



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT**

Project Type: <u>Operational</u>	P.I. Number: <u>751580-</u>
GDOT District: <u>Seven (7)</u>	County: <u>Fulton</u>
Federal Route Number: <u>19</u>	State Route Number: <u>400</u>

**SR 400/US 19 @ CR 145/Northridge Road**

**Submitted for approval:**

<u>Gary Dunton</u> <u>Kimley-Horn and Assoc.</u>	<u>12/21/11</u>
Consultant Designer & Firm	DATE
<u>Harris M. Coleman</u> <u>City of Sandy Springs</u>	<u>12/21/11</u>
Local Government (if applicable)	DATE
<u>David V. [Signature]</u>	<u>12/22/2011</u>
Office Head (GDOT Project Manager's Office)	DATE
<u>Charles S. Chivers</u>	<u>12/21/11</u>
GDOT Project Manager	DATE

**Recommendation for approval:**

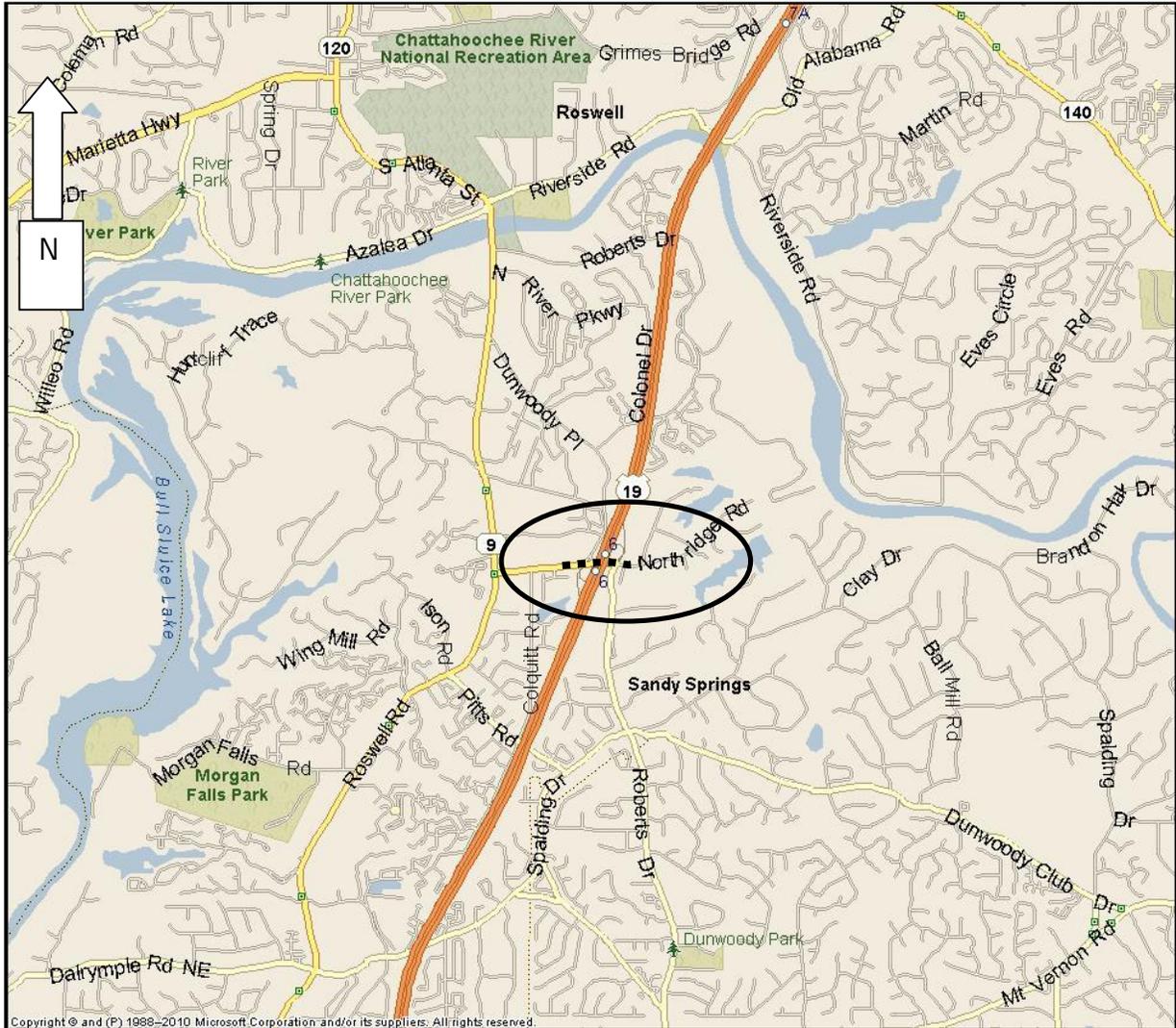
Program Control Administrator	<u>[Signature]</u>	<u>5/4/2012</u>
* <u>Glenn Bowman</u>		DATE
State Environmental Administrator (recommendation required)	<u>[Signature]</u>	<u>5/16/2012</u>
* <u>Kathy Zahul</u>		DATE
State Traffic Engineer (recommendation required for roundabout projects)	<u>[Signature]</u>	<u>5/4/2012</u>
* <u>Lisa Myers</u>		DATE
Project Review Engineer	<u>[Signature]</u>	<u>5/11/2012</u>
* <u>Patrick Allen</u>		DATE
for: State Utilities Engineer	<u>[Signature]</u>	<u>5/14/2012</u>
* <u>Bryant Poole</u>		DATE
District Engineer (projects not originating in District Office)	<u>[Signature]</u>	<u>5/9/2012</u>
* <u>Ben Rabun</u>		DATE
State Bridge Design Engineer (if applicable)		
State Transportation Financial Management Administrator		DATE

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

* <u>Cynthia VanDyke</u> <u>[Signature]</u>	<u>5/4/2012</u>
State Transportation Planning Administrator (recommendation required)	DATE

\*Recommendation on file - [Signature]

### PROJECT LOCATION



## PLANNING & BACKGROUND DATA

Project Justification Statement: The Georgia Department of Transportation (GDOT) and the State Road and Tollway Authority (SRTA) are making a constructive effort to improve transportation along State Route (SR) 400. The SR 400/US 19 at CR 145/Northridge Road interchange is one such area that experiences severe congestion.

PI 751580 is currently shown in Fiscal Year (FY) 2012-2017 Transportation Improvement Program (TIP) under the Atlanta Regional Commission (ARC) Project Number FN-AR-191.

### Existing Conditions

This section of Northridge Road is functionally classified as an Urban Minor Arterial. The existing conditions in the area are as follows:

#### Northridge Road between Somerset Court and Dunwoody Place

- Four (4) 10-foot through lanes
- One (1) 10-foot left turn lane

The current posted speed limit along Northridge Road is 35 miles per hour (MPH) at the SR 400 interchange.

### Existing and Projected Traffic Volumes

The current (2011) Average Daily Traffic (ADT) is 30,600 on Northridge Road between Roberts Drive and Dunwoody Place.

Table 1 Volume Summary for (2011) Existing			
Segment	AM Peak	PM Peak	ADT
Northridge Road from Roberts Drive to Dunwoody Place	2,565	2,695	30,600

Sources: Kimley-Horn and Associates, Inc. (August/September 2011)

Table 2 Volume Summary for (2034) No-Build			
Segment	AM Peak	PM Peak	ADT
Northridge Road (between Roberts Drive and Dunwoody Place)	2,880	3,020	34,250

Note: Traffic volumes grown from 2010 regional travel demand model used for PLAN 2040

Levels-of-Service (LOS)

The current level of service (LOS) at the Roberts Drive and Dunwoody Place intersections is “E” and “D”, respectively, for the AM peak hour. The intersections currently operate at LOS “E” during the PM peak hour. The (2034) design traffic volumes will provide a LOS “E” for the AM peak hour. During the PM peak hour, the LOS at Roberts Drive is “F” while the LOS at Dunwoody Place is “E”.

Table 3 Existing Year 2011 AM and PM LOS Analysis				
Segment	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
Northridge Road and Dunwoody Place/SR 400 SB Ramps	E	55.0	D	51.6
Northridge road and Roberts Drive/SR 400 NB Ramps	E	71.3	E	57.3

Table 4 Design Year 2034 No-Build AM and PM LOS Analysis				
Segment	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
Northridge Road and Dunwoody Place/SR 400 SB Ramps	E	79.0	E	57.3
Northridge road and Roberts Drive/SR 400 NB Ramps	F	85.3	E	63.1

Crash Data

Crash data within proximity of the Northridge Road intersections with the SR 400 on- and off- ramps were obtained from the Georgia Department of Transportation for the years 2007, 2008, and 2009. The crash data were obtained for the Northridge corridor between the residential neighborhood driveway directly west of the SR 400 southbound ramps and Somerset Court directly east of the SR 400 northbound ramps as well as for the tops of the ramps themselves, a segment length of approximately 0.5 miles. The statewide average crash rates for 2009, 2008, and 2007 for an Urban Minor Arterial were 463, 469, and 513 crashes per 100 million vehicle miles traveled and the corridor crash rates were 1687, 1188 and 1033 crashes per 100 million vehicle miles traveled. This shows that the accident rates for this section of Northridge Road, has been consistently higher than the statewide average.

Table 5 Urban Minor Arterial Street Crash Rate Summary			
Total Accidents	2007	2008	2009
Accidents per 100 MVMT	1687	1188	1033
Statewide Accidents per 100 MVMT	513	469	463
Injury Accidents			
Injury Accidents per 100 MVMT	517	275	155
Statewide Injury Accidents per 100 MVMT	126	117	115
Fatalities			
Fatalities per 100 MVMT	17.22	0.00	17.22
Statewide Fatalities per 100 MVMT	1.48	1.47	1.10

Project Limits

The project limits for this project are of a sufficient length to improve traffic congestion on Northridge Road in the vicinity of the SR 400 interchange. The proposed eastern terminus is suitable because it would tie to the existing two lanes that serve the residential neighborhoods. The proposed western terminus for this project will be at the existing five (5) lane section along Northridge Road west of the SR 400 interchange. This terminus is suitable because additional intersection capacity at the interchange is achieved by matching the existing downstream laneage.

Project Goal

The goal of the project would be to improve traffic mobility in the vicinity of the SR 400 at Northridge Road interchange. Improvements are needed to alleviate traffic congestion to accommodate existing and future travel demand and to reduce crash frequency along the corridor. Crash rates along the corridor are above the statewide averages for comparable route types, and the level of service ranges from "E" to "F" for 2034 (Design year).

Description of the proposed project:

Design-build project NH000-0056-01(061) consists of approximately 0.4 miles of widening along Northridge Road at SR 400 in the City of Sandy Springs. The project will provide capacity and operational improvements to the GA 400 ramps at Northridge Road as well as the intersections of Northridge Road at Dunwoody Place and Roberts Drive. Operational improvements will include additional signage for the northbound exit ramp from GA 400 and additional through lane on Northridge Road to accommodate improved traffic flow. The project also includes replacing the existing bridge over SR 400 and treatments to address wrong way movements at the intersection of Northridge Road and Somerset Court.

Federal Oversight:     Full Oversight     Exempt     State Funded     Other

MPO:     N/A     MPO - Atlanta Regional Commission (ARC)  
 MPO Project TIP # FN-AR-191

Regional Commission:  N/A

RC – Atlanta Regional Commission  
 RC Project ID # FN-AR-191

Congressional District(s): 6

Projected Traffic ADT:

Current Year (2011): 30,600      Open Year (2014): 31,025      Design Year (2034): 34,250

Functional Classification (Mainline): Urban Minor Arterial Street

Is this project on a designated bike route?       No       YES

Is this project located on a pedestrian plan?       No       YES

Is this project located on or part of a transit network?       No       YES

## CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: Concerns have been noted by the residents of Northridge Forest of confused drivers in their neighborhood just east of the interchange. Northridge Road east of the interchange is the entrance to the subdivision and does not provide an outlet. Therefore, the wrong way driver often turns around in driveways or by making a U-turn in Northridge Road just east of the Roberts Drive intersection due to the excessive amount of pavement available. The wrong way driver also tends to drive at excessive speeds through the neighborhood.

Context Sensitive Solutions: Several solutions were evaluated to provide relief from the wrong way driver. A roundabout has been determined to be the preferred solution. With the improvements to the interchange, additional signage will be installed to notify the travelling public in advance of the proper lane assignments for their intended direction. For the wrong way driver, a roundabout will be installed to provide a turn-around maneuver.

## DESIGN AND STRUCTURAL DATA

Mainline Design Features: Northridge Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	4	4
- Lane Width(s)	9.5' (+/-)	11'-12'	11'
- Median Width & Type	1-10' center left turn lane	14' flush	1-11' center left turn lane
- Outside Shoulder Width & Type	Urban	10'-16' Urban	12' Urban
- Outside Shoulder Slope	2:1/4:1	2:1/4:1	2:1/4:1
- Inside Shoulder Width & Type	N/A	N/A	N/A
- Sidewalks	N. shdr - 0' S. shdr - 0'-5'	5'	5'
- Auxiliary Lanes	N/A	N/A	1-11' from

			SR 400 NB to Dunwoody Place NB
- Bike Lanes	N/A	4'	None (2' bike friendly)
Posted Speed	35 mph		35 mph
Design Speed	35 mph	45 mph	35 mph
Min Horizontal Curve Radius	700'	371' (35 mph)	700'
Superelevation Rate	2.5%	4% max	2.5%
Grade	4%	8%	4.76%
Access Control	Full, By Permit	N/A	Full, By Permit
Right-of-Way Width	100' west of int., 60' east of int.	N/A	105'-116' west of int., 60'-118' east of int.
Maximum Grade – Crossroad	Roberts Dr - 3% Ramp B – 5% Ramp A – 3% Ramp C – 6% Ramp D – 5% Dunwoody PI – 4%	Roberts, Dunwoody – 8% Ramps – 8%	Roberts Dr - 3% Ramp B – 5% Ramp A – 3% Ramp C – 6% Ramp D – 5% Dunwoody PI – 4%
Design Vehicle	N/A	WB-40 or BUS-40	S-BUS-36
<i>Additional Items as needed</i>			

\*According to current GDOT design policy if applicable

Major Structures:

Structure	Existing	Proposed
ID #121-0270-0, Northridge Road over SR 400	289'L x 61'W, 52' roadway width, 4-9.5' travel lanes, 1-10' center left turn lane, 2' shoulders, 5 sidewalk on S shdr. Suff. Rating = 54.45 (9/30/2010)	359.83'L x 86.33'W, 72' roadway width, 4-11' travel lanes, 1-11' center left turn lane, 1-11' auxiliary lane with 2' separation, 2-2' "bike friendly" lanes, 5.5' sidewalk Along south side of bridge
<i>Retaining walls</i>	N/A	<i>MSE wall along SR 400 SB shoulder under bridge</i>
<i>Other</i>	N/A	N/A

Major Interchanges/Intersections:

- Northridge Road at SR 400: Four-leg Partial Cloverleaf Interchange with ramps beyond main structure including existing bridge on Northridge Road over SR 400.
- Northridge Road at Dunwoody Place: Signalized intersection where Dunwoody Place aligns with the entrance and exit ramps to SR 400 SB.
- Northridge Road at Roberts Drive: Signalized intersection where Roberts Drive aligns with the entrance and exit ramps to SR 400 NB.

Utility Involvements:

- AGL Resources
- AT&T City of Atlanta Bureau of Water
- City of Sandy Springs
- Comcast
- Fulton County Sewer
- Georgia Department of Transportation
- Georgia Power

Public Interest Determination Policy and Procedure recommended (Utilities)?  YES  NO

SUE Required:  Yes  No

Railroad Involvement: N/A

Right-of-Way:

Required Right-of-Way anticipated:  YES  NO  Undetermined  
Easements anticipated:  Temporary  Permanent  Utility  Other  
*(check all easement types that apply)*

Anticipated number of impacted parcels: 4  
Anticipated number of displacements (Total): 0  
Businesses: 0  
Residences: 0  
Other: 0

Location and Design approval:  Not Required  Required

Off-site Detours Anticipated:  No  Yes  Undetermined

Transportation Management Plan Anticipated:  YES  NO

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	YES	Appvl Date (if applicable)	NO	Undetermined
1. Design Speed	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Lane Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Shoulder Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Bridge Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Horizontal Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Superelevation	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
7. Vertical Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Grade	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Stopping Sight Distance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Cross Slope	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Vertical Clearance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Lateral Offset to Obstruction	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Bridge Structural Capacity	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

A design Exception will be required for the superelevation rate across new Northridge Road bridge over SR 400. The horizontal curve across bridge will not include superelevation. The curve will remain in normal crown to allow a smoother tie in for the free-flow NB Ramp from SR 400 and Dunwoody Place.

Design Variances to GDOT standard criteria anticipated:

GDOT Standard Criteria	Reviewing Office	YES	Appvl Date (if applicable)	NO	Undetermined
1. Access Control - <i>Median Opening Spacing</i>	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination - <i>(if applicable)</i>	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Safety Edge	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

VE Study anticipated:  No  Yes  Completed – Date: 10/27/2011

## ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA:  NEPA:  Categorical Exclusion  EA/FONSI  EIS

Air Quality:

Is the project located in a PM 2.5 Non-attainment area?  No  Yes

Is the project located in an Ozone Non-attainment area?  No  Yes

This project is located in the Metro-Atlanta non-attainment area for PM 2.5 and Ozone. The project is listed in the approved FY 2012-2017 Transportation Improvement Program (TIP). The reference number in the TIP is FN-AR-191. It is anticipated that this project will not require a qualitative PM2.5 hotspot analysis since it is NOT a project of local air quality concern under 40 CFR 93.123(b)(1). Because the average annual daily traffic exceeds 10,000 vehicles and the level-of-service (LOS) will be LOS D or worse, a carbon monoxide analysis is required.

Environmental Permits/Variations/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Other Commitments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. Other Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Is a PAR required?  No  Yes  Completed – Date:

NEPA/GEPA: A GEPA document with no significant issues is anticipated. There are no known Section 4(f) resources in the area.

Ecology: A combined Ecology Resource Survey and Assessment of Effects Report is appropriate for this project. The federally listed and candidate species known to occur in Fulton County include Cherokee darter (*Etheostoma scotti*), gulf moccasinshell (*Medionidus penicillatus*), shinyrayed pocketbook (*Hamiota subangulata*), dwarf sumac (*Rhus michauxii*), and Georgia aster (*Symphotrichum georgianum*). It is anticipated that there will be no suitable habitat for any of the species. It is also anticipated that there will be no significant ecological issues. However, a 404 Permit is anticipated due to impacts to a stream with the relocation of the NB entrance ramp. A survey for the Georgia aster was completed during the 2011 flowering season.

History: It is anticipated that a Historic Resources Survey Report would be appropriate for this project.

Archeology: It is anticipated that an archaeology short form will be appropriate for this project.

Air & Noise: A Noise study is not required for this project.

Public Involvement:

- A series of Public Information Open Houses (PIOH) were held by State Road and Tollway Authority (SRTA) on December 7, 8 & 20 2010 and also held January 5 & 6, 2011. The PIOH's were held for various GA 400 corridor improvement projects including PI 751580-.
- A meeting was held between GDOT and City of Sandy Springs with the Northridge Forest Neighborhood Association. The neighborhood association discussed the section of Northridge Road east of the interchange. This section is residential with no outlet and the neighborhood expressed concerns of wrong way traffic turning around in the neighborhood. The association has a project to provide a hardscape plan to discourage wrong way drivers entering the neighborhood. The association's plan has been approved by City of Sandy Springs and is concerned with coordination between the two projects.
- A PIOH was held on December 5, 2011.

Major stakeholders: SRTA, City of Sandy Springs, Northridge Forest Neighborhood Association

## ROUNDBABOUTS

Lighting agreement/commitment letter received:  No  Yes

*Lighting commitment e-mail is attached. A Lighting Agreement is pending.*

Feasibility Study:

*Northridge Road and SR 400 NB Ramps/Roberts Drive* - The Northridge Road and SR 400 NB Ramps/Roberts Drive would operate at acceptable LOS according to the operational analysis results.

*Northridge Road and SR 400 SB Ramps/Dunwoody Place* - The forecasted future entering volumes at the SR 400 SB Ramps/Dunwoody Place would exceed the optimal volumes for a roundabout. In addition, the results based on the HCM model indicate a roundabout at this location would operate at an unacceptable LOS. However, the results based on the UK model indicate favorable operating conditions with a roundabout at this location. It is recommended that a more rigorous analysis be conducted to overcome the shortcomings of a deterministic analysis tool such as GDOT's Roundabout Analysis Tool.

The cost to construct roundabouts at the Northridge Road and SR 400 NB Ramps/Roberts Drive and the Northridge Road and SR 400 SB Ramps/Dunwoody Place intersections is anticipated to be significantly higher than the currently proposed signalized intersections. Signalized intersections are preferred at these locations.

*Northridge Road and Somerset Court* - A roundabout at Somerset Court would operate at acceptable LOS with either a signalized or roundabout intersection at Northridge Road and SR 400 NB Ramps/Roberts Drive. However, it is redundant and unnecessary if a roundabout is constructed. The proposed roundabout would consist of a single travel lane, truck apron and landscaped center island.

Peer Review required:  No  Yes  Completed – Date:  
 A Peer Review is currently being conducted by Ourston.

## CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Replacing the existing Northridge Road Bridge over SR 400 will require 3 stages to construct and may require off-hour construction due to lane closures on SR 400 and grade changes on Northridge.

Early Completion Incentives recommended for consideration:  No  Yes

## PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Kimley-Horn and Associates, Inc.
Design	Kimley-Horn and Associates, Inc
Right-of-Way Acquisition	GDOT
Utility Relocation	Contractor/Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	N/A
Environmental Studies, Documents, and Permits	Kimley-Horn and Associates, Inc
Environmental Mitigation	N/A
Construction Inspection & Materials Testing	GDOT

Lighting required:  No  Yes  
 Lighting is to be street and pedestrian level according to the City of Sandy Springs standards with LED luminaires.

Initial Concept Meeting: September 29, 2011 – Minutes attached.

Concept Meeting:  
 Concept Meeting was held December 7, 2011. Minutes attached.

Other projects in the area:

- 0006398 – SR 400 ATMS Ramp Meters from I-285 to SR 120/Old Milton Parkway - Construction is complete.
- 0008415 – SR 400 at Hammond Drive Interchange – Construction is complete.

- 0001757 – SR 400 from I-285 to McFarland Road/Forsyth County HOV Lanes - A feasibility study is underway.
- 0010311 – SR 400 at Abernathy Road – Northbound Ramp Extension – Preliminary Engineering is underway
- 0010290 – SR 400 from CR 458/McFarland Road to Big Creek Greenway – Northbound Lane Extension - Preliminary Engineering is underway.
- GA 400 Shoulder Lanes Demonstration Project – GA 400 southbound from Holcomb Bridge Road entrance ramp to North Springs MARTA Station is complete. Northbound GA 400 between the North Springs MARTA Station entrance ramp to Holcomb Bridge Road exit ramp may be implemented pending the review of the southbound shoulder lanes.

Other coordination to date: N/A

Project Cost Estimate and Funding Responsibilities: *Add additional rows as necessary; Attach current cost estimates to report.*

	PE	Previous Early ROW Acquisition	ROW	Utility	CST*	Total Cost
By Whom	SRTA	GDOT	SRTA	SRTA	SRTA/Sandy Springs	
\$ Amount	\$600,000	\$4,490,669.20 (not included in Total Cost)	\$141,000.00	\$912,000.00	\$7,585,758.61 /\$500,000.00	\$9,738,758.61
Date of Estimate	2/16/2011	1997	10/25/2011	12/20/2011	11/14/2011	

\*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

## ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative: Widen Northridge Road to six (6) lanes including a free flow separated right turn lane to Dunwoody Place. The SB and NB exit loop ramps will be widened to two lanes. The SR 400 NB exit ramp approach to Northridge Road includes triple right turn lanes (1 – free-flow; 2 - stop controlled). Replace the existing Northridge bridge over SR 400 to accommodate the proposed Managed Lanes on SR 400.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$9,738,758.61
Estimated ROW Cost:	\$141,000	Estimated CST Time:	24 months
Rationale: This alternative improves the operations of the intersections of Roberts Drive and Dunwoody Place. Also, the alternative provides for additional capacity west bound on Northridge Road.			

No-Build Alternative: No proposed improvements within the project limits.			
Estimated Property Impacts:	0	Estimated Total Cost:	0
Estimated ROW Cost:	0	Estimated CST Time:	0

Alternative 1: An initial alternative was evaluated that represented the same improvements as proposed Build condition, with the exception of providing dual “free-flow” right-turn lanes from the SR 400 NB Exit Ramp terminal and only a single left-turn lane on Roberts Drive at Northridge Road. The Roberts Drive left would operate in protected/permitted phase since they are single left-turns.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$9,738,758.61
Estimated ROW Cost:	\$141,000	Estimated CST Time:	24 months
Rationale: While Alternative 1 provides a better LOS with the free-flow right-turn lanes comparable to the Build option, the build option provides for a left-turn movement with protected-only phase, since a significant number of left-turns do not have to weave with WB right-turn lane traffic to Dunwoody Place.			

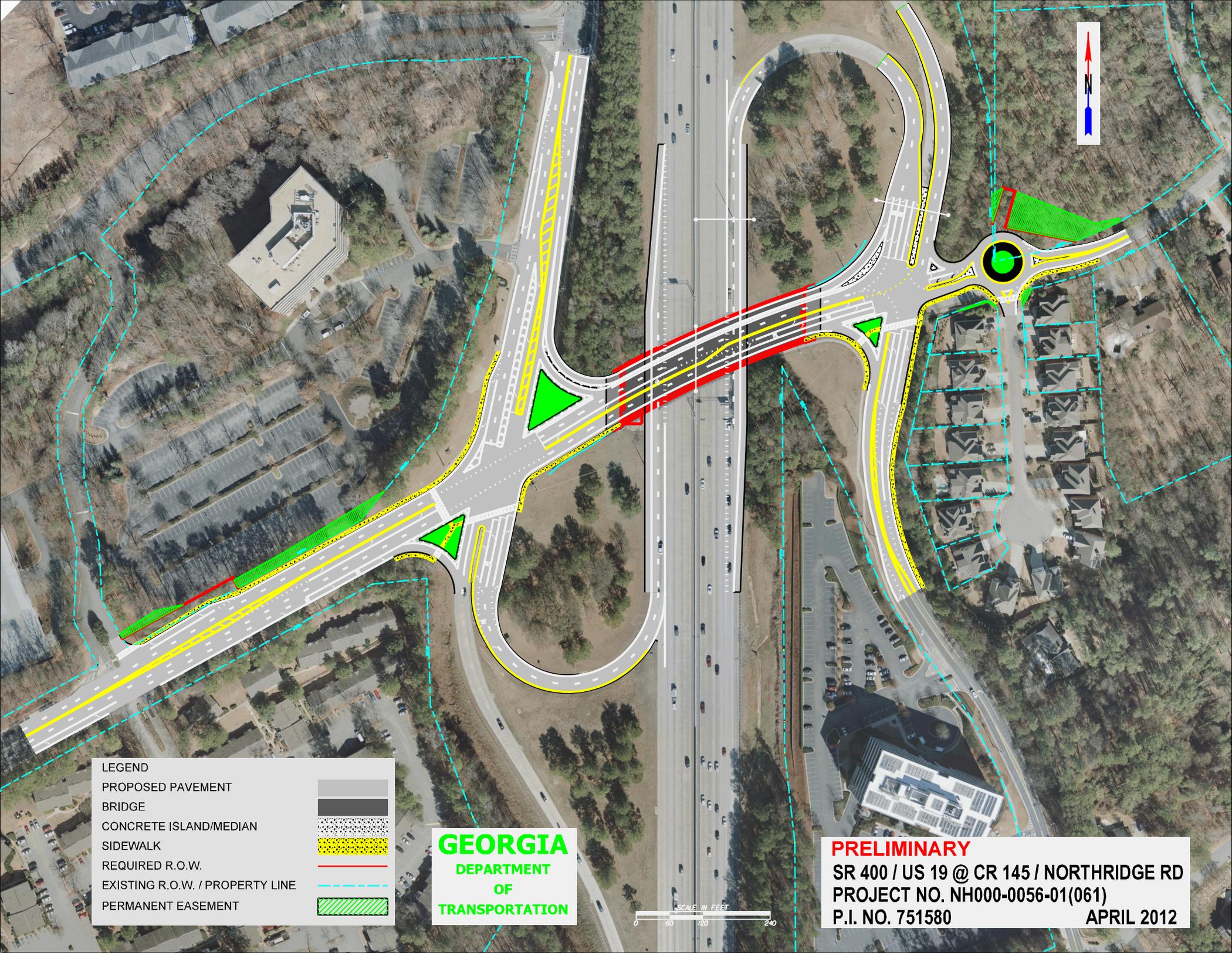
Alternative 2: A second alternative was evaluated that represented the same improvements as proposed Build conditions, with the exception of providing one non-separated “free-flow” right-turn lane and two stop controlled right-turn lanes at SR 400 NB Exit Ramp approach to Northridge Road. The Roberts Drive left would operate in protected phase only because they are dual left-turns.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$9,738,758.61
Estimated ROW Cost:	\$141,000	Estimated CST Time:	24 months
Rationale: This option provides the same LOS as the preferred alternative however since the free flow right turn lane is not separated there is the possibility of additional weaving.			

Comments: N/A

Attachments:

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
  - a. Construction including Engineering and Inspection
  - b. Completed Fuel & Asphalt Price Adjustment forms
  - c. Right-of-Way
  - d. Utilities
4. Crash summaries
5. Traffic diagrams
6. Capacity analysis summary
7. Summary of TE Study and/or Signal Warrant Analysis
8. Roundabout Data
  - a. Roundabout feasibility study
  - b. Lighting commitment letter
9. Bridge inventory
10. Pavement Type Recommendation
11. Conforming plan’s network schematics showing thru lanes.
12. Minutes of Concept meetings
13. Executed MOU with SRTA
14. Draft MOU with the City of Sandy Springs
15. PIOH Synopsis
16. VE implementation letter





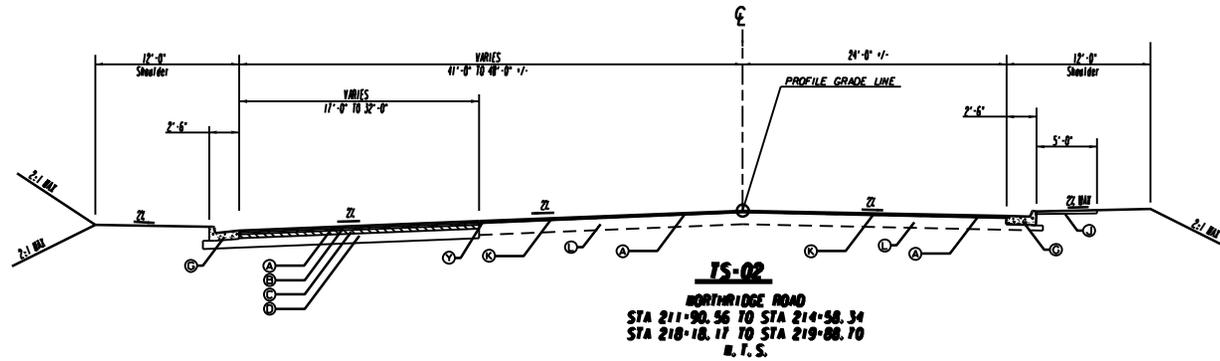
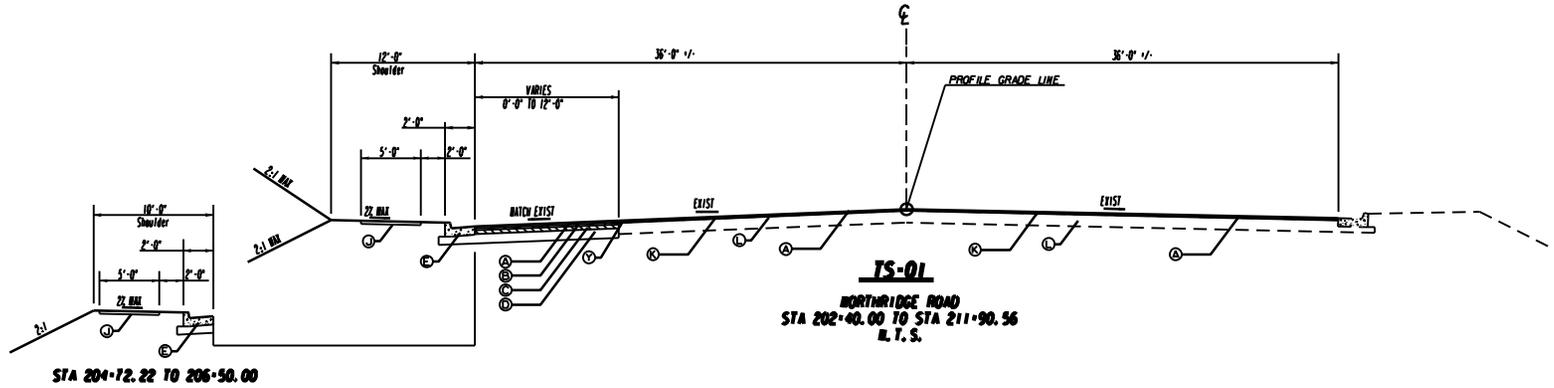
**LEGEND**

PROPOSED PAVEMENT	
BRIDGE	
CONCRETE ISLAND/MEDIAN	
SIDEWALK	
REQUIRED R.O.W.	
EXISTING R.O.W. / PROPERTY LINE	
PERMANENT EASEMENT	

**GEORGIA**  
DEPARTMENT  
OF  
**TRANSPORTATION**

SCALE IN FEET  
0 60 120 240

**PRELIMINARY**  
SR 400 / US 19 @ CR 145 / NORTHRIDGE RD  
PROJECT NO. NH000-0056-01(061)  
P.I. NO. 751580  
APRIL 2012



**REQUIRED PAVEMENT**

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
- Ⓓ GRADED AGGREGATE BASE, 10 IN
- Ⓔ 8' X 24" TP 2 CURB & GUTTER
- Ⓕ CONCRETE MEDIAN, 7 1/4 IN
- Ⓖ 8' X 30" TP 2 CURB & GUTTER
- Ⓗ 6' X 30" TP 1 CURB & GUTTER
- Ⓘ 4' CONC. SIDEWALK
- Ⓚ MILLING, VARIABLE DEPTH
- Ⓛ EXISTING ASPHALT PAVEMENT
- Ⓜ CONCRETE MEDIAN, 4 IN
- Ⓝ PLAIN PC CONC PVMT, CL 3 CONC, 12 INCH THK
- Ⓟ GRADED AGGREGATE BASE, 12 IN
- Ⓠ RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME
- Ⓡ EXISTING PLAIN PC CONC PVMT
- Ⓢ TRUCK APRON, 8 IN COLORED, STAMPED CONCRETE
- Ⓣ GRADED AGGREGATE BASE, 6 IN
- Ⓤ CONC. HEADER CURB, 6 IN, TP 9
- Ⓡ CONC. HEADER CURB, 4 IN, TP 1
- Ⓦ PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH



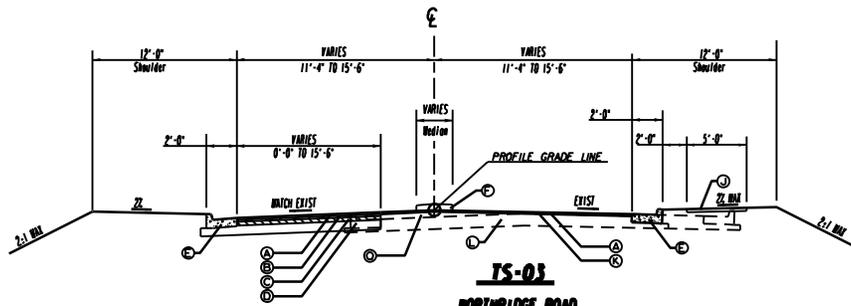
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 and Associates, Inc.

**REVISION DATES**

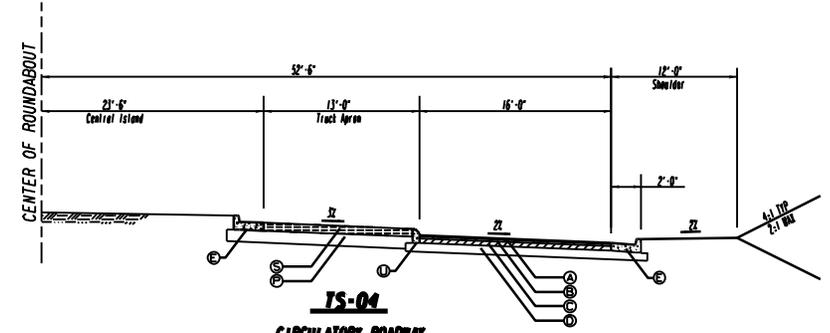
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STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY

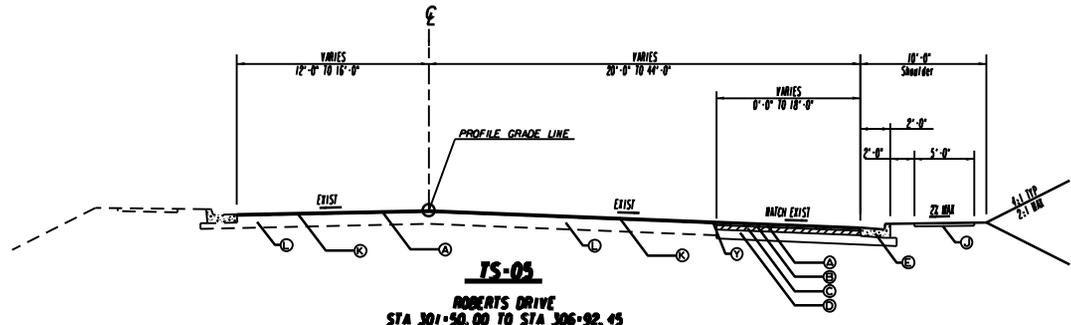
DRAWING NO.  
 5-01



**TS-03**  
 NORTHDRIDGE ROAD  
 STA 219+88.70 TO STA 224+17.32  
 N. T. S.



**TS-04**  
 CIRCULATORY ROADWAY  
 NORTHDRIDGE ROAD AT SOMERSET COURT  
 N. T. S.



**TS-05**  
 ROBERTS DRIVE  
 STA 301+50.00 TO STA 306+92.45  
 N. T. S.

**REQUIRED PAVEMENT**

- ① RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- ② RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
- ③ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
- ④ GRADED AGGREGATE BASE, 10 IN
- ⑤ 8' X 24" TP 2 CURB & GUTTER
- ⑥ CONCRETE MEDIAN, 7 1/2 IN
- ⑦ 8' X 30" TP 2 CURB & GUTTER
- ⑧ 6' X 30" TP 1 CURB & GUTTER
- ⑨ 4' CONC. SIDEWALK
- ⑩ MILLING, VARIABLE DEPTH
- ⑪ EXISTING ASPHALT PAVEMENT

- ⑫ CONCRETE MEDIAN, 4 IN
- ⑬ PLAIN PC CONC PVMT, CL 3 CONC, 12 INCH THK
- ⑭ GRADED AGGREGATE BASE, 12 IN
- ⑮ RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME
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- ⑰ TRUCK APRON, 8 IN COLORED, STAMPED CONCRETE
- ⑱ GRADED AGGREGATE BASE, 6 IN
- ⑲ CONC. HEADER CURB, 6 IN, TP 9
- ⑳ CONC. HEADER CURB, 4 IN, TP 1
- ㉑ PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH

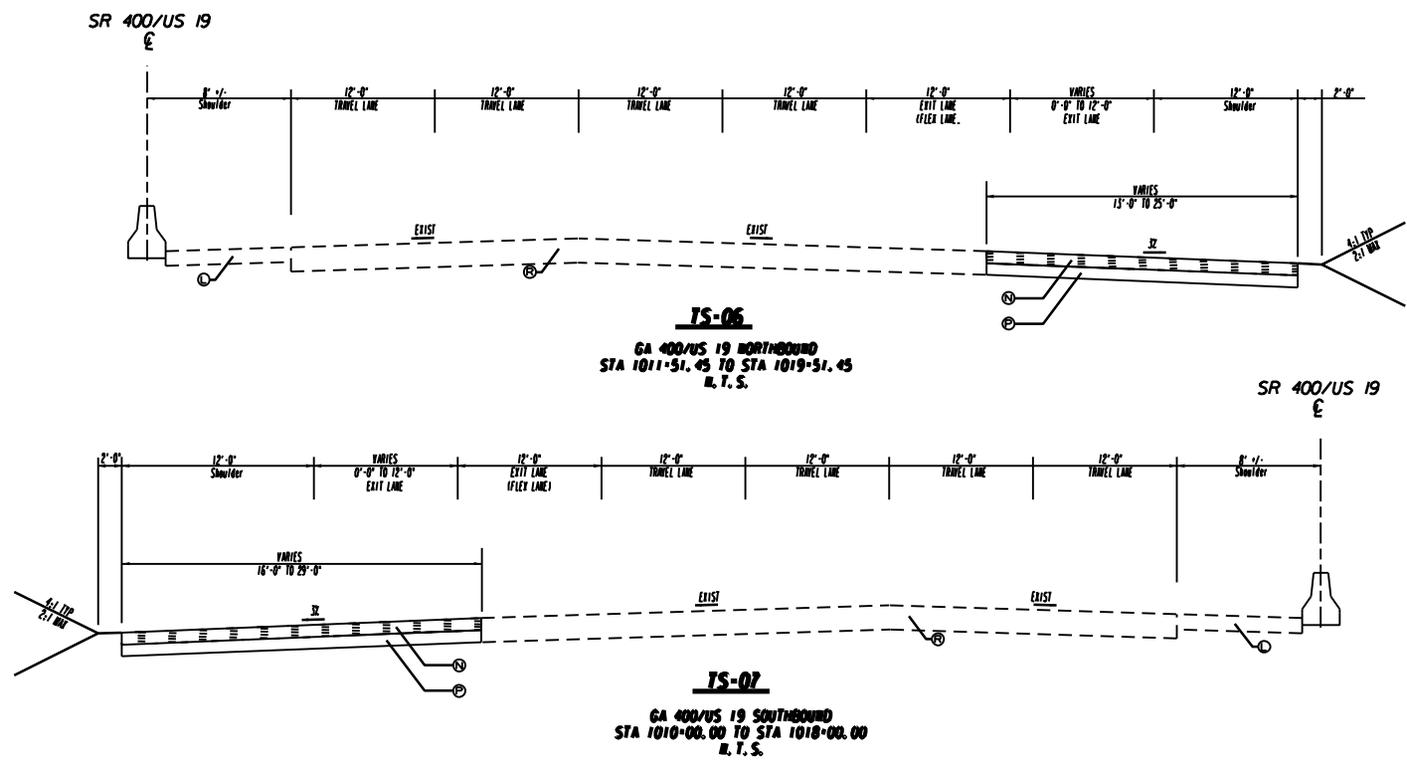
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REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY

DRAWING No. 5-02



- REQUIRED PAVEMENT**
- ① RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
  - ② RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
  - ③ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
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  - ⑪ EXISTING ASPHALT PAVEMENT
  - ⑫ CONCRETE MEDIAN, 4 IN
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  - ⑭ GRADED AGGREGATE BASE, 12 IN
  - ⑮ RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME
  - ⑯ EXISTING PLAIN PC CONC PVMT
  - ⑰ TRUCK APRON, 8 IN COLORED, STAMPED CONCRETE
  - ⑱ GRADED AGGREGATE BASE, 6 IN
  - ⑲ CONC. HEADER CURB, 6 IN, TP 9
  - ⑳ CONC. HEADER CURB, 4 IN, TP 1
  - ㉑ PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH

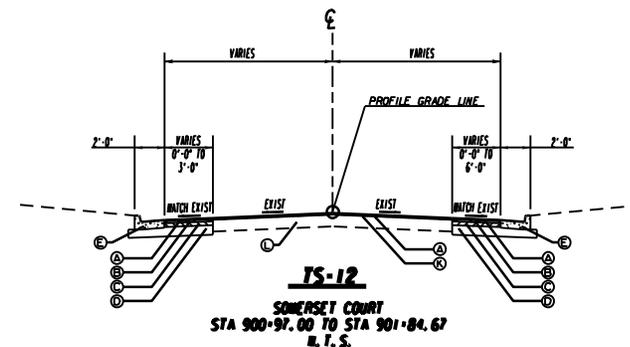
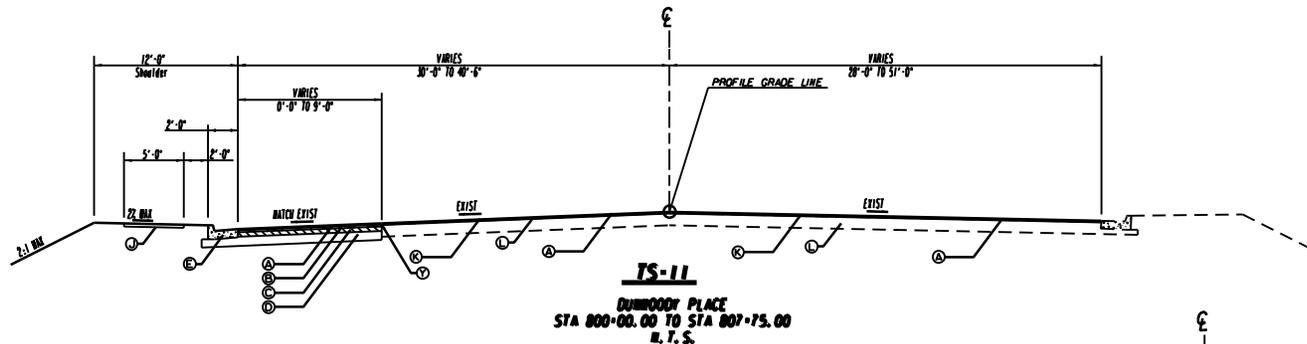
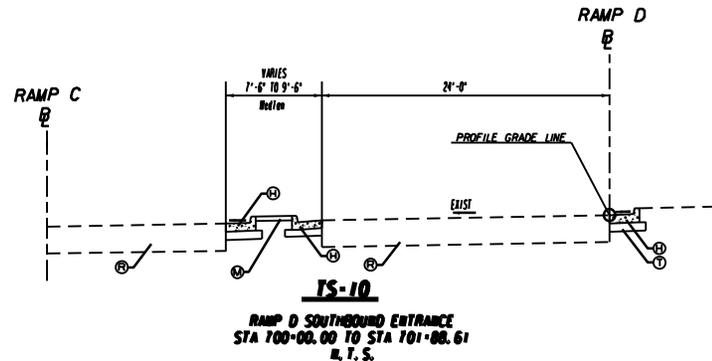
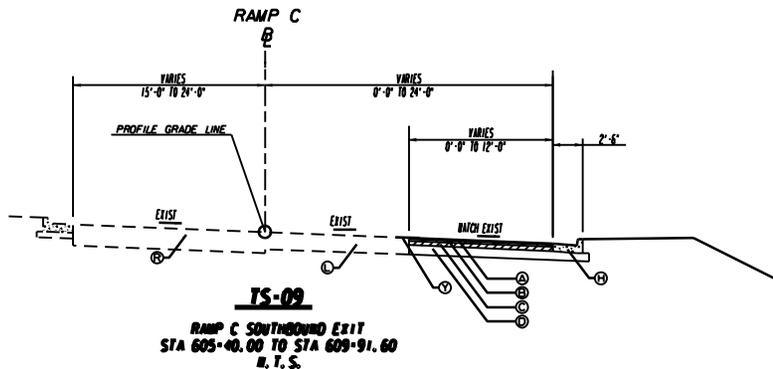
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REVISION DATES

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: INNOVATIVE PROGRAM DELIVERY

DRAWING No. 5-03



**REQUIRED PAVEMENT**

- ① RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- ② RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
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- ⑪ EXISTING ASPHALT PAVEMENT

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- ⑲ CONC. HEADER CURB, 6 IN, TP 9
- ⑳ CONC. HEADER CURB, 4 IN, TP 1
- ㉑ PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH

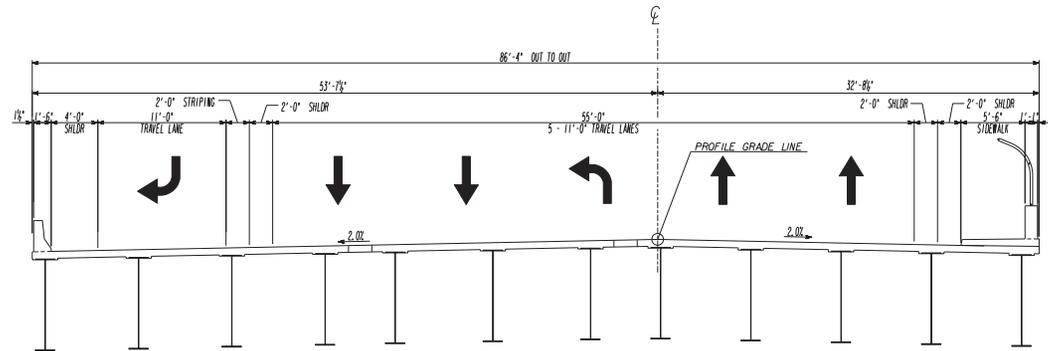


Kimley-Horn  
and Associates, Inc.

**REVISION DATES**


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: INNOVATIVE PROGRAM DELIVERY

DRAWING No.  
5-04



TS-13  
NORTHBRIDGE BRIDGE  
STA 214+58.34 TO STA 218+18.17  
N. T. S.

**REQUIRED PAVEMENT**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL &amp; H LIME (165 LB/SY)</li> <li>Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL &amp; H LIME (220 LB/SY)</li> <li>Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL &amp; H LIME (440 LB/SY)</li> <li>Ⓓ GRADED AGGREGATE BASE, 10 IN</li> <li>Ⓔ 8" X 24" TP 2 CURB &amp; GUTTER</li> <li>Ⓕ CONCRETE MEDIAN, 7 1/2 IN</li> <li>Ⓖ 8" X 30" TP 2 CURB &amp; GUTTER</li> <li>Ⓗ 6" X 30" TP 1 CURB &amp; GUTTER</li> <li>Ⓙ 4" CONC. SIDEWALK</li> <li>Ⓚ MILLING, VARIABLE DEPTH</li> <li>Ⓛ EXISTING ASPHALT PAVEMENT</li> </ul> | <ul style="list-style-type: none"> <li>Ⓜ CONCRETE MEDIAN, 4 IN</li> <li>Ⓝ PLAIN PC CONC PVMT, CL 3 CONC, 12 INCH THK</li> <li>Ⓟ GRADED AGGREGATE BASE, 12 IN</li> <li>Ⓞ RECYCLED ASPH CONC LEVELING, INCL BITUM MATL &amp; H LIME</li> <li>Ⓡ EXISTING PLAIN PC CONC PVMT</li> <li>Ⓠ TRUCK APRON, 8 IN COLORED, STAMPED CONCRETE</li> <li>Ⓢ GRADED AGGREGATE BASE, 6 IN</li> <li>Ⓣ CONC. HEADER CURB, 6 IN, TP 9</li> <li>Ⓢ CONC. HEADER CURB, 4 IN, TP 1</li> <li>Ⓡ PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH</li> </ul> |
|--|--|



REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TYPICAL SECTIONS**

## ATTACHMENT #3

STATE HIGHWAY AGENCY

DATE : 04/17/2012  
PAGE : 1

## JOB ESTIMATE REPORT

JOB NUMBER : 751580                    SPEC YEAR: 01  
DESCRIPTION: SR 400 @ NORTHRIDGE ROAD

## ITEMS FOR JOB 751580

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - NH000-0056-01(061)	1.000	400000.00	400000.00
0010	150-5010		EA	TRAF CTRL,PORTABLE IMPACT ATTN	4.000	9361.07	37444.29
0015	207-0203		CY	FOUND BKFILL MATL, TP II	50.000	41.86	2093.43
0020	210-0100		LS	GRADING COMPLETE - NH000-0056-01(061)	1.000	500000.00	500000.00
0025	310-1101		TN	GR AGGR BASE CRS, INCL MATL	10300.000	16.97	174857.95
0030	318-3000		TN	AGGR SURF CRS	100.000	17.87	1787.78
0035	402-1812		TN	RECYL AC LEVELING,INC BM&HL	500.000	75.28	37644.94
0040	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1500.000	66.16	99248.30
0045	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	1950.000	68.85	134270.80
0050	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	750.000	68.70	51525.14
0060	413-1000		GL	BITUM TACK COAT	1300.000	2.81	3656.85
0065	431-1000		SY	GRIND CONC PVMT	2000.000	3.98	7979.10
0070	432-0206		SY	MILL ASPH CONC PVMT/ 1.50" DEP	16650.000	1.80	30057.91
0074	430-0220		SY	PLN PC CONC PVMT/CLIC/ 12" TK	5800.000	33.21	192650.71
0075	433-1000		SY	REINF CONC APPROACH SLAB	540.000	134.63	72704.04
0080	441-0104		SY	CONC SIDEWALK, 4 IN	925.000	27.14	25108.37
0084	441-0108		SY	CONC SIDEWALK, 8 IN	400.000	42.06	16825.71
0085	441-0204		SY	PLAIN CONC DITCH PAVING, 4 IN	1975.000	27.34	53997.53
0087	441-0303		EA	CONC SPILLWAY, TP 3	2.000	1893.11	3786.24
0090	441-0748		SY	CONC MEDIAN, 6 IN	425.000	37.38	15887.12
0091	441-5010		LF	CONC HDR CURB, 6 IN, TP 9	230.000	14.00	3220.00
0092	441-6012		LF	CONC CURB & GUTTER/ 6"X24"TP2	3050.000	8.30	25328.45
0094	441-6021		LF	CONC CURB & GUTTER/ 6"X30"TP1	3025.000	8.00	24200.00
0095	441-6022		LF	CONC CURB & GUTTER, 6"X30"TP2	675.000	12.75	8611.38
0105	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	3000.000	3.79	11379.12
0109	452-1000		CY	FULL DEPTH SLAB REPLACEMENT	0.000		
0110	461-1000		LF	RESEAL RDWAY JTS & CRACKS, TP-	1000.000	5.06	5062.53
0115	500-9999		CY	CL B CONC,BASE OR PVMT WIDEN	100.000	165.36	16536.28
0120	550-1150		LF	STM DR PIPE 15",H 1-10	0.000		
0125	550-1180		LF	STM DR PIPE 18",H 1-10	700.000	33.90	23735.78
0127	550-1240		LF	STM DR PIPE 24",H 1-10	100.000	38.84	3884.96
0129	550-1300		LF	STM DR PIPE 30",H 1-10	100.000	50.78	5078.46
0130	550-4218		EA	FLARED END SECT 18 IN, ST DR	0.000		
0131	550-4224		EA	FLARED END SECT 24 IN, ST DR	1.000	528.00	528.01
0134	550-4230		EA	FLARED END SECT 30 IN, ST DR	2.000	753.92	1507.85
0135	576-1018		LF	SLOPE DRAIN PIPE, 18 IN	0.000		
0140	611-3010		EA	RECONSTR DROP INLET, GROUP 1	3.000	1391.48	4174.44
0145	611-3030		EA	REC STORM SEW MANHOLE, TYPE 1	6.000	1525.39	9152.35
0150	620-0100		LF	TEMP BARRIER, METHOD NO. 1	1600.000	24.87	39795.33
0153	621-3150		LF	CONCRETE BARRIER, TYPE 26	125.000	164.14	20517.50
0154	621-4080		LF	CONCRETE SIDE BARRIER, TY 7R	200.000	125.62	25125.20
0160	632-0003		EA	CHANGEABLE MESS SIGN,PORT,TP 3	4.000	7084.95	28339.83

## STATE HIGHWAY AGENCY

DATE : 04/17/2012

PAGE : 2

## JOB ESTIMATE REPORT

0165	641-1100	LF	GUARDRAIL, TP T	170.000	42.74	7266.73
0170	641-1200	LF	GUARDRAIL, TP W	50.000	18.14	907.33
0175	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	0.000		
0180	641-5012	EA	GUARDRAIL ANCHORAGE, TP 12	2.000	1859.98	3719.96
0185	668-1100	EA	CATCH BASIN, GP 1	14.000	2010.47	28146.71
0190	668-4300	EA	STORM SEW MANHOLE, TP 1	4.000	1604.41	6417.65
0195	163-0232	AC	TEMPORARY GRASSING	2.000	564.16	1128.32
0200	163-0240	TN	MULCH	70.000	209.28	14650.30
0205	163-0300	EA	CONSTRUCTION EXIT	6.000	1162.21	6973.31
0210	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	27.000	151.50	4090.72
0215	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	12000.000	0.60	7244.76
0220	165-0101	EA	MAINT OF CONST EXIT	6.000	639.72	3838.37
0225	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	27.000	56.50	1525.73
0230	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	2.000	312.20	624.41
0235	167-1500	MO	WATER QUALITY INSPECTIONS	18.000	555.43	9997.90
0240	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	12000.000	2.65	31800.48
0245	700-6910	AC	PERMANENT GRASSING	4.000	715.00	2860.01
0250	700-7000	TN	AGRICULTURAL LIME	8.000	88.55	708.46
0255	700-8000	TN	FERTILIZER MIXED GRADE	4.000	509.06	2036.26
0260	700-8100	LB	FERTILIZER NITROGEN CONTENT	180.000	1.82	329.21
0265	716-2000	SY	EROSION CONTROL MATS, SLOPES	2500.000	0.95	2387.00
0270	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	150.000	14.03	2105.15
0275	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	80.000	19.28	1543.17
0280	636-1041	SF	HWY SIGNS,TP 2MAT,REFL SH TP 9	150.000	30.35	4553.49
0285	636-2070	LF	GALV STEEL POSTS, TP 7	600.000	7.14	4287.49
0288	638-1001	LS	STR SUPPORT OVHD SIGN,TP I,STA TBD	1.000	67000.00	67000.00
0293	638-1003	LS	STR SUPPORT OVHD,SIGN,TP1I,STA TBD	1.000	32000.00	32000.00
0294	639-2002	LF	STEEL WIRE STRAND CABLE, 3/8"	1200.000	3.23	3881.09
0299	639-3004	EA	STEEL STRAIN POLE, TP IV	0.000	17500.00	0.00
0304	639-5000	EA	PRESTRESSED CONC STR POLE, TP- IV	8.000	5321.34	42570.74
0309	639-4002	EA	STRAIN POLE, TP II	10.000	5517.77	55177.79
0314	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	95000.00	95000.00
0319	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	95000.00	95000.00
0324	653-0110	EA	THERM PVMT MARK, ARROW, TP 1	0.000		
0329	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	32.000	75.76	2424.54
0334	653-0130	EA	THERM PVMT MARK, ARROW, TP 3	2.000	99.12	198.25
0339	653-0210	EA	THERM PVMT MARK, WORD, TP 1	3.000	99.86	299.60
0344	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	7850.000	0.48	3811.65
0349	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	2800.000	0.56	1580.60
0354	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	275.000	3.84	1057.50
0359	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	1150.000	1.97	2272.84
0364	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	5200.000	0.31	1635.40
0369	653-3502	GLF	THERMO SKIP TRAF ST, 5 IN, YEL	125.000	0.39	49.05
0374	653-6004	SY	THERM TRAF STRIPING, WHITE	1375.000	3.12	4290.08
0379	653-6006	SY	THERM TRAF STRIPING, YELLOW	1000.000	3.47	3479.45
0384	654-1001	EA	RAISED PVMT MARKERS TP 1	100.000	4.73	473.36
0389	654-1003	EA	RAISED PVMT MARKERS TP 3	300.000	4.54	1363.66
0394	657-1054	LF	PRF PL SD PVMT MKG,5",WH,TP PB	0.000		
0399	657-1084	LF	PRF PL SD PVMT MKG,8",WH,TP PB	425.000	7.22	3069.55
0404	657-1085	LF	PRF PL SD PVT MKG,8",B/W,TP PB	6600.000	5.23	34560.11
0409	657-1104	LF	PRF PL SD PVMT MKG,10",WH,TPPB	0.000		
0414	657-1130	LF	PRF PL SD PVMT MKG, 13",B/W,TPPB	1050.000	8.00	8400.00
0419	657-1244	LF	PRF PL SD PVMT MKG,24",WH,TPPB	75.000	19.47	1460.70

## STATE HIGHWAY AGENCY

DATE : 04/17/2012  
PAGE : 3

## JOB ESTIMATE REPORT

0424	657-3085	GLF	PRF PL SK PVMT MKG,8",B/W,TPPB	3250.000	2.80	9130.88
0429	657-5002	SY	PREFORMED PLASTIC PVMT MKG, YE, TP PB	0.000		
0434	657-5003	EA	PRF PLASTIC PVMT MKG, WORD TP 1, TP PB	5.000	580.00	2900.00
0439	657-5017	EA	PRF PL PVT MKG,ARW TP2,WH,TPPB	18.000	521.42	9385.68
0444	657-6054	LF	PRF PL SD PVMT MKG,5",YW,TP PB	0.000		
0449	657-6085	LF	PRF PL SD PVMT MKG,8",B/Y,TPPB	2500.000	6.16	15417.60
0454	657-8095	LF	PRF PL SK PVMT MKG, 13", B/W, TPPB	100.000	3.00	300.00
0459	441-0004	SY	CONC SLOPE PAV, 4 IN	500.000	39.75	19879.45
0464	211-0200	CY	BR EXCAV, GRADE SEPARATION	200.000	25.45	5091.43
0469	441-0004	SY	CONC SLOPE PAV, 4 IN	800.000	37.39	29916.57
0474	500-0100	SY	GROOVED CONCRETE	600.000	6.70	4025.64
0479	540-1102	LS	REM OF EX BR, BR NO - 1	1.000	150000.00	150000.00
0484	543-9000	LS	CONSTR OF BRIDGE COMPLETE - 360' X 86' BRIDGE	1.000	4334400.00	4334400.00
0489	620-0200	LF	TEMP BARRIER, METHOD NO. 2	1000.000	52.76	52763.98
0494	627-1010	SF	MSE WALL FACE, 10 - 20 FT HT, WALL NO - WEST END ROLL	1200.000	51.66	62002.04
0499	643-1152	LF	CH LK FEN,ZC COAT, 6', 9 GA SUB BLACK COATED FENCE	360.000	35.00	12600.00
0504	681-3600	EA	LIGHTING STD, SPCL DES PCID STD 12' ACPRN LED	5.000	6191.00	30955.00
0509	681-3600	EA	LIGHTING STD, SPCL DES PCID STD 24' TEAR DROP LED	10.000	5729.00	57290.00
0514	681-3600	EA	LIGHTING STD, SPCL DES PCID STD TEAR DROP SINGLE ARM	8.000	4312.00	34496.00
0519	500-3101	CY	CLASS A CONCRETE	12.000	667.00	8004.05
0524	511-1000	LB	BAR REINF STEEL	2624.000	0.87	2293.77
0529	682-6120	LF	CONDUIT, RIGID, 2 IN	900.000	11.70	10535.12
0534	682-6222	LF	CONDUIT, NONMETL, TP 2, 2 IN	2900.000	3.94	11427.42
0539	682-7050	LF	CONDUIT DETECTION WIRE	2900.000	1.00	2900.00
0544	682-9000	LS	MAIN SVC PICK UP POINT	1.000	2500.00	2500.00
0549	682-9021	EA	ELEC JCT BX,CONC GRD MOUNTED	12.000	1579.79	18957.52
0554	702-0542	EA	LAGERSTROEMIA INDICA - CRAPE MYRTLE	0.000		
0559	702-0502	EA	JUNIPERUS DAVURICA - PARSONI JUNIPER	0.000	36.00	0.00
0564	702-0030	EA	ACER RUBRUM - AUTUMN FLAME MAPLE	0.000		
0569	702-0838	EA	PRUNUS X YEDOENSIS - YOSHINO CHERRY	0.000	300.00	0.00
0574	702-0855	EA	QUERCUS ALBA - SUB CLADRATIS KENTUCKEA YELLOWWOOD	0.000	350.00	0.00
0579	702-0855	EA	QUERCUS ALBA - WHITE OAK	0.000	250.00	0.00
0584	702-0785	EA	PINUS TAEDA - LOBLOLLY PINE	0.000	17.50	0.00
0589	702-0675	EA	MYRICA CERIFERA - WAX MYRTLE	0.000	50.00	0.00
ITEM TOTAL						7615074.68
INFLATED ITEM TOTAL						7615074.68
TOTALS FOR JOB 751580						
ESTIMATED COST:						7615074.71
CONTINGENCY PERCENT ( 0.0 ):						0.00
ESTIMATED TOTAL:						7615074.71

## STATE HIGHWAY AGENCY

DATE : 04/17/2012  
PAGE : 4

## JOB ESTIMATE REPORT

PROJ. NO.: NH000-0056-01(161)  
P.I. NO. 751580  
DATE: 4/18/2012

Base Construction Cost		\$	7,615,074.71
E & I	5%	\$	380,753.74
Construction Contingency		\$	-
Subtotal Construction Cost		\$	7,995,828.45
Liquid AC Adjustment (50 % cap)		\$	89,930.16
Total Construction Cost		\$	8,085,758.61

Early R/W Acquisition -(not included in total cost)		\$	4,490,669.20
R/W Acquisition (Est)		\$	141,000.00
PE			600,000.00
Utilities (Est)		\$	912,000.00

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Total Project Cost \$ 9,738,758.61

PROJ. NO. NH000-0056-01(161)  
 P.I. NO. 751580  
 DATE 4/18/2012

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Apr-12	\$ 3.842
DIESEL		\$ 4.138
LIQUID AC		\$ 623.00

Link to Fuel and AC Index:  
<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

**LIQUID AC ADJUSTMENTS**

PA=[((APM-APL)/APL)]xTMTxAPL  
 Asphalt  
 Price Adjustment (PA) 87843 \$ 87,843.00  
 Monthly Asphalt Cement Price month placed (APM) Max. Cap 60% \$ 996.80  
 Monthly Asphalt Cement Price month project let (APL) \$ 623.00  
 Total Monthly Tonnage of asphalt cement (TMT) 235

ASPHALT	Tons	%AC	AC ton
Leveling	500	5.0%	25
12.5 OGFC		5.0%	0
12.5 mm	1950	5.0%	97.5
9.5 mm SP		5.0%	0
25 mm SP	1500	5.0%	75
19 mm SP	750	5.0%	37.5
	4700		235

BITUMINOUS TACK COAT  
 Price Adjustment (PA) \$ 2,087.16 \$ 2,087.16  
 Monthly Asphalt Cement Price month placed (APM) Max. Cap 60% \$ 996.80  
 Monthly Asphalt Cement Price month project let (APL) \$ 623.00  
 Total Monthly Tonnage of asphalt cement (TMT) 5.583631199

Bitum Tack	Gals	gals/ton	tons
	1300	232.8234	5.5836312

BITUMINOUS TACK COAT (surface treatment)  
 Price Adjustment (PA) 0 \$ -  
 Monthly Asphalt Cement Price month placed (APM) Max. Cap 60% \$ 996.80  
 Monthly Asphalt Cement Price month project let (APL) \$ 623.00  
 Total Monthly Tonnage of asphalt cement (TMT) 0

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf. Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0

**TOTAL LIQUID AC ADJUSTMENT \$ 89,930.16**

# Department of Transportation

## State of Georgia

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### Interdepartmental Correspondence

**FILE** R/W Cost Estimate **OFFICE** Atlanta  
**DATE** March 07, 2012  
**FROM** Phil Copeland, Right of Way Administrator  
**TO** Marlo Clowers, Project Manager  
**SUBJECT** **Preliminary Right of Way Cost Estimate**

**Project: NH000-0056-01(061) Fulton County**

**P.I. No.:** 751580

**Description: SR 400/US 19 @ CR 145/Northridge Road**

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308, Right of Way Office at (478) 553-1569 or (478) 232-4045.

,

PC:LA  
Attachments

c:



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P.I. No. 751580 Fulton County  
SR 400/US 19 @ CR 145/NORTHRIDGE ROAD

**OFFICE** District 7  
Chamblee

**DATE** March 15, 2012

**FROM**   
Jonathan Walker  
District Utilities Engineer

**TO** Bobby Hilliard P.E., State Program Delivery Engineer  
**ATTN** Marlo Clowers, P.E., Project Manager

**SUBJECT** PRELIMINARY UTILITY COST (ESTIMATE)

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for each utility with facilities potentially located within the project limits.

<b>FACILITY OWNER</b>	<b>NON-REIMBURSABLE</b>	<b>REIMBURSABLE</b>	<b>GRAND TOTAL</b>
Atlanta Gas Light Company	\$ 105,000.00	\$ 0.00	
AT&T Formerly BellSouth	\$ 235,000.00	\$ 0.00	
Fulton County Pub. Works	\$ 275,000.00	\$ 0.00	
Georgia Power Distribution	\$ 97,000.00	\$ 0.00	
City of Atlanta Watershed Mgmt.	\$ 125,000.00	\$ 0.00	
Comcast	\$ 75,000.00	\$ 0.00	
<b>Totals</b>	<b>\$ 912,000.00</b>	<b>\$0.00</b>	<b>\$ 912,000.00</b>

If you have any questions, please contact Clyde Cunningham at 770-986-1117.

BRP/JW/CAC

C: Jeff Baker, P.E., State Utilities Engineer  
Angela Robinson, Office of Financial Management  
Sebastian Nesbitt, Area Engineer

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

DATE December 20, 2011

FROM District Utilities Engineer

TO State Utilities Engineer

SUBJECT Utility Risk Management Plan

Project Number NH000-0056-01(161)

PI Number 751580

County Fulton

**Check the Recommendation that Applies:**

- Recommendation from Concept Team Meeting
- Recommendation from Preliminary Field Plan Review Team Meeting
- Recommendation from Final Field Plan Review Meeting

From the above noted Team Meeting, the Subject Matter Experts have utilized the Public Interest Determination Policy on the referenced project and recommend the following Utility Risk Management Plan:

**Check the Risk Management Plan that Applies:**

- Through risk identification, analysis, and assessment, the Team has established that there is a high risk assessment associated with the project and 3<sup>rd</sup> Party involvement and recommends that, in the best interest of the public and in order to expedite the staging of the project, the Department participate in the costs associated with the relocation, removal, and adjustment of the utility facilities and to include the work in the construction project. The Team's recommended Utility Risk Management Plan is Risk Avoidance. **Therefore, please review and forward this request as a Public Interest Determination Recommendation to the Office of the Chief Engineer for its review and action.**
- Through risk identification, analysis, and assessment, the Team has established that there is a moderate risk assessment associated with the project and 3<sup>rd</sup> Party involvement and recommends that, in the best interest of the public and in order to expedite the staging of the project, the Department consider participating in the costs associated with the relocation, removal, and adjustment of the utility facilities and to consider including the work in the construction project. This recommendation may also include considerations for addressing certain utility facilities on the project that may present higher risks than other utility facilities. The Teams recommended Utility Risk Management Plan is Risk Avoidance. **Therefore, please review and forward this request as a Public Interest Determination Recommendation to the Office of the Chief Engineer for its review and action.**

- Through risk identification, analysis, and assessment, the Team has established that there is a moderate risk assessment associated with the project and 3<sup>rd</sup> Party involvement, and recommends that the Department accept the identified risks and not participate in the costs associated with the relocation, removal, and adjustment of the utility facilities and not include the work in the construction project. The Teams recommended Utility Risk Management Plan is Risk Acceptance.
  
- Through risk identification, analysis, and assessment, the Team has established that there is a low risk assessment associated with the project and 3<sup>rd</sup> Party involvement, and recommends that the Department accept the identified risks and not participate in the cost associated with the relocation, removal, and adjustment of the utility facilities and not to include the work in the construction project. The Team's recommended Utility Risk Management Plan is Risk Acceptance.

Attachment - Utility Risk Management Plan

## Attachment 4

### Crash Data

Crash data within proximity of the Northridge Road intersections with the SR 400 on- and off- ramps were obtained from the Georgia Department of Transportation for the years 2007, 2008, and 2009. The crash data were obtained for the Northridge corridor between the residential neighborhood driveway directly west of the SR 400 southbound ramps and Somerset Court directly east of the SR 400 northbound ramps as well as for the tops of the ramps themselves, a segment length of approximately 0.5 miles. The statewide average crash rates for 2009, 2008, and 2007 for an Urban Minor Arterial were 463, 469, and 513 crashes per 100 million vehicle miles traveled and the corridor crash rates were 1687, 1188 and 1033 crashes per 100 million vehicle miles traveled. This shows that the accident rates for this section of Northridge Road, has been consistently higher than the statewide average.

<b>Table 5 Urban Minor Arterial Street Crash Rate Summary</b>			
<b>Total Accidents</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Accidents per 100 MVMT	1687	1188	1033
Statewide Accidents per 100 MVMT	513	469	463
<b>Injury Accidents</b>			
Injury Accidents per 100 MVMT	517	275	155
Statewide Injury Accidents per 100 MVMT	126	117	115
<b>Fatalities</b>			
Fatalities per 100 MVMT	17.22	0.00	17.22
Statewide Fatalities per 100 MVMT	1.48	1.47	1.10

# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** NH000-0056-01(061), Fulton County **OFFICE** Planning  
P.I. # 751580 **DATE** November 14, 2011

**FROM** Cindy VanDyke, State Transportation Planning Administrator

**TO** Daryl VanMeter, State Innovative Engineer  
**Attention:** Marlo Clowers

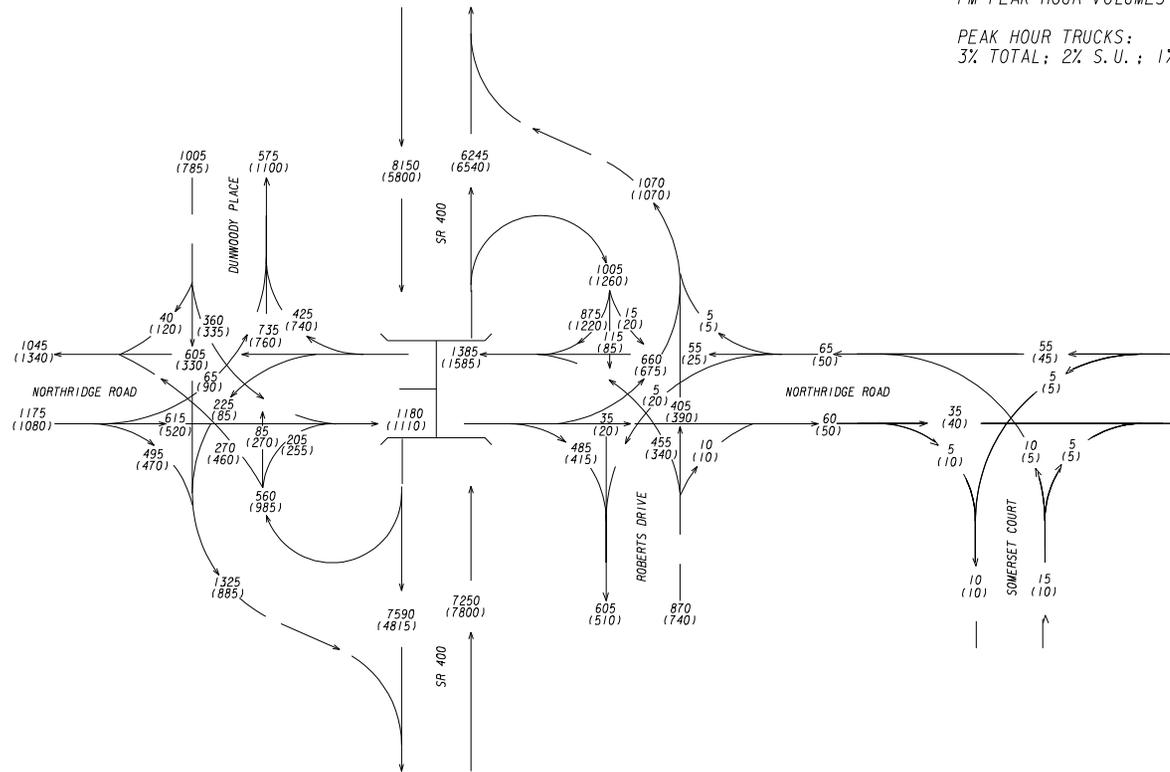
**SUBJECT** **Reviewed** Design Traffic for SR 400/US 19 @ CR 145/NORTHRIDGE  
ROAD Years 2014/2034.

We have Reviewed Design Traffic for the above project.

The traffic is approved based on information furnished. If you have any questions concerning this information please contact Abby Ebodaghe at (404) 631-1923.

CLV/AFE

EXISTING YEAR 2011 DHV  
 TRAFFIC VOLUMES  
 AM PEAK HOUR VOLUMES = 000  
 PM PEAK HOUR VOLUMES = (000)  
 PEAK HOUR TRUCKS:  
 3% TOTAL; 2% S. U.; 1% C. U.



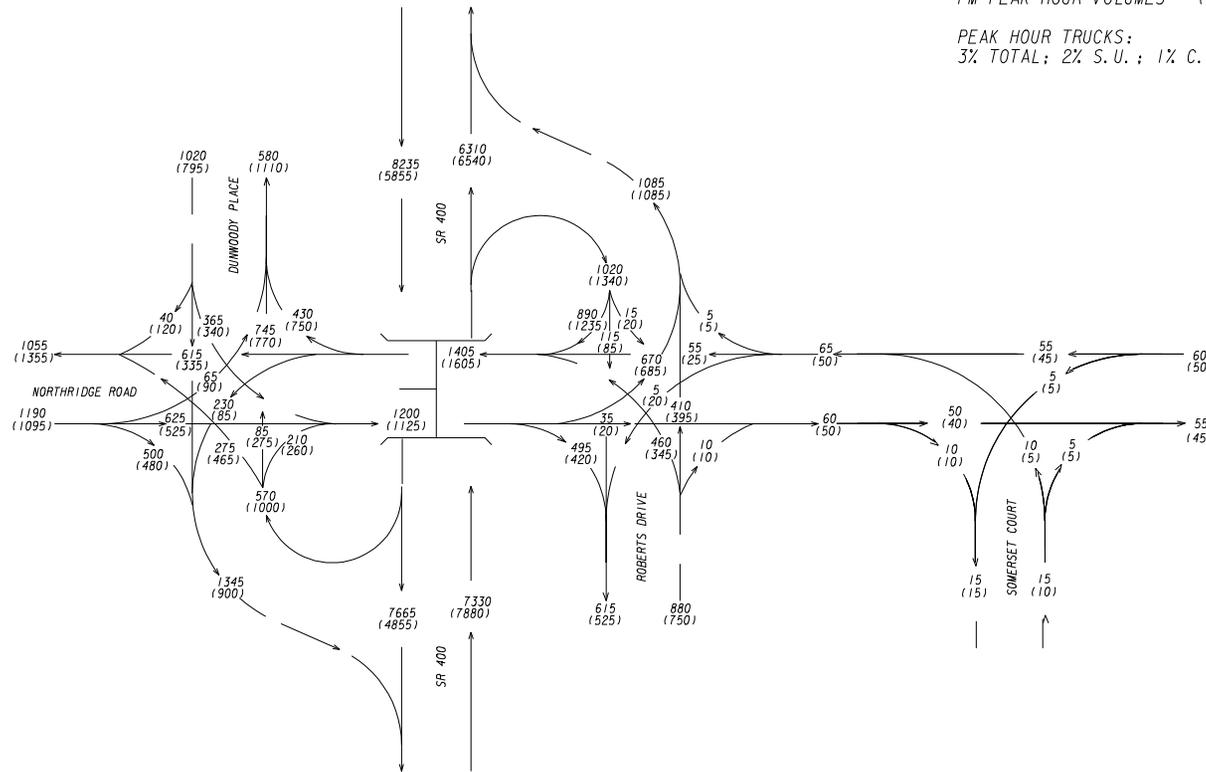
FULTON COUNTY  
 SR 400 @ NORTHRIDGE ROAD  
 NH000-0056-01(061)  
 PI 751580 9/11



REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**  
 SR 400 @ NORTHRIDGE ROAD  
 DRAWING No. 10-01

BASE YEAR 2014 DHV  
 TRAFFIC VOLUMES  
 AM PEAK HOUR VOLUMES = 000  
 PM PEAK HOUR VOLUMES = (000)  
 PEAK HOUR TRUCKS:  
 3% TOTAL; 2% S. U.; 1% C. U.



NOTE: BUILD VOLUMES AND NO BUILD VOLUMES ARE EQUAL.

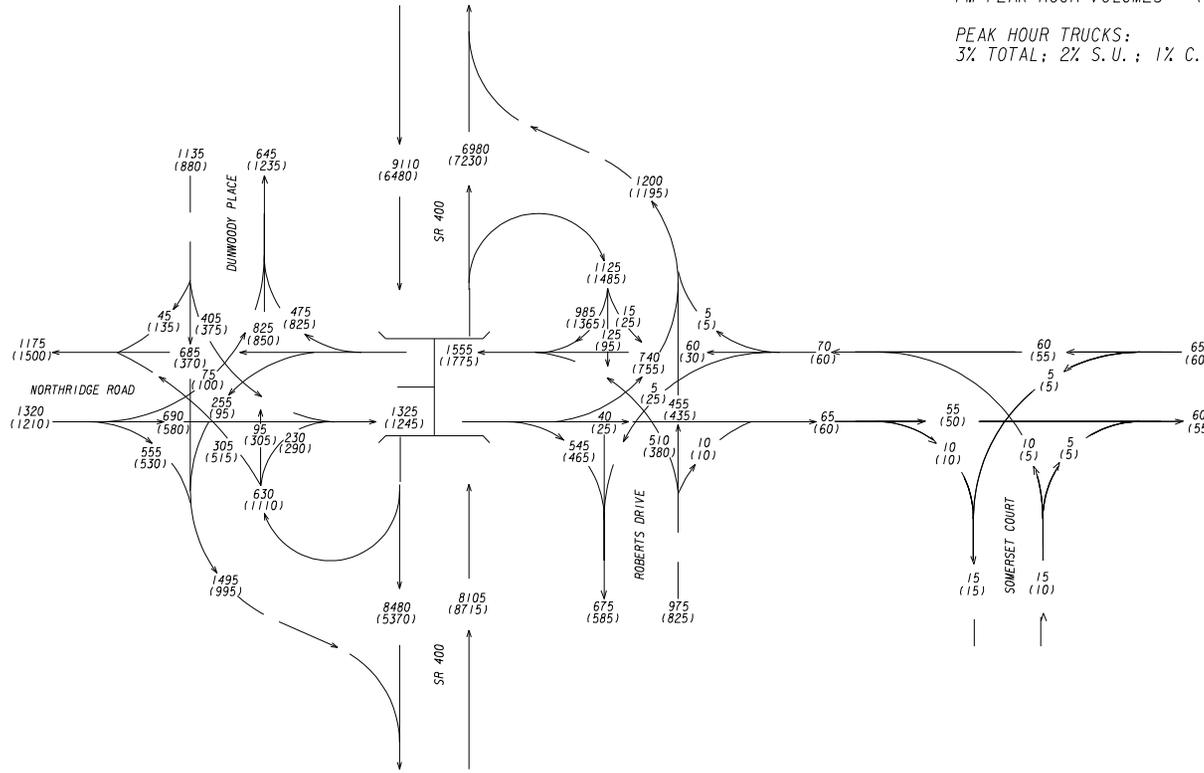
FULTON COUNTY  
 SR 400 @ NORTHRIDGE ROAD  
 NH000-0056-01(061)  
 PI 751580 9/11



REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**  
 SR 400 @ NORTHRIDGE ROAD  
 DRAWING NO. 10-02

DESIGN YEAR 2034 DHV  
 TRAFFIC VOLUMES  
 AM PEAK HOUR VOLUMES = 000  
 PM PEAK HOUR VOLUMES = (000)  
 PEAK HOUR TRUCKS:  
 3% TOTAL; 2% S. U.; 1% C. U.



NOTE: BUILD VOLUMES AND NO BUILD VOLUMES ARE EQUAL.

FULTON COUNTY  
 SR 400 @ NORTHRIDGE ROAD  
 NH000-0056-01(061)  
 PI 751580 9/11

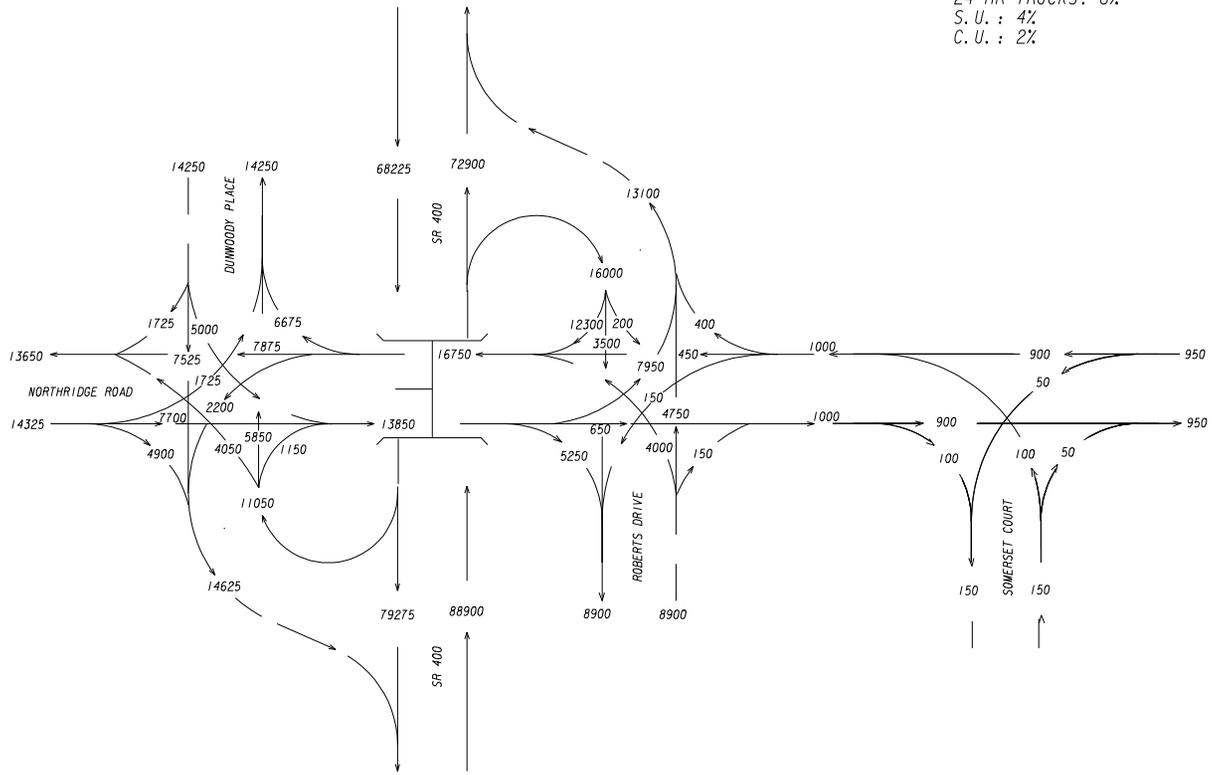


REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**  
 SR 400 @ NORTHRIDGE ROAD  
 DRAWING NO. 10-03

EXISTING YEAR 2011 AADT  
 TRAFFIC VOLUMES

24 HR TRUCKS: 6%  
 S. U. : 4%  
 C. U. : 2%



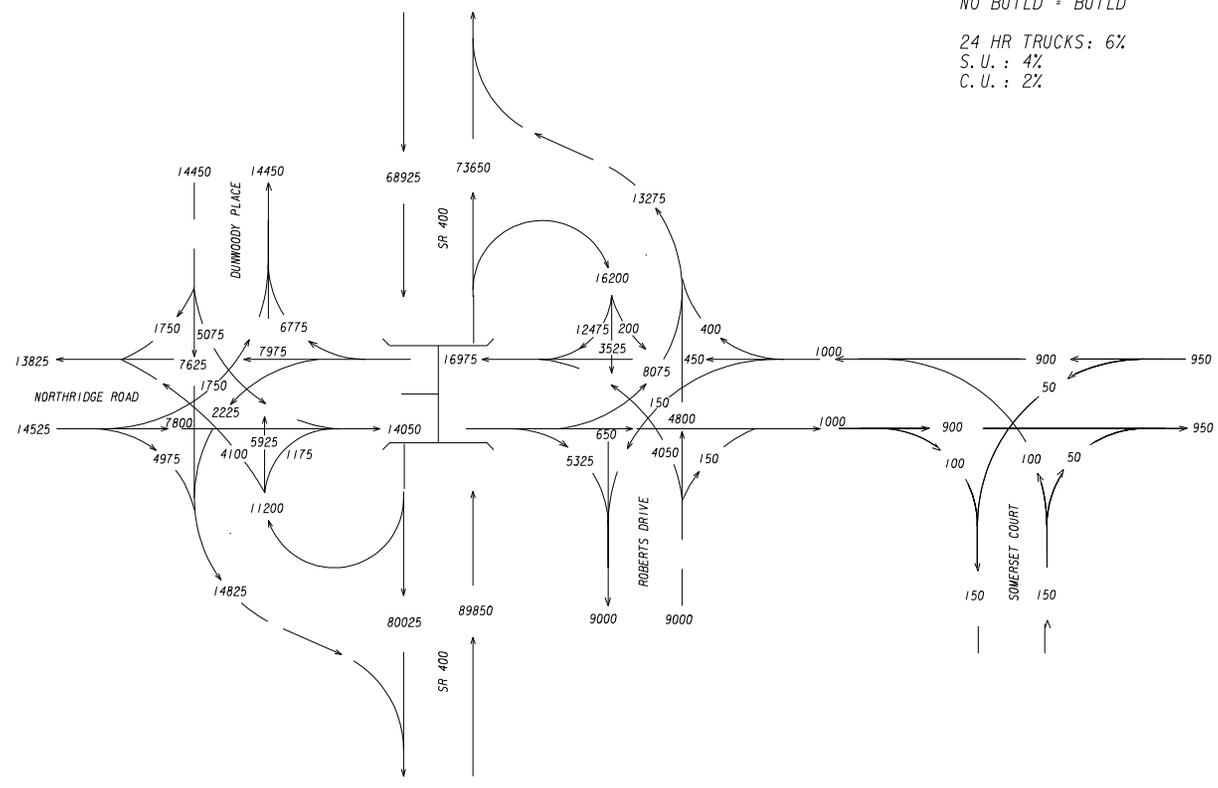
FULTON COUNTY  
 SR 400 @ NORTHRIDGE ROAD  
 NH000-0056-01(061)  
 PI 751580 9/11



REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**  
 SR 400 @ NORTHRIDGE ROAD  
 DRAWING No. 10-04

BASE YEAR 2014 AADT  
 TRAFFIC VOLUMES  
 NO BUILD = BUILT  
 24 HR TRUCKS: 6%  
 S. U. : 4%  
 C. U. : 2%



NOTE: BUILT VOLUMES AND NO BUILD VOLUMES ARE EQUAL.

FULTON COUNTY  
 SR 400 @ NORTHRIDGE ROAD  
 NH000-0056-01(061)  
 PI 751580 9/11



REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: INNOVATIVE PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**  
 SR 400 @ NORTHRIDGE ROAD  
 DRAWING No. 10-05



<b>Table 2</b>				
<b>Existing Year 2011</b>				
<b>AM and PM LOS Analysis</b>				
Intersection	AM Peak		PM Peak	
	LOS	Delay (sec)	LOS	Delay (sec)
Northridge Road and Dunwoody Place/SR 400 SB Ramps	E	55.0	D	51.6
Northridge Road and Roberts Drive/SR 400 NB Ramps	E	71.3	E	57.3
Northridge Road and Somerset Court	A	0.9	A	0.8

<b>Table 4</b>				
<b>Base Year 2014 Build Preferred Option</b>				
<b>AM and PM LOS Analysis</b>				
Intersection	AM Peak		PM Peak	
	LOS	Delay (sec)	LOS	Delay (sec)
Northridge Road and Dunwoody Place/SR 400 SB Ramps	D	46.6	D	38.7
Northridge Road and Roberts Drive/SR 400 NB Ramps	C	25.2	C	27.6
Northridge Road and Somerset Court	A	1.2	A	1.0

<b>Table 9 Design Year 2033 Build Preferred Option AM and PM LOS Analysis</b>				
Intersection	AM Peak		PM Peak	
	LOS	Delay (sec)	LOS	Delay (sec)
Northridge Road and Dunwoody Place/SR 400 SB Ramps	E	69.9	D	46.4
Northridge Road and Roberts Drive/SR 400 NB Ramps	D	39.5	C	28.1
Northridge Road and Somerset Court	A	1.7	A	1.0

<b>Table 13 Design Year 2033 Preferred Option vs. No-Build AM and PM LOS Analysis LOS and Delay (secs)</b>				
Intersection	Preferred Option		No-Build	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Northridge Road and Dunwoody Place/SR 400 SB Ramps	E (69.9)	D (46.4)	E (78.3)	E (57.3)
Northridge Road and Roberts Drive/SR 400 NB Ramps	D (39.5)	C (28.1)	F (84.3)	E (63.1)
Northridge Road and Somerset Court	A (1.1)	A (1.0)	A (0.9)	A (0.7)

## 12.0 CONCLUSION

The interchange of SR 400 and Northridge Road is scheduled to be improved by the year 2014 in order to provide capacity and operational improvements to the northbound and southbound ramp terminals at the intersection with Northridge Road.

Traffic counts were collected for the interchange at the intersections of Northridge Road and Dunwoody Place/SR 400 SB Ramps and the intersection of Northridge Road and Roberts Drive/SR 400 NB Ramps. The existing year 2011 traffic volumes were then grown by the annual growth rate of 0.5% for two years to establish the Base year 2014 volumes. The Base year 2013 volumes were then grown by the 0.5% annual growth rate for 20 years to establish Design year 2034 volumes. The two ramp intersections listed above, as well as the intersection of Northridge Road and Somerset Court, were analyzed under Existing year 2011, Base year 2013 and Design year 2034 traffic conditions for the No-Build and Build scenarios. Four different Build alternatives were analyzed and a Preferred Option was determined.

The Preferred Option is expected to experience improved levels of service during both the AM and PM peak hours for both the 2014 and 2034 conditions. Specifically, the analysis shows that for the Design year 2034 traffic conditions, the intersection of Northridge Road and Dunwoody Place operates at LOS E for the AM peak hour and LOS D for the PM peak hour for the Preferred Option. For the Design year 2034 No-Build conditions is projected to operate at LOS E for both the AM and PM peak hour under the No-Build alternative. For the intersection of Northridge Road and Roberts Drive, the Preferred Option is projected to operate at LOS D for the AM peak hour and LOS C for the PM peak hours while the No-Build alternative is projected to operate at LOS F for the AM peak hour and LOS E for the PM peak hour. The proposed improvements associated with the Preferred Option are listed below.

Northridge Road at Dunwoody Place/SR 400 SB Ramps:

- Install a westbound shared through-right lane along Northridge Road (creating one westbound through lane and one westbound shared through-right lane).
- Install a westbound free-flow right turn lane along Northridge Road. This lane will become an additional lane northbound along Dunwoody Place.
- Install a northbound left-turn lane, creating dual left turn lanes, along the SB 400 ramps. This movement will have to be signalized as a protected-only phase.
- Install a southbound right-turn lane along Dunwoody Place.

Northridge Road at Roberts Drive/SR 400 NB Ramps:

- Convert the eastbound right turn lane into a shared through-right lane and conversely modifying the shared thru-left lane to a left turn only lane (creating dual left turn lanes). By removing the shared thru-left lane, this intersection can be converted from split-phase operation to traditional phasing.
- Install a westbound left turn lane along Northridge Road.
- Install a northbound left-turn lane, creating dual left turn lanes, along Roberts Drive.
- Install an additional northbound through lane (creating a northbound shared-thru right lane) along Roberts Drive.
- Install a southbound left turn lane along the SR 400 NB ramps.
- Install a southbound free-flow right turn lane along the SR 400 NB ramps creating a right turn movement with one free-flow lane and two right turn lanes operating under signal control. Note: The free flow lane becomes the additional lane created from widening the bridge over SR 400.
- Stripe the outside westbound lane along Northridge Road with double white lines and install “turtles” along this lane to discourage weaving from the free-flow right turn lane onto Northridge Road.

Northridge Road at Roberts Drive/SR 400 NB Ramps:

- Convert the existing intersection into a single-lane mini roundabout with a mountable center island.

## **A Roundabout Feasibility Study for SR 400/US 19 at CR 145/Northridge Road Interchange**

NH000-0056-01, P.I. No. 751580, Fulton County

Prepared by HNTB Corporation

November 14, 2011

### **Introduction**

The interchange of SR 400 at Northridge Road is located just 5 miles north of I-285 in the City of Sandy Springs, Fulton County, Georgia. This partial cloverleaf interchange also provides connections to two arterials, Roberts Drive at the northbound (NB) ramps intersection and Dunwoody Place at the southbound (SB) ramps intersection (please see the attached interchange Location Map).

A traffic study was conducted by Kimley-Horn and Associates, Inc. (KHA) in October, 2011 to evaluate the proposed improvements to this interchange. By utilizing the traffic micro-simulation tool VISSIM, this study evaluated existing 2011 operational conditions and future No-Build and Build conditions in 2013 and 2033. Four different Build alternatives were evaluated by KHA's study for capacity and traffic operational improvements to the existing signalized intersections. A preferred option was recommended and was illustrated in the attached KHA's layout for the preferred option.

The purpose of this roundabout feasibility study is to develop and evaluate an additional improvement alternative for this interchange. The additional alternative would convert the two existing signalized intersections at the interchange ramp termini to roundabouts. A conceptual layout was developed for the roundabout alternative. Georgia Department of Transportation's (GDOT's) Roundabout Analysis Tool (version 2.0) was used to analyze the AM and PM peak hours for both the Opening Year (2013) and the Design Year (2033).

### **Geometric Issues**

Please refer to the attached conceptual roundabout layout for the following discussion on geometric layout.

#### **Northridge Road at SR 400 SB Ramps/Dunwoody Place**

The proposed roundabout at this intersection would be a two-lane roundabout with an inscribed circle diameter of 220 feet. This larger diameter was chosen to provide adequate separation between legs. The circulatory roadway lane widths would be 15 feet for a total circulating width of 30 feet. Each approach entry would have two lanes, one designated as left or left and through and the other through or through and right. In order to provide adequate separation between entering approaches, the inscribed circle would be centered slightly to the north of the current signalized intersection's approximate center. There would be additional right-of-way required in the northwest quadrant of the intersection.

*West Leg* - The eastbound (EB) approach on the west leg would be offset to the left of center to increase the deflection angle and allow for greater spacing between the EB entry and the SB exit. There would be additional right-of-way required to the north of this approach. A right-turn bypass lane would be added from Northridge Road EB to SR 400 SB on-ramp. There would be two westbound exit lanes.

*South Leg* - The NB approach on the south leg would be aligned through the center of the roundabout but shifted left compared to the existing angle of the approach. The amount this leg can be realigned is somewhat limited in order to tie back to the existing ramp alignments. There would be two southbound exit lanes, which then merge into one lane prior to merging with the SR 400 SB mainline.

*East Leg* - The westbound (WB) approach on the east leg would be offset to the left of center of the roundabout due to the roundabout center being to the north. The approach alignment would not vary much from the current alignment. There would be a right-turn bypass lane from Northridge Road WB to Dunwoody Place NB. There would also be an additional separated bypass lane from SR 400 NB off-ramp to Dunwoody Place that would merge into Dunwoody Place north of the intersection. There would be two eastbound exit lanes.

*North Leg* - The SB approach on the north leg would be aligned through the center of the roundabout but angled left compared to the existing alignment. This allows for increased deflection and for greater spacing between the WB entry and the NB exit. The NB exit would be one-lane exit with two bypass merging in north of the intersection.

### **Northridge Road at SR 400 SB Ramps/Roberts Drive**

The proposed roundabout at this intersection would be a two-lane roundabout with an inscribed circle diameter of 190 feet. The circulatory roadway lane widths would be 15 feet for a total circulating width of 30 feet. The NB, EB, and SB approaches would have two entry lanes, one designated as left or left and through and the other through or through and right. The WB approach would have one entry lane. The inscribed circle would be centered slightly to the north and west of the current signalized intersection in order to provide adequate separation between entry approaches. Additional right-of-way would be required in the southeast quadrant of the intersection.

*West Leg* – The EB approach would be offset to the right of center. This leg’s alignment is relatively fixed so as to have a similar overpass alignment as existing over the SR 400 overpass. There would be a right-turn bypass lane from Northridge Road EB to Roberts Drive. There would be two WB exit lanes.

*South Leg* - The NB approach would be offset to the right of center to allow for greater spacing between the EB entry and the SB exit as well as increase the deflection between the NB entry and EB exit. The existing angle between this leg and the east leg would not provide adequate deflection. Additional right-of-way would be required to the east of this approach. There would be two SB exit lanes.

*East Leg* - The WB would be offset to the left of center of the roundabout due to the roundabout center being to the north, the approach alignment would not vary much from the current alignment. This alignment is restricted from shifting very much to the left to avoid impacts to an existing neighborhood. There would be one EB exit lane.

*North Leg* - The SB approach would be offset to the left of center to increased deflection and allow for greater spacing between the SB entry and the WB exit. There would be a bypass lane from SR 400 NB off ramp to Dunwoody Place. The amount this leg’s alignment can shift is relatively fixed in order to tie to the existing ramp alignment. There would be two NB exit lanes.

### **Northridge Road at Somerset Court**

A mini-roundabout is proposed for this intersection. This would be similar to the mini-roundabout proposed in the KHA preferred concept.

## Roundabout Analysis

GDOT's Roundabout Analysis Tool was used to determine the operational performance of the proposed roundabouts. The roundabout analysis utilizing the future traffic volumes forecasted by KHA was conducted for both future years 2013 and 2033. Future average daily traffic volumes (ADT) for 2013 and 2033 are summarized in **Table 1**.

According to GDOT's Roundabout Analysis Tool, a roundabout may not operate well when there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. For a Multi-lane roundabout, the thresholds to determine if a roundabout capacity analysis is justified are an ADT less than 45,000 and percentage on the major road less than 90 percent. As indicated by **Table 1**, the ADT volumes and splits for the SB ramp intersection exceed the suggested entering volume criteria of 45,000 ADT in both 2013 and 2033.

**Table 1 Volume Information**

	2013		2033	
	ADT	Split	ADT	Split
<b>NB Ramps</b>				
Major Street	22425	60%	24750	60%
Minor Street	14800	40%	16350	40%
<b>Total</b>	<b>37225</b>		<b>41100</b>	
<b>SB Ramps</b>				
Major Street	28475	55%	31450	55%
Minor Street	23025	45%	25425	45%
<b>Total</b>	<b>51500</b>		<b>56875</b>	

The information pertaining to the inputs and outputs of the roundabout analysis is included in the attachment. Key measures of effectiveness (MOE) including control delay, Level of Service (LOS), and 95<sup>th</sup> percentile Queue for each all entry approaches are summarized in **Tables 2 and 3**.

**Table 2 2013 GDOT Multi-lane Roundabout Analysis Summary**

	Approach Measures of Effectiveness				Approach Measures of Effectiveness			
	SR 400 NB Ramps - AM/PM				SR 400 SB Ramps - AM/PM			
	North Leg	East Leg	South Leg	West Leg	North Leg	East Leg	South Leg	West Leg
<b>HCM 2010 Model</b>								
Control Delay, sec/pcu	16.3/25.2	14.9/12.5/	26.4/20.1	8.7/8.2	112.8/97.4	11.4/33.9	19.5/100.5	50.7/15.8
LOS	C/D	B/B	D/C	A/A	F/F	B/D	C/F	F/C
95% Queue (ft)	137/252	20/14	213/136	48/51	561/399	110/214	86/467	239/88
<b>UK Model</b>								
Control Delay, sec/pcu	4.2/4.7	3.5/3.1	6.7/5.8	3.9/4.0	11.3/9.8	5.0/6.9	5.1/9.8	7.5/5.0
LOS	A/A	A/A	A/A	A/A	A/A	A/A	A/A	A/A
95% Queue (ft)	35/47	4/4	83/63	37/39	175/118	56/83	39/146	79/45

**Table 3 2033 GDOT Multi-lane Roundabout Analysis Summary**

	Approach Measures of Effectiveness				Approach Measures of Effectiveness			
	SR 400 NB Ramps - AM/PM				SR 400 SB Ramps - AM/PM			
	North Leg	East Leg	South Leg	West Leg	North Leg	East Leg	South Leg	West Leg
<b>HCM 2010 Model</b>								
Control Delay, sec/pcu	22.3/38.4	17.5/13.3	44.8/29.3	9.7/9.0	229.2/204.6	13.4/100.5	27.7/171.8	102.8/19.2
LOS	C/E	C/B	E/D	A/A	F/F	B/F	D/F	F/C
95% Queue (ft)	197/363	24/10	336/211	58/60	832/607	121/336	129/715	379/80
<b>UK Model</b>								
Control Delay, sec/pcu	4.6/5.1	4.0/3.4	8.0/5.8	4.2/5.6	17.7/14.3	5.7/8.4	6.0/13.9	9.6/5.6
LOS	A/A	A/A	A/A	A/A	C/B	A/A	A/B	A/A
95% Queue (ft)	42/57	4/3	112/80	43/45	299/192	69/112	50/231	114/56

The GDOT Roundabout Analysis Tool computes the entry capacity based on the Highway Capacity Manual 2010 (HCM 2010) formula and the UK formula referenced in the 2000 FHWA Roundabout guide. As suggested by the GDOT Roundabout Analysis Tool, the HCM 2010 model yields a conservative capacity and is best applied to the opening year when the driver familiarity is low; while the UK model yields a liberal entry capacity and is best applied for the design year when driver familiarity has increased.

As indicated in **Table 2**, the roundabout at the NB Ramps would operate at acceptable LOS. The longest queue of 252 feet would be expected at the north leg which is the SR 400 NB off ramp. As the layout illustrates, this approach would have adequate storage to accommodate anticipated queuing. However, LOS F would be expected at the roundabout at the SB Ramps in 2013. The HCM model results indicated that all approaches would operate at LOS F. Significant queuing would be expected on both the North and the South legs.

The 2033 results based on using the UK Model indicate that both intersection would operate at acceptable levels of service. Relatively long queues may be expected at the North and South Legs of the SB ramps roundabout but could be accommodated based on the geometric layout.

Recommended improvements from KHA's study include the installation of mini-roundabout at the intersection of Somerset Court. The purpose of the mini-roundabout was to address the complaints that vehicles were using Somerset Court as a turnaround point. If a roundabout is constructed at the NB Ramp intersection, the need to access Somerset Court as a turnaround point would likely go away. A geometric layout was developed to include a mini-roundabout at Somerset Court. No roundabout analysis was conducted at this intersection since very minimal traffic was forecasted for this intersection.

## Conclusions

As part of the roundabout feasibility study, a conceptual two-lane roundabout layout was developed for the Northridge Road intersections at SR 400 SB Ramps/Dunwoody Place and SR 400 NB Ramps/Roberts Drive and a mini-roundabout for the intersection of Northridge Road and Somerset Court. Operational analysis utilizing GDOT's Roundabout Analysis Tool was conducted to evaluate the future operational conditions including delay, LOS, and queuing at the proposed two-lane roundabouts. Key observations are summarized below:

- Adjustments to the existing intersection entry approach alignments would be needed to provide adequate separations between entry approaches and proper entry deflection angles. Some new right-of-way would be needed to accommodate those adjustments.

- Information provided by KHA in its Traffic Study was not sufficient to accurately determine the volume from SR 400 NB Off-ramp to NB on Dunwoody Place. This volume would utilize the proposed separate right-turn lane at the interchange from SR 400 NB Off-ramp to Dunwoody Place and would ultimately determine the configuration of the WB approach at the intersection of Northridge Road at SR 400 SB Ramps/Dunwoody Place.
- According to the operational analysis results, the Northridge Road and SR 400 NB Ramps/Roberts Drive would operate at acceptable LOS. The forecasted future entering volumes at the SR 400 SB Ramps/Dunwoody Place would exceed the optimal volumes for a roundabout. In addition, the results based on the HCM model indicate a roundabout at this location would operate at an unacceptable LOS. However, the results based on the UK model indicate favorable operating conditions with a roundabout at this location. It is recommended that a more rigorous analysis be conducted to overcome the shortcomings of a deterministic analysis tool such as GDOT's Roundabout Analysis Tool.
- A roundabout at Somerset Court may not be needed if a roundabout is constructed at the NB Ramp intersection.
- The construction cost to implement the proposed roundabouts could be significantly higher than that of KHA's proposed preferred improvements at this interchange. However, a comprehensive comparative analysis is recommended to facilitate a preferred option selection process. A well calibrated and validated traffic micro-simulation model would be a useful tool for the comparative analysis.

**Newton, Gary**

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**From:** Clowers, Marlo <mclowers@dot.ga.gov>  
**Sent:** Thursday, November 03, 2011 5:13 PM  
**To:** Newton, Gary  
**Subject:** FW: 751580-, Fulton - Lighting

FYI

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From: Coleman, Garrin [<mailto:GColeman@SandySpringsga.gov>]  
Sent: Thursday, November 03, 2011 5:12 PM  
To: Clowers, Marlo  
Subject: RE: 751580-, Fulton - Lighting

Marlo,

Good afternoon. I spoke with the City Manager this afternoon regarding the maintenance and power for the lighting associated with the proposed roundabout with the project. He indicated that the City would be willing to pay for these elements as it will be located on a City right-of-way. Please let me know if you have any questions.

Thank you,

Garrin M. Coleman, P.E., L.S.I.T.  
Capital Programs Manager, Public Works  
City of Sandy Springs  
7840 Roswell Road, Building 500  
Sandy Springs, GA 30350  
ph. 770-206-2017  
mobile. 404-985-9832  
[garrin.coleman@sandyspringsga.org](mailto:garrin.coleman@sandyspringsga.org)  
[www.sandyspringsga.org](http://www.sandyspringsga.org)

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From: Clowers, Marlo [<mailto:mclowers@dot.ga.gov>]  
Sent: Tuesday, November 01, 2011 2:55 PM  
To: Coleman, Garrin  
Subject: 751580-, Fulton - Lighting

Garrin,

Does the City want a lighting agreement for the interchange and roundabout on this project? The agreement would be for the City to pay for materials (if the cost exceeds the \$7 million SRTA toll reserve funding), GDOT to install as part of the construction project, and the City to pay for maintenance. Please let me know as soon as possible. Thanks

Ms. Marlo L. Clowers, P.E.  
Project Manager  
Office of Innovative Program Delivery

Georgia Department of Transportation

One Georgia Center  
600 West Peachtree Street, NW  
Atlanta, Georgia 30308

**Please update your address for me to [GColeman@SandySpringsga.gov](mailto:GColeman@SandySpringsga.gov) as my email address has changed.**

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# Bridge Inventory Data Listing

Processed Date: 10/28/2010  
 Parameters: Bridge Serial Num

Structure ID: 121-0270-0		Location & Geography		Fulton		SUFF. RATING: 53.45	
<b>Structure ID:</b>	121-0270-0	<b>*104 Highway System:</b>	0	<b>Signs &amp; Attachments</b>			
<b>200 Bridge Information:</b>	06	<b>*25 Functional Classification:</b>	16	<b>225 Expansion Joint Type:</b>	15		
<b>*6A Feature Int:</b>	SR 400 (US 19)	<b>*204 Federal Route Type:</b>	M No: 09260	<b>242 Deck Drains:</b>	0		
<b>*6B Critical Bridge:</b>	0	<b>*102 Federal Lands Highway:</b>	0	<b>243 Parapet Location:</b>	0		
<b>*7A Route No Carried:</b>	CR00145	<b>*101 Truck Route:</b>	0	<b>Height:</b>	0		
<b>*7B Facility Carried:</b>	NORTHIDGE ROAD	<b>2060 School Bus Route:</b>	1	<b>Width:</b>	0		
<b>8 Location:</b>	5.2 MI N OF I-285	<b>217 Benchmark Elevation:</b>	0000.00	<b>238 Curb Height:</b>	1		
<b>2 Dist District:</b>	7	<b>218 Datum:</b>	0	<b>Curb Material:</b>	1		
<b>207 Year Photo:</b>	2010	<b>*19 Bypass Length:</b>	04	<b>239 Handrail:</b>	7 7		
<b>*51 Inspection Frequency:</b>	24 Date: 09/20/2010	<b>*20 Toll:</b>	3	<b>*240 Medium Barrier Rail:</b>	0		
<b>92A Fract Crf Insp Freq:</b>	0 Date: 02/01/1901	<b>*21 Maintenance:</b>	01	<b>241 Bridge Median Height:</b>	0		
<b>92B Underwater Insp Freq:</b>	0 Date: 02/01/1901	<b>*22 Owner:</b>	01	<b>Bridge Median Width:</b>	0		
<b>92C Other Spc. Insp Freq:</b>	0 Date: 02/01/1901	<b>*31 Design Load:</b>	6	<b>230 Guardrail Loc. Dir. Rear:</b>	2		
<b>*4 Pile Code:</b>	68518	<b>37 Historical Significance:</b>	5	<b>Fwd:</b>	1		
<b>*5 Inventory Route(EXT):</b>	1	<b>205 Congressional District:</b>	06	<b>Oppo. Dir. Rear:</b>	0		
<b>Type:</b>	5	<b>27 Year Constructed:</b>	1958	<b>Oppo. Fwd:</b>	0		
<b>Designation:</b>	1	<b>106 Year Reconstructed:</b>	0000	<b>244 Approach Slab:</b>	3		
<b>Number:</b>	09250	<b>33 Bridge Medium:</b>	0	<b>224 Retaining Wall:</b>	0		
<b>Direction:</b>	0	<b>34 Skew:</b>	30	<b>233 Posted Speed Limit:</b>	35		
<b>*16 Latitude:</b>	33 -59.9320 HMMS Prefix:00	<b>35 Structure Flex:</b>	0	<b>236 Warning Sign:</b>	0.00		
<b>*17 Longitude:</b>	84 -20.4620 HMMS Suffix:000 MIP:0.00	<b>38 Navigation Control:</b>	N	<b>234 Delineator:</b>	0.00		
<b>98 Bowler Bridge:</b>	000% Shared:00	<b>213 Special Steel Design:</b>	0	<b>235 Hazard Boards:</b>	0		
<b>99 ID Number:</b>	0000000000000000	<b>307 Type of Pier:</b>	2	<b>237 Utilities Gas:</b>	21		
<b>*100 STRAJNET:</b>	0	<b>*40 Type of Service On:</b>	5	<b>Water:</b>	22		
<b>12 Base Highway Network:</b>	1	<b>Type of Service Under:</b>	1	<b>Electric:</b>	22		
<b>13A LRS Inventory Route:</b>	1212014500	<b>214 Movable Bridge:</b>	0	<b>Telephone:</b>	22		
<b>13B Sls Inventory Route:</b>	0	<b>203 Type Bridge:</b>	0	<b>Sewer:</b>	00		
<b>101 Parallel Structure:</b>	N	<b>259 Pile Encasement:</b>	3	<b>247 Lighting Street:</b>	0		
<b>*102 Direction of Traffic:</b>	2	<b>*43 Structure Type Main:</b>	3 02	<b>Navigation:</b>	0		
<b>*204 Road Inventory Mile Post:</b>	000.80	<b>45 No Spans Main:</b>	004	<b>Aerial:</b>	0		
<b>*208 Inspection Area:</b>	7 Initials: BTY	<b>44 Structure Type Appr:</b>	0 00	<b>*248 County Continuity No.:</b>	00		
<b>Engineer's Initials:</b>	sgm	<b>46 No Spans Appr:</b>	0000				
<b>Location ID No:</b>	121-09260M-005.23N	<b>226 Bridge Curve Horiz:</b>	1 Vert: 0				
		<b>111 pier Protection:</b>	0				
		<b>107 Deck Structure Type:</b>	1				
		<b>108 Wearing Structure Type:</b>	1				
		<b>Membrane Type:</b>	0				
		<b>Deck Protection:</b>	8				



# Bridge Inventory Data Listing

Processed Date: 10/28/2010

Parameters: Bridge Serial Num

Structure ID: 121-0270-0

Pavement Data		APD-056-1 (10) CT,2	
201 Project No	4	038350	Year:2007
202 Plans Available	0		
249 Prop Exp Est	00000000000000000000000000000000	04	Under:10
250 Approval Status	0000	00	Under:00
251 H-Number	00000000	0089	
232 Contract Date	02/01/1901	289	
260 Science No	00000	52.00	
73 Type Work	00 1	61.00	
94 Bridge Imp Cost	50	52	
95 Roadway Imp Cost	0	5.00 / 2.00	
96 Total Imp Cost	0	052	
76 Imp Length	000000	2.00	Type:1 Rt:2.00
97 Imp Year	0000	2.00	Type:1 Rt:2.00
11-Route/ADT	059025		
<b>Hydraulic Data</b>			
215 Waterway Data			
High Water Elev	0000.0	Year:1900	
Flood Elev	0000.0	Freq:00	
Avg Streambed Elev	0000.0		
Drainage Area	00000		
Area of Opening	000000		
113 Scour Critical	N		
218 Water Depth	00.0	Br:Height:00.0	
222 Slope Protection	4		
221 Slope Protection	0	Fwd:0	
217 Under System	0		
230 Balloon	0		
232 Culvert Cover	000		
Type	0		
No Banded	0		
Width	0.00	Height:0.00	
Length	0	Apron:0	
263 USF Insp Area	0	Dir:77Z	
Location ID No	121-09250M-005.23N		
<b>Inventory Rating Method:</b>			
65 Inventory Rating Method:	1		
63 Operating Rating Method:	1		
66 Inventory Type	2	Rating: 24	
64 Operating Type:	2	Rating: 24	
231 Calculated Loads:			
11-Modified:	21	0	
HS-Modified:	28	0	
Type 3:	27	0	
Type 3a2:	34	0	
Timber:	31	0	
Pigg/Back:	00	0	
261 H Inventory Rating:	26		
262 H Operating Rating	43		
67 Structural Evaluation:	5		
58 Deck Condition:	5		
59 Superstructure Condition	7		
* 227 Collision Damage:	0		
60A Substructure Condition:	7		
60B Scour Condition:	N		
60C Underwater Condition	N		
71 Waterway Adequacy:	N		
61 Channel Protection Cond.:	N		
68 Deck Geometry:	4		
69 Under/Cr. Horz/Vert:	6		
72 Appr. Alignment:	7		
62 Culvert:	N		
<b>Pavement Data</b>			
70 Bridge Posting Required	5		
41 Struct Open, Posted, CL:	A		
* 103 Temporary Structure:	0		
232 Posted Loads			
H-Modified:	00		
HS-Modified:	00		
Type 3:	00		
Type 3a2:	00		
Timber:	00		
Pigg/Back	00		
253 Notification Date:	02/01/1901		
255 Fed Notify Date:	2/1/1901	12:00:00AM	

# DEPARTMENT OF TRANSPORTATION

## STATE OF GEORGIA

### INTERDEPARTMENTAL CORRESPONDENCE

**FILE** NH000-0056-01(061)

Fulton County

PI.No.751580

**OFFICE** Materials and Research

Forest Park, GA

**DATE** November 17, 2011

**FROM**  Georgene M. Geary, P. E., State Materials and Research Engineer

**TO** Darryl VanMeter, Office of Innovative Program Delivery  
Attention: Marlo Clowers, Project Manager

**SUBJECT** Pavement Type Recommendation  
SR 400/US 19 at CR 145/Northridge Road

This project consists of approximately 0.5 miles of widening along Northridge Road. The purpose of the project is to provide roadway improvements to the existing bridge over SR 400, widen the adjacent approach roads, traffic signal improvements and pedestrian amenities.

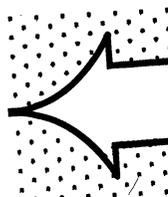
We recommend that Hot Mix Asphalt (HMA) pavement be used in the design and construction of Northridge Road for the following reasons:

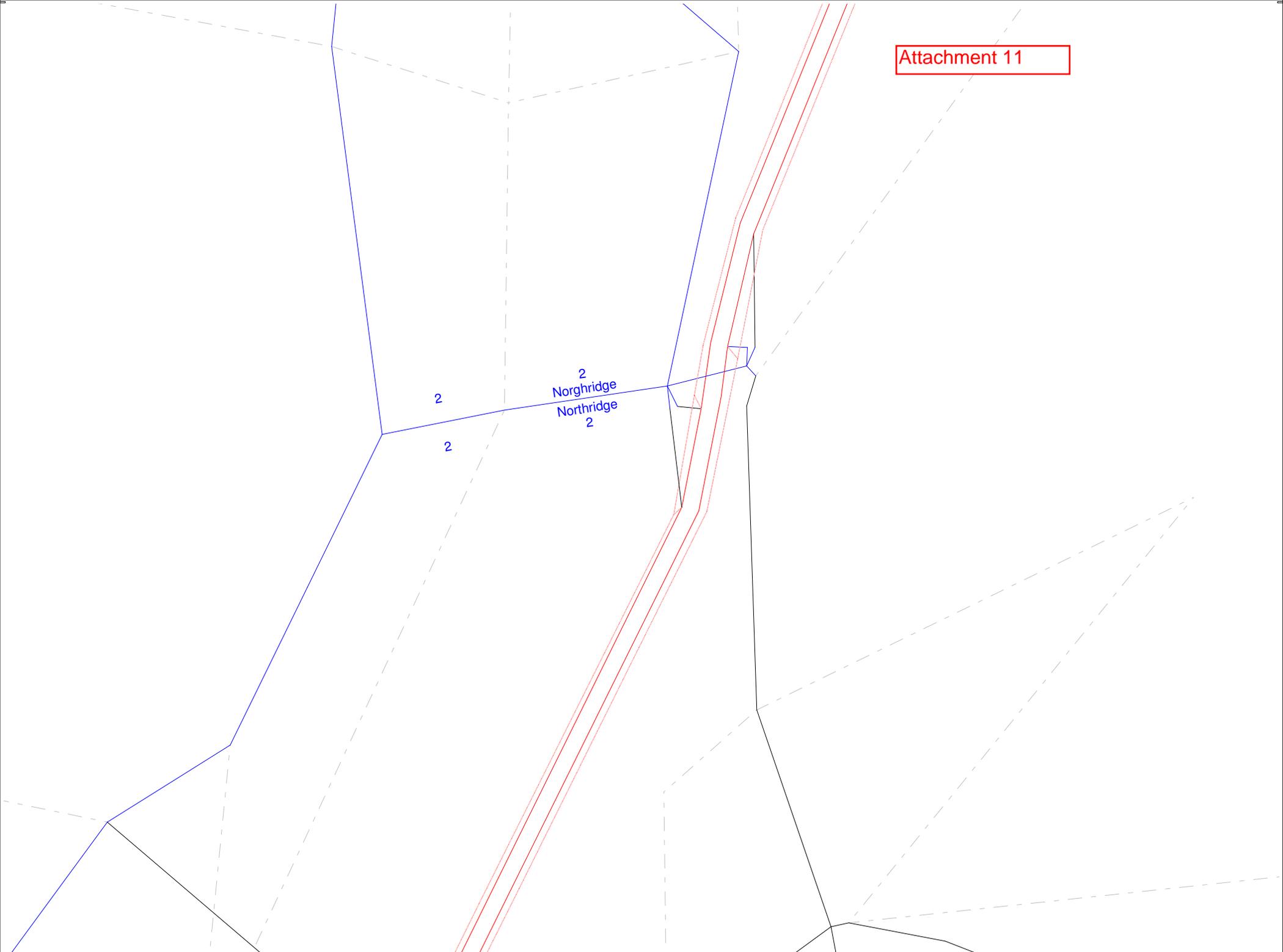
1. The improvements due to this project are a very small portion of the existing corridor.
2. Within the project limits, the existing pavement on Northridge Road and all side roads consists of HMA. This pavement has been maintained throughout the years by mill and inlay or overlay construction. Selecting HMA for intersection improvement will match the existing pavement. The final roadway pavement will be uniform, with the same future maintenance cycles.

We recommend that Portland Cement Concrete (PCC) pavement be used in the design and construction of northbound entrance and exit ramps. The existing ramps consist of PCC.

If additional information is needed, please contact Palliambil Geetha of the Geotechnical Engineering Bureau at 404-608-4774.

GMG: PRG





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Norghridge

Northridge

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## MINUTES OF MEETING

**Project:**        **NH000-0056-01(061)**  
**PI No. 751580**  
**Fulton County**  
**SR 400/US 19 @ CR 145/Northridge Road**

**Date:**            **September 29, 2011**

<b>Attendees:</b>	Marlo Clowers	GDOT – IPD
	Mike Lobdell	GDOT – D7
	Scott Zehngraff	GDOT – TO TMC
	Raymond Chandler	GDOT- Utilities
	Melanie Hale	GDOT – DP&S
	Ron Wishon	GDOT – Eng. Services
	Ken Werho	GDOT – TO TMC
	Lisa Myers	GDOT – Eng. Services
	Kyle Mote	GDOT - Planning
	Darrell Richardson	GDOT
	Steve Matthews	GDOT – Eng. Services
	Michael Hester	GDOT – OES
	Ben Rabun	GDOT – Bridge Design
	Doretha Cannon	SRTA
	Garrin Coleman	City of Sandy Springs
	Jean Hee Park	ARC
	Gary Newton	KHA
	David Stricklin	KHA
	John Walker	KHA

**Purpose:**        Initial Concept Team Meeting

**Meeting Notes:**

- Marlo Clowers welcomed the attendants and listed the SR 400@ Northridge project number, County and PI Number for the record. She then asked everyone in the room to introduce themselves.
- The draft project concept report was discussed. The following comments were made regarding the project concept and the project concept report.
  - Gary Newton introduced the project and background of the SRTA initiated project. The project will be funded by SR 400 tolls.
  - Gary reviewed alternates to date including the previously developed SRTA/ City of Sandy Springs concept. This alternate would widen the bridge several lanes and provide a median separated slip ramp to



Dunwoody Place. GDOT has agreed to widen the bridge 1.5 lane widths (one additional travel lane and bike accommodations). Three alternatives were discussed which centered around the Northridge Road @ Roberts Drive/ SR 400 NB Ramps. These alternates included dual free flow rights, triple rights (1 free-flow, 2 stop controlled) and triple rights stop controlled from the NB exit ramp.

- Scott Zehngraft discussed previous traffic operation studies and the need for a free flow right to Dunwoody Place with positive separation. Discussion revolved around the possibility of a small (one foot) raised median across the bridge. The issue of drainage is a concern of this design and the need to widen the bridge to accommodate the raised median. A two foot separation was discussed that consisted of two 8" solid white lane stripes with type 10 raised pavement markers between the stripes.
- John Walker stated a meeting was held with the Philip Allen representing the City of Sandy Springs and his concern of weaving across the bridge if the free-flow lane was not physically separated from the adjacent through lanes
- Scott mentioned the weaving could be lessened with the installation of double solid white striping across the bridge..
- Ken Werho stated concerns over properly signing the shared use lanes. Possibly place Share the Road signs over the proper lane on the overhead signs.
- Scott then discussed operations at the Roberts Drive intersection. This intersection has had some phasing changes recently, but the EB/WB approaches still operate split phase. The recent changes were due to several accidents at this intersection. Scott stated that any upgrades to the intersection should not include a split-phased signal. Instead, traditional phasing should be utilized.
- Scott asked John Walker to provide some VISSIM data of various configurations of these two intersections.
- John stated the data would be available later in the afternoon and suggested a 3-way conference call with Philip Allen to discuss. John stated that all of the configurations would provide acceptable levels of service (and an improvement over current operations), but it was a matter of picking the configuration that everyone could support. The call will be set for either tomorrow (Friday) or Monday afternoon at the latest due to the tight schedule to provide the VE study team a design by the following week.
- Melanie Hale stated the roundabout at Somerset Court appeared to be too small. She also asked that a feasibility study be performed to justify the roundabout and to determine the proper size. This must be performed in order for the concept report to be approved.



- Gary stated the roundabout idea was part of a neighborhood request to provide wayward drivers a safe way to turn around. Currently, eastbound Northridge terminates in a neighborhood just east of the ramp terminals. These confused drivers currently either travel down Somerset Court to turn around or U-turn on Northridge Road in an unsafe manner.
- Melanie stated this should be properly stated in the project justification statement.
- Kyle Mote stated the project justification statement needed to be revised per the new requirements soon to be in place. Kyle stated he would provide Gary with a recent example of an approved project justification statement.
- Jean Hee Park stated that the current project design should be reflected in the regional model. An amendment would be required if it is not correctly included. If utility cost is significant, it may need a separate phase.
- Darrell Richardson stated the concept did not appear to address the needs for SR 400 as stated in the need and purpose. If the project does not make improvements to SR 400, those references should be removed from the need and purpose. He stated the project description should be revised to describe the NB exit ramp as a parallel ramp.
- Ken Werho stated the southbound entrance ramp should be studied for additional improvements based on the observed AM peak congestion.
- Marlo stated the project's purpose is to improve operations on Northridge within the overall \$7M budget. The project is not intended to improve/reconstruct the entire interchange.
- Gary stated the concept construction cost is approximately \$4.8M and this figure does not include a previous \$4M early R/W acquisition cost or additional R/W and utility costs. The total of all these costs is expected to exceed the \$10M threshold for VE study.
- Lisa Myers stated a concern over the schedule for the VE study.
- Marlo stated she had prior conversation with Matt Sanders and the level of plans that would be supplied to the VE team. The project is anticipated to be let as a design build and is scheduled for an August 2012 Let.
- Lisa stated a concern over responses to the VE study since this will be let as a design build project. Lisa stated that anything that is rejected in the VE study cannot be considered by the design build team.
- David Stricklin discussed the existing bridge condition and stated a deck survey has been requested. David stated the bridge would only be widened on the north side, but the south would be rebuilt to



- current standards including sidewalk and a new rail. A standard curved fence would be installed on both sides.
- Ben Rabun discussed the latest bridge survey and sufficiency rating. Ben stated the existing deck survey would most likely need to be hydro demolished and concrete overlay placed. Ben stated the reinforcing steel clearance should not be an issue.
  - Ben asked if there would be a vertical clearance issue with the widening and asked for confirmation of who is responsible for maintenance if the bridge is struck by a vehicle due to vertical clearance issues
  - David stated that it appears there will not be an issue based on the preliminary survey, but the clearance would be verified.
  - Ben stated the edge beams may be failing.
  - David stated there are several utilities in the outer bays of the existing bridge.
  - Marlo stated the bridge deck condition survey may not be available for the VE material submittal next week, but hopefully would be available at the time of the VE study ( Oct 24-27, 2011)
  - Gary stated that several utilities will most likely be impacted and Level D has been performed and SUE Quality B is underway.
  - Gary stated the environmental studies are underway and is anticipated to be a GEPA Letter B document. There does not appear to be any issues associated with the project.
  - Marlo stated that the project is not full oversight because it is fully state funded. Although the project is within the Appalachian development corridor, FHWA verbally committed to minimal involvement.
  - Gary stated a PIOH is scheduled for December 5, 2011.

#### Action Items

1. KHA to schedule a meeting with Scott Zehngraft and Philip Allen (City of Sandy Springs) to discuss which alternative the group prefers.
2. Kyle Mote to provide example of recent approved project justification report.
3. KHA/GDOT to discuss the roundabout feasibility study.
4. KHA to submit traffic data to Abby for approval.
5. GDOT to get level of FHWA involvement in writing.
6. GDOT to add the Office of Communications to the bi-weekly status meetings.
7. ARC/GDOT to confirm if the project is correct in the ARC model.



This document represents Kimley-Horn's interpretation of the meeting. Please contact Gary Newton if you have any questions, comments or concerns.

SR 400 | US 19 & SR 145 | NORTHRIUGE RD.

INITIAL CONCEPT MTG

9/29/2011

DAVID STRICKLAND	KIMLEY-HORN	DAVID.STRICKLAND@KIMLEY-HORN.COM	4) 419-8703
Marlo Clowers	GDOT-IPD	mclowers@dot.ga.gov	(4) 631-1713
Mike Lobdell	GDOT-D7	mlobdell@dot.ga.gov	7/986-1765
Scott Zehngraff	GDOT-TO	szehngraff@ " " "	4-635-8127
Doretha Cannon	SR TA	dcannon@georgiatolls.com	4-893-6113
Raymond Chandler	GDOT-UTILITIES	rchandler@dot.ga.gov	4-631-1356
Melanie Hale	GDOT-DRIS	mhale@dot.ga.gov	4/631-1542
Jean Hee Park	APC	jpark@atlantaregional.com	4/463-3282
RON WISHON	GDOT-ENG.SRVS.	rwishon@dot.ga.gov	4) 631-1753
KEN WERHO	GDOT-T.O.TMC	KWERHO@DOT.GA.GOV	404-635-8144
LISA MYERS	GDOT-Eng.Services	lmyers@dot.ga.gov	404 631 1770
Kyle Mote	GDOT-PLANNING	KMOTEE@DOT.GA.GOV	4) 631-1811
John Walker	Kimley-Horn	john.walker@kimley-horn.com	4) 201-6157
Darrell Richards	GDOT	drichardsr	4-631-1705
STEVE MATTHEWS	GDOT-ES	smatthews@dot.ga.gov	631-1769
MICHAEL HESTER	GDOT-ENVIR.SER.	MHESTER@DOT.GA.GOV	
BEN BRADON	GDOT BRIDG	bradon@dot.ga.gov	631 1008
GARY NEWTON	Kimley-Horn	gary.newton@kimley-horn.com	678 533 3802

To: Attendees

From: Gary Newton, P.E.  
Kimley-Horn and Associates, Inc.

Subject: PI #751580 – SR 400 @ Northridge Road

Date: December 7, 2011

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A concept team meeting was held on December 7, 2011 at 10:30 AM in the GDOT General Office, conference room 408. The following is a list of attendees (see attachment for e-mail addresses & phone numbers):

Marlo Clowers (Moderator/PM)	GDOT – IPD
Melanie Hale	GDOT – Design Policy
Ken Werho	GDOT – Traffic Operations TMC
Michael Hester	GDOT – Environmental Services
Jun Birnkammer	GDOT – Utilities
Raymond Chandler	GDOT – Utilities
Kyle Mote	GDOT – Planning
Darrell Richardson	GDOT – Road Design
Ron Wishon	GDOT – Engineering Services
Lillian Jackson	GDOT – Communications
Jean Hee Park	Atlanta Regional Commission (ARC)
Walt Rekuc	City of Sandy Springs
Gary Newton	Kimley-Horn (KHA)
John Walker	Kimley-Horn (KHA)
David Stricklin	Kimley-Horn (KHA)

Agenda:

- Introductions
- Project Introduction (Marlo Clowers)
  - Design-Build project to be let in August 2012
  - The Environmental Document is anticipated to be a GEPA- B.
  - SRTA providing 100% of funding for project
- The draft project concept report was discussed. The following comments were made regarding the project concept and the project concept report:
- Concept Report review (Gary Newton)
  - Project Justification Statement has been reviewed by Planning and all comments have been incorporated
  - Project is State Funded and FHWA does not require oversight
  - Context Sensitive Solutions are being evaluated along Northridge Road east of the interchange at the Northridge Forest Subdivision. Three alternative solutions have been presented to the public. They include a roundabout, a U-Turn eyebrow and a U-Turn jug

- handle. Based on comments from the PIOH on December 5, 2011, it appears the roundabout will be the preferred alternative
- Major Structure: existing bridge to be widened to the north 1 ½ lanes. Coordination between Bridge Design and Maintenance has been held to discuss the condition of the structure. The bridge deck rehabilitation will consist of hydro demolition and concrete overlay.
  - Utility Office requested the utilities referenced be revised to match those identified in the SUE plans. District 7 will complete the Public Interest Determination documentation.
  - Design Variances/Design Exceptions are not anticipated for the project
  - VE Study was completed on 10/27/11. VE implementation letter is pending. The recommendations included pavement types, bridge material recommendations and alternatives associated with the context sensitive solutions.
  - No significant issues are anticipated with the GEPA document.
  - A summary of the PIOH from 12/5/11 was given. The majority of the comments concerned the pedestrian facilities in the area and the alternatives for the roundabout and U-turn. The displays for the PIOH were reviewed.
  - A summary of the roundabout feasibility was provided. The Northridge/Dunwoody Place intersection did not perform at an acceptable LOS and the design year traffic exceeded the amount for a 2-lane roundabout. The Northridge/Roberts Drive intersection would operate at an acceptable LOS as a roundabout. A roundabout at Northridge/Somerset would not be required if a roundabout was constructed at Roberts Drive.
  - A roundabout peer review will be required.
- Comments
    - Michael Hester gave a summary of the public comments received from the PIOH held on 12/5/11. The number in attendance was 75 with 29 in favor, 6 conditional, 4 uncommitted, and 0 against the project. The most common comments were that the roundabout was preferred at the entrance of Somerset Court, and that there should be sidewalks on the south side of Northridge Road at Somerset Court and along east side of Roberts Drive.
    - Ken Werho recommended a roundabout (Northridge/Somerset) with an increased radius of 125 feet. This size would accommodate a planter island in the center as requested by residents in the area.
    - Melanie Hale confirmed that any roundabout would require a peer review.
    - Marlo Clowers stated that coordination with the lighting group will be held to discuss the options available for lighting the roundabout.
    - Ken Werho asked for the type 10 raised pavement markers be reconsidered for the lane separation across the bridge. Ken stated they have had problems with the rpm's becoming lodged between the tandem tires. Ken recommended type 6 rpm and posts as an alternative.
    - Darrell Richardson asked how much property in the northeast area of the project was owned by GDOT. Darrell suggested investigating if there is enough property available to reconstruct the SR 400 northbound loop ramp. This would allow for a larger radius, additional storage and increased signage
    - Ken Werho asked KHA to send a roll plot of the displays to Scott Zehngraft.

- Melanie Hale recommended asked if the displays in the concept report attachments could be enlarged and/or resolution increased
- Melanie Hale stated the L&D could be submitted along with the Concept Report. The L&D could not be approved until after the Concept is approved.
- City of Sandy Springs (Walt Rekuc) provided a list of equipment (attached) the City desires to be included in the project.

This document represents Kimley-Horn's interpretation of the meeting. Please contact Gary Newton at [gary.newton@kimley-horn.com](mailto:gary.newton@kimley-horn.com) or at 770-825-0074 if you have any questions, comments or concerns.

# SIGN-IN

<u>Name</u>	<u>Agency</u>	<u>email</u>
Marko Clowers	GDOT-IPD	melowers@dot.ga.gov
Walt Rexise	City of Sandy Springs	wrexise@sandyspringsga.gov
Ken Werho	GDOT-T.O. TRAC	KWERHO@DOT.GA.GOV
Melanie Hale	GDOT-Design Policy + Support	mhale@dot.ga.gov
Michael Hester	GDOT-ENV. SERV.	MHESTER@DOT.GA.GOV
Jean Hee Park	AEC	jpark@atlantaregional.com
Jean Birnkammer	GDOT-UTILITIES	jbirnkammer@dot.ga.gov
Raymond Chandler	GDOT-UTILITIES	SUE rchandler@dot.ga.gov
Kyle More	GDOT	KMOT@DOT.GA.GOV
Ron Wishon	GDOT-ENG. SERV.	rwishon@dot.ga.gov
Lillian Jackson	GDOT	lijackson@dot.ga.gov



Nathan Deal, Governor  
*Chairman*

Gena L. Evans, Ph.D.  
*Executive Director*

May 6, 2011

Mr. Darryl VanMeter  
State Innovative Program Delivery Engineer  
One Georgia Center, 600 West Peachtree Street, NW  
Atlanta, GA 30308

**RECEIVED**

**MAY - 9 2011**

**OFFICE OF  
INNOVATIVE PROGRAM DELIVERY**

**SENT VIA HAND DELIVERY**

Dear Darryl:

As requested, SRTA is providing you three original copies of the GA 400 Bond Projects MOU between GDOT and SRTA. Please let me know if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Mary Sallach".

Mary Sallach,  
Project Manager

Attachments: As stated.

MEMORANDUM OF UNDERSTANDING  
By and between  
GEORGIA DEPARTMENT OF TRANSPORTATION  
And  
STATE ROAD AND TOLLWAY AUTHORITY  
REGARDING  
STATE ROUTE 400 PROJECTS

**THIS MEMORANDUM OF UNDERSTANDING** (“MOU”) is made and entered into this 29 day of April 2011, by and between the Georgia Department of Transportation (“GDOT”), a department within the executive branch of government of the State of Georgia, whose address is 600 W. Peachtree Street, NW., Atlanta, Georgia 30308, and the State Road and Tollway Authority (“SRTA”), a body corporate and politic and instrumentality of the State of Georgia, whose address is 47 Trinity Avenue, 4<sup>th</sup> Floor, Atlanta, Georgia 30334, hereinafter sometimes collectively referred to as the “parties”.

**WHEREAS**, pursuant to the provisions of OCGA §32-2-2(a)(1), the GDOT is authorized to plan, design, manage, control, construct and maintain the state highway system; and

**WHEREAS**, pursuant to the provisions of OCGA §32-10-67, the SRTA is authorized to initiate a study of any given project or projects and expend sums as may be necessary in establishing the feasibility of utilizing toll revenue financing in the implementation of the project or project construction; and

**WHEREAS**, on July 10, 1991, the GDOT and SRTA executed an agreement wherein the Department granted the authority an Estate for Years for the Georgia 400 Extension; and

**WHEREAS**, on September 24, 2010, the GDOT and SRTA entered into a Modification of Agreement wherein GDOT granted SRTA an extension of the Estate for Years; and

**WHEREAS**, the parties desire to partner with each other to undertake projects related to State Route 400, hereinafter referred to as the “Toll Reserves” projects as listed and described in **Exhibit A**, attached hereto and incorporated herein by reference; and

**WHEREAS**, the Projects are Authorized Projects under the applicable Code sections.

**NOW THEREFORE**, the GDOT and SRTA, governmental entities of the State of Georgia, pursuant to the provisions of Article IX, Section III, Paragraph I(a) of the Constitution of 1983, are authorized to enter into this Agreement and in consideration of the mutual promises made and of the benefits to flow from one to the other, the GDOT and SRTA hereby agree as follows:

The parties agree to undertake the following projects:

1. **Description of the Projects**

- a. **P.I. No. 0008445: GA 400 Lane Widening from McFarland Parkway to SR 20** - Project includes Preliminary Engineering (PE) to widen GA 400 to provide additional capacity between McFarland Parkway and State Route 20. This project is anticipated to reduce congestion and decrease travel times along the corridor. Preliminary engineering is expected to be completed in 2013.
- b. **P.I. No. 0001757: GA 400 Managed Lanes Project from I-285 to McFarland Parkway** - Project includes preliminary engineering of managed lanes along GA 400 between I-285 and McFarland Parkway. This includes design analysis of managed lane configurations. In this case, managed lanes means high occupancy toll lanes. Passenger vehicles not meeting an occupancy requirement use these lanes by paying a variable toll. Meanwhile, transit vehicles and passenger vehicles meeting the occupancy requirement can use the lanes for free. Managed lanes are designed to provide a reliable trip option for those that carpool, use a vanpool, take transit, or wish to pay to use the lane. This cost only includes preliminary engineering and does not include construction of the actual facilities. Preliminary engineering is expected to be completed in 2014.
- c. **P.I. No. 0010290: GA 400 Northbound Third Transition Lane Extension at McFarland Parkway** - Project includes the extension of the third northbound lane along GA 400 approximately 0.75 miles to improve the transition from the existing four-lane northbound section that terminates south of McFarland Parkway to the two-lane section that extends towards SR 20. The proposed three-lane section will address the merging bottleneck of GA 400 northbound traffic near McFarland Parkway, thus improving travel times along the corridor.
- d. **P.I. Nos. 0010291 & 0010312: GA 400 ITS and HERO Expansion from McFarland Parkway to SR 20** - Project will expand Intelligent Transportation System (ITS) coverage from McFarland Parkway to SR 20. ITS uses advanced information and communications technology to improve mobility and safety. Some examples of current ITS technology in use around the state include the Georgia Navigator system, traveler information on 511, changeable messages signs that alert drivers of upcoming traffic issues, ramp meters and cameras / video detection. Highway Emergency Response Operator (HERO) units that respond to incidents and clear the road so that traffic can proceed as normal will be expanded as well. The additional HERO units can be operational in the year 2011 and the expanded ITS network can be completed in the year 2012.
- e. **P.I. Nos. 0006820 SR 140 (Holcomb Bridge Road) ATMS** - Project includes the installation of Advanced Transportation Management System (ATMS) elements along SR 140 between Barnwell Road and SR 9/Roswell Road. The project includes signal improvements, cameras, and traffic count stations that are designed to improve the operations of the corridor and reduce travel times for those driving along the corridor. Improvements to Holcomb Bridge Road are projected to improve operations at the GA 400 / Holcomb Bridge Road interchange. The expected operational date is in 2014.

- f. **P.I. No. 0010311: GA 400 Northbound Ramp Extension at Abernathy Road** - Project includes the reconstruction of the on-ramp from Abernathy Road to GA 400 northbound to add approximately one-quarter mile of pavement. This extension will move the point at which drivers must merge with the GA 400 mainline traffic further north to allow motorists additional time and distance to accelerate and merge. This improvement will also increase the distance between the northbound on-ramp and the new “half diamond” interchange at Hammond Drive. This increased ramp spacing is anticipated to reduce conflicts between drivers entering GA 400 at Hammond Drive and others exiting at Abernathy Road. The amount of time needed for design and construction is around two years and the facility is expected to be operational in 2012.
- g. **P.I. No. 751580-: Improvements to GA 400 at Northridge Road Interchange** - Project will provide capacity and operational improvements to the GA 400 interchange at Northridge Road. Improvements will include better signage for the northbound exit ramp from GA 400 and additional through lanes on Northridge Road to accommodate the improved traffic flow. Currently, traffic exiting at the Northridge interchange queues back onto GA 400, impacting travel along the mainline. Preliminary engineering is expected to be complete in 2012 and construction is expected to begin in 2013.

2. **Responsibilities.** The Parties agree to the following roles and responsibilities for the development of the Projects.

**a. GDOT Responsibilities:**

- 1. Coordinate with the Atlanta Regional Commission (“ARC”) to program the Projects not currently included in the Transportation Improvement Program (“TIP”);
- 2. Through its procurement process, hire Consultants, as needed, to provide engineering support;
- 3. Undertake the responsibility for the development of the environmental documents and all efforts associated therewith;
- 4. Undertake the responsibility for obtaining all necessary project permissions including Federal, State and Local;
- 5. Make a determination as to the optimal project delivery method including but not limited to traditional design-bid-build and alternative delivery methods;
- 6. Coordinate with SRTA on all public outreach and external communications relative to any or all of the Projects.
- 7. For any or all of the Projects, advise SRTA as soon as possible upon GDOT’s learning of any (a) delay or a change in schedule, (b) anticipated delay or an anticipated change in schedule, and (c) issues that affect or otherwise impact the purpose or scope.

8. Manage the construction and implementation of the Projects; and
9. Perform operations and maintenance on facilities once open to traffic consistent with typical GDOT practices or assign this responsibility to the local entity.

**b. SRTA Responsibilities:**

1. Review GDOT invoices and requests for reimbursement, and issue the reimbursement;
2. Participate in project development, coordination, and implementation meetings. Provide input relative to scoping, design, budgeting, scheduling, procurement, public outreach, and communication activities. However, GDOT retains final decision making authority regarding these project implementation activities.
3. Provide technical support as needed.

**3. Commencement Date and Term.** This MOU shall be effective as of on the 29 day of April, 2011, (hereinafter referred to as the "Commencement Date") and shall expire eight (8) years from the Commencement Date or 12 months after the completion of the last project on **Exhibit A**, whichever occurs first; unless otherwise extended by mutual agreement of the parties.

**4. Funding.** GDOT will initially use State Motor Fuel Tax proceeds to pay Project costs for the toll reserves projects identified in **Exhibit A**. GDOT shall submit invoices to SRTA for reimbursement. Upon the review and approval of such invoices, SRTA shall reimburse GDOT using funds amended into SRTA's budget from GA 400 toll reserve funds. GDOT shall submit invoices to SRTA no more than once a month. SRTA agrees to reimburse GDOT for work performed within **30 days** after receipt of a valid invoice. SRTA agrees to fund any and all valid Project cost invoices up to a maximum not-to-exceed amount established for each Project as detailed in **Exhibit A**, **such maximum not-to-exceed amount shall not be revised except upon mutual agreement of the parties**. Eligible Project costs include costs for Preliminary Engineering, Right-of-Way, Utilities, and Construction, in addition to indirect costs and labor costs.

**5. Reimbursement Request Documentation.** In order to initiate reimbursements under this MOU, GDOT shall submit a letter addressed to SRTA's Treasurer, signed by GDOT accounting representative and GDOT project manager requesting reimbursements. Subsequent to the letter submission, all GDOT invoices submitted to SRTA for reimbursement shall include the following documentation:

- a. GDOT's Invoices.
- b. A copy of the paid invoices from the contractors for all work performed.
- c. A copy of the total expenses update spreadsheet so the project managers and accounting for both SRTA and GDOT can use it as a guide for totaling / tracking purposes.

6. **Termination.** Either party may terminate this MOU for cause or without cause upon thirty (30) days written notice to the other.
7. **Amendments.** This MOU may not be amended except by mutual consent in writing by the parties.
8. **Assignment.** This MOU shall not be assigned by any party to any other person or entity whatsoever unless agreed to by the parties.
9. **Notices.** Any notices, requests, demands and other communications which may be required hereunder shall be in writing and shall either be mailed or transmitted by either first class United States certified mail, return receipt requested; delivery by carrier or personally delivered to the appropriate party; or facsimile transmission, immediately followed by a telephone call to confirm delivery to:

Georgia Department of Transportation  
600 W. Peachtree Street, NW  
Atlanta, Georgia 30308  
ATTN: Chief Engineer

State Road and Tollway Authority  
47 Trinity Ave, 4<sup>th</sup> Floor  
Atlanta, Georgia 30334  
ATTN: Executive Director

The date on which such notice is delivered will be deemed the date thereof. Either party may from time to time, by five (5) days' prior notice to the other party in writing, specify a different address to which notices will be sent. Rejection or refusal to accept a notice or inability to deliver a notice because of a changed address of which no notice was given will be deemed a delivery of the notice on the date when postmarked.

10. **Interpretation.** The parties stipulate that for good business reasons, each party has determined to negotiate, and each party has had significant voice in the preparation of this MOU. Should any provision of this MOU require judicial interpretation, it is agreed that the Court interpreting or construing it shall not construe the MOU more strictly against either party because it drafted a particular provision, or the provision was for the party's benefit, or the party enjoyed a superior bargaining position.
11. **No Third Party Beneficiaries.** Nothing contained herein shall be construed as conferring upon or giving to any person, other than the parties hereto, any rights or benefits under or by reason of this MOU.
12. **Risk Allocation.** Each party shall conduct its own functions under this MOU in accord with state law at its sole cost, risk and responsibility.
13. **Severability.** If any provision of this MOU is determined to be invalid or unenforceable, the remaining provisions shall remain in force and unaffected to the fullest extent permitted by law and regulation.

14. **Governing Law.** This Agreement is made and entered into in Fulton County, Georgia, and shall be governed and construed under the laws of the State of Georgia.

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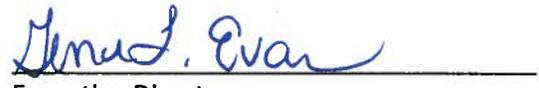
The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

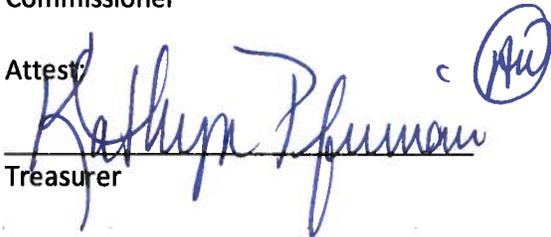
IN WITNESS WHEREOF, said parties have hereunto set their hand and affixed their seals the day and year above first written.

Georgia Department of Transportation

State Road and Tollway Authority

  
\_\_\_\_\_  
Vance C. Smith, Jr.  
Commissioner

  
\_\_\_\_\_  
Dennis L. Egan  
Executive Director

Attest:  (KPF)  
\_\_\_\_\_  
Kathryn P. Furman  
Treasurer

  
\_\_\_\_\_  
Christopher Tombs  
Witness



**EXHIBIT "A"**

<b>PI #</b>	<b>Description</b>	<b>Funding Source</b>	<b>Preliminary Engineering (PE)</b>	<b>Right-of-Way</b>	<b>Construction</b>	<b>Per Project Maximum Not-to-Exceed Amount</b>
0008445	GA 400 Lane Widening from McFarland Parkway to SR 20	Toll Reserves	\$4,000,000	\$ 0	\$ 0	\$4,000,000
0001757	GA 400 Managed Lanes Project from I-285 to McFarland Parkway	Toll Reserves	\$8,000,000	\$ 0	\$ 0	\$8,000,000
0010290	GA 400 Northbound Third Transition Lane Extension at McFarland Parkway	Toll Reserves	\$1,000,000	\$ 0	\$2,000,000	\$3,000,000
0010291	GA 400 ITS from McFarland Parkway to SR 20	Toll Reserves	\$150,000	\$ 0	\$1,559,000	\$1,709,000
0010312	GA 400 HERO Expansion from McFarland Parkway to SR 20	Toll Reserves	\$290,000 (FY 2011) \$110,000 (beginning in FY 2012 per year for 7 consecutive years thereafter)	\$ 0	\$ 0	\$1,060,000

**EXHIBIT "A"**

<b>PI #</b>	<b>Description</b>	<b>Funding Source</b>	<b>Preliminary Engineering (PE)</b>	<b>Right-of-Way</b>	<b>Construction</b>	<b>Per Project Maximum Not-to-Exceed Amount</b>
0006820	SR 140 (Holcomb Bridge Road) ATMS	Toll Reserves	\$ 114,800	\$ 0	\$459,200	\$574,000
0010311	GA 400 Northbound Ramp Extension at Abernathy Road	Toll Reserves	\$300,000	\$ 0	\$1,700,000	\$2,000,000
751580-	Improvements to GA 400 at Northridge Road Interchange	Toll Reserves	\$500,000	\$1,000,000	\$5,500,000	\$7,000,000

MEMORANDUM OF UNDERSTANDING

By and between

GEORGIA DEPARTMENT OF TRANSPORTATION

And

CITY OF SANDY SPRINGS

Regarding

PROJECT 751580-, SR 400/US 19 at CR 145/NORTHRIDGE ROAD INTERCHANGE

**THIS MEMORANDUM OF UNDERSTANDING** (“MOU”) is made and entered into this \_\_\_day of \_\_\_\_\_ 2012, by and between the Georgia Department of Transportation (“GDOT”), a department within the executive branch of government of the State of Georgia, whose address is 600 W. Peachtree Street, NW., Atlanta, Georgia 30308, and the City of Sandy Springs (“COSS”), a body corporate and politic of the State of Georgia, whose address is 7840 Roswell Road, Building 500, Sandy Springs, Georgia 30350, hereinafter sometimes collectively referred to as the “parties”.

**WHEREAS**, the COSS has represented to the GDOT a desire to improve the transportation facility described in Exhibit A, attached and incorporated herein by reference and hereinafter referred to as the “PROJECT”; and

**WHEREAS**, the COSS has represented to the GDOT a desire to participate in certain activities including the funding of certain portions of the PROJECT and the GDOT has relied upon such representations; and

**WHEREAS**, the COSS has represented to the GDOT a desire to accept the short term nature of improvements to the transportation facility provided by the PROJECT; and

**WHEREAS**, the GDOT has expressed a willingness to participate in certain activities of the PROJECT as set forth in the Agreement; and

**NOW THEREFORE**, the GDOT and COSS, governmental entities of the State of Georgia, pursuant to the provisions of Article IX, Section III, Paragraph I(a) of the Constitution of 1983, are authorized to enter into this Agreement and in consideration of the mutual promises made and of the benefits to flow from one to the other, the GDOT and COSS hereby agree as follows:

The parties agree to undertake the following PROJECT:

1. **Description**

**P.I. No. 751580-: SR 400/US 19 at CR 145/Northridge Road Interchange** - PROJECT provides capacity and operational improvements to the SR 400 ramps at Northridge Road as well as other intersections of Northridge Road at Dunwoody Place, Roberts Drive, and Somerset Court. Improvements will include better signage for the northbound exit ramp from GA 400 and additional through lanes on Northridge Road to accommodate the improved traffic flow.

2. **Responsibilities.** The Parties agree to the following roles and responsibilities for the development of the Projects.

- a. **GDOT Responsibilities:**

1. Coordinate with the State Road and Tollway Authority (“SRTA”) to determine the PROJECT’s eligibility to participate in the toll reserve funding program.
    2. Through its procurement process, hire Consultants, as needed, to provide engineering support for all preliminary engineering activities.
    3. Manage all aspects of planning, designing, design review/approval, bidding, letting, construction inspection, testing, and requests for information of the projects.
    4. Perform operations and maintenance on facilities once open to traffic which are consistent with typical GDOT practices or to assign this responsibility to the local entity.

- b. **COSS Responsibilities:**

1. Undertake the responsibility for the development of initial concepts to ensure the PROJECT’s eligibility to participate in the SRTA toll reserve funding program.
    2. Participate in project development, coordination, and implementation meetings. Provide input relative to scoping, design, budgeting, scheduling, procurement, public outreach and communication activities. However, notwithstanding the foregoing, GDOT retains the final decision making authority regarding these project implementation activities.
    3. Provide technical support to GDOT and its consultant as needed for the development of the project.
    4. Assume all project costs exceeding the amount allocated in the SRTA toll reserve funding program (\$7,000,000), including but not limited to construction cost overruns.

3. **Commencement Date and Term.** The responsibilities set out in this MOU shall commence on the \_\_\_\_ day of \_\_\_\_\_, 2012, (hereinafter referred to as the “Commencement Date”) and shall expire eight (8) years from the Commencement Date or 12 months after completion of the project, whichever occurs first; unless otherwise extended by mutual agreement of the parties.

4. **Funding.** GDOT will initially use State Motor Fuel Tax proceeds to pay Project costs. GDOT shall submit invoices to SRTA for reimbursement. Upon the review and approval of such invoices, SRTA shall reimburse GDOT using funds amended into SRTA’s budget from SR 400 toll reserve funds. Eligible Project costs include costs for Preliminary Engineering, Right-of-Way, Utilities, and Construction, in addition to indirect costs and labor costs.

5. **Termination.** Prior to the award of any construction bid either party may terminate this MOU for cause or without cause upon thirty (30) days written notice to the other.
6. **Amendments.** This MOU may not be amended except by mutual consent in writing by the parties.
7. **Assignment.** This MOU shall not be assigned by any party to any other person or entity whatsoever unless agreed to by the parties.
8. **Notices.** Any notices, requests, demands and other communications which may be required hereunder shall be in writing and shall either be mailed or transmitted by either first class United States certified mail, return receipt requested; delivery by carrier or personally delivered to the appropriate party; or facsimile transmission, immediately followed by a telephone call to confirm delivery to:

Georgia Department of Transportation  
600 W. Peachtree Street, NW  
Atlanta, Georgia 30308  
ATTN: Chief Engineer

The City of Sandy Springs  
7840 Roswell Road, Building 500  
Sandy Springs, Georgia 30350  
ATTN: Director of Public Works

The date on which such notice is delivered will be deemed the date thereof. Either party may from time to time, by five (5) days' prior notice to the other party in writing, specify a different address to which notices will be sent. Rejection or refusal to accept a notice or inability to deliver a notice because of a changed address of which no notice was given will be deemed a delivery of the notice on the date when postmarked.

9. **Interpretation.** The parties stipulate that for good business reasons, each party has determined to negotiate, and each party has had significant voice in the preparation of this MOU. Should any provision of this MOU require judicial interpretation, it is agreed that the Court interpreting or construing it shall not construe the MOU more strictly against either party because it drafted a particular provision, or the provision was for the party's benefit, or the party enjoyed a superior bargaining position.
10. **No Third Party Beneficiaries.** Nothing contained herein shall be construed as conferring upon or giving to any person, other than the parties hereto, any rights or benefits under or by reason of this MOU.
11. **Risk Allocation.** Each party shall conduct its own functions under this MOU in accord with state law at its sole cost, risk and responsibility.
12. **Severability.** If any provision of this MOU is determined to be invalid or unenforceable, the remaining provisions shall remain in force and unaffected to the fullest extent permitted by law and regulation.

13. **Governing Law**. This Agreement is made and entered into in Fulton County, Georgia, and shall be governed and construed under the laws of the State of Georgia.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, said parties have hereunto set their hand and affixed their seals the day and year above first written.

Georgia Department of Transportation

City of Sandy Springs

\_\_\_\_\_  
Commissioner

\_\_\_\_\_  
Director of Public Works

Attest:

\_\_\_\_\_  
Treasurer

\_\_\_\_\_  
Witness

**EXHIBIT "A"**

**Project Number 751580- (SR 400/US 19 at CR 145/Northridge Road Interchange ) - Fulton County**

<b>Project</b>	<b>Preliminary Engineering</b>		<b>Right of Way</b>			<b>Construction</b>		<b>Utility Relocation</b>	
<b>(PI#, Project #, Description)</b>	<b>Funding</b>	<b>PE Activity by</b>	<b>Funding of Real Property</b>	<b>Acq. By</b>	<b>Acq. Fund by</b>	<b>Funding</b>	<b>Letting by</b>	<b>Utility Funding by</b>	<b>Railroad Funding by</b>
P.I. # 751580- (SR 400/US 19 at CR 145/Northridge Road Interchange ) - Fulton County	(100%) State (\$500,000 Estimate) Source: SRTA Toll Reserves - 44220  > (\$500,000 Total Estimate) 100% COSS	COSS/ GDOT	(100%) State (\$1,000,000 Estimate) Source: SRTA Toll Reserves - 44220  >(\$1,000,000 Total Estimate) 100% COSS	GDOT	GDOT	(100%) State (\$5,500,000 Estimate) Source: SRTA Toll Reserves - 44220  >(\$5,500,000 Total Estimate) 100% COSS	GDOT	(100%) Local  Source: COSS	COSS

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

FILE: P. I. No. 751580 OFFICE: Environmental Services  
DATE: December 6, 2011  
*JB-MH*  
FROM Glenn Bowman, P.E., State Environmental Administrator  
TO Distribution Below  
SUBJECT PUBLIC INFORMATION OPEN HOUSE SYNOPSIS

PROJECT No. & COUNTY: NH000-0056-01(061), Fulton  
PROJECT DESCRIPTION: SR 400/US 19 @ CR 145/Northridge Road Improvements  
DATE: December 5, 2011  
NUMBER IN ATTENDANCE: 75  
FOR: 29  
CONDITIONAL: 6  
UNCOMMITTED: 4  
AGAINST: 0  
OFFICIALS IN ATTENDANCE: Dianne Fries - City Council  
Rep. Harry Geisinger  
John Paulson - City Council  
ADDITIONAL COMMENTS: The most common comments were that the roundabout was preferred at the entrance of Somerset Court, and that there should be sidewalks on the south side of Northridge Road at Somerset Court and along the east side of Roberts Drive.  
PREPARED BY: Michael Hester TELEPHONE: 404-631-1255

cc: Gerald Ross, P.E.  
Brandon L. Beach  
Russell McMurry, P.E.  
Bryant Poole  
Scott Lee  
Darryl VanMeter, P.E.  
Marlo Clowers, P.E.  
Glenn Bowman, P.E.  
Keisha Jackson  
Vicki Gavalas  
Karlene Barron  
Jennifer Giersch

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** NH000-0056-01(061) Fulton **OFFICE:** Engineering Services  
P.I. No.: 751580  
SR 400/Northridge Road Interchange **DATE:** March 12, 2012

**FROM:** Lisa L. Myers, Acting State Project Review Engineer

**TO:** Darryl D. VanMeter, PE, State Innovative Program Delivery Engineer  
Attn.: Marlo Clowers

**SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

The VE Study for the above project was held October 24-27, 2011. The VE Study was performed based on the original scope of the project to provide interim operational improvements which included the widening of the existing Northridge Bridge over SR 400. The Department recently performed a bridge condition survey which recommends extensive deck repairs. Based on this survey, the scope of the project has been expanded to include replacing the bridge with a new structure that would not preclude the constriction of the future Managed Lane System along SR 400. Responses based on the new scope of the project were received on March 7, 2012. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
A-1	Reduce the width of the shared bike/vehicle lanes from 13 feet to 11 feet	\$193,000	No	No longer applicable due to scope change. The new bridge will include minimum width bike lanes in both directions
A-3	Construct the bridge widening over SR 400 using Type III pre-stressed concrete beams in lieu of steel beams	\$240,000	No	No longer applicable due to scope change. The bridge will likely be replaced with a steel bridge due to the required span lengths.
A-10	Overlay the existing bridge deck with asphalt pavement instead of a concrete overlay with hydro-demolition	\$616,000	No	No longer applicable due to scope change. The bridge will be replaced.
B-2	Reduce the width of the shoulder on Northridge Drive from 12 feet to 10 feet from Sta. 205+00 to Sta. 210+00	\$15,000	Yes	This will be done.

C-1	Eliminate the temporary concrete barrier in Stage 3 and replace it with construction barrels	\$64,000	Yes	This will be done.
G-2	Use asphalt pavement and overlay in lieu of concrete pavement for widening Ramp A and Ramp B intersection approaches	\$13,000	No	OMR recommends the use of PCC for design and construction of NB entrance and exit ramps because they currently consist of PCC. See attached pavement type recommendation memo.
G-2.1	Eliminate the 3 inch asphalt layer between the GAB and concrete pavement	\$11,000	Yes	This will be done.
G-2.2	Use a 1 ½ inch thick layer of asphalt in lieu of a 3 inch layer of asphalt in the concrete pavement typical section	\$5,000	No	This cannot be done because G-2.1 will be implemented.
G-2.3	Use filter fabric in lieu of the 3 inch asphalt layer in the concrete pavement typical section	\$8,000	No	This cannot be done because G-2.1 will be implemented.
G-5	Eliminate the roundabout intersection at the east end of the project and construct a gravel turn around	\$16,000	No	The roundabout is a context sensitive solution that is supported by the affected neighborhood.
G-5.1	Eliminate the roundabout intersection at the east end of the project and modify the east side of the Roberts Drive/Northridge Road intersection	\$24,000	No	The roundabout is a context sensitive solution that is supported by the affected neighborhood.
G-7	Construct a second NB exit lane on SR 400 to tie directly into the existing two lane NB exit ramp	-\$72,000 cost increase	Yes	This will be done.
H-1	Use yellow cross-hatch striping in lieu of raised concrete median between the ramp entrance/exit areas in the signalized intersections	-\$15,000 cost increase	No	The cross slope of the median between the exit/entrance lanes slopes away from the motorists, therefore reducing the visibility of the striping.

H-2	Add additional signage to the SR 400 NB exit Ramp	-\$60,000 cost increase	Yes	The additional signage exceeds MUTCD requirements; however, based on the desire to improve the NB SR 400 exit ramp signage to Northridge Road and Dunwoody Place, the additional signage adds clarity to the lane configuration.
H-4	Replace smaller concrete island with white or yellow cross hatching	\$4,000	No	These raised islands are a physical barrier to channelize traffic and to prevent weaving in these areas.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:



Gerald M. Ross, PE, Chief Engineer

Date: 4/30/2013

LLM

Attachments

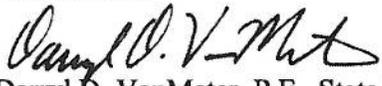
c: Russell McMurry  
Darryl VanMeter/Mike Dover/Marlo Clowers  
Paul Liles/Ben Rabun/Bill Duvall/Dexter Whaley  
Jonathan Cox/Michael Hester  
Jeff Woodward  
Lee Upkins  
Ken Werho/Nabil Raad  
Lisa Myers  
Matt Sanders

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

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INTERDEPARTMENT CORRESPONDENCE

FILE NH000-0056-01(061), Fulton County                      OFFICE Innovative Program Delivery  
SR 400/US 19 @ CR145/ Northridge Road  
P.I. # 751580-    DATE February 29, 2012

  
FROM Darryl D. VanMeter, P.E., State Innovative Program Delivery Engineer

TO Lisa Myers, Acting Project Review Engineer  
**Attention:** Matt Sanders

**SUBJECT Value Engineering Study – Revised Response to Final Report**

The final report for the Value Engineering Study conducted on October 24 - 27, 2011 for the above listed project has been reviewed by this Office and discussed with the Subject Matter Experts. Due to scope changes on the project, the original responses to each of the value engineering recommendations have been revised and are included in the attachment.

The Office of Innovative Program Delivery is in agreement with the responses listed in the attached report. If you have any questions or require additional information, please contact Marlo Clowers at (404) 631-1713 or email.

DVM:MLC

Attachments

cc: Russell McMurry



Kimley-Horn  
and Associates, Inc.

February 15, 2012

Marlo Clowers, P.E.  
Project Manager  
GDOT, Office of Innovative Program Delivery  
One Georgia Center, Suite 1900  
600 West Peachtree Street  
Atlanta, Georgia 30308

2 Sun Court  
Suite 220  
Norcross, Georgia  
30092

Re: VE Responses  
Project No. 751580-  
SR 400/Northridge Road Interchange

**Note: The Value Engineering Study was performed based on the original scope of the project to provide interim operational improvements which included the widening of the existing Northridge Road bridge over SR 400. The Department recently performed a bridge condition survey which recommends extensive deck repairs. Therefore, the Department has expanded the scope of the project to include replacing the bridge with a new structure that would not preclude the construction of the future Managed Lane System along SR 400.**

Reference is made to the recommendations that were contained in the Value Engineering Study Report dated November 8, 2011 for the above referenced project. Responses and recommendations are as follows:

1. **Value Engineering Alternative #A-1: Reduce the width of the shared bike/vehicle lanes from 13 feet to 11 feet.**  
**VE Team Savings: \$193,000**

No longer applicable due to scope change. The new bridge will include minimum width bike lanes in both directions.

2. **Value Engineering Alternative #A-3: Construct the bridge widening over SR 400 using Type III Prestressed Concrete Beams in-lieu-of Steel Beams .**  
**VE Team Savings: \$240,000**

TEL 770.825.0744  
FAX 770.825.0074



No longer applies due to scope change. The bridge will likely be replaced with a steel bridge due to the required span lengths.

3. **Value Engineering Alternative # A-10: Overlay the existing bridge deck with asphalt instead of a concrete overlay with hydro-demolition.**  
**VE Team Savings: \$616,000**

No longer applies due to scope change. The bridge will be replaced.

4. **Value Engineering Alternative #B-2: Reduce the width of the shoulder on Northridge Road (Station 205 to Station 210) from 12 feet to 10 feet.**  
**VE Team Savings: \$15,000**

Yes, will implement.

5. **Value Engineering Alternative #C-1: Eliminate the temporary concrete barrier in Stage 3 and replace it with construction barrels.**  
**VE Team Savings: \$64,000**

Yes, will implement.

6. **Value Engineering Alternative #G-2: Use asphalt pavement and overlay in-lieu of concrete pavement for widening Ramp A & Ramp B intersection approaches.**  
**VE Team Savings: \$13,000**

No, will not implement. OMR recommends the use of PCC for design and construction of northbound entrance and exit ramps as they currently consist of PCC. This alternative does not represent equal or better value. See attached Pavement Type Recommendation memo dated November 17, 2011.

7. **Value Engineering Alternative G-2.1: Eliminate the 3-inch asphalt layer in the concrete pavement section.**  
**VE Team Savings: \$11,000**



Yes, will implement.

8. **Value Engineering Alternative G2.2: Use a 1 ½-inch thick asphalt layer in-lieu-of a 3-inch asphalt layer in the concrete pavement section.**  
**VE Team Savings: \$6,000**

No, will not implement – Because we are implementing G2.1. Only one of the recommendations can be implemented.

9. **Value Engineering Alternative G2.3: Use Filter Fabric in-lieu-of- 3-inch asphalt layer in the concrete pavement section.**  
**VE Team Savings: \$8,000**

No, will not implement – Because we are implementing G2.1. Only one of the recommendations can be implemented.

10. **Value Engineering Alternative # G-5: Eliminate the roundabout intersection at the east end of the project and construct gravel turn around.**  
**VE Team Savings: \$16,000**

No, will not implement. The roundabout is a context sensitive solution in which the affected neighborhood will support. This alternative does not represent equal or better value.

11. **Value Engineering Alternative # G-5.1: Eliminate the roundabout intersection at the east end of the project and modify the east side of Roberts Drive/Northridge Road Intersection.**  
**VE Team Savings: \$20,000**

No, will not implement. The roundabout is a context sensitive solution in which the affected neighborhood will support.

12. **Value Engineering Alternative # G-7: Construct a second NB exit lane segment on SR 400 to tie directly into the existing two-lane NB exit ramp.**  
**VE Team Savings: Increase cost of \$72,000**

Yes, will implement.



13. **Value Engineering Alternative # H-1: Use yellow cross-hatch striping in-lieu-of raised concrete median between the ramp entrance/exit areas in the signalized intersections.**

**VE Team Savings: \$15,000**

No, will not implement. The cross slope of median between the exit/entrance lanes slopes away from the motorists, therefore reducing the ability for the striping to be seen clearly.

14. **Value Engineering Alternative # H-2: Add/revise overhead signing for the SR 400 NB off ramp.**

**VE Team Savings: Increase of \$60,000**

Yes, will implement. The additional signage exceeds MUTCD requirements; however, based on the desire to improve the northbound SR 400 exit ramp signage to Northridge Road and Dunwoody Place, the additional signage adds clarity to the lane configuration.

15. **Value Engineering Alternative # H-4: Replace smaller concrete islands with white or yellow cross hatch striping.**

**VE Team Savings: \$4,000**

No, will not implement. These raised islands are for a physical barrier to channelize traffic and to also prevent weaving in these areas.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Gary T. Newton, P.E.  
Project Manager

**PRECONSTRUCTION STATUS REPORT FOR PI:751580-**

**PROJ ID :** 751580-  
**COUNTY :** Fulton  
**LENGTH (MD) :** 0.50  
**PROJ NO.:** NH000-0056-01(061)  
**PROJ MGR:** Clowers, Marlo  
**AOHD Initials:** MD  
**OFFICE :** Innovative Prog. Delivery  
**CONSULTANT:** Design-Build Approved  
**SPONSOR :** GDOT  
**DESIGN FIRM:** Kimley-Horn and Associates, Inc.

**SR 400/US 19 @ CR 145/NORTHBRIDGE ROAD**  
**MPO:** Atlanta TMA  
**TIP #:** FN-AR-191  
**MODEL YR :** 2016  
**TYPE WORK:** Interchange  
**CONCEPT:** INTERCH RECONST  
**PROG TYPE:** Reconstruction/Rehabilitation  
**Prov. for ITS:** N  
**BOND PROJ. :**

**MGMT LET DATE :** 08/17/2012  
**MGMT ROW DATE :** 03/15/2012  
**BASELINE LET DATE:** 08/21/2012  
**SCHED LET DATE :** 1/8/2013  
**WHO LETS?:** GDOT Let  
**LET WITH :**

**PRIORITY CODE:** SRTA  
**DOT DIST:** 7  
**CONG. DIST:** 6  
**BIKE:** N  
**MEASURE:** E  
**NEEDS SCORE:** 04  
**BRIDGE SUFF:**

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS				Date Auth		
								Activity	Approved	Proposed	Cost		Fund	Status
8/4/2011	11/3/2011			Concept Development	9/7/2011	12/7/2011	59	PE	2011	2011	500,000.00	44220	AUTHORIZED	2/16/2011
9/15/2011	9/15/2011	3/22/2012	3/22/2012	Concept Meeting	12/7/2011	12/7/2011	100	ROW	1997	1997	4,490,669.20	315	AUTHORIZED	
9/22/2011	9/22/2011	3/22/2012	3/22/2012	PM Submit Concept Report	12/21/2011	12/21/2011	100	ROW	2012	2012	1,000,000.00	44220	PRECST	
9/23/2011	11/3/2011	3/22/2012	3/22/2012	Concept Report Review and Comments	1/3/2012		27	CST	2013	2013	5,500,000.00	44220	PRECST	
11/3/2011	11/3/2011	3/22/2012	3/22/2012	Management Concept Approval Complete	7/19/2011		0							
11/21/2011	4/20/2012	4/6/2012	4/6/2012	Value Engineering Study	10/7/2011		86							
9/29/2011	2/22/2012	3/22/2012	3/22/2012	Environmental Approval			25							
11/4/2011	12/1/2011	3/23/2012	4/19/2012	R/W Plans Preparation			0							
12/2/2011	12/29/2011	4/20/2012	5/17/2012	R/W Plans Final Approval			0							
3/1/2012	3/28/2012	7/6/2012	8/2/2012	R/W Authorization			0							
7/5/2012	7/18/2012	11/9/2012	11/22/2012	Stake R/W			0							

Activity	Amount	Date	STIP AMOUNTS	
			Activity	Fund
PE	\$500,000.00	6/16/1988	PE	0.00
ROW	\$4,490,669.20	3/18/2011	ROW	0.00
ROW	\$1,000,000.00	3/18/2011	ROW	1,000,000.00
CST	\$5,500,000.00	3/18/2011	CST	5,500,000.00

**PDD:** "LR CONSULT" REDEFINE DESCRIP IN TIP. FHWA APPROVED ADV ACQ OF WILLIAMS PROPERTY. 1/21/99

**Bridge:** BRIDGE REQUIRED

**Design:** Costing Plans in progress [MLC 1/12]

**EIS:** GEPA Type B/NotApp'd/OnSchedule-AUG-LET/Scott 02.23.12

**LGPA:** NOTIFICATION NEEDED

**Planning:** Env6 unfunded

**Programming:** ADV ACQ 10-96/PR2/R=11-12-96(8-8-97)#2/R=8-13-97/#4/R=12-18-97/#5 2-0||CHANGED TO EXEMPT PEI FHWA 12-20-2010

**Traffic Op:** SEND PLANS FOR REVIEW 12-13-07

**UST:** MC

**Utility:** CC-NEED PPLANS 03/12/SJE

**EMG:** RECST/REHAB (INTERCHANGE RECST), C=M/S/D

**Engr Services:** VE Report Distributed 11/10/11

Prel. Parcel CT:	Under Review:	Released:	Total Parcel in ROW System:	Options - Pending:	Condemnations- Pend:	Acquired by:	Date	DEEDS CT:
4	0	1	1	0	0	DOT		1
0	0	0	0	0	0			
1	0	0	0	0	1			