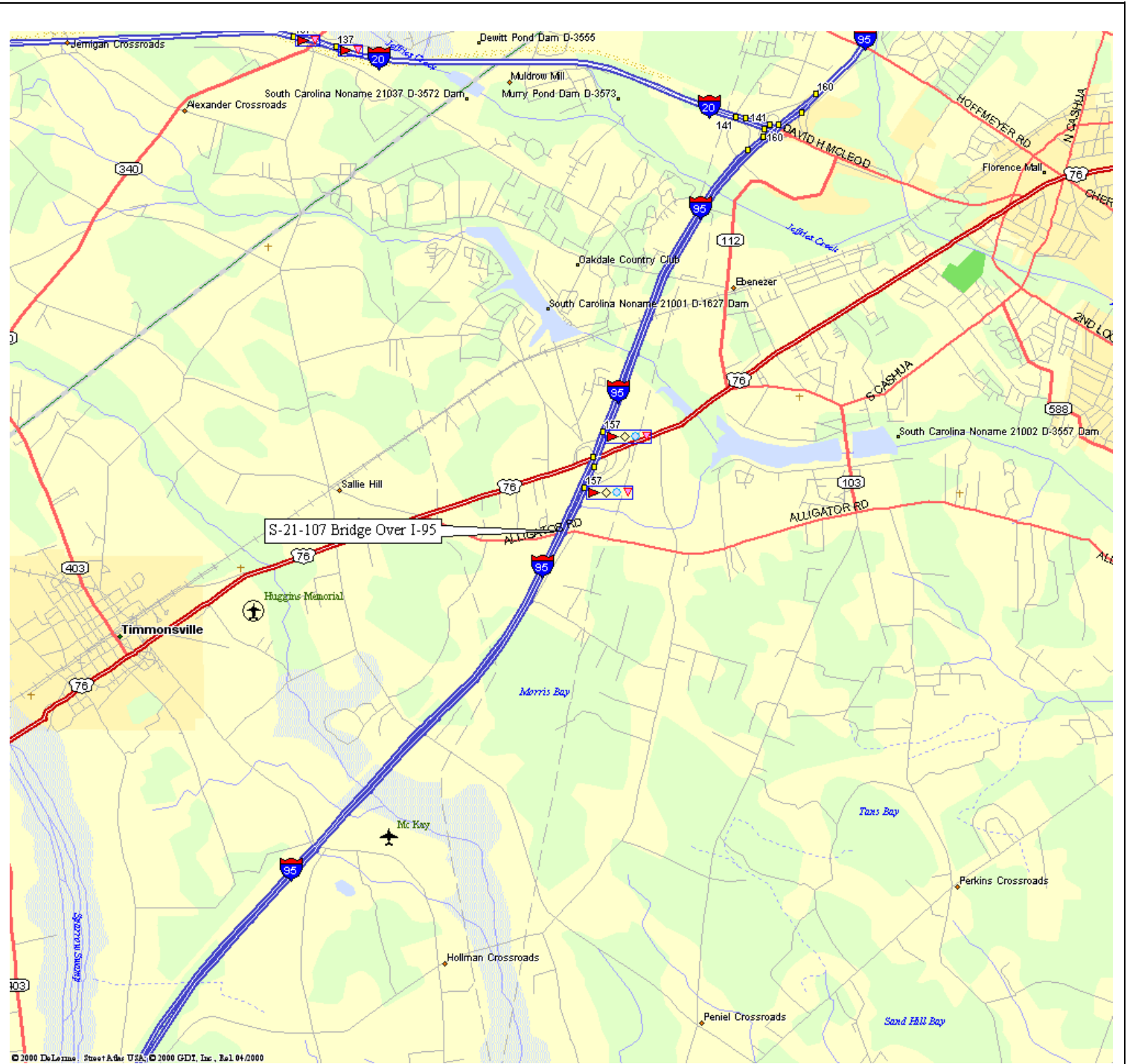
## **LEAD-BASED PAINT CONCLUSIONS / RECOMENDATIONS**

A lead-based paint survey was performed for the S-21-107 (Alligator Road) Bridge over I-95 in Florence County, South Carolina. **The results of the XRF analyses indicate that lead based paint is present on the steel tie rods, plates, bridge shoes and associated metal bolts.** If these bridge components are disturbed during renovation or demolition, contractors and workers should be informed as to the presence of lead-based paint and appropriate work practices and personal protective equipment should be used to prevent exposure to lead dust/fumes or spreading lead contamination from the work site. The building components containing lead based paint should be disposed of in accordance with federal and state regulations. All waste debris coated with lead-based paint equal to or greater than  $0.7\text{mg}/\text{cm}^2$  must be disposed of in an approved Class Two (C&D) or Class Three (MSWLF) landfill or approved metal recycler. The OSHA lead standard for construction work (29CFR 1926.62) would apply to all demolition or renovation activities that disturb any of the materials containing lead.



# **Appendix A**

Figures



**Project**

Asbestos & Lead Based Paint Survey  
 Alligator Rd. (S-21-107) Bridge Over I-95  
 Florence County, South Carolina  
 ARM Project Number 16-311-13

**Figure 1**

Site Location Map

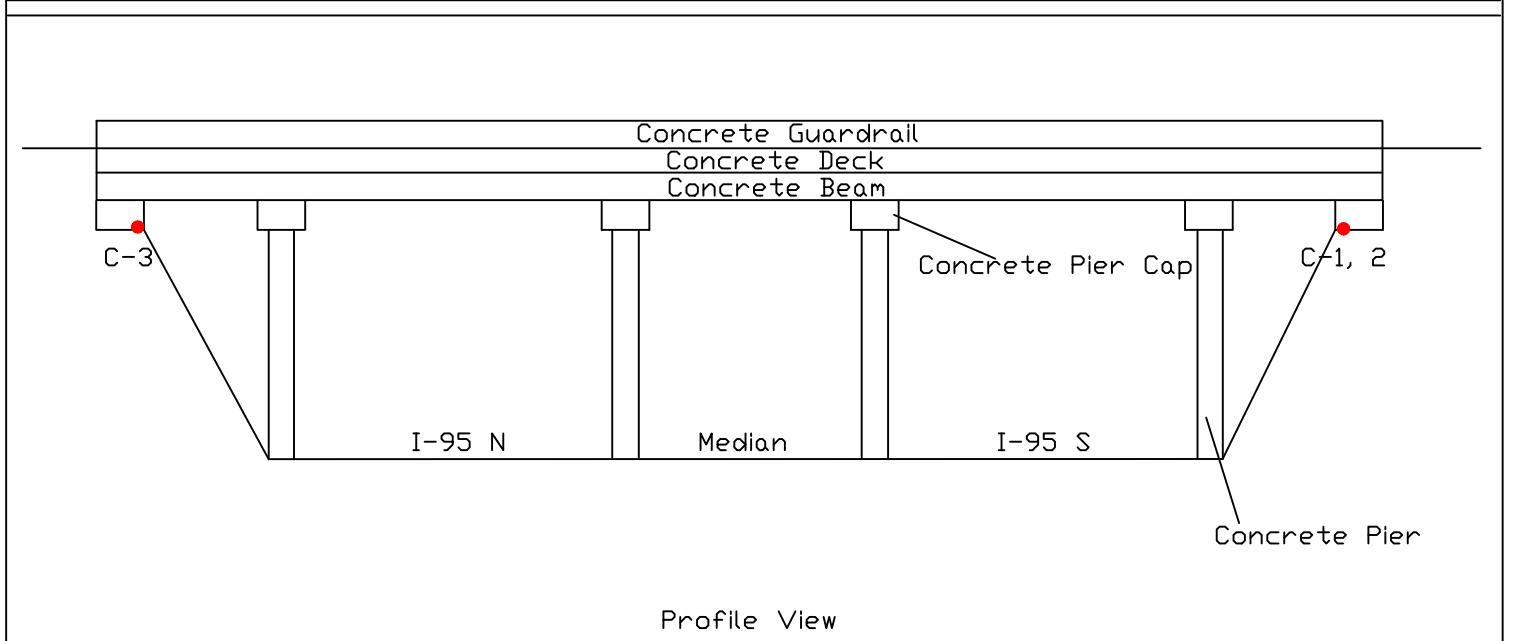
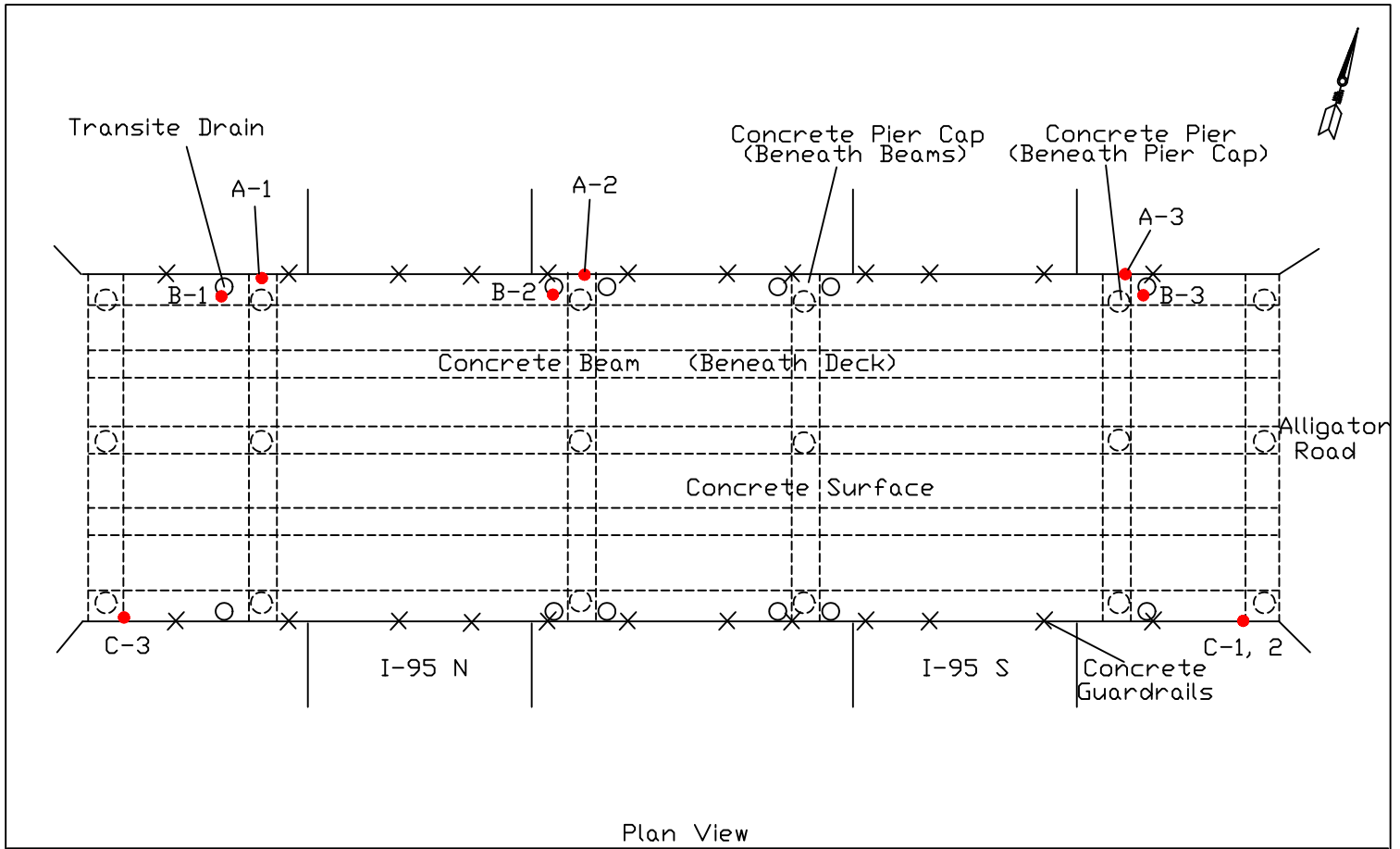
**Scale**


No Scale

**Date**

June 2013

**ARM** ENVIRONMENTAL  
 SERVICES, INC.



<p>PROJECT: Asbestos &amp; Lead-Based Paint Inspection Alligator Rd (S-21-107) Bridge Over I-95 Florence County, South Carolina ARM Project #16-311-13</p>	<p>DESCRIPTION:  Site Plan Showing Sample Collection Points</p>	<p><b>FIGURE 2</b></p>
	<p>LEGEND:  A-2 ● = Asbestos Sample Collection Point</p>	<p>DATE: June 2013</p>
	<p>DRAWN BY: RC</p>	<p>APPROVED BY: SH</p>

## **Appendix B**

Inspectors Licenses and Certifications

**SCDHEC ISSUED**  
**Asbestos ID Card**

Cyril O Havird Jr

Expires



CONSULTBI

BI-00258 09/12/13

# Certificate of Achievement

*Sid Havird*

*Arm Environmental Services*

*Has successfully completed the  
Thermo Fisher Scientific NITON Analyzers Manufacturer's Training Course  
and is now certified in radiation safety and monitoring, device operation,  
and machine maintenance of the NITON XRF Analyzer.  
Certificate issued by Thermo Fisher Scientific NITON Analyzers  
(CIH's - The ABIH Awards 1 CM point, approval # 07-1596)*

**ThermoFisher**  
S C I E N T I F I C



*Robbie Graydon*

Training Coordinator

*Kenneth P. Sperts*

Director of Training

00b3000000DUEN0

Certificate Number

2007 Nov 8 / Columbia, SC

Date & Site of Course

## Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

### MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLp 300

Source:  $^{109}\text{Cd}$ 

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.

XLp 300A, XLp 301A, XLp 302A and XLp 303A.

XLi 700A, XLi 701A, XLi 702A and XLi 703A.

XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

## FIELD OPERATION GUIDANCE

### OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

### XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm <sup>2</sup> (inclusive)
---

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm<sup>2</sup> in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm<sup>2</sup> film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

### SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

### INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm <sup>2</sup> )
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0



## BACKGROUND INFORMATION

### EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

### OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

### SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

### EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

### TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
Substrate	All Data			Median for laboratory-measured lead levels (mg/cm <sup>2</sup> )		
	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Pb < 0.25	0.25 ≤ Pb < 1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

### CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

### DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

## **Appendix C**

### Laboratory Results

**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273  
 Phone/Fax: (704) 525-2205 / (704) 525-2382  
<http://www.emsl.com> [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 411302604  
 CustomerID: ARM62  
 CustomerPO: 16-311-13  
 ProjectID:

Attn: **Sid Havird**  
**ARM Environmental Services, Inc.**  
**1210 1st Street South Extension**  
  
**Columbia, SC 29209**  
  
 Project: **S-21-107 Bridge**

Phone: (803) 783-3314  
 Fax: (803) 783-2587  
 Received: 06/13/13 9:45 AM  
 Analysis Date: 6/13/2013  
 Collected:

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
A-1 411302604-0001	Expansion Joint Compound	Black Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
A-2 411302604-0002	Expansion Joint Compound	Black Fibrous Heterogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
B-1 411302604-0003	Transite Drains	Gray Fibrous Homogeneous		60% Non-fibrous (other)	40% Chrysotile
B-2 411302604-0004	Transite Drains				Stop Positive (Not Analyzed)
B-3 411302604-0005	Transite Drains				Stop Positive (Not Analyzed)
C-1 411302604-0006	Abutement Buffer	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
C-2 411302604-0007	Abutement Buffer	Black Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected

Analyst(s)  
 Eric Loomis (2)  
 Kyle Collins (3)

Lee Plumley, Laboratory Manager  
 or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 06/13/2013 13:27:38



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Bulk Building Material Chain of Custody

**EMSL Order Number (Lab Use Only):**

41302604

376 Crompton Street

Charlotte, NC 28273

PHONE: (704) 525-2205

FAX: (704) 525 2382

<b>Company :</b> ARM Environmental		<b>EMSL-Bill to:</b> <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
<b>Street:</b> 1210 First Street South Ext.		<i>Third Party Billing requires written authorization from third party</i>	
<b>City:</b> Columbia	<b>State/Province:</b> SC	<b>Zip/Postal Code:</b> 29209	<b>Country:</b> United States
<b>Report To (Name):</b> Sid Havird		<b>Telephone #:</b> 803-783-3314	
<b>Email Address:</b> Shavird@armenv.com		<b>Fax #:</b> 803-783-2587	<b>Purchase Order:</b> 16-311-13
<b>Project Name/Number:</b> S-21-107 Bridge		<b>Please Provide Results:</b> <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Mail	
<b>U.S. State Samples Taken:</b> SC		<b>CT Samples:</b> <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

**Turnaround Time (TAT) Options\* – Please Check**

3 Hour   
  6 Hour   
  24 Hour   
  48 Hour   
  72 Hour   
  96 Hour   
  1 Week   
  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input checked="" type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	<b>Other</b>
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

**Check For Positive Stop – Clearly Identify Homogenous Group**      **Date Sampled:** 6-12-13

**Samplers Name:** Sid Havird      **Samplers Signature:**

Sample #	HA #	Sample Location	Material Description
A-1, A-2	HA-1	Bridge Decks	Expansion Joint Compound (PLM)
A-3	HA-1	Bridge Decks	Expansion Joint Compound (TEM)
B-1, B-2, B-3	HA-2	Bridge Deck Drain Spouts	Transite Drains (PLM)
C-1, C-2	HA-3	Bridge Abutements	Abutement Buffer (PLM)
C-3	HA-3	Bridge Abutements	Abutement Buffer (TEM)

<b>Client Sample # (s):</b> A-1, A-2 - C-3	<b>Total # of Samples:</b> 9
<b>Relinquished (Client):</b> Sid Havird	<b>Date:</b> 6/12/13 <b>Time:</b> 1700
<b>Received (Lab):</b>	<b>Date:</b> <b>Time:</b>
<b>Comments/Special Instructions:</b> Run PLM analyses first prior to TEM. If PLM samples For A-1, A-2, C-1 and C-2 are less than 1% then run samples A-3, C-3 for TEM analyses. Bill To: ARM Environmental, 1210 First Street South Ext., Columbia, SC, 29209, United States Attention: Sid Havird Phone: 803-783-3314 Email: Shavird@armenv.com Purchase Order:	



**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273  
Phone/Fax: (704) 525-2205 / (704) 525-2382  
<http://www.emsl.com> [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 411302604  
CustomerID: ARM62  
CustomerPO: 16-311-13  
ProjectID:

Attn: **Sid Havird**  
**ARM Environmental Services, Inc.**  
**1210 1st Street South Extension**  
  
**Columbia, SC 29209**

Phone: (803) 783-3314  
Fax: (803) 783-2587  
Received: 06/13/13 3:00 PM  
Analysis Date: 6/14/2013  
Collected:

Project: **S-21-107 Bridge**

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM  
via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
A-3 411302604-0008	Expansion Joint Compound	Black Non-Fibrous Homogeneous	100	None	No Asbestos Detected
C-3 411302604-0009	Abutement Buffer	Black Fibrous Heterogeneous	100	<0.25 Fibrous (other)	No Asbestos Detected

Analyst(s)  

---

*Christopher Estes (2)*

Lee Plumley, Laboratory Manager  
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.  
Samples analyzed by EMSL Analytical, Inc. Charlotte, NC

Initial report from 06/14/2013 12:24:41



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Bulk Building Material Chain of Custody

**EMSL Order Number** (Lab Use Only):

41302604

376 Crompton Street

Charlotte, NC 28273

PHONE: (704) 525-2205

FAX: (704) 525 2382

Company : ARM Environmental		EMSL-Bill to: <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 1210 First Street South Ext.		<i>Third Party Billing requires written authorization from third party</i>	
City: Columbia	State/Province: SC	Zip/Postal Code: 29209	Country: United States
Report To (Name): Sid Havird		Telephone #: 803-783-3314	
Email Address: Shavird@armenv.com		Fax #: 803-783-2587	Purchase Order: 16-311-13
Project Name/Number: S-21-107 Bridge		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: SC		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

**Turnaround Time (TAT) Options\* – Please Check**

3 Hour   
  6 Hour   
  24 Hour   
  48 Hour   
  72 Hour   
  96 Hour   
  1 Week   
  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input checked="" type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	<b>Other</b>
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

Check For Positive Stop – Clearly Identify Homogenous Group      Date Sampled: 6-12-13

Samplers Name: Sid Havird      Samplers Signature: \_\_\_\_\_

Sample #	HA #	Sample Location	Material Description
A-1, A-2	HA-1	Bridge Decks	Expansion Joint Compound (PLM)
A-3	HA-1	Bridge Decks	Expansion Joint Compound (TEM)
B-1, B-2, B-3	HA-2	Bridge Deck Drain Spouts	Transite Drains (PLM)
C-1, C-2	HA-3	Bridge Abutements	Abutement Buffer (PLM)
C-3	HA-3	Bridge Abutements	Abutement Buffer (TEM)

Client Sample # (s): A-1, A-2, C-1, C-2, C-3	Total # of Samples: 9
Relinquished (Client): Sid Havird	Date: 6/12/13      Time: 1700
Received (Lab):	Date:      Time:
<b>Comments/Special Instructions:</b> Run PLM analyses first prior to TEM. If PLM samples For A-1, A-2, C-1 and C-2 are less than 1% then run samples A-3, C-3 for TEM analyses. Bill To: ARM Environmental, 1210 First Street South Ext., Columbia, SC, 29209, United States Attention: Sid Havird Phone: 803-783-3314 Email: Shavird@armenv.com Purchase Order:	



## **Appendix D**

XRF Field Data

Index	Time	Component	Substrate	Side	Condition	Color	Site	Results	PbC
1	2013-06-12 13:26			CALIBRATE				Positive	1.20 ± 0.40
2	2013-06-12 13:27			CALIBRATE				Positive	1.00 ± 0.30
3	2013-06-12 13:27			CALIBRATE				Positive	1.10 ± 0.40
4	2013-06-12 13:33	ANCHOR PLATE	METAL	A	POOR	SILVER	S-21-107	Positive	10.10 ± 8.00
5	2013-06-12 13:33	ANCHOR PLATE	METAL	A	POOR	SILVER	S-21-107	Positive	10.00 ± 7.80
6	2013-06-12 13:35	SHOE	METAL	A	POOR	BROWN	S-21-107	Negative	0.22 ± 0.23
7	2013-06-12 13:37	SHOE	METAL	A	POOR	BROWN	S-21-107	Null	0.80 ± 0.20
8	2013-06-12 13:37	SHOE	METAL	A	POOR	BROWN	S-21-107	Negative	0.30 ± 0.34
9	2013-06-12 13:37	SHOE	METAL	A	POOR	BROWN	S-21-107	Negative	0.00 ± 0.02
10	2013-06-12 13:38	SHOE	METAL	A	POOR	BROWN	S-21-107	Positive	1.30 ± 0.60
11	2013-06-12 14:00			CALIBRATE				Positive	1.00 ± 0.30
12	2013-06-12 14:00			CALIBRATE				Positive	1.10 ± 0.40
13	2013-06-12 14:00			CALIBRATE				Positive	1.20 ± 0.40

## **Appendix E**

DHEC Asbestos Renovation/  
Demolition Requirements

**Q. Am I required to submit notification of all renovation projects?**

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any renovation activity of a regulated facility/structure only if the scope of work contains asbestos. (see chart below)

Project Type	Minimum Required Notification Period
DEMOLITION	10 Working Days
NESHAP Removal (> or = 160 SF, 260 LF, or 35 CF)	10 Working Days
SMALL Removal (> 25 SF but < 160 SF, 260 LF, or 35 CF)	4 Working Days
MINOR Removal (< or = 25 SF)	2 Working Days
Non-Friable NESHAP-Sized Removal (non-friable > or = 160 SF, 260 LF, or 35 CF)	4 Working Days

**Q. How do I notify DHEC's Asbestos Section?**

A. Get notification forms by calling or writing to:

S.C. DHEC Asbestos Section  
 2600 Bull Street  
 Columbia, SC 29201  
 (803) 898-4289

DHEC's Asbestos Section will mail you the necessary forms and can answer any questions you may have.

The forms and additional information are also available to view and download from the DHEC Asbestos Section's Web site at:

[www.scdhec.gov/asbestos](http://www.scdhec.gov/asbestos)

*This brochure is a brief overview of South Carolina's asbestos regulations pertaining to demolition and renovation activities. Before owners or operators become involved in demolition and renovation activities, they are encouraged to contact the DHEC-Asbestos Section to make sure they understand the applicable regulations, accreditation and permitting requirements.*



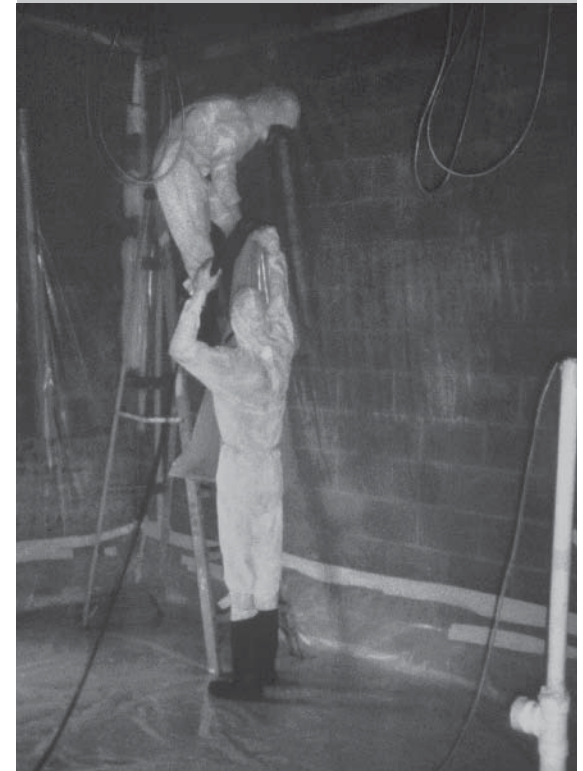
[www.scdhec.gov](http://www.scdhec.gov)

*We promote and protect the health of the public and the environment.*

ML-025415 7/09

# Renovation, Demolition & Asbestos

## What Building Owners & Contractors Should Know



S.C. Department of Health and Environmental Control

**Asbestos Section**  
**803-898-4289**

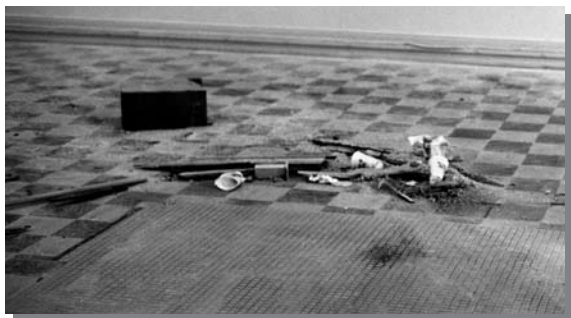
## What is Asbestos?

Asbestos is the common name for a group of naturally occurring minerals made up of long, thin fibers. Asbestos is very strong and resistant to stress or forces that might tear it apart. It's also heat resistant. Asbestos fibers can be toxic to humans if inhaled. Despite this, it can still be found in a number of building products, including:

- Heating system insulation
- Spray-applied insulation
- Vinyl floor tiles
- Vinyl sheet flooring
- Ceiling tiles
- Roofing paper and shingles
- Cement siding shingles
- Plaster and joint compound

*\*\*It is still possible to purchase new products that contain asbestos. \*\**

When materials that contain asbestos are disturbed during renovations or demolitions, people nearby may get the dangerous fibers in their lungs. So before beginning a building project that could disturb asbestos-containing materials, property owners need to know how to spot asbestos and ensure the safety of those working nearby.



## Frequently Asked Questions

### Q. What is demolition?

A. Demolition is the wrecking or removal of a regulated facility/structure's load-bearing structure(s). It also refers to related handling operations, the burning of a regulated facility, or moving of a regulated structure.

### Q. What is renovation?

A. It's altering all or part of a regulated facility/structure in any way (except demolition). Stripping or removing regulated asbestos-containing materials (RACM) from a regulated facility/structure is considered renovation.



### Q. What is a regulated facility?

- A.
- Any institutional, commercial, public, industrial, or residential structure, installation, or building (including condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units);
  - any bridge;
  - any ship;
  - any active or inactive waste disposal site; and

- any structure, installation or building that was previously subject to this requirement, regardless of its current use or function.

*Note:* Under this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building.

### Q. Do asbestos regulations require me to have my property inspected for asbestos?

A. S.C. DHEC Regulation 61-86.1 states that prior to any demolition or renovation at a regulated facility, a thorough inspection must be done to detect any asbestos-containing materials. The inspection must be carried out by a person licensed by DHEC's Asbestos Section as an asbestos building inspector.

If asbestos is found in an area that will be disturbed during renovation or repair work, it must be removed properly and disposed of at an approved landfill. DHEC's Asbestos Section keeps a list of South Carolina landfills that accept asbestos. These actions also must occur prior to any building demolition project. In most cases, asbestos removal and disposal activities must be performed by a licensed asbestos abatement contractor.

### Q. Am I required to submit notification of all *demolition* projects?

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any demolition of a regulated facility/structure regardless of the amount of asbestos present (and even when no asbestos is present).

# **Appendix F**

Photographs



Photograph 1 – Top view of the Alligator Road (S-21-107) Bridge over I-95.



Photograph 2 – Side view of the Alligator Road (S-21-107) Bridge over I-95.





Photograph 3 – Typical view of asbestos containing transite drain pipe located in the bridge deck.



Photograph 4 – Typical view of steel tie rods and plates located on the bridge structure. These components are coated with lead based paint.



Photograph 5 – Typical view of metal bridge shoe and associated bolt. These components are coated with lead based paint.

Alligator Road Bridge  
Over Alligator Swamp  
Florence County, South Carolina

Asbestos and Lead-Based Paint  
Survey Report

F&H Job Number 1114201

ARM Project #16-311-13

June 27, 2013

Prepared For:

Florence & Hutcheson  
Columbia, South Carolina

Yes, Asbestos was found

No, Asbestos was not found

Yes, Lead-Based Paint was found

No, Lead-Based Paint was not found



Alligator Road Bridge  
Over Alligator Swamp  
Florence County, South Carolina

Asbestos and Lead-Based Paint  
Survey Report

F&H Job Number 1114201

ARM Project #16-311-13

June 27, 2013

Prepared For:

Florence & Hutcheson  
Columbia, South Carolina

Report Compiled By:



Richard Ciccolella  
Project Manager

Report Reviewed By:



Sid Havird  
ASBESTOS CONSULTANT/  
BUILDING INSPECTOR  
SCDHEC LICENSE #00258



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Photographs .....	Appendix F

## **ASBESTOS AND LEAD-BASED PAINT SURVEY**

On June 12, 2013 ARM Environmental Services, Inc. performed an asbestos and lead-based paint survey at a bridge located in Florence County, South Carolina. The Alligator Road Bridge over Alligator Swamp as shown in Appendix A, Figure 1. The site consists of one highway bridge. The asbestos survey has been conducted in accordance with the Asbestos Hazard Emergency Response Act (AHERA) guidelines, as required by the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) prior to renovation or demolition of public or commercial structures. The lead-based paint survey was performed to identify lead-based paint (LBP) on the bridge.

### **BRIDGE MATERIALS**

No construction records were available to determine the building materials used in construction of the structure. The bridge was constructed in 2001. All accessible structural components, including columns, piers, bridge deck, end bents, and buffer materials were examined.

Photographs of the site are shown in Appendix F. The bridge deck of the structure consists of one pre-cast concrete deck section. The bridge deck is resting on concrete pier caps. The concrete pier caps are supported by concrete piers. Concrete guardrails are located on the bridge structure. Galvanized metal guardrails also extend alongside the roadway at either end of the bridge. The bridge structure is estimated to be 75 feet long and 35 feet wide. A non-suspect rubber buffer material is located between the pier caps and the bridge deck.

### **ASBESTOS SURVEY**

No materials suspected to contain asbestos were found to be present on the bridge structure. The bridge location is shown in Appendix A, Figure 1 and a bridge drawing is included as Figure 2.

### **ASBESTOS CONCLUSIONS / RECOMMENDATIONS**

An asbestos inspection was performed for a structure, the Alligator Road Bridge over Alligator Swamp in Florence County, South Carolina. **Based on the results of this survey, no asbestos containing materials were found to be present on the bridge structure. In the event that any suspect asbestos containing materials that were not addressed in this survey are encountered, the materials should be presumed to contain asbestos until laboratory analysis can be conducted.** If the structure is to be demolished or renovated, a copy of this report and a notification of demolition or renovation forms must be submitted to the South Carolina Department of Health and Environmental Control at least ten working days prior to these activities taking place.

Copies of the DHEC regulatory requirements for renovations and demolition are included in Appendix E of this report.

### **LEAD-BASED PAINT SURVEY**

ARM personnel conducted a lead-based paint survey of accessible painted bridge materials on June 12, 2013. ARM personnel transported a Niton XLp-300A X-Ray Fluorescence (XRF) Analyzer (Serial #17307) to the site in order to measure the lead content of surface coatings on representative bridge building components. A homogenous bridge building component is a building material that is uniform in color, texture, and appears identical in every respect. EPA guidelines define lead-based paint as any paint with equal to or greater than 1.0 milligram of lead per square centimeter of painted surface ( $\text{mg}/\text{cm}^2$ ) when measured by X-ray Fluorescence. In this survey, the limit for lead in paint was decreased to 0.7 milligrams of lead per square centimeter of painted surface when measured by the XRF since the structure may be slated for renovation or demolition. All waste debris coated with lead-based paint equal to or greater than  $0.7\text{mg}/\text{cm}^2$  must be disposed of in an approved Class Two (C&D) or Class Three (MSWLF) landfill or approved metal recycler.

No painted materials were found to be present on the bridge structure, and therefore, no XRF data was collected for this bridge. Photographs of the site are located in Appendix F.

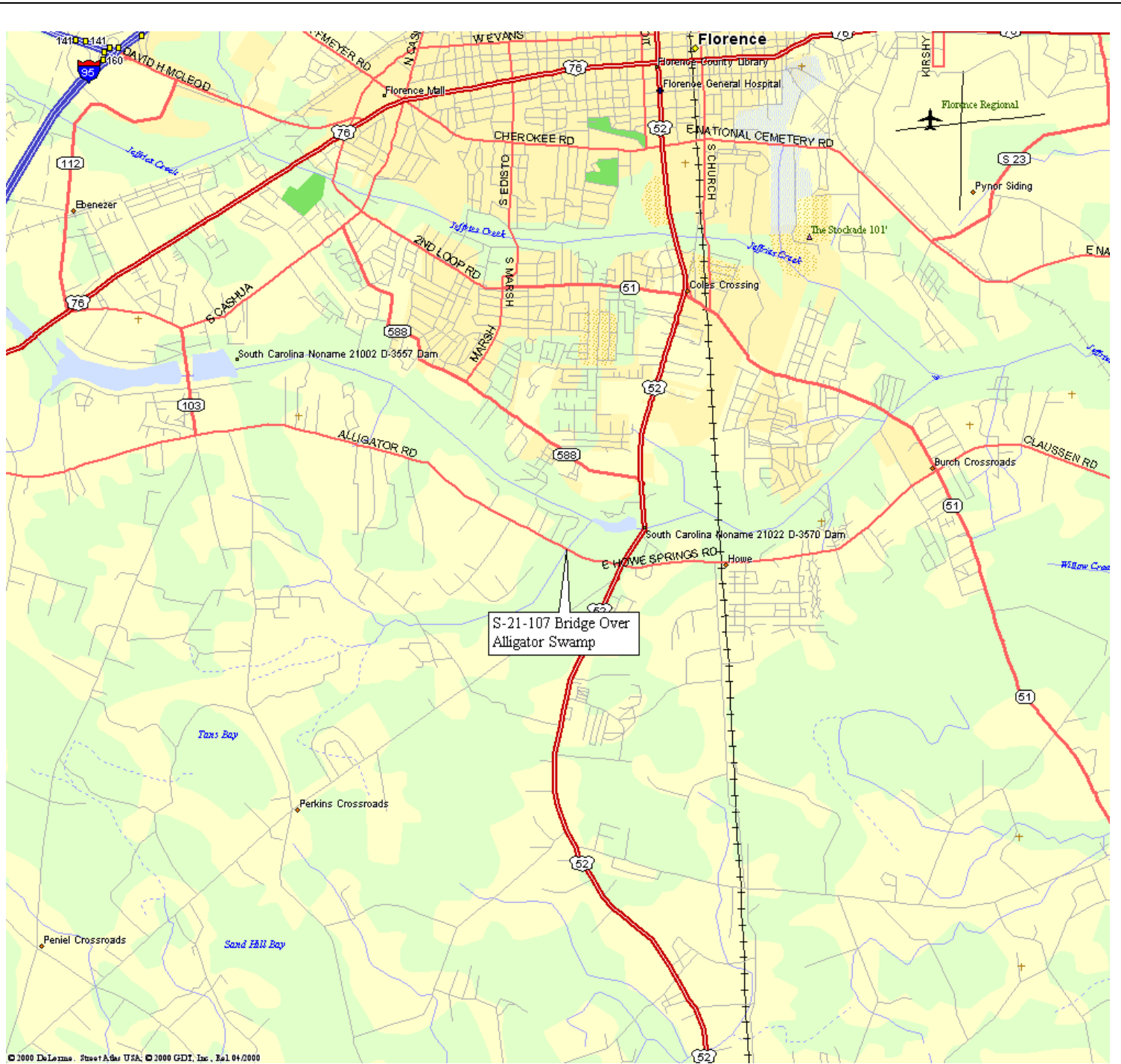
### **LEAD-BASED PAINT CONCLUSIONS / RECOMENDATIONS**

A lead-based paint survey was performed for the Alligator Road Bridge over Alligator Swamp in Florence County, South Carolina. No painted materials were found to be present on the bridge structure, and therefore, no XRF data was collected for this bridge. No lead based paint is present on the bridge structure.



# **Appendix A**

Figures



**Project**

Asbestos & Lead Based Paint Survey  
 Alligator Rd. (S-21-107) Bridge  
 Over Alligator Swamp  
 Florence County, South Carolina  
 ARM Project Number 16-311-13

**Figure 1**

Site Location Map

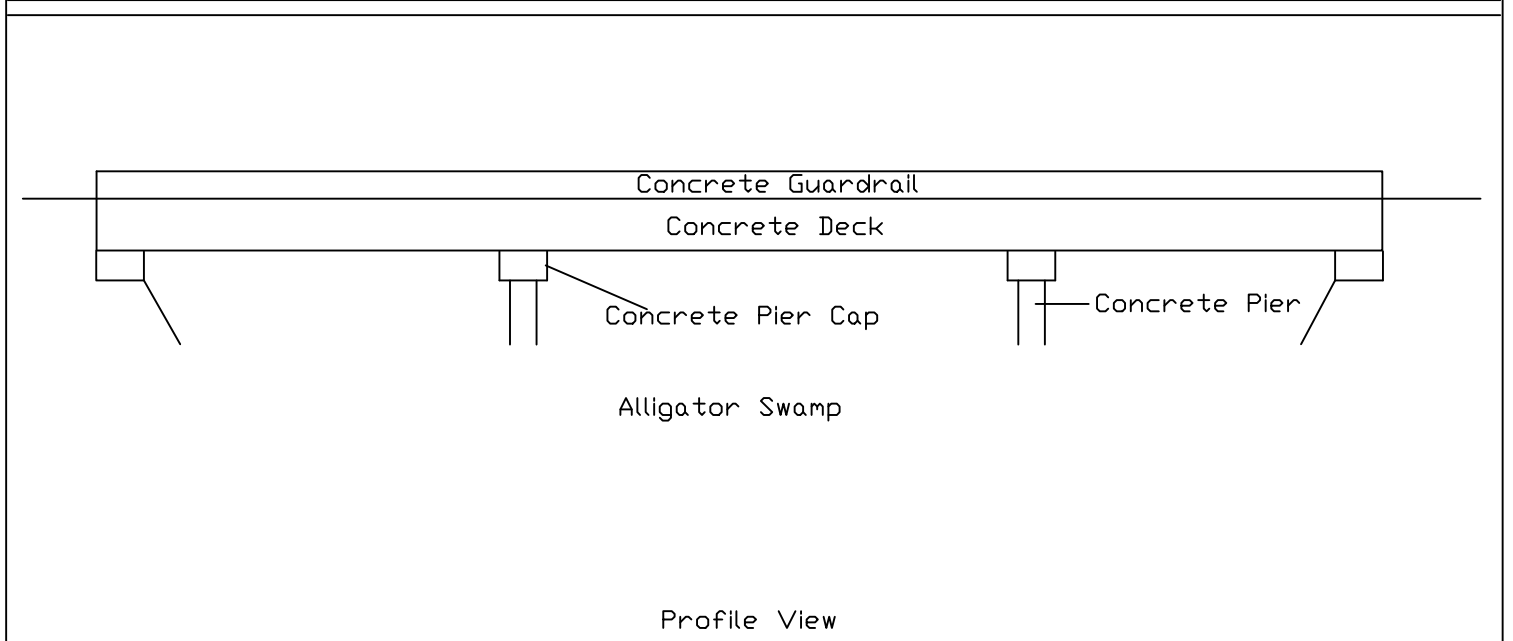
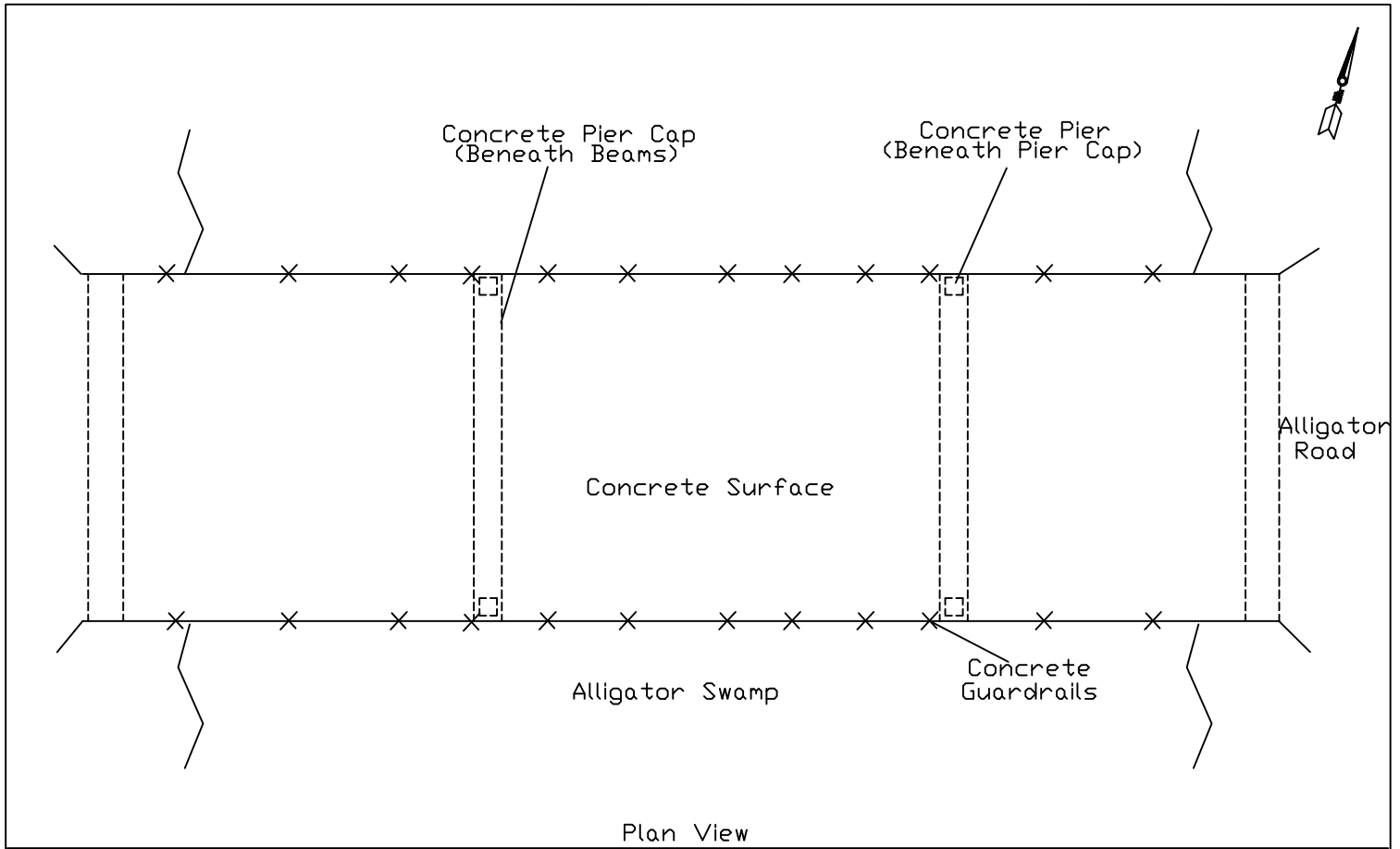
**Scale**


No Scale

**Date**

June 2013





PROJECT: Asbestos & Lead-Based Paint Inspection Alligator Rd (S-21-107) Bridge Over Alligator Swamp Florence County, South Carolina ARM Project #16-311-13	DESCRIPTION:  Site Plan Showing Sample Collection Points	<b>FIGURE 2</b>
		DATE: June 2013
	LEGEND:  No Asbestos Samples Collected	DRAWN BY: RC
		APPROVED BY: SH

## **Appendix B**

Inspectors Licenses and Certifications

**SCDHEC ISSUED**  
**Asbestos ID Card**

Cyril O Havird Jr

Expires



CONSULTBI

BI-00258 09/12/13

# Certificate of Achievement

Sid Havird

Arm Environmental Services

Has successfully completed the  
Thermo Fisher Scientific NITON Analyzers Manufacturer's Training Course  
and is now certified in radiation safety and monitoring, device operation,  
and machine maintenance of the NITON XRF Analyzer.  
Certificate issued by Thermo Fisher Scientific NITON Analyzers  
(CIH's - The ABIH Awards 1 CM point, approval # 07-1596)

ThermoFisher  
S C I E N T I F I C



*Robbie Graydon*

Training Coordinator

*Kenneth P. Sperts*

Director of Training

00b3000000DUENO

Certificate Number

2007 Nov 8 / Columbia, SC

Date & Site of Course

## Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

### MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLp 300

Source:  $^{109}\text{Cd}$ 

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.

XLp 300A, XLp 301A, XLp 302A and XLp 303A.

XLi 700A, XLi 701A, XLi 702A and XLi 703A.

XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

## FIELD OPERATION GUIDANCE

### OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

### XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm<sup>2</sup> (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm<sup>2</sup> in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm<sup>2</sup> film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

### SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

### INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm <sup>2</sup> )
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0



## BACKGROUND INFORMATION

### EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

### OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

### SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

### EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

#### TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
Substrate	All Data			Median for laboratory-measured lead levels (mg/cm <sup>2</sup> )		
	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Pb < 0.25	0.25 ≤ Pb < 1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

#### CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

#### DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

## **Appendix C**

### Laboratory Results

No suspect materials were encountered, and therefore, no samples for asbestos analysis were collected from the Alligator Road bridge over Alligator Swamp.

## **Appendix D**

XRF Field Data

No painted materials were encountered, and therefore, no XRF data was collected for the Alligator Road Bridge over Alligator Swamp.

## **Appendix E**

DHEC Asbestos Renovation/  
Demolition Requirements



**Q. Am I required to submit notification of all renovation projects?**

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any renovation activity of a regulated facility/structure only if the scope of work contains asbestos. (see chart below)

Project Type	Minimum Required Notification Period
DEMOLITION	10 Working Days
NESHAP Removal (> or = 160 SF, 260 LF, or 35 CF)	10 Working Days
SMALL Removal (> 25 SF but < 160 SF, 260 LF, or 35 CF)	4 Working Days
MINOR Removal (< or = 25 SF)	2 Working Days
Non-Friable NESHAP-Sized Removal (non-friable > or = 160 SF, 260 LF, or 35 CF)	4 Working Days

**Q. How do I notify DHEC's Asbestos Section?**

A. Get notification forms by calling or writing to:

S.C. DHEC Asbestos Section  
 2600 Bull Street  
 Columbia, SC 29201  
 (803) 898-4289

DHEC's Asbestos Section will mail you the necessary forms and can answer any questions you may have.

The forms and additional information are also available to view and download from the DHEC Asbestos Section's Web site at:

[www.scdhec.gov/asbestos](http://www.scdhec.gov/asbestos)

*This brochure is a brief overview of South Carolina's asbestos regulations pertaining to demolition and renovation activities. Before owners or operators become involved in demolition and renovation activities, they are encouraged to contact the DHEC-Asbestos Section to make sure they understand the applicable regulations, accreditation and permitting requirements.*



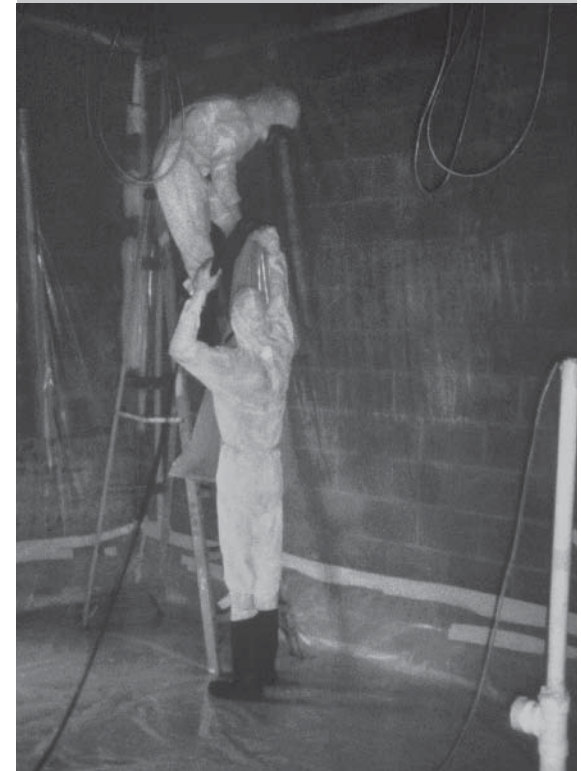
[www.scdhec.gov](http://www.scdhec.gov)

*We promote and protect the health of the public and the environment.*

ML-025415 7/09

# Renovation, Demolition & Asbestos

## What Building Owners & Contractors Should Know



S.C. Department of Health and Environmental Control

**Asbestos Section**  
**803-898-4289**

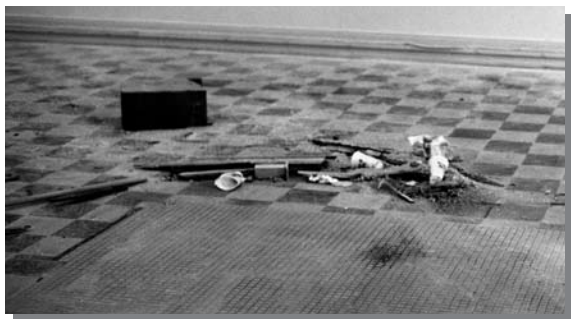
## What is Asbestos?

Asbestos is the common name for a group of naturally occurring minerals made up of long, thin fibers. Asbestos is very strong and resistant to stress or forces that might tear it apart. It's also heat resistant. Asbestos fibers can be toxic to humans if inhaled. Despite this, it can still be found in a number of building products, including:

- Heating system insulation
- Spray-applied insulation
- Vinyl floor tiles
- Vinyl sheet flooring
- Ceiling tiles
- Roofing paper and shingles
- Cement siding shingles
- Plaster and joint compound

*\*\*It is still possible to purchase new products that contain asbestos. \*\**

When materials that contain asbestos are disturbed during renovations or demolitions, people nearby may get the dangerous fibers in their lungs. So before beginning a building project that could disturb asbestos-containing materials, property owners need to know how to spot asbestos and ensure the safety of those working nearby.



## Frequently Asked Questions

### Q. What is demolition?

A. Demolition is the wrecking or removal of a regulated facility/structure's load-bearing structure(s). It also refers to related handling operations, the burning of a regulated facility, or moving of a regulated structure.

### Q. What is renovation?

A. It's altering all or part of a regulated facility/structure in any way (except demolition). Stripping or removing regulated asbestos-containing materials (RACM) from a regulated facility/structure is considered renovation.



### Q. What is a regulated facility?

- A.
- Any institutional, commercial, public, industrial, or residential structure, installation, or building (including condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units);
  - any bridge;
  - any ship;
  - any active or inactive waste disposal site; and

- any structure, installation or building that was previously subject to this requirement, regardless of its current use or function.

*Note:* Under this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building.

### Q. Do asbestos regulations require me to have my property inspected for asbestos?

A. S.C. DHEC Regulation 61-86.1 states that prior to any demolition or renovation at a regulated facility, a thorough inspection must be done to detect any asbestos-containing materials. The inspection must be carried out by a person licensed by DHEC's Asbestos Section as an asbestos building inspector.

If asbestos is found in an area that will be disturbed during renovation or repair work, it must be removed properly and disposed of at an approved landfill. DHEC's Asbestos Section keeps a list of South Carolina landfills that accept asbestos. These actions also must occur prior to any building demolition project. In most cases, asbestos removal and disposal activities must be performed by a licensed asbestos abatement contractor.

### Q. Am I required to submit notification of all *demolition* projects?

A. Each owner/operator must notify DHEC's Asbestos Section in writing before beginning any demolition of a regulated facility/structure regardless of the amount of asbestos present (and even when no asbestos is present).

# **Appendix F**

Photographs



Photograph 1 – Top view of the Alligator Road (S-21-107) Bridge over Alligator Swamp.



Photograph 2 – Side view of the Alligator Road (S-21-107) Bridge over Alligator Swamp.

APPENDIX H  
Cultural Resource Reports and Coordination



# Phase I Cultural Resources Survey of Alligator Road

Florence County, South Carolina



NEW SOUTH ASSOCIATES, INC.

# Phase I Cultural Resources Survey of Alligator Road

Florence County, South Carolina

Report submitted to:

---

ICA Engineering • 501 Huger Street • Columbia, South Carolina 29201

Report prepared by:

---

New South Associates • 6150 East Ponce de Leon Avenue • Stone Mountain, Georgia 30083



---

Natalie Adams Pope – Principal Investigator

Valerie Davis – Archaeologist and Co-Author

Kristie L. Person – Historian and Co-Author

October 30, 2014 • **Final Report**  
New South Associates Technical Report 2337





# ABSTRACT

New South Associates performed a cultural resources survey of the proposed Alligator Road (S-21-107) widening in Florence County, South Carolina. The approximately 7.5-mile long widening project begins at the intersection of Alligator Road and West Palmetto Street/U.S. Highway 76 and ends at the intersection with South Irby Street/U.S. Highway 52. The area of potential effect (APE) measured 300 feet beyond the existing right-of-way (ROW) of Alligator Road and the area of archaeological emphasis focused on 100 feet on either side of the centerline.

No previously recorded archaeological sites were identified within 0.25-mile of the APE during background research. Two new sites were identified during the current survey including a small multicomponent artifact scatter (38FL475) and the Langston Family cemetery (38LF476). Neither site is recommended eligible for listing on the National Register of Historic Places (NRHP).

Two previously recorded architectural resources were identified within 0.5 mile of the project area: Rogers House (0168) and 2016 West Palmetto Street (0169). Both resources were recommended not eligible for listing on the NRHP and were not recorded within the viewshed of the current APE. The current survey also recorded 17 architectural resources. None are recommended eligible for listing on the NRHP.

In addition to these resources, Sunset Memory Gardens Perpetual Care is a modern cemetery located adjacent to Alligator Road. Care should be taken to avoid this cemetery.

# ACKNOWLEDGEMENTS

New South Associates would like to thank Wayne Hall of ICA Engineering for maps and information provided over the course of this project. Many thanks to Sarah Stephens and Brad Sauls at South Carolina State Historic Preservation Office (SHPO) for providing data and other information necessary to successfully complete the project. Lain Graham, Daniel Upchurch, and Lisa Pittman served as crew during the archaeological survey. Lain Graham analyzed the artifacts and prepared the artifact catalog. Laboratory Director, Amy Irons, assisted in further analysis questions.

Additionally, local townspeople are acknowledged for sharing historical data and memories of their communities. Emma Green of Savannah Grove Baptist Church and Bill Brown of Crown Masonic Lodge provided background information for those resources. The staff of the South Carolina Room at the Doctors Bruce and Lee Foundation Library provided historical information about the project area. Carmen Beard prepared GIS data and graphics. Jennifer Wilson and Becca Brown edited and prepared the report.

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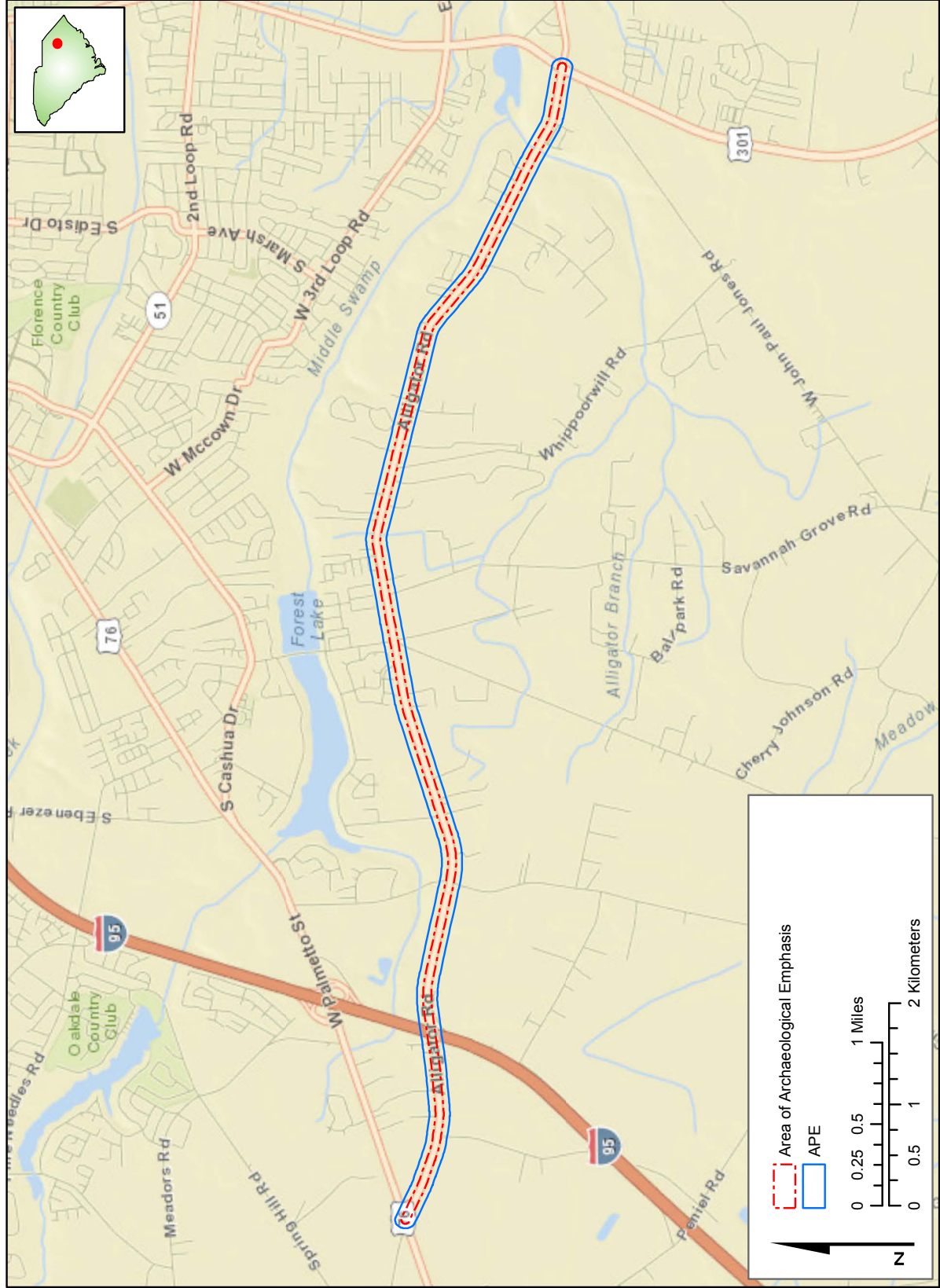
# I. INTRODUCTION

New South Associates conducted an intensive cultural resources survey of Alligator Road in Florence County, South Carolina. The project consists of improvements along approximately 7.5 miles of Alligator Road. At its western end, the project area begins at West Palmetto Street/U.S. Highway 76 and extends east along Alligator Road to its eastern end at the intersection with South Irby Street/US Highway 52 (Figures 1-6). Improvements will consist of expansion from a two-lane ditch section to a variable five-lane curb and gutter and ditch section with pedestrian accommodations, as well as replacement of the bridges over Alligator Swamp and I-95. These improvements will provide more efficient transportation for local commuters and pedestrians as well as provide better access to residential, commercial, and industrial areas in and around Florence.

This project consisted of background research, archaeological field survey, architectural field survey, and assessment of all archaeological sites and architectural resources for inclusion on the National Register of Historic Places (NRHP). The area of potential effect (APE) is defined as the construction limits and the viewshed, which is 300 feet beyond the existing right-of-way (ROW). The area of archaeological emphasis in the APE is defined as 100 feet from the existing ROW. For architecture, the study area was considered to be the entire APE. The work was performed by New South Associates on behalf of ICA Engineering to comply with Section 106 of the National Historic Preservation Act of 1966, as amended.

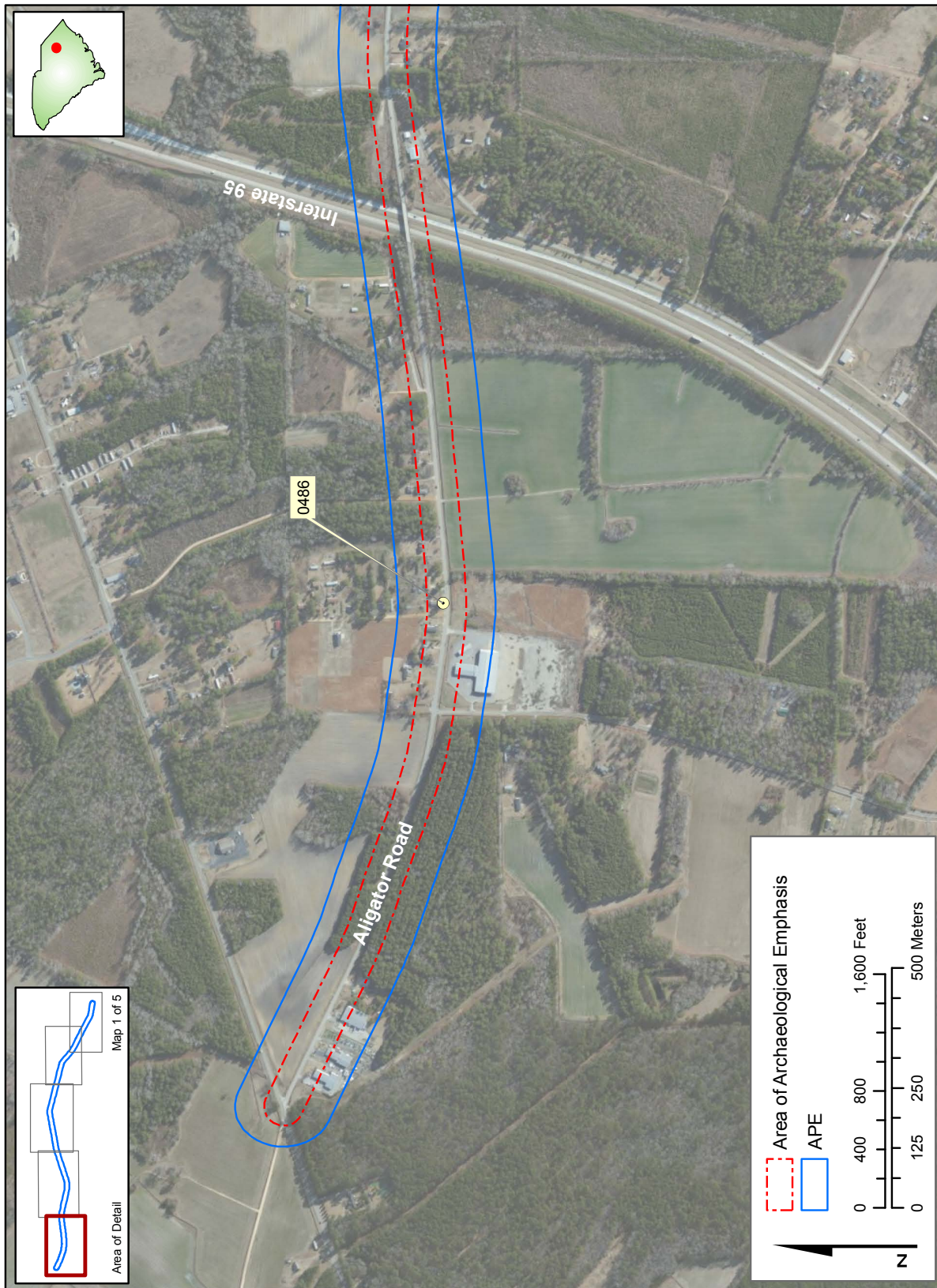
Natalie Adams Pope served as the Principal Investigator and Valerie Davis served as Field Director. The archaeological fieldwork was conducted on June 3-6, 2013. Kristie Person, Architectural Historian, conducted the architectural survey in on May 20 and 21, 2013.

The report is organized into six chapters including this introduction. Chapter II presents the environmental context and Chapter III features the cultural overview. A discussion of methodology is presented in Chapter IV, while the archaeological and architectural survey results and recommendations are presented in Chapter V. Finally, Chapter VI presents the conclusions. Appendix A provides the specimen catalog and Appendix B provides the archaeological site forms.



Source: ESRI Resource Data

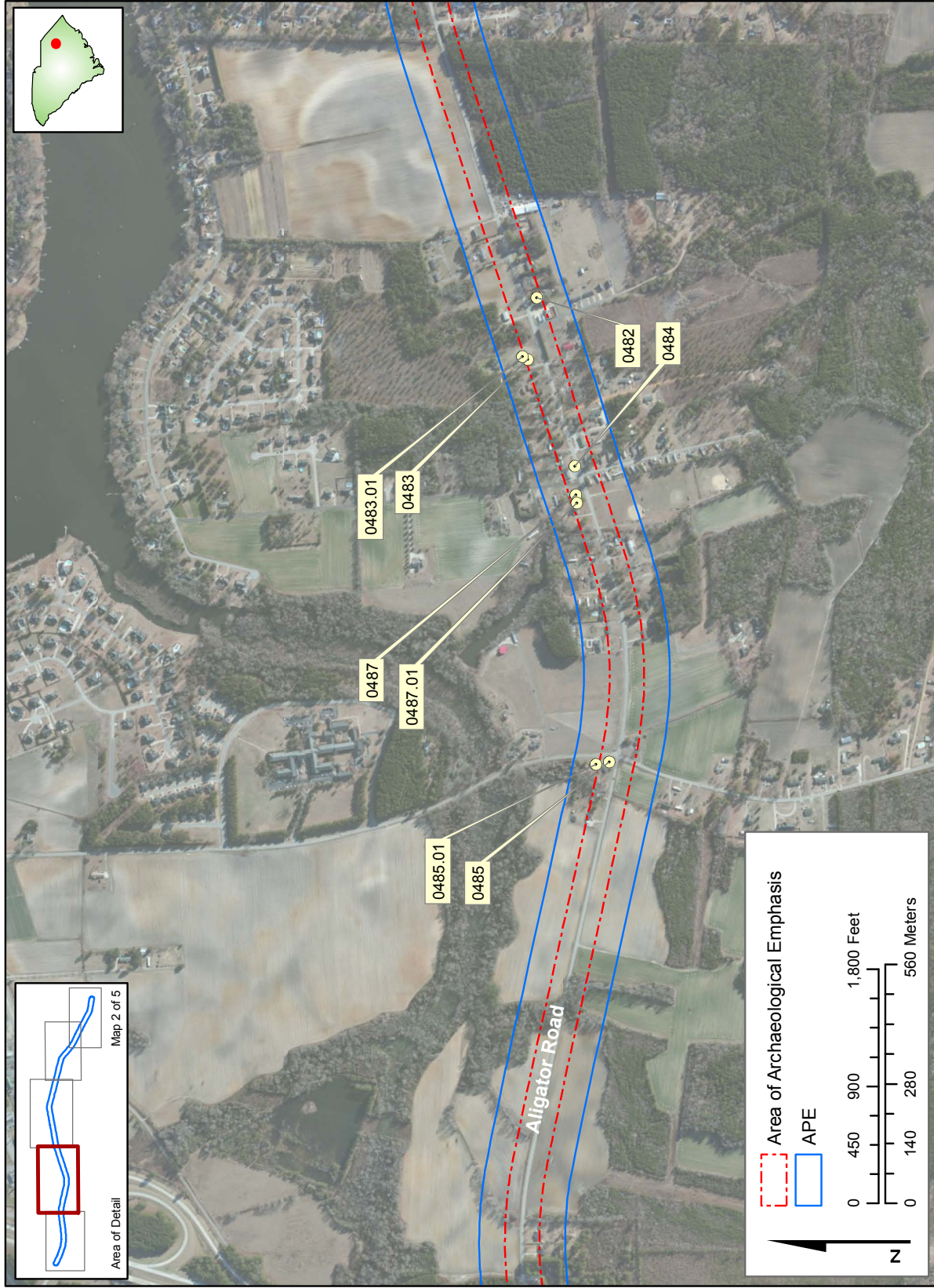
Figure 1.  
Project Location Map



Source: ESRI Resource Data

Figure 2.  
Map of Resources (1 of 5)

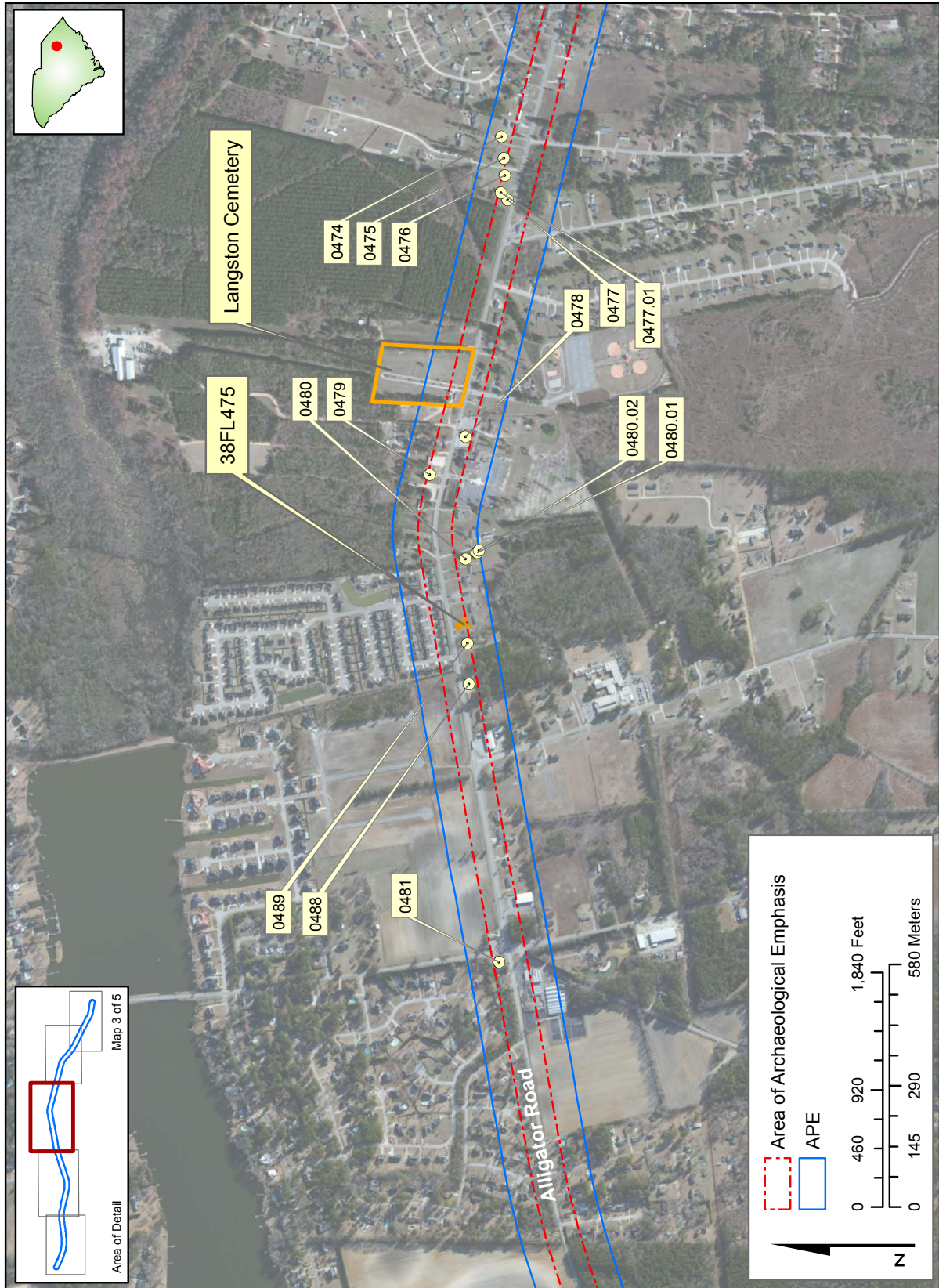




Source: ESRI Resource Data

Figure 3.  
Map of Resources (2 of 5)





Source: ESRI Resource Data

Figure 4.  
Map of Resources (3 of 5)



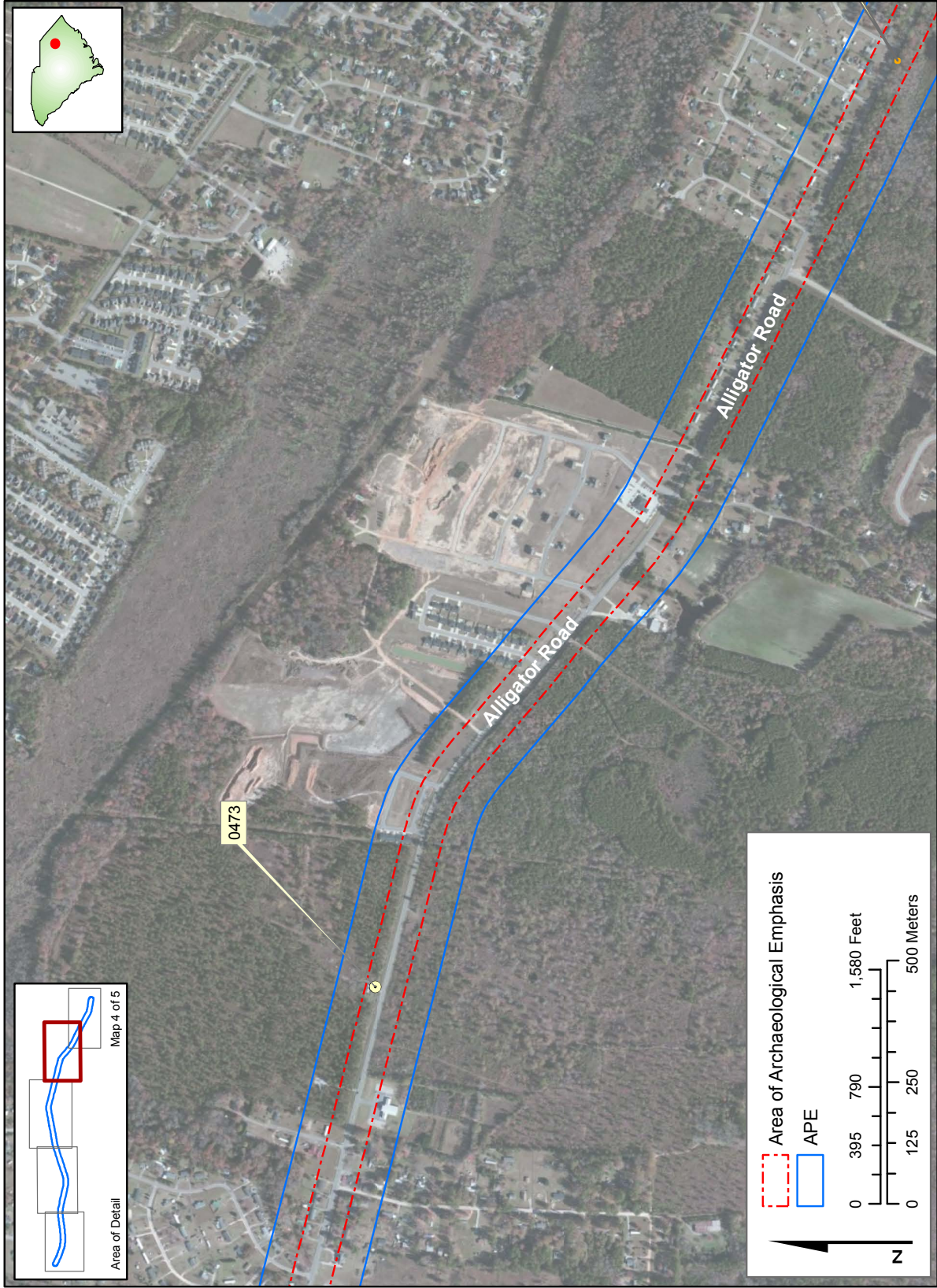
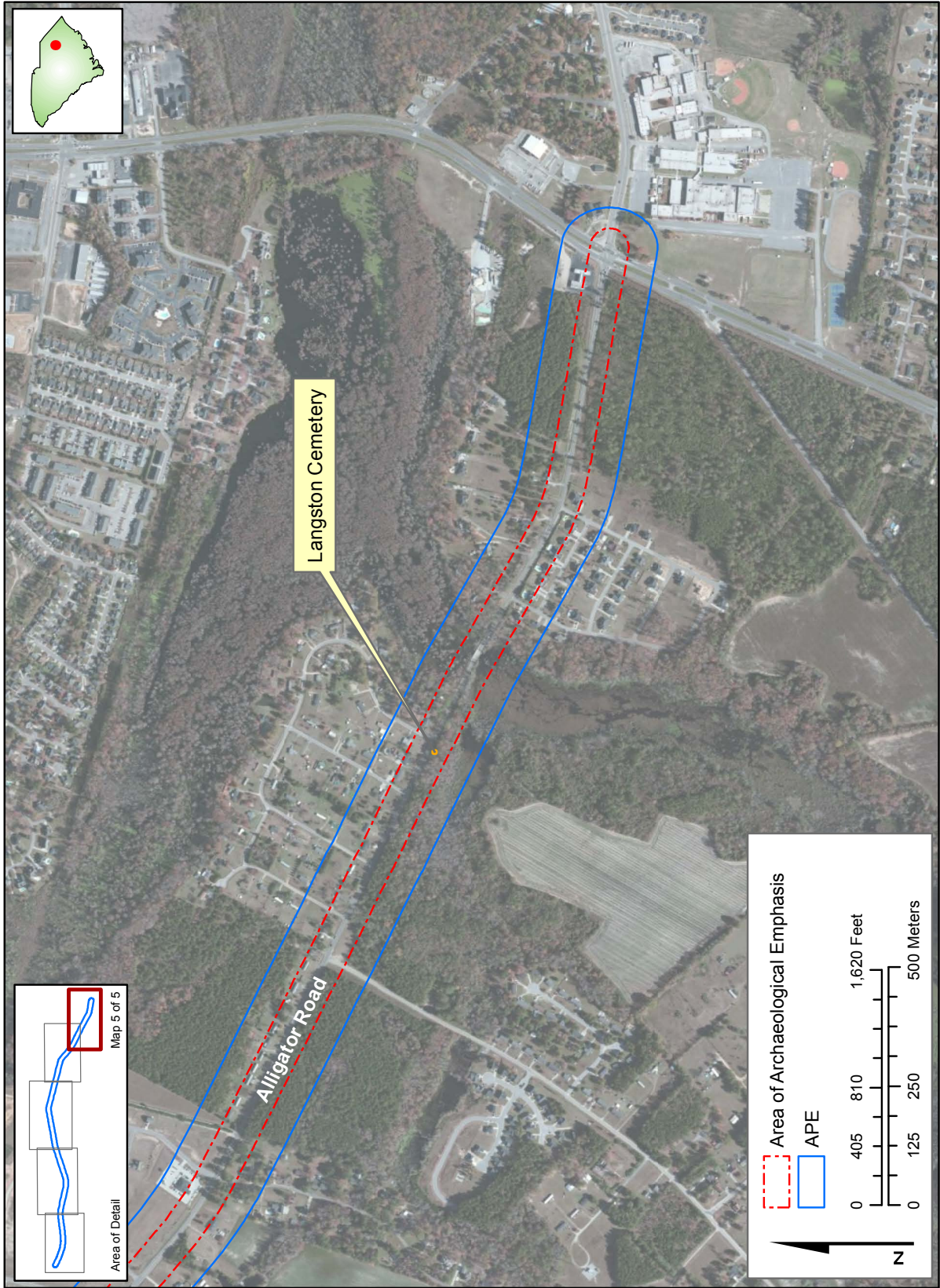


Figure 5.  
Map of Resources (4 of 5)





Source: ESRI Resource Data

Figure 6.  
Map of Resources (5 of 5)

## II. ENVIRONMENTAL CONTEXT

Florence County is geographically part of the Inner Coastal Plain. Topography in the county ranges from approximately 70-150 feet above sea level. The county is drained by the Pee Dee River System, which flows to the southeast. The closest water source to the project area is Alligator Branch. Alligator Branch, a tributary of Pee Dee River, crosses the APE approximately 0.55 mile west of South Irby Street/U.S. Highway 52.

The geology of the Coastal Plain was shaped over millions of years by the movement of the Atlantic sea line due to tilting of lands and sea level change. Beginning at the fall line and ending at the sea, the Coastal Plain consists of sand and clays. This physiographic region exhibits considerable weathering which is evident in the inner coastal plain by its river bluffs, relic surfaces, and rolling hills (Barry 1980).

The Natural Resources Conservation Service's (Soil Survey Staff 2012) online soil survey of Florence County identifies the project area as consisting of Coxville, Duplin, Goldsboro, Lynchburg, Norfolk, Orangeburg, Rains, Wagram, and Wehadkee and Johnston soils. These soils typically have a slope of 0-6 percent. Norfolk, Orangeburg, and Wagram soils are classified as well drained. Duplin fine sandy loam and Goldsboro loamy sands are moderately well drained. Lynchburg is a somewhat poorly drained sandy loam. Coxville and Rains are poorly drained sandy loams. Wehadkee and Johnston soils are poorly drained and frequently flooded soils.

Short, mild winters and mild, humid summers characterize the climate of the Inner Coastal Region. In the center of the state, July average maximum temperatures hover near 92-93 degrees Fahrenheit, while January temperatures fall to an average of 23 degrees (Barry 1980). Precipitation fluctuates throughout the year (Kovacik and Winberry 1987) with the heaviest rainfall in the spring and the driest period in October and November (Barry 1980). The growing seasons in South Carolina for most major cultivated crops is limited by spring and fall freezes and ranges from an average length of 210 days in the northwestern portion of the state to 235 days along the coast (Barry 1980).

The Southeastern Coniferous Forest association dominates the South Carolina's Coastal Plain province (Barry 1980). Vegetation in the project area included both hard and soft woods, with the latter being the primary flora. The project area consists of a mix of residential and commercial land use with portions of the project's ROW traversing front lawns, open green spaces, parking lots, agricultural fields, and remnant forests.

## III. CULTURAL CONTEXT

### PREHISTORIC OVERVIEW

#### PALEOINDIAN PERIOD

The Paleoindian period is commonly dated between 12,000 and 10,000 B.P. It has been divided into the Early, Middle, and Late subperiods. The Early Paleoindian is consistently represented by the fluted Clovis Lanceolate type, while the Middle and Late Paleoindian periods reflect the beginnings of accelerated regional variation. The Middle Paleoindian period is marked by the appearance of Cumberland, Simpson, Suwannee, and Quad points, while the Late Paleoindian period is represented by the nonfluted Hardaway-Dalton and Dalton types. From what little is known about the Paleoindian period, archaeologists tend to agree that they were a band level society, were nomadic, and were hunters and foragers. Although the population density was low, it is believed that toward the end of the Paleoindian period that it increased significantly (see Walthall 1980:30).

There is the possibility for the existence of a pre-Clovis horizon in the New World. Work at Monte Verde (Meltzer et al. 1997), Meadowcroft Rockshelter (Adovasio et al. 1977; 1985), and Cactus Hill (McAvoy and McAvoy 1999), as well as new evidence from the Topper site is providing ammunition for its existence. The Topper site is located along the middle Savannah River Valley near Aiken, South Carolina. Albert Goodyear's work has reported radiocarbon dates of more than 50,000 B.P. were obtained from a possible hearth area. If the dates are correct and are associated with human occupation, then the site provides evidence of pre-Clovis occupation in South Carolina (University of South Carolina Times 2004).

#### ARCHAIC PERIOD

The Archaic period has been traditionally divided into three subperiods — the Early Archaic (10,000-8,000 B.P.), the Middle Archaic (8,000-5,000 B.P.), and the Late Archaic (5,000-3,000 B.P.). Generally, the Archaic is viewed as a lengthy time of adjustment to changing environments brought about by the Holocene warming trend and rising sea level.

A population increase occurred in the Coastal Plains area of South Carolina during the Early Archaic period. These conclusions are drawn from the noticeable increase of cultural remains. Points commonly seen in the Coastal Plain region include Hardway, Dalton, and Kirks, which are found along riverine environments (Goodyear et al. 1979). Representatives of the terminal Early Archaic bifurcate tradition, St. Albans and LeCroy, are also found in some quantities (Chapman 1977).

Sassaman (1983) suggested that Middle Archaic people were very mobile, perhaps moving residences every few weeks, which fits Binford's (1980) definition of a foraging society. The Middle Archaic sequence begins with Kirk Serrated and Kirk Stemmed points, which are followed by the closely aligned Stanly Stemmed. These are followed by the Morrow Mountain I and II types, and then by the Guilford and Brier Creek lanceolate types.

The Late Archaic period has been described as a time of increased settlement permanence, population growth, subsistence intensification, and technological innovation (Smith 1986). The Savannah River Stemmed, small Savannah River Stemmed, and Otarre projectile points characterize the period, as well as the technological development of fiber-tempered pottery known as St. Simons and Stallings (Griffin 1943; Stoltman 1974).

### WOODLAND PERIOD

Although there has been a dispute over exactly when the Woodland period began, some researchers believe that it started with the beginning of the production of Stallings fiber-tempered pottery, around 5,000 B.P. (Trinkley 1990). Vessel forms include shallow bowls, large wide-mouth bowls, and jars. The pottery was built through molding, although coil fractures are sometimes present, particularly later in the period. Firing was not well controlled and was incompletely oxidized. Decorations include punctations (with periwinkle shells, reeds, and sticks), finger pinching, and incising. Some of these motifs are believed to be temporally sensitive (Claggett et al. 1986; 1990; Sassaman 1983). This culture also produced a rich material assemblage of worked bone and antler, polished stone items, net sinkers, steatite heating slabs, and stone tools (projectile points, scrapers, knives, and drills).

Although Stallings is considered to be older and the progenitor of the Thom's Creek pottery, some radiocarbon dates suggest that the two types are largely contemporaneous (Trinkley 1980a). The artifact assemblage characteristic of the Thom's Creek phase is almost identical to that found in Stallings. The pottery, however, is tempered with sand rather than Spanish moss fibers. Some of the potteries are untempered. The motifs are almost all identical to those found in the Stallings series (Griffin 1943) including punctations (reed and shell), finger pinching, simple stamping, incising, and finger smoothing (Trinkley 1980a).

Projectile points from this time period are typically Savannah River Stemmed (Coe 1964). They reduced in size later on during the Thom's Creek phase and are classified as Small Savannah River Stemmed (Oliver 1985). Anderson and Joseph (1988:197) noted that there appears to be a "long co-occurrence of both large and small forms", suggesting that one type did not replace the other.

Refuge (3,000-2,600 B.P.) and Deptford (2,800-1,500 B.P.) potteries follow the Stallings and Thom's Creek wares. The Refuge series is characterized by a compact, sandy or gritty paste and a sloppy simple stamped, dentate stamped, or random punctated decoration (Williams 1968). They are very similar to the preceding Thom's Creek wares and Anderson et al. (1982:265) noted that the typologies are "marred by a lack of reference to the Thom's Creek series" and that the Punctate and Incised types are indistinguishable from Thom's Creek (Trinkley 1990:11).

Deptford potteries, which begin to occur in the latter part of the Early Woodland and continued into the Middle Woodland, are characterized by a fine to coarse sandy paste with surface treatments including Plain, Check Stamped, Simple Stamped, Cord Marked, Geometric Stamped, and Complicated Stamped (Williams 1968). Shell tools are uncommon and bone tools are very rare. This has led some researchers (Milanich and Fairbanks 1980:75) to conclude "wood must have been worked into a variety of tool types." A small, stemmed point tentatively described as "Deptford Stemmed" has been found associated with these sites (Trinkley 1980b:20-23). Points similar to Yadkin Triangular points have also been found at Deptford sites (Coe 1964; Milanich and Fairbanks 1980). Sassaman et al. (1990) reported that, in the Savannah River Valley, triangular types appear to be more strongly associated with Deptford than stemmed types. It has also been noted that there is a co-occurrence of the larger triangular Yadkin and Badin type points with smaller triangular forms such as Caraway, which has traditionally been attributed to the Late Woodland and Mississippian periods (Blanton et al. 1986:107; Sassaman et al. 1990; Trinkley 1990).

North of Charleston, a somewhat different cultural manifestation is found that is related to what Caldwell (1958) referred to as the "Northern Tradition". This assemblage is referred to as Deep Creek and is characterized by medium to coarse sand inclusions with surface treatments of cord marking, fabric impressing, simple stamping, and net impressing (see Trinkley 1990). This pottery was previously designated as the Middle Woodland "Cape Fear" pottery type originally described by South (1960). The Deep Creek settlement and subsistence systems are poorly known but appear to be very similar to those identified with the Deptford phase.

In South Carolina, the Middle Woodland is distinguished by a pattern of settlement mobility and short-term occupation. During this time Yadkin, McClellanville, Santee, Wilmington, Hanover, and Yadkin assemblages occur in the Coastal Plain region. Yadkin ceramics are "characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments" (Trinkley and Adams 1992:19). Additional Yadkin ceramic typologies for South Carolina can be found in Anderson et al. (1982:299-302). Projectile points found are typically medium-sized triangular points.

McClellanville (Trinkley 1981) and Santee (Anderson et al. 1982:202–308) wares are characterized by a fine to medium sandy paste with a surface treatment primarily of V-shaped simple stamping. Although the two potteries are very similar, the Santee series may have later features such as excurvate rims and interior rim stamping, which the McClellanville Series pottery does not exhibit. Both of these types concentrate on the north central coast of the state (Trinkley 1990:18).

Wilmington and Hanover are actually believed to be regional varieties of the same ceramic tradition, which is characterized by crushed sherd or grog tempering. Caldwell and Waring (see Williams 1968:113–116) first described the Wilmington wares from sites examined in coastal Georgia. Hanover was described by South (1960) from his survey of the southeastern coast of North Carolina and portions of the northeastern coast of South Carolina. Hanover is more or less distributed evenly across the Coastal Plain but is more prevalent north of Edisto River (Anderson 1975:187). Dates cluster from about A.D. 400-900 (Trinkley 1990:18).

Essentially, the Late Woodland is a continuation of previous Middle Woodland assemblages. The Hanover and Mount Pleasant pottery series are found as late as A.D. 1000 (Trinkley 1989). Cable (2001:15) indicated that Wilmington and Cape Fear Fabric Impress dominate during this period as well. Unfortunately, this period is difficult to delineate from the preceding Middle Woodland period or subsequent Mississippian period (Sassaman et al. 1990:14). Sites with Late Woodland or Mississippian occupations tend to contain small, triangular points such as the Caraway or Pee Dee (Coe 1964). Stoltman (1974) observed in the Middle Coastal Plain that Late Woodland sites have a settlement pattern characterized by dispersed upland settlement, which he believes may indicate the beginnings of slash and burn agriculture or intensification of upland resource procurement.

#### MISSISSIPPIAN PERIOD

The Mississippian period (A.D. 1100-1640) is characterized by sedentary village life, agricultural food production, and regionally integrated and hierarchically organized social, political, and ceremonial systems (Anderson 1994). Not much is known about the Mississippian period in this area of the state. Most of the work has been done in the middle Savannah River Valley or along the Wateree River Valley in the central part of the state. It is possible that Mississippian occupations are aligned with the Scott's Lake Mound Center on the Upper Santee River as well as the Wateree Mound Complex near Camden. Anderson et al. (1982) ceramic sequence is based on data supplied by local collectors, Coe's (1995) work at Town Creek in North Carolina, and excavations conducted by South (1971) at Charlestowne Landing. Anderson et al. phases include Santee II, which is dominated by Santee Simple Stamped, Jeremy, and Pee Dee.



## PROTOHISTORIC PERIOD

The majority of the resources on the protohistoric period in South Carolina come from secondary sources such as Mooney (1894), Hodge (1907), and Swanton (1952). Aside from these earlier accounts, little information exists on the Pedee.

The first Native American tribes that made contact with the English settlers and explorers were the Cuccoes, Wandos, Wineaus (Winyahs), Etiwans, and Sewees. The first mention of the Pedee occurred in 1711, when they joined part of Colonel John Barnwell's force, which fought against the Tuscarora in North Carolina (Milling 1969:118). Notes and maps from 1715, describe the Pedee living along the eastern bank of the Pee Dee River, possibly in Marion County, downstream from "Saraus" (Saras), and 80 miles up river from the Atlantic Ocean (Mooney 1894:76–77).

Warfare commonly broke out between southern and northern Native American groups during the early eighteenth century. Although Pedee numbers dwindled, some survived the violence. Around the 1740s, the Pedee joined with the Catawba in a confederation, although they remained Pedee (Mooney 1894:77). Mooney (1894:77) described that during this time the Pedee settlement lived among the English and some even owned African American slaves. Despite the effort of joining with the Catawba for protection, accounts still exist of the Pedee being taken as slaves and their settlements being destroyed (Mooney 1894:77–84). According to an account by Ramsay (2000: Appendix II), by the late eighteenth century, the Pedee population dwindled down to extinction.

No Pedee archaeological sites have been identified to date. It is assumed that the sites would mimic other protohistoric sites found in the region. Trinkley and Adams (1992:21) noted that items would include crude small triangular projectile points and ceramics with complicated stamping, along with trade items such as glass beads, guns, tobacco pipes, knives, and other similar objects. Currently, no information exists on the Pedee or their villages.

## HISTORIC OVERVIEW

Florence County was not established until 1888, when parts of Darlington, Marion, Williamsburg, and Clarendon were given to create the new county. The current project area is located southwest of Florence, with some resources now located within the city limits. This area was once part of the Darlington District. The following examination of the history of the region draws on previous contexts written by New South Associates (Olson 2009) (Lockerman and Stephens 2012).



## EARLY SETTLEMENT

Prior to the mid 1700s, the population of the area that would eventually be Florence County was extremely sparse (Godbold and Williamson 1923:11). The first European settlers in South Carolina were under the direction of William Sayle, who was also the first governor, near Port Royal in 1670. By 1680, a settlement had been established in what is now Charleston. Charles II granted charters in 1663 and 1665, for the land that became South Carolina to: Edward, Earl of Clarendon; George, Duke of Albermarle; William Lord Craven; John Lord Berkley; Anthony Lord Ashley; Sir George Content; and Sir George Content, William Berkley and John Colleton (Sellers 1902:1–2). Sir John Yeamans, traveling from England to Barbados then on to the colonies, brought the first black population to South Carolina in 1671, introducing slavery to the colony (Sellers 1902:1–2).

The Carolina province was divided into three counties in 1682: Berkeley, Colleton, and Craven. Berkeley County reached from the Stono River, around Charleston to Seewee Creek, now Awendaw Creek, to where it emptied into Bulls Bay. To the south of Berkeley was Colleton County, reaching to the Combahee River, and to the north was Craven County, from which Florence would eventually be created. (Godbold and Williamson 1923:7; Stauffer 1994:1).

Population of the counties remained small throughout the Colonial period. It was not until after the Yemassee War of 1715, when most Native Americans of the region were gone, that the area that would later be Florence County began to host more permanent European settlement (Edgar 1998). The slight population of the backcountry limited legal necessities and regulated governmental and judicial activity to Charleston. Until the Revolutionary War, county designations were merely a means to locate land grants and militia command areas. The inconvenience of a government and legal system located in Charleston became increasingly prevalent as the backcountry population rose. In 1721, the General Assembly approached the issue by instituting the County and Precinct Courts, which would rule on “small civil claims and criminal cases whose punishment fell short of life or limb” (Stauffer 1994). While townships were established throughout South Carolina’s backcountry in the mid-1700s, the area that would become Florence County was devoid of such official enterprises. Settlement of the area was, however, encouraged by the government, and led to an influx of immigrants from Pennsylvania of Welsh ancestry. The region became unofficially known as the Welsh Tract (Edgar 1998).

By the mid-1760s, lawlessness in the backcountry had become rampant. In response to the disorder and to the colonial government’s inaction, backcountry vigilantes began to retaliate against outlaws roaming the countryside. By October 1767, the vigilantes had banded together to form the Regulators. The colonial governor was less than supportive of the Regulators,

regarding them as merely another band of outlaws; however, the Regulators were representative of a substantial segment of the backcountry population. Between 3,000 and 6,000 men were members of the Regulator movement, most of them being small planters owning farms of several hundred acres, which they cultivated with the help of their families. The leaders of the movement were slaveholders, regional captains instead of a single commander-in-chief. On November 7, 1767, a petition written by Charles Woodsman, regional captain of Camden County, was presented to the Commons house. The petition listed 23 requests including the construction of “courts, courthouses, jails and schools – institutions that would help bring order and stability to the backcountry” (Edgar 1998).

By 1768, the County and Precinct Courts had become defunct. The petition from the Regulators increased the pressure on the General Assembly to pass an act dividing the land into seven judicial districts (Godbold and Williamson 1923:7; Stauffer 1994:1). Georgetown, Charleston, and Beaufort districts were created below a line running southwest to northeast about 50 miles from the coast, and Cheraws District was created in an area northwest of Georgetown District. Each district had a courthouse town, six of which were named after their respective districts, the exception being Cheraws, where court was held in Long Bluff. Chesterfield, Marlboro, and Darlington counties would eventually be created from areas once in Cheraws District (Stauffer 1994).

Settlement patterns originated along Jeffreys [sic] Creek and trading paths, as well as the Pee Dee River (Mills 1980; Sellers 1902:66, 75–77). Communities grew up at the intersections of trading paths, creeks, and rivers, facilitating commerce in agricultural products (Mills 1980). The early settlers were farmers who took advantage of the rich soils for the cultivation of food and cash crops, and of the abundant range lands to raise livestock, both for domestic and market consumption. While there is mention of a few slaveholders in the backcountry around 1735, which would suggest the early existence of some plantations, the majority of these first pioneers probably inhabited modest log structures situated on small farms on their land grants (Godbold and Williamson 1923; Sellers 1902).

Major crops in the area included indigo, tobacco, and cotton. Indigo was first introduced to South Carolina in the 1740s and just before the Revolutionary War, South Carolina was exporting 1,107,660 pounds of indigo (Sellers 1902:22–24). Tobacco emerged as early as the 1670s in South Carolina, but Cotton eventually overtook tobacco as a cash crop. In the 1890s, however, tobacco again became a major cash crop throughout the Pee Dee region (Prince 2000:41,51; Sellers 1902:18–24).

## REVOLUTIONARY WAR

During the American Revolutionary War, there were no military units from what was then still Craven County as European settlement in the area was nearly non-existent; however, there were several soldiers from the area that served in the Continental Army and various partisan militias. Acts of aggression carried out by Tories and British sympathizers impacted the area far more than did acts carried out by the British Army (Godbold and Williamson 1923; Marion Historical Society 1976). While no Revolutionary War action has been reported in the current study area, some noteworthy engagements took place within the bounds of what would later be Florence County.

General Francis Marion, the Swamp Fox, fought his first skirmish with the Tory Cavalry, under the leadership of Major General Micajah Gainey, near Port's Ferry on the Big Pee Dee River at the present-day Marion-Florence County line, four miles south of Greshman, South Carolina. Marion's forces fought against Tories and British soldiers again near Port's Ferry (near the Ariel Crossroads), at the Battle of Blue Savannah. Colonel Hugh Giles, the highest ranking military leader in eastern South Carolina during the Revolutionary War, served under Marion at Blue Savannah, joining in the defeat of the Tory forces commanded by Gainey (Godbold and Williamson 1923; Marion Historical Society 1976; Pee Dee Regional Planning and Development Council 1972).

Located in what is now Florence County is the nationally significant Revolutionary War campsite of Snow's Island. Listed on the NRHP in 1973, and designated a National Historic Landmark in 1974, Snow's Island served as the headquarters, supply depot, and retreat for Marion and his partisan forces during the winter of 1780-1781. The most famous of Marion's forested campsites, Snow's Island was well situated for various attacks on British stations, as well as a major attack on the garrison at Georgetown by Marion and Colonel "Light Horse" Harry Lee on January 25, 1781. British Colonel Doyle led the successful raid on Marion's camp in late March 1781. Following the defeat, Marion no longer made use of the Snow's Island site (Shoire 1972).

## ANTEBELLUM PERIOD

In 1783, the General Assembly ordered each of the seven court districts surveyed for the division of uniform counties. County courts were established in 1785, and in 1786, most governmental duties were transferred from Charleston to the county courts (Godbold and Williamson 1923; Stauffer 1994). The county courts lasted from 1785 until 1799, existing on a tiered system in which the county courts comprised the base (Stauffer 1994). When many of the counties were transformed into districts in 1800, judicial powers were transferred to the districts. Justices

traveled between courthouses within each circuit, a system designed to allow citizens more access to the courts. The Judicature Act of 1798 specified that a courthouse and a jail should be established in a central location in each judicial district (Figure 7) (Stauffer 1994).

Following the Revolutionary War, farming remained the primary source of income and sustenance for most residents of the area. However, some small industries were beginning to emerge in the form of sawmills and gristmills. By 1795, the Effingham Sawmill was in operation on Lynches River (Norris 2009:33). This and other sawmills would remain important to the area and eventually lead to the birth of small communities.

The current project area is located in what was the Darlington District in 1820 (Figure 8A). The town of Darlington served as the seat of justice for district. According to the 1800 census, the population of Darlington District was 7,631 inhabitants, of which 2,336 were slaves. The 1820 census showed an increase in population to 10,949. Of these, 6,407 were white, 4,473 slaves, and 69 freed blacks (Mills 1826)

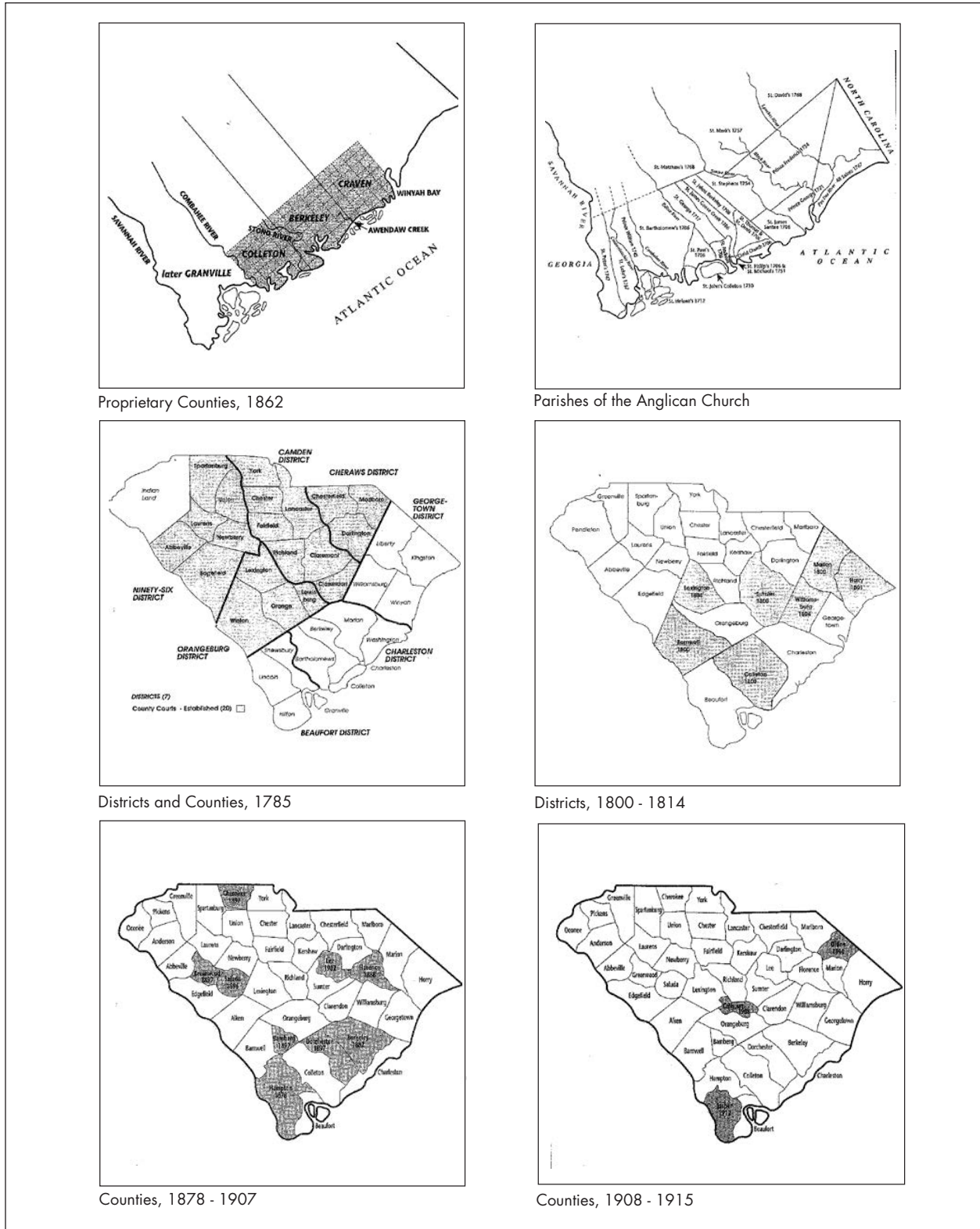
Historian Eugene N. Zeigler, Jr. described the three large, adjoining plantations as occupying much of the land that would eventually become the city and outskirts of Florence (Zeigler 2008). While Thomas McCall, Jr., and James A. Pettigrew both owned large tracts in what would be Florence, Muldrow's is the only name denoted on the Mills' Atlas of the Marion and Darlington Districts, which date to 1825 and 1820, respectively. Two Muldrow's sites are labeled in the Marion District, near the boundary line with Darlington (Figure 8B).

Zeigler describes Hugh Muldrow, Jr. as one of the three large plantation owners whose landholdings would comprise Florence and its vicinity. However, Zeigler points out that John H. Muldrow was the owner of Muldrow's Millpond, which was identified approximately 0.3 mile from the intersection of what is now Alligator Road and South Irby Street/U.S. Highway 52 at the east end of the project area. No resources associated with the millpond remain extant within the project area.

Eli Whitney's invention of the cotton gin in 1793 revolutionized the cotton industry, increasing the amount of cotton that could be processed in a day from a few pounds to a few hundred pounds (Aiken 1998:5,7,12-13). Within 25 years of Whitney's invention, cotton had become the staple crop of the southeast (United States Census 1902).

Beginning in 1850, southern farmers were cultivating cotton over a larger acreage than they were food crops, creating a reliance on the North and West for food crops. The development of rail lines connected southern plantations with western farms that were growing corn. Rail line development along with the rising price of cotton made it more profitable for southern farmers to grow cotton and purchase needed food crops (United States Census 1902).

Figure 7.  
Formation of Florence County



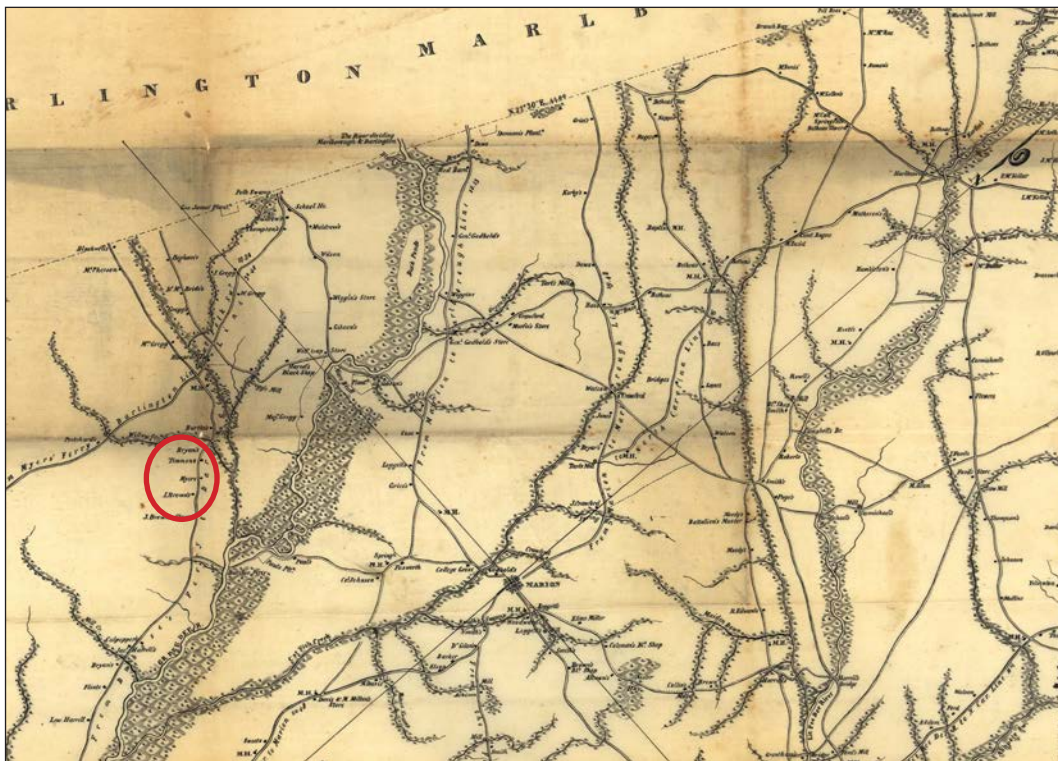
Source: Stauffer 1994



Figure 8.  
Mill's Atlas



A. Detail, Darlington District, 1820



B. Detail, Marion District, 1825

Source: Library of Congress

Until the 1850s, connecting the Pee Dee region to other areas of the state was not a concern, and even then, the first arrival of rails to the area was not instigated by South Carolinians, but by businessmen from Wilmington, North Carolina. In 1854, the Wilmington and Manchester Railroad began travels between Wilmington to Sumter County by way of the Pee Dee. A second rail line through the region linked Charleston to Florence in 1858, and a third connected Florence and Cheraw before the onset of the Civil War (Kovacik and Winberry 1987:96–97; in Garrow et al. 2006).

## CIVIL WAR ERA

On April 12, 1861, the Civil War officially began when Confederate troops fired onto Union-occupied Fort Sumter in Charleston Harbor. By the onset of the Civil War, the nearly exclusive cultivation of cotton had depleted the southern soils. Low production during the war kept cotton prices high, doubling the price per pound by 1866, and all cotton exports had to be “bonded to purchase war material” (Edgar 1998; United States Census 1902). A draft was implemented in 1862 by the executive council of South Carolina so that troop quotas could be filled. The state was then divided into four districts, each of which was to provide 750 slaves each month for the construction of fortifications (Edgar 1998:361).

In November 1862, a Confederate Navy Yard was established on the banks of the Great Pee Dee. Here, under the command of Lieutenant Van Renssalaer Morgan, the wooden gunboat C.S.S. *Pee Dee* was built and launched in November 1864. In 1865, the C.S.S. *Pee Dee* was burned by Confederate troops to prevent its capture by Union forces ((Pee Dee Regional Planning and Development Council 1972).

In September 1864, the Civil War arrived at Florence in the form of a Confederate prison. Only operable for five months, the prison camp has been compared to Andersonville for its overall poor condition and treatment of prisoners. At the rate of approximately 560 per month, at least 2,800 Union soldiers perished at the 24-acre prison. In 1865, General Sherman sent a regiment of cavalry to the stockades to free the prisoners, destroy the town, and the rail lines. The attack resulted in failure, General Wheeler and Cullock defended the town and Sherman’s regiment retreated (Baker 1974:6–7). More recently, archaeology has been performed on the Confederate prison, by MACTEC, the South Carolina Institute of Archaeology and Anthropology (SCIAA), and TRC. A more thorough review of the history can be found in Avery ((Avery 2008) and Grunden and Holland ((Grunden and Holland 2005).



## SAVANNAH GROVE BAPTIST CHURCH

Ebenezer Baptist Church was formed in 1778 near the banks of Jeffries Creek. Of the three large, adjoining plantations that would become the city of Florence and its immediate vicinity, owners McCall and Pettigrew, as well as ancestors of Muldrow, all had early ties to Ebenezer (Zeigler 2008). As was common during the period of slavery, parishioners of Ebenezer sought to save the souls of their captive workers and regularly brought them to church services. Born in 1815, a slave named Sampson Ham received baptism and was purchased and freed by Ebenezer in 1831 due to his skill as spiritual orator and leader (Savannah Grove Baptist Church 2004). Ham was thereby commissioned to lead Black Worship Services to black members of Ebenezer Baptist Church and elsewhere until 1866 (Edwards 2005).

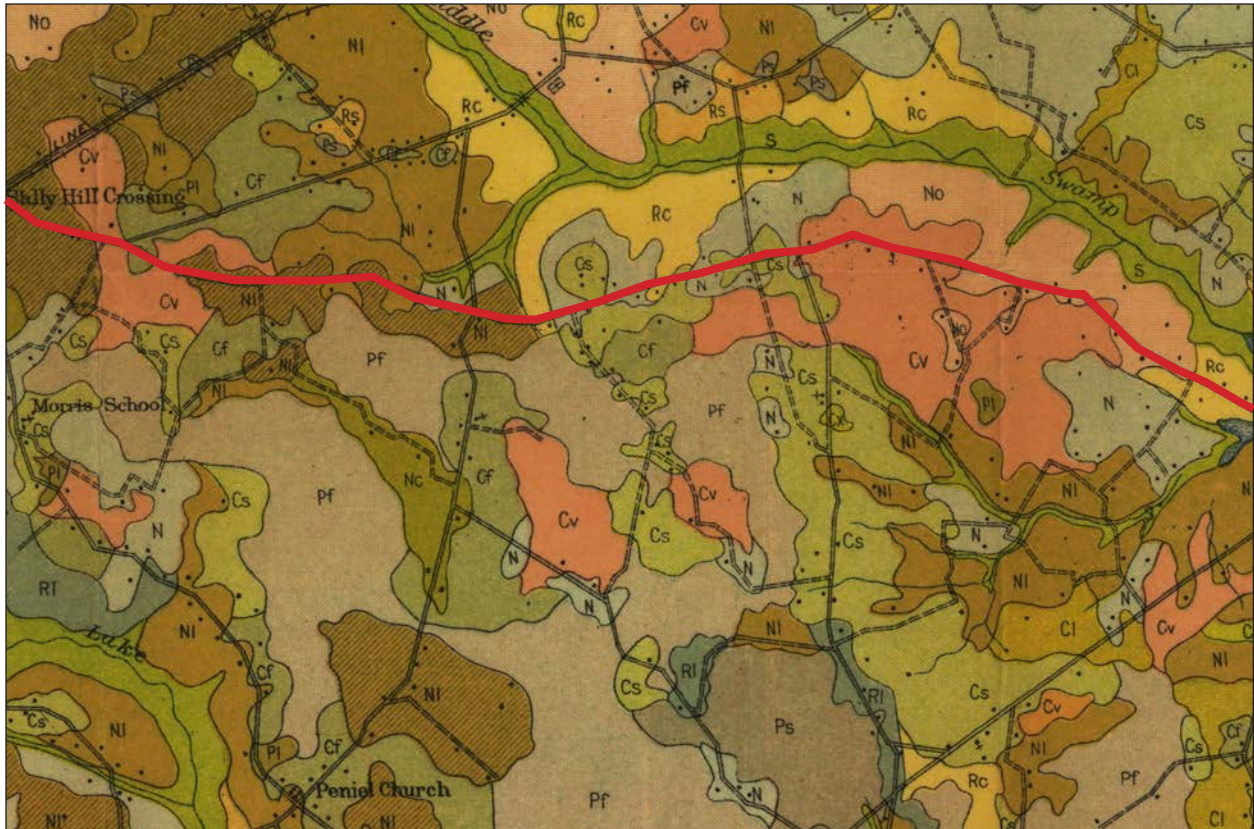
Following the emancipation of slaves across the south, tensions between former slaveholders and the newly freed meant new standards of living and worship. Caucasian churchgoers, whose entire economy had entered upheaval, and African American congregants, who were now free to seek payment for employment, had to decide if worshipping together remained a viable option during the painful era of Reconstruction. For Ebenezer:

the old Church was not content to rest from its labors among the black brethren. They were still welcome there and some retained their affiliation; but it was very apparent that it would be best (for both races) to maintain separate churches and there was fraternal cooperation in the organization of colored groups, with their own houses of worship (Pettigrew 1951).

Thus, in 1866, George W. Pettigrew, a white landowner and a later member of Ebenezer, sold one acre of land located approximately five miles from the mother church for \$1 to members of what would be the new congregation of Savannah Grove Baptist Church (Rogers 1978) (Edwards 2005). Under the leadership of Reverend Sampson Ham, the congregation began meetings on their new property under a brush arbor, and soon constructed a small sanctuary on site (Savannah Grove Baptist Church 2004).

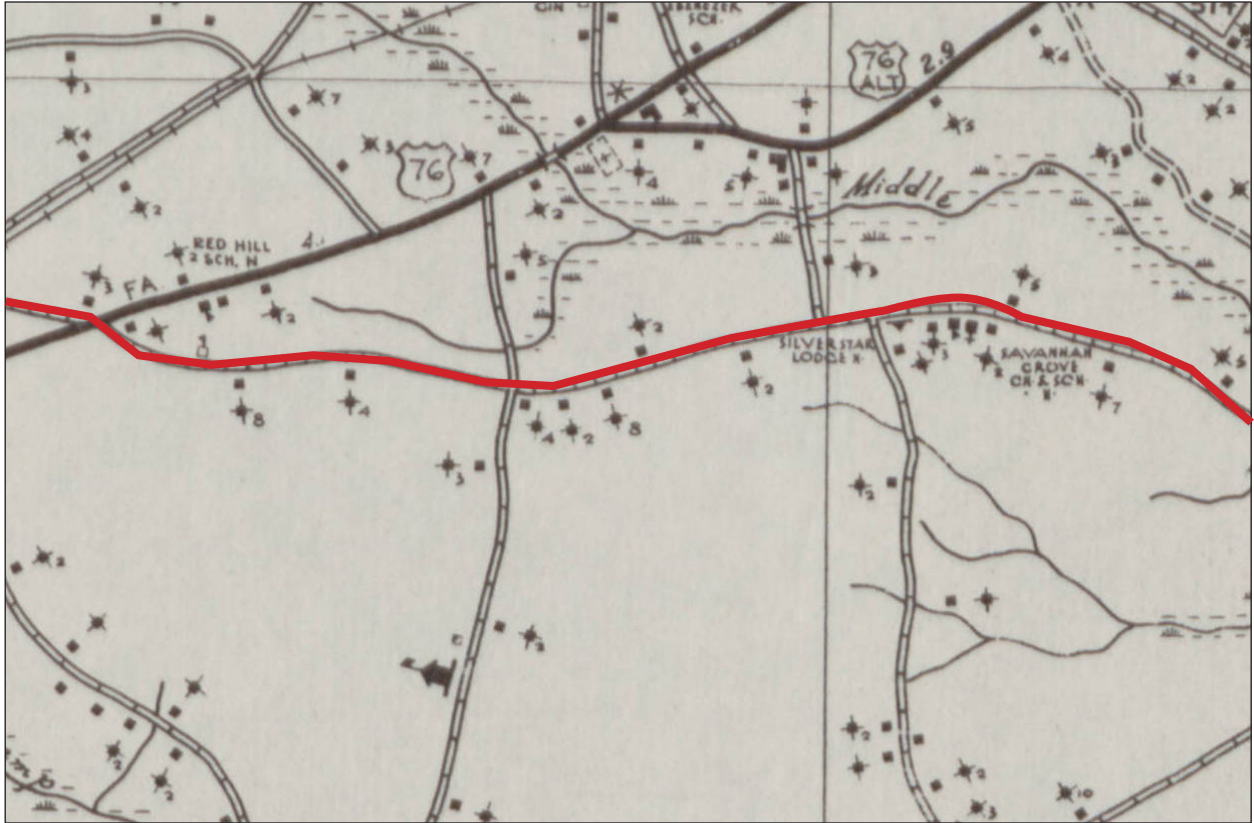
The location of the original church building, which still remains as the church location, can be seen on the 1914 soil survey map of the project area (Figure 9). This map shows additional development all along Alligator Road by this period. None of the development from this period remains intact within the project area. By 1938, the site is labeled “Savannah Grove Ch & Sch” on a countywide highway map (Figure 10), but none of the buildings indicated on the property at that time remain intact. This map also denotes Silver Star Lodge on Alligator Road just west of

Figure 9.  
Detail of 1914 Soil Survey Map of Florence County



Source: University of South Carolina Map Library

Figure 10.  
Detail of 1938 Florence County Highway Map



Source: University of South Carolina Map Library

Savannah Grove Baptist Church. The 1952-constructed building now located at that site remains in use to date as Silver Star Tent No. 4, Crown Masonic Lodge No. 383, and Mary Perkins Chapter Order of the Eastern Star No. 292. Further information on this resource can be found in Chapter VI.

Reverend Ham also founded the congregations of Mount Carmel Baptist Church and Antioch Baptist Church, which both remain active in Florence County to date. Ham, recognized as a “Son of Ebenezer,” continued to lead all three churches until his passing in 1878. At the time of his death, Ham was interred at the Ham-Benjamin-Woods Cemetery, a family burial ground. In 2004, after finding the family cemetery abandoned, the congregation of Savannah Grove Baptist Church relocated the remains of church founder, Reverend Sampson Ham, and his wife, Linda, to a tomb fronting the sanctuary, called “Roots of Savannah,” on the church grounds (Savannah Grove Baptist Church 2004).

The Roots of Savannah, erected in 1940 following the destruction of the first sanctuary by fire, and the Savannah Grove Baptist Church property is discussed further in Chapter VI.

*Alfred Rush: Slave, Representative, Deacon*

Two years prior to Ham’s death, another death shook the congregation of Savannah Grove Baptist Church. Alfred Rush, a deacon of the church and former slave of mixed-race decent, was recorded on state census records as a “mulatto” and was considered a black man to the general public. As a slave, Rush was a farmer, blacksmith, gin and mill operator, and personal servant to Edmund Gee, son of magistrate John Gee of what was then Darlington County.

As Gee’s servant, Rush learned to read, a rare skill allowed to a slave. Following the Civil War, literate freedmen like Rush won seats in the state’s 48<sup>th</sup> General Assembly, in which African Americans composed a majority of legislators due to the numerical advantage of newly freed black voters in South Carolina. Rush won a seat twice representing the Darlington District, serving as state representative during Reconstruction from 1868 to 1870 and again from 1874 to 1876. Rush had Effingham’s name changed to Rushtown, or Rush Township, in 1868, but that name was reversed in 1878 (Dana 2009)(Meder 2013).

In 1876, while returning home from a reelection campaign picnic at Mount Carmel Baptist Church, Rush and his wife, Aggy, stopped at Long Branch stream to let their horse drink before carrying on for the approximately mile-long journey ahead. At that stop, near what is now the corner of John Paul Jones and Cummings roads, Rush was assassinated. Rush was the sixth member of the South Carolina House of Representatives to be murdered during Reconstruction. The Florence County Historical Commission erected a historical marker in 2004 commemorating the tragic event and a school in Quinby is currently being renovated and will reopen under the name “Alfred Rush Academy” (Dana 2009) (Meder 2013).

## RECONSTRUCTION AND A NEW COUNTY

The Civil War ended slavery, but settled only a few of the other problems that plagued a heavily race and class-divided society. Reconstruction attempted to make changes that would favor the local freedmen, such as guaranteeing voting rights, but many of these changes proved to be fleeting. Other alterations were made to state and local government, including the abolishment of districts and a return to the county system.

Following the war's end, farmers of the Pee Dee region set out to rebuild their economy. The familiarity and relatively high cost of cotton made this crop the initial post-war selection of many growers. Though maintaining social and labor constructs of the antebellum period soon proved unsustainable as the free population, thus costly labor, doubled following the Civil War. False promises of land heightened frustrations of the newly freed population, eventually forcing most African Americans back onto the white-owned lands upon which they worked as slaves (Garrow et al. 2006).

During the 1880s, pressure to form a new county along the “west bank” of the Great Pee Dee River reached a peak. For more than 100 years, the river and its adjacent, dense swamplands, made Marion, the county seat, mostly inaccessible to those living in the west bank area. No bridges crossing the river were erected by this time, and the swamps made ferries also difficult to reach. Roads were not easily traversable and if one eventually made it to a ferry, they were not operable at night ((King 1981):91-92). James Evans succinctly argued for new-county proponents, explaining:

The foremost and most powerful reason is, that Marion—a county possessing the area of Rhode Island, and three-fifths that of Delaware—is divided in two by the Great Pee Dee River... To go from west Marion to the court house, involves two days in traveling, besides spending the night at a Marion hotel ((Evans 1888:1 quoted in; Trinkley et al. 1993).

The growing railroad town of Florence also aided arguments for creating a new west bank county. The population was rather larger for a Pee Dee community during this period, with 1,914 residents in 1880. Well-located for access by west bank residents, Florence was an ideal town in which to form a new county seat (King 1981).

In 1888, Florence County was formed, with the bustling town sharing its namesake serving as the new county seat. By late 1889, Florence County officials were already hard at work planning for new and improved thoroughfares throughout the county (King 1981).

Created from lands previously of Clarendon, Darlington, Marion, and Williamsburg counties, the new county's current boundaries were not completely settled until 1921 (Garrow et al. 2006). By that time, the county was described as holding "a total area of about 390,000 acres," making it one of the larger counties in the state. Calculations in 1921 also regarded approximately 85,000 acres of Florence County land lying idle (McNeil and Chase 1921):59-60). The relatively new county was ready for agricultural growth.

At the end of the nineteenth century, tobacco began its reemergence in the Pee Dee region, eventually becoming the area's dominant cash crop. The first major public display of this reemergence took place on October 1, 1891, at the Florence Tobacco Warehouse in Florence. Here, the first auction of flue-cured tobacco was held, hosting not only growers from Florence and Darlington counties, but also tobacco farmers from counties like Clarendon, Horry, Lancaster, Marion, Marlboro, and Sumter. Prominent tobacco businessmen from North Carolina, New York, and Virginia were also present at the grand opening of the new market (Prince 2000).

Despite the overwhelming interest in the cultivation of tobacco in the region, high cotton prices in the early twentieth century sustained some farmers' attention to this crop during the first years of the 1900s (Norris 2009). In 1910, 76 percent of Florence County's annual agricultural monetary gains were gained through a combination of cotton and tobacco. In 1920, Florence County ranked ninth in the state for the production of cotton, with total bales per annum increasing with each year. It was also in 1920 that the county tied Williamsburg in producing the most tobacco in the state with a total of 9,900,000 pounds and the city of Florence great to a population of more than 10,000 (Baker 1974; McNeil and Chase 1921).

While the Great Depression officially began for the rest of the country in 1929, Pee Dee Bright Leaf tobacco farmers were already struggling. In the summer of 1928, a massive block of storms drenched the region in 21 inches of rain in only eight days. The already mature crops were nearly ruined. That year, crops averaged 12.7 cents per pound, or around half of the average price just two years prior (Prince 2000).

Struggles in the Pee Dee continued until hope arrived in the form of the New Deal's Agricultural Adjustment Act (AAA). Under the AAA, farmers were required to not plant part of their land, and thus were paid subsidies in return. This action lessened the problem of crop surplus, thus raising crop values. In 1935, in the midst of the country's Great Depression, the Bright Leaf crop had its most profitable year since 1918 (Prince 2000). The remaining years of the decade saw the AAA's constitutionality struck down by the Supreme Court in 1936, and its revised reemergence in 1938. Tobacco farmers grew weary of new governmental controls and quotas, but were soon appeased by wartime demands (Prince 2000).

World War II, like the First World War, meant a vast increase in the demand for cigarettes. The small stress-reliever became so popular amongst soldiers that packaged rations were routinely issued to combat troops. By 1944, 25 percent of all cigarettes produced were serving the military. Along with military support, civilians were also smoking more. Amended federal controls kept tobacco crops and demand for such in concert with one another, satisfying the grower, who maintained profitability (Prince 2000).

#### MID-TWENTIETH-CENTURY FLORENCE

Following the war, Congress was careful to prevent a reoccurrence of the diminished market with which farmers struggled following World War I. Thus, the Steagall Amendment was enacted, protecting growers by supporting commodity prices at 90 percent of parity following the war's end for a period of two years. To provide further support, the official start of the two-year time period did not begin until December 31, 1946 (Prince 2000).

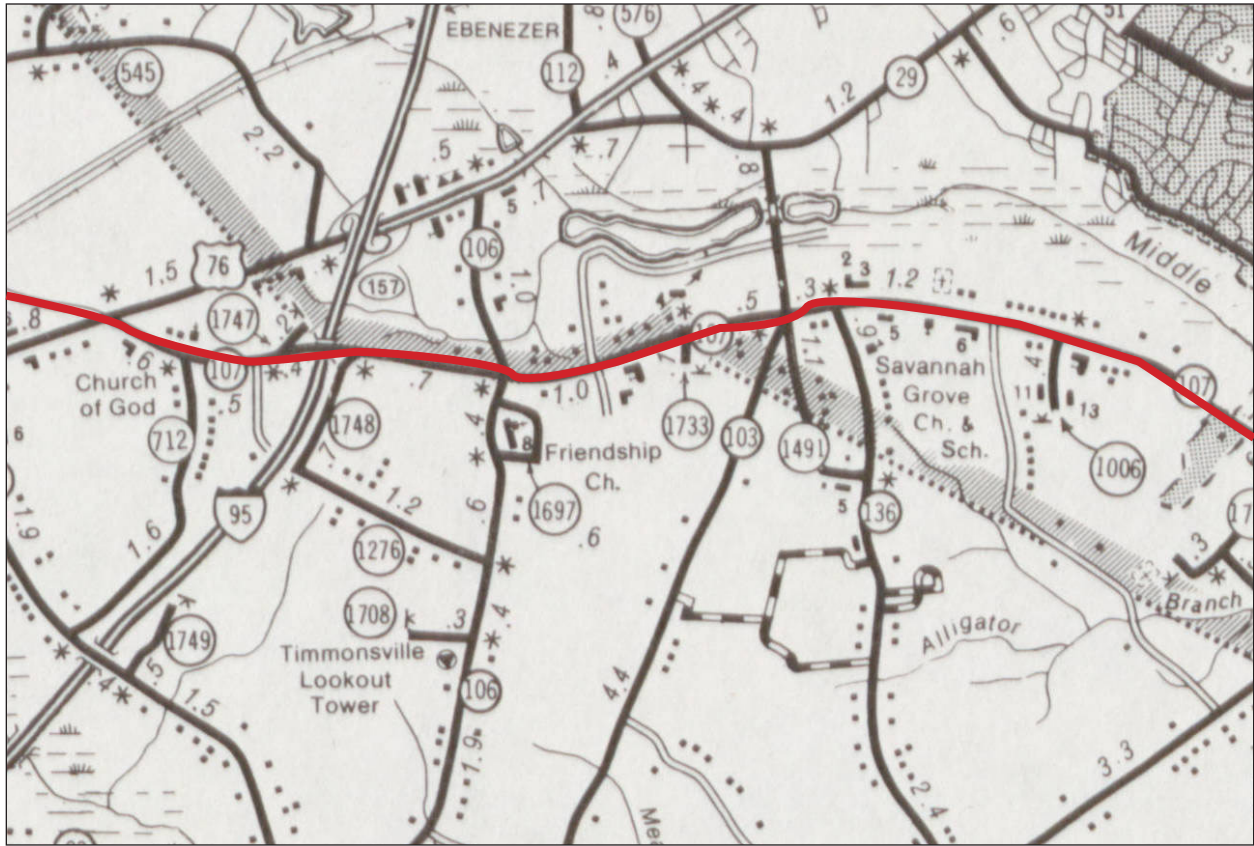
The city of Florence continued to grow with the population reaching over 10,000 by 1920. The city's limits were expanded for the first time in 1948 changing the population number from 16,094 to over 22,000. In the mid-twentieth century, industries such as DuPont and Electro-Motive began moving into Florence, leading to rural communities seeking out city factory jobs (Baker 1974:13).

The continuing popularity of cigarettes met with an era of increased advertising and prosperous countrywide growth. Prince (2000) described the 1950s as "the golden age of the golden leaf". However, with the newfound knowledge of the damaging health effects of tobacco during the mid-twentieth century, tobacco production gradually fell year-to-year in South Carolina. With the exception of occasional upturns in total crop acreage, the decline was steady. While in 1952, the United States Department of Agriculture (USDA) National Agricultural Statistics Service reported a statewide tobacco crop harvest of 132,000 acres; by 1960, this total had reduced to 80,000 acres (Prince 2000).

Despite declines in tobacco crops, growth in the city of Florence led to the widening of Highway 301, which intersects Alligator Road at the east end of the project area. By 1973, Highway 301 is described as a divided highway on the countywide highway map (Figure 11). As a result of this widening, at least three resources in the project area were relocated from that thoroughfare to parcels on Alligator Road. Assessments of these resources can be found in Chapter VI. According to residents along Alligator Road, this growth continued outward from Florence during the 1970s and thereafter, positioning Alligator Road as an area for new residential and industrial development.



Figure 11.  
Detail of 1973 Florence County Highway Map



Source: University of South Carolina Map Library

Subsequent decades saw decreased harvests of tobacco crops, with 1970 producing 68,000 acres and 1980 holding relatively steady at 65,000 acres of tobacco. The decline continued in 1990 with a recorded 51,000 acres produced in the state (Prince 2000). The most recent, and most accurate, totals for tobacco acreage were recorded in 2002 and 2007. In 2002, South Carolina produced only 30,241 acres of tobacco, while 2007 declined even further with 20,084 acres produced in all. The results of the countywide USDA Census were also available for these dates, with Florence producing 5,676 acres of tobacco in 2002, and only 2,750 in 2007. As of these results, Florence County is no longer the state's leading producer of tobacco, but has fallen to second after Horry County (U.S. Census Bureau 2007).

## IV. METHODS

### BACKGROUND RESEARCH

The goal of the background research was to identify all previously recorded archaeological sites and historic properties in and around the project area that may be adversely affected by the proposed undertaking, and to develop a general cultural and historical background to properly evaluate resources identified during field survey. Historic maps were examined to identify areas surrounding the project area with the potential to contain historic resources. The GIS database at the South Carolina Archives and History Center in Columbia was consulted for NRHP-listed properties. The site files housed at the SCIAA were examined for previously identified archaeological sites. As a result of the background research, no archaeological sites or previous surveys were found within in 0.25 mile of the current APE. In addition, no previously recorded architectural resources were identified in the APE; however, two resources were located within a 0.5-mile radius of the APE. These resources were described as not eligible for listing on the NRHP and are not located in the view shed of the current APE.

### METHODS

#### ARCHAEOLOGY

Following the background research, a four-person crew, consisting of the project archaeologist and three research assistants, conducted a pedestrian survey to inspect exposed soils, document any alterations to the natural landforms, and to identify potential archaeological deposits. The APE contains a mixture of cleared and uncleared land and commercial and residential areas.

In well drained, relatively level areas, shovel tests were excavated at a 30-meter interval on either side of the existing ROW. In more poorly drained and more steeply sloping areas, shovel test intervals were widened to 60 meters, although shovel tests were not excavated in wet soils or in obviously disturbed areas. Site boundaries were delineated on a 10-meter grid. Shovel tests were approximately 30 centimeters in diameter and excavated until culturally sterile subsoil was encountered. All soils were screened through 0.25-inch mesh hardware cloth to ensure systematic artifact recovery. Shovel tests used to investigate sites and delineate site boundaries were excavated in arbitrary 10-centimeter levels within natural strata in order to better assess integrity. Where possible, all site boundaries were delineated until two sterile shovel tests were encountered. A visual inspection and delineation tests were also placed just outside of the right-of-way, when possible, to assess whether sites continued beyond the survey area and to help estimate their extent.

For the purposes of this project, a site was identified if artifacts from the same, broad cultural period were recovered in the following three combinations: A) three or more artifacts from a 30-meter area on the surface, B) two or more artifacts recovered from a shovel test that cannot be co-joined, or C) one artifact recovered from a shovel test and one found on the surface within a 20- meter radius. Wells, chimney falls, house piers, brick scatters, and other surface features were also considered in determining site boundaries. An isolated find was identified by the presence of no more than two artifacts within a 30-meter radius or those that appeared to be obviously redeposited. Historic period cemeteries in the APE were considered archaeological sites and were recorded as such.

When a cemetery was encountered, grounds within the project area were examined for the features listed below, in addition to formal markers.

- 1. Human-sized cigar-shaped depressions or mounds;
- 2. Presence of formal stone, metal, concrete, or wooden grave markers;
- 3. Presence of dressed or undressed fieldstones arranged as head and/or footstones;
- 4. Presence of concentrations of mortuary-associated ground covers, particularly vinca, narcissus (daffodils), cedar, hemlock, crepe myrtle, gardenia, spirea, roses, lilies, and/or irises;
- 5. Stone, metal, wood, or floral enclosures that restrict land use for other (particularly agricultural) purposes;
- 6. Oval or rectangular concentrations of stone, glass, wood, metal, seashells or plastic containers, used to outline a potential grave's dimensions;
- 7. Low oval or rectangular piles of stones;
- 8. Maintained areas evidenced by removal of vegetation and unwanted debris; and/or
- 9. Oval or human-sized color/plant differences in mowed areas.

Graves in the APE were briefly inventoried, photographed, and a sketch map of the cemetery layout was produced.

## ARCHITECTURE

Buildings and structures greater than 50 years in age were assessed for their National Register eligibility. There were 17 newly recorded architectural properties surveyed using the Statewide Survey Intensive Form, produced by the South Carolina State Historic Preservation Office (SHPO). The resources were identified and surveyed in accordance with the South Carolina's SHPO's *Survey Manual: South Carolina Statewide Survey of Historic Places*, and digital photographs were taken of each one. Each resources is described individually in Chapter VI.

Also followed were the March 2011 SHPO *Guidelines for Surveying Post-World War II Neighborhoods and Ranch Houses* due to the presence of some mid-to-late twentieth-century residences within the proposed project area. While most of the residential architecture in the project area was constructed in the late twentieth century, some Minimal Traditional and Ranch houses that have reached 50 years of age are also present. Per the SHPO guidelines, the Ranch houses in the survey area over 50 years of age, which were located in groups of 10 or less and not found to be pristine, excellent examples of the house type, were not photographed or recorded on a survey card.

Properties were evaluated following the NRHP criteria and a preliminary assessment of effect for the proposed project was conducted for any property in the APE that was NRHP listed or that met the NRHP criteria for eligibility.

## LABORATORY ANALYSIS AND CURATION

All recovered artifacts were transported to the Stone Mountain, Georgia laboratory facilities of New South Associates, where they were washed, cataloged, and analyzed. Analysis included cleaning, identifying, cataloging, and curation preparation all artifacts to the standards required by the SCIAA. Distinct provenience numbers were assigned to each shovel test and surface collection point. Artifacts from each provenience were divided by class and type, and assigned a catalog number.

Analysis focused on determining period of occupation and site function. Historic artifacts were cataloged by functional category (e.g. kitchen, architecture, etc.). Prehistoric ceramics were analyzed primarily through examining surface treatment and temper. Lithic debitage and tools were cataloged by raw material, reduction stage, and tool type. Generally speaking, raw materials consisted of quartz and silicates.

New South Associates provides temporary storage for all records and artifacts, which will be turned over to SCIAA for final curation. Artifacts, photographs, and notes will be prepared using their standards.

## NATIONAL REGISTER OF HISTORIC PLACES (NRHP) EVALUATION

Cultural resources are evaluated based on criteria for NRHP eligibility specified in the Department of Interior Regulations 36 CFR Part 60: National Register of Historic Places. Cultural resources can be defined as significant if they “possess integrity of location, design, setting, materials, workmanship, feeling, and association,” and if they:

- A) are associated with events that have made a significant contribution to the broad pattern of history;
- B) are associated with the lives of persons significant in the past;
- C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,
- D) have yielded, or may be likely to yield, information important in prehistory or history.

According to National Register Bulletin 41, *Guidelines for Evaluating and Registering Cemeteries*, (Potter and Boland 1992), a cemetery can be eligible for inclusion on the NRHP if it is shown to be significant under one or more of the four basic Criteria for Evaluation (A, B, C, and or D). These are discussed in detail below.

- Criterion A: Properties can be eligible if they are associated with events that have made a significant contribution to the broad patterns of history. Under Criterion A, the events or trends must be clearly important, and the connection between the burial place and its associated context must be unmistakable.
- Criterion B: Properties may be eligible if they are associated with the lives of persons significant in our past. These persons may be of National, State or Regional importance or important to a cultural group. In the case of cemeteries, it is eligible only if there is no other appropriate site or building directly associated with her or her productive life.

- Criterion C: Properties may be eligible if they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: Properties may be eligible if they have yielded, or may be likely to yield, information important in prehistory or history. This information could include bioarchaeological data and burial items such as coffin hardware and clothing items (buttons, jewelry, etc.).



## V. RESULTS AND RECOMMENDATIONS

### ARCHAEOLOGICAL SITES

During the survey, two archaeological sites (38FL475 and 38FL476) were identified. They are described below.

#### 38FL475

Site 38FL475 is a late nineteenth- to early twentieth-century historic artifact scatter with a small prehistoric component (Figure 12). The site is situated on a low rise in the front lawn of 2830 Alligator Road, which is occupied by a mobile home. Ground visibility was less than one percent. A visual inspection of the lawn did not reveal any surface features in the immediate area.

A total of 19 shovel tests were excavated in a 10-meter (50-ft.) grid pattern until two negative shovel tests were achieved within the APE. One of those tests was placed outside of the APE to determine whether the site continued to the south. Additional shovel tests outside of the APE were not pursued due to the presence of a mobile home in shovel test locations. Five shovel tests, including the test placed outside of the APE, were positive for cultural material. Positive tests indicate that the site is at least 20x30 meters in size. Because the majority of the testing was confined to the current project's APE, the southern boundary of the site remains unknown.

The typical soil profile consisted of 30 centimeters of very dark grayish brown (10YR 3/2) loamy sand over 25 centimeters of light yellow brown (2.5YR 6/4) sand, over brownish yellow (10YR 6/6) sandy clay subsoil. Soils in the area are classified as Norfolk loamy sand. Twenty-four artifacts were recovered from the upper 30 centimeters in the loamy sand stratum. The following table presents the findings with date ranges.

*Table 1. Artifacts Recovered from 38FL475*

Artifact Type	Count	Period	Date Range
Rhyolite Flake	1	Prehistoric, Unknown	
Rhyolite Debitage	1	Prehistoric, Unknown	
Whiteware	5	Historic	1830-Present
Ironstone, Transfer Print	1	Historic	1842-Present
Ironstone, Plain	2	Historic	1842-Present
Clear Container Glass	6	Historic	
Green Container Glass	1	Historic	
Amethyst Container Glass	1	Historic	1880-1917
Aqua Container Glass	1	Historic	

*Table 1. Artifacts Recovered from 38FL475*

Artifact Type	Count	Period	Date Range
Milk Glass	1	Historic	1743-Present
Wire Nail	2	Historic	1860-Present
Cut Nail	1	Historic	1805-1870s
Brick		Historic	
Auto Glass	1	Historic/Modern	1928-Present
Canada Dry Bottle Glass	1	Modern	1960s
Total	26		

It is likely that an older house once occupied the property where the mobile home now sits. In addition, a 1950s-era one-story, rectangular house (2846 Alligator Road - 0489) is situated to the west of 38FL475.

The site, as it exists within the project area, is recommended as not eligible for the NRHP. However, the eligibility of the remainder of the site is unknown. The lithic artifacts are undiagnostic of a particular time period. Additionally, the historic artifact scatter was light and sparse and undiagnostic of a precise time period. It does not appear that the surveyed portion of the site has the potential to yield information important to the history of the region.

#### 38FL476 – LANGSTON FAMILY CEMETERY

The Langston Family Cemetery (38FL476) is located on a ridge nose overlooking Alligator Branch on the south side of Alligator Road (Figure 13). The cemetery is situated in a mixture of hard and softwood with moderate groundcover, and does not appear on any historic maps. Four grave markers were visible on the surface including three headstones and one footstone (Figure 14). The footstone presumably once had an associated headstone. It is possible that this stone was either removed from the cemetery or has fallen over and is present beneath the ground surface. Based on the position of the grave markers the cemetery measures at least 12x18 meters. All four markers are carved marble and each bears an inscription (Table 2).

Based on the visible gravestones and their inscriptions, at least four people are present in the cemetery. Wilson P. Langston, his two daughters, and presumably the footstone belongs to his wife, L. Langston. A brief search of Ancestry.com provided little information on the Langston family. In 1850 (U.S. Federal Census 1850), Wilson was one of eight children belonging to Wade Hampton Langston (50) and wife Vacey (50). The children included Mariah (23), Mahaley (22), Wilson (19), Washington (17), Rosannah (15), Pinkney (10), Abbot (8), and Vacey (7). By 1860, (U.S. Federal Census 1860) Wilson had his own family including his wife L.S. Langston and daughters Cora and Julia. No further biographical information was uncovered.

Figure 12.  
Sketch Map and Photograph of 38FL475



Source: ESRI Resource Data

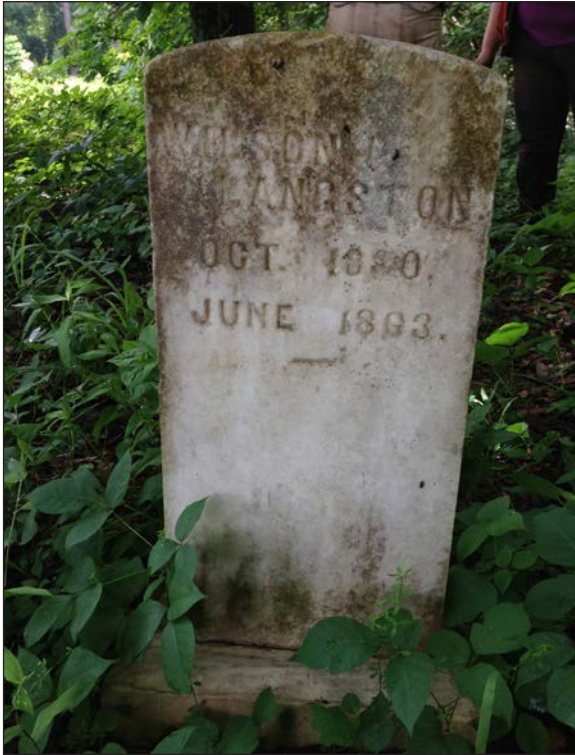
Figure 13.  
Sketch Map and Photographs of the Langston Family Cemetery



Source: ESRI Resource Data



Figure 14.  
Photographs of the Grave Markes at the Langston Family Cemetery



A. Wilson P. Langston



B. Cora Langston



C. Julia Langston



D. L.L. Footstone

*Table 2. Grave Markers at Langston Family Cemetery*

Marker Number	Marker Type	Construction	Inscription
1	Headstone	Round-shouldered Tablet on Base	WILSON P. LANGSTON OCT. 1830. JUNE 1863.
2	Headstone	Square Tablet	CORA Daughter of . W.P. & L. LANGSTON June 20, 1856. Oct. 1863 —
3	Headstone	Square Tablet	JULIA Daughter of W.P. & L. LANGSTON. Jan. 1860. Aug. 1862. —
4	Footstone	Square Tablet	L.L.

The cemetery was evaluated under the National Register Criterion Considerations for cemeteries, but does not meet the requirements for eligibility. Although recommended as not eligible for inclusion on the NRHP, the cemetery is protected under several South Carolina Codes that safeguard historic cemeteries including: South Carolina Codes 27-43-10, 27-43-20, 27-43-30, and 16-17-600. Permits are required for the exhumation and transport of human remains by SC DHEC (South Carolina Code of Regulations Section 61-19-28, 29). New South Associates, Inc. recommends avoidance of the cemetery.

## ARCHITECTURAL HISTORY

Two previously recorded residential resources, Rogers House (0168) and 2016 West Palmetto Street (0169), were located within 0.5 mile of the APE. These resources were described as not eligible for listing on the NRHP and are not located within the APE. Two bridges carrying Alligator Road were also identified during background research, but neither appear to be over 50 years of age.

The present survey identified 17 historic resources (see Figure 1, Table 3). Four of these resources are residential buildings with at least one historic outbuilding on site. Five of the resources are buildings or structures originally used for agricultural, commercial, religious, or, civic/social purposes.

Table 3. Newly Surveyed Historic Resources

Site Number	Address/Location/Name	Date	NRHP Recommendation
Florence West Quadrangle (no. 153)			
0473	2115 Alligator Road	c. 1940	Not Eligible
0474	Barn at 2429 Alligator Road	c. 1930	Not Eligible
0475	2433 Alligator Road	c. 1930	Not Eligible
0476	2437 Alligator Road	c. 1920	Not Eligible
0477	2441 Alligator Road	1919	Not Eligible
0477.01	Outbuilding at 2441 Alligator Road	c. 1960	Not Eligible
0478	Savannah Grove Baptist Church	1939	Not Eligible
0479	2707 Alligator Road	c. 1948	Not Eligible
0480	2810 Alligator Road	c. 1940	Not Eligible
0480.01	Shed at 2810 Alligator Road	c. 1945	Not Eligible
0480.02	Well House at 2810 Alligator Road	c. 1940	Not Eligible
0481	Atkinson's Grocery	c. 1948	Not Eligible
0482	3416 Alligator Road	c. 1940	Not Eligible
0483	Dairy Barn at 3439 Alligator Road	c. 1947-1949	Not Eligible
0483.01	Concrete Stave Silo at 3439 Alligator Road	c. 1947-1949	Not Eligible
0484	3511 Alligator Road	c. 1940	Not Eligible
0485	2277 Twin Church Road	c. 1950	Not Eligible
0485.01	Outbuilding at 2277 Twin Church Road	c. 1955	Not Eligible
0487	3523 Alligator Road	c. 1940	Not Eligible
0487.01	Well House at 3523 Alligator Road	c. 1940	Not Eligible
0488	Crown Masonic Lodge No. 383	1952	Not Eligible
0489	2836 Alligator Road	c. 1950	Not Eligible
Timmons ville Quadrangle (no. 514)			
0486	4141 Alligator Road	c. 1940	Not Eligible

## 2115 ALLIGATOR ROAD (0473)

The one-story, rectangular house at 2115 Alligator Road was built with a lateral-gabled roof circa 1940 (Figure 15A). While the building appears to have been originally constructed as a single-family residence, its current state of abandonment leaves its most recent use unclear. Damaged and missing windows and doors have exposed the resource to weather and vegetative overgrowth. The house is in a state of disrepair.



Figure 15.  
2115 Alligator Road (0473)



A. South Elevation



B. Southeast Oblique

The foundation of the house is covered in vinyl and was therefore not visible during the field visit. The building's exterior is covered in wood clapboard and wood sash windows hung alone and in pairs where still present. While several windows are either missing or boarded over by plywood, window remnants suggest that the primary window form is six-over-six wood sash (Figure 15B).

Due to the dilapidated state of the resource, alterations and additions are not completely readable. The building's façade includes two entrances, each with its own porch, but it is not clear if both porches are original. Near the east end of the façade is a single-bay shed roof carried by wood knee braces marking one entrance. The door of this bay is now missing. An engaged corner porch covering one window bay and a second entrance bay marks the west end of the façade. A multi-light and paneled door marks the entrance bay.

Exposed wood rafter tails line the lateral gabled roof. The roof is clad in standing-seam metal sheeting. Two brick chimneys are visible in the roof surface.

The house at 2115 Alligator Road is not known to be associated with an event or a person and was therefore not evaluated under Criteria A or B. The resource was evaluated under Criterion C for architecture. This building does not appear to have moved from its original site, and therefore retains integrity in the area of location. While modern development is quickly encroaching upon this area, the house remains on a relatively rural, wooded stretch of Alligator Road, thus its setting is maintained as well. The state of abandonment and extensive vegetative overgrowth render it impossible to tell if the resource maintains integrity in the area of design. Integrity in the areas of materials and workmanship is diminished due to the absence of original fabric and damage. The house does evoke the sense of a mid-twentieth-century residence and thus retains integrity in the areas of feeling and association. Overall, however, the property is not a good example of a historic residence and is recommended not eligible for listing on the NRHP.

#### BARN AT 2429 ALLIGATOR ROAD (0474)

The two-story, rectangular barn at 2429 Alligator Road was built with a lateral-gabled roof circa 1930 (Figure 16A). According to the building's owner, the barn was relocated to its present site in the 1970s during road improvements along Highway 301. The barn may have once been used as a tobacco barn but is not currently in use and is badly damaged.

The rectangular foundation of the barn was reconstructed in the 1970s at its new location and is composed of non-historic concrete block. Where still intact, the exterior walls of the resource are composed of a conglomeration of materials, including wood clapboard, board and batten, and vertical flushboard. In several places, the exterior walls are covered in asphalt roll.

The east and west elevations of the barn each hold replacement vertical wood board entrances. The east elevation door reads as the main entrance to the barn and includes a small poured slab at the door, which is topped by a sagging shed roof. A single wood post currently supports the shed roof and the door includes an attached wood screen door. Above the asphalt shingle-covered shed roof is an added, wood second-story door. The west elevation door sits below a gable frame, which marked the end of a roof that is now missing from the open wood frame west addition (Figure 16B).

The rear elevation's first story is covered by a shed addition marked by a set of metal double doors at its east end. This addition includes an exterior concrete block chimney along its north elevation. Above the shed addition, the second story framing of the main massing is exposed due to the absence of exterior wall cladding. Where not missing, the roofs of the main massing and shed addition are covered in standing-seam metal sheeting.

The barn at 2429 Alligator Road is not known to be associated with an event or a person and was therefore not evaluated under Criteria A or B. The resource was evaluated under Criterion C for architecture. This building was moved from its original site, and therefore does not retain integrity in the area of location. Surrounded by a mix of relocated historic resources and modern development has diminished the resource's original setting. The additions to the building do not support integrity in the area of design. Integrity in the areas of materials and workmanship is diminished due to the absence of original fabric and damage. The barn does not evoke the sense of an early twentieth-century tobacco barn and thus does not retain integrity in the areas of feeling and association. It is for these reasons that the barn at 2429 Alligator Road is recommended not eligible for listing on the NRHP.

#### 2433 ALLIGATOR ROAD (0475)

The one-story, rectangular house at 2433 Alligator Road was built with a jerkinhead-gabled roof circa 1930 (Figure 17A). According to a neighbor, the house was relocated to its present site in the 1970s during road improvements along Highway 301. The house appears to retain its original use as a single-family residence.

The rectangular foundation of this house was reconstructed in the 1970s at its new location and is composed of non-historic concrete block and brick. Hung alone and in pairs, the original six-over-six wood sash windows are set in walls clad in replacement aluminum siding (Figure 17B). Early replacement windows composed of horizontal two-over-two wood sash are located on the rear elevation and rear shed addition.



Figure 16.  
Barn at 2429 Alligator Road (0474)



A. Northeast Oblique



B. Southeast Oblique

Figure 17.  
2433 Alligator Road (0475)



A. Southeast Oblique



B. West Elevation

The symmetrical façade fenestration features four windows with faux shutters flanking a centrally set entrance. The entrance holds a replacement modern door behind a vinyl storm door. A front-facing gabled porch tops the three central bays and appears to be an addition concurrent with the 1970s relocation.

A corbeled brick chimney is centrally located in the ridgeline of the main massing roof. The main massing and addition roofs are all covered asphalt shingles and louvered wood gable vents are sited in each gable end.

The house at 2433 Alligator Road is not known to be associated with an event or a person and was therefore not evaluated under Criteria A or B. The resource was evaluated under Criterion C for architecture. This building was moved from its original site, and therefore does not retain integrity in the area of location. Surrounded by a mix of relocated historic resources and modern development has diminished the resource's original setting. The façade and rear additions to the building do not support integrity in the area of design.

Integrity in the areas of materials and workmanship is diminished due to the presence of replacement siding and front door. The house does evoke the sense of an early twentieth-century residence and thus retains integrity in the areas of feeling and association. Therefore, the house at 2433 Alligator Road is recommended not eligible for listing on the NRHP.

#### 2437 ALLIGATOR ROAD (0476)

The one-story, rectangular house at 2437 Alligator Road was built with a lateral-gabled roof circa 1920 (Figure 18A). According to a neighbor, the house was relocated to its present site in the 1970s during road improvements along Highway 301. The house retains its original use as a single-family residence. The owner of the house requested no additional photography of the resource during the field visit.

The foundation of this house was reconstructed in the 1970s at its new location and is composed of non-historic concrete block. A large rear addition covering the entire north elevation nearly doubles the original building footprint. All windows and the front door are vinyl replacements, as is exterior siding. The front-facing gabled porch is also a replacement and appears to date to the building's 1970s relocation.

The main massing and addition roofs are covered asphalt shingles. No chimney was detected during the field survey.



Figure 18.  
2437 Alligator Road (0476) and 2441 Alligator Road (0477)



A. Southeast Oblique



B. Southwest Oblique



The house at 2437 Alligator Road is not known to be associated with an event or a person and was therefore not evaluated under Criteria A or B. The resource was evaluated under Criterion C for architecture. This building was moved from its original site, and therefore does not retain integrity in the area of location. Surrounded by a mix of relocated historic resources and modern development has diminished the resource's original setting. The façade and rear additions to the building do not support integrity in the area of design. Integrity in the areas of materials and workmanship is diminished due to the presence of replacement siding, windows, and front door. The house no longer evokes the sense of an early twentieth-century residence and does not retain integrity in the areas of feeling and association. Thus, the house at 2437 Alligator Road is recommended not eligible for listing on the NRHP.

#### 2441 ALLIGATOR ROAD (0477 AND 0477.01)

According to the tenant, the one-story, rectangular bungalow at 2441 Alligator Road was built with a front-facing-gabled roof in 1919 (Figure 18B). Two gabled-roof additions extend the footprint of the house from the rear elevation. The resource retains its original use as a single-family residence.

The foundation and walls of this house were constructed using concrete block, while the corners of the resource are marked by painted brick quoins. The front gable is clad in asbestos shingles and exposed wood rafter tails line the main massing and rear addition roofs.

While over 50 years old, most main massing windows either do not fully fit within the original bay opening or feature a later sash composition. The wood windows feature six-over-six and horizontal two-over-two horizontal sash, while a large, multi-light wood picture window adorns the façade. Painted brick headers frame main massing window bays.

Much of the façade is covered by a front-facing gabled porch, which is slightly offset and typical of the bungalow form. The porch tops a sash window and the picture window, which flank a replacement front door behind a vinyl storm door. The poured concrete porch floor is carried by a concrete block foundation that is lined across its front by painted brick. Four concrete block piers topped by three lines of brick carry squared wood porch supports to the front-facing gable covered in synthetic siding.

A brick chimney is visible in the west side roof surface, while a lateral exterior concrete block chimney is present on the east elevation (Figure 19A). The main massing and addition roofs are covered asphalt shingles.

Figure 19.  
2441 Alligator Road (0477 and 0477.01)



A. Southeast Oblique



B. Outbuilding, Southeast Oblique

A large outbuilding of unknown use is also present at 2441 Alligator Road (Figure 19B). Overgrown paved areas alongside the east edge of the house leading to the building suggest that the outbuilding was most likely used as a garage and/or large equipment workshop. The building is composed of two large, shed-roof sections set atop a poured concrete floor. A mix of exterior cladding includes standing-seam metal sheeting, plywood, and asphalt roll. Standing-seam metal also covers the roof sections. The replacement, paneled door on the south elevation of the building appears to be the sole fenestration on the outbuilding.

The house and outbuilding at 2441 Alligator Road are not known to be associated with an event or a person and were therefore not evaluated under Criteria A or B. The house and outbuilding were evaluated together under Criterion C for architecture. The buildings do not appear to be relocated and therefore retain integrity in the area of location. The surrounding mix of relocated historic resources and modern development has diminished the integrity of setting of the two buildings. Additions to the house do not support integrity in the area of design. Integrity in the areas of materials and workmanship is diminished due to replacement windows and doors. While the house evokes the sense of an early twentieth-century residence, its outbuilding does not convey its period of construction and the property therefore does not retain integrity in the areas of feeling and association. It is for these reasons that the house and outbuilding at 2441 Alligator Road are recommended not eligible for listing on the NRHP.

#### SAVANNAH GROVE BAPTIST CHURCH (0478)

The two-tower, front-gabled church at 2620 Alligator Road was constructed in 1940 as a replacement for a previous sanctuary destroyed by fire in 1939 (Figure 20A). Since its 1940 construction, the church congregation has called this sanctuary “Roots of Savannah.” With one addition over 50 years of age, and two additional large, modern additions, the building has grown to nearly 10 times its original size. Nonetheless, its 1940 main massing remains decipherable and intact. With the construction of a new sanctuary addition in 1999, the Roots of Savannah is now used as a fellowship hall. The congregation of Savannah Grove Baptist Church has been the sole operator of the facility since its founding in 1866.

The foundation and exterior walls of the Roots of Savannah are clad in brick veneer, which was added during a remodeling of the church buildings in 1961. At that time, a cornerstone was added near the base of the east tower on the east elevation, giving dates of church organization, rebuilding, additions, and remodeling through 1961. When constructed in 1940, the Roots of Savannah was sheathed in wood clapboard and set upon a brick foundation. Though the overall original form of the Roots of Savannah is still readable, several additional building elements were altered during the 1961 remodeling and during later periods of improvement. While



Figure 20.  
Savannah Grove Baptist Church (0478), 1 of 4



A. Roots of Savannah, Northwest Oblique



B. Educational Building Addition, Southwest Oblique

patterned wood sash windows remain intact along the façade and side elevations, double doors and transoms in the towers are modern, metal replacements. Originally reached by a simple set of steps, both doors are currently reached by a landing with steps on each side with low metal railings.

Above each door, a stuccoed triangular form evoking a pediment was installed during the brick veneering of the building. The form is repeated in small, triangular, wood-frame windows that adorn both towers and the front gable, and are original to the 1940 sanctuary. Below the front-gable triangular window is a rectangle covered in wood beadboard that once housed a wood tripartite window. The east tower also includes an original, louvered, pointed vent in each of its elevations. Both towers and the gabled roof are covered in asphalt shingles.

A small portion of the rear elevation remains visible despite the presence of an addition and reveals a wood clapboard-clad gable end with a rectangular louvered wood gable vent (Figure 20B).

The rear elevation is almost completely covered by a 1950 addition that was also remodeled in 1961. This addition, erected as an educational building, is covered in brick veneer, but has maintained its original six-over-six wood sash windows atop brick header sills. The educational building addition was constructed with space for support rooms like a kitchen, chapel, dressing rooms, restrooms, a superintendent's office, library, and pastor's study, and altered the building footprint to an L shape. The entrance to the educational building addition is centrally set in the east gable end, where a replacement, metal-framed, single-light door is accessed by a low, poured concrete ramp. Another entrance bay is in the north elevation of the addition and is no longer in use. Here, three brick steps lead to a metal, lightless door (Figure 21A).

A side- and rear-facing set of large gable additions gave the building an irregular footprint in 1985 (Figures 21B and 22A). The additions of an educational complex and administrative wing are also covered in brick veneer whose color is redder than that of the sanctuary and educational building addition. In 1999, architect Thomas R. King and contractor John S. Clark completed a 24,500-square-foot sanctuary addition (Figure 22B). The addition is connected to the 1985 additions and also includes a porte cochère on the rear elevation Figure 23A.

Detached additions to the property include several non-historic outbuildings, including a parsonage erected in 1968. Adjacent to the main church property is a community park, constructed for use by the public by the church the between 2003 and 2008. In 2004, the church relocated the remains of church founder Sampson Ham and his wife, Linda, from an abandoned family cemetery to the church grounds. The remains of the Hams were reinterred in a marble

Figure 21.  
Savannah Grove Baptist Church (0478), 2 of 4



A. Roots of Savannah and Educational Building Addition, Northeast Oblique



B. 1985 Addition, East Elevation



Figure 22.  
Savannah Grove Baptist Church (0478), 3 of 4



A. Roots of Savannah and 1985 Addition, Northwest Oblique



B. Roots of Savannah and 1999 Sanctuary Addition, Northwest Oblique

Figure 23.  
Savannah Grove Baptist Church (0478), 4 of 4



A. 1999 Sanctuary Addition and 1985 Addition, Southwest Oblique



B. Tomb of Sampson and Linda Ham, Roots of Savannah

tomb atop white gravel between the two entrances of the 1940 sanctuary (Figure 23B). The landholdings of the church have grown from its initial single acre in 1866 to approximately 46 contiguous acres.

Savannah Grove Baptist Church is not known to be associated with a significant event and therefore was not evaluated under Criterion A. The church was evaluated under Criteria B and C for its association with significant persons and for architecture.

The 1940 sanctuary building has not been relocated and retains integrity in the area of location. Savannah Grove Baptist Church does not retain integrity in the area of setting due its current surroundings of non-historic residential and commercial buildings. Extensive additions to the sanctuary, combined with some alterations to 1940 building elements have diminished the church's integrity in the areas of design, materials, and workmanship. However, its readable main massing aids in maintaining the feeling and association of an early twentieth-century religious resource. Its association with historical figures Sampson Ham (1815-1878) and Alfred Rush (date of birth unknown-1876) is not conveyed, as the property does not retain integrity from the period of these significant historic associations.

It is for these reasons that Savannah Grove Baptist Church is recommended not eligible for listing on the NRHP.

It is worth noting that the tomb of Sampson and Linda Ham, which lies between the entrances of the Roots of Savannah, is in close proximity to the existing ROW. The tomb is protected under several South Carolina Codes of Law (South Carolina Code 27-43-20, Removal to Plot Agreeable to Governing Body and Relatives; 27-43-30, Supervision of Removal Work; and 16-17-600, Destruction of Graves and Graveyards). It is thus recommended that the location of this resource be taken into consideration when planning for proposed improvements.

#### 2707 ALLIGATOR ROAD (0479)

According to the builder, who still owns and lives in the house, the one-story, rectangular bungalow with a front-facing-gabled roof at 2707 Alligator Road was built behind the mature tree that now shades the front yard around 1948 (Figure 24). A gabled-roof west elevation addition greatly enlarged the building circa 1960, while two non-historic additions, a smaller shed-roof addition and an additional hipped-roof addition, along the rear increased the building footprint a bit more circa 1975. A concrete pad located southeast of the house suggests the former presence of an outbuilding. No additional outbuildings are present at this property. The resource retains its original use as a single-family residence.



Figure 24.  
2707 Alligator Road (0479)



A. Southeast Oblique



B. Southwest Oblique

The foundation and walls of the original portion of the house were constructed using concrete block, while the circa-1960 addition was also constructed in concrete block. The front gable of the main massing and the gable end of the first addition are covered by wood clapboard.

Main massing fenestration consists of wood six-over-six sash windows and a replacement front door behind an aluminum screen door. The earliest addition includes a tripartite window on the façade in which wood horizontal two-over-two sash windows flank a fixed, single-light window. Remaining windows on this addition are also horizontal two-over-two wood sash. An additional front door behind another aluminum screen door is also part of this addition, and is marked by three diagonal lights.

A concrete block porch floor covers much of the now-extended façade. Circular wood posts set into the concrete block porch floor along the circa-1960 addition carry a shed roof above the tripartite window and second entrance.

A brick chimney protrudes from the west side of the main massing roof surface, while a concrete block exterior chimney is present in the gable end of the circa-1960 addition. The roof of the entire building is covered in asphalt shingles.

The house at 2707 Alligator Road is not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. The house was evaluated under Criterion C for architecture. The building does not appear to be relocated and therefore retains integrity in the area of location. The primarily non-historic resources surrounding the house have diminished the integrity of setting of the building. Additions to the house do not support integrity in the area of design. Integrity in the areas of materials and workmanship has been maintained overall through the preservation of original siding and windows. While the house no longer evokes the sense of an early twentieth-century residence due to later additions, it does convey the feeling and association of a building at least 50 years of age. This house is not a good example of the historic bungalow form and is therefore recommended not eligible for listing on the NRHP.

#### 2810 ALLIGATOR ROAD (0480, 0480.01, 0480.02)

The rectangular house at 2810 Alligator Road was constructed circa 1940 in the bungalow form with a jerkinhead-gabled roof (Figure 25A). The building's footprint was extended circa 1950 with a rear concrete block and wood shiplap gable addition that looks to have been constructed with an open porch that was enclosed at a later date (Figure 25B). This originally single-family residence appears to remain in use as such to date. Two historic outbuildings are also present on this property.



Figure 25.  
2810 Alligator Road (0480)



A. Facade



B. Southeast Oblique



Constructed of concrete block with wood shiplap in the gable ends, this house is typical of others found in the area. Its original, wood six-over-six sash windows are found throughout the building hung alone and in pairs. The windows on the main massing and the concrete block portion of the addition all sit atop a sill of brick headers and most include added aluminum screens (Figure 26A).

The building's front door, which sits behind a vinyl screen door, is original and includes six lights above wood panels. The door is offset between two sets of paired sash windows flanked by faux louvered shutters. A hipped-roof porch that covers nearly all of the façade tops these bays. Two concrete steps lead onto the stuccoed concrete block and poured concrete porch, which is also accessed by an added wood American with Disabilities (ADA) ramp. The porch, which features no railing, includes three stuccoed concrete block piers topped by two lines of brick headers and stretchers. The piers carry battered wood supports to the asphalt shingle-covered hipped roof.

Brick chimneys are visible in both the east and west sides of the roof surface. The main massing, porch, and addition roofs are all covered in asphalt shingles.

The shed and well house at 2810 Alligator Road were constructed circa 1945 and circa 1940, respectively. Both were erected in concrete block, which the shed boasting fenestration on its façade and side elevations. Its façade, or north elevation, holds a simple plywood door, while the side windows, which are now covered, sit atop brick header sills matching those on the main house (Figure 26B and 27A). The gable end and roof of the shed are covered in corrugated metal. The well house holds a single plywood door on its north elevation, which is shielded by an unsupported gabled roof overhang (Figure 27B). The gable end of the well house is also covered in plywood, while asphalt shingles top its roof.

The house and outbuildings at 2810 Alligator Road are not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. Together, the house and outbuildings were evaluated under Criterion C for architecture. The house and its outbuildings do not appear to be relocated and therefore retain integrity in the area of location. The primarily non-historic resources surrounding the house have diminished the integrity of setting of the property. Additions and alterations to the house and outbuildings are few, thus maintaining the property's integrity in the areas of design, materials, and workmanship. This property continues to evoke the sense of an early twentieth-century residence and conveys the feeling and association of a historic residential property. While much of its integrity is intact, the property at 2810 Alligator Road is not an exceptional example of a bungalow house and its outbuildings and is thus recommended not eligible for listing on the NRHP.

Figure 26.  
2810 Alligator Road (0480 and 0480.01)



A. Northwest Oblique



B. Shed, Northwest Oblique



Figure 27.  
2810 Alligator Road (0480.01 and 0480.02)



A. Shed, Northeast Oblique



B. Well House, Northeast Oblique

## ATKINSON'S GROCERY (0481)

The rectangular, front-gabled store building at 3107 Alligator Road was constructed circa 1948 in the one-part vernacular country store form (Figure 28A). The building's footprint was extended with a side feed shed addition that has decayed and fallen in over time. The building is no longer in use and is in a state of disrepair.

Set at the crossroads of Alligator Road and Knollwood Drive, the store is surrounded by a small parking lot covered in asphalt and gravel that has become overtaken by grass with time (Figure 28B). The lot appears to have once been accessible from both roads, but is now only accessed via Knollwood Drive. A small paved island in this parking area includes a once-lighted overhang on a steel post with hooks for gasoline pumps (Figure 29). Just north of the building is a small, non-historic outbuilding behind a chain-link fence that appears to be in use as a commercial enterprise. West of the store building is a non-historic residence that is associated with the resource.

Constructed of concrete block with wood shiplap in the gable ends, this store is typical of other construction of this period in the vicinity despite being slightly wider than a residential building. The only visible fenestration is found in two large, boarded-up windows and a centrally set, single-light wood door on the façade. While no porch is present on the building, a narrow, paved sidewalk spans the entire façade of the main massing and shed addition.

Above the door, in the gable end is a simple, painted sign reading, "Atkinson's Grocery" set below a set of paired, rectangular metal vents. Where still intact, the badly damaged roof is covered in asphalt shingles.

The one-part vernacular country store at 3107 Alligator Road is not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. The store was instead evaluated under Criterion C for architecture. Atkinson's Grocery does not appear to be relocated and therefore retains integrity in the area of location. The primarily non-historic resources in the vicinity have diminished the integrity of setting of the store. The building's state of abandonment has left many of its original features in ruins, thus it does not convey integrity in the areas of design, materials, and workmanship. This property nonetheless continues to evoke the sense of a mid-twentieth-century country store and thus maintains integrity in the areas of feeling and association. Atkinson's Grocery is in an elevated state of disrepair and is not a good example of a one-part vernacular country store. Therefore, this resource is recommended not eligible for listing on the NRHP.



Figure 28.  
Atkinson's Grocery (0481), 1 of 2



A. Southeast Oblique



B. View South toward Alligator Road and Knollwood Drive Intersection

Figure 29.  
Atkinson's Grocery (0481), 2 of 2



A. Gasoline Island, View Northeast



B. Gasoline Island, View Southwest



## 3416 ALLIGATOR ROAD (0482)

This rectangular, side-gabled minimal traditional house was constructed circa 1940 at 3416 Alligator Road (Figure 30). According to a neighbor, this house was relocated from a military base in the Charleston area following World War II. The building's footprint has been expanded with a gable extension to the west. If this building was indeed relocated from a military base, it was likely used as some sort of residence from its time of construction. It is currently in use as a single-family residence.

Constructed at this site atop a concrete block foundation, the small, frame residence is clad in replacement vinyl siding. Hung alone and in pairs, the windows are all wood six-over-six sash and most are now covered in aluminum screens. The front door has three horizontal lights above wood panels and sits at the top of a roofless stoop porch. The porch is built of concrete block and accessed by concrete block steps. A brick chimney sits in the rear roof surface of the asphalt shingle-covered roof with no overhanging eaves.

This house is not known to be associated with any events or persons of particular significance and was therefore not evaluated under Criteria A or B. The house was evaluated under Criterion C for architecture. According to a neighbor, this building was moved to its current site just after World War II and therefore does not have integrity in the area of location. The primarily non-historic residential and industrial resources surrounding the house have diminished integrity in the area of setting. The addition and replacement siding diminish the building's integrity in the areas of design, materials, and workmanship. This house nonetheless continues to evoke the sense of an early twentieth-century residence and thus maintains integrity in the areas of feeling and association. The house at 3416 Alligator Road is not a good example of a historic residence and is therefore recommended not eligible for listing on the NRHP.

## DAIRY BARN AND CONCRETE STAVE SILO (0483 AND 0483.01)

The rectangular dairy barn at 3439 Alligator Road was constructed with a front-facing gable roof and situated laterally along Alligator Road. Immediately north of the dairy barn is a concrete stave silo that was most likely connected to the barn when first constructed (Figure 31A). According to the owner, the foundation of a second silo or other structure was present immediately northwest of the extant silo as late as the 1980s. This foundation is no longer present and the surviving silo is damaged and no longer in use. The barn is now used for storage. Both the barn and silo were constructed between 1947 and 1949 and were employed by Sealtest Dairy during part of their active use. The barn and silo are now part of a parcel occupied by a non-historic residence.

Figure 30.  
3416 Alligator Road (0482)



A. Northeast Oblique



B. Northwest Oblique

Figure 31.  
Dairy Barn and Concrete Stave Silo (0483 and 0483.01) 1 of 2



A. Barn and Silo, Looking South



B. Barn and Silo, Looking East



Constructed atop a poured slab foundation, the dairy barn was constructed of concrete block with wood flushboard covering gable ends. Square windows covered by vertical board shutters are found throughout the building, in lines of seven along side elevations and flanking the centrally set double doors at each gable end. Several windows are currently missing shutters and covered by a variety of materials.

The west elevation, which reads as the building's façade, includes a set of mismatched, replacement wood double doors (Figure 31B). Above the doors, in the flushboard gable, is an added six-over-six wood sash window. The east elevation gable end features a set of original, diagonally reinforced wood double doors below a wood gable vent (Figure 32A). Lined by exposed wood rafter tails, the gabled roof of the dairy barn is covered in asphalt shingle siding.

The silo is constructed of small, precast concrete blocks or staves (Figure 32B). Single and paired steel hoops encompass the silo, holding the tower together. A ladder with steel and concrete rungs is intact within the silo, but damage to concrete staves and overgrowing vegetation has left this silo currently unusable.

This barn and silo are not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. The property was evaluated under Criterion C for architecture. The dairy barn and silo at 3439 Alligator Road has not moved and holds integrity in the area of location. While the immediate vicinity remains rural, encroaching non-historic and modern development diminish its integrity in the area of setting. Replacement of doors and original wood shutters and deteriorating materials of the barn and silo render the resources unable to convey integrity in the areas of design materials, and workmanship. The dairy barn and silo nonetheless continue to evoke the sense of early twentieth-century agricultural resources and therefore maintain integrity in the areas of feeling and association. The dairy barn and silo at 3439 Alligator Road are not excellent examples of historic agricultural resources and are therefore recommended not eligible for listing on the NRHP.

#### 3511 ALLIGATOR ROAD (0484)

The rectangular, side-gabled house at 3511 Alligator Road was constructed circa 1940 (Figure 33). The building's footprint has been expanded with a gable extension on the west elevation, as well as at least two rear elevation additions that together more than double the original size of the resource. During field survey, the rear elevation was not easily visible, but aerial photography reveals the extent of the additions. Several non-historic shed outbuildings are also present on the property, which remains in use for its original intent as a single-family residence.

Figure 32.  
Dairy Barn and Concrete Stave Silo (0483 and 0483.01) 2 of 2



A. Barn, Southeast Oblique



B. Silo, Looking West

Figure 33.  
3511 Alligator Road



A. Southeast Oblique



B. Southwest Oblique



The addition of vinyl cladding to the foundation of the building prevented view of its material makeup during the field survey. Vinyl counterparts have also replaced siding, several windows, and faux shutters throughout the building. Where still in place, original wood sash windows hung alone and in pairs are composed of both horizontal two-over-two and six-over-six wood sash.

The originally single-bay, front-facing gable entrance porch has been extended along the full façade of the main massing by a roofless, wood-board-floor extension carried by a wood pier foundation. Concrete block steps flanked by added wood railings lead onto the wood-board floor between two decorative wrought-iron porch supports. The small gabled roof above the replacement vinyl front door is also covered in vinyl siding. The front door also includes a vinyl storm door. No chimneys were detected in the asphalt shingle-covered roof during the field survey.

This house appears to be sited in its original location and therefore retains integrity in that area. The primarily non-historic residential and commercial resources surrounding the house have diminished integrity in the area of setting. Large rear additions and replacement siding and windows diminish the building's integrity in the areas of design, materials, and workmanship.

The original main massing, however, remains readable, thus the house continues to evoke the sense of an early twentieth-century residence and thus maintains integrity in the areas of feeling and association. Overall, the house at 3511 Alligator Road is not an exceptional example of a historic residence and is therefore recommended not eligible for listing on the NRHP.

#### 2277 TWIN CHURCH ROAD (0485 AND 0485.01)

The residence at 2277 Twin Church Road consists of a house and outbuilding constructed circa 1950 and 1955, respectively (Figures 34 and 35A). The rectangular minimal traditional house includes a typical front-facing gable extension original to its construction, as well as a circa-1960, side-gable, partially enclosed double-carport addition along its south elevation. Originally constructed as a single-family residence, the resource now doubles as a residence and business and is accessed by a U-shaped driveway serving Twin Church Road.

Brick veneer covers both the foundation and exterior walls of both the main massing and circa-1960 addition of the house. All windows and doors on both the main massing and addition are synthetic replacements, with many windows on the main massing also flanked by faux vinyl shutters.

Figure 34.  
2277 Twin Church Road (0485)



A. Southeast Oblique



B. Facade, East Elevation



Figure 35.  
Outbuilding at 2277 Twin Church Road (0485.01) and 4141 Alligator Road (0486)



A. Northeast Oblique



B. Southwest Oblique

An engaged porch that culminates in the front-facing gable extension marks the façade of the main massing. Brick steps lead onto a brick porch floor supported by a brick veneer-covered foundation. Three slightly battered, circular wood supports carry the engaged porch roof.

The originally south gable end includes an exterior brick chimney alongside the asphalt shingle-covered roof of the main massing. A second wide brick chimney is set in the south gable end of the enclosed portion of the addition. Carried by thin metal poles, the double carport terminates in a secondary entrance now used as the business entrance and includes a low brick wall and single brick post along the south elevation. The addition roof is also covered in asphalt shingles.

The gabled-roof outbuilding sits atop a poured concrete foundation and includes a side-shed addition. The roof is covered in asphalt shingles and the siding and door area replaced in aluminum.

This house and outbuilding are not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. The property was evaluated under Criterion C for architecture. The house and outbuilding at 2277 Twin Church Road do not appear to be moved and therefore have integrity in the area of location. While the Alligator and Twin Church roads intersection remains primarily rural, encroaching non-historic residential development is diminishing integrity of the property in the area of setting. The large addition and replacement, non-historic elements diminish the integrity of the house and outbuilding in the areas of design, materials, and workmanship. With its large addition and replacement materials, the house and outbuilding do not convey the sense of a minimal traditional home and historic outbuilding. The property at 2277 Twin Church Road is not a good example of a historic residence and is therefore recommended not eligible for listing on the NRHP.

#### 4141 ALLIGATOR ROAD (0486)

The rectangular house at 4141 Alligator Road was constructed circa 1940 in the bungalow form with a front-facing-gabled roof lined in exposed wood rafter tails (Figure 35B and Figure 36A). The building's footprint has been extended to the rear with a shed addition, but retains its overall historic size and form. The building retains its original use as a single-family residence. Non-historic shed outbuildings are also located to the rear of the parcel.

While much of the foundation of this resource has been covered by patterned aluminum siding, damaged areas of siding reveal a concrete block pier foundation. Siding covering the frame construction of the bungalow is primarily replacement wide wood clapboard, with some synthetic siding also present on the building's exterior.



Figure 36.  
4141 Alligator Road (0486)



A. Southeast Oblique



B. Facade, South Elevation

Several original, narrow, wood four-over-four sash windows remain intact throughout the building, but many are damaged and/or partially boarded up. Some replacement, wood, six-over-six sash windows are also located on the side elevations of the resource. An original wood, multi-light-and-paneled, offset front door is located on the gabled-roof porch. The concrete block porch includes decorative wrought-iron supports and synthetic siding framing a louvered vent. A damaged portion of siding reveals that at least this gable was formerly sheathed in wood shiplap (Figure 36B). Overgrowing vegetation surrounding a bulk of the building prevented a full view of fenestration and building materials during field survey.

Two chimneys are visible on east and west sides of the asphalt shingle-covered roof surface, while a third is centrally located in the ridgeline.

Brick chimneys are visible in both the east and west sides of the roof surface. The main massing, porch, and addition roofs are all covered in asphalt shingles.

The house 4141 Alligator Road is not known to be associated with any events or persons of particular significance and was therefore not evaluated under Criteria A or B. The house was evaluated under Criterion C for architecture. The house does not appear to be relocated and therefore retains integrity in the area of location. The primarily non-historic residential and industrial resources surrounding the house have diminished the integrity of the otherwise rural setting of property. Additions and alterations to the house are few, thus the bungalow's integrity in the areas of design, materials, and workmanship is relatively intact. This house continues to evoke the sense of an early twentieth-century residence and conveys the feeling and association of a historic bungalow. While some of its integrity is intact, the house at 4141 Alligator Road is not a good example of a historic bungalow house and is thus recommended not eligible for listing on the NRHP.

#### 3523 ALLIGATOR ROAD (0487)

The house and well house at 3523 Alligator Road were constructed circa 1940 and remain in use as a single-family residential property (Figure 37). The original footprint, which reads as two rooms deep and two rooms wide, was extended to the west with a large gable addition that nearly doubled the size of the building. An open shed porch addition is also present on the rear elevation of the main massing.

The whole of the house foundation is covered in corrugated siding, but a gap in the covering suggests a concrete block foundation supports at least the addition, if not the entire house. The whole of the exterior is sheathed in a seamless, replacement siding of asbestos shingles.



Figure 37.  
3523 Alligator Road (0487)



A. Southeast Oblique



B. Southwest Oblique

Windows on the main massing are primarily original wood three-over-one sash hung alone and in pairs, with a replacement wood six-over-two smaller sash window on the east elevation. The addition features both paired and single two-over-two sash windows. Nearly all windows are covered in aluminum screens.

The main entrance is an original, three-light wood door behind an aluminum screen door flanked by two pairs of sash windows. A shed-roof porch partially covers all three bays and is accessed by concrete block steps flanked by a low railing. Slender squared porch supports extend to the wood board porch floor and carry the shed roof. The porch foundation is also covered in corrugated siding.

A single, centrally set, concrete block chimney sits in the ridgeline of the newly clad standing-seam gable roof. The addition is also seamlessly covered in the same material, as are the front and rear porches.

The well house for 3523 Alligator Road sits just west of the main house (Figure 38A). Composed of concrete block, the well house sits below an open gabled roof covered in asphalt shingles.

The house and well house at 3523 Alligator Road are not known to be associated with any events or persons of particular significance and were therefore not evaluated under Criteria A or B. The property was evaluated under Criterion C for architecture. The house and well house do not appear to be relocated and therefore retain integrity in the area of location. Non-historic residential and commercial resources now surround the property and have diminished the integrity of its original setting. The large addition and siding alteration to the house diminish the property's integrity in the areas of design, materials, and workmanship. This property no longer conveys the sense of an early twentieth-century residence and does not maintain integrity in the areas of feeling and association. The property at 3523 Alligator Road is not a good example of a historic residence and is therefore recommended not eligible for listing on the NRHP.

#### SILVER STAR LODGE (0488)

The two-story, rectangular building at 2912 Alligator Road was built with a front-facing-gabled roof in 1952 (Figure 38B and 39A). A single-story, lateral-gabled roof addition was constructed along the building's rear in 1985. Erected to replace the previous lodge destroyed by fire at this location, the building continues to serve as a masonic lodge. The Silver Star Lodge is denoted on Florence County Highway Maps at this site as early as 1938 (see Figure 10).



Figure 38.  
Well House at 3523 Alligator Road (0487.01) and Silver Star Lodge (0488)



A. South Elevation



B. Northeast Oblique

Figure 39.  
Silver Star Lodge (0488)



A. Northwest Oblique



B. Detail, Cornerstone

According to the building's cornerstone, this site was home to the Crown Masonic Lodge No. 383 as of 1948 and the Mary Perkins Chapter Order of the Eastern Star No. 292 as of 1951 (Figure 39B). The lodge continues to serve both such groups and is also known as Silver Star Tent No. 4. A U-shaped dirt driveway traverses the otherwise grass-covered, tree-lined parcel.

The lodge was erected in concrete block and now includes replacement vinyl siding and vents in the gable ends. Two sets of two concrete block pilasters are situated along the side elevations, while the façade is primarily a curtain wall and much of the rear is covered by the 1985 addition. Serving a secretive group, the building features little fenestration. The facade story is adorned with a sole, lightless, replacement metal door with a low, poured concrete landing and no windows. A sign and cornerstone lined in brick veneer marks the east corner of the façade.

Windows along the side elevations are small, two-light wood awnings where original and two-light aluminum awnings where replaced. The second story includes larger, six-over-six wood sash windows behind aluminum screens. On the east side of the asphalt shingle-covered roof surface is a single brick chimney.

Though a representative of Crown Masonic Lodge No. 383 was contacted and local churches and libraries were consulted, little historical information was made available during background research. Therefore, possible associations with events or persons of significance remain unknown. The resource was therefore not evaluated under Criteria A or B, but instead was assessed under Criterion C for architecture.

This building does not appear to be moved, and therefore retains integrity in the area of location. While some open fields and historic resources are located near the resource, encroaching modern residential development threatens its integrity in the area of setting. The large rear addition does diminish resource integrity in the area of design; however, minor replacement window, door, and siding have not threatened integrity in the areas of materials and workmanship. The resource continues to evoke the feeling of a mid-twentieth-century civic/social resource and thus retains integrity in the areas of feeling and association. This building is not an exceptional display of civic/social-related architecture. While it remains unknown if this building could be evaluated under Criteria A or B, its assessment under Criterion C finds the resource not eligible for listing on the NRHP.

#### 2846 ALLIGATOR ROAD (0489)

The one-story, rectangular house at 2846 Alligator Road was built with a lateral-gabled roof circa 1950 (Figure 40). The house retains its original use as a single-family residence. The resident of the house requested no additional photography of the resource during the field visit.



Figure 40.  
2846 Alligator Road (0489), Façade, North Elevation





The foundation of this house constructed of concrete block and no alterations to the original footprint or additions were detected during the survey. Clad in replacement synthetic siding, this residence includes an original three-light wood front door behind a wood screen door that is offset in the façade wall surface. Original, horizontal two-over-two sash wood windows hung alone and in pairs also adorn the exterior walls of the resource.

Concrete block steps lead to a small, poured concrete floor supported by a concrete block foundation. The small stoop porch is covered by a slight roof eave extension with no supports lined by exposed wood rafter tails. Wood rafter tails also line the remainder of the roof eaves, while the roof is clad in asphalt shingles.

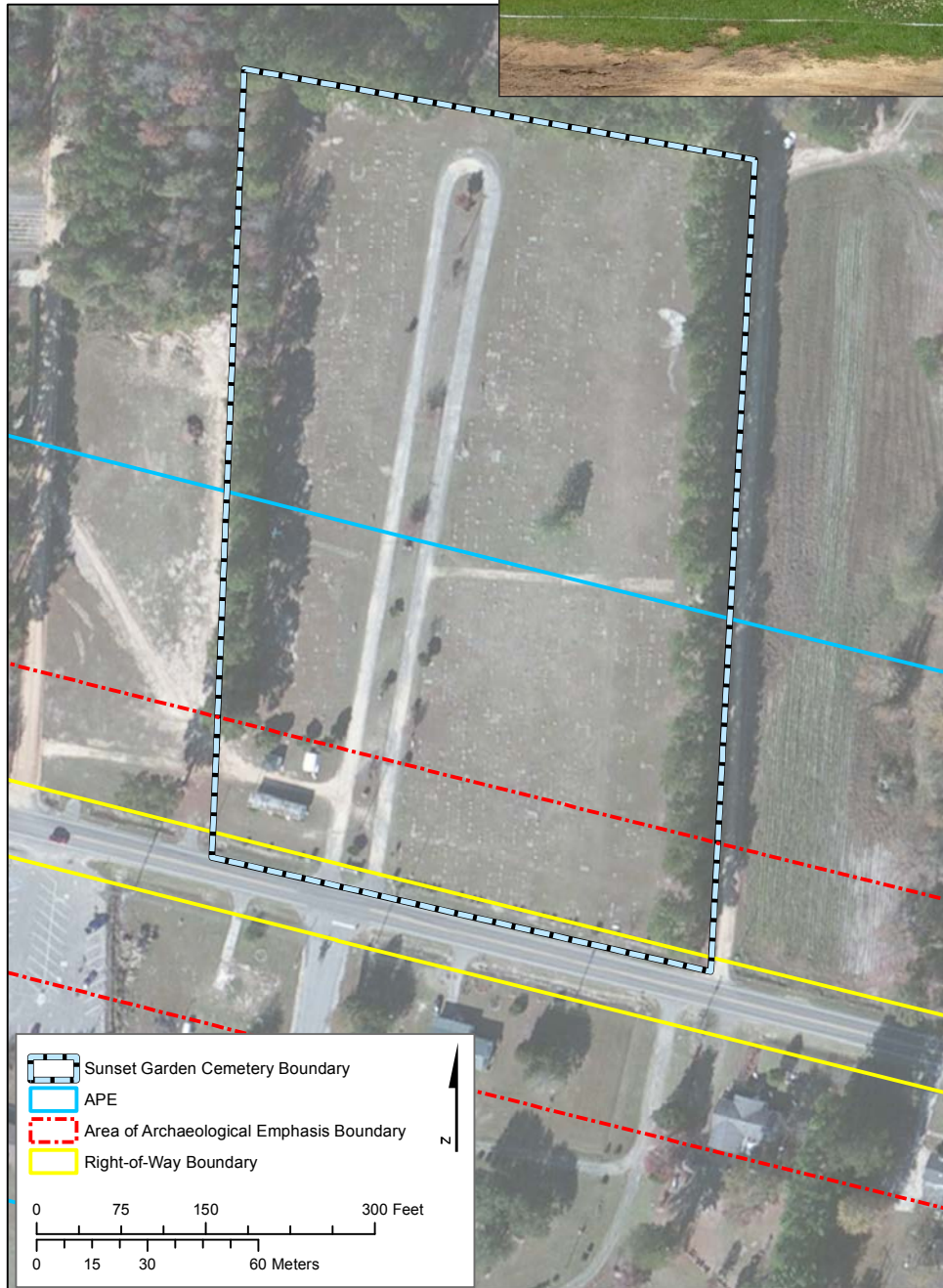
The house at 2846 Alligator Road is not known to be associated with an event or a person and was therefore not evaluated under Criteria A or B. The resource was evaluated under Criterion C for architecture. This building does not appear to be moved, and therefore retains integrity in the area of location. Primarily modern residential development now surrounds the resource, diminishing its integrity in the area of setting. Though the resource has replacement exterior walls, its footprint and other original elements remain intact, supporting its integrity in the areas of design, materials, and workmanship. This residence maintains the sense of a mid-twentieth-century residence, therefore displaying integrity in the areas of feeling and association. While some areas of integrity are intact, the house at 2846 Alligator Road is not an exceptional example of a historic residence and is recommended not eligible for listing on the NRHP.

## OTHER RESOURCES

### SUNSET MEMORY GARDENS PERPETUAL CARE

The Sunset Memory Gardens Perpetual Care is a modern cemetery located at 2615 Alligator Road (Figure 41). Mr. Rauch, owner of Rauch and James Memorial Gardens nearby, indicated that Sunset was established in the early 1970s. A brief examination of the cemetery confirmed the earliest interments in the APE date to 1970. The cemetery currently holds several thousand graves, with about 100-150 graves present within the current right-of-way. The closest graves fall seven meters (25 ft.) from the current edge of Alligator Road. Though not historic, the cemetery is protected under several South Carolina Codes of Law (South Carolina Code 27-43-20, Removal to Plot Agreeable to Governing Body and Relatives; 27-43-30, Supervision of Removal Work; and 16-17-600, Destruction of Graves and Graveyards). New South recommends that the location of this cemetery be taken into consideration when planning for proposed improvements. Avoidance is recommended.

Figure 41.  
Map and Photograph of Sunset Memory Gardens



Source: ESRI Resource Data

## VI. CONCLUSIONS

New South Associates conducted a cultural resources survey for proposed improvements along approximately 7.5 miles of Alligator Road in Florence County, South Carolina. The project included background research, archaeology and architectural history survey, and reporting.

Over the course of the survey two new archaeological sites were identified. Site 38FL475 is a multi-component artifact scatter with historic artifacts dating to the late nineteenth and early twentieth centuries. The prehistoric artifacts were not diagnostic of a particular time period. The Langston Family Cemetery (38FL476), which contains at least four graves, dates to the 1862-1863. The architectural survey portion of the project recorded 17 newly identified resources including Atkins Grocery (0481), Savannah Grove Baptist Church (0478), and the Crown Masonic Lodge No. 383 (0488), and a number of houses and barns. All of the archaeological and architectural resources are recommended as not eligible for listing on the NRHP.

The Langston Family Cemetery is protected under several South Carolina Codes that safeguard historic cemeteries including: South Carolina Codes 27-43-10, 27-43-20, 27-43-30, and 16-17-600. Permits are required for the exhumation and transport of human remains by SC DHEC (South Carolina Code of Regulations Section 61-19-28, 29). New South Associates, Inc. recommends avoidance of the cemetery. If the cemetery cannot be avoided, New South Associates is prepared to assist in survey and relocation efforts.

Additionally, Sunset Memory Gardens Perpetual Care cemetery located at 2615 Alligator Road and the tomb of Sampson and Linda Ham at the Savannah Grove Baptist Church (0478) are protected under several South Carolina Codes of Law (South Carolina Code 27-43-20, Removal to Plot Agreeable to Governing Body and Relatives; 27-43-30, Supervision of Removal Work; and 16-17-600, Destruction of Graves and Graveyards). It is recommended that these to resources be further considered during the planning process.

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# APPENDIX A: SPECIMEN CATALOG

## Specimen Catalog

County: Florence  
 State: South Carolina  
 Project: Alligator Road Survey (2013)

State Site #	Field Bag #	Prov Bag #	Catalog #	Excavation Unit	Horizontal Location	Vertical Location	Count/Weight	Artifact Description	Field Date
38FL475	1	1	38FL475-1-1	Transect 9, STP 3	N500 E500	Level 2, 10-30 cmbs	1 (1.6g)	Rhyolite, Retouched Flake	6/5/13
38FL475	2	2	38FL475-2-1	Transect 9	N490 E510	Level 2, 10-25 cmbs	1 (2.2g)	Whiteware, Plain	6/5/13
38FL475	3	3	38FL475-3-1	Transect 9	N490 E500	Level 1, 0-20 cmbs	2 (15g)	Container Glass, Clear	6/5/13
38FL475	3	3	38FL475-3-2	Transect 9	N490 E500	Level 1, 0-20 cmbs	1 (9.7g)	Ironstone, Transfer Print, Blue Transfer Print	6/5/13
38FL475	3	3	38FL475-3-3	Transect 9	N490 E500	Level 1, 0-20 cmbs	1 (0.4g)	Auto Safety Glass	6/5/13
38FL475	3	3	38FL475-3-4	Transect 9	N490 E500	Level 1, 0-20 cmbs	1 (4g)	Container Glass, Aqua	6/5/13
38FL475	3	3	38FL475-3-5	Transect 9	N490 E500	Level 1, 0-20 cmbs	1 (1.1g)	Container Glass, Milk Glass, Floral decal, eroded	6/5/13
38FL475	3	3	38FL475-3-6	Transect 9	N490 E500	Level 1, 0-20 cmbs	1 (2.7g)	Nail, Wire Finish, Unmeasured, Glenched	6/5/13
38FL475	3	3	38FL475-3-7	Transect 9	N490 E500	Level 1, 0-20 cmbs	4 (4.7g)	Whiteware, Plain	6/5/13
38FL475	3	3	38FL475-3-8	Transect 9	N490 E500	Level 1, 0-20 cmbs	2 (6.7g)	Ironstone, Plain	6/5/13
38FL475	4	4	38FL475-4-1	Transect 9	N480 E500	Level 1, 0-30 cmbs	1 (12.7g)	Container Glass, Amethyst Color	6/5/13
38FL475	4	4	38FL475-4-2	Transect 9	N480 E500	Level 1, 0-30 cmbs	1 (23.3g)	Container Glass, Clear, Molded, tableware glass?	6/5/13
38FL475	4	4	38FL475-4-3	Transect 9	N480 E500	Level 1, 0-30 cmbs	1 (55.9g)	Bottle Glass, Canada Dry, Machine made	6/5/13
38FL475	5	5	38FL475-5-1	Transect 9	N480 E510	Level 1, 0-20	1 (0.6g)	Rhyolite, Angular Debris	6/5/13
38FL475	6	6	38FL475-6-1	Transect 9	N460 E500	Level 1, 0-30 cmbs	1 (1g)	Brick, Unidentified	6/5/13
38FL475	6	6	38FL475-6-2	Transect 9	N460 E500	Level 1, 0-30 cmbs	1 (2.5g)	Container Glass, Green	6/5/13
38FL475	6	6	38FL475-6-3	Transect 9	N460 E500	Level 1, 0-30 cmbs	3 (10.5g)	Container Glass, Clear	6/5/13
38FL475	6	6	38FL475-6-4	Transect 9	N460 E500	Level 1, 0-30 cmbs	1 (1.6g)	Nail, Wire Common Fragment	6/5/13
38FL475	6	6	38FL475-6-5	Transect 9	N460 E500	Level 1, 0-30 cmbs	1 (2.8g)	Nail, Cut Common, Unmeasured, ..	6/5/13

# APPENDIX B: SITE FORMS

SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY  
UNIVERSITY OF SOUTH CAROLINA  
SITE INVENTORY RECORD  
(68-1 Rev. 85)

STATE: SC COUNTY: Florence SITE NUMBER: 38LF476  
Recorded By: Valerie Davis Affiliation: New South Associates Date: 6/13/13

A. GENERAL INFORMATION

1. Site name: Langston Family Cemetery Project: Alligator Road Phase I Survey
  2. USGS Quadrangle: Florence West Date: 1986 Scale: 7.5 or 15 minute (circle one)
  3. UTM: Zone 17 Easting 612090 Northing 3777862
  4. Other map reference: \_\_\_\_\_
  5. Descriptive site type (see handbook):  
Prehistoric \_\_\_\_\_ Historic Historic Cemetery
  6. Archaeological investigation (circle): Survey \_\_\_\_\_ Testing \_\_\_\_\_ Excavation \_\_\_\_\_
  7. Property owner: \_\_\_\_\_ Phone number: \_\_\_\_\_
  8. Address: \_\_\_\_\_
  9. Other site designations: \_\_\_\_\_
  10. National Register of Historic Places status (circle one):  
Potentially eligible \_\_\_\_\_ Probably not eligible \_\_\_\_\_ Additional work \_\_\_\_\_
- Office Use Only-----
- |                                |                         |            |
|--------------------------------|-------------------------|------------|
| Determined eligible<br>On NRHP | Determined not eligible | Date _____ |
| Date _____                     |                         |            |

11. Level of significance (circle): National \_\_\_\_\_ State \_\_\_\_\_ Local \_\_\_\_\_
12. Justification: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

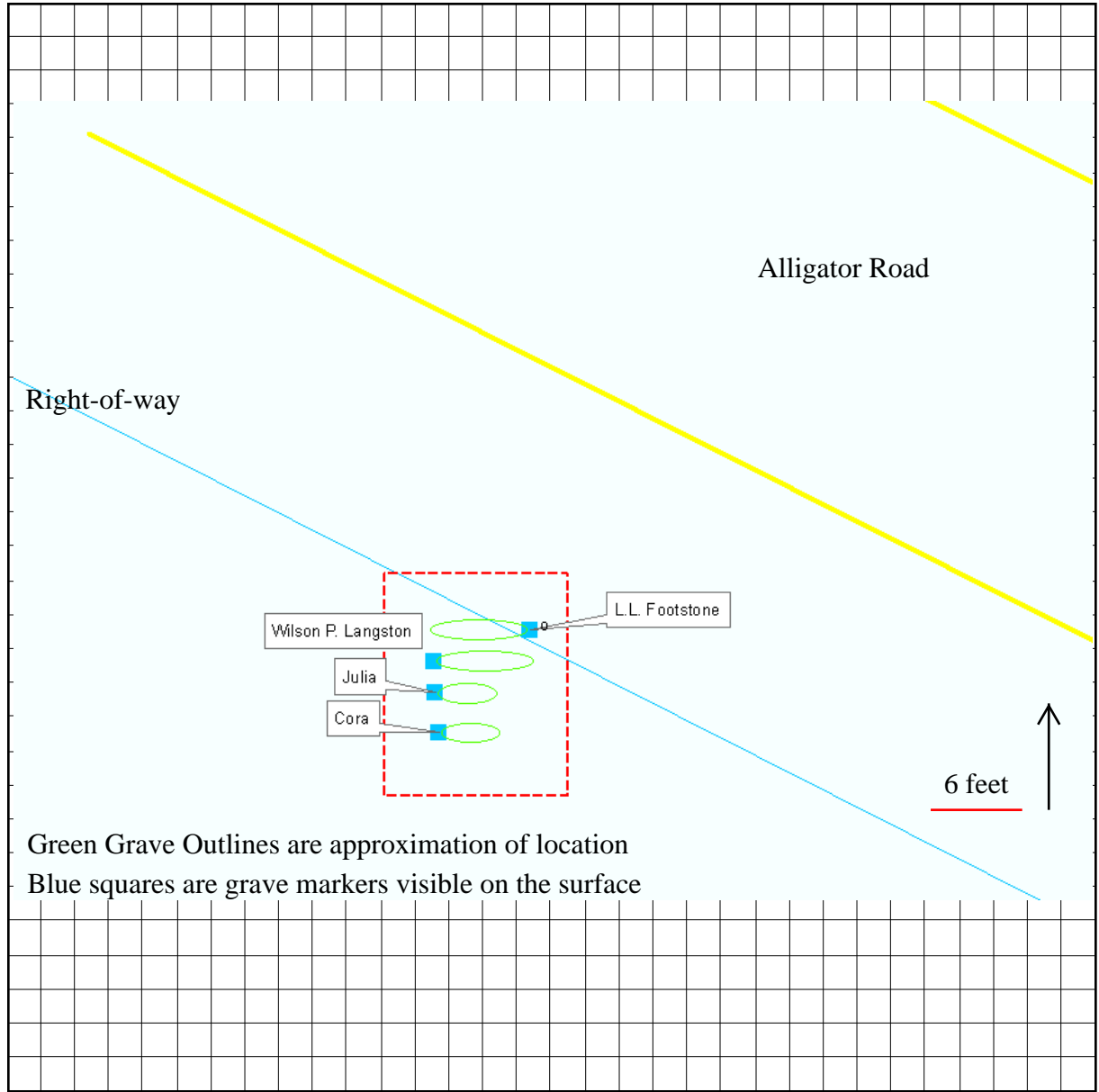
B. ENVIRONMENT AND LOCATION

1. General physiographic province (circle):  
Lower Coastal Plain \_\_\_\_\_ Piedmont \_\_\_\_\_ Middle Coastal Plain \_\_\_\_\_ Blue Ridge Mountains \_\_\_\_\_ Upper Coastal Plain \_\_\_\_\_
2. Landform location: Ridge Nose Site elevation (above MSL): 32 (in feet)
3. On site soil type: Loamy sand Soil classification: Wagram sand
4. Major river system (circle): Pee Dee Santee \_\_\_\_\_ Ashley-Combahee-Edisto \_\_\_\_\_ Savannah \_\_\_\_\_
5. Nearest river/stream: Alligator Branch
6. Current vegetation (circle): Pine/coniferous \_\_\_\_\_ Hardwood \_\_\_\_\_ Mixed pine/hardwood \_\_\_\_\_  
Old field \_\_\_\_\_ Grass/pasture \_\_\_\_\_ Agricultural/crops \_\_\_\_\_ Wetlands/freshwater \_\_\_\_\_  
Wetlands/saltwater \_\_\_\_\_ Other \_\_\_\_\_ Comments: \_\_\_\_\_
7. Description of groundcover (circle): Absent \_\_\_\_\_ Light \_\_\_\_\_ Moderate \_\_\_\_\_ Heavy \_\_\_\_\_

C. SITE CHARACTERISTICS

1. Estimated site dimensions: 12 meters by 18 meters
2. Site depth: Unknown cm.
3. Cultural features (type and number): Three headstones and one foostone  
\_\_\_\_\_  
\_\_\_\_\_
4. Presence of (circle): midden \_\_\_\_\_ floral remains \_\_\_\_\_ faunal remains \_\_\_\_\_ shell \_\_\_\_\_ charcoal \_\_\_\_\_
5. Human skeletal remains (circle): \_\_\_\_\_ present \_\_\_\_\_ preservation (circle): \_\_\_\_\_ good \_\_\_\_\_  
absent \_\_\_\_\_ poor \_\_\_\_\_
6. General site description: Langston Family Cemetery holds at least four people. Wilson P. Langston his wife L.L., and daughters Cora and Julia. Cemetery dates to mid-1800s  
\_\_\_\_\_  
\_\_\_\_\_

Site Map



Green Grave Outlines are approximation of location  
Blue squares are grave markers visible on the surface



Scale

The following information should be provided on the site map: site boundaries, nearby topographic features, associated streams, modern cultural features, different land use types in site area, collection loci, test excavation loci, archaeological features and means of access (include north arrow and scale).

MAP KEY:

Verbal description of location: \_\_\_\_\_  
Cemetery is situated just beyond road edge at top of road cut  
approximately 30 meters north of the intersection of Alligator Road  
and Greenfield Drive on the south side of Alligator Road.

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D. ARCHAEOLOGICAL COMPONENTS

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Paleo Indian   | <input type="checkbox"/> Middle Woodland     | <input type="checkbox"/> 17th Century            |
| <input type="checkbox"/> Early Archaic  | <input type="checkbox"/> Late Woodland       | <input type="checkbox"/> 18th Century            |
| <input type="checkbox"/> Middle Archaic | <input type="checkbox"/> Mississippian       | <input checked="" type="checkbox"/> 19th Century |
| <input type="checkbox"/> Late Archaic   | <input type="checkbox"/> Unknown prehistoric | <input type="checkbox"/> 20th Century            |
| <input type="checkbox"/> Early Woodland | <input type="checkbox"/> 16th Century        | <input type="checkbox"/> Unknown historic        |

E. DATA RECOVERED

List materials recovered: \_\_\_\_\_ Total number of artifacts: 0

No Collection Made		

(Attach additional artifact inventory sheets if needed)

F. DATA RECOVERY METHODS

- Ground surface visibility (circle one): 0% 1-25% 26-50% 51-75% 76-100%
- Number of person hours spent collecting (total hours X total people): 4
- Description of surface collection methods (circle):
 

Type:	grid collection	Extent: complete
	grab collection	selective
	controlled sampling	<u>no collection made</u>
	other (specify): _____	
- Description of testing methods (circle):
 

Systematic	Type _____	Test units:
<u>Nonsystematic</u>		Number
		<u>0</u>
		Size/max. depth
		_____ cm.
		_____ cm.
		_____ cm.
- Description of excavation units:
 

Number	Size/max. depth	Comments: _____
_____	_____ cm.	_____
_____	_____ cm.	_____
_____	_____ cm.	_____
_____	_____ cm.	_____

G. MANAGEMENT INFORMATION

- Present land use (circle):
 

Agricultural	Residential, high density
<u>Forest</u>	Commercial
Fallow	Industrial
Residential, low density	Other (specify) _____
	_____
	_____



MANAGEMENT INFORMATION (Cont.)

2. Present condition/integrity of site (circle):

Intact

Damaged

Extent of damage ----->  light  
 moderate  
 heavy

Nature of damage ----->  erosion  
 cultivation  
 logging  
 construction/development  
 vandalism  
 inundation  
 other (specify) \_\_\_\_\_

3. Potential impacts and threats to site (circle):

Potential threat:

none  
low  
moderate  
high

Nature of threat:

erosion  
cultivation  
logging  
construction/development ----->  direct impact zone  
 indirect impact zone  
 outside impact zone  
 indeterminate  
vandalism  
inundation  
other (specify) \_\_\_\_\_

4. Recommendations for further work (circle):

survey

testing

excavation

archival

none

other: \_\_\_\_\_

Comments: \_\_\_\_\_

5. References (circle):

Historic/archival documentation

Yes

No

Not Known

Archaeological documentation

Yes

No

Not Known

6. Additional management information/comments: \_\_\_\_\_

7. Location of existing collections: \_\_\_\_\_

8. Location of photographs: New South Associates

9. Location of special samples: \_\_\_\_\_

Type of special samples: \_\_\_\_\_

Signature of observer: Valerie Davis

Date: 6/13/13

Subsequent visits:

Observer \_\_\_\_\_ Date: \_\_\_\_\_

Observer \_\_\_\_\_ Date: \_\_\_\_\_

Observer \_\_\_\_\_ Date: \_\_\_\_\_

SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY  
UNIVERSITY OF SOUTH CAROLINA  
SITE INVENTORY RECORD  
(68-1 Rev. 85)

STATE: SC COUNTY: Florence SITE NUMBER: 38LF475  
Recorded By: Valerie Davis Affiliation: New South Associates Date: 6/12/13

A. GENERAL INFORMATION

1. Site name: Find 1 Project: Alligator Road Archaeological Survey
2. USGS Quadrangle: Florence West Date: 1986 Scale: 7.5 or 15 minute (circle one)
3. UTM: Zone 17 Easting 608255 Northing 3779278
4. Other map reference: \_\_\_\_\_
5. Descriptive site type (see handbook):  
Prehistoric Lithic Scatter Historic Historic Scatter
6. Archaeological investigation (circle): Survey Testing \_\_\_\_\_ Excavation \_\_\_\_\_
7. Property owner: \_\_\_\_\_ Phone number: \_\_\_\_\_
8. Address: \_\_\_\_\_
9. Other site designations: \_\_\_\_\_
10. National Register of Historic Places status (circle one):  
Potentially eligible Probably not eligible Additional work \_\_\_\_\_  
-----  
Determined eligible On NRHP \_\_\_\_\_ Date \_\_\_\_\_  
Determined not eligible \_\_\_\_\_ Date \_\_\_\_\_  
-----  
-----
11. Level of significance (circle): National \_\_\_\_\_ State \_\_\_\_\_ Local \_\_\_\_\_
12. Justification: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. ENVIRONMENT AND LOCATION

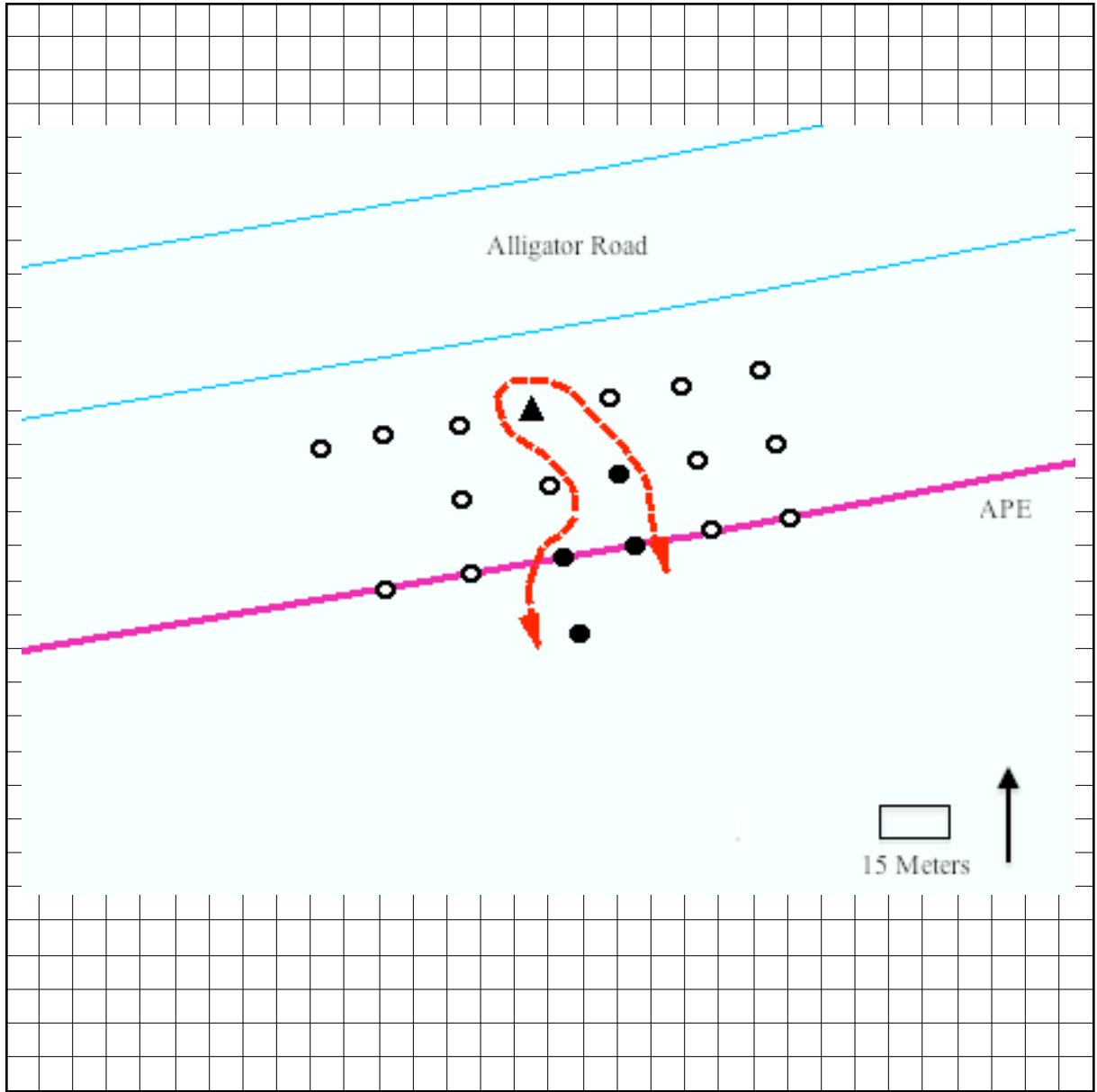
1. General physiographic province (circle):  
Lower Coastal Plain \_\_\_\_\_ Piedmont Middle Coastal Plain Blue Ridge Mountains \_\_\_\_\_ Upper Coastal Plain \_\_\_\_\_
2. Landform location: Ridge Top Site elevation (above MSL): 36 (in feet)
3. On site soil type: Loamy Sand Soil classification: Norfolk loamy sand
4. Major river system (circle): Pee Dee Santee \_\_\_\_\_ Ashley-Combahee-Edisto \_\_\_\_\_ Savannah \_\_\_\_\_
5. Nearest river/stream: Alligator Branch
6. Current vegetation (circle): Pine/coniferous \_\_\_\_\_ Hardwood \_\_\_\_\_ Mixed pine/hardwood \_\_\_\_\_  
Old field Grass/pasture Agricultural/crops \_\_\_\_\_ Wetlands/freshwater \_\_\_\_\_  
Wetlands/saltwater \_\_\_\_\_ Other \_\_\_\_\_ Comments: \_\_\_\_\_
7. Description of groundcover (circle): Absent \_\_\_\_\_ Light \_\_\_\_\_ Moderate \_\_\_\_\_ Heavy \_\_\_\_\_

C. SITE CHARACTERISTICS

1. Estimated site dimensions: 30+ meters by 20 meters
2. Site depth: 30 cm.
3. Cultural features (type and number): None observed
4. Presence of (circle): midden \_\_\_\_\_ floral remains \_\_\_\_\_ faunal remains \_\_\_\_\_ shell \_\_\_\_\_ charcoal \_\_\_\_\_
5. Human skeletal remains (circle): \_\_\_\_\_ present \_\_\_\_\_ preservation (circle): good \_\_\_\_\_  
absent \_\_\_\_\_ poor \_\_\_\_\_
6. General site description: \_\_\_\_\_

This multicomponent site lies in the front yard of a modern mobile home. Light prehistoric scatter (lithics) and a early twentieth-century artifact scatter that was likley associaitated with an earlier house. A house of similiar age is next door to the west.

Site Map



Scale

The following information should be provided on the site map: site boundaries, nearby topographic features, associated streams, modern cultural features, different land use types in site area, collection loci, test excavation loci, archaeological features and means of access (include north arrow and scale).

MAP KEY:

Verbal description of location: \_\_\_\_\_

Located at 2830 Alligator Road in the front yard of a modern mobile  
home.

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D. ARCHAEOLOGICAL COMPONENTS

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Paleo Indian   | <input type="checkbox"/> Middle Woodland                | <input type="checkbox"/> 17th Century            |
| <input type="checkbox"/> Early Archaic  | <input type="checkbox"/> Late Woodland                  | <input type="checkbox"/> 18th Century            |
| <input type="checkbox"/> Middle Archaic | <input type="checkbox"/> Mississippian                  | <input type="checkbox"/> 19th Century            |
| <input type="checkbox"/> Late Archaic   | <input checked="" type="checkbox"/> Unknown prehistoric | <input checked="" type="checkbox"/> 20th Century |
| <input type="checkbox"/> Early Woodland | <input type="checkbox"/> 16th Century                   | <input type="checkbox"/> Unknown historic        |

E. DATA RECOVERED

List materials recovered:	Total number of artifacts: <u>9</u>
<u>Chert Flake - 2</u>	_____
<u>Whiteware - 1</u>	_____
<u>Clear Glass - 4</u>	_____
<u>Green Glass - 1</u>	_____
<u>Amethyst Glass - 1</u>	_____
<u>Modern trash</u>	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach additional artifact inventory sheets if needed)

F. DATA RECOVERY METHODS

- Ground surface visibility (circle one): 0%      1-25%      26-50%      51-75%      76-100%
- Number of person hours spent collecting (total hours X total people): 4
- Description of surface collection methods (circle):
 

Type: <u>grid collection</u>	Extent: complete
grab collection	selective
controlled sampling	no collection made
other (specify): _____	
- Description of testing methods (circle):
 

<u>Systematic</u>	Type <u>Shovel Testing</u>	Test units:
Nonsystematic		Number
		<u>19</u>
		Size/max. depth
		<u>30/55</u> cm.
		_____ cm.
		_____ cm.
- Description of excavation units:
 

Number	Size/max. depth	Comments:
_____	_____ cm.	_____
_____	_____ cm.	_____
_____	_____ cm.	_____
_____	_____ cm.	_____

G. MANAGEMENT INFORMATION

- Present land use (circle):
 

<u>Residential, low density</u>	Residential, high density
Agricultural	Commercial
Forest	Industrial
Fallow	Other (specify) _____
	_____
	_____

MANAGEMENT INFORMATION (Cont.)

2. Present condition/integrity of site (circle):

Intact

Damaged

Extent of damage

light

moderate

heavy

Nature of damage

erosion

cultivation

logging

construction/development

vandalism

inundation

other (specify) \_\_\_\_\_

3. Potential impacts and threats to site (circle):

Potential threat:

none

low

moderate

high

Nature of threat:

erosion

cultivation

logging

construction/development

vandalism

inundation

other (specify) \_\_\_\_\_

direct impact zone

indirect impact zone

outside impact zone

indeterminate

4. Recommendations for further work (circle):

survey

testing

excavation

archival

none

other: \_\_\_\_\_

Comments: \_\_\_\_\_

5. References (circle):

Historic/archival documentation

Yes

No

Not Known

Archaeological documentation

Yes

No

Not Known

6. Additional management information/comments: \_\_\_\_\_

7. Location of existing collections: New South Associates

8. Location of photographs: New South Associates

9. Location of special samples: \_\_\_\_\_

Type of special samples: \_\_\_\_\_

Signature of observer: Valerie Davis

Date: 6/13/13

Subsequent visits:

Observer \_\_\_\_\_

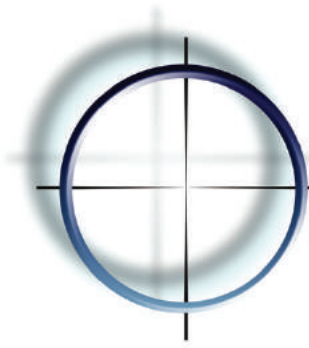
Date: \_\_\_\_\_

Observer \_\_\_\_\_

Date: \_\_\_\_\_

Observer \_\_\_\_\_

Date: \_\_\_\_\_



# NEW SOUTH ASSOCIATES

PROVIDING PERSPECTIVES ON THE PAST

A WOMEN-OWNED SMALL BUSINESS

August 2, 2016

Mr. Wayne Hall  
HDR/ICA  
1122 Lady Street, Suite 1100  
Columbia, South Carolina 29201

Re: John Paul Jones Road/U.S. 52 Intersection Realignment Cultural Resources Survey, Florence County, South Carolina

Dear Mr. Hall,

New South Associates has completed the Cultural Resource Survey of proposed changes to the Alligator Road widening design in Florence, South Carolina. Our previous report on the overall project entitled *Phase I Cultural Resources Survey of Alligator Road, Florence County, South Carolina* was printed as final on October 30, 2014. Since that time, there was a modification of the design, which consists of a realignment of John Paul Jones Road/U.S. 52 intersection. The road will be realigned approximately 800 feet south of this intersection to tie into the entrance to South Florence High School.

The alignment is approximately 624 feet in length and was subjected to 100-foot (30-m) interval shovel testing down the centerline. In addition, the area within 300 feet of the centerline was surveyed for architectural resources. Mr. Tracy Martin performed the archaeological survey on July 26, 2016 while Ms. Katie Dykens performed the architectural survey on July 13, 2016. As a result of the survey, no archaeological deposits were encountered and two previously unrecorded architectural resources were documented (Figure 1).

## Resource U/41/0494

Resource U/41/0494 is a 1944 single-family residence located at 3318 S. Irby Street (Figure 2). It is stylistically similar to an English Cottage, but has a central chimney rather than one located on the front façade, as is typical for this house type. The house is clad in brick veneer and has a red standing seam metal roof. It is cross-gabled and almost rectangular in massing with a front-gabled “T” section on the left side of the front (west) elevation that is only slightly proud of the main façade. The entrance is under a small front-gabled porch with vinyl siding in the pediment and square wood supports. The entrance is a nine-pane half-light wood paneled door. To the left of the entrance is a set of paired six-over-one wood frame double-hung sash windows. To the right of the entrance lies a laterally-gabled portion with another set of paired six-over-one

### Georgia/Headquarters

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Stone Mountain, Georgia 30083  
T/770.498.4155  
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### South Carolina

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### North Carolina

408-B Blandwood Avenue  
Greensboro, North Carolina 27401  
T/336.379.0433  
F/336.379.0434

### Tennessee

118 South 11th Street  
Nashville, Tennessee 37206  
T/615.262.4326  
F/615.262.3338

### Louisiana

1005 Cook Drive  
DeRidder, Louisiana 70634  
T/915.433.4130



Founding Member of the American Cultural Resources Association

[www.acra.org](http://www.acra.org)



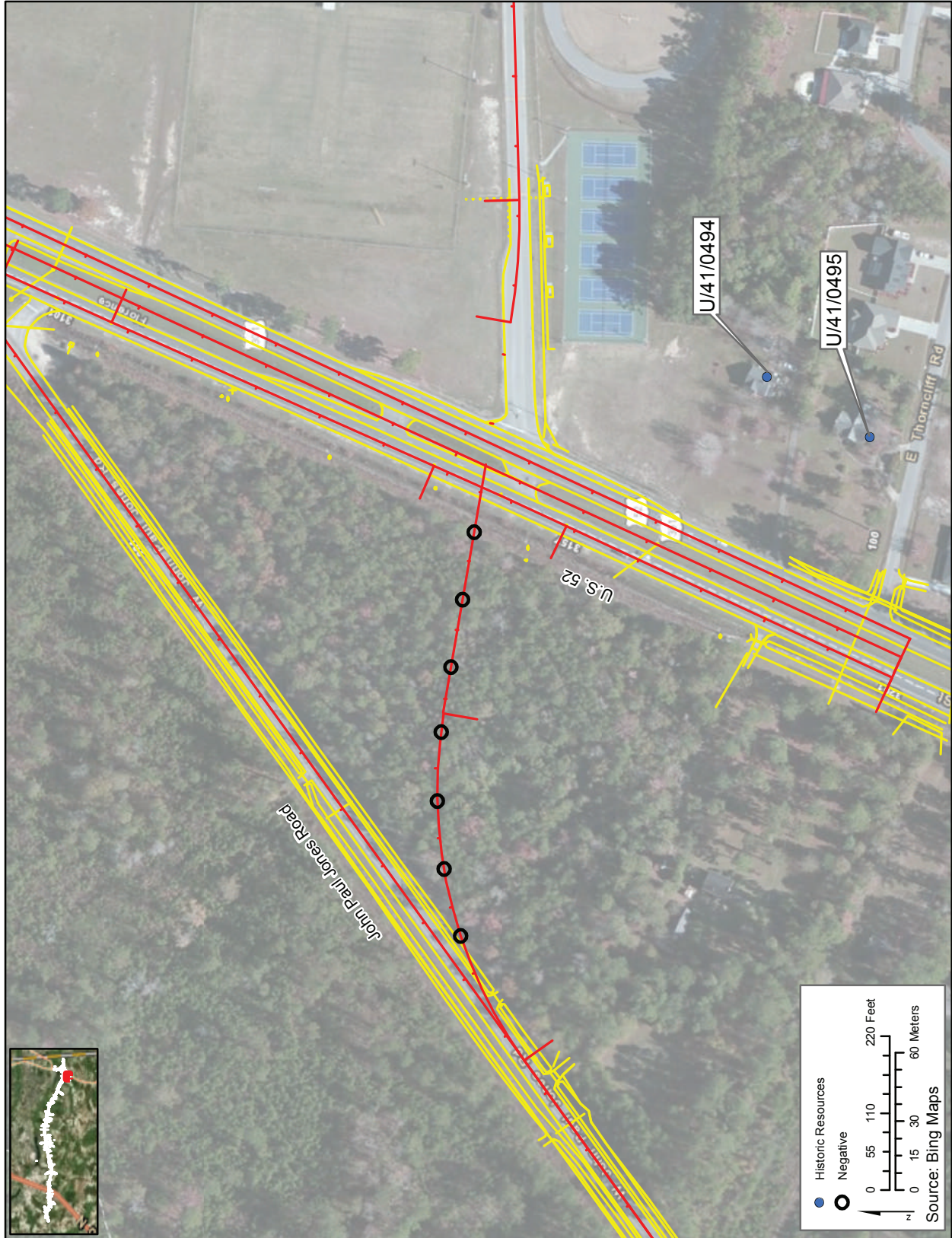


Figure 1. Location of Proposed Intersection Realignment Showing Shovel Test Locations and Recorded Resources



Figure 2.  
Resource U/41/0494 (3318 S. Irby Street)



A. Northwest Oblique View



B. West Elevation

wood frame double-hung sash windows and a small laterally-gabled side porch with square wooden supports. The house is one and a half stories tall with a usable upper story as evidenced by operational six-over-one wood frame double-hung sash windows in the gable ends.

Resource U/41/0494 is located on a corner lot situated on S. Irby Street and the unnamed access road which leads to adjacent South Florence High School. The lot is one acre in size allowing for a generous setback from Irby Street. The lot is landscaped with a large grass lawn, ornamental bushes and deciduous trees, as well as a non-historic laterally-gabled shed. Irby Street is a very busy commercial corridor with four lanes of traffic separated by a central divide. The area remains primarily residential in this section with the exception of the large school complex and adjacent ball fields which directly abut this parcel to the rear.

Resource U/41/0494 is recommended not eligible for listing on the NRHP. It does not embody the distinctive characteristics of a type, period, or method of construction, and does not represent the work of a master or possess high artistic value. It is not recommended as eligible for inclusion on the NRHP under Criterion C. It is not known to be associated with any significant person or event, and therefore was not evaluated under Criterion A or B.

#### **Resource U/41/0495**

Resource U/41/0495 is a 1952 single-family house of no discernible style located at 109 E. Thorncliff Road (Figure 3). The house is clad in brick veneer and has a composition shingle cross-gabled roof. It has a central front-gabled T on the front (west) elevation, which contains the entrance to the left and a set of paired two-over-two wood-frame double-hung sash windows to the right. The entry door is wood with three small vertical windows and is surrounded by heavy Classical molding. There is a round louvered window in the gable end. To the left of this central T is a tripartite wood frame picture window with two small two-over-two double-hung sash as the flanking windows with louvered shutters. To the right is a single two-over-two wood-frame double hung sash window, also with louvered shutters. The house has two brick chimneys, one externally located on the north elevation and one internally located towards the east side of the house. A front-gabled section extends to the rear of the house. This may be a garage that has been finished as living space with a bank of non-historic floor-to-ceiling 15-pane windows with arched five-pane top panels and a central glass door.

Resource U/41/0495 is located on the corner of E. Thorncliff Road and S. Irby Street and fronts onto Irby Street. The lot is approximately one acre in size and is landscaped with a large grass lawn, ornamental shrubs, deciduous trees, and perennial flowering plants. Thorncliff Road is a one-lane residential street with a mixture of historic and modern single-family homes. Irby Street is a busy commercial corridor with four divided lanes, although development in this section is primarily residential.



Figure 3.  
Resource U/41/0495 (109 E. Thorncliff Road)



A. South Elevation



B. West Elevation

Resource U/41/0495 is recommended not eligible for listing on the NRHP. It lacks the distinctive characteristics of a type, period, or method of construction, and does not represent the work of a master or possess high artistic value. It is not recommended as eligible for inclusion on the NRHP under Criterion C. It is not known to be associated with any significant person or event, and therefore was not evaluated under Criterion A or B.

In summary, additional survey for the proposed realignment of the intersection of John Paul Jones Road at U.S. Highway 52 identified no archaeological sites and two historic resources that are recommended not eligible for listing on the NRHP. It is the opinion of New South Associates that no historic properties within the additional survey area will be affected by project implementation. Please let us know if you have any questions or need any additional information.

Sincerely,

NEW SOUTH ASSOCIATES, INC.

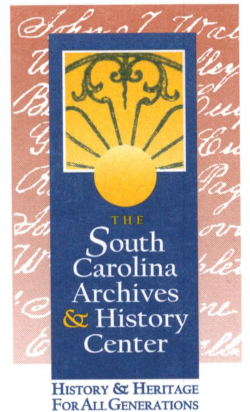
A handwritten signature in black ink, appearing to read "Natalie Adams Pope". The signature is fluid and cursive, with the first name being the most prominent.

Natalie Adams Pope, RPA  
Executive Vice President  
South Carolina Branch Manager



November 7, 2014

David Kelly  
NEPA Coordinator  
South Carolina Department of Transportation  
955 Park Street  
Columbia, SC 29201



Re: New South's *Phase I Cultural Resources Survey of Alligator Road*  
Florence County, South Carolina  
SCDOT PIN 42321  
SHPO Project No. 14-SS0011

Dear Mr. Kelly:

Thank you for your letter of November 6, which we received on November 7, regarding the above-referenced project. We also received the survey report *Phase I Cultural Resources Survey of Alligator Road* and statewide survey forms as supporting documentation for this undertaking. The State Historic Preservation Office is providing these comments to assist you with your responsibilities as agency official designee, as defined under 36 CFR 800.2, to ensure compliance with Section 106 of the National Historic Preservation Act. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

During the survey, New South Associates identified and recorded two archaeological sites (38FL0475 and 38FL0476) and seventeen above-ground sites (sites 0473-0489). Our office concurs with the recommendation that the portion of site 38FL0475 within the current project area is not eligible for listing in the National Register of Historic Places (NRHP). We also concur that all seven architectural resources and the Langston Family Cemetery (38FL0476) are not eligible for the NRHP. However, cemeteries are protected under several South Carolina Codes of Law and we recommend avoidance of 38FL0476 and the modern cemetery Sunset Memory Gardens Perpetual Care.

In the future, please follow the SC SHPO's *Guidelines for Recording Historic Cemeteries* (2013), which is available on our website, when recording historic cemeteries.

Based on the description of the Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this project.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older,



which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

If you have any questions, I can be reached at (803) 896-6184 or at [sstephens@scdah.state.sc.us](mailto:sstephens@scdah.state.sc.us).

Sincerely,

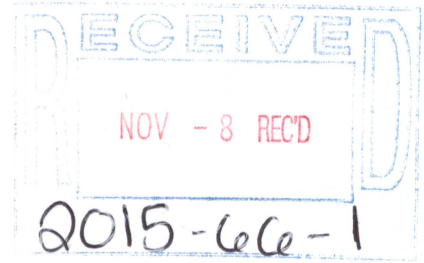
A handwritten signature in blue ink, appearing to read 'S.A. Stephens', with a large, stylized flourish at the end.

Sarah A. Stephens  
Review Coordinator for Transportation Projects  
State Historic Preservation Office



South Carolina  
Department of Transportation

November 6, 2014



Ms. Sarah Stephens  
Department of Transportation Project Coordinator  
South Carolina Department of Archives & History  
8301 Parklane Road  
Columbia, South Carolina 29223-4905

**Re: New South Associates' Phase I Cultural Resources Survey of Alligator Road, Florence County, SCDOT PIN 42321**

Dear Ms. Stephens:

The South Carolina Department of Transportation (SCDOT) proposes to widen and replace bridges on Alligator Road in Florence County. Cultural resource investigations for the revised project resulted in the identification of two archaeological sites and seventeen aboveground sites (site #s 0473 – 0489). All of the identified resources are recommended as not eligible for the National Register of Historic Places (NRHP). Therefore it is recommended that the Alligator Road project will not affect any historic properties. No additional investigations are recommended.

In accordance with the memorandum of agreement approved by the Federal Highway Administration (FHWA), November 29, 2011, SCDOT is providing this information as agency official designee, as defined under 36 CFR 800.2, to ensure compliance with Section 106 of the National Historic Preservation Act.

It is requested that you review the enclosed material and, if appropriate, indicate your concurrence with SCDOT findings, thus completing the Section 106 consultation process. Please respond within 30 days if you have any objections or if you have need of additional information.

Sincerely,

David P. Kelly  
NEPA Coordinator, RPG 4

DPK:dk  
Enclosures: cultural resources report, survey cards

I (~~do not~~) concur in the above determination.

Signed: Wenonah G. Haire, THPO Date: 11/19/14

cc: Shane Belcher, FHWA  
Wenonah G. Haire, Catawba Nation THPO  
Keith Derting, SCIAA

File: ENV/DPK

RECEIVED

DEC - 5 2014

Environmental Management  
SCDOT



APPENDIX I  
Comments and Coordination

February 20, 2014

*Electronic Correspondence – In an effort to save resources and expedite delivery you are receiving this document in an electronic format. Please consider the environment before printing.*

Subject: Letter of Intent for the Alligator Road (S-107) Widening From US 52 to US 76  
in Florence County, South Carolina PIN 42321, File No. 21.042321.

Dear Sir or Madam:

The South Carolina Department of Transportation (SCDOT) proposes the widening of Alligator Road (S-107) from US 52 to US 76 in Florence County, South Carolina. Attached is a location map for your information and reference. As an integral part of the environmental review process, SCDOT is soliciting input from agencies and individuals concerning the potential social, economic and environmental impacts of the proposed improvements. An Environmental Assessment (EA) is anticipated reflecting the benefits and impacts for the proposed project, in accordance with regulations of the Federal Highway Administration and the National Environmental Policy Act (NEPA).

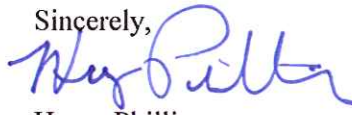
The scope of the proposed improvements consists of widening 7.5 miles of Alligator Road to include a new bridge across I-95, and a new or widened bridge across Alligator Branch. The project would also evaluate pedestrian accommodations. These improvements would provide a more efficient transportation facility for local commuters, through traffic, pedestrians, and provide better access to residential, commercial, and industrial areas located in and around Florence. Traffic count data indicates that the average daily traffic is in excess of 8,100 vehicles per day. The proposed project will evaluate various alternatives, including the no-build. The study area is mixed use with open forest, agricultural, residential, and commercial land uses.

Funding for preliminary engineering, right-of-way acquisition and construction for the proposed project is included in the SCDOT's State Transportation Improvement Program (STIP). The project will be funded through the Florence County Local Option Sales Tax and the South Carolina State Transportation Infrastructure Bank.

To ensure that issues of the proposed project are fully evaluated, SCDOT requests your written response concerning any beneficial or adverse impacts of the project relating to the interest of your agency. SCDOT looks forward to receiving your comments on the project within 30 days of receipt of this letter. Comments should be addressed to the following:

Mr. Henry Phillips  
Environmental Project Manager  
South Carolina Department of Transportation  
Post Office Box 191  
Columbia, South Carolina 29202-0191  
Email: Phillipsmh@scdot.org

Your expeditious handling of this notice will be appreciated. Should you have any questions, please contact me at 803-737-1872.

Sincerely,  
  
Henry Phillips

HP:lb

Enclosure

File: ENV/RPG2/Florence County



# Alligator Road (S-107) Widening

City of Florence  
Florence County, S.C.

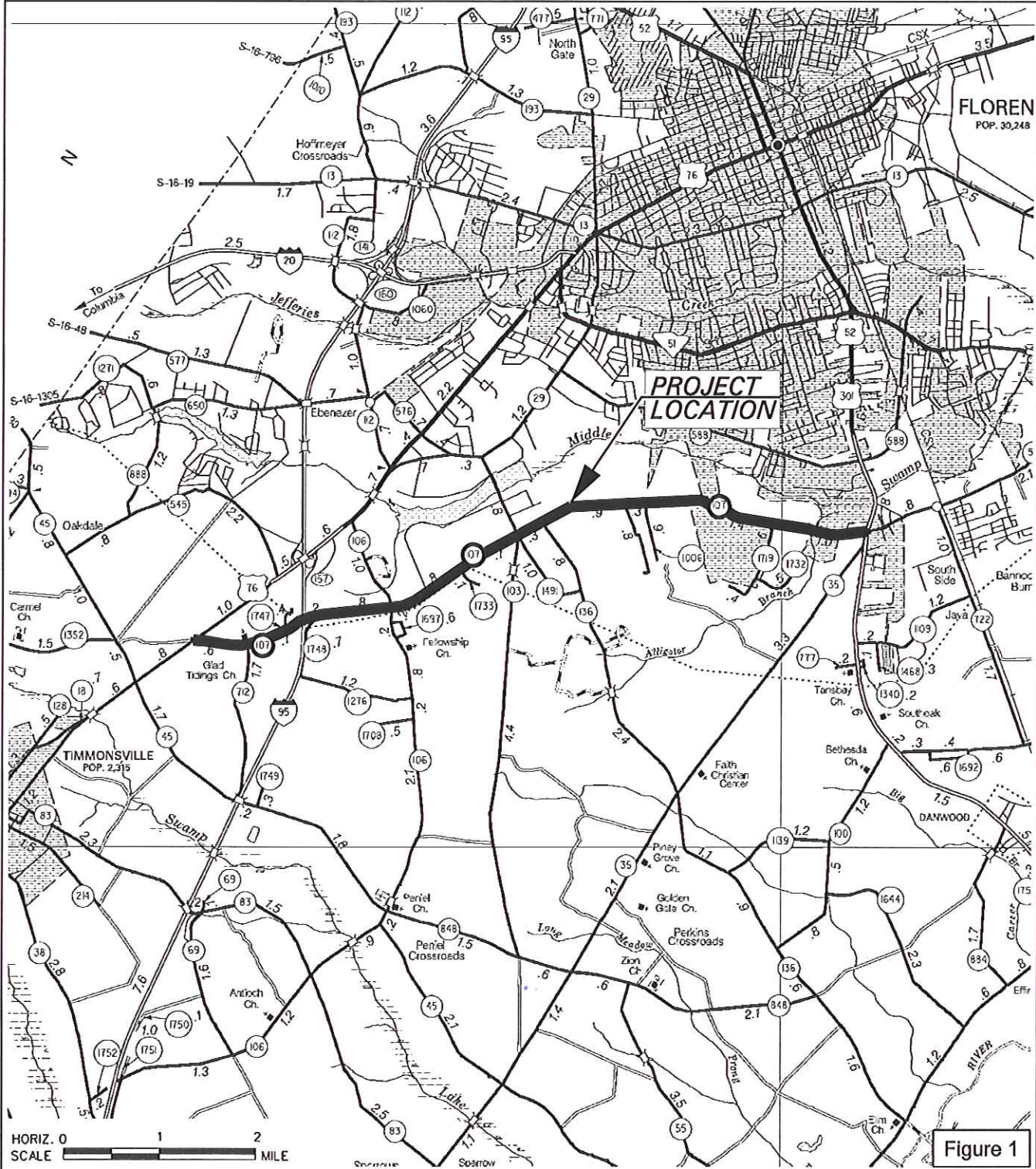
Shaded Area Indicates  
County Location in SC



Approximate Location of Project is:

Longitude 79° 50' 09"

Latitude 34° 08' 58"



4/30/2013  
J:\Alligator Road\Drawings\Figure1\_Location\_Map(8.5x11).dgn

Figure 1

LOI Distribution List

<i>Ms. Ramona McConney</i>	US Environmental Protection Agency Region 4 Office of the Environmental Assessment
<i>Mr. Kelly Laycock</i>	US Environmental Protection Agency Region 4 Wetlands Regulatory Section
<i>Ms. Tina Hadden</i>	US Army Corps of Engineers Charleston District
<i>Ms. Elizabeth Williams</i>	US Army Corps of Engineers Charleston District
<i>Mr. Steve Brumagin</i>	US Army Corps of Engineers
<i>Mr. Jim Chaplin</i>	Columbia Field Office Director US Housing and Urban Development
<i>Ms. Elizabeth Johnson</i>	SC Dept. of Archives and History - Deputy SHPO
<i>Ms. Sarah Stephens</i>	SC Dept. of Archives and History
<i>Mr. Greg Mixon</i>	SC Dept. of Natural Resources
<i>Ms. Elizabeth Johnson</i>	Deputy State Historic Preservation Officer SC Dept. of Archives & History
<i>Dr. Johnathan M Leader</i>	SC State Archaeologist SC Dept. of Archaeology & Anthropology-USC
<i>Ms. Susan Davis</i>	SC Dept. of Natural Resources
<i>Mr. Bob Perry</i>	Director of Environmental Programs SC Dept. of Natural Resources
<i>Ms. Diane Lynch</i>	Field Supervisor US Fish and Wildlife Service
<i>Ms. Heather Preston</i>	Director Water Quality Division Bureau of Water SC Dept. of Health & Environmental Control
<i>Mr. David Wilson</i>	Bureau Chief Bureau of Water SC Dept. of health & Environmental Control
<i>Mr. Mark Giffin</i>	Bureau of Water SC Dept. of Health & Environmental Control
<i>Ms. Myra C Reece</i>	Bureau Chief Bureau Air Quality SC Dept. of Health & Environmental Control
<i>Ms. Daphne Neel</i>	Chief, Bureau of Land & Waste Management SC Dept. of Health and Environmental Control
<i>Mr. Don Siron</i>	Director Division of UST Management Bureau of Land & Waste Management SC Department of Health & Environmental Control
<i>Ms. Alison Hathcock</i>	Division of UST Management Bureau of Land & Waste Management SC Department of Health & Environmental Control
<i>Mr. Robbie Brown</i>	Director Air Planning Development and Outreach Division Bureau of Air Quality SC Department of Health & Environmental Control



LOI Distribution List

<i>Mr. Pat Walker</i>	Bureau Chief Bureau of Environmental Services SC Department of Health & Environmental Control
<i>Ms. Christine Sanford-Coker</i>	Regional Director Region 7 Environmental Quality Control
<i>Mr. Duane Parrish</i>	Executive Director SC Dept. of Parks Recreation and Tourism
<i>Mr. Ralph Haile</i>	Commissioner of Human Affairs
<i>Mr. Bobby Hitt</i>	SC Secretary of Commerce
<i>Mr. Hugh Weathers</i>	Commissioner SC Dept. of Agriculture
<i>Ms. Bonnie Anderson</i>	Inter Governmental Review SC Budget & Control Board
<i>Mr. Ben Gregg</i>	Executive Director SC Wildlife Federation
<i>Mr. Guy Sabin</i>	Section Chief Environmental Management SC Forestry Commission
<i>Mr. Calvin Bailey</i>	Coastal Region Forester SC Forestry Commission
<i>Mr. Robert Lee</i>	Division Administrator FHWA
<i>Dr. Wenonah G Haire</i>	Tribal Historic Preservation Officer Catawba Indian Nation
<i>Mr. Kurt Henning</i>	Chapter Coordinator Sierra Club
<i>Mr. Mark Robertson</i>	Executive Director The Nature Conservancy
<i>Mr. Randall Overton</i>	Bridge Management Specialist US Coast Guard
<i>Mr. Brodie Rich</i>	Bridge Management Specialist US Coast Guard
<i>Mr. Johnny Brown</i>	Pee Dee Council of Governments
<i>Mr. Russell G. Townsend</i>	Tribal Historic Preservation Office Eastern Band of Cherokee Indians
<i>Mr. George Wickliffe</i>	Tribal Historic Preservation Office United Keetoowah Band of Cherokee
<i>Ms. Elizabeth Harm</i>	Heritage Corridor
<i>Mr. Jack Tiller</i>	Ridge Heritage Association
<i>Ms. Andrea Marks</i>	Chapter Coordinator Sierra Club
<i>Mr. George Thornton</i>	National Wild Turkey Foundation
<i>Mr. Harrison Rearden</i>	SCDOT District 6 Commissioner
<i>Mr. Mike Wooten</i>	SCDOT District 7 Commissioner

LOI Distribution List

<i>Mr. Stephen Wukela</i>	City of Florence - Mayor
<i>Mr. Drew Griffin</i>	City of Florence - City Manager
<i>Mr. James Scofield</i>	Florence County Council Chairman
<i>Mr. K G Smith, Jr.</i>	Florence County Administrator
<i>Senator Kevin Johnson</i>	
<i>Senator Hugh K. Leatherman, Sr.</i>	
<i>Senator Yancey McGill</i>	
<i>Senator Kent Williams</i>	
<i>Representative Terry Alexander</i>	
<i>Representative Lester Branham, Jr.</i>	
<i>Representative Kristopher Crawford</i>	
<i>Representative Phillip Lowe</i>	
<i>Representative Robert Williams</i>	



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

February 21, 2014

RECEIVED

FEB 26 2014

Mr. Henry Phillips  
South Carolina Department of Transportation  
Environmental Management Division  
955 Park Street  
Columbia, SC 29202

Environmental Management  
SCDOT

Re: Letter of Intent for Alligator Road (S-107) Widening from US 52 to US 76 in Florence County, South Carolina PIN 42321, File No. 21.042321

Dear Mr. Phillips:

We received notice of the letter of intent for the Alligator Road Widening in Florence County, SC on February 20, 2014. *Based on the information provided, I am responding on behalf of the South Carolina Department of Health and Environmental Control, Bureau of Air Quality (Bureau).*

The Bureau is tasked with implementing the Federal Clean Air Act (1990, as amended) in the State of South Carolina. The Bureau is required to ensure compliance with the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Currently two criteria pollutants are of particular concern in South Carolina:

- **Ozone** – The 2008 8-hour ozone standards (primary and secondary) are currently set at 0.075 parts per million (ppm). The area represented in this proposal is meeting the 2008 ozone standards. The Environmental Protection Agency (EPA) is currently reviewing the 2008 ozone standard and the proposal of a new standard is anticipated.
- **Particulate Matter 2.5** (Particulates 2.5 microns in size and smaller) – The 2012 standard for maximum daily concentration is set at 35 micrograms per cubic meter. The 2012 standard for the maximum annual concentration is set at 12 micrograms per cubic meter. The area represented in this proposal is meeting the 2012 particulate matter 2.5 standards.

Presently only the eastern portion of York County has been designated nonattainment for the 2008 8-hour ozone NAAQS. For more information on which areas have been designated nonattainment, please visit <http://www.epa.gov/oar/oaqps/greenbk>. If a project is located in a nonattainment area, it may be subject to prescriptive requirements such as Transportation Conformity or air quality modeling.

An asbestos survey and project license may be required prior to any demolition activities such as deconstruction of a building or removal of structures in the right-of-way of a road project. If you have any questions regarding asbestos regulatory applicability you may contact Robin Mack (with the Bureau's Asbestos Section) at (803) 898-4270 or [mackrs@dhec.sc.gov](mailto:mackrs@dhec.sc.gov).

As both bicycle and pedestrian travel are beneficial for health and air quality, the Bureau supports the provision of suitable accommodations for those road users. If, on evaluation, it is determined that the project should proceed, the Bureau encourages the project planners to provide for bicycle and pedestrian travel across and along Alligator Road.

All necessary environmental permits for the subject project must be obtained in accordance with applicable state and federal regulations. If you have not already done so, please contact the Bureau of Water at (803) 898-4300 and the Bureau of Land and Waste Management at (803) 898-2000 for input regarding those program areas' assessments of this proposed project.

Emissions from construction equipment are regulated by federal standards. The Bureau would like to offer the following suggestions on how this project can help us stay in compliance with the NAAQS. More importantly, these strategies are beneficial to the health of citizens of South Carolina.

- Utilize alternatively fueled equipment.
- Utilize emission controls applicable to your equipment.
- Reduce idling time on equipment.
- Fugitive dust emissions should be minimized through good operating practices.

The Bureau can provide model clean construction contract language. A vendor may need to retrofit, repower or replace older and more polluting diesel construction equipment in order to satisfy clean construction requirements. These types of projects can be financed with Congestion Mitigation and Air Quality (CMAQ) funds, and are in fact a high priority for CMAQ funding. Please contact our office if assistance is needed.

Thank you for the opportunity to comment on this project. Should you have any further questions or comments concerning this matter, please do not hesitate to contact me at (803) 898-4122 or at [robertln@dhec.sc.gov](mailto:robertln@dhec.sc.gov).

Sincerely,



L. Nelson Roberts, Jr., Manager  
Air Quality Standards and Assessment Section  
SCDHEC Bureau of Air Quality

cc: Brian Baxley, Pee Dee EQC Florence Office, [baxleybc@dhec.sc.gov](mailto:baxleybc@dhec.sc.gov)





Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

RECEIVED

FEB 26 2014

Environmental Management  
SCDOT

February 21, 2014

S. C. Department of Transportation  
Attn: Mr. Henry Phillips, Environmental Project Manager  
Environmental Management Office, Rm. 509  
P.O. Box 191  
Columbia, SC 29202-0191

Re: Alligator Road (S-107) widening in Florence County.  
PIN: 42321

Dear Mr. Phillips:

The South Carolina Department of Health and Environmental Control (SCDHEC) is providing comments regarding potential environmental impacts of the above project, as requested in your letter dated June 6, 2013. As you are aware, SCDHEC's Bureau of Water administers applicable regulations pertaining to water quality standards and classifications, including wetland protection, in accordance with the South Carolina Pollution Control Act, the Federal Clean Water Act, the State Stormwater Management and Sediment Reduction Act, Construction in Navigable Waters Permitting, and associated regulations for all of these statutes.

The following comments are provided as input concerning environmental impacts of the proposed SCDOT project to aid in the preparation of an Environmental Assessment (EA) in accordance with regulations of the Federal Highway Administration (FHWA) and National Environmental Policy Act (NEPA).

The project consists of widening 7.5 miles of Alligator road, including a new bridge across I-95 and w new or widened bridge across Alligator Branch. The project could also include pedestrian accommodations. The purpose of the proposed work is to provide a more efficient transportation facility and provide better access to residential, commercial and industrial areas located in and around Florence.

The project alignment crosses Alligator Branch; however, the information provided does not indicate if other aquatic resources would be impacted by the project. Therefore, a delineation will be needed to identify other jurisdictional aquatic impacts resulting from the project based on a final design. If impacts to aquatic resources will result from the proposed project, SCDHEC recommends that efforts are made to minimize such

Page 2  
February 21, 2014  
Mr. Henry Phillips

impacts when planning and constructing this project. Such efforts could include additional bridging or providing an adequate number of adequately sized culverts to accommodate bank-full rain events, maintain hydrologic flows and aquatic life passage. In addition, reducing road widths by utilizing 2:1 slopes and/or reducing median widths or shifting alignments in sensitive areas may minimize aquatic impacts. Finally, the use of best management practices to minimize sediment migration during construction, as well as other post construction stormwater management practices will minimize water quality impacts.

Alligator Branch is a tributary to Middle Swamp, which is impaired due to low dissolved oxygen levels (D.O.) approximately 3.8 miles downstream of the proposed bridge (PD-230). Therefore, Scupper drains from the proposed bridge should not be placed directly over the waterbody, if practicable. In addition, construction access to the bridge should be attained from highland, from the portion of the bridge already completed (“end on end construction”) or from temporary work trestles, floating barges or mats instead of barge canals or causeways.

SCDHEC will review any additional information provided in the environmental document, including a thorough description (and quantification) of the stream and wetland resources that will potentially be impacted by the proposed project, if applicable. The environmental document will also include an alternatives analysis, which addresses stream and wetland impact avoidance and minimization, in addition to other factors. The above information will be useful in making a decision regarding 401 Water Quality Certification, administered by SCDHEC. If required, the Certification may be conditioned to address specific modifications and measures that would be required to further reduce wetland and water quality impacts after a review of detailed project drawings. Also, a final mitigation plan addressing unavoidable wetland/stream impacts must be reviewed and approved by SCDHEC during the certification process.

In addition to the aforementioned Certification, the proposed work must be in compliance with State Sediment and Erosion Control and NPDES MS4 stormwater permitting requirements administered by the Bureau of Water.

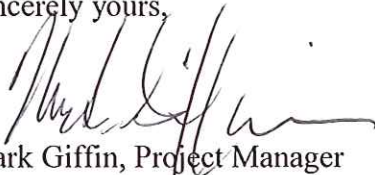
Finally, please ensure that all other necessary environmental permits for this project are obtained in accordance with applicable State and Federal regulations. If you have not done so already, please contact the Bureau of Air Quality and the Bureau of Land and Waste Management for input regarding those program areas’ assessments of this proposed project.



Page 3  
February 21, 2014  
Mr. Henry Phillips

Please call me at 898-4179 if you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark Giffin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Giffin, Project Manager  
Water Quality Certification and Wetlands Section

cc: Heather Preston  
Chuck Hightower  
Jill Stewart  
Pee Dee EQC Region



1122 Lady Street  
Suite 1100  
Columbia, SC 29201  
(p) 803.254.5800

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