

*Transportation Analysis*

**Perimeter Park South  
DRI# 1683  
DeKalb County, Georgia**

*Prepared for:*  
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019461007

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## EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed 17.74-acre mixed-use redevelopment (Perimeter Park South) in DeKalb County, Georgia. This report is being prepared as part of a submittal requesting a demolition permit with DeKalb County. Because the project will exceed 400,000 square feet (SF) of mixed-use development area, the proposed redevelopment is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed redevelopment is expected to consist of 665 total residential units (585 multi-family apartments - convertible to condominium units - and 80 townhomes) and 60,000 SF of office space. The development is scheduled to be completed in a single phase, by the year 2010.

The results of the detailed intersection analysis for the 2010 No-Build (excluding the Perimeter Park South development) and 2010 Build conditions (including the Perimeter Park South development) identify the following improvements are necessary in order to maintain the Level of Service standard within the study network.

*2010 No-Build recommended improvements (includes background growth but does not include Perimeter Park South DRI project traffic):*

I-285 Westbound Ramps / Cotillion Drive at North Peachtree Road (Subject to available right-of-way to implement these improvements.)

- Install an additional westbound through lane.
- Install an additional eastbound left-turn lane, creating dual left-turn lanes.

*2010 Build recommended improvements (includes Perimeter Park South DRI project traffic):*

North Peachtree Road at Perimeter Park Drive

- Install a signal if warranted.
- Convert the southbound right-turn lane to a shared through/right-turn lane and convert the southbound through lane to a left-turn lane.

## 1.0 PROJECT DESCRIPTION

### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed 17.74-acre mixed-use redevelopment (Perimeter Park South) in DeKalb County, Georgia. This report is being prepared as part of a submittal requesting a demolition permit with DeKalb County. Because the project will exceed 400,000 square feet (SF) of mixed-use development area, the proposed redevelopment is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed redevelopment is expected to consist of 665 total residential units (585 multi-family apartments - convertible to condominium units - and 80 townhomes) and 60,000 SF of office space. The development is scheduled to be completed in a single phase, by the year 2010.

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

<b>Table 1 Proposed Land Uses</b>	
Apartments (Convertible to Condominium)	585 dwelling units
Townhomes	80 dwelling units
Office	60,000 SF

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

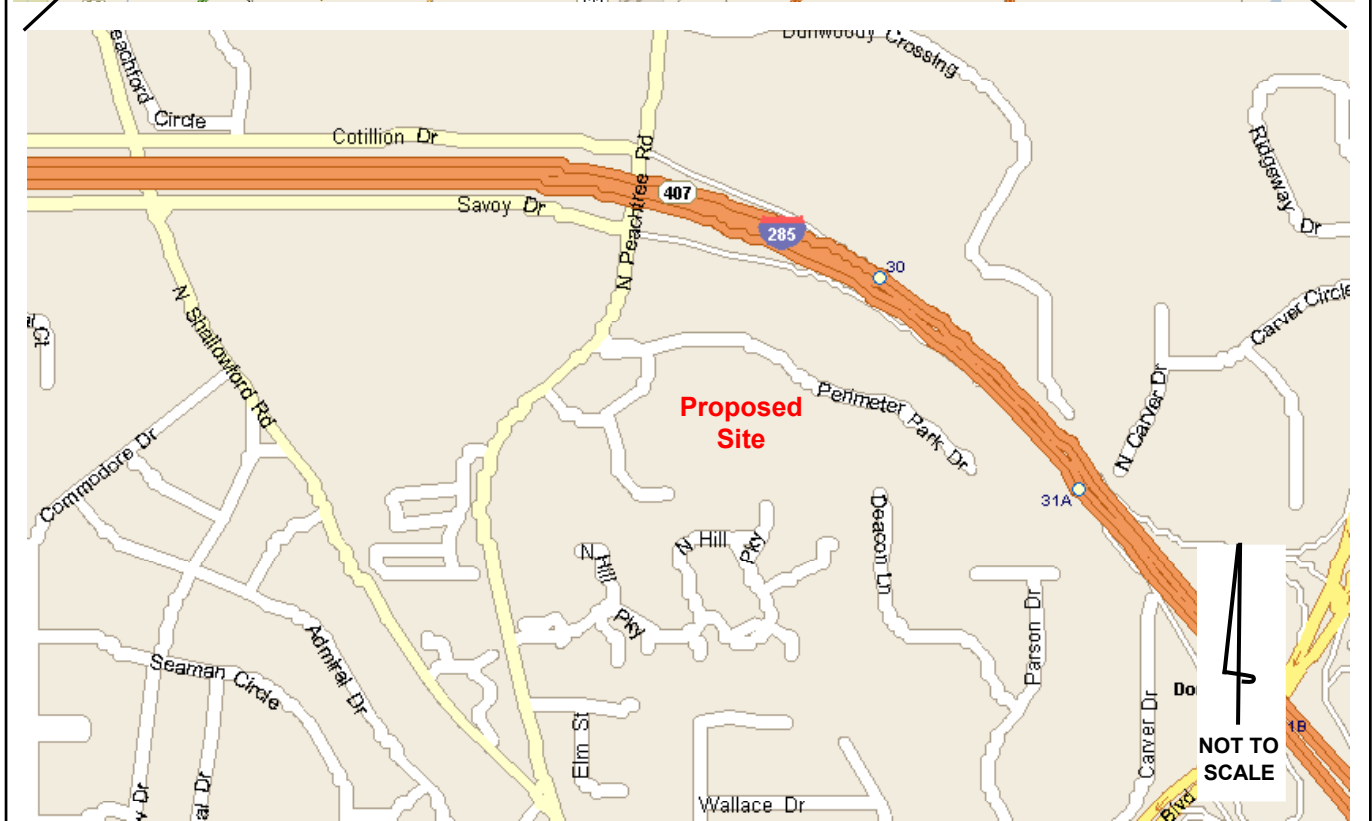
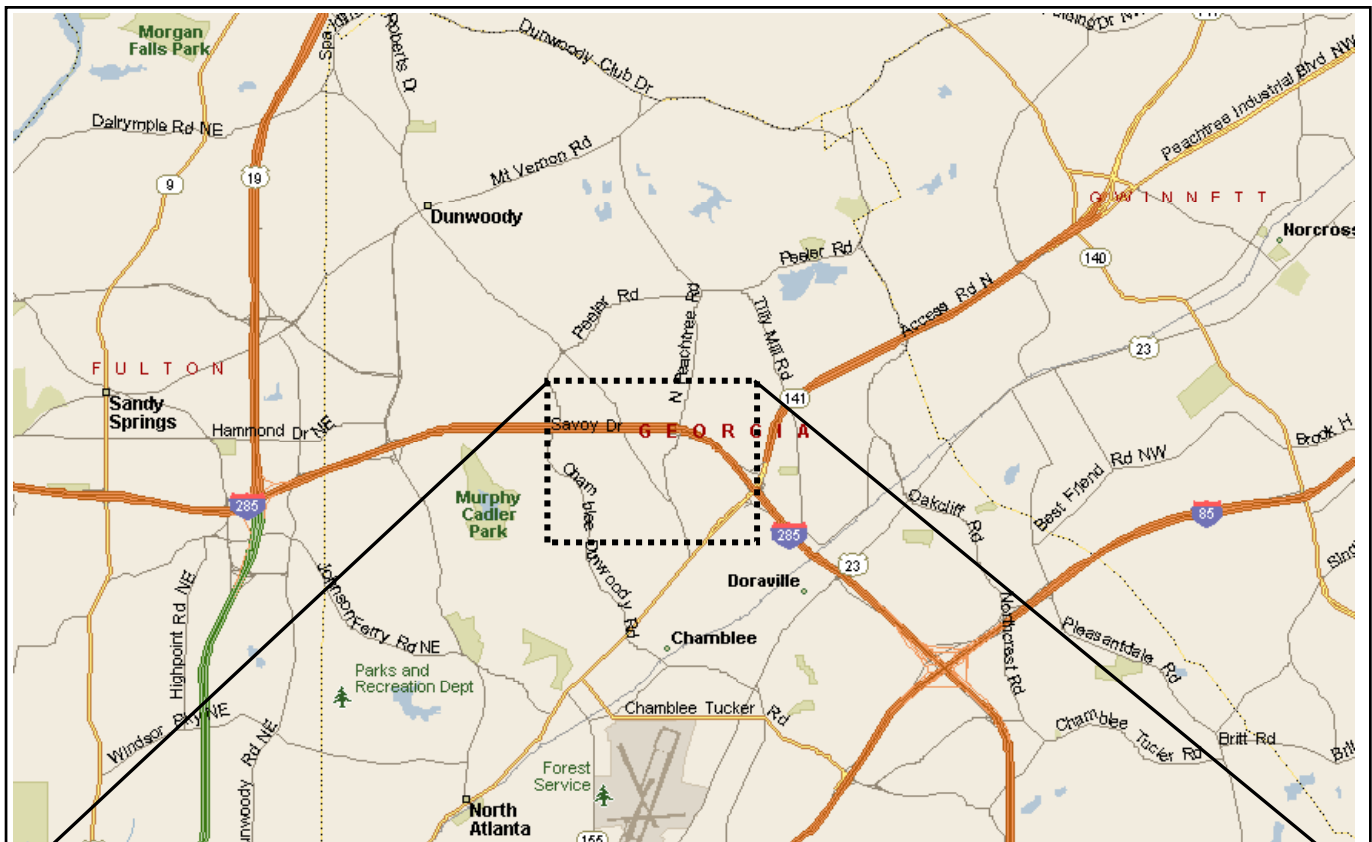
### 1.2 Site Plan Review

The redevelopment plan is scheduled to be completed in one phase. The proposed site is located along the south side of Perimeter Park Drive and the east side of Perimeter Park South. The office buildings are proposed to be located to the north of the site along Perimeter Park Drive while the residential buildings are located to the south and east of the site.

**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.

### 1.3 Site Access

Three site driveways currently exist along Perimeter Park Drive and one exists along Perimeter Park South. Perimeter Park East is a public road that terminates near the south side of the development. The proposed site driveways will be in the general vicinity of the existing driveways. Driveway #1 along Perimeter Park Drive will remain in its existing location. Driveway #2 along Perimeter Park Drive will be relocated approximately 325' east of the existing driveway. Driveway #3 along Perimeter Park Drive will be relocated approximately 95' east of the existing driveway. Driveway #4 along Perimeter Park South and Driveway #5 along Perimeter Park East will remain in their existing locations. Perimeter Park East will terminate into a private drive.







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## Perimeter Park South Transportation Analysis

Site Aerial

Figure  
2



### *1.4 Bicycle and Pedestrian Facilities*

Limited pedestrian facilities are currently in place in the vicinity of the development. The development is proposing to include sidewalks along all public rights-of-way surrounding the site. Additionally, the development will provide internal pedestrian circulation via internal sidewalks.

### *1.5 Transit Facilities*

The proposed development is located near the intersection of N. Peachtree road at Perimeter Park Drive. Currently, one MARTA bus route accesses the site: Route 132. Route 132 connects the Chamblee rail station and the North Springs Station on 29-to 33-minute headways. The nearest MARTA bus stop is located approximately one tenth of a mile south of the site along North Peachtree Road. Given the transit options within the vicinity of the project (for both residential and office trips) and the overall project location proximity to nearby MARTA bus stops, transit is a viable option for some of the residents and workers of the new development. An alternative mode reduction of 2% was taken per GRTA's Letter of Understanding.

## **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 redevelopment, and growth rates of 2.0% per year along all roadways per GRTA's Letter of Understanding.

### *2.2 Traffic Data Collection*

2008 weekday peak hour turning movement counts were conducted on Tuesday January 15, 2008 at the study intersections between 7:00-9:00 AM and 4:00-6:00 PM. The morning and afternoon peak hours varied between the eight intersections:

- N. Peachtree Road @ I-285 WB Ramp/Cotillion Drive (7:30-8:30 AM, 5:00-6:00 PM)
- N. Peachtree Road @ I-285 EB Ramp/Savoy Drive (7:30-8:30 AM, 4:30-5:30 PM)
- N. Peachtree Road @ Perimeter Park Drive (7:45-8:45 AM, 4:45-5:45 PM)
- N. Peachtree Road @ Perimeter Park South (7:45-8:45 AM, 4:30-5:30 PM)
- N. Peachtree Road @ N. Shallowford Road North (7:30-8:30 AM, 5:00-6:00 PM)
- N. Peachtree Road @ N. Shallowford Road South (7:45-8:45 AM, 5:00-6:00 PM)
- Perimeter Park Drive @ Perimeter Park South (8:00-9:00 AM, 5:00-6:00 PM)
- Perimeter Park South @ Perimeter Park East (8:00-9:00 AM, 4:45-5:45 PM)

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 are reported for individual movements as well as 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 redevelopment is expected to consist of a 665 total residential units (585 multi-family apartments - convertible to condominium units - and 80 townhomes) and 60,000 SF of office space. The development is scheduled to be completed in a single phase, by the year 2010.

Traffic for these land uses was calculated using equations contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003*. Average rates were used only when equations were not provided. Gross trips generated are displayed below in **Table 2**.

Table 2 Perimeter Park South 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 2010)							
585 Apartment Units	220	1,833	1,833	58	232	220	119
80 Townhome Units	230	266	266	7	36	34	16
60,000 SF Office	710	450	450	110	15	25	121
Total		2,549	2,549	175	283	279	256

#### 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on a review of existing counts, engineering judgment, and discussions with GRTA, GDOT, ARC, and Dekalb County staff at the methodology 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 includes the following intersections:

- N. Peachtree Road @ I-285 WB Ramp/Cotillion Drive (signalized)
- N. Peachtree Road @ I-285 EB Ramp/Savoy Drive (signalized)
- N. Peachtree Road @ Perimeter Park Drive (unsignalized)
- N. Peachtree Road @ Perimeter Park South (unsignalized)
- N. Peachtree Road @ N. Shallowford Road North (unsignalized)
- N. Peachtree Road @ N. Shallowford Road South (unsignalized)
- Perimeter Park Drive @ Perimeter Park South (unsignalized)
- Perimeter Park South @ Perimeter Park East (unsignalized)

Each of the above listed intersections was analyzed for the AM and PM peak periods under Existing 2008 Condition, the 2010 No-Build Condition, and the 2010 Build Condition. The 2010 No-Build condition represents the existing traffic volumes grown at 2.0% per year for two years. The 2010 Build condition adds the projected trips associated with Perimeter Park South redevelopment to the 2010 No-Build condition.

### 3.5 Existing Facilities

#### North Peachtree Road

- North Peachtree Road is a north-south oriented roadway that extends from Peachtree Industrial Boulevard to Tilly Mill Road. North Peachtree Road is a two-lane undivided urban collector street near the intersection with Perimeter Park Drive. The posted speed limit along the roadway is 35 mph.

#### Perimeter Park Drive

- Perimeter Park Drive is an east-west oriented roadway that extends eastward from North Peachtree Road. Perimeter Park Drive is a two-lane undivided urban local road that terminates into an existing office park. The posted speed limit along the roadway is 25 mph.

#### Cotillion Drive

- Cotillion Drive is an east-west oriented roadway that extends from North Peachtree Road to Chamblee-Dunwoody Road. Cotillion Drive is a three-lane undivided urban collector street in the vicinity of the project site with 2 eastbound lanes and 1 westbound lane between North Peachtree Road and Dunwoody Park South, and 1 eastbound lane and 2 westbound lanes between Dunwoody Park South and Chamblee-Dunwoody Road. The posted speed limit along the roadway is 45 mph.

#### Savoy Drive

- Savoy Drive is an east-west oriented roadway that extends from North Peachtree Road to Chamblee-Dunwoody Road. Savoy Drive is a three-lane undivided urban collector street in the vicinity of the project site with 2 eastbound lanes and 1 westbound lane between North Peachtree Road and The Mad Italian Restaurant, 1 eastbound lane and 2 westbound lanes between The Mad Italian Restaurant Dunwoody and North Shallowford Road, 2 eastbound lanes and 1 westbound lane between North Shallowford Road and

The Marriott Residence Inn, and 1 eastbound lane and 2 westbound lanes between The Marriott Residence Inn and Chamblee-Dunwoody Road. The posted speed limit along the roadway is 45 mph.

#### North Shallowford Road

- North Shallowford Road is a north-south oriented roadway that extends from North Peachtree Road to Chamblee-Dunwoody Road. North Shallowford Road is a two-lane undivided urban collector street in the vicinity of the project site, with 1 northbound and 1 southbound lane. The posted speed limit along the roadway is 35 mph.\

**Table 3** below summarizes the existing conditions along roadways in the study network.

<b>Table 3</b> <b>Perimeter Park South DRI</b> <b>Existing Conditions</b>				
Roadway	Road Type	Number of Lanes	Posted Speed Limit (MPH)	GDOT Functional Classification
North Peachtree Road	Two-Way	2	35	Urban Collector Street
Perimeter Park Drive	Two-Way	2	25	Urban Local Street
Cotillion Drive	Two-Way	3	45	Urban Collector Street
Savoy Drive	Two-Way	3	45	Urban Collector Street
North Shallowford Road	Two-Way	2	35	Urban Collector Street

## 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 according to the *ITE Trip Generation Handbook*, June 2004 and GRTA guidelines. Alternate modes of transportation reductions of 2% for residential and non-residential were taken, per the Letter of Understanding. The total trips generated and analyzed in the report are listed below in **Table 4**.

<b>Table 4</b> <b>Perimeter Park South DRI</b> <b>Net Trip Generation</b>						
	Daily Traffic		AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
<b>Build-Out (Year 2010)</b>						
<b>Gross Trips</b>	<b>2,549</b>	<b>2,549</b>	<b>175</b>	<b>283</b>	<b>279</b>	<b>256</b>
<i>Internal Capture Reductions</i>	-6	-6	0	0	-3	-3
<i>Alternative Mode Reductions</i>	-51	-51	-3	-5	-6	-5
<b>New Trips</b>	<b>2,492</b>	<b>2,492</b>	<b>172</b>	<b>278</b>	<b>270</b>	<b>248</b>

## 5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages agreed to during the methodology meeting. **Figure 4 and Figure 5** displays the expected 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 6**.

## 6.0 TRAFFIC ANALYSIS

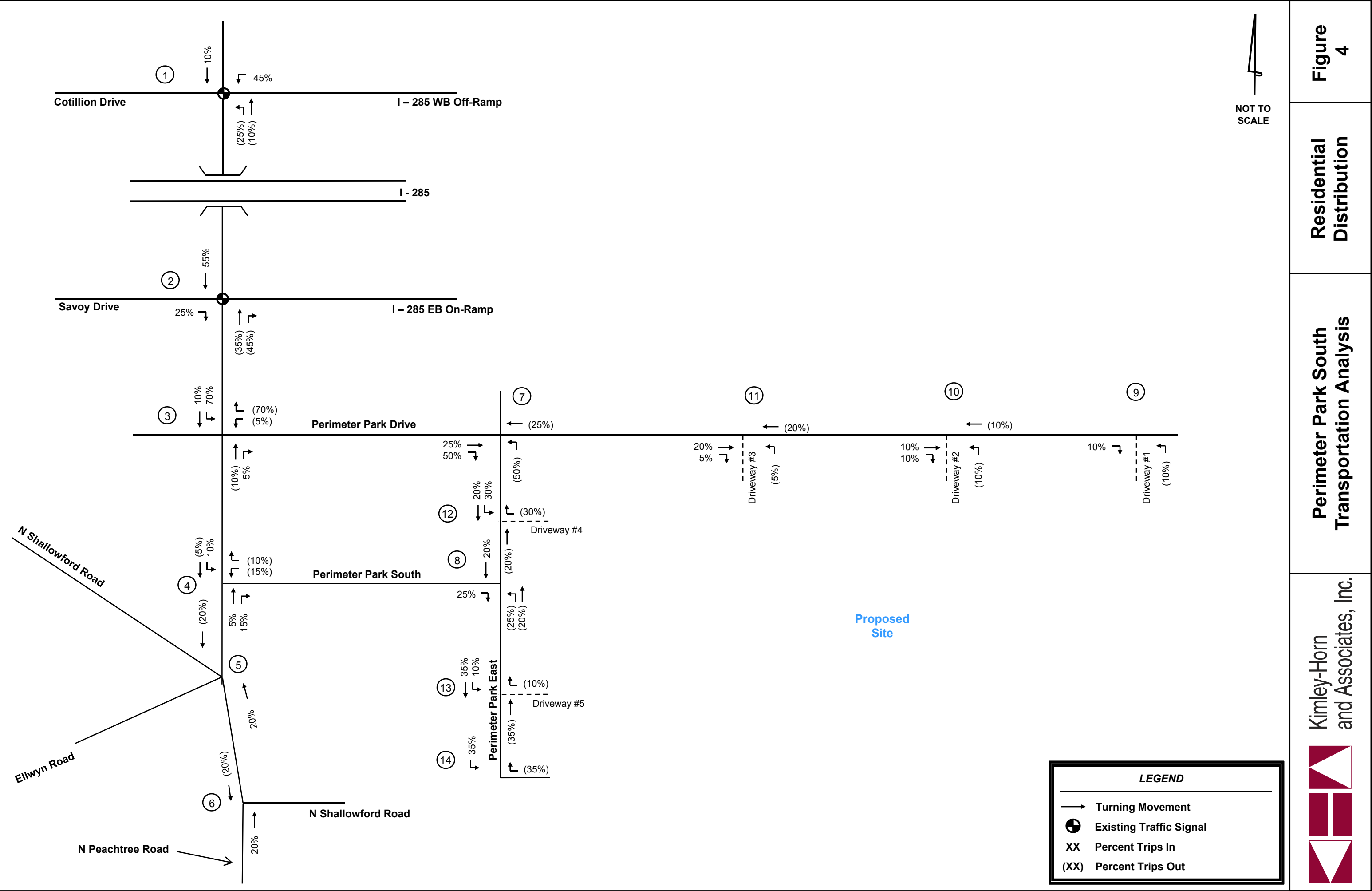
### 6.1 Existing 2008 Traffic

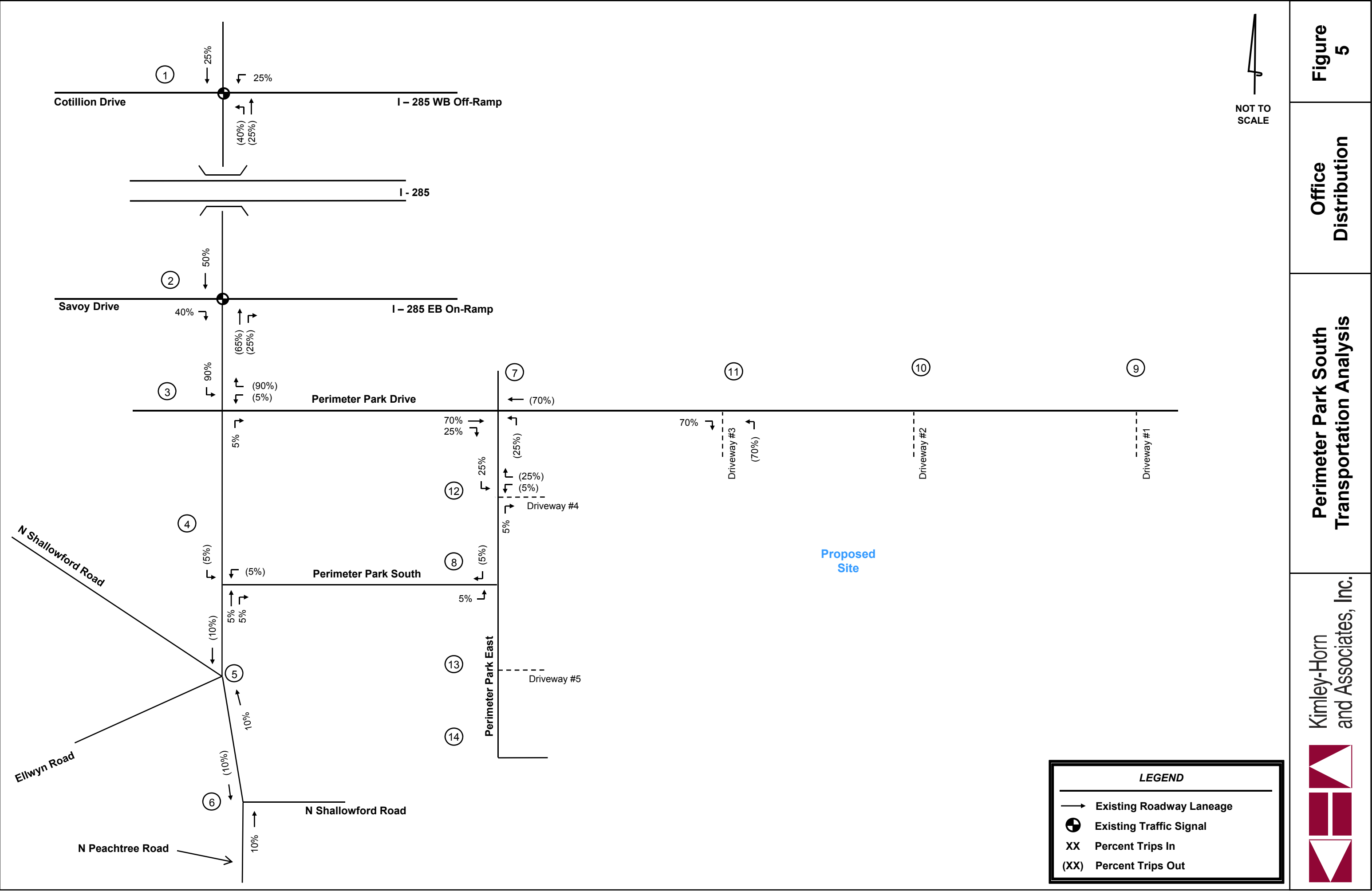
These observed existing peak hour traffic volumes (as well as pedestrian volumes and heavy vehicle percentages) were input in Synchro 6.0, along with the existing cycle lengths, splits, and offsets, and an Existing 2008 Conditions analysis was performed. The results are displayed below in **Table 5**.

The existing traffic volumes are shown in **Figure 7**.

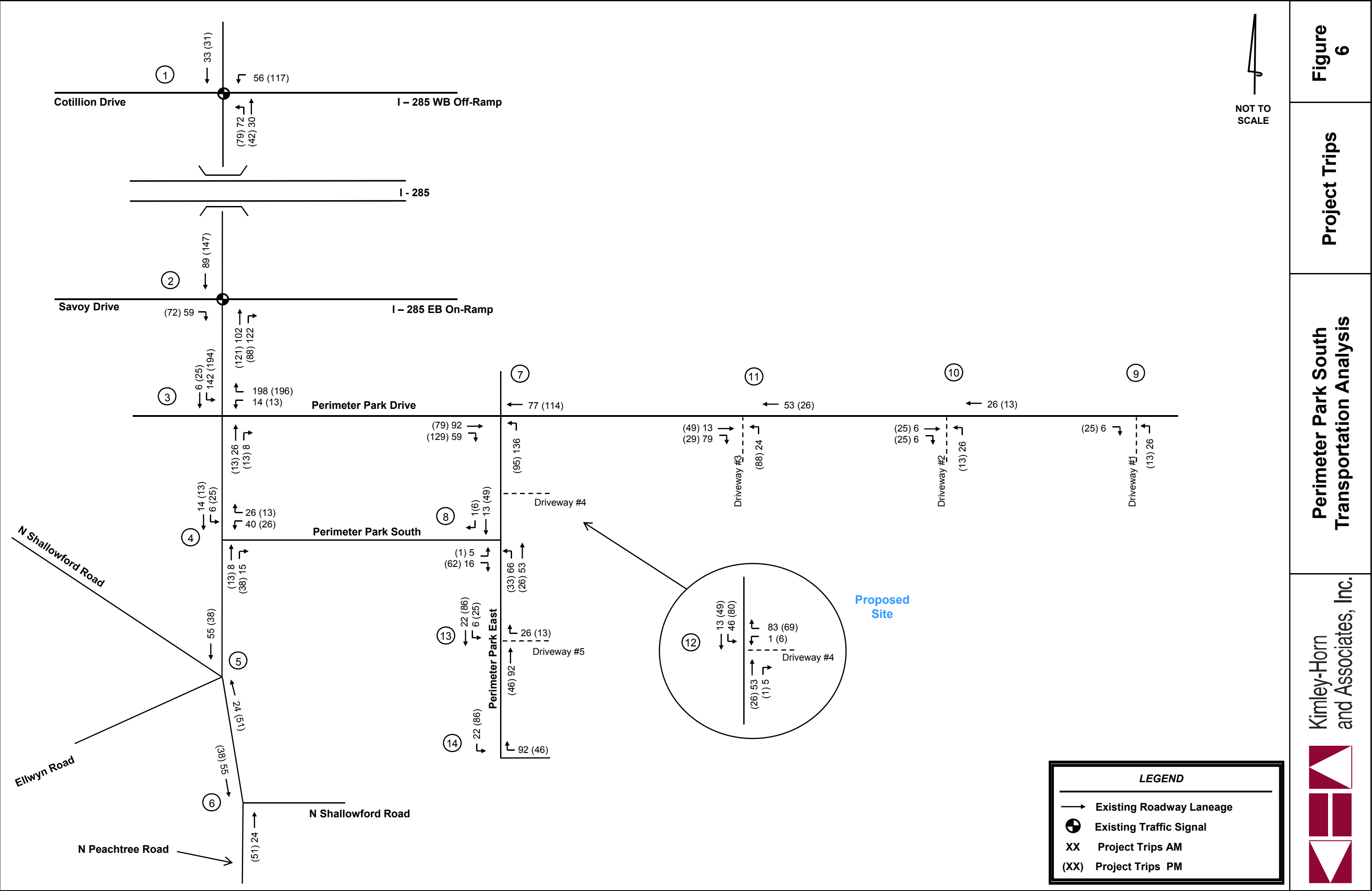
<b>Table 5</b> <b>Perimeter Park South DRI</b> <b>Existing 2008 Intersection Levels of Service</b> <b>(delay in seconds)</b>				
Intersection		Control	AM Peak Hour	PM Peak Hour
1	I-285 WB Ramp/Cotillion Drive N. @ Peachtree Road	Signal	E (71.4)	F (127.8)
2	I-285 EB Ramp/Savoy Drive @ N. Peachtree Road	Signal	C (30.8)	D (43.4)
3	N. Peachtree Road @ Perimeter Park Drive	Side Street Stop Control	EB - C (21.9) WB - B (12.9)	EB - C (17.6) WB - B (13.0)
4	N. Peachtree Road @ Perimeter Park South	Side Street Stop Control	WB - B (12.0)	WB - B (11.6)
5	N. Peachtree Road @ N. Shallowford Road North *	Side Street Stop Control	EB1 - B (12.7) EB2 - C (16.4) WB - B (14.9)	EB1 - C (15.7) EB2 - C (16.8) WB - B (14.4)
6	N. Peachtree Road @ N. Shallowford Road South	Side Street Stop Control	WB - C (15.7)	WB - C (19.4)
7	Perimeter Park Drive @ Perimeter Park South	Side Street Stop Control	NB - B (10.1) SB - B (10.5)	NB - A (9.8) SB - A (9.7)
8	Perimeter Park South @ Perimeter Park East	Side Street Stop Control	EB - A (8.5)	EB - A (8.6)

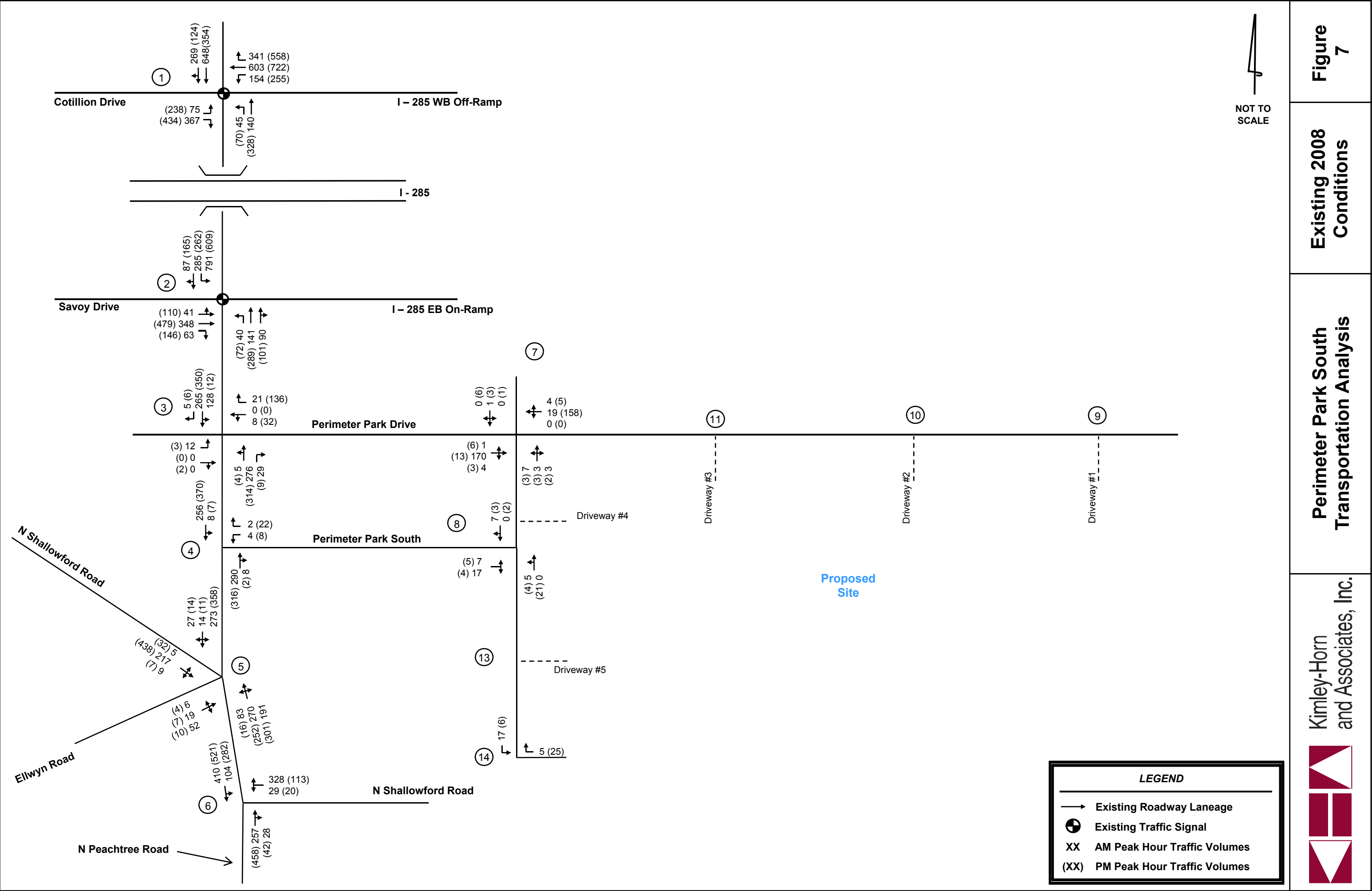
\* Note: EB1 refers to the eastbound approach of Ellwyn Drive at North Peachtree, while EB2 refers to the eastbound approach of Ellwyn Drive at North Shallowford Road.











One intersection currently operates below the acceptable Level of Service standard (LOS D) during the AM and PM peak hours. The intersection's No-Build and Build peak hour LOS standard is therefore lowered to LOS E per GRTA guidelines in the Letter of Understanding (LOU).

## 6.2 2010 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. The results are displayed below in **Table 6**.

<b>Table 6</b> <b>Perimeter Park South DRI</b> <b>2010 No-Build Intersection Levels of Service</b> <b>(delay in seconds)</b>					
	<b>Intersection</b>	<b>Control</b>	<b>LOS Standard</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
1	I-285 WB Ramp/Cotillion Drive N. @ Peachtree Road	Signal	E	F (84.5)	F (145.3)
2	I-285 EB Ramp/Savoy Drive @ N. Peachtree Road	Signal	D	C (31.9)	D (46.7)
3	N. Peachtree Road @ Perimeter Park Drive	Side Street Stop Control	D	EB - C (23.1) WB - B (13.1)	EB - C (18.4) WB - B (13.4)
4	N. Peachtree Road @ Perimeter Park South	Side Street Stop Control	D	WB - B (12.2)	WB - B (11.7)
5	N. Peachtree Road @ N. Shallowford Road North	Side Street Stop Control	D	EB1 - B (12.9) EB2 - C (17.2) WB - B (15.6)	EB1 - C (16.3) EB2 - C (17.4) WB - B (14.6)
6	N. Peachtree Road @ N. Shallowford Road South	Side Street Stop Control	D	WB - C (16.5)	WB - C (23.8)
7	Perimeter Park Drive @ Perimeter Park South	Side Street Stop Control	D	NB - B (10.2) SB - B (10.6)	NB - A (9.9) SB - A (9.7)
8	Perimeter Park South @ Perimeter Park East	Side Street Stop Control	D	EB - A (8.5)	EB - A (8.6)

As shown in Table 5, one of the eight study intersections does not operate acceptably. To obtain an acceptable level of service at the intersection of North Peachtree Road at I-285 Westbound Ramps / Cotillion Drive, the following improvements are recommended:

I-285 Westbound Ramps / Cotillion Drive at North Peachtree Road (See note on the following page.)

- Install an additional westbound through lane.
- Install an additional eastbound left-turn lane, creating dual left-turn lanes.

Note: Maintaining existing roadway geometry, the intersection of North Peachtree Drive at I-285 WB Ramp / Cotillion Drive is projected to operate below the acceptable Level of Service standards for the year 2010 No-Build Conditions during both the AM and PM peak hours.

In order to elevate the level of service at this intersection to the appropriate level of service standard, significant improvements, including the installation of an additional eastbound left-turn lane and an additional westbound through lane (see above), were made to this intersection per GRTA guidelines. An additional through lane would require an additional westbound receiving lane just west of the intersection, and further right-of-way would be required west of the intersection to accommodate the additional eastbound left-turn lane. These improvements may be warranted; however, they are recommended subject to available right-of-way. Therefore, these improvements and the subsequent analysis are for informational purposes only.

With the improvements listed above, the intersection of North Peachtree Road at I-285 Westbound Ramps / Cotillion Drive is expected to operate acceptably, as shown on the following page in **Table 7**. **Figure 8** displays projected 2010 No-Build Conditions.

<b>Table 7</b> <b>Perimeter Park South DRI</b> <b>2010 No-Build Intersection Levels of Service IMPROVED</b> <b>(delay in seconds)</b>					
<b>Intersection</b>		<b>Control</b>	<b>LOS Standard</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
1	I-285 WB Ramp/Cotillion Drive N. @ Peachtree Road	Signal	E	E (59.2)	E (58.2)

### 6.3 2010 Build Traffic

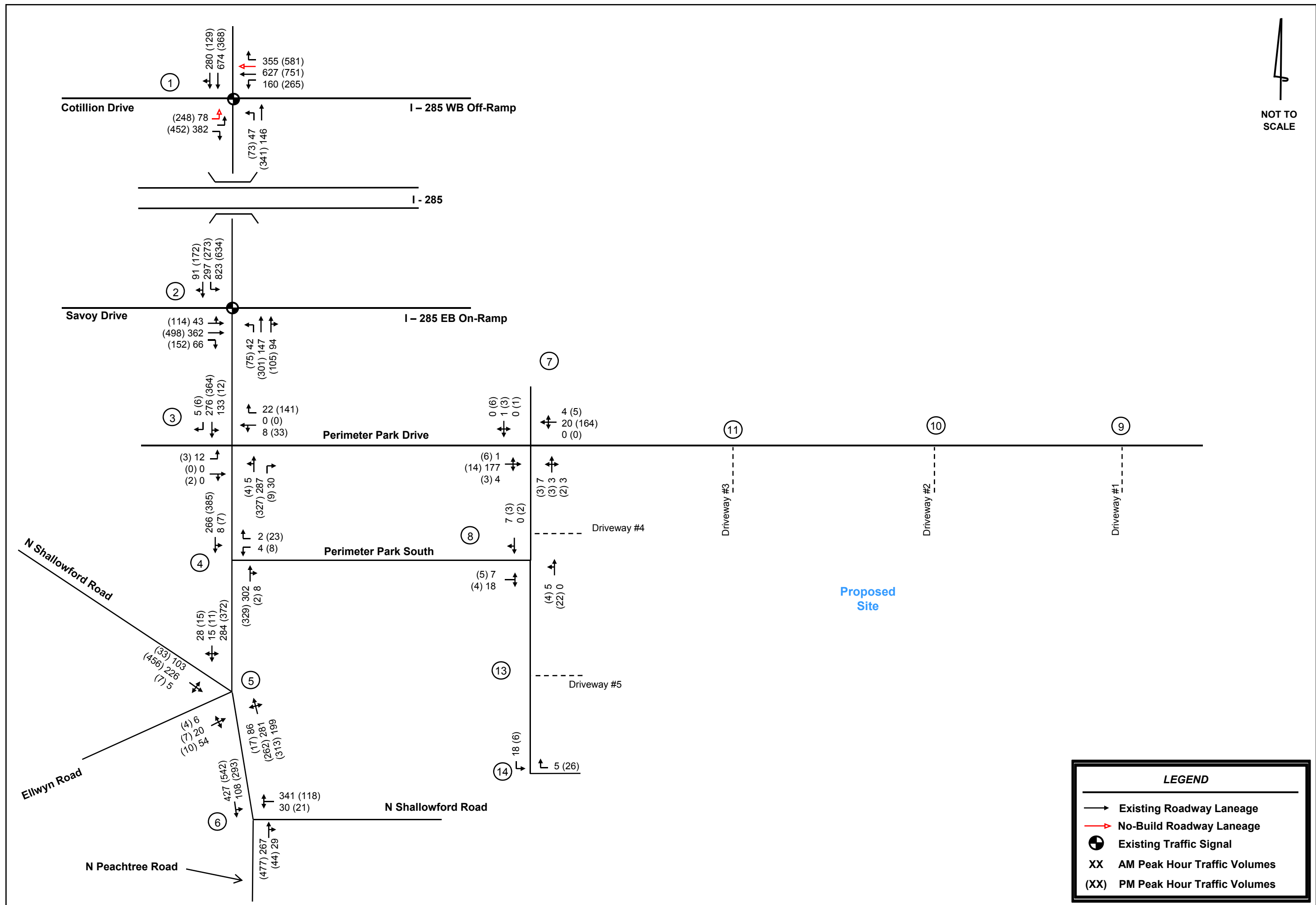
The traffic associated with the proposed development (Perimeter Park South) was added to the 2010 No-Build volumes. These volumes were then input into Synchro 6.0. The results of the analyses are displayed in **Table 8** on the following page.



## No-Build 2010 Conditions

## Perimeter Park South Transportation Analysis

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**Table 8**  
**Perimeter Park South DRI**  
**2010 Build Intersection Levels of Service**  
**(delay in seconds)**

Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	I-285 WB Ramp/Cotillion Drive N. @ Peachtree Road	Signal	E	E (70.1)	E (73.8)
2	I-285 EB Ramp/Savoy Drive @ N. Peachtree Road	Signal	D	D (39.9)	D (50.9)
3	N. Peachtree Road @ Perimeter Park Drive	Side Street Stop Control	D	EB - F (82.7) WB - C (15.3)	EB - F (50.5) WB - B (14.0)
4	N. Peachtree Road @ Perimeter Park South	Side Street Stop Control	D	WB - B (13.5)	WB - B (14.2)
5	N. Peachtree Road @ N. Shallowford Road North	Side Street Stop Control	D	EB1 - B (13.9) EB2 - C (17.2) WB - B (15.6)	EB1 - C (18.0) EB2 - C (17.4) WB - B (14.6)
6	N. Peachtree Road @ N. Shallowford Road South	Side Street Stop Control	D	WB - C (17.3)	WB - D (30.3)
7	Perimeter Park Drive @ Perimeter Park South	Side Street Stop Control	D	NB - C (15.1) SB - B (12.1)	NB - C (15.2) SB - B (11.0)
8	Perimeter Park South @ Perimeter Park East	Side Street Stop Control	D	EB - A (9.0)	EB - A (9.9)
9	Perimeter Park Drive at Driveway #1	Side Street Stop Control	D	NB - A (9.9)	NB - A (9.8)
10	Perimeter Park Drive at Driveway #2	Side Street Stop Control	D	NB - B (10.1)	NB - B (10.0)
11	Perimeter Park Drive at Driveway #3	Side Street Stop Control	D	NB - B (10.4)	NB - B (10.5)
12	Perimeter Park South at Driveway #4	Side Street Stop Control	D	WB - A (9.0)	WB - A (8.8)
13	Perimeter Park East at Driveway #5	Side Street Stop Control	D	WB - A (8.9)	WB - A (8.7)
14	Perimeter Park East at Driveway #6	Side Street Stop Control	D	WB - A (6.6) SB - A (7.4)	WB - A (6.5) SB - A (7.4)

As shown in Table 8, one of the eight study intersections does not operate acceptably. To obtain an acceptable

level of service at the intersection of North Peachtree Road at Perimeter Park Drive, the following improvements are recommended:

North Peachtree Road at Perimeter Park Drive

- Install a signal if warranted.
- Convert the southbound right-turn lane to a shared through/right-turn lane and convert the southbound through lane to a left-turn lane.

With the improvements listed above, the intersection of North Peachtree Road at Perimeter Park Drive is expected to operate acceptably, as shown below in **Table 9**. **Figure 9** displays projected 2010 Build Conditions.

<b>Table 9</b> <b>Perimeter Park South DRI</b> <b>2010 Build Intersection Levels of Service IMPROVED</b> <b>(delay in seconds)</b>					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
3	N. Peachtree Road @ Perimeter Park Drive	Signal	D	A (6.5)	A (7.1)

## 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. Several projects are programmed for the area surrounding the study network, shown below in **Table 10**.

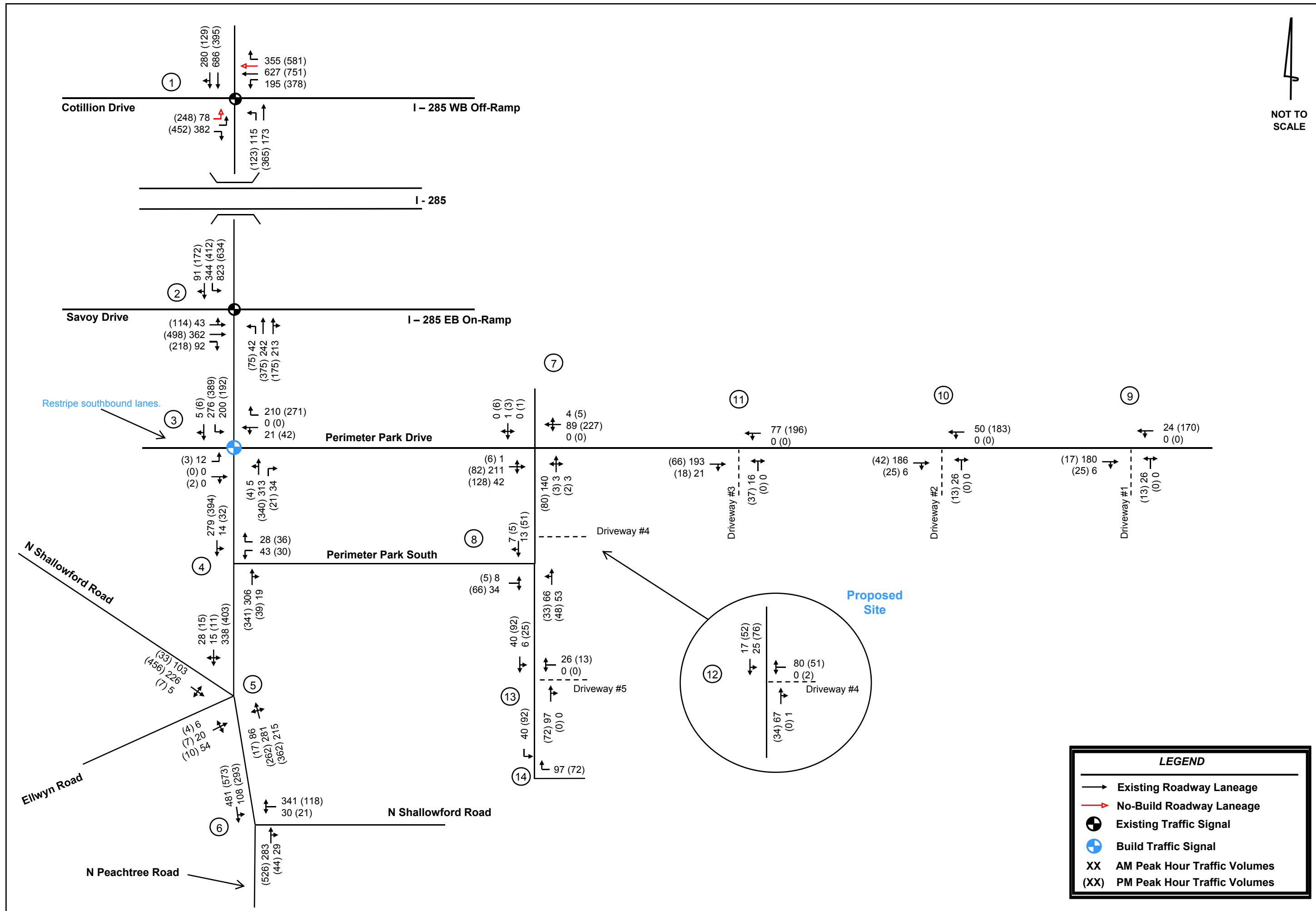
<b>Table 10</b> <b>Perimeter Park South DRI</b> <b>Programmed Improvements</b>		
2012	<b>DK-AR-219A</b>	I-285 North from SR 400 to North Shallowford Road – Includes Ashford-Dunwoody Road Interchange.
2012	<b>DK-AR-BP052</b> <b>STIP 0002410</b>	SR 141 (Peachtree Industrial Boulevard) From McGaw Drive to N. Peachtree Road North – Pedestrian Facility.
2015	<b>AR-H-300</b> <b>STIP 0001758</b>	I-285 North HOV Lanes from I-75 North in Cobb County to I-85 North in DeKalb County
2020	<b>AR-901A</b>	I-285 North Bus Rapid Transit (BRT) from Perimeter Center Area to Doraville MARTA Station.
2020	<b>AR-901B</b>	I-285 North Bus Rapid Transit (BRT) from Perimeter Center Area to Doraville MARTA Station.
N/A	<b>STIP 0002799</b>	Chamblee-Dunwoody Road from Clairview/Cumberland to Buford Highway.
N/A	<b>CWP 0006982</b>	Chamblee-Dunwoody Road from Clairview/Cumberland to Buford Highway.



# Build 2010 Conditions

## Perimeter Park South Transportation Analysis

Kimley-Horn  
and Associates, Inc.





## **8.0 INGRESS/EGRESS ANALYSIS**

Three site driveways currently exist along Perimeter Park Drive and one exists along Perimeter Park South. Perimeter Park East is a public road that terminates near the south side of the development. The proposed site driveways will be in the general vicinity of the existing driveways. Driveway #1 along Perimeter Park Drive will remain in its existing location. Driveway #2 along Perimeter Park Drive will be relocated approximately 325' east of the existing driveway. Driveway #3 along Perimeter Park Drive will be relocated approximately 95' east of the existing driveway. Driveway #4 along Perimeter Park South and Driveway #5 along Perimeter Park East will remain in their existing locations. Perimeter Park East will terminate into a private drive. Since the traffic along Perimeter Park Drive, Perimeter Park South, and Perimeter Park East is minimal, negligible delay is projected at the driveways.

## **9.0 INTERNAL CIRCULATION ANALYSIS**

The proposed redevelopment will generate trips between the residential and office uses. The parking deck connects the mixed uses and will provide connectivity for internal trips. Using the *ITE Trip Generation Handbook, June 2004* as a reference, approximately 0.25% of the gross daily trips will be internal and approximately 1.18% of the gross PM peak hour trips will be internal.

## **10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS**

The DeKalb County's Land Use Plan designates this area as a Highway Corridor.

## **11.0 NON-EXPEDITED CRITERIA**

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

The proposed development is located near the intersection of N. Peachtree road at Perimeter Park Drive. Currently, one MARTA bus route accesses the site: Route 132. Route 132 connects the Chamblee rail station and the North Springs Station on 29-to 33-minute headways. The nearest MARTA bus stop is located approximately one tenth of a mile south of the site along North Peachtree Road. Given the transit options within the vicinity of the project (for both residential and office trips) and the overall project location proximity to nearby MARTA bus stops, transit is a viable option for some of the residents and workers of the new development. An alternative mode reduction of 2% was agreed to during the methodology meeting with GRTA for this development.

## 11.2 Vehicle Miles Traveled

The following table displays the reduction in traffic generation due to internal capture and alternative mode reductions.

<b>Table 11</b> <b>Perimeter Park South DRI</b> <b>Trip Reductions</b>	
	<b>Build-out Total</b>
Daily Gross Trip Generation	5,097
(-) Mixed-use reductions (internal capture)	-12
(-) Alternative modes	-102
Net Trips	4,983

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

The proposed development is located approximately 0.15 miles from the nearest major interstate, I-285. The proximity of access to the interstate system contributes to regional mobility.

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

The proposed DRI is located along MARTA Route 132. A route map is provided in the appendix.

## 11.5 Transportation Management Area Designation

The proposed redevelopment is not located within a TMA.

## 11.6 Offsite Trip Reduction and Trip Reduction Techniques

Mixed-use reductions were taken according to the *ITE Trip Generation Handbook, 2003*. Approximately 0.25% of the gross daily trips will be internal and approximately 1.18% of the gross PM peak hour trips will be internal. A 2% alternative mode reduction (those using transportation modes such as walking, bicycling, transit, etc.) was taken for the residential and office land uses.

## 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 adequate to serve the needs of the development upon build-out (2010).

# 12.0 AREA OF INFLUENCE

This section will describe the Area of Influence (AOI) demographics, AOI average wage levels, expected DRI housing costs, and the availability of jobs within the AOI that would reasonably position employees to purchase housing within the proposed DRI.

## 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 proposed development. For this proposed development expansion, the non-expedited review criterion is as follows:

This section is included to satisfy the following GRTA Non-expedited review criteria:

7. The proposed DRI:

- (c) Is located in an area of influence with employment opportunities which are such that at least twenty-five percent (25%) of the persons that are reasonably anticipated to live in the proposed DRI and are reasonably expected to be employed will have an opportunity to find employment appropriate to such persons' qualifications and experience 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 (Perimeter Park Drive at North Peachtree Street). 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 Fulton, DeKalb, and Gwinnett Counties) can be seen in **Figure 10**. Information obtained from the census tracts can be seen in **Table 12**.

<b>Table 12 Census Tract Information</b>	
Total Households	88,494
Population in Households	211,717
Average household size	2.39
Total Workers	122,823
Workers per Household	1.39
Owner Occupied	47.99%
Rental Occupied	52.01%

As can be seen from the table above, the total population within the Area of Influence is 211,717, residing within 88,494 households (an average of 2.39 people per household). The AOI area totals 46,920 acres.

Using the above calculated average of 2.39 persons per household, it can be anticipated that the proposed DRI will house approximately 1,589 people (665 proposed dwelling units multiplied by 2.39). Based on information obtained from the Census Tracts, it is estimated that approximately 924 of these expected 1,589 residents would be workers. The remainder of this section will demonstrate the availability of jobs for these expected workers within the development at or above the necessary income level to afford housing within the DRI.

The Atlanta Journal-Constitution website was researched to find current listings of houses for sale in the vicinity of the proposed development (30328 Zip Code). At the time of this report, about 157 homes were listed for sale in the area, ranging in price from \$64,800 to \$895,000. Many apartments are expected to be available for rent in the vicinity of the project.

## 12.3 Development Housing Analysis

The development plan provides for houses for sale in eight price ranges within the proposed development. Approximately twenty percent of the housing is projected to be designated as "affordable housing" per DeKalb County Workforce guidelines. **Table 13**, below, displays the number of units for sale, the average sale price for those units, and the number of workers expected to reside in the homes.

<b>Table 13</b> <b>Estimated Workers per Household</b>				
<b>Tier</b>	<b>Description</b>	<b>Number of Units</b>	<b>Average Price</b>	<b>Number of Workers</b>
1	Unit Type 1	231	\$800/month	321
2	Unit Type 2	179	\$1,200/month	249
3	Unit Type 3	58	\$1,500/month	80
4	Unit Type 1AH	58	\$683/month	80
5	Unit Type 2 AH	45	\$880/month	62
6	Unit Type 3 AH	14	\$1,080/month	20
7	Townhome	64	\$300,000	89
8	Townhome AH	16	\$145,000	22

In order to determine the number of jobs available within the AOI that would provide adequate income, information about the types of jobs within the AOI and the average salaries for these positions was collected first. Information about the types of jobs available within the AOI was obtained from Claritas, a data solutions company. A map with the boundary of the AOI was sent to Claritas, and a report containing the types of employment opportunities and number of each type of job was compiled. The Claritas report is included in the Appendix of this report. Next, the Georgia Department of Labor website was researched to obtain average salary information for the positions available within the AOI. Average salary information for jobs in Fulton, DeKalb, and Gwinnett counties was matched to the jobs existing within the AOI. This information (also available in the Appendix), along with the information provided by Claritas, is included in the **Table 14**, on the following page.

**Table 14**  
**AOI Jobs and Average Salaries**

<b>Industry / Business Type</b>	<b># Businesses</b>	<b># Employees</b>	<b>Average Salary</b>
<b>Retail Trade</b>	3,080	56,612	\$26,618
Building Materials and Garden Supply	159	3,481	-
General Merchandise Stores	107	5,432	-
Food Stores	246	4,301	-
Auto Dealers and Gas Stations	250	8,002	-
Apparel and Accessory Stores	247	1,681	-
Home Furniture, Furnishings, and Equipment	558	13,742	-
Eating and Drinking Places	789	14,570	-
Miscellaneous Retail Stores	724	5,403	-
<b>Finance</b>	2,283	30,932	\$54,238
Banks, Savings and Lending Institutions	551	8,596	-
Securities and Commodity Brokers	279	2,595	-
Insurance Carriers and Agencies	428	7,829	-
Real Estate	1,025	11,912	-
Trusts, Holdings, and Other Investments			
<b>Services</b>	8,472	119,352	-
Hotels and Other Lodging	99	6,703	\$15,342
Personal Services	1,376	12,945	-
Business Services	2,633	38,922	\$64,562
Motion Picture and Amusement	271	2,755	\$35,707
Health Services	1,366	25,936	\$38,746
Legal Services	602	3,203	\$64,562
Education Services	253	10,661	\$41,028
Social Services	263	3,597	\$38,746
Miscellaneous, Membership	1,609	14,630	-
Organizations and Nonclassified			
<b>Agriculture</b>	234	1,850	\$14,874
<b>Mining</b>	8	75	\$44,705
<b>Construction</b>	984	10,612	\$44,764
<b>Manufacturing</b>	826	29,610	\$51,501
<b>Transportation, Communication/Public Utilities</b>	721	15,164	\$92,554
<b>Wholesale Trade</b>	843	14,681	\$59,879
<b>Public Administration</b>	109	2,441	\$44,664
<b>Total</b>	17,560	281,329	-

## 12.4 Affordable Housing Analysis

Various mortgage calculators are available online to aid in determining affordable housing based on given incomes and income ranges. These calculators were used to determine the minimum income necessary to afford housing within the proposed Perimeter Park South development. It was assumed that no more than one third of an individual's income would be used for mortgage costs (principal + interest), that a 6.1% interest rate on a 30-year conventional loan could be obtained, and that a 10% down payment would be made. The income required to purchase a home at the approximate price range was calculated and is displayed in **Table 15**. Because there is an average of 1.39 workers expected per household, the required income was divided by 1.39 to determine the average salary each worker within the development would be expected to earn in order to provide their "fair share" of the housing costs. This methodology assumes an equal burden on all workers within the development, and is considered to be a conservative approach since it eliminates the lower paying positions within the AOI from consideration in the analysis. Table 12 also displays the number of workers expected in each price range, as well as the number of jobs available at the necessary average income level to afford housing within that price range. As can be seen in the table, there are more than enough positions available within the AOI for expected workers within the proposed development to find employment at the required income level for the eight levels of pricing within the development, thus satisfying the GRTA requirement of 25%.

<b>Table 15 Expected Workers</b>				
	<b>Average Sale Price</b>	<b>Necessary Income per Expected Worker</b>	<b>Expected Worker per Price Range</b>	<b>Jobs at or above Necessary Income</b>
1	\$800/month	\$20,719	321	245,201
2	\$1,200/month	\$31,079	249	188,589
3	\$1,500/month	\$38,849	80	156,301
4	\$683/month	\$17,689	80	245,201
5	\$880/month	\$22,791	62	245,201
6	\$1,080/month	\$27,971	20	188,589
7	\$300,000	\$42,376	89	145,640
8	\$145,000	\$20,482	22	245,201
<b>Percent of expected workers likely to find necessary employment within the AOI</b>				<b>100%</b>

### 13.0 ARC'S AIR QUALITY BENCHMARK

The proposed redevelopment is expected to consist of 665 total residential units (585 multi-family units and 80 townhomes) and 60,000 SF of office space. Because residential is the dominant use and the dwelling units per acre ratio is approximately 37.5 units per acre, the development meets the ARC criteria (1 b) for a 6% reduction.

Additionally, pedestrians will be able to access other uses within the proposed development via the parking decks and lots. This pedestrian network meets the ARC criteria (6 e) for a 5% reduction.

There are bus stops within ¼ mile of the project and meet the ARC criteria (4) for a 3% reduction.

The proposed development meets the ARC criteria for a total 14% VMT reduction. These reductions are displayed below in **Table 16**.

<b>Table 16 ARC VMT Reductions</b>	
<b>Mixed-Use Projects where Residential is the dominant use</b>	
Greater than 15 dwelling units/acre	-6%
Bike/ped networks in development that meet one Density 'target' and connect to adjoining uses	-5%
Project is located within ¼ mile of a bus stop	-3%
<b>Total Reductions</b>	<b>14%</b>

## **Appendix**



## **Site Photos**

Perimeter Park South DRI  
**Photograph Sheet**

KHA Job No.: 019461007

KHA Rep.: DB

Date: February 4, 2008

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Photo No. 1



Remarks: EB Perimeter Park Drive @ Perimeter Park South

Photo No. 2



Remarks: WB Perimeter Park Drive @ N Peachtree Road

Photo No. 3



Remarks: SB Perimeter Park South @ Perimeter Park Drive

Photo No. 4



Remarks: Perimeter Park East @ Existing Site Driveway

# Perimeter Park South DRI

## Photograph Sheet

KHA Job No.: 019461007

KHA Rep.: DB

Date: February 4, 2008

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Photo No. 5



Remarks: NB Perimeter Park East @ Perimeter Park South

Photo No. 6



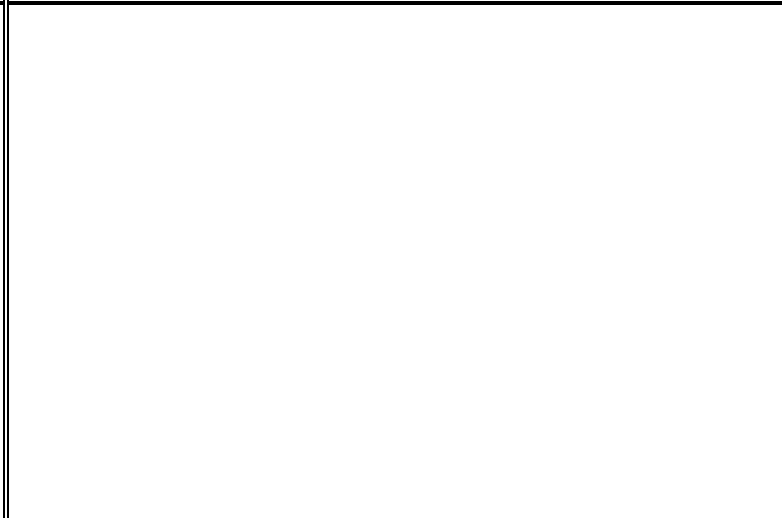
Remarks: SB N Peachtree Road @ Perimeter Park Drive

Photo No. 7



Remarks: NB N Peachtree Road

Photo No. 8



Remarks:

## **Transit Information**

## **Future Roadway/Intersection Projects**

## **Trip Generation and Volume Worksheets**

## **Peak Hour Turning Movement Counts**

## **Capacity Analyses – Existing 2007 Conditions**



## **Capacity Analyses – 2010 No-Build Conditions**

## **Capacity Analyses – 2010 Build Conditions**