

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**OFFICE OF DESIGN POLICY & SUPPORT  
INTERDEPARTMENTAL CORRESPONDENCE**

**FILE** P.I. # 0007319  
CSSTP-0007-00(319)  
Hall County  
GDOT District 1 - Gainesville

**OFFICE** Design Policy & Support

**DATE** March 18, 2013

**FROM**  for Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

**DISTRIBUTION:**

Bobby Hilliard, Program Control Administrator  
Genetha Rice-Singleton, State Program Delivery Engineer  
Glenn Bowman, State Environmental Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
Kathy Zahul, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Lisa Myers, State Project Review Engineer  
Charles "Chuck" Hasty, State Materials Engineer  
Mike Bolden, State Utilities Engineer  
Paul Tanner, Asst. State Transportation Data Administrator  
Attn: Systems & Classification Branch  
Ken Thompson, Statewide Location Bureau Chief  
Andy Casey, State Roadway Design Engineer  
Attn: Albert Welch, Design Group Manager  
Tamaya Huff, State Pedestrian and Bicycle Coordinator  
Bayne Smith, District Engineer  
Brent Cook, District Preconstruction Engineer  
Neil Kantner, District Utilities Engineer  
Ryan Fernandez, Project Manager  
BOARD MEMBER - 9th Congressional District

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

Project Type: <u>Widening</u>	P.I. Number: <u>0007319</u>
GDOT District: <u>1</u>	County: <u>Hall</u>
Federal Route Number: <u>N/A</u>	State Route Number: <u>347</u>

SR 347 / Lanier Islands Parkway from Lake Lanier to McEver Road – Phase II

**Submitted for approval:**

<u><i>C. Alan King</i></u> Office of Roadway Design	<u>8/8/12</u> DATE	<i>Revised</i>
<u><i>Stacy Hill</i></u> Office of Program Delivery	<u>9-10-12</u> DATE	<i>12/20/12</i>
<u><i>Kevin J. Long</i></u> GDOT Project Manager	<u>8/9/2012</u> DATE	

**Recommendation for approval:**

<u>Program Control Administrator</u>	<u>DATE</u>
<u>* <i>Glenn Bowman /mas</i></u>	<u>12-31-2012</u>
<u>State Environmental Administrator</u>	<u>DATE</u>
<u>* <i>Kathy Zshak /mas</i></u>	<u>12-26-2012</u>
<u>State Traffic Engineer</u>	<u>DATE</u>
<u>* <i>Lisa Myers /mas</i></u>	<u>12-20-2012</u>
<u>Project Review Engineer</u>	<u>DATE</u>
<u>* <i>Patrick Allen /mas</i></u>	<u><del>08-14-2012</del> 01-04-2013</u>
<u>for State Utilities Engineer</u>	<u>DATE</u>
<u>* <i>Bayne Smith /mas</i></u>	<u><del>08-27-2012</del> 12-20-2012</u>
<u>District Engineer</u>	<u>DATE</u>

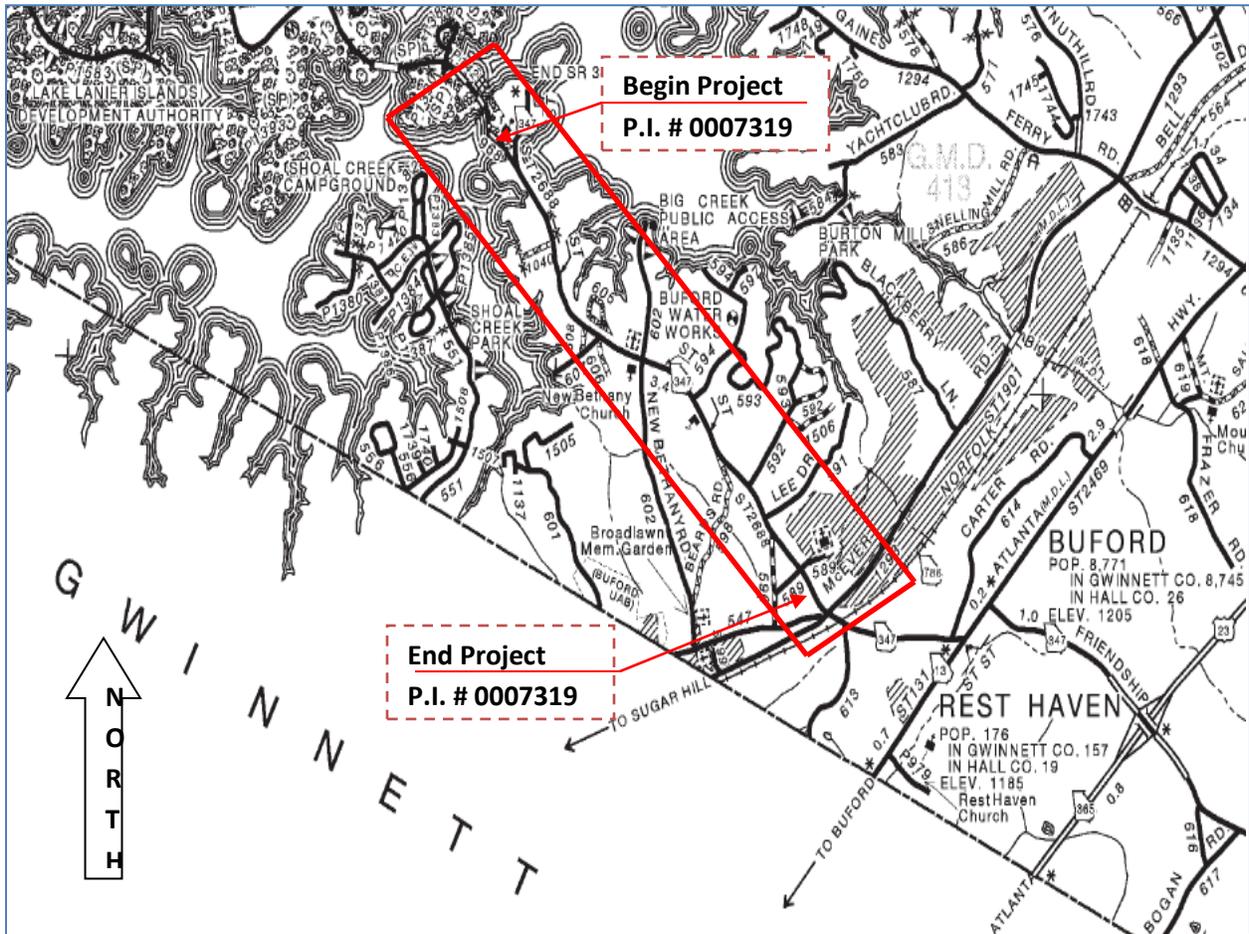
State Transportation Financial Management Administrator DATE

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>* <i>Cynthia L. VanDyke /mas</i></u>	<u><del>08-13-2012</del> 01-07-2013</u>
State Transportation Planning Administrator	DATE

\* Recommendation on file

### PROJECT LOCATION



## PLANNING & BACKGROUND DATA

**Project Justification Statement:** SR 347 / Lanier Islands Parkway in Hall County is classified as an urban minor arterial. It is a two lane facility that connects I-985 to commercial development and recreational opportunities on Lake Lanier. This roadway is identified in the Gainesville-Hall Metropolitan Planning Organization Bicycle and Pedestrian Plan adopted in March of 2006. This project was identified by the Lake Lanier Islands Authority and is included in the Gainesville-Hall Metropolitan Planning Organization 2012-2017 Transportation Improvement Program.

SR 347 currently operates at a Level of Service B with an Annual Daily Traffic of 2,740 vehicles per day. By the design year 2038, that is projected to increase to 10,000 vehicles per day, corresponding to a Level of Service D. However, the large number of turns that would be made on and off the roadway would likely degrade the Level of Service further into the E range for the design year. Analysis of the last three years of crash data shows that crash and injury rates on this roadway are significantly higher than the statewide average for similar facilities – with incidents occurring mostly at the intersection of SR 347 and McEver Road.

The proposed project limit to the west is where the roadway ends at Lake Lanier. The eastern terminus is at McEver Road where a widening project is already underway to provide multilane access to I-985.

According to the Gainesville-Hall MPO 2040 Metropolitan Transportation Plan, a level of service E or F is unacceptable in the area. The goal of this project is to improve SR 347 to address unacceptable levels of congestion and to improve the operation of turning movements and reduce crash frequency and severity through the corridor.

**Description of the proposed project:** State Route (SR) 347, Lanier Islands Parkway and Friendship Road, is located in the city of Buford, Hall County. The proposed project length along SR 347 is approximately 2.4 miles, from the Lake Lanier Islands to McEver Road.

SR 347 is a west – east highway in northeast Georgia, United States and in its entirety is approximately 12.3 miles long. SR 347 runs from its western terminus at Lake Lanier Islands, crossing Interstate 985 located northeast of Buford, Georgia and continues to its eastern terminus at SR 211, located west of Braselton, Georgia.

The concept for this project satisfies the need and purpose by adding operational improvements throughout the corridor. This includes providing 12 foot travel lanes in each direction and adding a 14 foot center turn lane throughout the corridor, adding right turn lanes where necessary, curb and gutter on both sides of the roadway and adding a 10 foot multi-use path and 5 foot sidewalk.

**Federal Oversight:**  Full Oversight  Exempt  State Funded  Other

**MPO:**  N/A  MPO –Gainesville – Hall MPO  
MPO Project TIP # GH-078

**Regional Commission:**  N/A  RC –Georgia Mountains RC  
RC Project ID # N/A

**Congressional District(s):** 9

**Projected Traffic:** ADT

Current Year (2009): 2740

Open Year (2018): 6200

Design Year (2038): 10000

**Functional Classification (Mainline):** Urban Minor Arterial Street

**Is this project on a designated bike route?**  No  YES

The designated bike route is a local bike route on SR 347 from Pass Drive to McEver Road with no specific route number.

**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:** Lake Lanier, Corps of Engineer Property

**Context Sensitive Solutions:** N/A

**DESIGN AND STRUCTURAL DATA**

**Mainline Design Features:**

**Roadway Name/Identification:** SR 347 - Lanier Islands Parkway

Feature	Existing	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	2	N/A	2
- Lane Width(s)	11' – 12'	12'	12'
- Median Width & Type	N/A	N/A	14' – Flush (TWLTL)**
- Outside Shoulder Width & Type	0' – 10'	10' – 16'	16.5'
- 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	5'	5'	5' sidewalk & 10' multiuse path
- Auxiliary Lanes	12'	12'	12'
- Bike Lanes	None	4'	Multiuse Path
Posted Speed	45		45
Design Speed	45	45	45
Min Horizontal Curve Radius	Approx. 380'	711'	1041'
Superelevation Rate	4%	4%	4%
Grade	7%	7%	7%
Access Control	By Permit	By Permit	By Permit
Right-of-Way Width	60' - 100'	One foot beyond shoulder break point	100'
Maximum Grade – Crossroad	9%	9%	9%
Design Vehicle	WB-40 or BUS-40/RV	WB-40 or BUS-40/RV	WB-40 or WB-62/RV

\*According to current GDOT design policy if applicable

\*\* TWLTL – Two Way Left Turn Lane

**Major Structures:** N/A

**Major Interchanges/Intersections:** There are no interchanges along this project. The following is a list of intersections along the project:

- Holiday Marina – 3 leg intersection with stop control on the minor road
- Holiday Point – 3 leg intersection with stop control on the minor road
- Lazy Day Marina – 3 leg intersection with stop control on the minor road
- Pass Drive – 3 leg intersection with stop control on the minor road
- Rowe Drive – 3 leg intersection with stop control on the minor road
- Merritt Drive – 3 leg intersection with stop control on the minor road
- Lee Circle – 3 leg intersection with stop control on the minor road
- New Bethany Road and Big Creek Road – proposed roundabout
- Whidby Road – 3 leg intersection with stop control on the minor road
- North Waterworks Road – 3 leg intersection with stop control on the minor road
- Beards Road – 3 leg intersection with stop control on the minor road
- Shoreland Drive – 3 leg intersection with stop control on the minor road
- Holiday Road – 3 leg intersection with stop control on the minor road
- Lee Drive – 3 leg intersection with stop control on the minor road

**Utility Involvements:** AT&T, Atlanta Gas Light, City of Buford – Electrical, Charter – CATV, Sawnee EMC – Electrical and City of Gainesville - Water

**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

Anticipated number of impacted parcels:	31
Anticipated number of displacements (Total):	2
Businesses:	1
Residences:	1
Other:	0

**Location and Design approval:**  Not Required  Required

**Off-site Detours Anticipated:**  No  Yes  Undetermined

**Transportation Management Plan Anticipated:**  YES  NO

The TMP will be handled as per Special Provision 150 – Traffic Control

**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 type="checkbox"/>		<input checked="" 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"/>

**Design Variances to GDOT standard criteria anticipated:**

GDOT Standard Criteria	Reviewing Office	YES	Appvl Date (if applicable)	NO	Undetermined
1. Access Control - Median Opening Spacing	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	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:

The Value Engineering Study is due to be held after the Concept Report approval and during the Preliminary Plan development.

**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

The proposed project is listed in the Gainesville-Hall Metropolitan Planning Organization’s FY 2012-2017 Transportation Improvement Program as GH-078 and is described as the widening of Lanier Islands Parkway from McEver Road to Lake Lanier Islands. The proposed number of lanes is shown as three, and the open to traffic year is listed as 2018. The proposed project is exempt from the conforming plan since it does not add capacity.

**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 checked="" type="checkbox"/>	<input type="checkbox"/>	USACE (United States Army Corps of Engineers)
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lake Lanier
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FEMA map shows flood hazard areas
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Although a cemetery exists in the project corridor, it is assumed no R/W would be required from it
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:** The anticipated level of documentation would be a categorical exclusion. Lake Lanier and the surrounding USACE (United States Army Corps of Engineers) owned property is considered a 4(f) resource. There are potentially eligible historic resources and a cemetery located along the corridor.

**Ecology:** An Ecology Survey and Assessment of Effects Report will be prepared. Two state protected species (Indian olive and Ozark bunchflower) are known to occur within three miles of the project. The survey seasons for these species are late April to early June and May to July, respectively.

Coordination with the United States Army Corps of Engineers would be required for any impacts to Lake Lanier. If any fill is required that would reduce the capacity of Lake Lanier then this loss of this storage would need to be mitigated in another area of the lake.

**History:** There are National Register of Historic Places potentially eligible structures in the project corridor. A full history survey will be conducted and a Historic Resources Survey Report and Assessment of Effects Report will be prepared. SHPO (State Historic Preservation Office) concurrence will be required.

**Archeology:** The New Bethany Church cemetery is located along the project corridor. A Phase I Archaeological Survey will be conducted. If any sites are found, SHPO concurrence will be required.

**Air & Noise:**

A full Air Quality Impact Assessment and Noise Impact Assessment will be required. Noise barriers are not expected to be feasible due to breaks needed to maintain driveway and side street access.

**Public Involvement:** A Public Information Open House (PIOH) will be required for this project. The need for additional outreach is not anticipated.

**Major stakeholders:** Boaters, Lake Lanier Islands, United States Army Corps of Engineers, New Bethany Baptist Church, Business Owners and Residences (Home / Property Owners).

## CONSTRUCTION

**Issues potentially affecting constructability/construction schedule:** Some issues that may affect the constructability / construction schedule include higher than normal traffic volumes due to holiday and / or summer events at the Lake Lanier Island Park and local marinas. There may be a need for time restrictions along with the standard holiday restrictions for construction of this roadway in the summer months.

**Early Completion Incentives recommended for consideration:**  No  Yes

## PROJECT RESPONSIBILITIES

**Project Activities:**

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Office of Roadway Design
Design	GDOT Office of Roadway Design
Right-of-Way Acquisition	GDOT Office of Right of Way
Utility Relocation	Utility Owner
Letting to Contract	GDOT Office of Contracts
Construction Supervision	GDOT Office of Construction
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	GDOT Office of Environmental Services (Atkins)
Environmental Mitigation	Contractor
Construction Inspection & Materials Testing	GDOT Office of Construction and Office of Materials and Research

**Lighting required:**  No  Yes

Note: Lighting requirement is for proposed roundabout

**Concept Meeting:** The Project Manager discussed the 2013 Right of Way Plan due date, the 2014 construction let date and mentioned the project would be designed within the Roadway Design office while the Environmental work would be completed by the Consultant Atkins. The existing two-lane; two-way road is being widened to include a 14 foot wide center left turn lane with curb and gutter on both sides of the roadway, a 10 foot wide multi use path to the North and a 5 foot wide sidewalk to the South of the alignment. The proposed project will tie to the existing raised island at the Lake Lanier end of the project and tie to the Phase I Projects sidewalk and curb and gutter at the McEver Road end of the project. The alignment will mainly follow the existing roadway, but will shift to the North of the existing roadway to avoid impacts to the cemetery and church property and will shift to the South of the existing alignment near the Lazy Day Marina to provide a larger radius and improve sight distance along the road in this area. There appears to be more Right of Way between Beards Road and McEver Road than between Lake Lanier and Beards Road and the alignment will reside on property already owned by the state DOT. Two side roads will be realigned and the intersection at Big Creek Road – New Bethany Road / SR 347 is proposed to be an intersection with two way stop control on the minor leg with consideration for a roundabout. Some major concerns with the proposed alignment include impacts to the Corp of Engineer property, the possibility of reducing the proposed 16 foot wide shoulder to the South of the project to reduce impacts and the 10 foot wide multi-use path proposal for bicyclist in lieu of a bicycle lane along the state route. Attached to the Concept Report are the details of this meeting.

Note: After the Concept Team Meeting, consideration for a roundabout at the Big Creek Road – New Bethany Road / SR 347 intersection was further evaluated and it was determined the roundabout would be the more desirable alternative for this area where residential development is anticipated. This area already has two roundabouts within the Lake Lanier islands and the cost of including the roundabout in the original corridor construction and within this new location area is less costly than it would be if construction of the roundabout, as a separate project, were to take place at a later date.

**Other projects in the area:**

- P.I. # 170735 – SR 347 / Lanier Island Parkway from I-985 to CR 1293 / McEver Road – Phase I. This project will widen and reconstruct existing two-lane; two-way SR 347 to a four-lane; two-way roadway with a 20 foot raised median, 16 foot urban shoulders and 5 foot wide sidewalk.
- P.I. # 162430 – SR 347 / Friendship & Thompson Mill Road from I-985 to SR 211. The proposed project would reconstruct, widen and relocate the existing SR 347 two lane roadway into a six and four lane roadway.
- P.I. # 0001821 – CR 1293 McEver Road widen from SR 347 to CR 537. This project will reconstruct and rehabilitate CR 1293 McEver Road from SR 347 to CR 537.

**Other coordination to date:** There has been coordination with the Engineering Director, the Project Manager, a GDOT Board Member and the current property owners of land to the North of SR 347 between Merritt Drive and North Waterworks Road concerning the Proposed Mill Creek development and how the SR 347 widening / construction will impact the land development.

**Project Cost Estimate and Funding Responsibilities:**

	<b>Breakdown of PE</b>	<b>ROW</b>	<b>Reimbursable Utility</b>	<b>CST*</b>	<b>Environmental Mitigation</b>	<b>Total Cost</b>
By Whom	State/Federal	Locals	Locals	State/Federal	-	
\$ Amount	510,000.00	4,920,000.00	113,400.00	10,260,471.20	-	15,803,871.20
Date of Estimate	11/28/2011	12/17/2012	9/26/2012	12/14/2012		

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

**ALTERNATIVES DISCUSSION**

**Alternative selection:**

**Preferred Alternative:** This alternative proposes one 12-ft travel lane in each direction along with a 14-ft center left turn lane throughout the length of the project from the existing raised median at Lake Lanier Islands to just west of McEver Road. The proposed typical section will also include a 2.5-ft curb and gutter on both sides of the roadway, a 10-ft multi-use path on one side of the roadway with a 5-ft sidewalk on the opposite side. The proposed four leg intersection at SR 347 and Big Creek Road/ New Bethany Road is proposed to be a roundabout design.

<b>Estimated Property Impacts:</b>	<b>31</b>	<b>Estimated Total Cost:</b>	<b>\$15,803,871.20</b>
<b>Estimated ROW Cost:</b>	<b>\$4,920,000.00</b>	<b>Estimated CST Time:</b>	<b>2.5 years</b>

**Rationale:** This alternative satisfies the goals outlined in the Project Justification Statement by adding a left turn lane throughout the length of the project and right turn lanes where necessary. Compared to the intersection alternative, the roundabout alternative requires an increase to property cost, Right of Way (ROW), total cost and construction time as well as an increase in design time since a roundabout design requires a planning level assessment, a feasibility study and a peer review; however, including a roundabout at this new location today is less costly versus retrofitting a roundabout into an existing intersection and location at a later date.

**Alternative1:** This alternative is similar to the preferred alternative except the proposed four leg intersection of SR 347 with Big Creek Road and New Bethany Road is proposed to be a two-way stop controlled intersection with a stop condition on the minor roadway.

<b>Estimated Property Impacts:</b>	<b>30</b>	<b>Estimated Total Cost:</b>	<b>\$14,104,416.16</b>
<b>Estimated ROW Cost:</b>	<b>\$3,807,000.00</b>	<b>Estimated CST Time:</b>	<b>2 years</b>

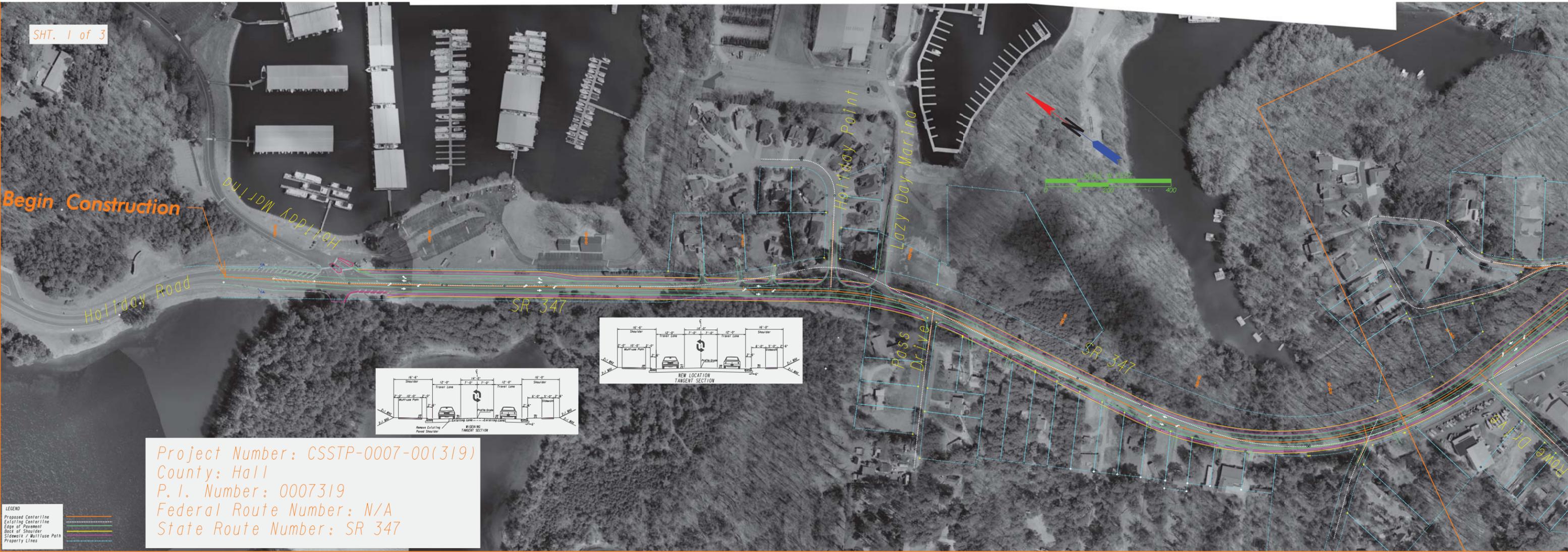
**Rationale:** This alternative also satisfies the goals outlined in the Project Justification Statement by adding a left turn lane throughout the length of the project and right turn lanes where necessary. This alternative will provide an efficient means to reduce design time as well as reduce cost to property, ROW, total cost and construction time in the short term; however, installing a roundabout with the initial design would be less costly in the long term if, after initially installing an intersection, there is a desire to modify the intersection to include a roundabout. Retrofitting a roundabout into an existing intersection and location at a later date would result in added Traffic Control cost along with additional inconvenience to the traveling public and may result in an increase to ROW, property cost and total cost.

**Alternative 2:** This alternative is mill and overlay of the existing two-lane; two-way roadway which includes the approximate 11-ft to 12-ft wide travel lanes, exclusive 12-ft to 16-ft right turn and left turn lanes at some locations between Beards Road and McEver Road and 0 to 10-ft variable width rural shoulder on both sides of the roadway from the Lake Lanier Marina to McEver Road.

<b>Estimated Property Impacts:</b>	<b>0</b>	<b>Estimated Total Cost:</b>	<b>\$5,758,815.91</b>
<b>Estimated ROW Cost:</b>	<b>\$0.00</b>	<b>Estimated CST Time:</b>	<b>6 months</b>

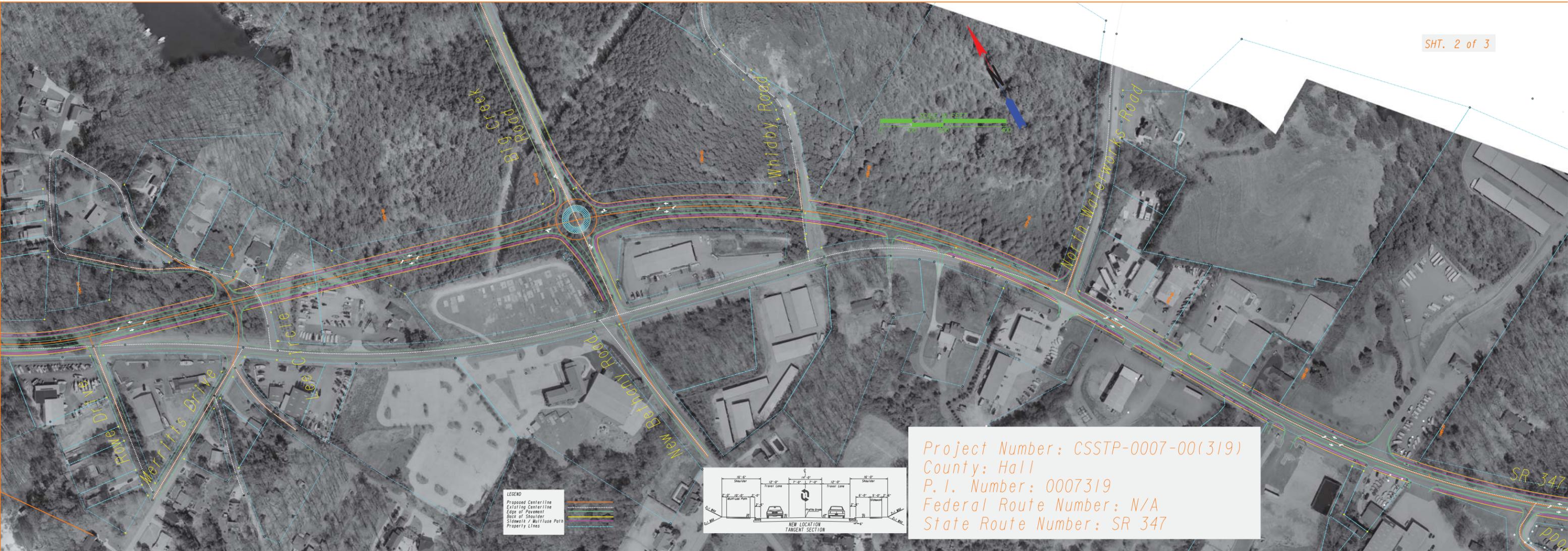


SHT. 1 of 3



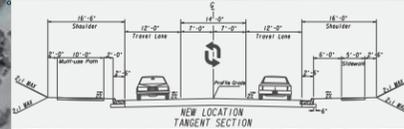
Project Number: CSSTP-0007-00(319)  
 County: Hall  
 P. I. Number: 0007319  
 Federal Route Number: N/A  
 State Route Number: SR 347

SHT. 2 of 3



LEGEND

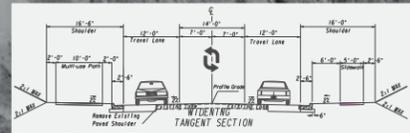
- Proposed Centerline
- Existing Centerline
- Edge of Pavement
- Back of Shoulder
- Sidewalk / Mill/Use Path
- Property Lines



Project Number: CSSTP-0007-00(319)  
 County: Hall  
 P. I. Number: 0007319  
 Federal Route Number: N/A  
 State Route Number: SR 347

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County: Hall  
P. I. Number: 0007319  
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LEGEND  
Proposed Centerline  
Existing Centerline  
Edge of Pavement  
Back of Shoulder  
Sidewalk / Mill/Use Path  
Property Lines  
Phase 1 Project

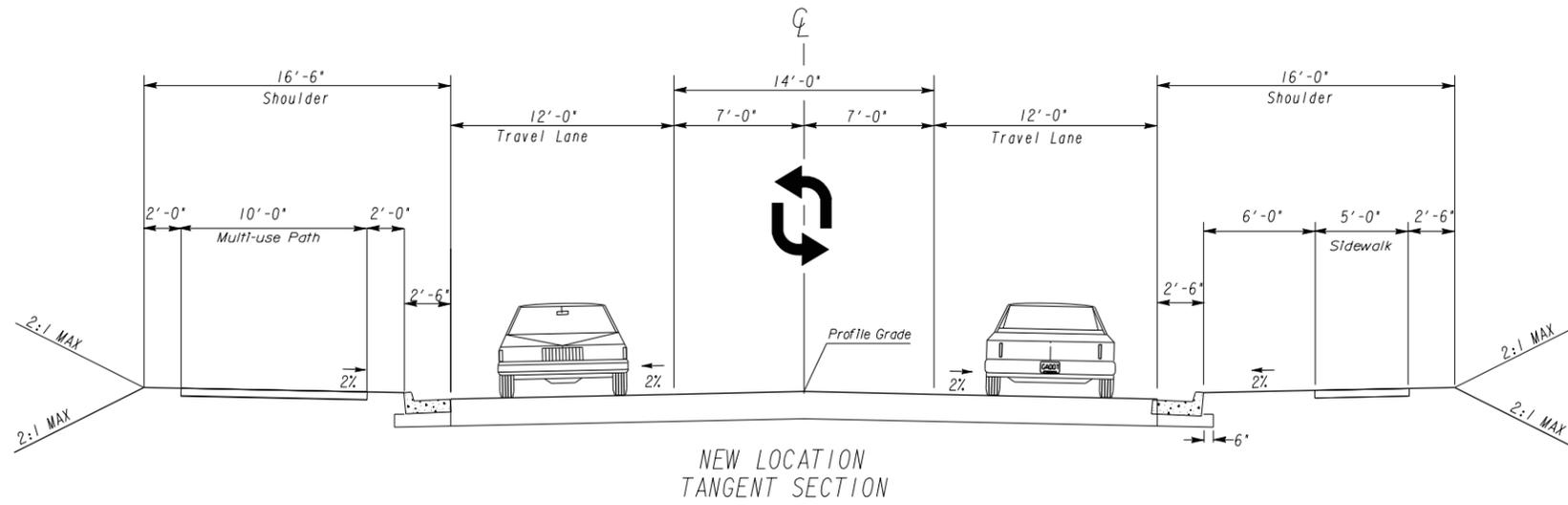
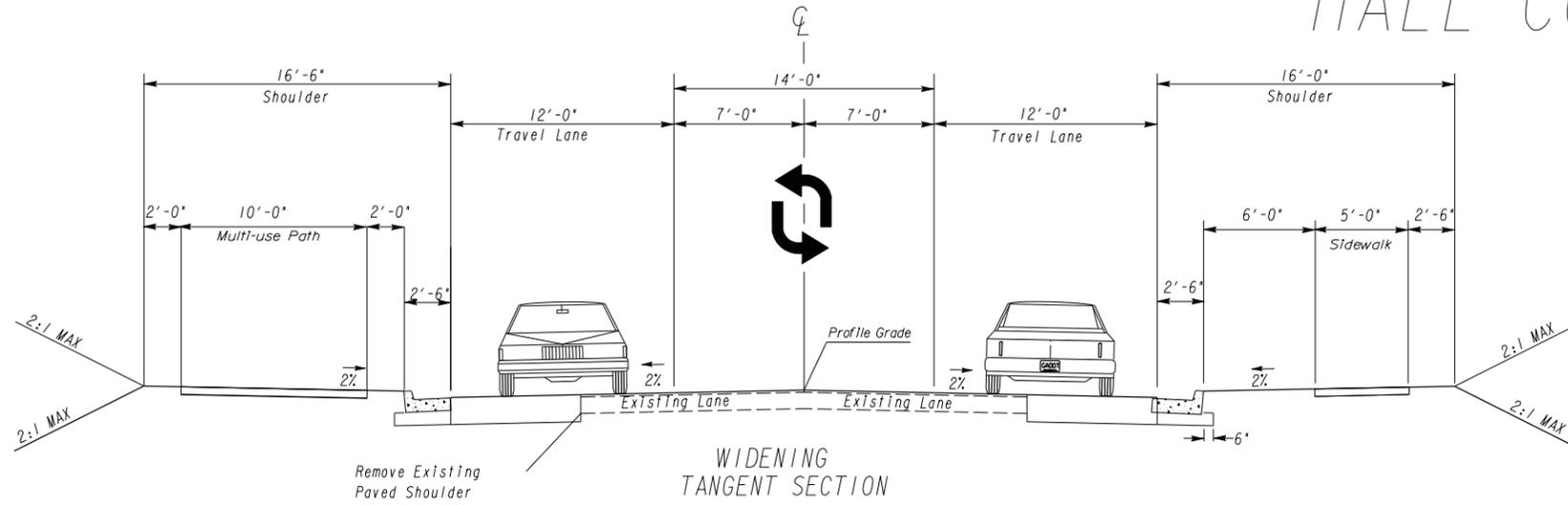


End Construction

SHT. 3 of 3



P. I. #0007319 - SR347  
HALL COUNTY



**PROJ. NO.:**  
**P.I. NO.** 0007319  
**DATE:** 12/14/2012

<b>Base Construction Cost</b>		\$	8,278,309.17
E & I	5%	\$	413,915.46
Construction Contingency	0%	\$	-
<b>Subtotal Construction Cost</b>		\$	8,692,224.63
Liquid AC Adjustment (50 % cap)		\$	1,568,246.57
<b>Total Construction Cost</b>		\$	10,260,471.20

**DETAILED COST ESTIMATE****Job: 0007319**

JOB NUMBER: 0007319

FED/STATE PROJECT NUMBER CSSTP-0007-00(319)

SPEC YEAR: 01

DESCRIPTION: SR 347/FRIENDSHIP RD FM MCEVER RD TO LAKE LANIER - PHASE II  
LANIER ISLANDS PARKWAY

**ITEMS FOR JOB 0007319****0010 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$500,000.00000	TRAFFIC CONTROL - CSSTP-0007-00(319) HALL	\$500,000.00
0010	153-1300	1.000	EA	\$69,347.29000	FIELD ENGINEERS OFFICE TP 3	\$69,347.29
0015	210-0100	1.000	LS	\$2,500,000.00000	GRADING COMPLETE - CSSTP-0007-00(319) HALL	\$2,500,000.00
0035	441-0014	800.000	SY	\$15.90573	DRIVEWAY CONCRETE, 4 IN TK	\$12,724.58
0020	441-0104	22000.000	SY	\$35.15000	CONC SIDEWALK, 4 IN	\$773,300.00
0030	441-4020	1250.000	SY	\$29.70858	CONC VALLEY GUTTER, 6 IN	\$37,135.73
0025	441-6022	26400.000	LF	\$11.66163	CONC CURB & GUTTER, 6"X30"TP2	\$307,867.03
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$4,200,374.63</b>

**COST GROUP FOR JOB 0007319**

LINE NUMBER	UNIT	CALCULATION RULE	QUANTITY	PRICE	COST GROUP ID	DESCRIPTION	AMOUNT
00000001	TN	NORM	32274.000	\$83.07	ASPH	ASPHALT (TN)	\$2,680,974.72
00000002	TN	NORM	36960.000	\$19.50	BASE	BASE/AGGREGATE (TN)	\$720,838.27
00000003	LF	PCTO	39983.698	\$4.67	DRNGPCTO	DRAINAGE (PERCENT OF JOB)	\$186,723.87
00000004	SY	PCTO	39983.698	\$4.46	EROCPCO	EROSION CONTROL (PERCENT OF JOB)	\$178,327.29
00000005	LF	PCTO	39983.698	\$4.22	GDRLPCTO	GUARDRAIL/BARRIER (PERCENT OF JOB)	\$168,731.20
00000006	SY	PCTO	39983.698	\$0.47	MILLPCTO	MILLING (PERCENT OF JOB)	\$18,792.34
00000007	LM	PCTO	39983.698	\$0.50	PVMKPCTO	PAVEMENT MARKING (PERCENT OF JOB)	\$19,991.85
00000008	EA	PCTO	39983.698	\$0.60	SIGNPCTO	SIGNS (PERCENT OF JOB)	\$23,990.22
00000009	EA	PCTO	39983.698	\$1.66	LTNGPCTO	LIGHTING (PERCENT OF JOB)	\$66,372.94
<b>SUBTOTAL:</b>							<b>\$4,064,742.70</b>

**TOTALS FOR JOB 0007319**

<b>ITEMS COST:</b>	<b>\$4,200,374.63</b>
<b>COST GROUP COST:</b>	<b>\$4,064,742.70</b>
<b>ESTIMATED COST:</b>	<b>\$8,278,309.17</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.00</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.00</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$8,278,309.17</b>

<b>PROJ. NO.</b>	CSSTP-117-00(319)
<b>P.I. NO.</b>	0007319
<b>DATE</b>	12/14/2012

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Dec-12	\$ 3.276
DIESEL		\$ 3.997
LIQUID AC		\$ 568.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

**LIQUID AC ADJUSTMENTS**

$PA = \left( \frac{APM - APL}{APL} \right) \times TMT \times APL$

**Asphalt**

Price Adjustment (PA)				<b>1554048</b>	\$	<b>1,554,048.00</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	908.80		
Monthly Asphalt Cement Price month project let (APL)			\$	568.00		
Total Monthly Tonnage of asphalt cement (TMT)				4560		

ASPHALT	Tons	%AC	AC ton
Leveling	400	5.0%	20
12.5 OGFC		5.0%	0
12.5 mm	32000	5.0%	1600
9.5 mm SP		5.0%	0
25 mm SP	16100	5.0%	805
19 mm SP	42700	5.0%	2135
	<b>91200</b>		<b>4560</b>

**BITUMINOUS TACK COAT**

Price Adjustment (PA)				\$	<b>14,198.57</b>	\$	<b>14,198.57</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	908.80			
Monthly Asphalt Cement Price month project let (APL)			\$	568.00			
Total Monthly Tonnage of asphalt cement (TMT)							41.66247894

Bitum Tack

Gals	gals/ton	tons
9700	232.8234	41.6624789

**PROJ. NO.** CSSTP-117-00(319)  
**P.I. NO.** 0007319  
**DATE** 12/14/2012

CALL NO.

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)					<b>0</b>	\$	-
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$	908.80		
Monthly Asphalt Cement Price month project let (APL)				\$	568.00		
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
					0

**TOTAL LIQUID AC ADJUSTMENT** \$ **1,568,246.57**

GEORGIA DEPARTMENT OF TRANSPORTATION  
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 12/17/2012  
Revised:

Project: CSSTP-007-00(319) Hall  
County: Hall  
PI: 0007319

Description: McEver Rd To Lanier Islands  
Project Termini: Widening of SR 347 Holiday Rd fm McEver Road to Lanier Islands

Existing ROW: Varies  
Required ROW: Varies  
Parcels: 31

Land and Improvements \$4,229,493.75

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$1,200,000.00

Valuation Services \$57,500.00

Legal Services \$208,425.00

Relocation \$117,000.00

Demolition \$40,000.00

Administrative \$267,000.00

TOTAL ESTIMATED COSTS \$4,919,418.75

**TOTAL ESTIMATED COSTS (ROUNDED) \$4,920,000.00**

Preparation Credits	Hours	Signature

Prepared By: Lashana Alexander ICG# 286999 12/17/2012  
 Approved By: Sharon Boyde ICG# 286999 12/17/2012

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

FILE CSSTP-0007-00(319) Hall County OFFICE Gainesville  
P.I. No. 0007319  
SR 347 Widening DATE September 26, 2012

FROM Neil A. Kantner, P.E. *NAK*  
District Utilities Engineer

TO Ryan Fernandez, Project Manager, Office of Program Delivery

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for the subject project.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
AT&T	\$348,180.00	\$ 0.00
Atlanta Gas Light	\$379,260.00	\$ 0.00
City of Buford-Electrical*	\$283,500.00	\$ 0.00
Charter-CATV	\$ 46,410.00	\$ 0.00
Sawnee EMC-Electrical	\$737,100.00	\$ 113,400.00
City of Gainesville-Water*	\$870,030.00	\$ 0.00
<b>TOTAL</b>	<b>\$2,664,480.00</b>	<b>\$ 113,400.00</b>

	NON-REIMBURSABLE	REIMBURSABLE
Total Public and Private Utility Cost	\$2,644,480.00	\$ 113,400.00

\*Note: The reimbursable amount may increase if the Public Utilities are approved for utility assistance.

If you have any questions, please contact Neil Kantner at 770-532-5510.

NAK

C: Jeff Baker, State Utilities Engineer  
Angie Robinson, Office of Financial Management  
Matt Needham, Area Engineer  
File

P.I. # 0007319 - SR 347 MP 0.00 to MP 2.40

ACCIDENT RATE CALCULATION for year(s) 2006,2007,2008

**2006**

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2006	Hall	1	34700	0	2.4	3,990	2.4	9,576

		PROJECT AREA RATE	STATEWIDE RATE
Total Vehicle Miles: 9,576	Total Accidents: 13	Accident Rate: 372	Accident Rate: 548
Average ADT: 3,990	Total Injuries: 11	Injury Rate: 315	Injury Rate: 208
Length in Miles: 2.40	Total Fatalities: 0	Fatality Rate: 0.00	Fatality Rate: 1.55

NOTE: Rates are per 100 Million Vehicle Miles

**2007**

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2007	Hall	1	34700	0	2.4	2,940	2.4	7,056

		PROJECT AREA RATE	STATEWIDE RATE
Total Vehicle Miles: 7,056	Total Accidents: 17	Accident Rate: 660	Accident Rate: 514
Average ADT: 2,940	Total Injuries: 8	Injury Rate: 311	Injury Rate: 190
Length in Miles: 2.40	Total Fatalities: 0	Fatality Rate: 0.00	Fatality Rate: 1.47

NOTE: Rates are per 100 Million Vehicle Miles

**2008**

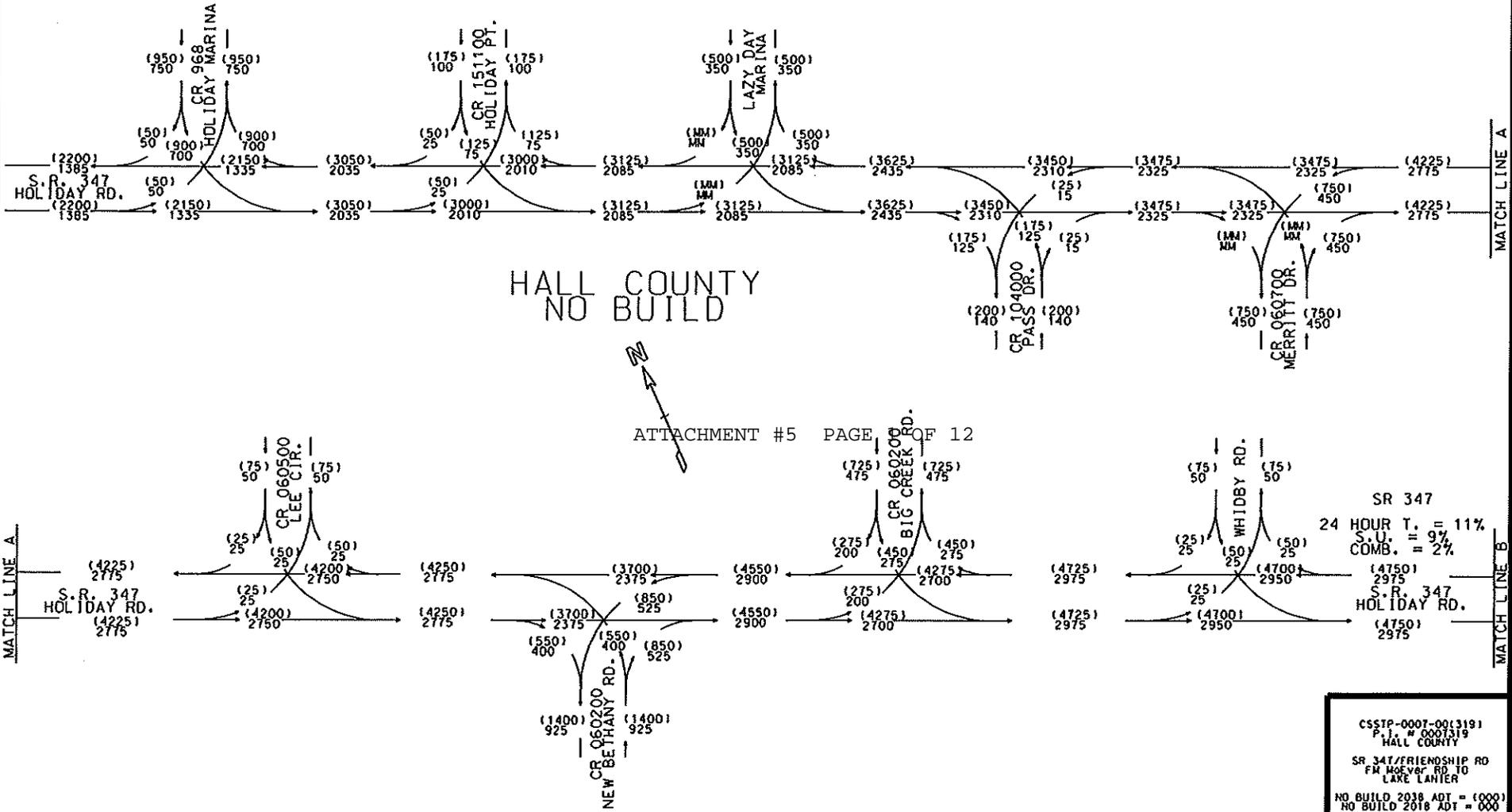
Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2008	Hall	1	34700	0	2.4	2,940	2.4	7,056

		PROJECT AREA RATE	STATEWIDE RATE
Total Vehicle Miles: 7,056	Total Accidents: 9	Accident Rate: 349	Accident Rate: 471
Average ADT: 2,940	Total Injuries: 2	Injury Rate: 78	Injury Rate: 176
Length in Miles: 2.40	Total Fatalities: 0	Fatality Rate: 0.00	Fatality Rate: 1.46

NOTE: Rates are per 100 Million Vehicle Miles

SHEET 1 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



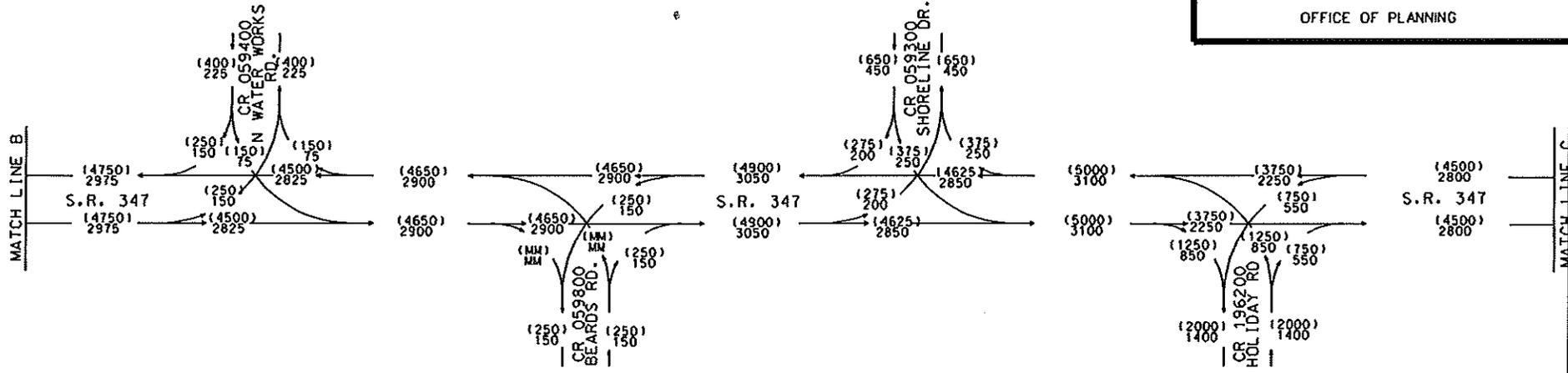
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24 HOUR T. = 11%  
S.U. = 9%  
COMB. = 2%  
(4750) 2975  
S.R. 347  
HOLIDAY RD.  
(4750) 2975

CSSTP-0007-00(319)  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MOYER RD TO  
LAKE LANIER  
NO BUILD 2018 ADT = 0000  
NO BUILD 2016 ADT = 0000

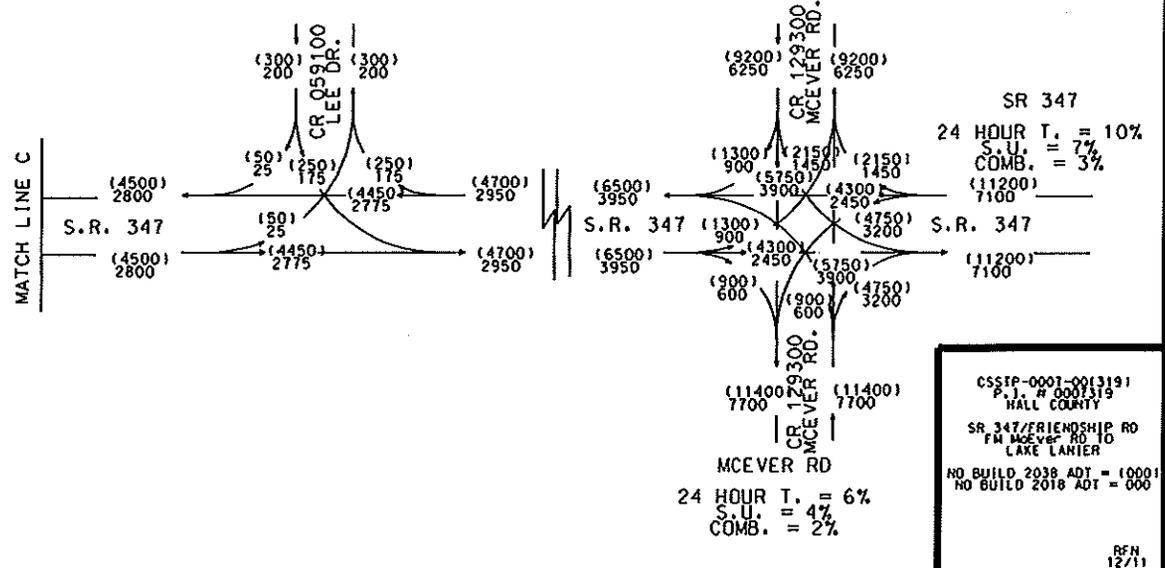
RFN  
12/11

SHEET 2 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING

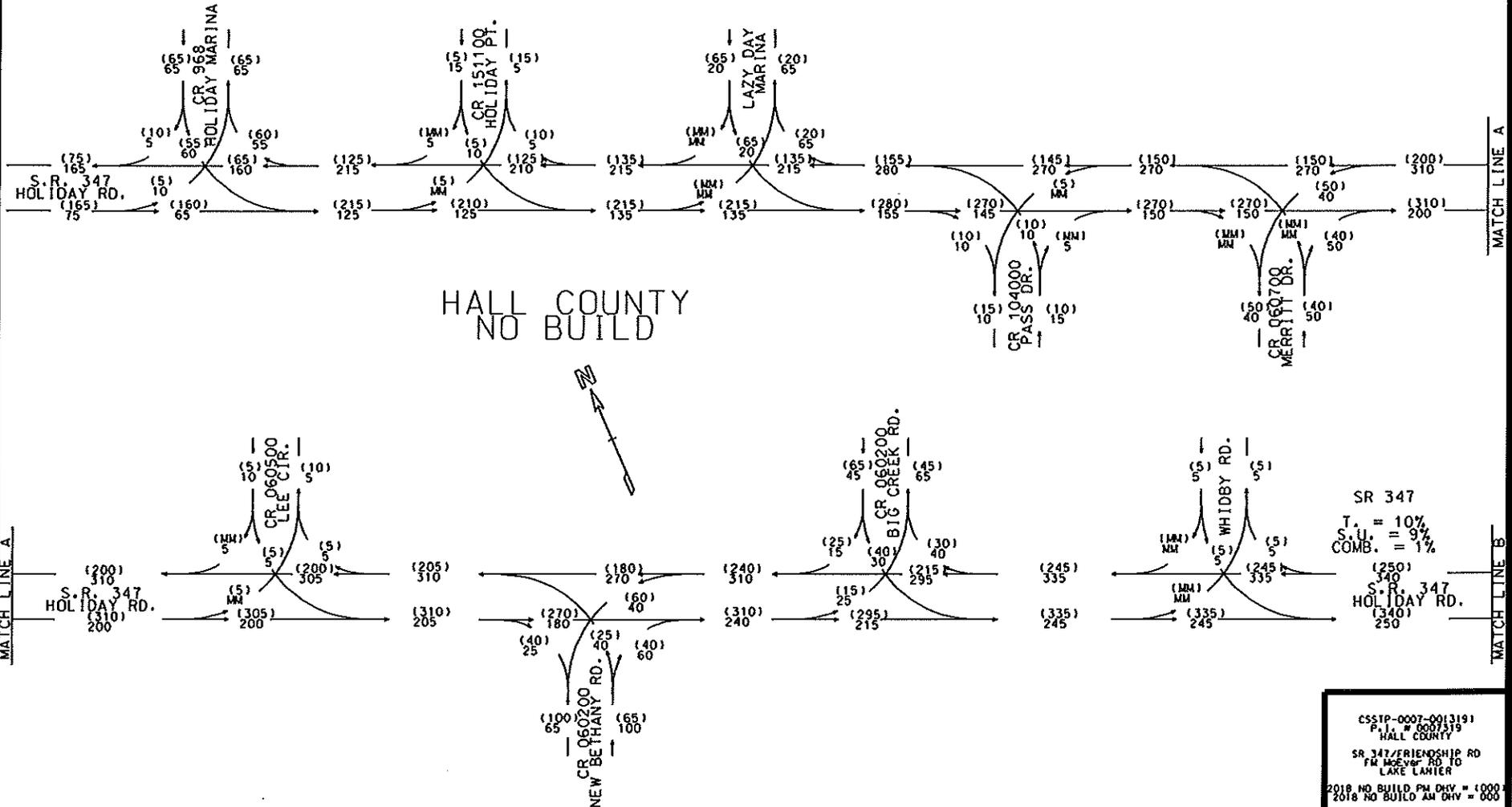


HALL COUNTY  
NO BUILD



SHEET 3 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



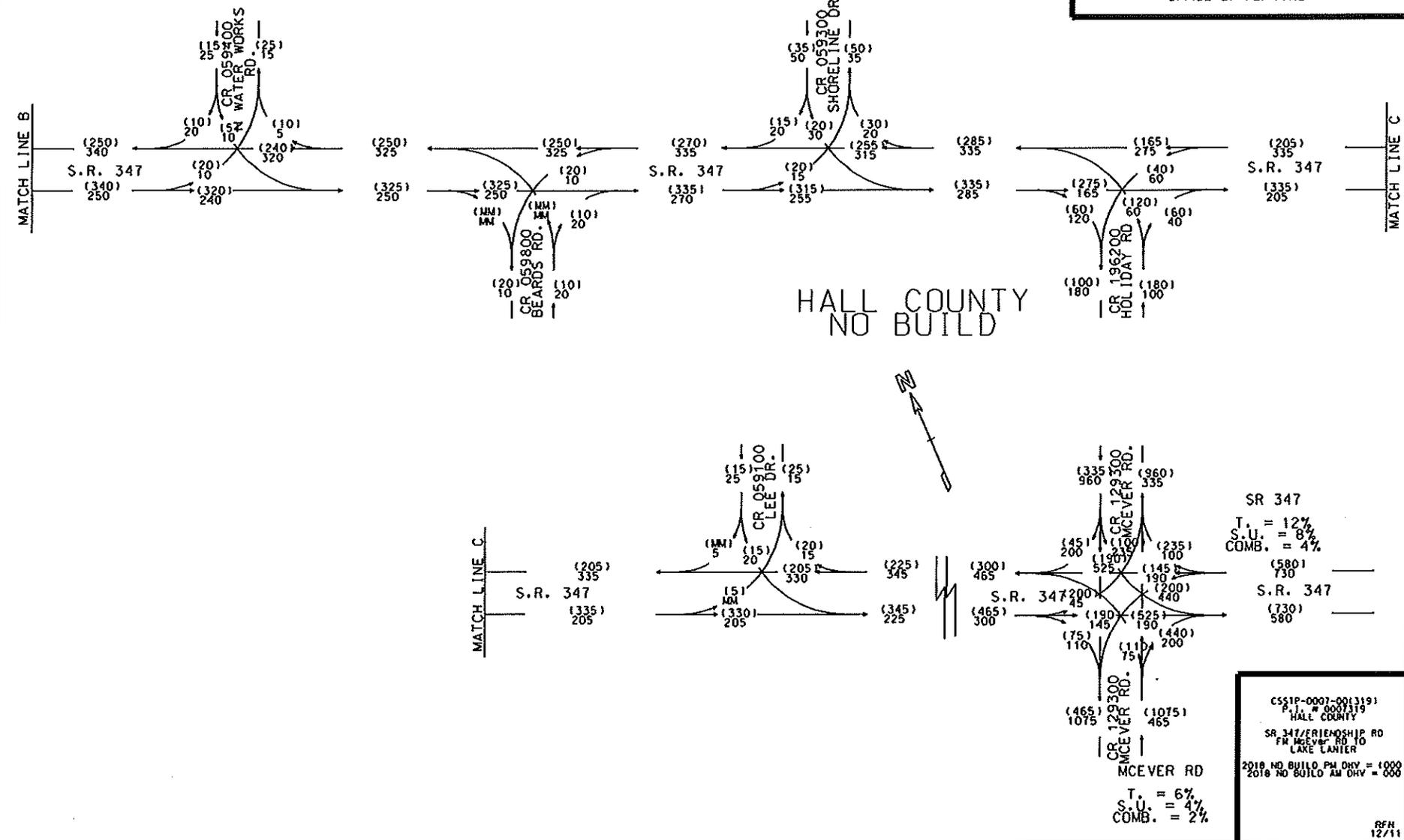
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S.U. = 9%  
COMB. = 1%  
S.R. 347  
HOLIDAY RD.  
(250)  
(340)  
(250)

CSSTP-0007-00(319)  
P.L. # 800119  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MOYER RD TO  
LAKE LANIER  
2018 NO BUILD PM DMY = 1000  
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RFN  
12/11

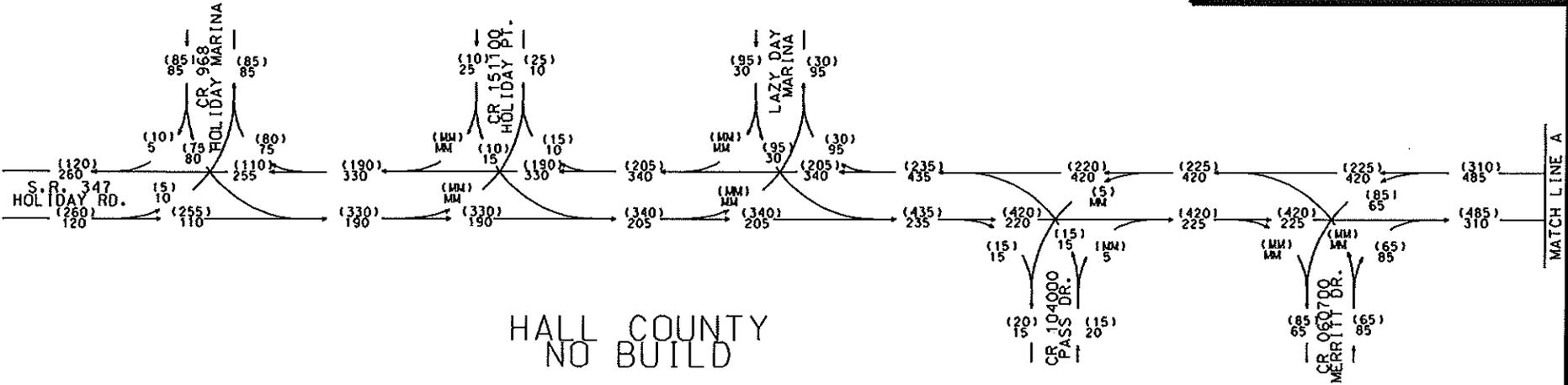
SHEET 4 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING

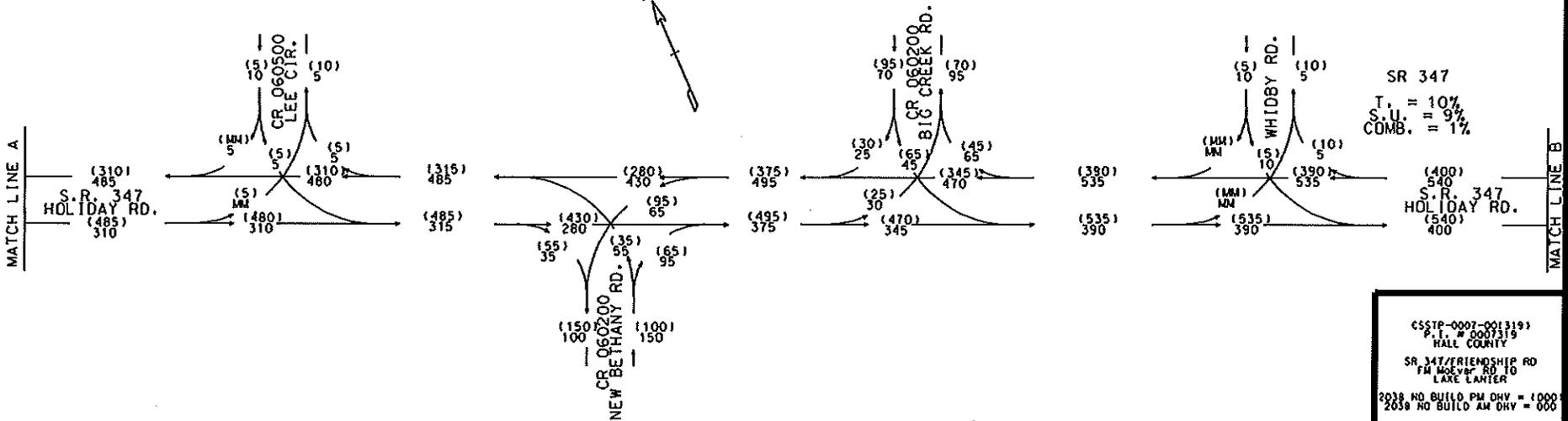


SHEET 5 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



HALL COUNTY  
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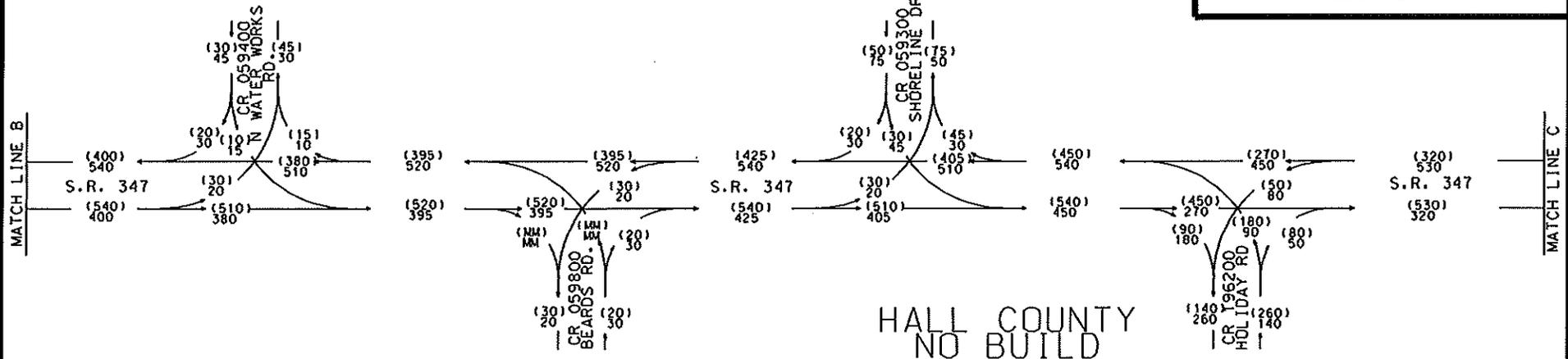
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COMB. = 1%

CSSTP-0007-001319  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MOEYER RD TO  
LAKE LANIER  
2038 NO BUILD PM OHV = 1000  
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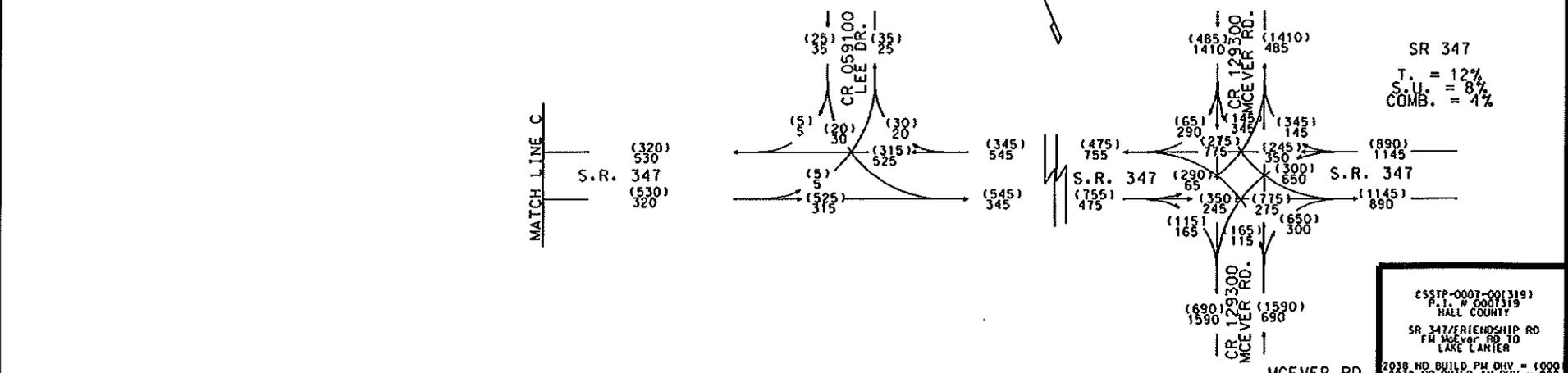
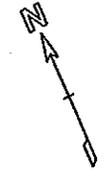
REN  
12/11

SHEET 6 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



HALL COUNTY  
NO BUILD



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S.U. = 8%  
COMB. = 4%

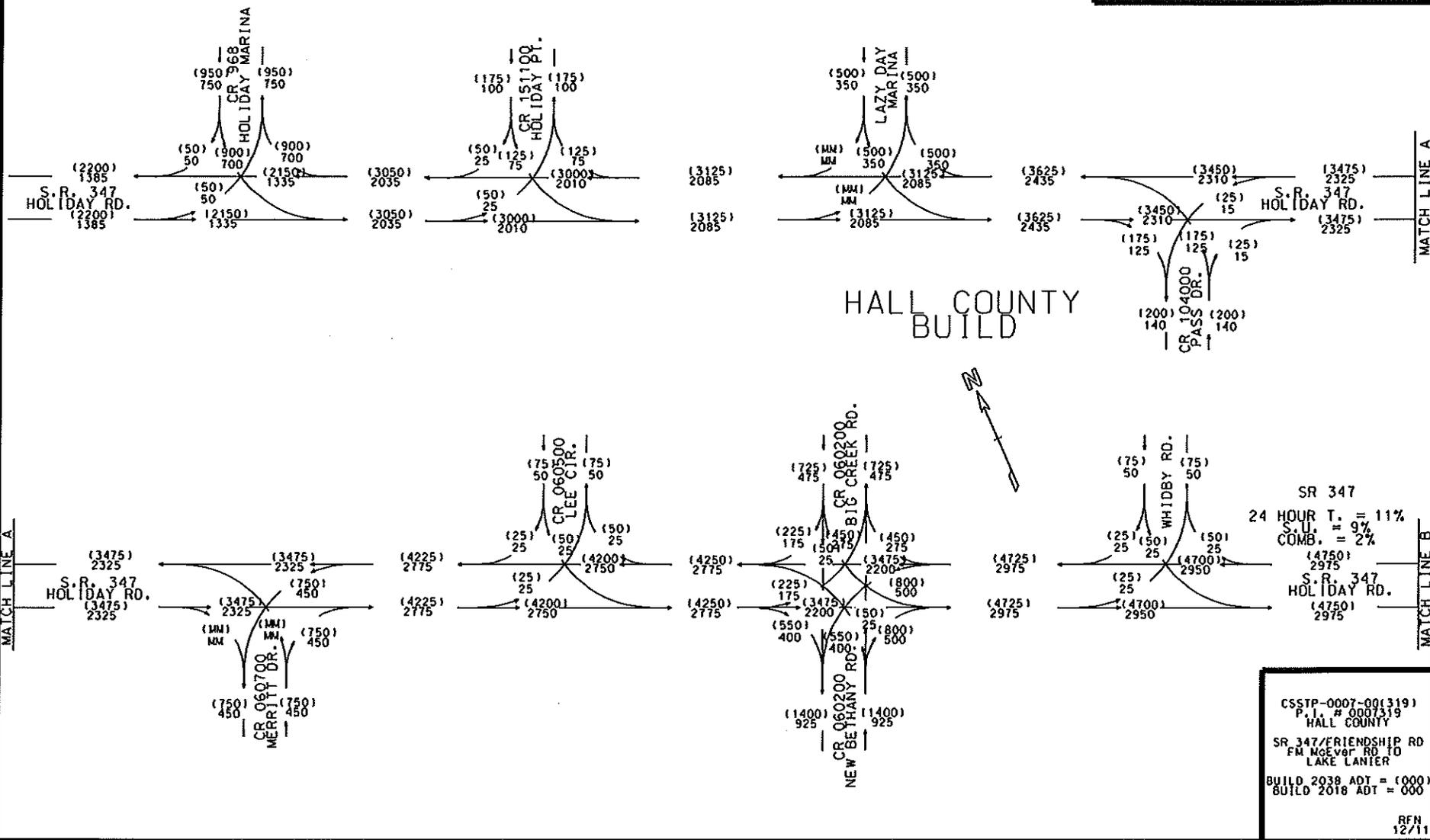
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P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MCEVER RD TO  
LAKE LANIER  
2038 NO BUILD PM DRY = 1000  
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MCEVER RD  
T. = 6%  
S.U. = 4%  
COMB. = 2%

RFH  
12/11

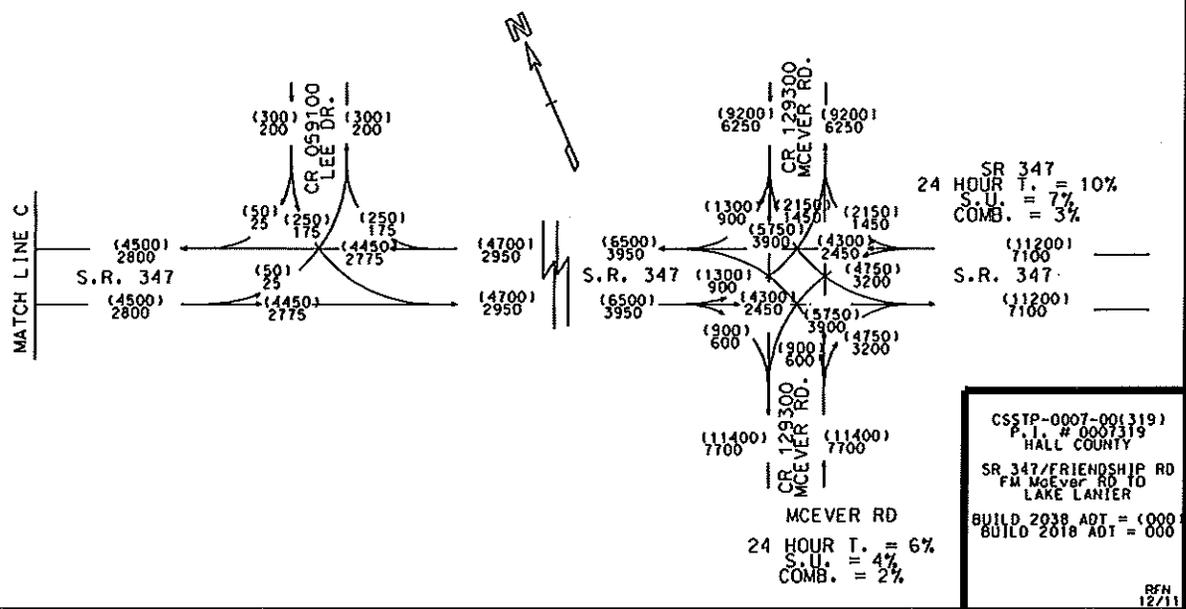
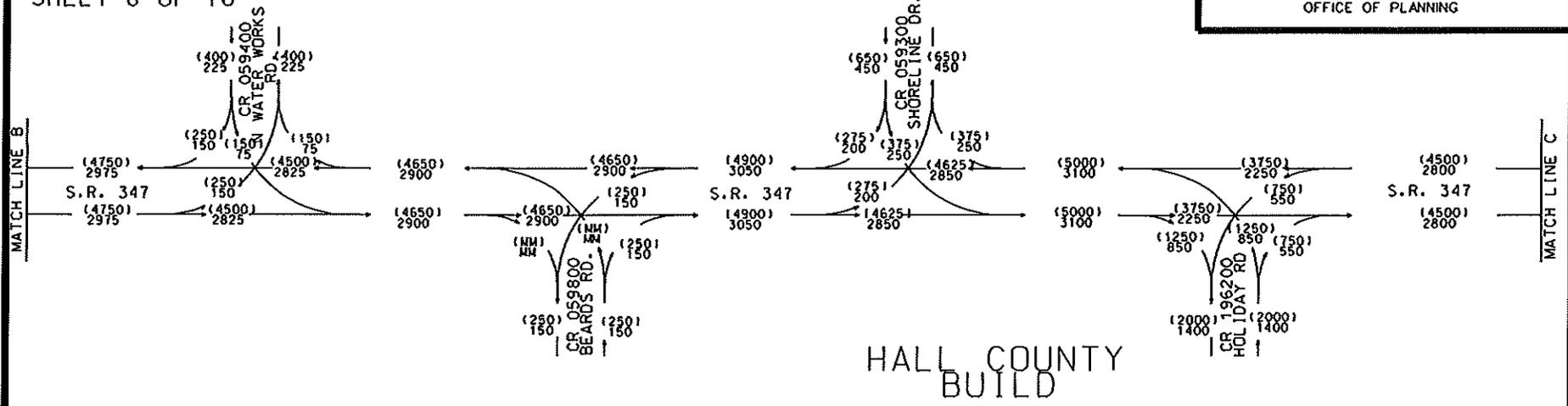
SHEET 7 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



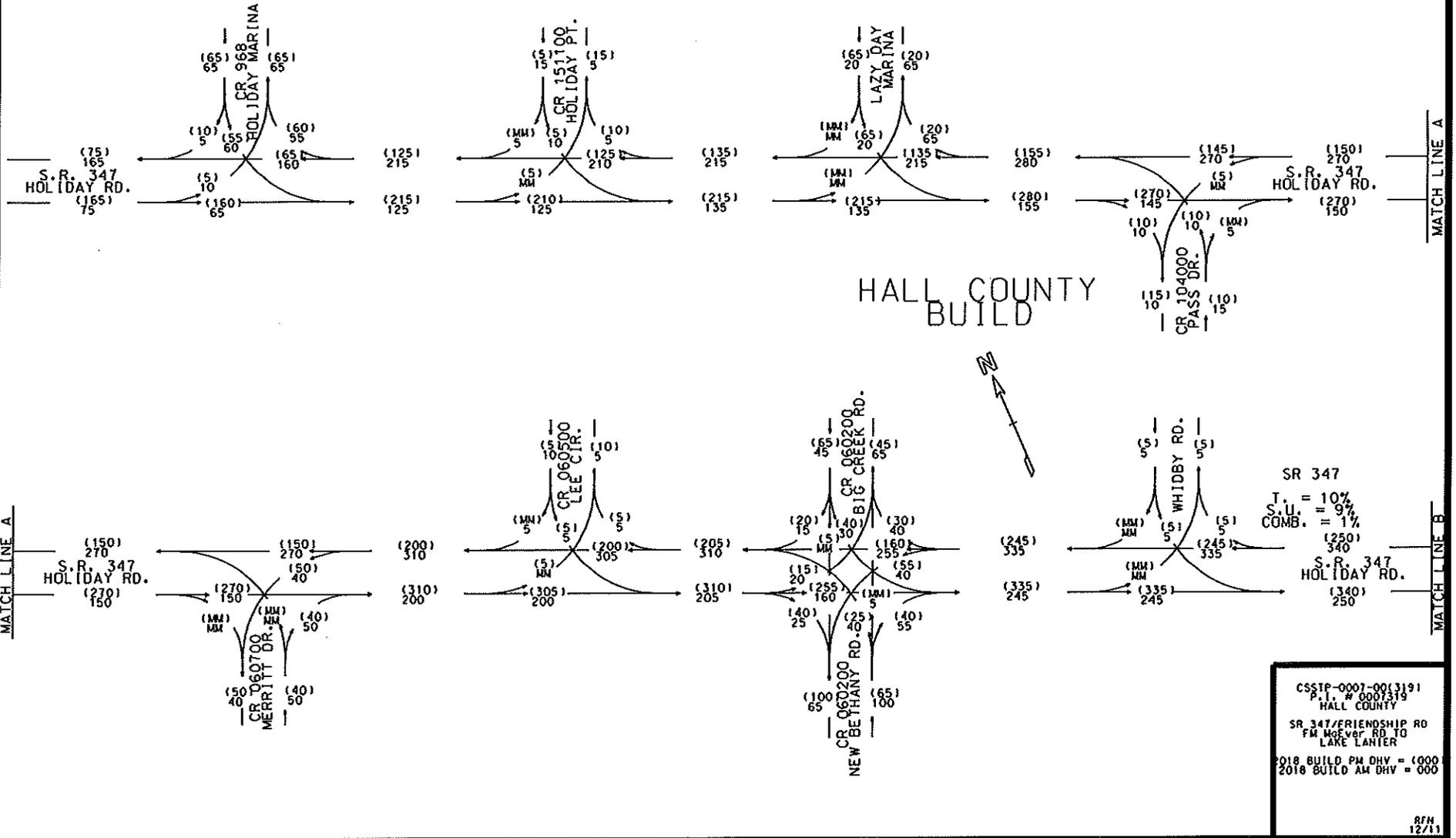
SHEET 8 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



SHEET 9 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



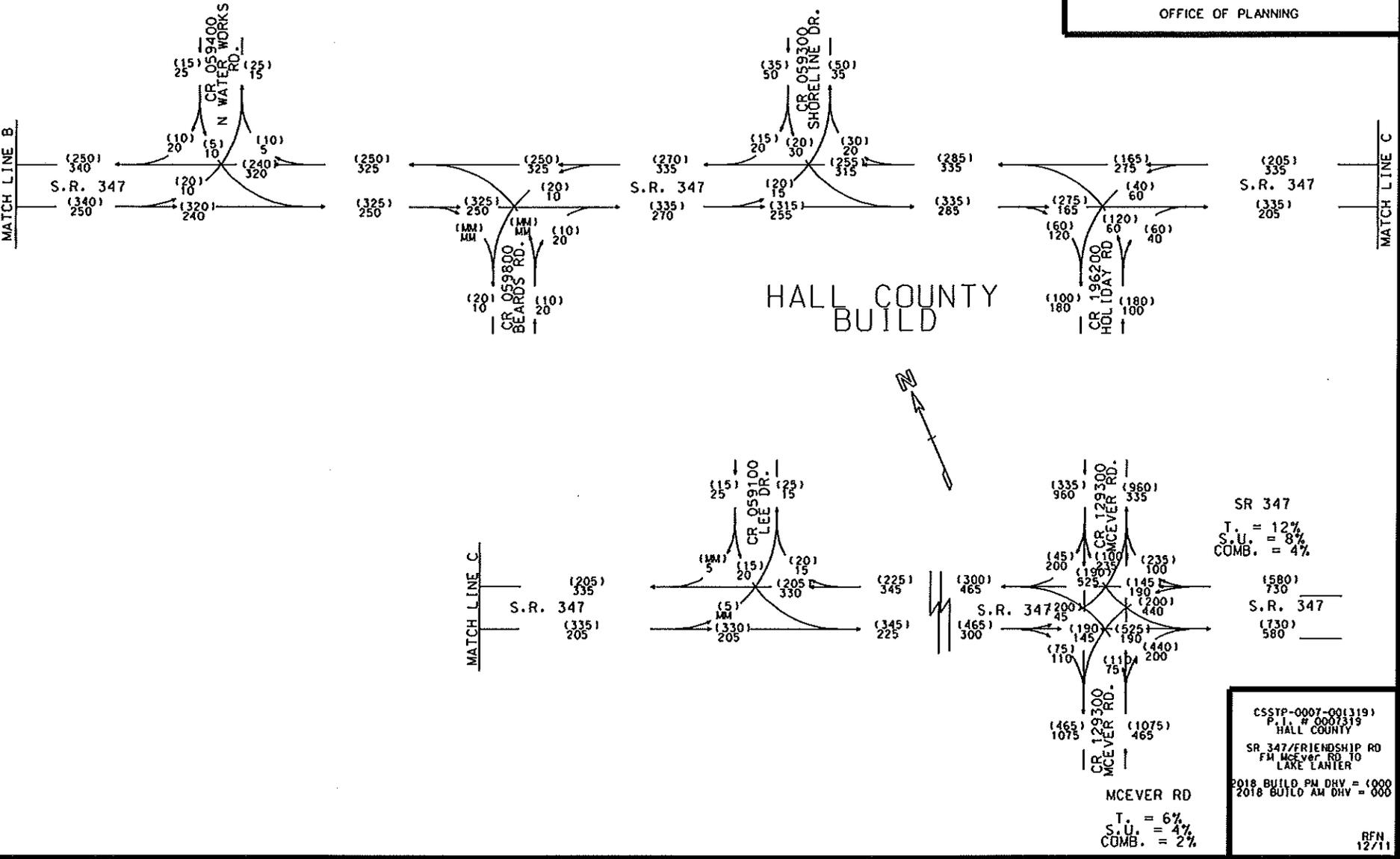
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S.U. = 9%  
COMB. = 1%  
(250) 340  
S.R. 347  
HOLIDAY RD.  
(340) 250

CSSTP-0001-00(319)  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM McEver RD TO  
LAKE LANIER  
2018 BUILD PM DHV = 1000  
2018 BUILD AM DHV = 000

RFM  
12/11

SHEET 10 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



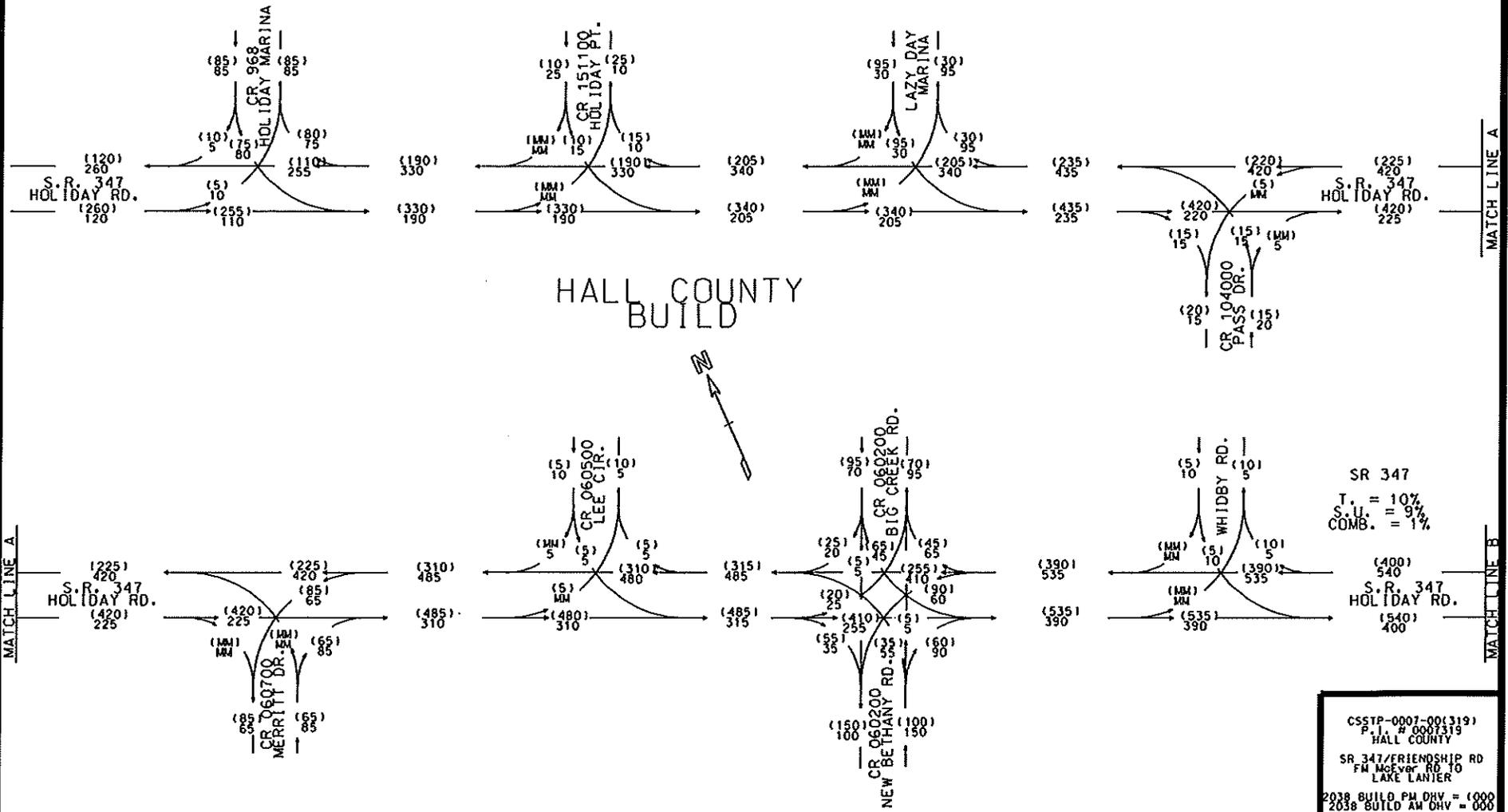
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S.U. = 8%  
COMB. = 4%

(580) 730  
S.R. 347  
(730) 580

CSSTP-0007-00(319)  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MCEVER RD TO  
LAKE LANIER  
2018 BUILD PM DIV = 000  
2018 BUILD AM DIV = 000  
RFN  
12/11

SHEET 11 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING

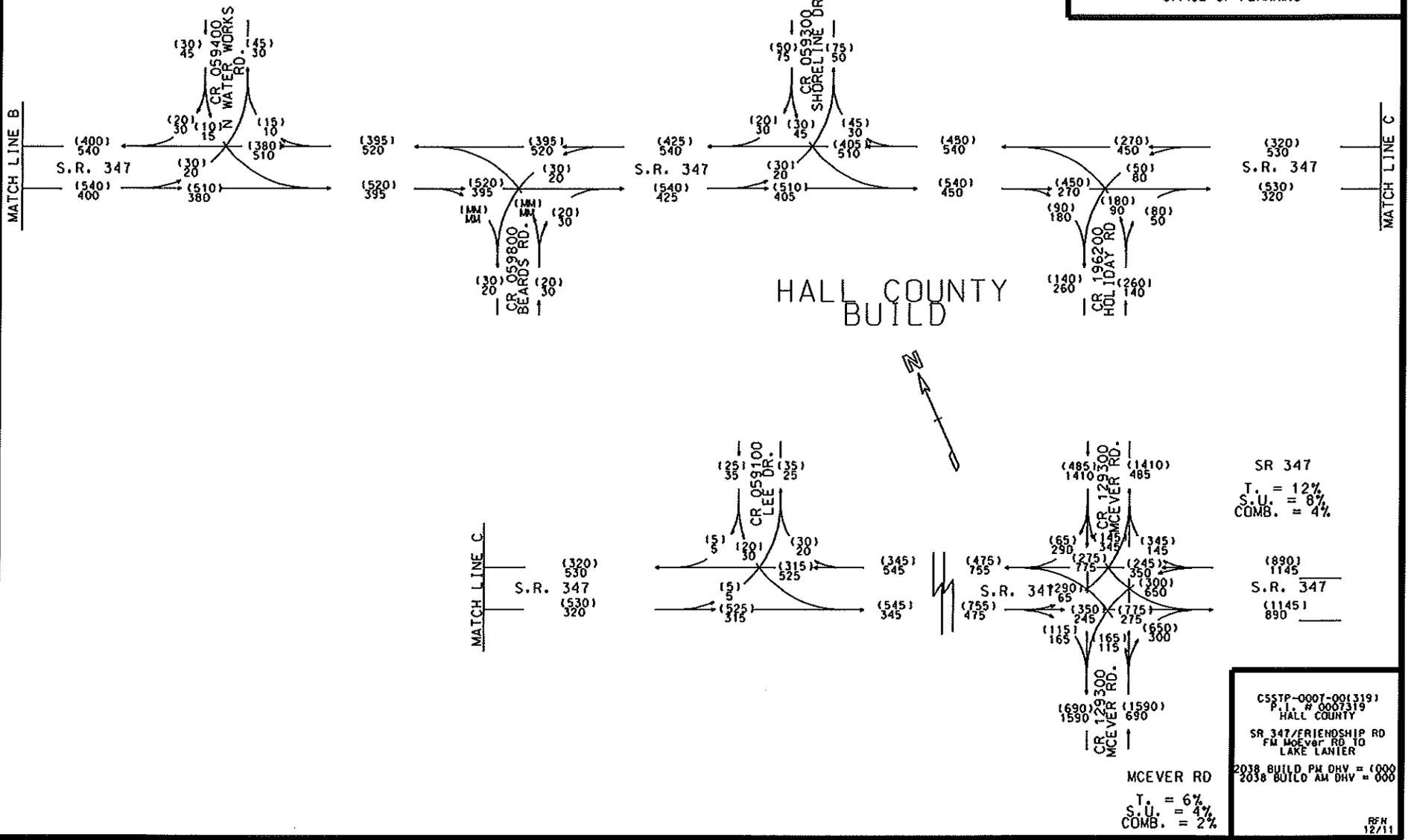


CSSTP-0007-00(319)  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM McEYER RD TO  
LAKE LANIER  
2038 BUILD PM OHV = 000  
2038 BUILD AM OHV = 000

RFN  
12/11

SHEET 12 OF 16

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF PLANNING



SR 347  
T. = 12%  
S.U. = 8%  
COMB. = 4%

(890) 1145  
S.R. 347  
(1145) 890

CSSTP-0007-001319  
P.L. # 0007319  
HALL COUNTY  
SR 347/FRIENDSHIP RD  
FM MCEVER RD TO  
LAKE LANIER  
2038 BUILD PM DHV = 0000  
2038 BUILD AM DHV = 0000

MCEVER RD  
T. = 6%  
S.U. = 4%  
COMB. = 2%

RFH  
12/11

July 17, 2012

P.I. # 0007319

CSSTP-0007-00(319)

Synchro Capacity Analysis Table

Page | 1

	<b>2018 AM Build</b>	<b>2018 AM No Build</b>	<b>2038 AM Build</b>	<b>2038 AM No Build</b>		<b>2018 PM Build</b>	<b>2018 PM No Build</b>	<b>2038 PM Build</b>	<b>2038 PM No Build</b>
Holiday Marina	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
Holiday Point	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
Lazy Day Marina	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A
Pass Drive	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
Merritt Drive	Appr. LOS – A ICU LOS - A	Appr. LOS – A ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
Lee Circle	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
New Bethany Rd		Appr. LOS – B ICU LOS - A		Appr. LOS – C ICU LOS - A			Appr. LOS – B ICU LOS - A		Appr. LOS – C ICU LOS - A
Big Creek Road - Unsignalized	Appr. LOS – B,C ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C,D ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – B,C ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C,E ICU LOS - A	Appr. LOS – C ICU LOS - A
Big Creek Road - Roundabout	ICU LOS - A		ICU LOS - A			ICU LOS - A		ICU LOS - A	
Big Creek Road- Signalized	Appr. LOS – A,B,A,A HCM LOS – A ICU LOS – A		Appr. LOS – B,B,C,C HCM LOS – B ICU LOS – A			Appr. LOS – B,A,A,A HCM LOS – A ICU LOS – A		Appr. LOS – B,B,C,C HCM LOS – B ICU LOS – A	
Whidby Road	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A
North Waterworks	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – B ICU LOS - A
Beards Road	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A
Shoreland Drive	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A
Holiday Road	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – E ICU LOS - A	Appr. LOS – E ICU LOS - A
Lee Drive	Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A		Appr. LOS – B ICU LOS - A	Appr. LOS – B ICU LOS - A	Appr. LOS – C ICU LOS - A	Appr. LOS – C ICU LOS - A

July 17, 2012

P.I. # 0007319

CSSTP-0007-00(319)

Synchro Capacity Analysis Table

Page | 2

- Approach Level of Service – Based on the approach control delay

- Intersection Capacity Utilization (ICU) Level of Service – Gives insight into how an intersection is functioning and how much extra capacity is available to handle traffic fluctuations and incidents. ICU is not a value that can be measured with a stopwatch, but it does give a good reading on the conditions that can be expected at the intersection.

<b>ICU</b>	<b>Level of Service</b>	<b>Interpretation</b>
0-60	A	Intersection has no congestion and can accommodate up to 40% more traffic on all movements
60-70	B	Intersection has very little congestion and can accommodate up to 30% more traffic on all movements
70-80	C	Intersection has no major congestion and can accommodate up to 20% more traffic on all movements
80-90	D	Intersection normally has no congestion and can accommodate up to 10% more traffic on all movements
90-100	E	Intersection is right on the verge of congested conditions and has less than 10% reserve capacity available
100-110	F	Intersection is over capacity and likely experiences congestion periods of 15 to 60 minutes per day
110-120	G	Intersection is 10% to 20% over capacity and likely experiences congestion periods of 60 to 120 minutes per day
120	H	Intersection is 20% over capacity and could experience congestion periods of over 120 minutes per day

- Highway Capacity Manual (HCM) Level of Service – A describes free-flow operations (free flow)

B describes reasonable free-flow operations (reasonably free flow)

C describes at or near free-flow operations (stable flow)

D describes decreasing free-flow levels (approaching unstable flow)

E describes operations at capacity (unstable flow)

F describes a breakdown in vehicular flow (forced or breakdown flow)

## Concept Team Meeting Minutes

**DATE:** May 29, 2012, 10:00 am, District 1 Office, Gainesville, GA

**SUBJECT:** SR 347/ Lanier Islands Parkway from Lake Lanier to McEver Road – Phase II

### ATTENDEES:

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- Ryan started the meeting by going around the room for introductions.
  - Ryan stated the project schedule milestones for Right of Way is 2013 and Let to construction is 2014.
  - Ryan stated a brief description of the project as follows:
    - Project justification statement is to improve SR 347 to address unacceptable levels of congestion
    - SR 347 is identified for the development of bike lanes in the Gainesville Hall MPO.
    - Address the high incidents of crashes at intersections.
  - Kyle Mote, the Planning representative, stated that ARC needs to change the project to a 2 lane existing with a center turn lane and he mentioned the Project Justification Statement was completed in the month of February and is up to date.
  - Sonya Sykes, the Roadway Design representative, went over the proposed design and alignment of the project.
    - The existing 2-lane; 2-way road is being widened to include a 14 foot wide center left turn lane
    - There will be curb and gutter on both sides of the road with a 10 foot wide multi use path to the North and a 5 foot wide sidewalk to the South of the alignment
    - The proposed project will tie to the existing raised island at the Lake Lanier end of the project and tie to the curb & gutter and sidewalk on the Phase I Project at the McEver Road end of the project.

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- The alignment follows the existing roadway for the most part; however, the alignment will shift to the north of the existing alignment in the Big Creek Road / New Bethany Road area to avoid impacts to the cemetery and the church property and the alignment will shift to the south of the existing alignment in the Lazy Day Marina area to provide a curve with a larger radius to improve safety and sight distance along the road. There are several parcels north of the existing alignment, between Rowe Drive and Whidby Road that are state owned property. The alignment shift to the North will reside on property already owned by the state DOT.
- There is approximately 130 feet of existing Right of Way between Beards Road and McEver Road and approximately 60 feet of existing Right of Way between Lake Lanier and Beards Road.
- Two side roads will be realigned. Lee Drive will be realigned to intersect the main road at more of a 90 degree angle since it currently intersects the main road at a 58 degree angle. New Bethany Road will be realigned to create a four leg intersection with Big Creek Road and the state route (SR 347).
- This design proposes a 4-leg intersection at the Big Creek Road – New Bethany Road / SR 347 intersection; however, a roundabout at this location will be considered.
- Roadway Design Personnel mentioned shifting the main road alignment further to the South in the Lazy Day Marina area will help provide turning vehicles with a smooth transition to and from the steep Lazy Day Marina driveway as well as the residential driveways at this location.
- Ryan stated the anticipated environmental document is a categorical exclusion.
  - Other projects that are or will be ongoing in the area include PI 170735 – widen SR 347 from I-985 to McEver Road, PI 162430 – widen SR 347 from I-985 to SR 211 and PI 0001821, widen McEver Road from SR 347 to CR 537.
  - Jeff Emmert, the Corp of Engineer representative, discussed the affects of any impacts to the Corp of Engineer property. Three main areas of concern were discussed that include conservation / flood pool elevation, fill in the flood pool and MS4 (Municipal Separate Storm Sewer System). Roadway Personnel asked what can be done from the design to alleviate impacts. The Corp representative mentioned maintaining a 1071 and a 1085 pool elevation and reducing impacts to the Corp area.
  - Atkins has the task order for the environmental document and has started the initial surveys.
  - Potential historic buildings located between North Waterworks and Beards Road have been identified at the start of the project.
  - A PIOH will be required for this project and will be scheduled later this year.
- Ryan stated the following utilities have been identified for this project.
  - AT&T
  - Atlanta Gas Light
  - City of Buford – Electrical
  - Charter – CATV

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- Sawnee EMC – Electrical
  - City of Gainesville – Water
  - Georgia Power
- After the presentation the comments made / questions asked and responses provided were as follows:
  - District Personnel asked if the curb and gutter will be throughout the entire project. The curb and gutter is proposed to be extended throughout the length of the project.
  - District Personnel asked if it is necessary to have a 16 foot wide shoulder to accommodate a 5 foot wide sidewalk. The 16 foot wide shoulder on the South side of the project can be modified to reduce impacts as necessary.
  - District Personnel mentioned previous plans for the alignment included the roadway taper from the existing typical section of a two-lane; two-way road to a 3-lane section. The current proposal for this project is to include a 14 foot wide turn lane throughout the entire project length. As Design Personnel obtain information from Environmental Personnel concerning project impacts the design will be adjusted to avoid impacts.
  - Construction Personnel questioned why a 5 foot wide sidewalk was proposed on one side of the roadway along with a 10 foot wide multiuse path on the other side. Roadway Personnel mentioned the 10 foot wide multiuse path was mainly for bicyclist in lieu of having a bicycle lane. The 5 foot wide sidewalk and the 10 foot wide multiuse path are consistent with the typical section along SR 347. The local government representative mentioned that the state route (SR 347) is part of a bicycle and pedestrian plan and the multiuse path is sufficient for this plan.
  - Right of Way Personnel wanted to know how big the inscribed diameter of the roundabout circle would be since the roundabout would need to be big enough to accommodate cars / trucks towing boats. Roadway Personnel mentioned if a roundabout were to be used, the proposed diameter shown on the layout is 120 feet for a single-lane roundabout. After the meeting it was determined that a diameter of 130 feet is required for single lane roundabouts that have a WB-67 as the typical design vehicle.
  - The Planning representative mentioned the project database information shows the locals are responsible for the Right of Way. The Project Manager will confirm that the locals will be required to purchase the Right of Way.
  - There was an inquiry about the absence of a raised median along the Phase II portion of SR 347 since there is a raised median on the Phase 1 portion of SR 347. Roadway Personnel mentioned the traffic does not justify a raised median for the Phase 2 portion of the SR 347 project since the traffic volumes are reduced within this part of the project and since there are many driveways throughout the corridor.
- Other comments as related to the project discussion include the following:

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- Based on conceptual data, 78 parcels have been identified at the concept stage as having possible Right of Way impacts due to the SR 347 widening. If 78 parcels are affected there will be a need to advertise buying Right of Way. The larger number of parcels to acquire would delay the project let date since the let date is based on having to acquire fewer parcels. This number is expected to be lower as more up to date survey information is obtained and as updated Right of Way plans are developed.
- The Right of Way estimate will need to be updated.
- Construction Personnel mentioned there may be a need for temporary easement. Permanent, Temporary and Driveway easement will be included on the Right of Way plans as required.
- The 10 foot wide multiuse path will be concrete.
- The staging plan should consider any special events. The Lanier Islands representative agreed to provide a schedule of the Lanier Island events to Roadway Design Personnel.
- The FHWA representative will take time to review everything before providing comments.
- The Project tie-in to Phase I will be handled / discussed between the District 1 and Roadway Design Personnel after the meeting. It was determined; the pavement width at the end of the Phase I project will match the Phase II project pavement width of 38 feet. The Phase II project will still need to modify the rural shoulder typical section at the end of the Phase I project. This modification includes adding curb & gutter, the 5 foot wide sidewalk to the South and the 10 foot wide multi-use path to the North.
- Roadway Design Personnel mentioned the design provides one scenario to tie all driveways to the proposed SR 347 widening / new location including and especially the area between Rowe Drive and Whidby Road. The proposed alignment in this area will tie to the existing alignment in order to provide access to any business or residential driveway and the church property. The proposed alignment tie to the existing alignment proposes to minimize impacts to additional properties while maximizing access to these properties. The scenario presented can be modified as needed based on suggestions/comments.
- The project limits have a lot of overhead utilities throughout the length and the utilities cross back and forth from one side of the roadway to the other throughout the length of the project. The realignment of New Bethany Road will affect the location of the existing utilities.
- The District Personnel asked when the VE Study would be anticipated. The Project Manager mentioned he would work to schedule one soon.
- The District 1 Design Office is prepared to provide design modifications to PI 170735 to produce a consistent tie in roadway width at our western project terminus once we receive confirmation that the State Construction Office supports

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the revision to facilitate Phase 2 staging and ease of construction. These changes may result in the request for a Supplemental Agreement by C.W. Matthews on PI 170735 if they consider the adjustments significant.

- In concept, the revision would consist of providing 2 twelve foot lanes and a 14 foot two way left turn lane along the existing centerline. We will retain a rural shoulder at the end of the project but will reduce the shoulder to 2 foot paved instead of 6.5 feet. The shoulder can be removed or used as an extra wide gutter area with the gutter placed on the back of it. We will extend our urban section on the left side of centerline to match the right side. The transition from 4 through lanes to 2 through lanes will be adjusted to account for the final 3 lane configuration.
- The meeting was adjourned.

cc: All Attendees

SIGN-IN SHEET  
 Concept Team Meeting  
 Project No. CSSTP-0007-00(319), Hall County  
 PI 0007319

SR 347 / Lanier Islands Parkway from Lake Lanier to McEver Road - Phase II  
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Concept Report comments / questions from Office of Design Policy

1. Signatures from the Office of Program Delivery Manager and the GDOT Project Manager are required on page 2 of pdf document.
  - Signatures will be obtained before the Concept Report is resubmitted to the Office of Design Policy.
2. Based on guidance from state highway agency attorneys, we have tried to reduce the number of sweeping statements about safety (deficiency); the attorneys indicated that, from a tort liability standpoint it is undesirable today that some particular action “improves safety “ and much better to say that it “ reduces crash frequency and severity.” Please review/revise where necessary (see page 4 of pdf document).
  - The statement will be revised to say “The goal of this project is to improve SR 347 to address unacceptable levels of congestion and to improve the operation of turning movements and reduce crash frequency and severity through the corridor.
3. In the Design Data table on page 4 of the report, Access Control should be changed to By Permit (see page 5 of pdf document).
  - “By Permit” will be used to describe the Existing, Standard and Proposed Access Control.
4. When is VE study anticipated? If feasible, VE should be held before concept approval so that any implementation items can be included in the concept report (see page 7 of pdf document).
  - The VE Study is anticipated to be held after the Concept Report approval and during the Preliminary Plan development.
5. Roundabout is not shown on layout (see page 11 of current pdf document).
  - Because the design with the roundabout is not the preferred alternative, the layout depicting the alignment with a roundabout was not included in the Concept Report.
  - **NOTE:** As of December 17, 2012, the Preferred Alternate will be the roundabout design at the Big Creek Road – New Bethany Road / SR 347 intersection and as a result the roundabout design will be shown on the layout.
6. On page 9, it is showing ROW & UTL as Fed/State. However, we have it as the Locals funding the RW & UTL. Also, the UTL estimate should be updated. It is almost a year old (see page 11 of current pdf document).
  - The Right of Way (ROW) and Utility fields have been updated to show the Locals will be responsible for the project cost estimate and funding. The Utility Estimate will be updated and included in the resubmittal.

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7. In the Project Cost Estimate and Funding Responsibilities table on page 9, the date of the ROW cost estimate does not match the date on the attachment. Also, usually only reimbursable utility cost is shown in this table (see page 11 of current pdf document).
  - The date of the ROW cost estimate has been revised to match the date on the attachment. The Utility cost estimate amount in the table has been revised to only include the reimbursable utilities.
8. Should the No-Build Alternative described on page 10 really be presented as Alternative No. 2 since it proposes a \$6 mil project cost? (see page 11 of pdf document)
  - This alternative will be renamed Alternative 2.
9. Based on guidance from state highway agency attorneys, we have tried to reduce the number of sweeping statements about safety (deficiency); the attorneys indicated that, from a tort liability standpoint it is undesirable today that some particular action “improves safety “ and much better to say that it “ reduces crash frequency and severity.” Please review/revise where necessary. (see page 12 of current pdf document)
  - This statement has been revised under the Alternative 2 Rationale section of the Concept Report.
10. Where is roundabout? (see page 14 of pdf document)
  - Because the design with the roundabout is not the preferred alternative, the layout depicting the alignment with a roundabout was not included in the Concept Report.
  - **NOTE:** As of December 17, 2012, the Preferred Alternate will be the roundabout design at the Big Creek Road – New Bethany Road / SR 347 intersection and as a result the roundabout design will be shown on the layout.
11. 5% E&I should be included, but not the 6% construction contingency. (see page 17 of the pdf documents)
  - The estimate will be updated to include a 5% Engineering and Inspection calculation for additional cost.
12. Any signals proposed at intersections? (see page 18 of pdf document)
  - There are no proposed signals at any of the intersections for this project.
13. Any need for concrete valley gutter and/or driveway concrete? (see page 18 of pdf document)
  - Concrete Valley Gutter and Driveway Concrete will be added to the conceptual estimate.
14. What quantities will be needed for roundabout? (see page 18 of pdf document)
  - The quantities needed for the roundabout are similar to those needed for the intersection along with the additional Lighting pay item and an increase in the Grading Complete pay item amount.
15. We don't have contingencies. (see page 17 of current pdf document)
  - This page will be removed from the Concept Report.

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16. 5% E& I should be included, but not the 6% construction contingency. (see page 17 of current pdf document)

- The estimate will be updated to include a 5% Engineering and Inspection calculation for additional cost.