

Transportation Analysis

**Foxhall Resort and
Sporting Club
DRI #1839
Douglas County, Georgia**

Prepared for:

Merrill Trust Communities and Resorts, LLC

Prepared by:

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed +/-1,092.15-acre mixed-use development (Foxhall Resort and Sporting Club) located along both sides of Capps Ferry Road, west of the Chattahoochee River, in the southeast corner of Douglas County, Georgia. This report is being prepared in conjunction with filing the Master Plan Development with Douglas County. Because the mixed-use project will exceed 400,000 square feet, the proposed development is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) review.

The proposed development is expected to consist of approximately 921 resort residential units and up to 2,377,400 square feet of hotel resort complex/commercial space. The master planned development includes recreation areas, a golf course, an equestrian center, a tennis center, and a network of multi-purpose use trails throughout the site. The site also proposes two community uses: a worship center and a public safety site. The site plan includes 693.83 acres of open space, or 64% of the development. The development is scheduled to be completed in phases with ultimate build-out by the year 2020.

Based on the existing 2008 conditions, two of the study area intersections currently operate below the acceptable Level of Service standard (LOS D). These two intersections are SR 166 at Post Road and SR 166 at Chapel Hill Road.

The results of the detailed intersection analysis for the 2020 No-Build and 2020 Build conditions identified improvements that will be necessary in order to maintain the Level of Service standard (LOS D or E) within the study network. These improvements are listed below:

2020 No-Build recommended improvements (includes background growth but does not include the Foxhall Resort and Sporting Club DRI project traffic):

Post Road at N Helton Road/E Union Hill Road (Intersection #1)

- Install an exclusive left-turn lane along all four approaches in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are not expected to meet the peak hour signal warrants.)
- An alternative intersection improvement to consider may be a modern roundabout.

SR 166 at Post Road (Intersection #3)

- Install an exclusive left-turn lane along all four approaches in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)
- An alternative intersection improvement to consider may be a modern roundabout.

SR 166 at SR 5 (Intersection #4) - Roundabout

- Install a northbound right-turn slip lane along the SR 5 approach.

SR 166 at Capps Ferry Road (Intersection #5)

- Install an eastbound right-turn lane along SR 166.
- Install an exclusive westbound left-turn lane along SR 166.
- Install a northbound right-turn lane along Capps Ferry Road.

- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)

SR 166 at Chapel Hill Road (Intersection #6)

- Install a westbound right-turn lane along SR 166.
- Install an exclusive eastbound left-turn lane along SR 166.
- Install a southbound right-turn lane along Chapel Hill Road.
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)

Note 1: Two lane approaches is a GDOT requirement at a signalized intersection. If a traffic signal is not installed, the left-turn lanes may not be required based on the low traffic volumes.

Note 2: The need for traffic signals at these intersections will depend on actual traffic volumes. Prior to installing a traffic signal, a traffic signal warrant study should be performed.

2020 Build recommended improvements (2020 No-Build conditions plus the Foxhall Resort and Sporting Club DRI project traffic): (Note: These improvements are in addition to the 2020 No-Build recommended improvements.)

South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70) (Intersection #8)

- Install an exclusive northbound and southbound left-turn lane along Campbellton Redwine Road in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Rico Road (Intersection #9)

- Install an exclusive northbound and southbound left-turn lane along Rico Road in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Cochran Mill Road (Intersection #10)

- Install an exclusive northbound and southbound left-turn lane along Cochran Mill Road in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are not expected to meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Rivertown Road (Intersection #11)

- Install an exclusive northbound left-turn lane along Rivertown Road in conjunction with future signalization.¹
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

Note 1: Two lane approaches is a GDOT requirement at a signalized intersection. If a traffic signal is not installed, the left-turn lanes may not be required based on the low traffic volumes.

Note 2: The need for traffic signals at these intersections will depend on actual traffic volumes. Prior to installing a traffic signal, a traffic signal warrant study should be performed.

The following intersection geometry and improvements are recommended at the project site driveways and internal intersections (Note: The attached site plan includes these improvements):

Capps Ferry Road @ Main Resort Entrance (Driveway #1) / (Driveway #2) – Intersection #14

- Install an exclusive eastbound left-turn lane and right-turn lane along Capps Ferry Road.
- Install an exclusive westbound left-turn lane and right-turn lane along Capps Ferry Road.
- Install a southbound left-turn lane and shared through/right-turn lane along Driveway #1.
- Install a northbound left-turn lane and shared through/right-turn lane along Driveway #2.
- Install a traffic signal when warranted. (Note: Projected 2020 peak hour volumes are expected to meet the peak hour signal warrants. Actual traffic volumes and conditions should be monitored as the development is built out. The traffic signal would likely be installed when approximately half of development is built out.)

Capps Ferry Road @ Commercial Village Right-in/right-out Entrance (Driveway #3) – Intersection #15

- Install a westbound right-turn lane along Capps Ferry Road.

Capps Ferry Road @ Resort/Residential Entrance (Driveway #4) – Intersection #16

- Install an exclusive southbound left-turn lane along Capps Ferry Road.
- Install a northbound right-turn lane along Capps Ferry Road.
- Install a westbound left-turn lane and right-turn lane along Driveway #4.

Capps Ferry Road @ Brookcrest Court & Resort/Residential Entrance (Driveway #5) – Intersection #17

- Install an exclusive southbound left-turn lane along Capps Ferry Road.
- Install a northbound right-turn lane along Capps Ferry Road.
- Install a westbound shared left-turn/through lane and separate right-turn lane along Driveway #5.

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed +/-1,092.15-acre mixed-use development (Foxhall Resort and Sporting Club) located along both sides of Capps Ferry Road, west of the Chattahoochee River, in the southeast corner of Douglas County, Georgia. This report is being prepared in conjunction with filing the Master Plan Development with Douglas County. Because the mixed-use project will exceed 400,000 square feet, the proposed development is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) review.

The proposed development is expected to consist of approximately 921 resort residential units and up to 2,377,400 square feet of hotel resort complex/commercial space. The master planned development includes recreation areas, a golf course, an equestrian center, a tennis center, and a network of multipurpose use trails throughout the site. The site also proposes two community uses: a worship center and a public safety site. The site plan includes 693.83 acres of open space, or 64% of the development. The development is scheduled to be completed in phases with ultimate build-out by the year 2020.

A summary of the proposed land-uses and densities can be found below in **Table 1**.

Table 1 Proposed Land Uses	
Resort Homes (Single-Family)	921 dwelling units
Mixed-Use Resort Commercial Space	2,237,400 square feet
Resort/Neighborhood Commercial Village	140,000 square feet

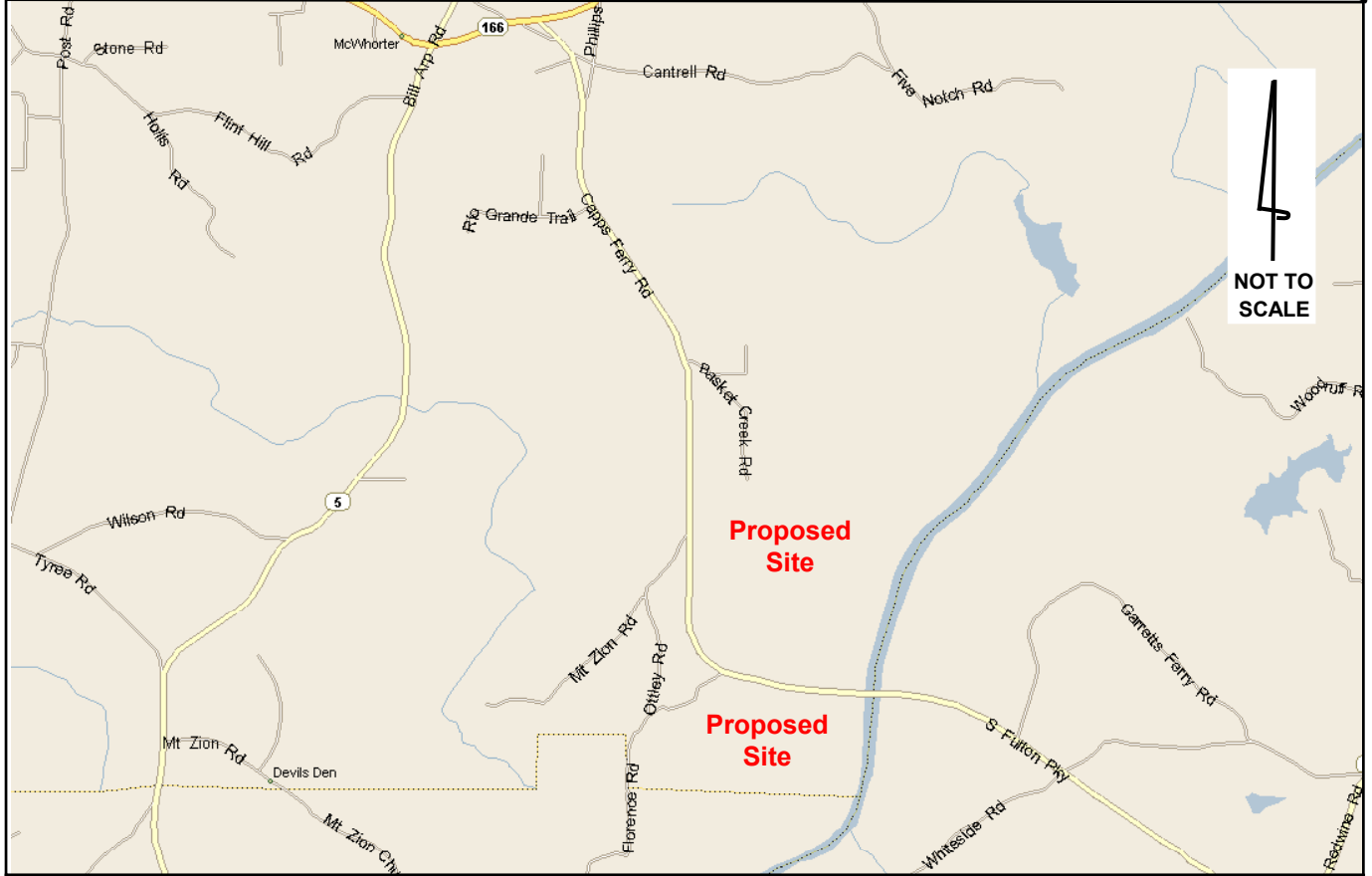
Figure 1 and **Figure 2** provide a location map and an aerial photograph of the site.

1.2 Site Plan Review

The project site is located along both sides of Capps Ferry Road. The northern portion of the site is bounded by the Chattahoochee River to the east, undeveloped land to the north, and Capps Ferry road to the west and south. Four residential subdivision exist to the west of the site: Brook Ridge Estates, Breckenridge, Capps Ferry Springs, and Capps Ferry Farm. The southern portion of the site is bounded by the Chattahoochee River to the east, Capps Ferry road to the north, and undeveloped land to the west and south.


The site plan illustrates a network of internal streets and connections between the residential homes, resort, and the neighborhood commercial village. An underpass currently exists under Capps Ferry Road, just west of the bridge over the Chattahoochee River. The underpass is proposed to be utilized for golf carts, pedestrians, bicycles, and maintenance vehicles.

Figure 3 is a small-scale copy of the site plan. A full-size site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the Review Package.



 <p>Kimley-Horn and Associates, Inc.</p>	<p>Foxhall Resort and Sporting Club Transportation Analysis</p>	<p>Site Location</p>	<p>Figure 1</p>
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 <p>Kimley-Horn and Associates, Inc.</p>	<p>Foxhall Resort and Sporting Club Transportation Analysis</p>	<p>Site Aerial</p>	<p>Figure 2</p>
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1.3 Site Access

The site currently has six access locations along Capps Ferry Road. One driveway will remain in the same location. Four driveways will be relocated so that the planned development will have a total of five access locations. One driveway will be closed. All of the resort/residential entrances will be gated. One 24-hr manned gate entrance will be located at Driveway #1. A description of each follows:

- Driveway #1 - Main Resort Entrance: Full movement driveway at relocated location; located approximately 1,925 feet west of the bridge over the Chattahoochee River and approximately 950 feet east of Florence Road.
- Driveway #2 - Residential Entrance: Full movement driveway aligned with Driveway #1.
- Driveway #3 - Commercial Village Right-in/right-out driveway; located approximately 200 feet east of Florence Road.
- Driveway #4 - Resort/Residential Area Entrance: Full movement driveway at existing driveway; located approximately 2,275 feet north of Florence Road.
- Driveway #5 - Resort/Residential Entrance: Full movement driveway aligned with Brookcrest Court.

The public safety site is proposed to have an access location along Capps Ferry Road.

1.4 Bicycle and Pedestrian Facilities

No sidewalks currently exist in the vicinity of the proposed development. Along the site frontage, Capps Ferry Road consists of a rural road cross-section (i.e. no curb and gutter and shoulder slopes away from road).

The proposed development will provide a network of sidewalks and multipurpose use trails for pedestrian, golf cart, and bicycle traffic within the development. The retail and residential portions of the development are proposed to be connected by sidewalks/trails to potentially reduce the amount of vehicular traffic internal to the site.

The development will provide trail connections as well to access the expected future multi-use trail located within the existing Capps Ferry Road Right of Way being provided by Douglas County. These trail connections will provide the development an alternative method of access to surrounding recreational uses and points of interest.

1.5 Transit Facilities

There is currently no fixed-transit service in the vicinity of this project; however, vanpools are available for Douglas County commuters. Additionally, GRTA Xpress bus route #460 currently operates from Douglasville to Downtown Atlanta.

The development anticipates providing a shuttle service to the Hartsfield Jackson Atlanta International Airport and adjacent MARTA station.

2.0 TRAFFIC ANALYSES METHODOLOGY AND ASSUMPTIONS

2.1 Growth Rate

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed project. Historical traffic count data from the Georgia DOT was reviewed for the area surrounding the proposed development, and growth rates of 2.0% per year along all roadways were agreed upon during the methodology meeting with GRTA staff.

2.2 Traffic Data Collection

2008 peak hour turning movement counts were conducted May 6th and 7th at thirteen intersections from 7:00-9:00 AM and 4:00-6:00 PM. The morning and afternoon peak hours varied between the thirteen intersections:

1. Post Road at N Helton Road/E Union Hill Road (7:15-8:15 AM; 5:00-6:00 PM)
2. Post Road at Liberty Road (7:30-8:30 AM; 5:00-6:00 PM)
3. SR 166 at Post Road (7:00-8:00 AM; 5:00-6:00 PM)
4. SR 166 at SR 5 (8:00-9:00 AM; 4:15-5:15 PM)
5. SR 166 at Capps Ferry Road (7:00-8:00 AM; 5:00-6:00 PM)
6. SR 166 at Chapel Hill Road (7:15-8:15 AM; 4:45-5:45 PM)
7. Capps Ferry Road at Florence Road (7:00-8:00 AM; 5:00-6:00 PM)
8. South Fulton Highway (SR 70) at Campbellton Redwine Road (7:00-8:00 AM; 5:00-6:00 PM)
9. South Fulton Highway (SR 70) at Rico Road (7:00-8:00 AM; 5:00-6:00 PM)
10. South Fulton Highway (SR 70) at Cochran Mill Road (7:00-8:00 AM; 4:45-5:45 PM)
11. South Fulton Highway (SR 70) at Rivertown Road (7:00-8:00 AM; 4:45-5:45 PM)
12. South Fulton Highway (SR 70) at Cascade Palmetto Highway (SR 154) (7:00-8:00 AM; 4:45-5:45 PM)
13. Rivertown Road at Cascade Palmetto Highway (SR 154) (7:15-8:15 AM; 5:00-6:00 PM)

Additionally, a 24-hour count was performed along Capps Ferry Road, just west of the bridge over the Chattahoochee River. The existing average daily traffic (ADT) was reported as 3,936 vehicles per day.

All raw count data is included in the Appendix.

2.3 Detailed Intersection Analysis

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists perceptions within a traffic stream. The Highway Capacity Manual defines six levels of service, LOS A through LOS F, with A being the best and F being the worst. Level of service analyses were conducted at all intersections within the study network using Synchro Professional, Version 6.0.

Levels of service for signalized intersections and all-way stop-controlled unsignalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low Level of Service, while the intersection as a whole may operate acceptably.

Levels of Service for unsignalized intersections, with stop control on the minor street only, are reported for the side street approaches. Low Levels of Service for side street approaches are not uncommon, as vehicles may experience delay in turning onto a major roadway.

3.0 STUDY NETWORK

3.1 Gross Trip Generation

As stated earlier, the proposed development is expected to consist of approximately 921 resort residential units and up to 2,377,000 square feet of mixed-use resort commercial space. The development is scheduled to be completed in phases with ultimate build-out by the year 2020.

Traffic for these land uses was calculated using equations contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003*. For the purposes of the DRI traffic study analysis, the breakdown of these uses is estimated to be:

- Resort Homes: 921 single family homes (consisting of primary and secondary homes)
- A hotel resort complex, consisting of hotel rooms, cottages, and a mix of resort rentals. The estimated traffic for this use will be estimated based on 600 hotel rooms (at 900SF/unit) and 843 resort units (at 1,800 SF/unit). It should be noted that traffic associated with the 180,000 SF of facilities supporting the resort uses (i.e. conference center, recreation buildings, spa, and maintenance) is included in the hotel and resort projections.
- Resort/Neighborhood Commercial Village: 140,000 square feet of retail (along Capps Ferry Road)

Gross trips generated are displayed below in **Table 2**.

Table 2 Foxhall Resort and Sporting Club DRI Gross Trip Generation							
Land Use	ITE Code	Daily Traffic		AM Peak Hour		PM Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
Build-Out (Year 2020)							
921 Residential Homes	270	3,406	3,406	103	365	397	213
843 Resort Units	260	1,332	1,332	90	45	90	129
300 Hotel Rooms	310	1,156	1,156	98	62	94	83
300 Resort Hotel Rooms	330	1,156	1,156	57	22	54	72
140,000 SF Shopping Center	820	4,225	4,225	117	75	375	407
Total		11,275	11,275	465	569	1,010	904

3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on the project land uses, a review of land use densities in the area, combined with engineering judgment and discussions with GRTA and Douglas County staff at the Pre-Application meeting.

3.3 *Level of Service Standards*

For the purposes of this traffic analysis, a level of service standard of D was assumed for all intersections and segments within the study network. If, however, an intersection or segment currently operates at LOS E or LOS F during an existing peak period, the LOS standard for that peak period becomes LOS E, consistent with GRTA's Letter of Understanding.

3.4 *Study Network Determination*

A general study area was determined using the 7% rule. This rule recommends that all intersections and segments be analyzed which are impacted to the extent that the traffic from the proposed site is 7% or more of the Service Volume of the facility (at a previously established LOS standard) be considered for analysis. This general study area was refined during the Pre-Application meeting, and includes the following intersections:

1. Post Road at N Helton Road/E Union Hill Road (Unsignalized)
2. Post Road at Liberty Road (Unsignalized)
3. SR 166 at Post Road (Unsignalized – All-Way Stop)
4. SR 166 at SR 5 (Roundabout)
5. SR 166 at Capps Ferry Road (Unsignalized)
6. SR 166 at Chapel Hill Road (Unsignalized)
7. Capps Ferry Road at Florence Road (Unsignalized)
8. South Fulton Highway (SR 70) at Campbellton Redwine Road (Unsignalized)
9. South Fulton Highway (SR 70) at Rico Road (Unsignalized)
10. South Fulton Highway (SR 70) at Cochran Mill Road (Unsignalized)
11. South Fulton Highway (SR 70) at Rivertown Road (Unsignalized)
12. South Fulton Highway (SR 70) at Cascade Palmetto Highway (SR 154) (Signalized)
13. Rivertown Road at Cascade Palmetto Highway (SR 154) (Unsignalized)

All thirteen intersections were analyzed for the weekday AM and PM peak hour.

Each of the above listed intersections was analyzed for the Existing 2008 Condition, the 2020 No-Build Condition, and the 2020 Build Condition. The 2020 No-Build condition represents the existing traffic volumes grown at 2.0% per year for twelve years. The 2020 Build condition adds the project trips associated with the Foxhall Resort and Sporting Club development to the 2020 No-Build condition. (NOTE: The additional proposed site access points and internal site intersections listed below were only analyzed for the 2020 Build Condition):

- Capps Ferry Road at Main Resort Entrance (Driveway #1) - Intersection #14
- Capps Ferry Road at Residential Entrance (Driveway #2) – Intersection #14
- Capps Ferry Road at Commercial Village Right-in/right-out Entrance (Driveway #3) - Intersection #15
- Capps Ferry Road at Resort/Residential Entrance (Driveway #4) - Intersection #16
- Capps Ferry Road at Brookcrest Court & Resort/Residential Entrance (Driveway #5) - Intersection #17

These intersections were analyzed for the weekday AM and PM peak periods.

3.5 Existing Roadway Facilities

Capps Ferry Road is a two-way, undivided, roadway that extends from SR 166 to the Chattahoochee River where the road name changes to South Fulton Parkway. (Note: Capps Ferry Road changes names to South Fulton Parkway at the Chattahoochee River.) The functional classification for the road is Rural Principal Arterial. The 2008 ADT just west of the bridge over the Chattahoochee River was 3,936 vehicles per day (vpd). This count was performed Tuesday, May 6th, 2008.

SR 166 (Duncan Memorial Highway) is a two-way, undivided, east-west oriented roadway. The 2006 ADT between SR 5 and Capps Ferry Road was 5,660 vehicles per day (vpd) per GDOT.

SR 5 (Bill Arp Road) is a two-way, undivided, north-south oriented roadway. The 2006 ADT north of SR 166 was 5,610 vehicles per day (vpd) per GDOT.

South Fulton Parkway is a major east-west oriented roadway, extending between the Chattahoochee River and I-285 / I-85 interchange in Fulton County. (Note: South Fulton Parkway changes names to Capps Ferry Road at the Chattahoochee River.) The parkway is a two-lane, undivided, roadway west of Rivertown Road. The parkway is a four-lane divided roadway east of Rivertown Road.

Additional roadways and roadway characteristics are listed below.

Roadway	Number of Lanes	Posted Speed Limit (MPH)	GDOT & Douglas County Functional Classification
Capps Ferry Road	2	45	Rural Principal Arterial Rural Major Arterial (Douglas Co.)
Florence Road	2	---	Rural Local Street
SR 166 (Duncan Memorial Highway)	2	45/55	Rural Minor Arterial
SR 5 (Bill Arp Road)	2	55	Rural Major Collector (south of SR 166); Rural Principal Arterial (north of SR 166)
Post Road	2	45	Rural Minor Collector
Liberty Road	2	--	Rural Major Collector
South Fulton Parkway (SR 70); west of Rivertown Road	2	55	Rural Principal Arterial
South Fulton Parkway (SR 70); east of Rivertown Road	4	55	Rural Principal Arterial
Campbellton Redwine Road (SR 70)	2	55	Rural Major Collector
Rico Road	2	45	Rural Minor Collector
Cochran Mill Road	2	45	Rural Minor Collector
Rivertown Road	2	45	Rural Major Collector
Cascade Palmetto Highway (SR 154)	2	55	Rural Major Collector

4.0 TRIP GENERATION

As stated earlier, trips associated with the proposed development were estimated using the ITE *Trip Generation Manual*, Seventh Edition (2003), using equations where available.

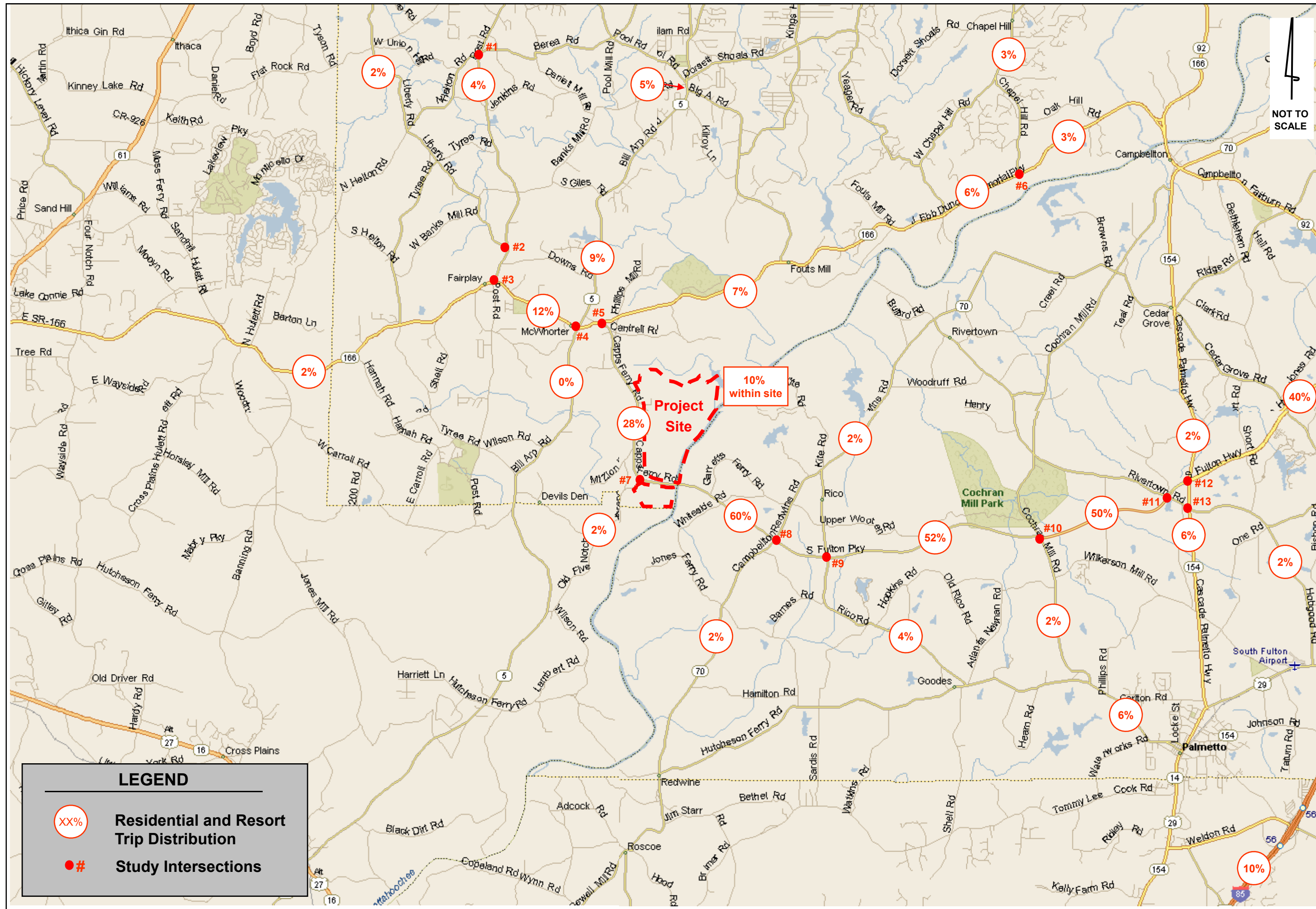
Mixed-Use reductions were taken to account for internal trips between the residential, resort, and retail uses. Internal trips were limited to be 10% of the residential and resort trips.

Pass-by reductions were taken according to the ITE Trip Generation Handbook, Second Edition, 2004 and GRTA guidelines. Based on a GRTA's "Limits Test", the total pass-by trips were limited to 10% of the adjacent roadway's existing traffic volumes. No alternate modes of transportation reductions were taken. The total trips generated and analyzed in the report are listed below in **Table 3**.

Table 3 Foxhall Resort and Sporting Club DRI Net Trip Generation						
Land Use	Daily Traffic		AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Build-Out (Year 2020)						
Gross Trips	11,275	11,275	465	569	1,010	904
<i>Pass-by Reductions</i>	<i>-499</i>	<i>-499</i>	<i>-0</i>	<i>-0</i>	<i>-57</i>	<i>-57</i>
New Trips	10,776	10,776	465	569	953	847
<i>Internal Interaction</i>	<i>-1,410</i>	<i>-1,410</i>	<i>-70</i>	<i>-99</i>	<i>-127</i>	<i>-99</i>
Driveway Volumes	9,366	9,366	395	470	826	748

5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages discussed during the Pre-Application meeting and based on existing traffic patterns. **Figure 4 and Figure 5** displays the expected distribution percentages for the development throughout the roadway network. These percentages were applied to the new trips generated by the development (see Table 3, above), and the volumes were assigned to the roadway network. The expected peak hour turning movements generated by the proposed development are shown in **Figure 6A & 6B**.



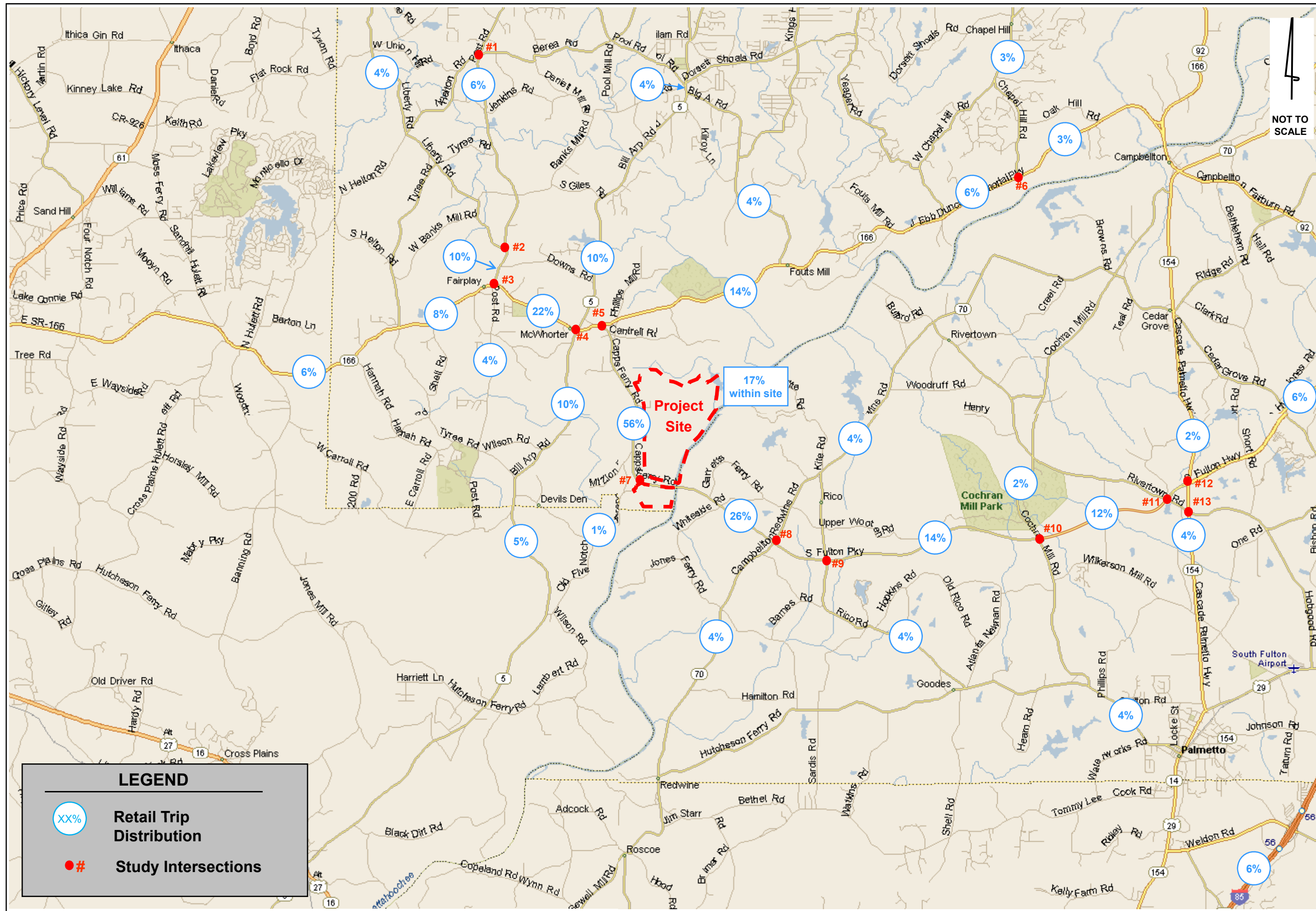


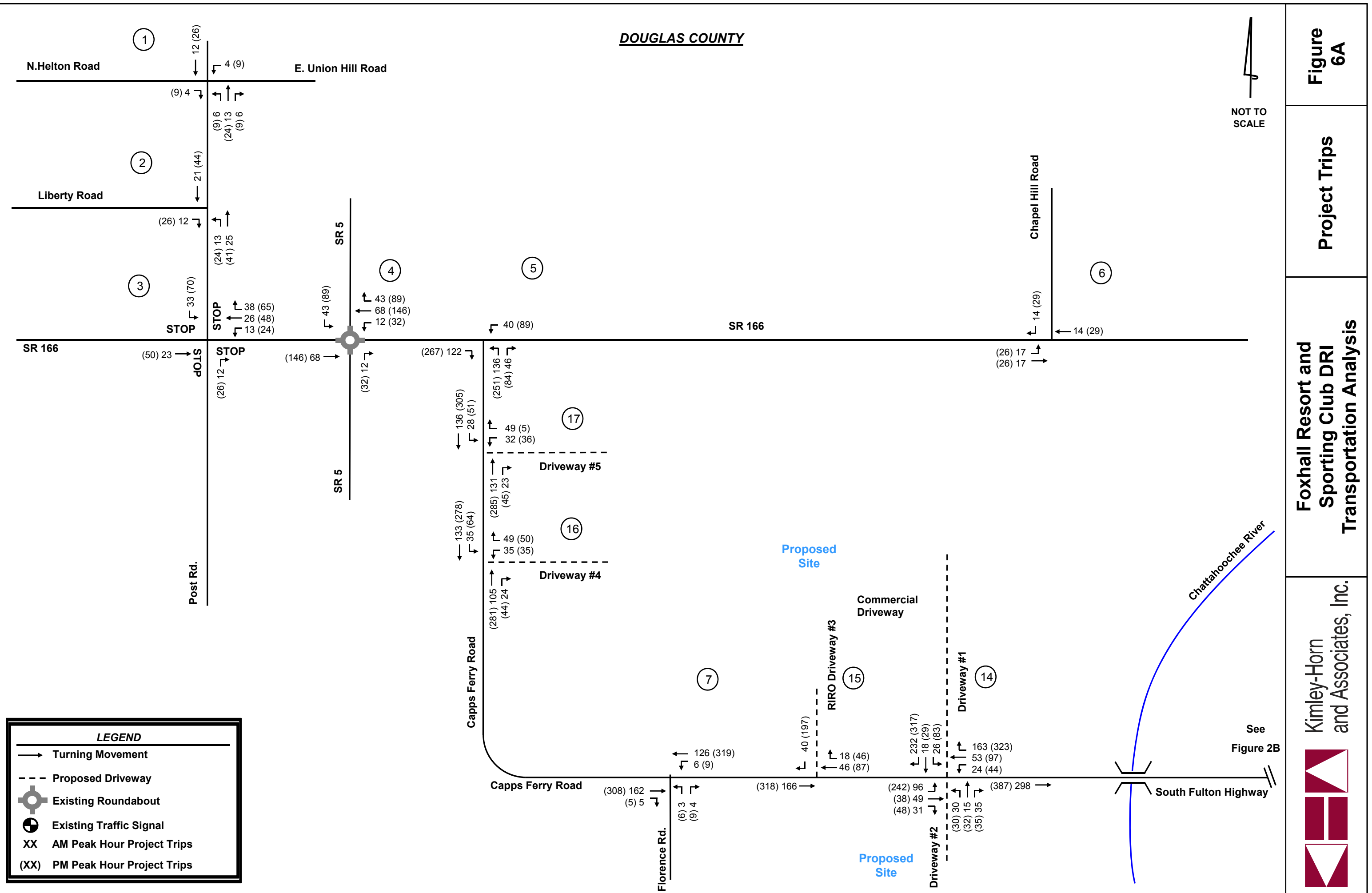
Figure 5

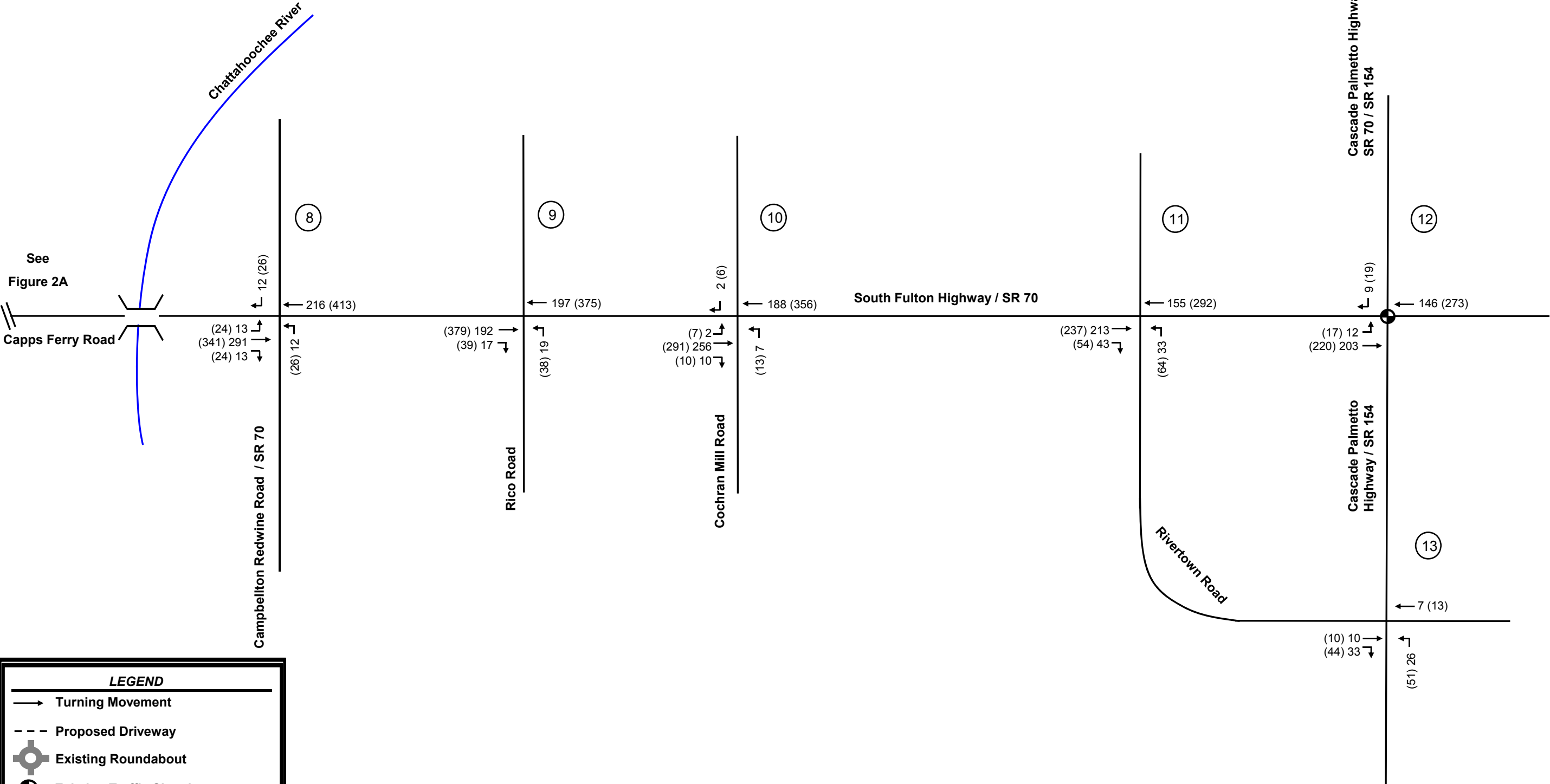
Retail Distribution

Foxhall Resort and Sporting Club DRI Pre-Application Meeting

Kimley-Horn and Associates, Inc.







6.0 TRAFFIC ANALYSIS

6.1 2008 Existing Traffic

The existing traffic volumes are shown in **Figure 7A & 7B**. These volumes were input in Synchro 6.0 and an Existing Conditions analysis was performed. The results are displayed in **Table 4**.

Table 4 Foxhall Resort and Sporting Club DRI 2008 Existing Intersection Levels of Service (delay in seconds)				
Intersection		Control	AM Peak Hour	PM Peak Hour
1	Post Road at N Helton Road/E Union Hill Road	WB/EB STOP Controlled	WB – B (13.5) EB – D (25.0)	WB – B (13.9) EB – C (15.6)
2	Post Road at Liberty Road	EB STOP Controlled	EB – B (10.2)	EB – B (10.8)
3	SR 166 at Post Road	All-Way STOP Controlled	Overall LOS F *	Overall LOS D (31.7)
4	SR 166 at SR 5	Roundabout	Overall: B NB – A SB – B WB – A EB – B	Overall: B NB – C SB – A WB – B EB – A
5	SR 166 at Capps Ferry Road	NB STOP Controlled	NB – C (21.2)	NB – D (26.3)
6	SR 166 at Chapel Hill Road	SB STOP Controlled	SB – F *	SB – E (40.3)
7	Capps Ferry Road at Florence Road	NB STOP Controlled	NB – B (12.1)	NB – A (9.8)
8	South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70)	NB/SB STOP Controlled	NB – C (17.5) SB – B (12.4)	NB – C (18.5) SB – C (17.2)
9	South Fulton Highway (SR 70) at Rico Road	NB/SB STOP Controlled	NB – B (12.8) SB – B (13.6)	NB – B (14.7) SB – B (13.8)
10	South Fulton Highway (SR 70) at Cochran Mill Road	NB/SB STOP Controlled	NB – B (13.5) SB – B (14.7)	NB – B (14.2) SB – B (13.2)
11	South Fulton Highway (SR 70) at Rivertown Road	NB/SB STOP Controlled	NB – B (11.6) SB – B (11.8)	NB – B (13.8) SB – B (12.6)
12	South Fulton Highway (SR 70) at Cascade Palmetto Highway (SR 154/SR 70)	Signalized	B (14.0)	B (14.4)
13	Rivertown Road at Cascade Palmetto Highway (SR 154)	EB/WB STOP Controlled	EB – C (15.5) WB – C (16.1)	EB – C (16.0) WB – C (16.4)

*Long delay expected

As shown in the table, two of the intersections currently operate below the acceptable Level of Service standard (LOS D) during either the AM or PM peak hour.

LEGEND

→

Existing Roadway Laneage

⊕

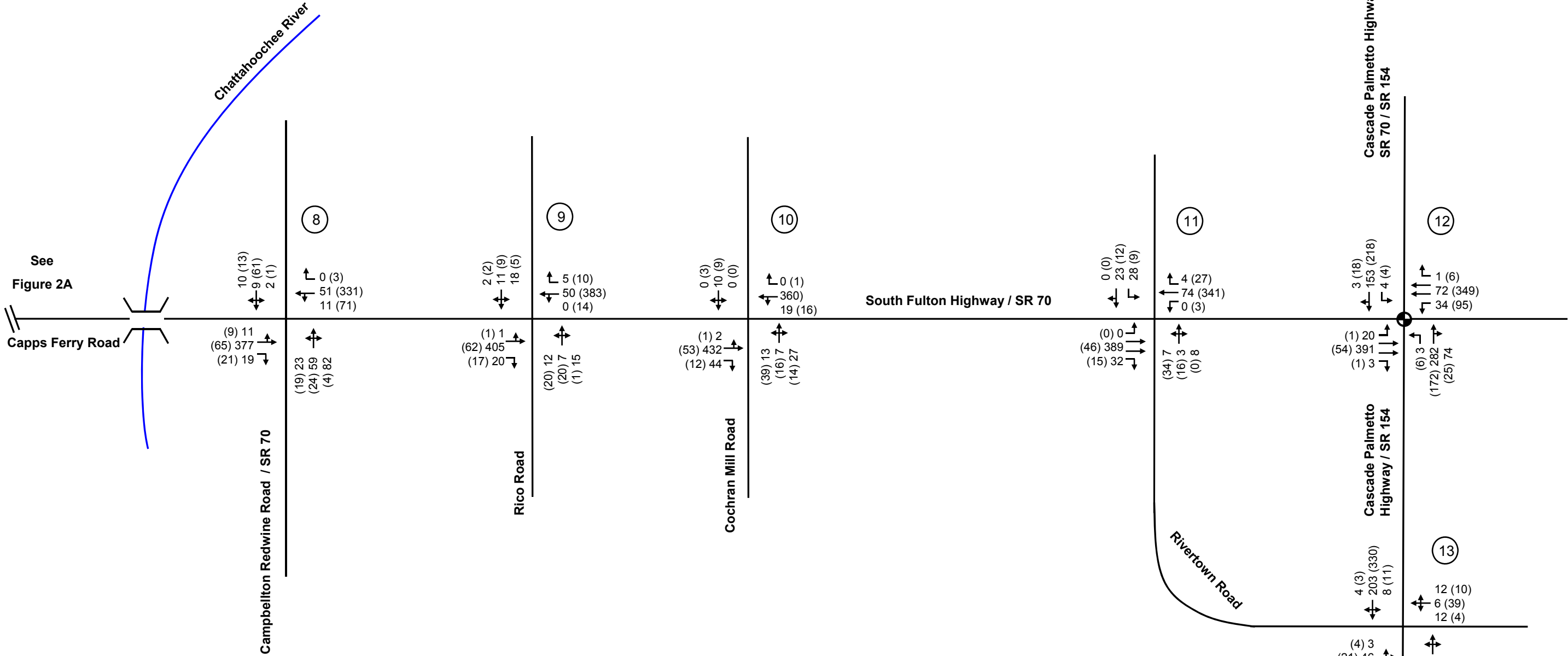
Existing Traffic Signal

XX

AM Peak Hour Traffic Volumes

(XX)

PM Peak Hour Traffic Volumes



6.2 2020 No-Build Traffic

The existing traffic volumes were grown at 2.0% per year along all roadway links within the study network. These volumes were input in Synchro 6.0 and analyses of the projected No-Build conditions were performed. No future transportation projects were included in the No-Build analyses, in accordance with GRTA's Letter of Understanding guidelines. The results are displayed below in **Table 5**. The projected volumes for the year 2020 No-Build conditions are shown in **Figure 8A & 8B**.

Table 5 Foxhall Resort and Sporting Club DRI Projected 2020 No-Build Intersection Levels of Service (delay in seconds)					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	Post Road at N Helton Road/E Union Hill Road	WB/EB STOP Controlled	D	WB – C (16.0) EB – F (76.1)	WB – C (16.8) EB – C (21.0)
2	Post Road at Liberty Road	EB STOP Controlled	D	EB – B (11.0)	EB – B (11.9)
3	SR 166 at Post Road	All-Way STOP Controlled	E	Overall LOS F *	Overall LOS F *
4	SR 166 at SR 5	Roundabout	D	Overall: B NB – A SB – C WB – B EB – B	Overall: C NB – F SB – A WB – B EB – A
5	SR 166 at Capps Ferry Road	NB STOP Controlled	D	NB – E (43.4)	NB – F (91.0)
6	SR 166 at Chapel Hill Road	SB STOP Controlled	E	SB – F *	SB – F *
7	Capps Ferry Road at Florence Road	NB STOP Controlled	D	NB – B (13.9)	NB – A (10.0)
8	South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70)	NB/SB STOP Controlled	D	NB – D (28.7) SB – C (15.1)	NB – D (28.6) SB – C (24.1)
9	South Fulton Highway (SR 70) at Rico Road	NB/SB STOP Controlled	D	NB – B (14.9) SB – C (16.3)	NB – C (18.4) SB – C (16.3)
10	South Fulton Highway (SR 70) at Cochran Mill Road	NB/SB STOP Controlled	D	NB – C (16.5) SB – C (17.6)	NB – C (18.0) SB – C (15.2)
11	South Fulton Highway (SR 70) at Rivertown Road	NB/SB STOP Controlled	D	NB – B (12.9) SB – B (12.9)	NB – C (16.5) SB – B (14.0)
12	South Fulton Highway (SR 70) at Cascade Palmetto Highway (SR 154/SR 70)	Signalized	D	B (17.5)	B (16.2)
13	Rivertown Road at Cascade Palmetto Highway (SR 154)	EB/WB STOP Controlled	D	EB – C (20.6) WB – C (22.6)	EB – C (21.9) WB – C (22.1)

*Long delay expected

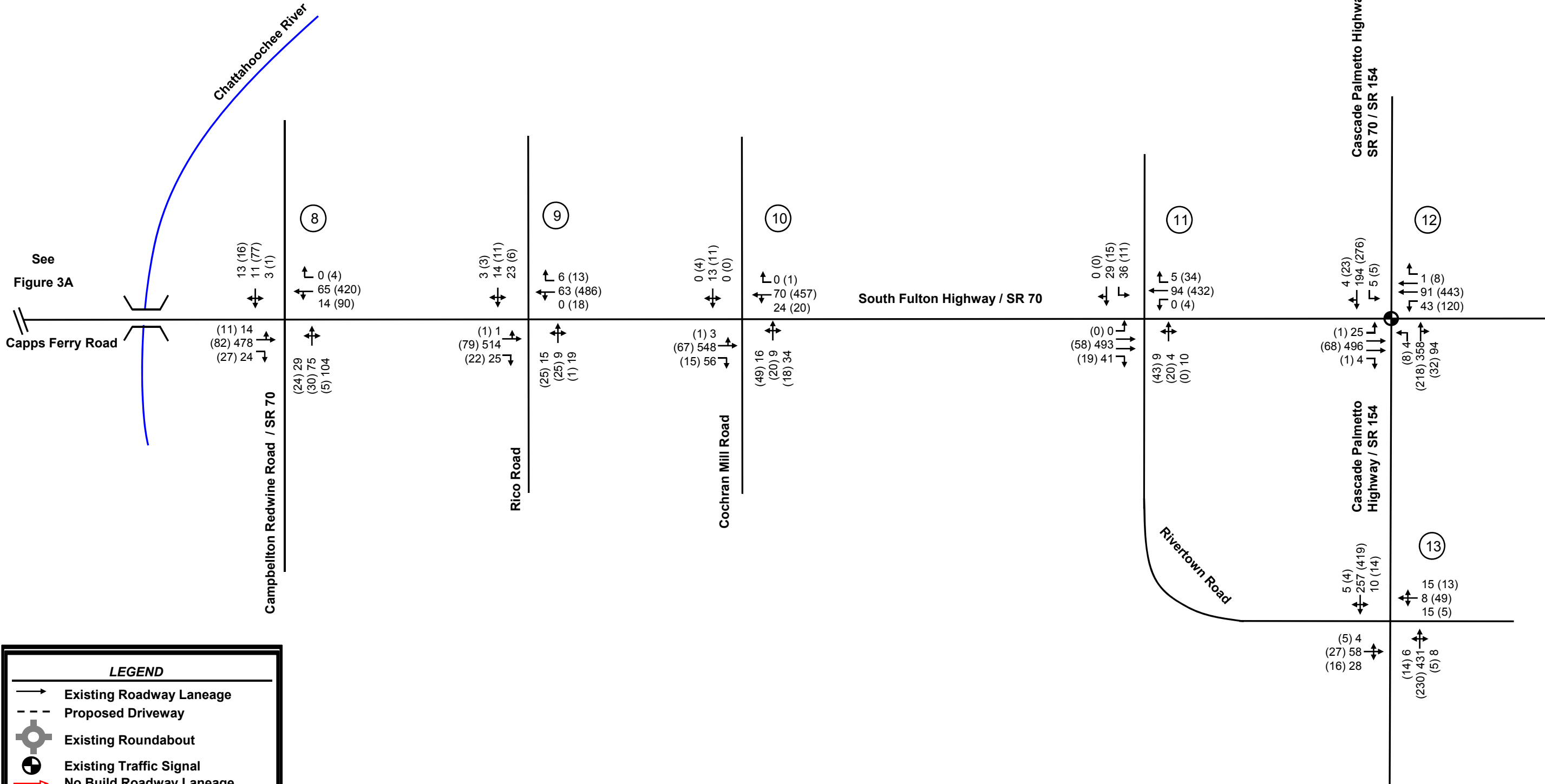


Figure 8B

Projected 2020 No-Build Conditions

Foxhall Resort and Sporting Club DRI Transportation Analysis

Five of the intersections failed to meet acceptable Level of Service standards for the year 2020 No-Build condition. Per GRTA's Letter of Understanding guidelines, improvements were made to these five intersections until the Level of Service was elevated to the GRTA standard. (Note: The roundabout overall LOS C may be considered acceptable; however, the northbound approach LOS F was projected to require improvement.) The 2020 No-Build with Improvement intersection analysis Levels of Service are displayed in **Table 6**.

Table 6 Foxhall Resort and Sporting Club DRI Projected 2020 No-Build IMPROVED Intersection Levels of Service (delay in seconds)					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	Post Road at N Helton Road/E Union Hill Road	New Signal	D	B (10.6)	A (7.4)
3	SR 166 at Post Road	New Signal	E	C (26.0)	A (9.6)
4	SR 166 at SR 5	Roundabout	D	Overall: B NB – A SB – C WB – B EB – B	Overall: B NB – B SB – A WB – B EB – A
5	SR 166 at Capps Ferry Road	New Signal	D	A (6.8)	A (9.7)
6	SR 166 at Chapel Hill Road	New Signal	E	B (13.7)	A (7.7)

The 2020 No-Build improvements made to the intersections are shown in Figure 8A & 8B, and are listed below by intersection:

Post Road at N Helton Road/E Union Hill Road (Intersection #1)

- Install an exclusive left-turn lane along all four approaches in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes are not expected to meet the peak hour signal warrants.)
- An alternative intersection improvement to consider may be a modern roundabout.

SR 166 at Post Road (Intersection #3)

- Install an exclusive left-turn lane along all four approaches in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)
- An alternative intersection improvement to consider may be a modern roundabout.

SR 166 at SR 5 (Intersection #4) - Roundabout

- Install a northbound right-turn slip lane along the SR 5 approach.

SR 166 at Capps Ferry Road (Intersection #5)

- Install an eastbound right-turn lane along SR 166.
- Install an exclusive westbound left-turn lane along SR 166.

- Install a northbound right-turn lane along Capps Ferry Road.
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)

SR 166 at Chapel Hill Road (Intersection #6)

- Install a westbound right-turn lane along SR 166.
- Install an exclusive eastbound left-turn lane along SR 166.
- Install a southbound right-turn lane along Chapel Hill Road.
- Install a traffic signal when warranted.² (Note: Projected peak hour volumes are expected to meet the peak hour signal warrants.)

Note 1: Two lane approaches is a GDOT requirement at a signalized intersection. If a traffic signal is not installed, the left-turn lanes may not be required based on the low traffic volumes.

Note 2: The need for traffic signals at these intersections will depend on actual traffic volumes. Prior to installing a traffic signal, a traffic signal warrant study should be performed.

6.3 2020 Build Traffic

The traffic associated with the proposed development (Foxhall Resort and Sporting Club) was added to the 2020 No-Build volumes. These volumes were then input into the 2020 No-Build with Improvements roadway network and analyzed with Synchro 6.0. The results of the analyses are displayed in **Table 7**. The projected volumes for the year 2020 Build conditions are shown in **Figure 9A & 9B**.

Table 7 Foxhall Resort and Sporting Club DRI Projected 2020 Build Intersection Levels of Service (delay in seconds)					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	Post Road at N Helton Road/E Union Hill Road	Signalized	D	B (10.7)	A (7.6)
2	Post Road at Liberty Road	EB STOP Controlled	D	EB – B (11.4)	EB – B (12.8)
3	SR 166 at Post Road	Signalized	E	D (45.0)	B (11.2)
4	SR 166 at SR 5	Roundabout	D	Overall: C NB – A SB – D WB – B EB – B	Overall: C NB – E SB – B WB – B EB – D
5	SR 166 at Capps Ferry Road	Signalized	D	A (9.5)	B (14.3)
6	SR 166 at Chapel Hill Road	Signalized	E	B (13.8)	A (7.9)
7	Capps Ferry Road at Florence Road	NB Stop Controlled	D	NB - C (19.5)	NB – C (17.8)
8	South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70)	NB/SB STOP Controlled	D	NB – F * SB – F (55.3)	NB – F * SB – F *
9	South Fulton Highway (SR 70) at Rico Road	NB/SB STOP Controlled	D	NB – D (31.8) SB – D (31.7)	NB – F * SB – F (65.1)
10	South Fulton Highway (SR 70) at Cochran Mill Road	NB/SB STOP Controlled	D	NB – E (41.6) SB – D (30.6)	NB – F * SB – E (35.6)
11	South Fulton Highway (SR 70) at Rivertown Road	NB/SB STOP Controlled	D	NB – D (25.4) SB – C (16.5)	NB – F (74.2) SB – C (21.2)
12	South Fulton Highway (SR 70) at Cascade Palmetto Highway (SR 154/SR 70)	Signalized	D	B (18.8)	B (18.4)
13	Rivertown Road at Cascade Palmetto Highway (SR 154)	EB/WB STOP Controlled	D	EB – C (24.1) WB – D (30.8)	EB – D (25.9) WB – D (33.6)

*Long delay expected

As shown in Table 7, four of the intersections failed to meet the acceptable Level of Service standard for the AM and/or PM peak hours. Per GRTA's Letter of Understanding guidelines, improvements were made to these intersections until the Level of Service was elevated to the GRTA standard. The 2020 Build with Improvement intersection analysis Levels of Service are displayed below in **Table 8**.

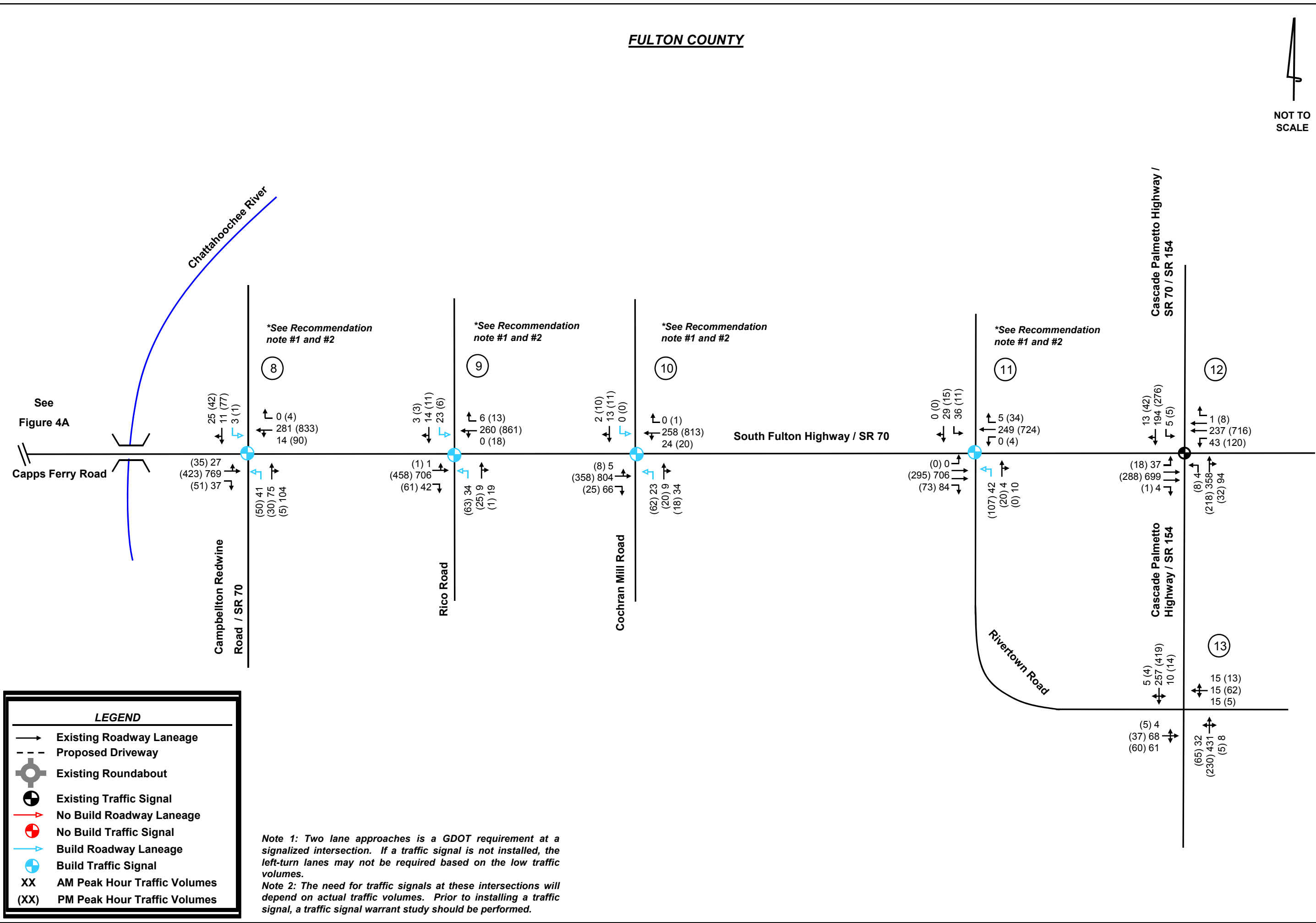


Table 8
Foxhall Resort and Sporting Club DRI
Projected 2020 Build IMPROVED Intersection Levels of Service
(delay in seconds)

Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
8	South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70)	New Signal	D	B (10.7)	B (13.1)
9	South Fulton Highway (SR 70) at Rico Road	New Signal	D	A (5.7)	A (7.9)
10	South Fulton Highway (SR 70) at Cochran Mill Road	New Signal	D	A (6.1)	A (8.4)
11	South Fulton Highway (SR 70) at Rivertown Road	New Signal	D	A (5.8)	A (9.7)

The 2020 Build improvements made to the intersections are shown in Figure 9A & 9B, and are listed below by intersection:

South Fulton Highway (SR 70) at Campbellton Redwine Road (SR 70) (Intersection #8)

- Install an exclusive northbound and southbound left-turn lane along Campbellton Redwine Road in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Rico Road (Intersection #9)

- Install an exclusive northbound and southbound left-turn lane along Rico Road in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Cochran Mill Road (Intersection #10)

- Install an exclusive northbound and southbound left-turn lane along Cochran Mill Road in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes are not expected to meet the peak hour signal warrants.)

South Fulton Highway (SR 70) at Rivertown Road (Intersection #11)

- Install an exclusive northbound left-turn lane along Rivertown Road in conjunction with future signalization. ¹
- Install a traffic signal when warranted. ² (Note: Projected peak hour volumes may or may not meet the peak hour signal warrants.)

Note 1: Two lane approaches is a GDOT requirement at a signalized intersection. If a traffic signal is not installed, the left-turn lanes may not be required based on the low traffic volumes.

Note 2: The need for traffic signals at these intersections will depend on actual traffic volumes. Prior to installing a traffic signal, a traffic signal warrant study should be performed.

The proposed project driveways were analyzed for the 2020 Build conditions. The results of the analyses are presented in **Table 9**. The projected volumes and recommended intersection geometry are shown in **Figure 9A**.

Table 9 Foxhall Resort and Sporting Club DRI Projected 2020 Build Levels of Service for Proposed Project Driveways (delay in seconds)					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
14	Capps Ferry Road @ Main Resort Entrance (Driveway #1) / Residential Entrance (Driveway #2)	New Signal	D	B (13.5)	C (25.0)
15	Capps Ferry Road at Commercial Village Right-in/Right-out Entrance (Driveway #3)	SB STOP Controlled	D	SB: A (9.3)	SB: C (17.3)
16	Capps Ferry Road at Resort/Residential Entrance (Driveway #4)	WB STOP Controlled	D	WB: B (14.6)	WB: C (24.1)
17	Capps Ferry Road at Brookcrest Court & Resort/Residential Entrance (Driveway #5)	WB STOP Controlled	D	WB: B (14.5)	WB: C (24.2)

The following intersection geometry and improvements are recommended at the project site driveways. (Note: The attached site plan includes these improvements):

Capps Ferry Road @ Main Resort Entrance (Driveway #1) / (Driveway #2) – Intersection #14

- Install an exclusive eastbound left-turn lane and right-turn lane along Capps Ferry Road.
- Install an exclusive westbound left-turn lane and right-turn lane along Capps Ferry Road.
- Install a southbound left-turn lane and shared through/right-turn lane along Driveway #1.
- Install a northbound left-turn lane and shared through/right-turn lane along Driveway #2.
- Install a traffic signal when warranted. (Note: Projected 2020 peak hour volumes are expected to meet the peak hour signal warrants. Actual traffic volumes and conditions should be monitored as the development is built out. The traffic signal would likely be installed when approximately half of development is built out.)

Capps Ferry Road @ Commercial Village Right-in/right-out Entrance (Driveway #3) – Intersection #15

- Install a westbound right-turn lane along Capps Ferry Road.

Capps Ferry Road @ Resort/Residential Area Entrance (Driveway #4) – Intersection #16

- Install an exclusive southbound left-turn lane along Capps Ferry Road.
- Install a northbound right-turn lane along Capps Ferry Road.
- Install a westbound left-turn lane and shared through/right-turn lane along Driveway #4.

Capps Ferry Road @ Brookcrest Court & Resort/Residential Entrance (Driveway #5) – Intersection #17

- Install an exclusive southbound left-turn lane along Capps Ferry Road.
- Install a northbound right-turn lane along Capps Ferry Road.
- Install a westbound shared left-turn/through lane and separate right-turn lane along Driveway #5.

6.4 Bridge crossing the Chattahoochee River

There is an existing two-lane bridge that carries Capps Ferry Road/South Fulton Highway over the Chattahoochee River. As part of the transportation analysis, the existing and projected traffic volumes across the bridge were reviewed. A 24-hour traffic count performed in May 2008, just west of the bridge over the Chattahoochee River, recorded 3,936 vehicles per day (vpd). The existing traffic volume was projected at a background growth rate of 2.0% per year and combined with the projected development traffic, which resulted in an expected 15,390 vehicles per day in year 2020. The two-lane bridge is anticipated to accommodate 18,000 – 20,000 vpd prior to the need for widening. It should also be noted the adjacent intersections to the west and east of the bridge are projected to operate at an acceptable level of service during the peak hours of the day. The proposed signalized intersection of Capps Ferry Road at the Main Resort Entrance (Driveway #1 and #2), located approximately 1,925 feet west of the bridge, is projected to operate at LOS B during the AM peak hour and LOS C during the PM peak hour. The existing two-lane bridge is expected to accommodate the projected future traffic volumes.

7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The *TIP*, *STIP*, *RTP*, and *GDOT's Construction Work Program* were searched for currently programmed transportation projects within the vicinity of the proposed development. One project is programmed in the study network area. Information on the project is included in the Appendix. No programmed projects were identified by Douglas County DOT.

1. ARC RTP FS-190, GDOT #0006729	SR 14 Alternate / SR 70 (South Fulton Parkway) Access Management Plan from Douglas County line to I-285 / I-85 Interchange Completion Date: 2030
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8.0 INGRESS/EGRESS ANALYSIS

The site currently has six access locations along Capps Ferry Road. Vehicular access to the planned development is proposed at five locations along Capps Ferry Road. Please see section 1.3 for a more detail description of the driveways.

9.0 INTERNAL CIRCULATION ANALYSIS

The proposed development will generate internal trips between the residential, resort, and retail uses. Internal trips were limited to be 10% of the residential and resort trips. These internal trips were assigned to the internal street network and between site driveways along Capps Ferry Road.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The Douglas County Future Land Use Plan identifies the area as Rural Places. The ARC Envision6 'Atlanta Region Unified Growth Policy Map' identifies the area as a 'Rural Areas'. The proposed densities are currently allowed for the site per the current Douglas County development code.

11.0 NON-EXPEDITED CRITERIA

11.1 *Quality, Character, Convenience, and Flexibility of Transportation Options*

There is currently no fixed-transit service in the vicinity of this project. However, vanpools are available for Douglas County commuters. Additionally, GRTA Xpress bus route #460 currently operates from Douglasville to Downtown Atlanta.

11.2 *Vehicle Miles Traveled*

The following table displays the reduction in traffic generation due to internal capture and pass-by trips.

Weekday	Build-out Total
Daily Gross Trip Generation:	23,032
(-)Pass-by trips	-998
New Trips	22,034
(-)Internal Interaction	-2,916
Net Trips:	19,118

11.3 *Relationship Between Location of Proposed DRI and Regional Mobility*

The proposed development is not located within an urban core, activity center or town center; it is not within walking distance to a rail station or transit facility; and it is not part of an infill initiative. The development provides access to Capps Ferry Road which provide for mobility to the north, south, east, and west. Capps Ferry Road changes names to the South Fulton Parkway to the east of the development, which provides access to I-285/I-85, the airport, and downtown Atlanta.

11.4 *Relationship Between Proposed DRI and Existing or Planned Transit Facilities*

The proposed DRI is not located near any existing or planned transit facilities or bus stops.

11.5 *Transportation Management Area Designation*

The proposed development is not located within an established TMA.

11.6 *Offsite Trip Reduction and Trip Reduction Techniques*

Pass-by trip reductions were taken according to the *ITE Trip Generation Handbook, 1998*; however, according the GRTA's 10% limit test, pass-by trips were limited to 10% of the estimated adjacent roadway volumes.

The development anticipates providing a shuttle service to the Hartsfield Jackson Atlanta International Airport and adjacent MARTA station.

11.7 *Balance of Land Uses – Jobs/Housing Balance*

Please refer to the Area of Influence Analysis, located in Section 12.0 of the report.

11.8 *Relationship Between Proposed DRI and Existing Development and Infrastructure*

The development is located in an area where the existing infrastructure is expected to be adequate to serve the needs of the development upon build-out (2020).

12.0 AREA OF INFLUENCE

The proposed development (Foxhall Resort and Sporting Club) is expected to consist of 921 dwelling units, 2,237,400 SF of mixed-use commercial resort space, and 140,000 SF of resort/neighborhood village area. Due to the nature of the development, it is classified as “predominantly employment” for the purposes of this AOI. The following section will describe the Area of Influence demographics, DRI average wage levels, expected AOI housing costs, and the opportunity for workers who are employed in the DRI to find housing within the AOI.

12.1 Criteria

As part of the non-expedited review process for a DRI, an Area of Influence Analysis must be performed to determine the impact of the proposed development on the balance of housing and jobs within the immediate area surrounding the development. For this proposed development classified as “predominantly employment,” the non-expedited review criterion is as follows:

The proposed DRI:

- (b) Is located in an Area of Influence where the proposed DRI is reasonably anticipated to contribute to the balancing of land uses within the Area of Influence such that twenty-five percent (25%) of the persons that are reasonably anticipated to be employed in the proposed DRI have the opportunity to live within the Area of Influence;

12.2 Study Area Determination and Characteristics

The Area of Influence is comprised of the area within six road-miles of the proposed development. To determine the AOI, *TransCAD* was used to measure six road miles from the nearest intersection to the project (Capps Ferry Road at Chattahoochee River). The population and housing statistics for the AOI were determined by taking the area outlined in *TransCAD*, creating a boundary in GIS format, and overlaying the boundary with a GIS layer containing census tract information. The Area of Influence (located within Clayton, Carroll and Fulton counties) can be seen in **Figure 10**.

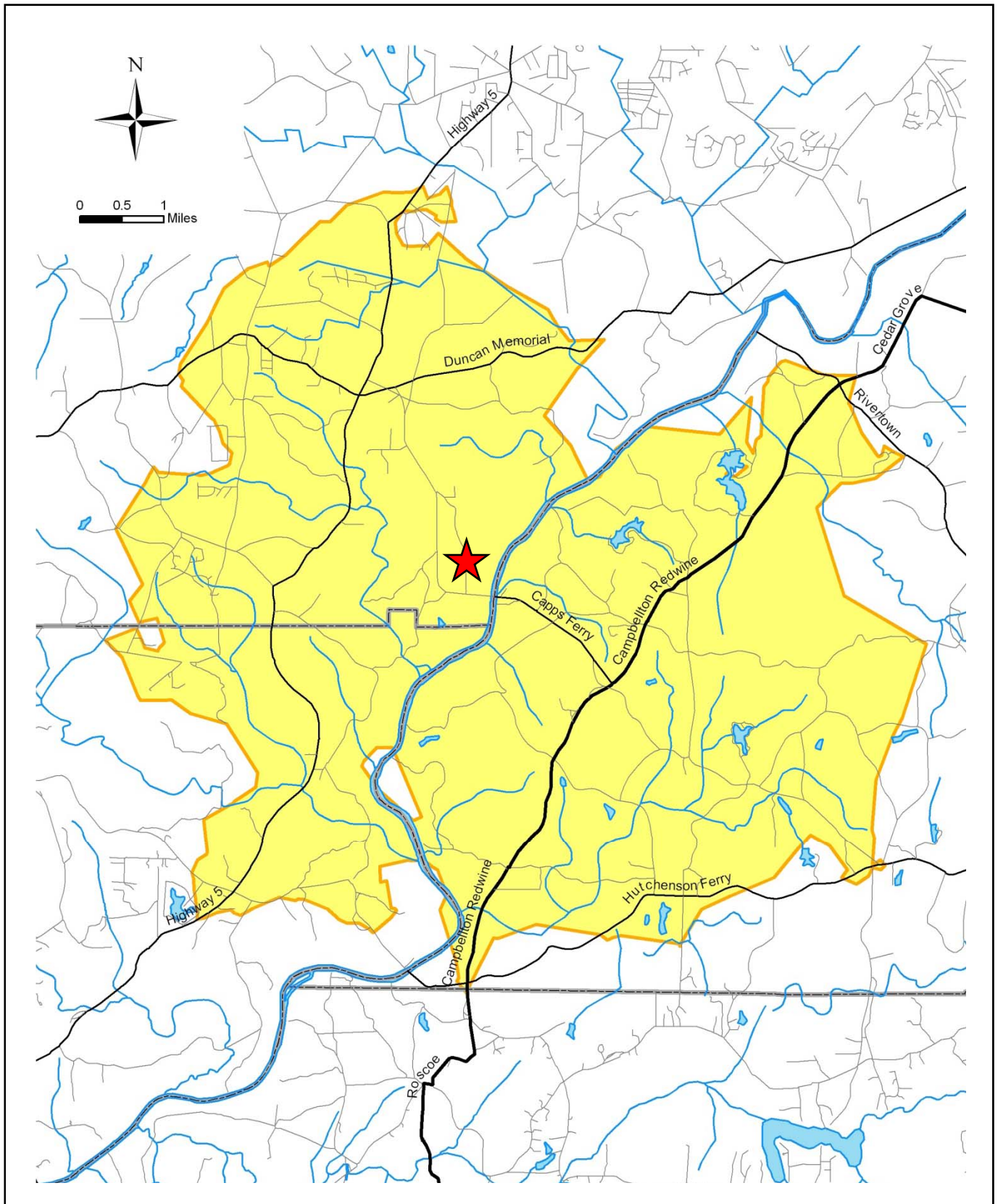
The total population within the Area of Influence is 5,493, residing within 1,963 households (an average of 2.80 people per household). There are approximately 2,621 workers in the AOI for an average of 1.34 workers per household. The AOI area over the three counties totals 36,153 acres.

12.3 DRI Employment and Salary Figures

The DRI is expected to employ approximately 437 workers in the hotel and retail land use categories. Approximately 157 workers were estimated for the hotel portion of the development based upon estimations made by the development team. It was also estimated that approximately 10% of the staff would work as managerial staff, while the remaining 90% would work as service staff based upon this information. Based on information included in the AOI technical guidelines, it was estimated that for the resort retail land use, there would be 1 employee per 500 SF resulting in 280 retail employees.

Using the departmental and occupational guidelines provided by the client, along with the U.S. Department of Labor’s *May 2005 Metropolitan Area Occupational Employment and Wage Estimates Atlanta-Sandy Springs-Marietta, GA*, salaries were approximated for each occupation. The following occupational codes were used for the above jobs:

11-9081	Lodging Managers
35-0000	Food Preparation and Serving Related Occupations
37-2012	Maids and Housekeeping Cleaners
39-6011	Baggage Porters and Bellhops
41-1011	Managers of Retail Sales
41-2031	Retail Salespersons



 <p>Kimley-Horn and Associates, Inc.</p>	<p>Foxhall Resort and Sporting Club DRI Transportation Analysis</p>	<p>Area of Influence</p>	<p>Figure 10</p>
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Household salary was calculated based on the computed workers per household ratio of 1.34 multiplied by the salary in each bracket. It is assumed then that each household has 1.34 workers who contribute to the monthly household salary. The affordable housing payment is calculated as 30% of the monthly household salary, as based on GRTA's *Area of Influence (AOI) Guidebook for Non-Expedited Reviews*. **Table 10** displays the department positions, the numbers of employees in each occupation, the monthly employee and household salaries, and the respective affordable housing payments.

Table 10 Employment, Salary, and Affordable Housing Payment by Occupation					
Land Use	Occupation	Employees	Monthly Employee Salary	Monthly Household Salary	Affordable Housing Payment
Resort Service	Service Manager	17	\$3,200	\$4,288	\$1,286
	Other Service Staff	140	\$2,200	\$2,948	\$884
Resort Retail	Managers of Retail Sales	56	\$2,937	\$3,935	\$1,181
	Retail Salespersons	224	\$1,932	\$2,588	\$777
Total Employees		437	-	-	-

Given the above calculated salaries, each household is eligible for a specific housing tier within the Area of Influence. **Table 11** below displays the number of households that fall into each tier based on the household salary.

Table 11 Number of Households in the DRI by Range of Monthly Income	
Range of Monthly Income for Housing	Number of Households
\$499 or less	0
\$500 to \$599	0
\$600 to \$699	224
\$700 to \$799	0
\$800 to \$899	140
\$900 to \$999	56
\$1,000 to \$1,249	17
\$1,250 to \$1,499	0
\$1,500 to \$1,999	0
\$2,000 or more	0
Total	437

12.4 AOI Occupied Housing Figures

An analysis of existing occupied housing was conducted based on 2000 Census data for owner- and renter-occupied housing. A GIS analysis identified approximately 3,000 owner-occupied units and 1,000 renter-occupied units in the AOI. **Table 12** below displays the housing units in comparable price tiers as are shown in **Table 11**. Owner-occupied housing includes housing with and without a mortgage. Renter-occupied housing includes all rental units with the exception of those with no cash rent.

Table 12 Selected Monthly Costs for All Occupied Housing Units in the AOI			
Monthly Dollar Range	Owner-Occupied Housing Units in the AOI	Renter-Occupied Housing Units in the AOI	Total Occupied Housing Units in the AOI
\$499 or less	956	676	1,632
\$500 to \$599	66	57	123
\$600 to \$699	514	55	569
\$700 to \$799	213	98	311
\$800 to \$899	246	61	307
\$900 to \$999	181	24	205
\$1,000 to \$1,249	289	21	310
\$1,250 to \$1,499	93	17	110
\$1,500 to \$1,999	145	0	145
\$2,000 or more	346	38	384
Total	3,049	1,047	4,095

Using the households in the DRI per price tier information in **Table 11** and the renter / owner distribution of occupied housing in the AOI in **Table 12** above, a comparison was done to analyze the available housing by price range within the AOI against the number of households per price tier expected within the proposed DRI. This comparison is shown below in **Table 13**.

Table 13 Comparison of Workers' Monthly Household Incomes in the DRI and Monthly Costs of Housing Units in the AOI			
Monthly Dollar Range	Total Occupied Housing Units in the AOI	Number of DRI Households with One or More Workers Working in the DRI	Difference in Number of Housing Units in AOI and Number of Households with Workers in DRI
\$499 or less	1,632	0	1,632
\$500 to \$599	123	0	123
\$600 to \$699	569	224	569
\$700 to \$799	311	0	311
\$800 to \$899	307	140	167
\$900 to \$999	205	56	205
\$1,000 to \$1,249	310	17	293
\$1,250 to \$1,499	110	0	110
\$1,500 to \$1,999	145	0	145
\$2,000 or more	384	0	384
Total	4,095	437	3,938

As can be seen from **Table 13**, adequate housing opportunities exist for all wage-earning levels in the DRI for both owner and renter properties. Additionally, because the salaries of the employees are concentrated at the middle limits of the price tiers, extra housing is available in lower price tiers if a household desires to choose a more conservative price range. Given this information, over 25% of the employees of the DRI have an opportunity to reside within the Area of Influence.

13.0 ARC'S AIR QUALITY BENCHMARK

The development is a mixed-use development, containing approximately 921 resort residential units and up to 2,377,400 square feet of hotel resort complex/commercial space on +/-1,092.15 acres. The project's resort/retail component is the dominant use. The residential units are approximately 41% of the total square footage. Therefore, the development warrants a 4% vehicle miles traveled (VMT) reduction for a 'mix' of uses.

The site plan illustrates a network of internal streets and connections between the residential homes, resort, and the neighborhood commercial village. The development will provide bicycle/pedestrian facilities within the site, as well as provide trail connections to access the expected future multi-use trail located within the existing Capps Ferry Road Right of Way being provided by Douglas County. These trail connections will provide the development an alternative method of access to surrounding recreational uses and points of interest. The developments meets the ARC criteria for a 5% VMT reduction.

The development anticipates providing a shuttle service to the Hartsfield Jackson Atlanta International Airport and adjacent MARTA station. This transportation service enhancement meets the ARC criteria for a 3% VMT reduction.

The proposed development meets the ARC criteria for a total 12% VMT reduction. These reductions are displayed below in **Table 14**.

Table 14 ARC VMT Reductions	
Mixed-Use Projects where Retail is the dominant use	
Project contains a 'mix' of uses, with a mix of resort, residential, and neighborhood commercial village uses	-4%
Bike/ped networks providing connections to uses within the site and adjoining uses	-5%
Project proposes shuttle service to activity center/transit facility	-3%
Total Reductions	12%

It should also be noted the development proposes 90% of the on-site vehicles (i.e. staff, maintenance, and golf carts) be electric, thereby improving air quality.