

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

**FILE** P.I. # 0008351 **OFFICE** Design Policy & Support  
CSSTP-0008-00(351)  
Columbia County  
GDOT District 2 - Tennille **DATE** April 10, 2014  
SR 388 Widening from CR 571/Wrightsboro Rd to  
I-20 Including Sidewalks and Bike Lanes (TIA)

**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:**

Glenn Bowman, Director of Engineering  
Joe Carpenter, Director of P3/Program Delivery  
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery  
Albert Shelby, State Program Delivery Engineer  
Bobby Hilliard, Program Control Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
Hiral Patel, State Environmental Administrator  
Ben Rabun, State Bridge Engineer  
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  
Jeff Fletcher, Statewide Location Bureau Chief  
Jimmy Smith, District Engineer  
Neal O'Brien, District Preconstruction Engineer  
Lynn Bean, District Utilities Engineer  
George Brewer, Project Manager  
BOARD MEMBER - 12th Congressional District

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

Project Type: <u>Road Widening</u>	P.I. Number: <u>0008351</u>
GDOT District: <u>2</u>	County: <u>Columbia</u>
Federal Route Number: <u>N/A</u>	State Route Number: <u>388</u>
Project Number: <u>CSSTP-0008-00(351)</u>	

*This project involves widening SR 388 from CR 571/Wrightsboro Road to I-20. The road will be widened from two lanes to four lanes with a raised median. This project also includes the addition of sidewalk and bike lanes.*

**Submitted for approval:**

<u>Nicholas Costanza</u> Consultant Designer & Firm, URS Corporation	<u>1/17/14</u> DATE
<u>Monette Rice-Spell</u> State Program Delivery Engineer	<u>1/24/14</u> DATE
<u>George M. Brown</u> GDOT Project Manager	<u>1/22/14</u> DATE

**Recommendation for approval:**

Program Control Administrator	DATE
<u>Glenn Bowman*</u>	<u>2/23/2014</u>
State Environmental Administrator	DATE

State Traffic Engineer	DATE
<u>Lisa Myers*</u>	<u>2/17/2014</u>

Project Review Engineer	DATE
<u>Jun Birnkammer*</u>	<u>2/20/2014</u>

for State Utilities Engineer	DATE
<u>Jimmy Smith*</u>	<u>3/5/2014</u>
District Engineer	DATE

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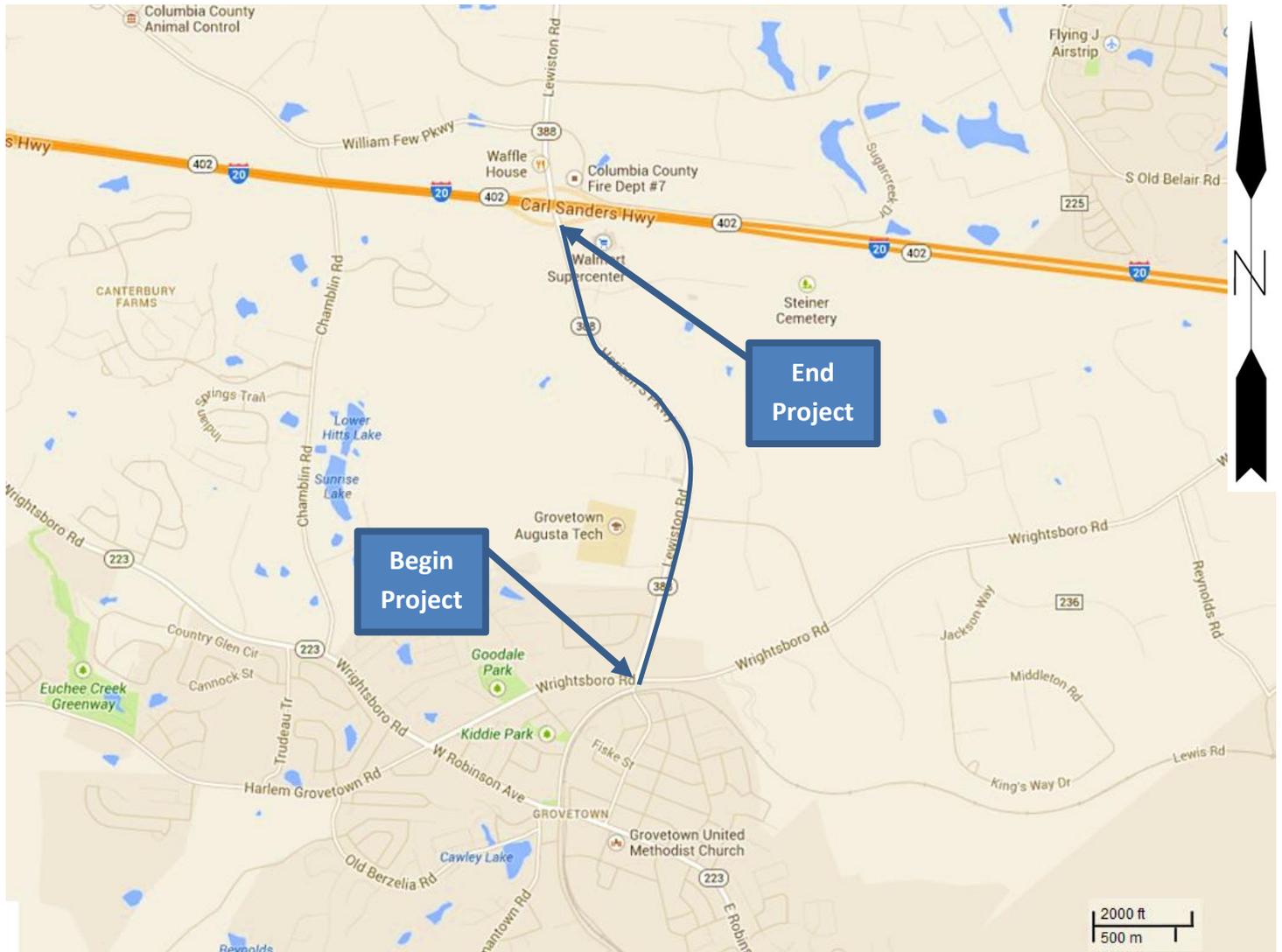
TIA Administrator	DATE
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The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

<u>Cynthia VanDyke*</u>	<u>3/3/2014</u>
State Transportation Planning Administrator	DATE

\* - Recommendation on file

### PROJECT LOCATION



**LOCATION MAP**  
**SR 388 from CR 571/Wrightsboro Road to I-20**  
**COLUMBIA COUNTY**  
**PROJECT NO. CSSTP-0008-00(351) / P.I. NO. 0008351**

County: Columbia

## **PLANNING & BACKGROUND DATA**

### **Project Justification Statement:**

At the request of the Augusta-Richmond County Metropolitan Planning Organization (MPO), right-of-way, construction and utility project phases for this project were initially programmed in July /August of 2006. In July 2011, the Preliminary Engineering phase was shifted from fiscal year 2015 into FY 2012 leaving the remaining phases in Long Range. This project is also identified in the August MPO's 2035 Long Range Transportation Plan (LRTP). State Route 388, within the project area, consists of a two lane section and is functionally classified as an Urban Principal Arterial and Urban Minor Arterial within Columbia County, Georgia. The SR 388 corridor is currently listed as a route on the Statewide Bicycle Plan.

In reviewing existing annual traffic data obtained from the GDOT STARS traffic count database (official design traffic is not yet available), SR 388 within the project area, has an AADT of 15,530 at count station 258. This count station encompasses the entire area from CR 571/Wrightsboro Road to Interstate 20. This volume is projected to increase up to 29,900 AADT by the year 2035. The existing Level of Service in the area is unacceptable at "E" and is projected to worsen in 2035 into an even more unacceptable Level of Service "F" without improvements. The Augusta MPO's 2035 Long Range Transportation Plan (page98) set a performance measure for congestion at Level of Service D and defines congestion as: "Roadways that have a Level of Service D, E, and F are considered unacceptable". For the last three years (07, 08, 09) the available crash rates for the corridor were below the state average.

The currently programmed limits of this project are between CR 571 / Wrightsboro Road and Interstate 20. At the northern limit of this project, I-20; SR 388 ties into an existing six lane section as it crosses over I-20. At this location, the AADT is an estimated 15,530 and has an acceptable LOS of "A". The southern limit of the project ties into an existing two lane facility at Wrightsboro Road with an approximate AADT of 13,030 vehicles, which represents a 16% traffic drop as it enters into the City of Grovetown. At the northern location, the currently identified project limit appears adequate with the project ending at the six lane section near the interchange with I-20.

This section of the SR 388 corridor under review is in need of capacity increasing improvements as demonstrated through high traffic volumes and deficient Level of Service. Providing these improvements in the corridor will serve to improve Level of Service on the corridor and relieve traffic congestion in this area.

**Existing conditions:** The existing SR 388 corridor between SR 232/Wrightsboro Road is 2 lane road with rural shoulders and some auxiliary lanes at intersections. There are few sidewalks along the corridor. The major intersections along SR 388 are at the Wrightsboro Road and Gateway Boulevard. Development along the southern and northern portions of the corridor is mainly commercial, while in the middle it is industrial. There is a new development planned west of the existing intersection of SR 388 and Gateway

County: Columbia

Blvd. There is also an existing at-grade railroad crossing on Katherine Street just south of the existing intersection of SR 388 and Wrightsboro Road.

**Other projects in the area:**

- 0008345 – Widening I-20 from McDuffie County Line to SR 383/Belair Road
- 0008347 – Widening SR 388 from SR 223/Robinson Ave to CR 571/Wrightsboro Road
- 0008348 – Widening Wrightsboro Road from SR 388 to SR 383/Jimmie Dyess Pkwy
- 0008349 – Widening SR 232 from CR 238/Chamblin Road to CR 221/Old Belair Road
- 0008350 – Widening SR 388 from I-20 to SR 232 / Columbia Road
- 0011414 – Widening SR 223 from SR 388/Wrightsboro Road to SR 10/Gordon Hwy

This project has 2 adjacent projects at its southern termini (0008347 and 0008348) and an adjacent project at its northern termini (0008350). This project is currently scheduled to be built in 2021. One southern adjacent project, 0008347, will add pocket left turn bays and other enhancements to Wrightsboro Road to the west of SR 388, and has a projected construction date of 2016. The other southern adjacent project, 0008348, will widen Wrightsboro Road to the east of SR 388, and has funding that is in long range. The northern adjacent project, 0008350, will widen SR 388 to the north, and has a projected construction date of 2018.

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

This is a TIA project.

**MPO:** Augusta Regional Transportation Study (ARTS)

**MPO Project ID:** STP-15

**Regional Commission:** Central Savannah River RC

**RC Project ID:** RC07-000031

**Congressional District(s):** 12

**Projected Traffic:** ADT

Current Year (2012): 20,350    Open Year (2017): 25,200    Design Year (2037): 35,200

Traffic Projections Performed by: Gresham Smith and Partners

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

**Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants:**

None  Bike Route  Pedestrian Plan  Transit Network

**Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project?**

No  Yes

**Pavement Evaluation and Recommendations**

Preliminary Pavement Evaluation Summary Report Required?

No  Yes

Preliminary Pavement Type Selection Report Required?

No  Yes

Feasible Pavement Alternatives:  HMA  PCC

HMA & PCC

Preliminary Pavement Evaluation Summary Report will be completed during preliminary design.

County: Columbia

## DESIGN AND STRUCTURAL DATA

### Description of the proposed project:

The proposed project will widen a 2.2 mile section of SR 388 in Columbia County, Georgia from Wrightsboro Road to I-20. It is proposed to widen the existing two lane section to a four lane urban section divided by a planted raised median with median breaks at designated locations. The project also includes the addition of sidewalks and bike lanes. Bike lanes are also proposed along the section of Wrightsboro Road that we are widening as it is on State Bicycle Route 50. The existing right of way varies from 70 to 160 feet. Additional right of way will be required for widening of the existing roadway, and will have a standard width of 145 feet, with other widths used as required.

### Major Structures:

Structure	Existing	Proposed
Mill Branch Culvert	The existing culvert is approximately 65' long.	The culvert will be extended approximately 30' to both sides of the road.
Retaining Walls	None	Multiple retaining walls are proposed in order to reduce impacts to homes and businesses along the corridor.

### Mainline Design Features: State Route 388

Feature	Existing	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	2	4	4
- Lane Width(s)	12'	11' to 12'	11'
- Median Width & Type	None	20' Raised	20' Raised
- Outside Shoulder or Border Area Width		10' rural	12' urban
- Outside Shoulder Slope		6% rural	4%
- Inside Shoulder Width	None	N/A	N/A
- Sidewalks	5'	None (rural)	5'
- Auxiliary Lanes	None	None	None
- Bike Lanes	None	4'	4'
Posted Speed	55 mph		45 mph
Design Speed			45 mph
Min Horizontal Curve Radius			643'
Maximum Superelevation Rate		6%	6%
Maximum Grade		6%	6%
Access Control	Permitted	Permitted	Permitted
Design Vehicle		SU	WB-67
Pavement Type	Asphalt		Asphalt

\*According to current GDOT design policy if applicable

County: Columbia

**Major Interchanges/Intersections:**

**SR 388 at Wrightsboro Road-** Wrightsboro Road eastbound will consist of two left turn lanes and a shared through/right lane. Wrightsboro Road westbound will consist of a left turn lane, two through lanes, and a right turn lane. SR 388 southbound will consist of a left turn lane, one through lane, and a right turn lane. Katherine Street northbound will consist of a left turn lane, a through lane, and a shared through/right lane. The southern project terminus for this project is Wrightsboro Road.

**Lighting required:**  No  Yes

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

It is expected that traffic will be staged and no detours will be required.

**Transportation Management Plan [TMP] Required:**  No  Yes  
 If Yes: Project classified as:  Non-Significant  Significant  
 TMP Components Anticipated:  TTC  TO  PI

**Design Exceptions to FHWA/AASHTO controlling criteria anticipated:**

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

**Design Variances to GDOT Standard Criteria anticipated:**

GDOT Standard Criteria	Reviewing Office	No	Undeter-- -mined	Yes	Appvl Date (if applicable)
1. Access Control/Median Openings	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Intersection Sight Distance	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Intersection Skew Angle	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Lateral Offset to Obstruction	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Rumble Strips	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

County: Columbia

6. Safety Edge	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Median Usage	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Roundabout Illumination Levels	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Complete Streets	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. ADA & PROWAG	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. GDOT Construction Standards	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. GDOT Drainage Manual	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. GDOT Bridge & Structural Manual	Bridges	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**VE Study anticipated:**  No  Yes  Completed – Date:

**UTILITY AND PROPERTY**

**Temporary State Route needed:**  No  Yes  Undetermined

**Railroad Involvement:** Yes, we have an at-grade crossing at Katherine Street that we will adjust. It is also anticipated that we will have a stormwater pipe crossing under the railroad.

**Utility Involvements:**

- Atlanta Gas Light Company – Gas
- AT&T – Telephone
- Columbia County Broadband Utility - Telecommunications
- Columbia County Traffic Engineering – Traffic
- Georgia Power – Power
- City of Grovetown Water & Sewer – Water & Sewer
- John Deere Commercial Products – Telephone
- Jefferson Energy – Power
- Comcast – Cable
- Wide Open West – Cable
- Tower Cloud – Telecommunications
- Verizon Business - Telecommunications

**SUE Required:**  No  Yes  
 QL-D is being provided as a part of the concept.

**Public Interest Determination Policy and Procedure recommended (Utilities)?**  No  Yes

**Right-of-Way (ROW):** Existing width: 70-160 ft Proposed width: 120-230 ft  
 Required Right-of-Way anticipated:  No  Yes  Undetermined  
 Easements anticipated:  None  Temporary  Permanent  Utility  Other

County: Columbia

Anticipated number of impacted parcels:	42
Displacements anticipated:	Total: 2
	Businesses: 0
	Residences: 2
	Other: 0

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

**CONTEXT SENSITIVE SOLUTIONS**

**Issues of Concern:**

1. The existing roadway corridor has little to no bicycle or pedestrian accommodations.
2. Adding extra pavement and changing the hydraulics of the area could result in flooding.

**Context Sensitive Solutions**

1. A raised median, which has been shown by FHWA to reduce crashes, will be installed.
2. To minimize the risk of risk of flooding, under the GAR41000 NPDES/MS4 permit, the implementation of post-construction BMPs is required to treat the first 1.2 inches of stormwater runoff for water quality, provide detention of the channel protection volume, and provide safe passage of the 100-year storm event.

**ENVIRONMENTAL & PERMITS**

**Anticipated Environmental Document:**

GEPA:  NEPA:  CE  EA/FONSI  EIS

Project is a TIA Project and is only required to have a GEPA document.

**MS4 Compliance – Is the project located in an MS4 area?**  No  Yes

See Conceptual Hydrology Study in the Appendices.

**Environmental Permits/Variations/Commitments/Coordination anticipated:**

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Forest Service/Corps Land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. CWA Section 404 Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Coastal Zone Management Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. NPDES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

County: Columbia

9. Cemetery Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Other Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Other Commitments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Other Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Project will need to comply with the GAR 10002 permit for erosion and sediment control as well as the GAR 41000 permit for MS4 since Columbia County is within the Phase 1 boundary.

Is a PAR required?  No  Yes  Completed – Date:

**Environmental Comments and Information:**

**NEPA/GEPA:**

A GEPA environmental document is currently anticipated because this is a TIA project

**Ecology:**

See the Ecology Report in the appendices.

**History:**

The one eligible historic resource on this project is the former Georgia Railroad, now owned by CSX Transportation. The original railroad was constructed in 1833. It is located just south of the intersection of SR 388 and Wrightsboro Road. The railroad intersects Katherine Street, and due to expected traffic growth it will be necessary to widen the road at this intersection, impacting the railroad. See the Historic Resources Survey Report in the appendices for more information.

**Archeology:**

No archaeological sites have been recorded within a one-kilometer radius of the project area.

**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  
 Is a Carbon Monoxide hotspot analysis required?  No  Yes

**Noise Effects:**

The level of Air & Noise analysis is to be determined later.

**Public Involvement:**

The level of public involvement on this project is to be determined later.

**Major stakeholders:**

- Columbia County
- City of Grovetown
- John Deere
- Grovetown Augusta Tech

County: Columbia

**CONSTRUCTION**

Issues potentially affecting constructability/construction schedule: None

Early Completion Incentives recommended for consideration:  No  Yes**COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS**

Initial Concept Meeting: Not held.

Concept Meeting: Meeting held December 4, 2013 - Minutes attached

Other coordination to date: None

**Project Activities:**

Project Activity	Party Responsible for Performing Task(s)
Concept Development	URS Corporation
Design	Columbia County
Right-of-Way Acquisition	Columbia County
Utility Relocation	Regional Program Manager
Letting to Contract	Columbia County
Construction Supervision	Regional Program Manager
Providing Material Pits	Contractor
Providing Detours	Columbia County
Environmental Studies, Documents, and Permits	Columbia County
Environmental Mitigation	Columbia County
Construction Inspection & Materials Testing	Regional Program Manager

**Project Cost Estimate and Funding Responsibilities:**

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	TIA & GDOT	TIA	TIA	TIA	TIA	
\$ Amount	\$3,007,287.76	\$5,861,000.00	\$1,569,000.00	\$12,192,746.78	\$100,732.00	\$22,730,766.54
Date of Estimate	Preconst. Status Report	11/20/2013	12/12/2013	3/18/2014	1/9/2014	

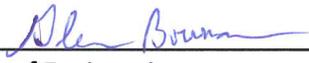
\*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

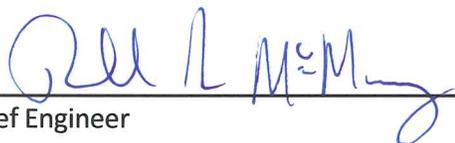
**Comments:**

**LIST OF ATTACHMENTS/SUPPORTING DATA**

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
  - e. Environmental Mitigation (EPD, etc)
4. Traffic Diagrams
5. Traffic Data Approval Letter
6. Hydrology Study for MS4 Permit
7. Historic Resources Survey Report
8. Phase I Environmental Site Assessment Report
9. Minutes of Meetings
10. TIA Project Sheet

**APPROVALS**

Concur:   
Director of Engineering

Approve:   
Chief Engineer

4/7/14  
Date

# Attachment #1



PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
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 OF  
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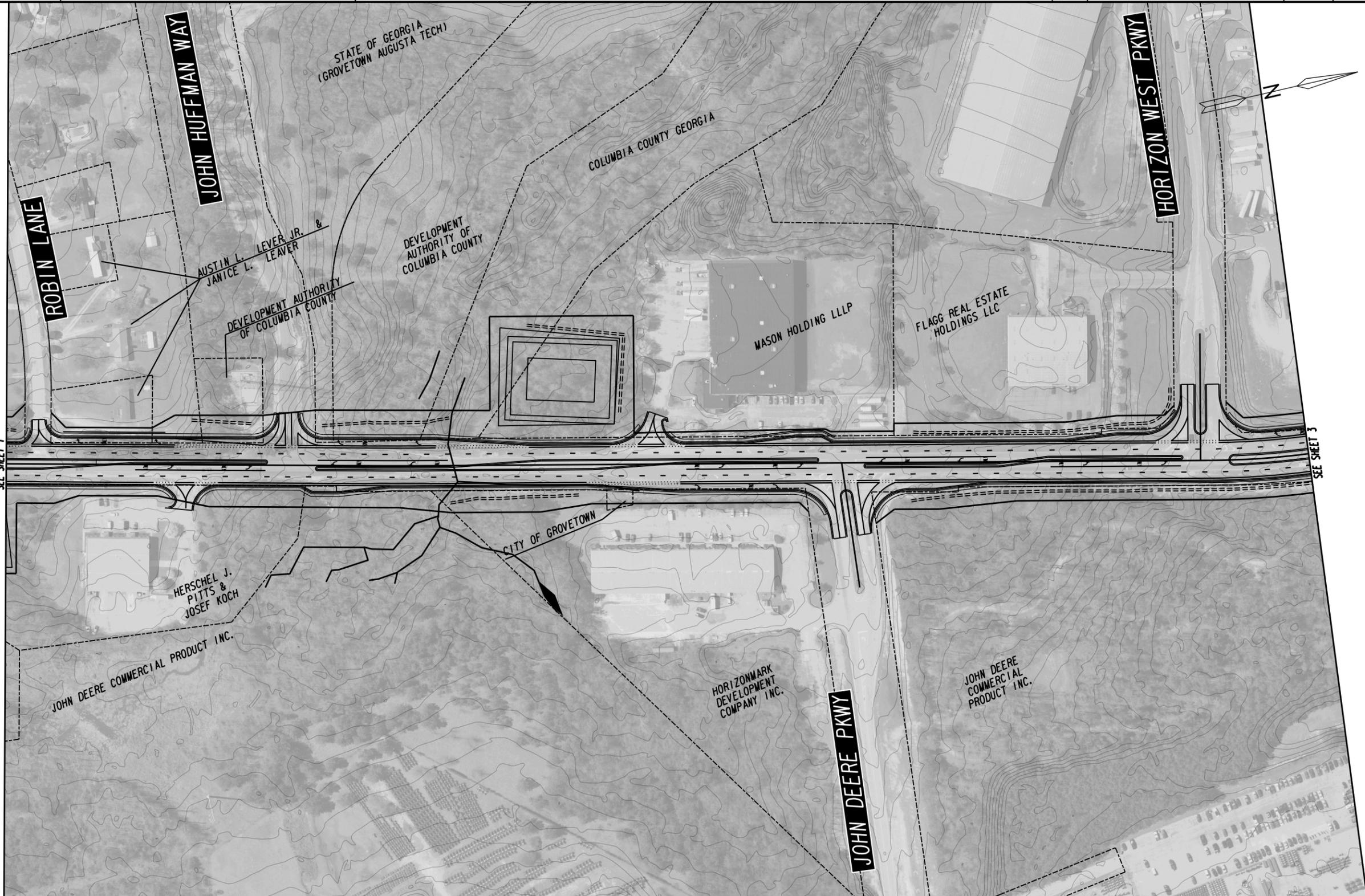
**URS** 400 NORTHPARK TOWN CENTER  
 1000 ABERNATHY ROAD, N.E., SUITE 900  
 ATLANTA, GEORGIA 30328  
 TEL: (678) 808-8800 FAX: (678) 808-8400

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REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: PROGRAM DELIVERY  
**CONCEPT PLAN**  
 SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

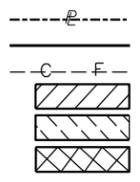
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SEE SHEET 1

SEE SHEET 3

PROPERTY AND EXISTING R/W LINE  
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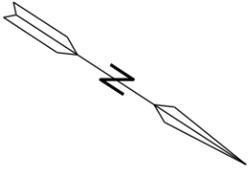
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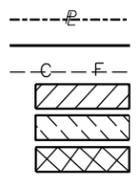
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SEE SHEET 2

SEE SHEET 4

PROPERTY AND EXISTING R/W LINE  
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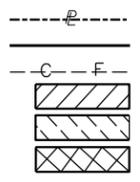
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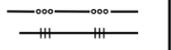
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DRAWING No.  
 4



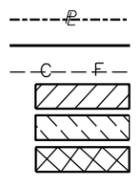
DATE PLOTTED: 6/20/2011

SCALE: 1"=200'

**SR 388/WRIGHTSBORO ROAD**

SEE SHEET 1

PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
 EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA  
 END LIMIT OF ACCESS.....ELA  
 LIMIT OF ACCESS  
 REQ'D R/W & LIMIT OF ACCESS

GEORGIA  
 DEPARTMENT  
 OF  
 TRANSPORTATION

**URS** 400 NORTHSPARK TOWN CENTER  
 1000 ABERNATHY ROAD, N.E., SUITE 900  
 ATLANTA, GEORGIA 30328  
 TEL: (678) 808-8800 FAX: (678) 808-8400

SCALE IN FEET  
 0 100 200 400

REVISION DATES	

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

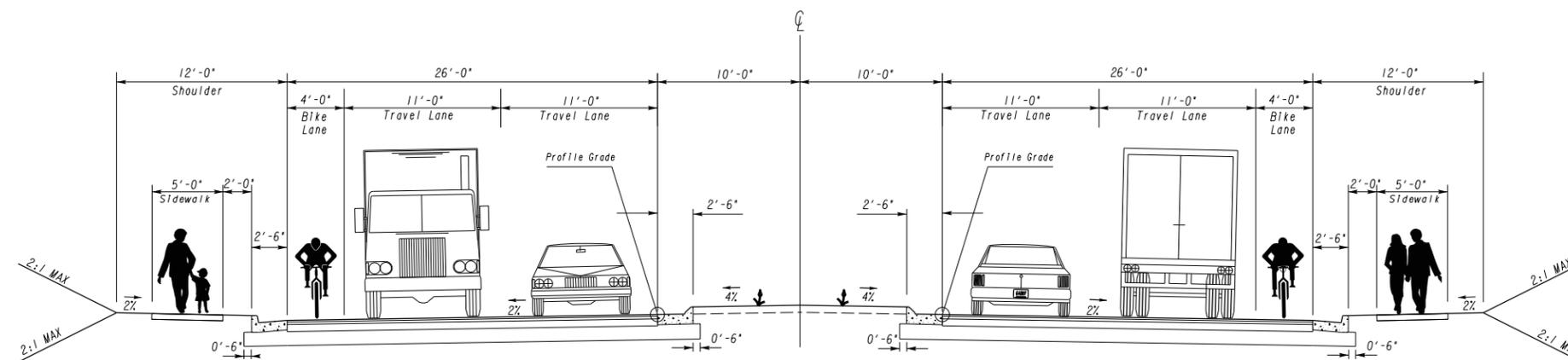
**CONCEPT PLAN**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

DRAWING No.  
**5**

# Attachment #2

SR 388 TYPICALS  
Proposed Typical Section



**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

**URS**  
400 NORTHPARK TOWN CENTER  
1000 ABERNATHY ROAD, N.E., SUITE 900  
ATLANTA, GEORGIA 30328  
TEL: (678) 808-8800 FAX: (678) 808-8400

NOT TO SCALE

REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY

**TYPICAL SECTIONS**

SR 388 FROM CR 571 /  
WRIGHTSBORO RD TO I-20

DRAWING No.  
**05-001**

# Attachment #3

STATE HIGHWAY AGENCY

DATE : 03/18/2014  
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0008351                      SPEC YEAR: 01  
DESCRIPTION: SR388 AFROM CR571 /WRIGHTSBORO ROAD TO I-20

COST GROUPS FOR JOB 0008351

COST GROUP	DESCRIPTION	QUANTITY	PRICE	AMOUNT	ACTIVE?
EROC	EROSION CONTROL (LS)	1.000	400000.00000	400000.00	Y
MISC	MS4 REQUIREMENTS (LS)	1.000	500000.00000	500000.00	Y
MISC	RAILROAD (LS)	1.000	750000.00000	750000.00	Y
SGNL	TRAFFIC SIGNALS (EA)	4.000	150000.00000	600000.00	Y
MISC	SIGNING AND MARKING (LS)	1.000	500000.00000	500000.00	Y
MISC	LANDSCAPING (LS)	1.000	160000.00000	160000.00	Y
ACTIVE COST GROUP TOTAL				2910000.00	
INFLATED COST GROUP TOTAL				2910000.00	

ITEMS FOR JOB 0008351

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - CSSTP-0008-00(351)	1.000	620000.00	620000.00
0009	153-1100		EA	FIELD ENGINEERS OFFICE TP 1	1.000	75000.00	75000.00
0020	210-0100		LS	GRADING COMPLETE - CSSTP-0008-00(351)	1.000	1375000.00	1375000.00
0025	310-5060		SY	GR AGGR BS CRS 6IN INCL MATL	0.000		
0030	310-5120		SY	GR AGGR BS CRS 12IN INCL MATL	66340.000	12.10	802714.00
0035	402-1812		TN	RECYL AC LEVELING,INC BM&HL	4390.000	66.40	291521.77
0040	402-3113		TN	RECYL AC 12.5MM SP,GP1/2,BM&HL	10060.000	58.40	587581.56
0045	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	9327.000	63.42	591576.63
0050	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	18660.000	60.38	1126757.98
0054	413-1000		GL	BITUM TACK COAT	8230.000	2.52	20793.92
0055	441-0754		SY	CONC MEDIAN, 7 1/2 IN	10300.000	43.73	450427.96
0060	441-0104		SY	CONC SIDEWALK, 4 IN	10560.000	27.15	286762.29
0065	441-6222		LF	CONC CURB & GUTTER/ 8"X30"TP2	25800.000	11.16	288074.54
0069	441-6740		LF	CONC CURB & GUTTER/ 8"X30" TP7	9520.000	13.81	131558.31
0070	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	18400.000	2.50	46036.43
0075	500-3101		CY	CLASS A CONCRETE	0.000		
0080	500-3107		CY	CL A CONC, RET WALL	0.000		
0085	511-1000		LB	BAR REINF STEEL	0.000		
0090	515-2020		LF	GALV STEEL PIPE HDRAIL,2",ROUD	600.000	42.34	25407.67
0095	550-1180		LF	STM DR PIPE 18",H 1-10	3680.000	29.63	109046.57
0100	550-1240		LF	STM DR PIPE 24",H 1-10	14720.000	30.50	448972.22
0105	550-3318		EA	SAFETY END SECTION 18",STD,4:1	12.000	528.98	6347.87

Item No	Description	Unit	Quantity	Unit Price	Total Price
0110	550-4224	EA	FLARED END SECT 24 IN, ST DR	12.000	631.04
0114	603-2182	SY	STN DUMPED RIP RAP, TP 3, 24"	200.000	39.84
0115	603-7000	SY	PLASTIC FILTER FABRIC	200.000	3.78
0120	621-4022	LF	CONCRETE SIDE BARRIER, TY 2B	551.000	517.40
0125	627-1010	SF	MSE WALL FACE, 10 - 20 FT HT, WALL NO -	1800.000	39.32

Untitled

STATE HIGHWAY AGENCY

DATE : 03/18/2014  
PAGE : 2

JOB ESTIMATE REPORT

0130	641-1200	LF	CSSTP-0008-00(351) GUARDRAIL, TP W	1200.000	17.27	20728.81
0135	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	6.000	619.95	3719.71
0140	641-5012	EA	GUARDRAIL ANCHORAGE, TP 12	6.000	1796.71	10780.29
0145	668-1100	EA	CATCH BASIN, GP 1	154.000	2113.41	325466.63
0150	668-2100	EA	DROP INLET, GP 1	15.000	2103.43	31551.59
0155	668-4300	EA	STORM SEW MANHOLE, TP 1	15.000	1827.64	27414.70
0160	163-0531	EA	CONSTR & REM SEDIMENT BASIN, TP 1, STA NO- CSSTP-0008-00(351)	3.000	6441.90	19325.73
0165	441-4040	SY	CONC VALLEY GUTTER, W/CURB, 6"	100.000	47.25	4725.00
0170	432-0206	SY	MILL ASPH CONC PVMT/ 1.50" DEP	39300.000	1.35	53146.96

ITEM TOTAL 8152619.77  
INFLATED ITEM TOTAL 8152619.77

TOTALS FOR JOB 0008351

ESTIMATED COST: 11062619.76  
CONTINGENCY PERCENT ( 5.0 ): 553130.99  
ESTIMATED TOTAL: 11615750.75

PROJ. NO.

CSSTP-0008-00(351)

CALL NO.

P.I. NO.

0008351

DATE

10/31/2013

INDEX (TYPE)

REG. UNLEADED

Oct-13

\$ 3.254

DIESEL

\$ 3.869

LIQUID AC

\$ 568.00

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)

565728

\$

565,728.00

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)

1660

ASPHALT	Tons	%AC	AC ton
Leveling	5600	5.0%	280
12.5 OGFC	0	5.0%	0
12.5 mm	9000	5.0%	450
9.5 mm SP	0	5.0%	0
25 mm SP	12400	5.0%	620
19 mm SP	6200	5.0%	310
	<b>33200</b>		<b>1660</b>

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$

11,271.03

\$

11,271.03

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)

33.0722771

Bitum Tack

Gals

gals/ton

tons

7700

232.8234

33.0722771

PROJ. NO.

CSSTP-0008-00(351)

CALL NO.

P.I. NO.

0008351

DATE

10/31/2013

**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	0.20	0	232.8234	0
Double Surf.Trmt.	0	0.44	0	232.8234	0
Triple Surf. Trmt	0	0.71	0	232.8234	0
					0

<b>TOTAL LIQUID AC ADJUSTMENT</b>	\$	<b>576,999.03</b>
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**GEORGIA DEPARTMENT OF TRANSPORTATION  
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 11/20/2013 Project: CSSTP-0008-00(350)  
 Revised: County: Columbia  
 PI: 0008531

Description: SR 388 Frm CR 571/Wrightsboro Rd To I-20  
 Project Termini: SR 388 Frm CR 571/Wrightsboro Rd To I-20

Existing ROW: vaires  
 Required ROW: vaires  
 Parcels: 46

Land and Improvements \_\_\_\_\_ \$4,906,800.00

Proximity Damage	\$0.00
Consequential Damage	\$750,000.00
Cost to Cures	\$400,000.00
Trade Fixtures	\$0.00
Improvements	\$1,250,000.00

Valuation Services \_\_\_\_\_ \$143,750.00

Legal Services \_\_\_\_\_ \$293,550.00

Relocation \_\_\_\_\_ \$122,000.00

Demolition \_\_\_\_\_ \$0.00

Administrative \_\_\_\_\_ \$394,500.00

TOTAL ESTIMATED COSTS \_\_\_\_\_ \$5,860,600.00

**TOTAL ESTIMATED COSTS (ROUNDED) \_\_\_\_\_ \$5,861,000.00**

Preparation Credits	Hours	Signature

Prepared By: Dashone Alexander CG#: 286999 11/20/2013 (E)  
 Approved By: Dashone Alexander CG#: 286999 11/20/2013 (E)

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

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

**FILE** CSSTP-0008-00(351) Columbia County P.I. No. 0008351 **OFFICE** Tennille  
**FROM**  Lynn Bean **DATE** December 12, 2013  
 District Utilities Engineer  
**TO** Genetha Rice-Singleton, State Program Delivery Engineer  
**ATTN** George Brewer, Project Manager  
**SUBJECT** UPDATED UTILITY COST ESTIMATE

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

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
GEORGIA POWER (DIST)		\$1,364,000.00
GEORGIA POWER (TRANSMISSION)		\$125,000.00
ATLANTA GAS LIGHT RESOURCES	\$ 525,000.00	
AT&T	\$ 450,000.00	
AT&T LEGENCY		\$30,000.00
CITY OF GROVETOWN WATER	\$ 190,725.50	
CITY OF GROVETOWN SEWER	\$ 399,529.00	
WOW CATV	\$ 164,414.00	
COLUMBIA COUNTY WATER	\$ 1,159,520.00	
COLUMBIA COUNTY SEWER	\$ 99,500.00	
COLUMBIA COUNTY TELECOMMUNICATIONS	\$ 300,650.00	
VERIZION BUSINESS (MCI FACILITIES)		\$50,000.00
JOHN DEERE TELECOMMUNICATIONS	\$ 18,000.00	

**Totals**

**Total Non-Reimbursable Cost:** \$ 3,307,338.00  
**Total Reimbursable Cost:** \$ 1,569,000.00  
**Total Relocations:** \$ 4,876,338.00

**CSSTP-0008-00(351) Columbia County  
P.I. No. 0008351  
Page Two**

**All information contained in this estimate was provided by each facility owner, with the exception of John Deere Telecommunications. The estimated cost for the relocation and/or adjustment of John Deere's Telecommunications facilities was obtained from past estimates for similar relocations. Please be advised this is an estimate and may be revised when prior rights research is completed.**

**If you have any questions, please contact Jimmy Hobby at 478-552-4633.**

**LB: JFH**

**C: Mike Bolden, State Utilities Engineer  
Lee Upkins, Assistant State Utilities Engineer  
Angela D. Robinson, Office of Financial Management;  
Rodney Way, Area Engineer**

Opinion of Probable Costs  
Conceptual Environmental Mitigation Cost Estimate

GDOT PI# 0008351

January 9, 2014

Project impacts

Stream impacts - 207 Lin. Ft.

Estimated stream credits needed -1,045.4 credits

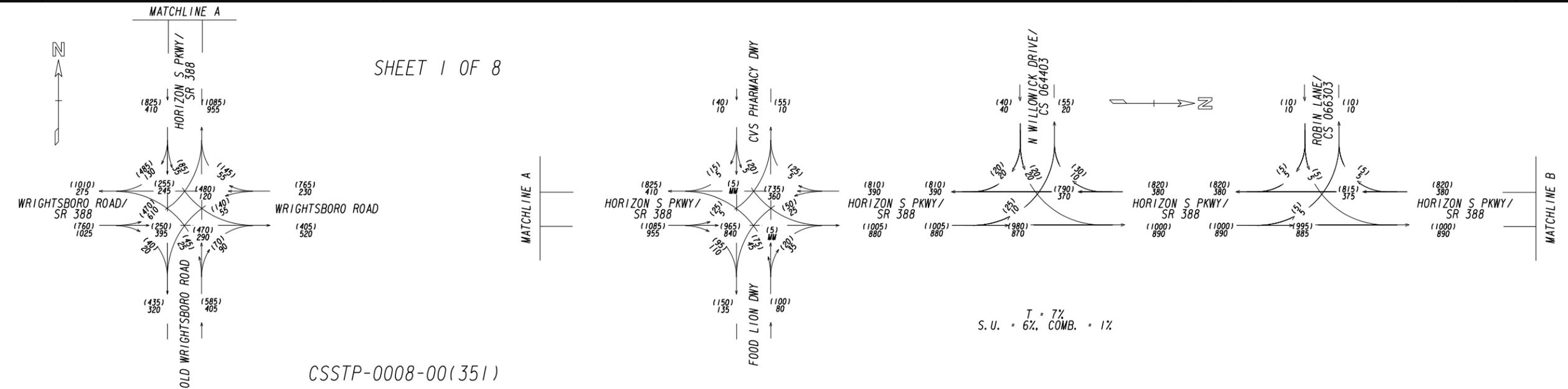
Estimated Cost = \$83,632

Wetland Impacts – 0.145 acres

Estimated wetland credits needed – 0.9 credits

Estimated Cost = \$17,100

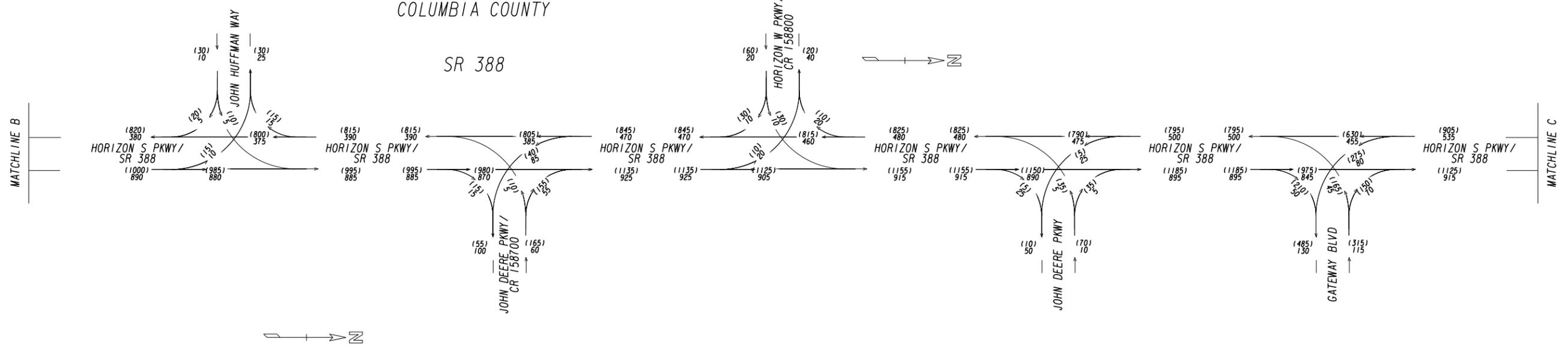
# Attachment #4



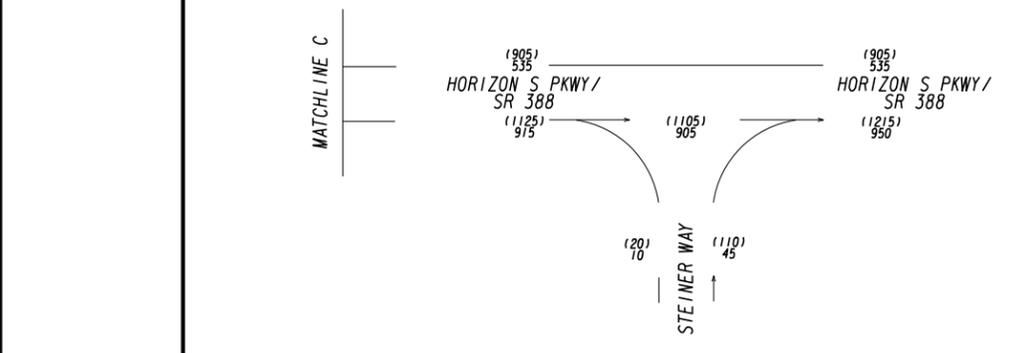
SHEET 1 OF 8

CSSTP-0008-00(351)  
PI # 0008351  
COLUMBIA COUNTY

T = 7%  
S.U. = 6% COMB. = 1%



SR 388



2012 AM DHV = 000  
2012 PM DHV = (000)



GRESHAM  
SMITH AND  
PARTNERS

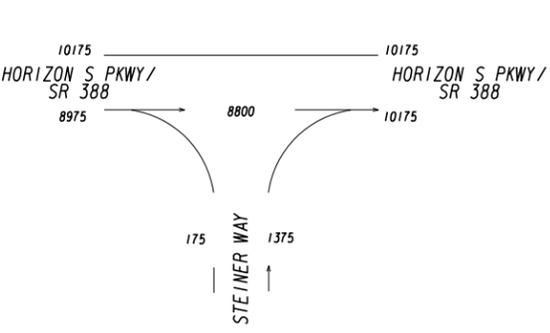
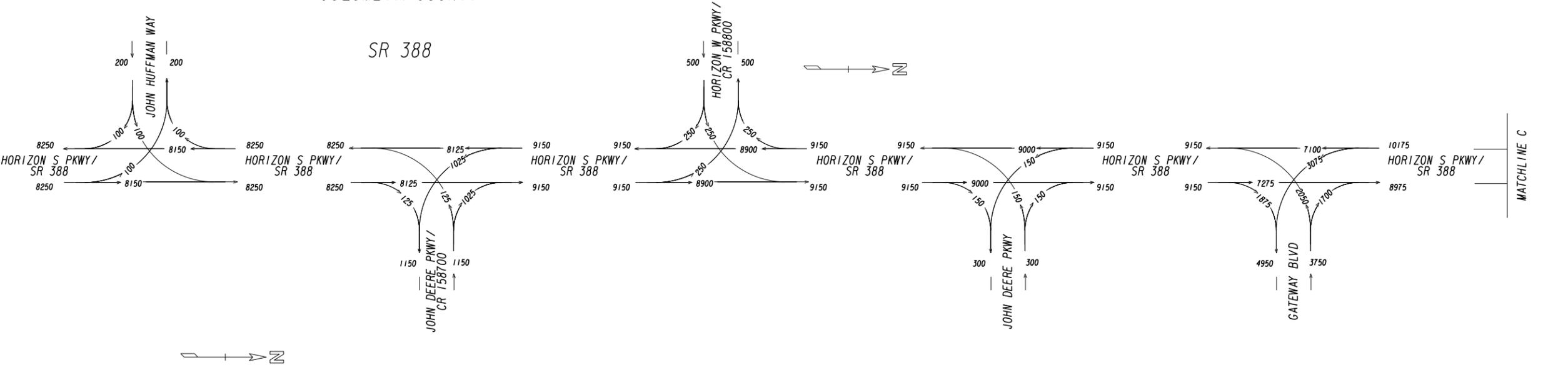
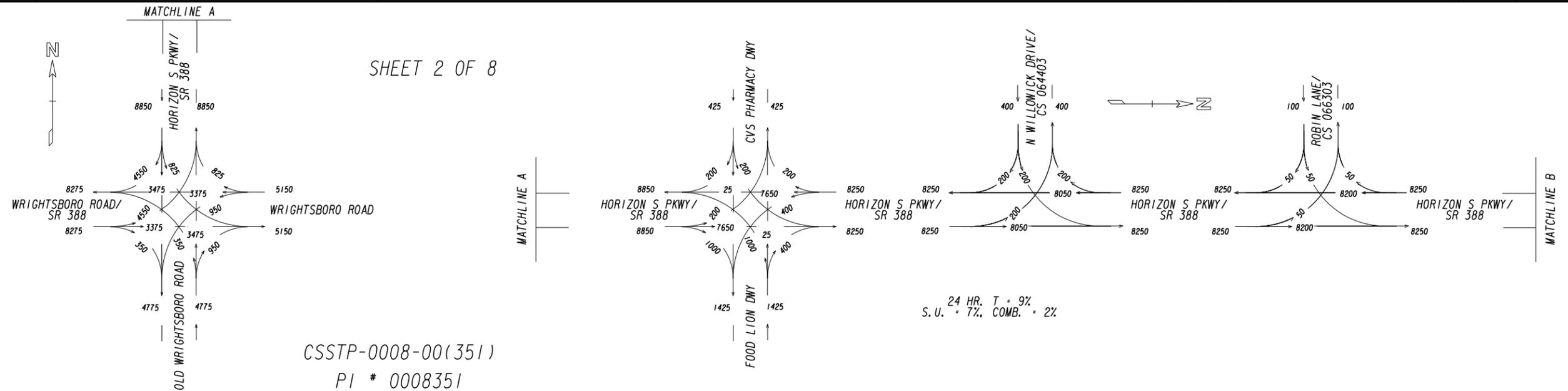
**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-01**



2012 AADT = 000



GRESHAM  
SMITH AND  
PARTNERS

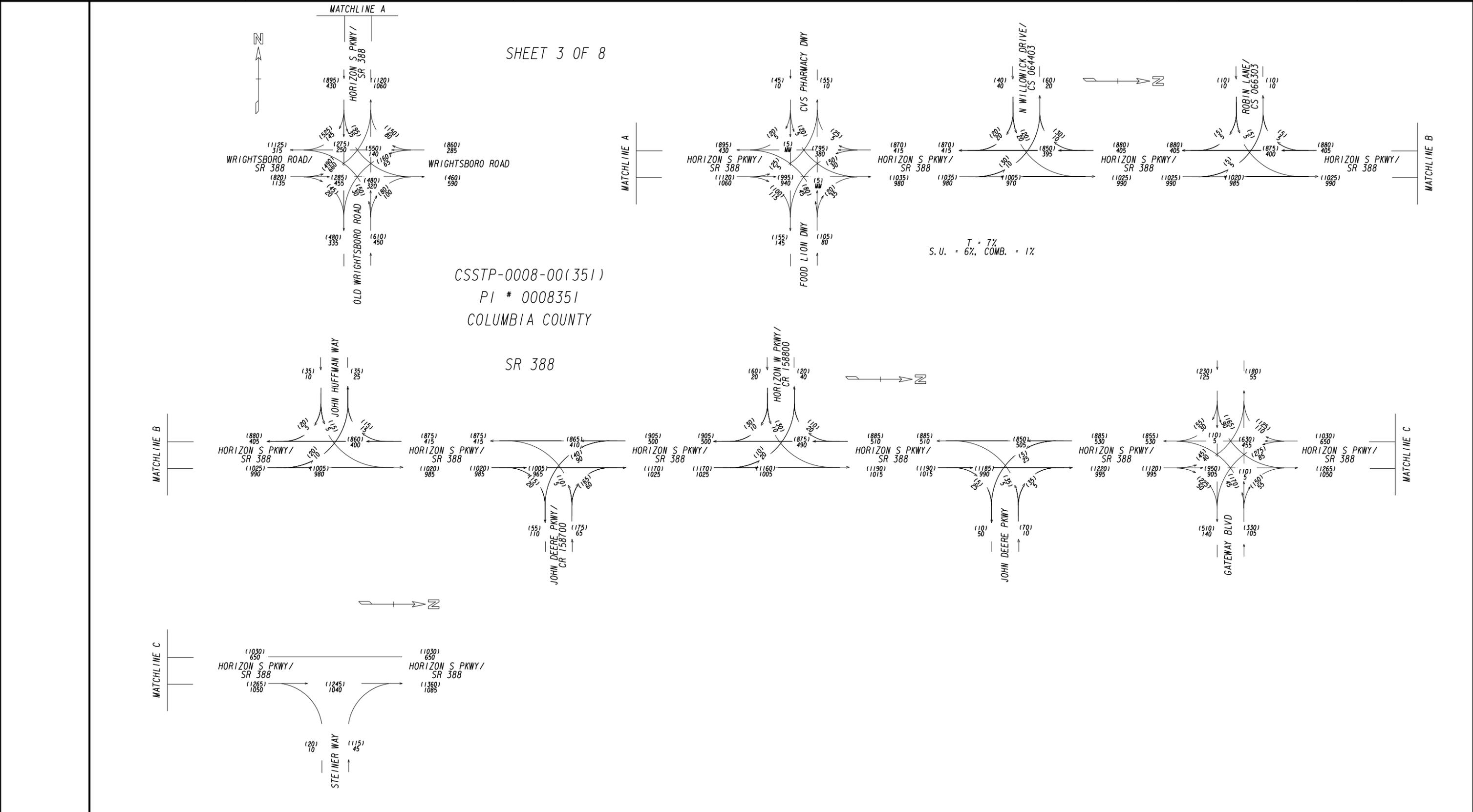
**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-02**



2017 NO BUILD AM DHV = 000  
2017 NO BUILD PM DHV = (000)



GRESHAM  
SMITH AND  
PARTNERS

**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES	

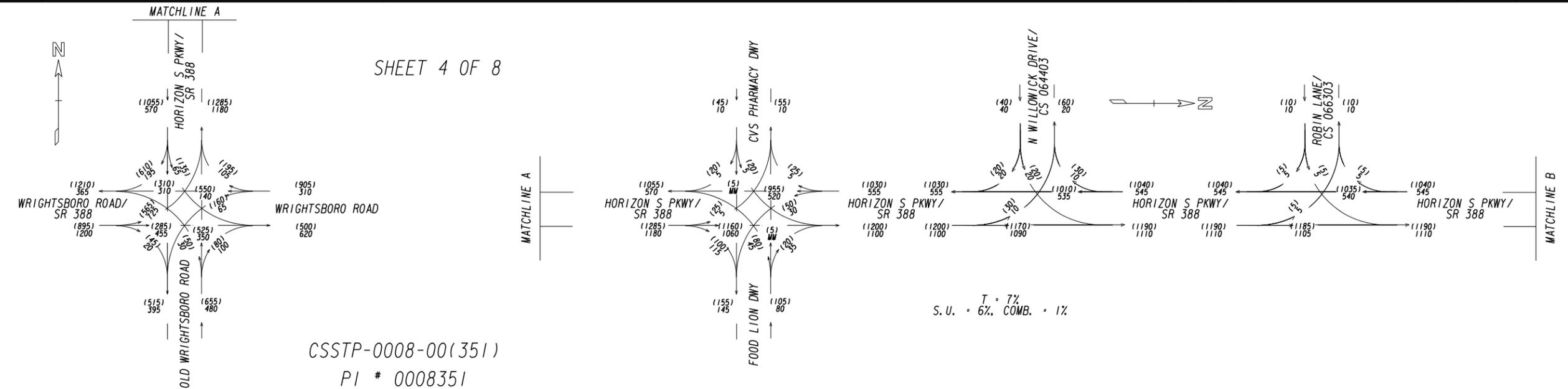
STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

**TRAFFIC DIAGRAM**

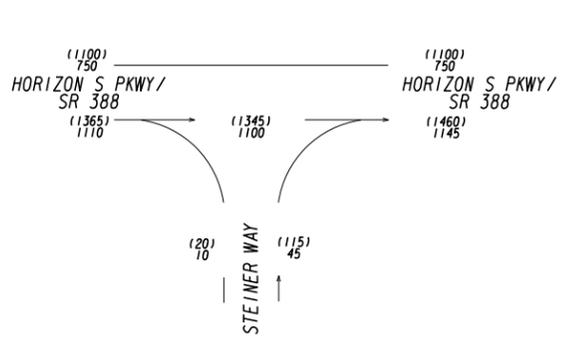
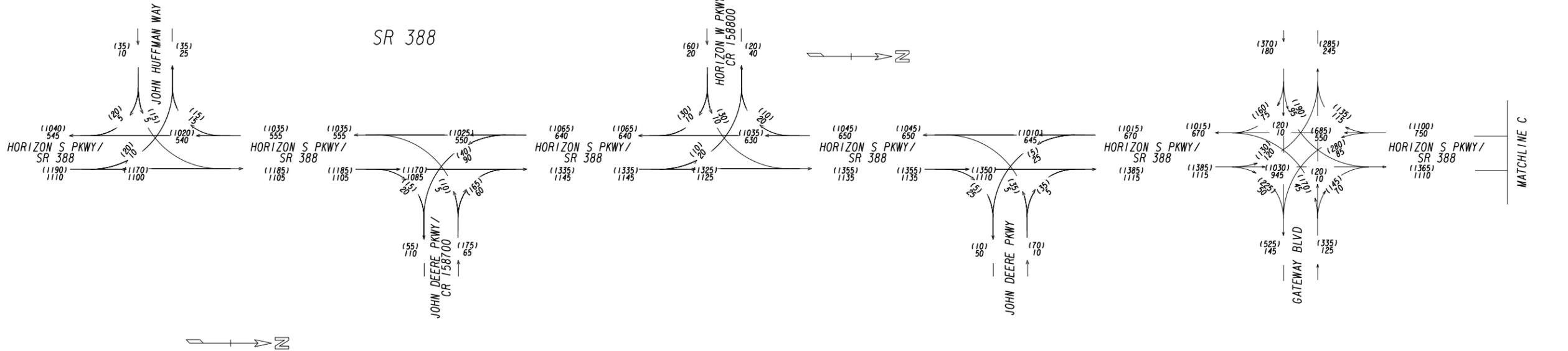
SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-03**



T = 7%  
S.U. = 6%, COMB. = 1%

CSSTP-0008-00(351)  
PI # 0008351  
COLUMBIA COUNTY



2017 BUILD AM DHV = 000  
2017 BUILD PM DHV = (000)



GRESHAM  
SMITH AND  
PARTNERS

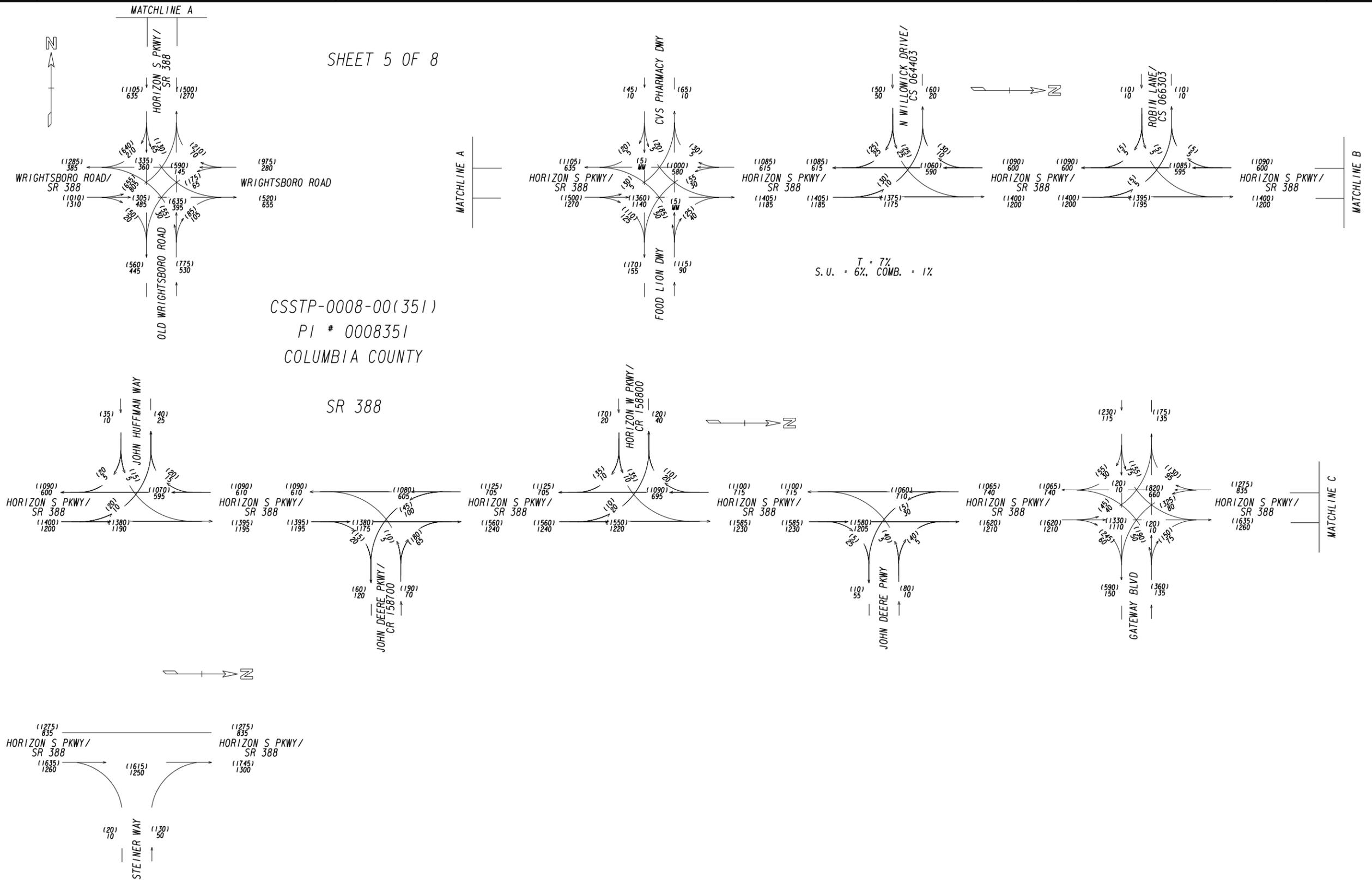
**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-04**



SHEET 5 OF 8

CSSTP-0008-00(351)  
PI # 0008351  
COLUMBIA COUNTY

SR 388

2037 NO BUILD AM DHV = 000  
2037 NO BUILD PM DHV = (000)



GRESHAM  
SMITH AND  
PARTNERS

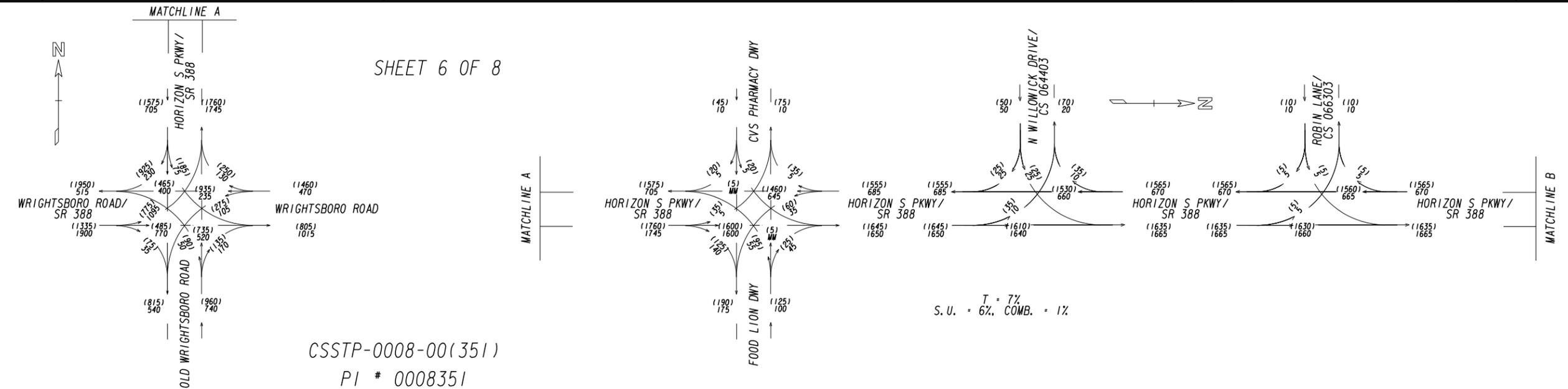
**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**

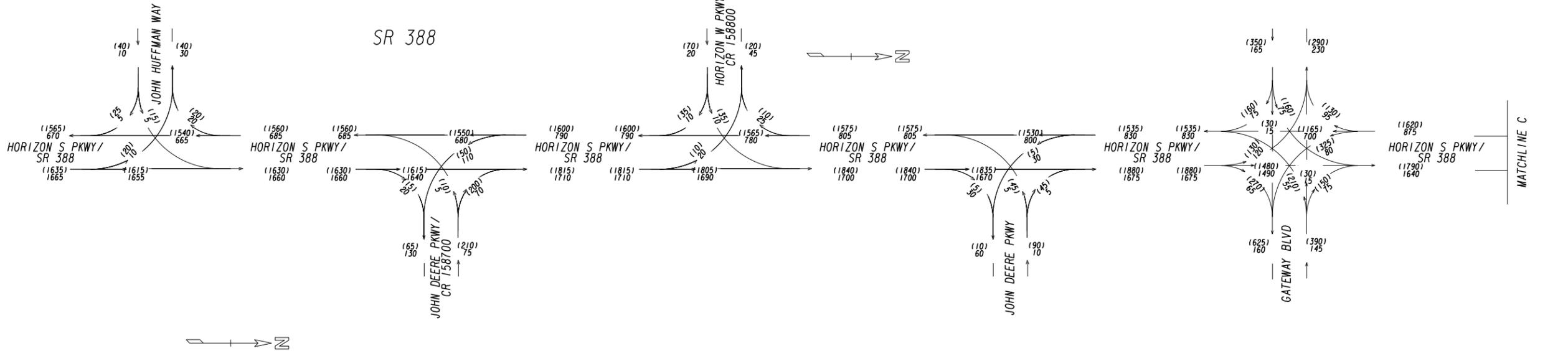
SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-05**



T = 7%  
S. U. = 6%, COMB. = 1%

CSSTP-0008-00(351)  
PI # 0008351  
COLUMBIA COUNTY



2037 BUILD AM DHV = 000  
2037 BUILD PM DHV = (000)



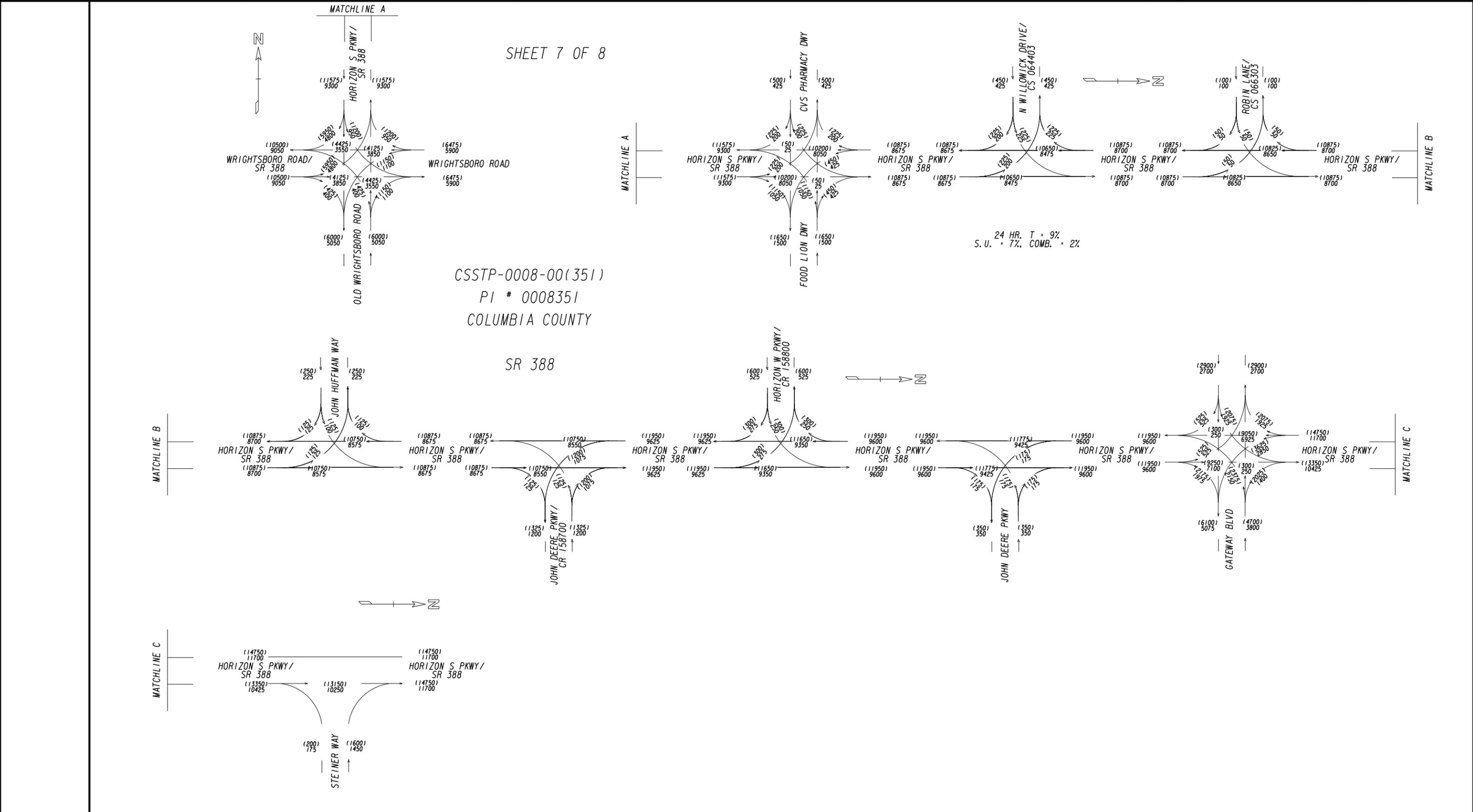
**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES	

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-06**



2017 NO BUILD AADT = 000  
2037 NO BUILD AADT = (000)



GRESHAM  
SMITH AND  
PARTNERS

**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

REVISION DATES	

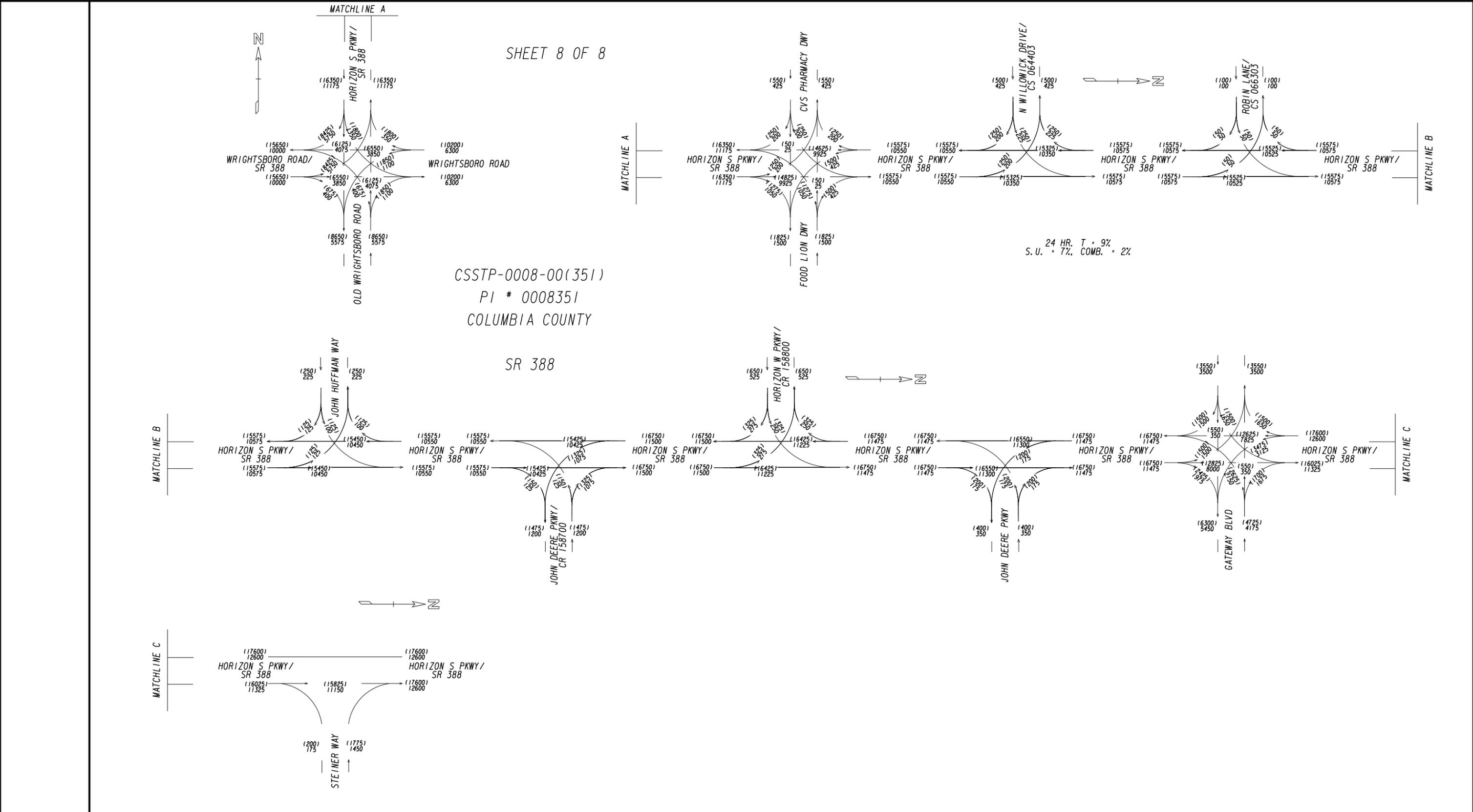
STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-07**



24 HR. T = 9%  
S.U. = 7%, COMB. = 2%

REVISION DATES	

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

**TRAFFIC DIAGRAM**

SR 388  
COLUMBIA COUNTY

DRAWING No.  
**10-08**



**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

# Attachment #5

# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** CSSTP-0008-00(351), Columbia County                      **OFFICE** Planning  
P.I. # 0008351  
**DATE** October 21, 2013

**FROM** Cynthia L. VanDyke, State Transportation Planning Administrator

**TO** Genetha Rice-Singleton, State Program Delivery Engineer  
**Attention:** George Brewer

**SUBJECT** **Reviewed** Design Traffic for SR 388 FROM CR 571/WRIGHTSBORO  
ROAD TO I-20

Per request, we have reviewed the consultant's design traffic data for the above project. Based on the information furnished, we find the design traffic projections to be satisfactory, and approve the design traffic volume.

If you have any questions concerning this information please contact Andre Washington at (404) 631-1925.

# Attachment #6

# **Concept Hydrology Study**

## **SR 388 from CR 571/Wrightsboro Road to I-20**

Project # CSSTP-0008-00(351)

PI # 0008351

County: Columbia

Prepared by:

URS Corporation  
400 Northpark Town Center  
1000 Abernathy Road, NE Suite 900  
Atlanta, Georgia 30328

November 1, 2013

## Introduction & Purpose

Project CSSTP-0008-00(351) is the widening and reconstruction of SR 388 from a 2-lane rural section to a 4-lane urban section with a raised median from CR 571/Wrightsboro Road to I-20. The project is located in Columbia County, GA.

The purpose of this report is to present the results of a concept level hydrology study for the project corridor and to provide an assessment of post-construction stormwater Best Management Practices (BMPs) best suited to the hydrologic attributes (e.g., topography, land use, ground water levels, and soils) of the project corridor.

The SCS Curve Number Method was selected for calculating runoff from the basins within the project corridor. Using available USGS Topographic QUAD Maps and GIS contours, drainage basins were delineated for the project corridor. Impervious, grassed, and wooded areas were determined for each basin using available aerial photography. This was done for the project corridor in both the pre- and post-construction conditions.

The NRCS Web Soil Survey reveals that most of the soils within the project limits fall within hydrologic soil group B, though others are mixed in as well. Based upon these soil group classifications and the Runoff Curve Number Table 2.1.5-1 provided in the Georgia Stormwater Management Manual (GSMM), curve number (CN) values were assigned to the various types of ground cover on the project as follows:

<b>Ground Cover Type</b>	<b>CN Value</b>
Impervious	98
Grassed	58
Wooded	55

Using the above curve numbers, an area-weighted average composite curve number for each delineated basin was computed for both the pre- and post-construction conditions.

Please see the attached layout for the location of the drainage basins and associated outfalls.

## **GDOT MS4 Program**

Columbia County is a designated Phase II Municipal Separate Storm Sewer System (MS4) in the State of Georgia. The GDOT MS4 Permit specifies that post-construction stormwater BMPs be implemented on GDOT projects such as this one in jurisdictions designated as MS4s.

The Permit states that, at a minimum, the post-construction BMPs must treat all stormwater runoff prior to discharge from GDOT's right-of-way or to the natural system. The treated stormwater runoff does not have to include stormwater flows that originate outside of GDOT's right-of-way or diverted flows from undisturbed areas. BMPs shall be designed to remove 80% of the average annual post-development total suspended solids (TSS) load or equivalent as defined in the Georgia Stormwater Management Manual (GSMM). Compliance with this performance standard is presumed to be met if the BMP system is sized to capture and treat the water quality treatment volume, which is defined as the runoff volume resulting from the first 1.2 inches of rainfall from a drainage area. Additional minimum post-construction standards that must be implemented include:

- Stream channel/aquatic resource protection
  - 24-hour extended detention storage of the 1-year, 24-hour storm event
  - Erosion prevention measures such as energy dissipation and velocity control
  - Preservation of applicable stream buffers
- Overbank flood protection
  - Downstream overbank flood protection shall be provided by controlling the post-development peak discharge rate to the predevelopment rate for the 25-year, 24-hour storm event.
- Extreme flood protection
  - Extreme flood protection shall be provided by controlling the 100-year, 24-hour storm event such that downstream flooding is not exacerbated.

## **Existing Conditions**

The existing road is a 2-lane rural section and the existing right-of-way appears to range from approximately 70' to 160' based on a review of available aerial photography and GIS information from the county.

The ground cover, soils, and terrain in project area are typical of the piedmont region of Georgia, within which the project resides. The topography in the area is hilly, with slopes ranging from 0% to a maximum of about 25%. The surrounding land uses along the corridor are predominantly suburban, big box commercial, and industrial.

Based upon a review of the Grovetown, GA and Evans Ga, GA 1980 USGS Topographic QUAD Maps, available GIS data, and available aerial mapping, the project corridor can be divided into 6 drainage basins. All 6 basins along SR 388 flow to Mill Branch, which ultimately flows to the Uchee Creek. There is a regional storage facility located on Mill Branch just west of the project. All of Columbia County and this entire project are located within the Savannah River Basin.

According to the NRCS Web Soil Survey for the project area, approximately 80% of the soils on the corridor have permeability rates greater than 0.5 inches/hour, which corresponds to the GSMM recommended minimum permeability rate for soils that are suitable for infiltration BMPs. Further, based on the Web Soil Survey, it is expected that approximately 65% of the soils on the project will have ground water table depths more than 6-ft.

According to a review of the latest approved (2012) 305(b)/303(d) list of impaired waters, the project is about 3.8 miles upstream of the Uchee Creek, which is an impaired waterway. The criteria violated for this waterway is Fecal Coliform (FC). Due to the nature of their practices and activities, GDOT is not a contributor of this pollutant of concern.

Based upon a review of the FEMA Flood Insurance Rate Map (FIRM) numbers 13073C0230D and 13073C0227D, part of the project near Mill Branch is located within the Zone A Special Flood Hazard Area (SFHA). This area is therefore subject to inundation by the 100-year flood.

## **Proposed Conditions**

The proposed project will widen SR 388 from a 2-lane rural section to a 4-lane urban section with a 20-foot raised median, 12-foot urban shoulders, and 2 to 1 slopes. The proposed profile grade line (PGL) will be elevated approximately 0.5 feet above the existing PGL. It is estimated that the proposed project will approximately triple the amount of impervious area currently on the project corridor.

It is anticipated that the right-of-way will be widened to approximately 120 to 230 feet to accommodate the proposed roadway section. Given that the existing right-of-way width is 70 to 160 feet and the project segment is approximately 2.2 miles long, a required right-of-way area of approximately 14 acres must be acquired to accommodate the proposed roadway.

In order to comply with Section 4.2.5 of the GDOT MS4 Permit, stormwater management BMPs need to be installed to provide water quality treatment of runoff from the GDOT roadway.

The project design will endeavor to minimize impacts to Environmentally Sensitive Areas (ESAs) and properties to the extent practicable. In general, this will be accomplished by offsetting the roadway widening to one side of the road versus the other, widening

symmetrically, and by selecting practicable locations for water quality BMP installation that minimize impacts.

We anticipate being able to divert most of the off-site water flowing to the project around the project through the use of swales and closed stormwater systems. These have been shown on the post-construction layout sheets.

## **Estimation of Required Stormwater Storage Volumes**

The methodologies provided in the GSMM were used to compute the required water quality and channel protection volumes for each of the 6 post-construction project drainage areas. The estimated required flood control storage volumes for the 25-year and 100-year, 24-hour storm events were computed using Intelisolve's Hydraflow Hydrographs 2007, Ver. 9.02, which uses HEC-22 computation methods. The required flood control storage volumes were computed based upon the assumption that selected flood control BMPs will be capable of attenuating post-construction peak discharges to be equal to or less than the pre-construction peak discharges for the flood control storm events.

Please see Table 1 below for a listing of the 6 project drainage basins and their associated areas, curve numbers, and relevant stormwater storage volumes.

Table 1. Drainage Basin Attributes and Required Post-Construction BMP Control Volumes								Required BMP Control Volumes				Description of adjacent land use
Basin ID	Total Drainage Area (AC)	Pre-Dev Impervious Area (AC)	Pre-Dev % Impervious	Pre-Dev CN	Post-Dev Impervious Area (AC)	Post-Dev % Impervious	Post-Dev CN	WQv (ft <sup>3</sup> )	CPv (ft <sup>3</sup> )	Overbank Flood Protection Volume (ft <sup>3</sup> )	Extreme Flood Protection Volume (ft <sup>3</sup> )	
1	1.48	0.70	47%	77	0.77	52%	79	3,341	3,523	4,276	6,669	Suburban
2	0.50	0.18	36%	72	0.30	60%	82	1,285	1,190	2,650	3,565	Suburban
3	8.34	4.66	56%	80	6.13	74%	87	25,849	19,716	37,709	49,050	Suburban
4	13.04	5.09	39%	74	9.71	74%	88	40,907	31,025	86,813	109,794	Suburban
5	8.55	1.97	23%	66	5.01	59%	81	21,503	20,351	55,639	75,288	Suburban
6	4.51	2.21	49%	78	3.34	74%	88	14,076	10,730	24,787	31,443	Suburban

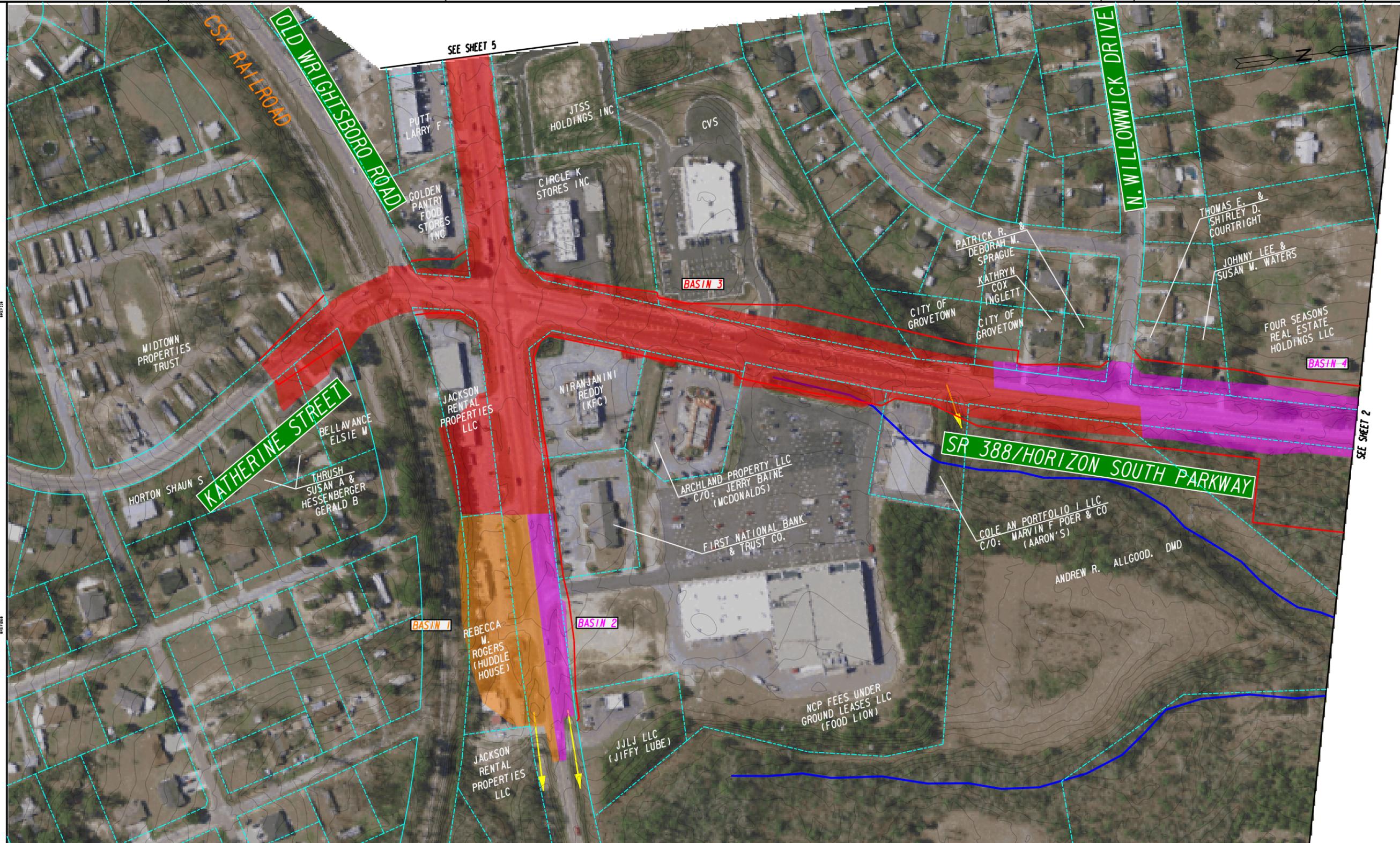
## **Selection of Stormwater BMPs for the Project**

It is anticipated that wet detention ponds, enhanced swales, infiltration trenches, and sand filters will be used for this project. Basins 1 and 2 will only be treated for water quality and channel protection. This will be achieved using enhanced swales. According to the Georgia Stormwater Manual, it is not practical to provide overbank flood protection or extreme flood protection volumes using enhanced swales. Basins 3, 4, and 5 will be treated for water quality, channel protection, overbank flood protection and extreme flood protection. This will be accomplished using wet detention ponds. Instead of building wet detention ponds for basins 3 and 4, it may be possible to utilize the regional storage facility just west of the project on Mill Branch to meet MS4 requirements for these basins. This will be determined in preliminary design, after coordinating with Columbia County. Basin 6 will be treated for water quality and channel protection. This will be accomplished using a combination of enhanced swales, infiltration trenches, sand filters, and other BMP's suited for the urbanized area this area is expected to become before construction of this project. According to the Georgia Stormwater Manual, it is not practical to provide overbank flood protection or extreme flood protection volumes using enhanced swales, infiltration trenches or sand filters.

The benefits of the wet detention pond are that it can be used to achieve 80% TSS removal, as well as control the 100 year-24 hour storm event. The enhanced swales, infiltration trenches and sand filters will achieve 80% TSS removal and hold the channel protection volume. Additional ROW will be required for the wet detention ponds, but they will not result in any displacements.

## **Conclusion**

It is anticipated that wet detention ponds, enhanced swales, infiltration trenches, and sand filters will be used on this project to meet MS4 requirements. Using this approach, the design will meet the required 80% TSS removal performance goal, and is expected to minimize maintenance costs.



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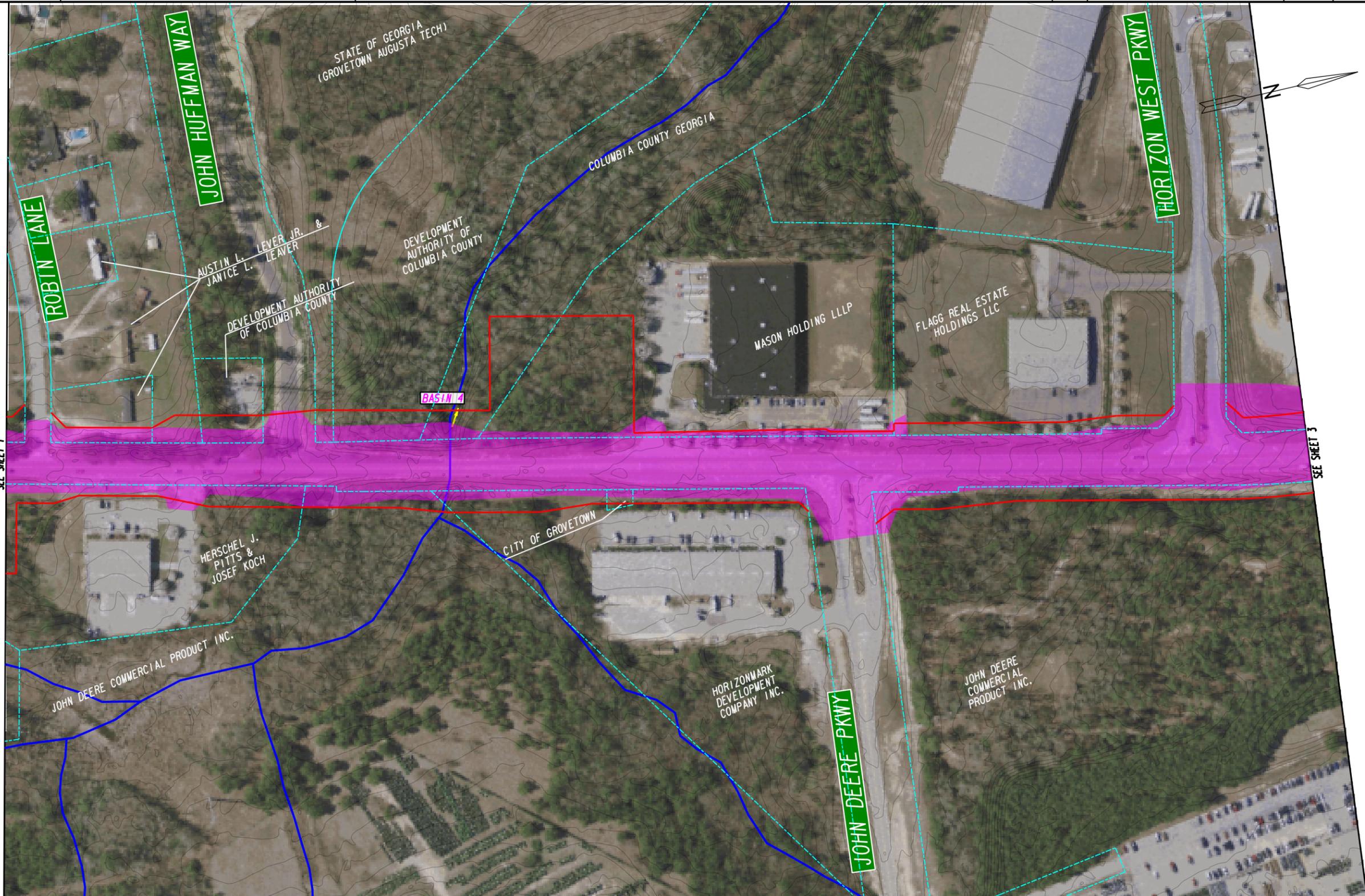
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REVISION DATES

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: PROGRAM DELIVERY  
**MS4 PRE-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
WRIGHTSBORO RD TO I-20

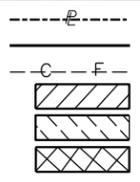
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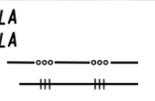
SEE SHEET 1

SEE SHEET 3

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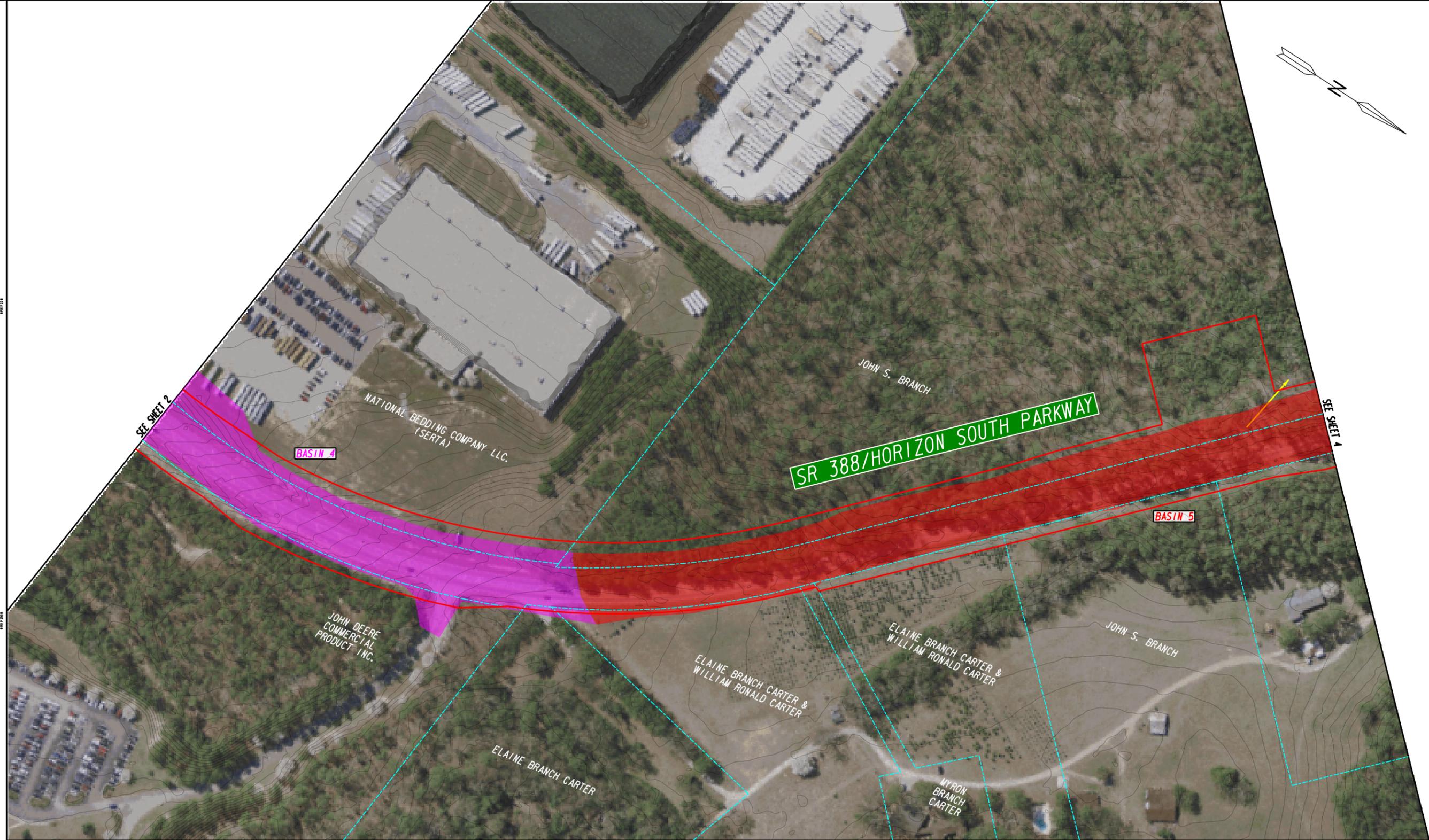
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REVISION DATES

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**MS4 PRE-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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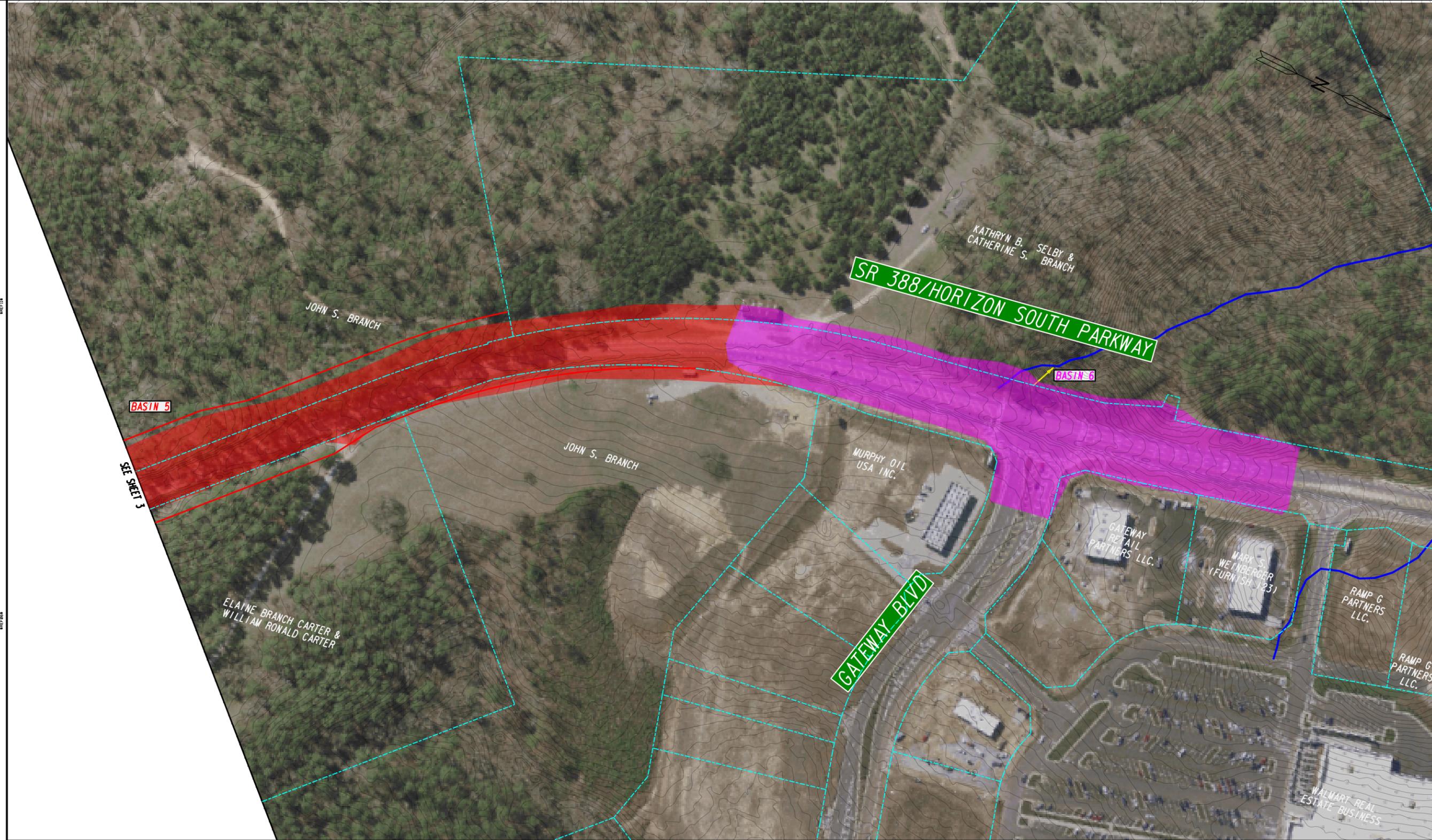
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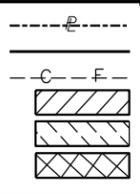
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**MS4 PRE-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
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SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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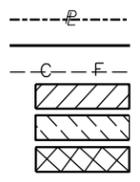
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SR 388/WRIGHTSBORO ROAD

BASIN 3

SEE SHEET 1

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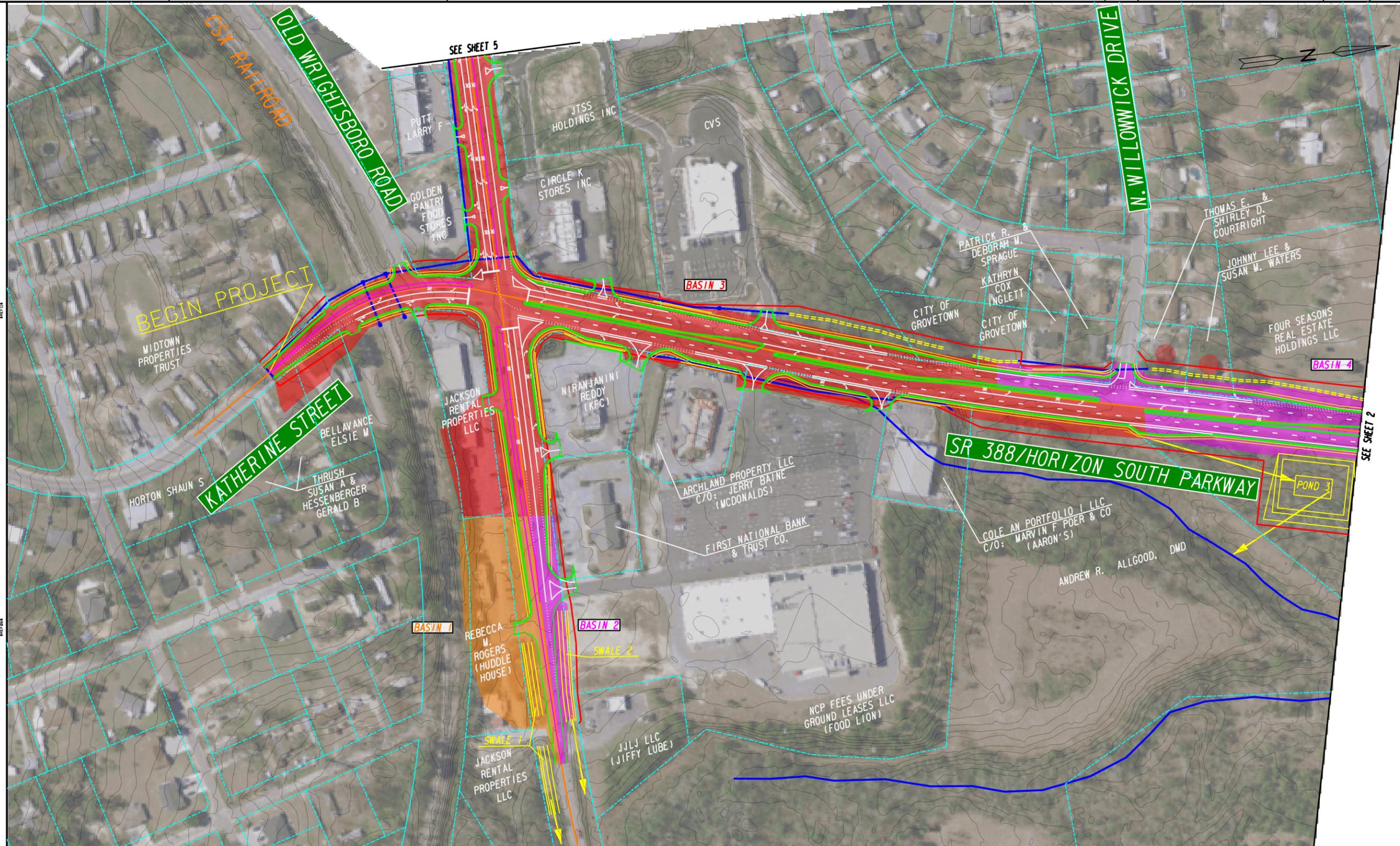
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**MS4 PRE-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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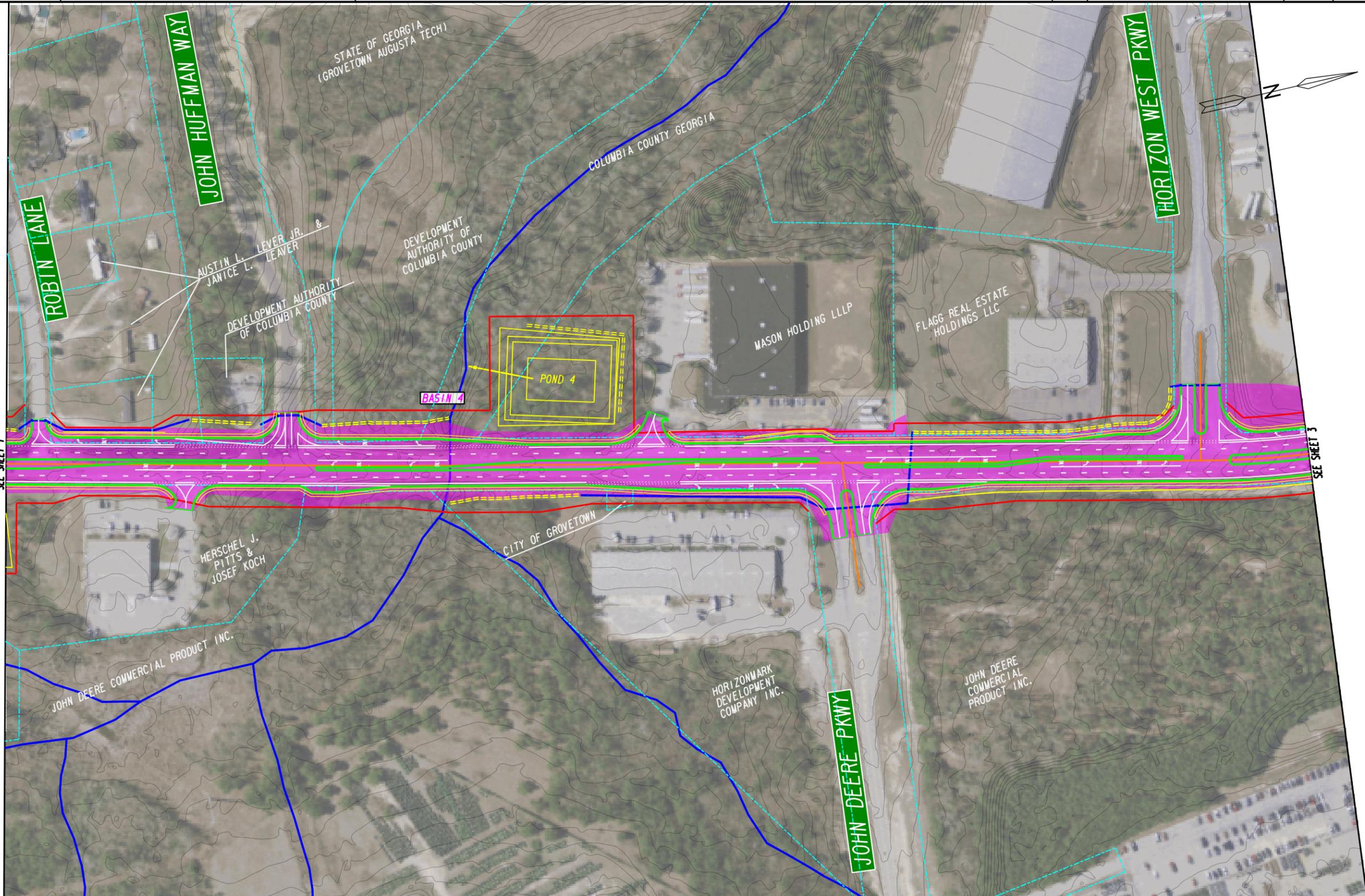
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**MS4 POST-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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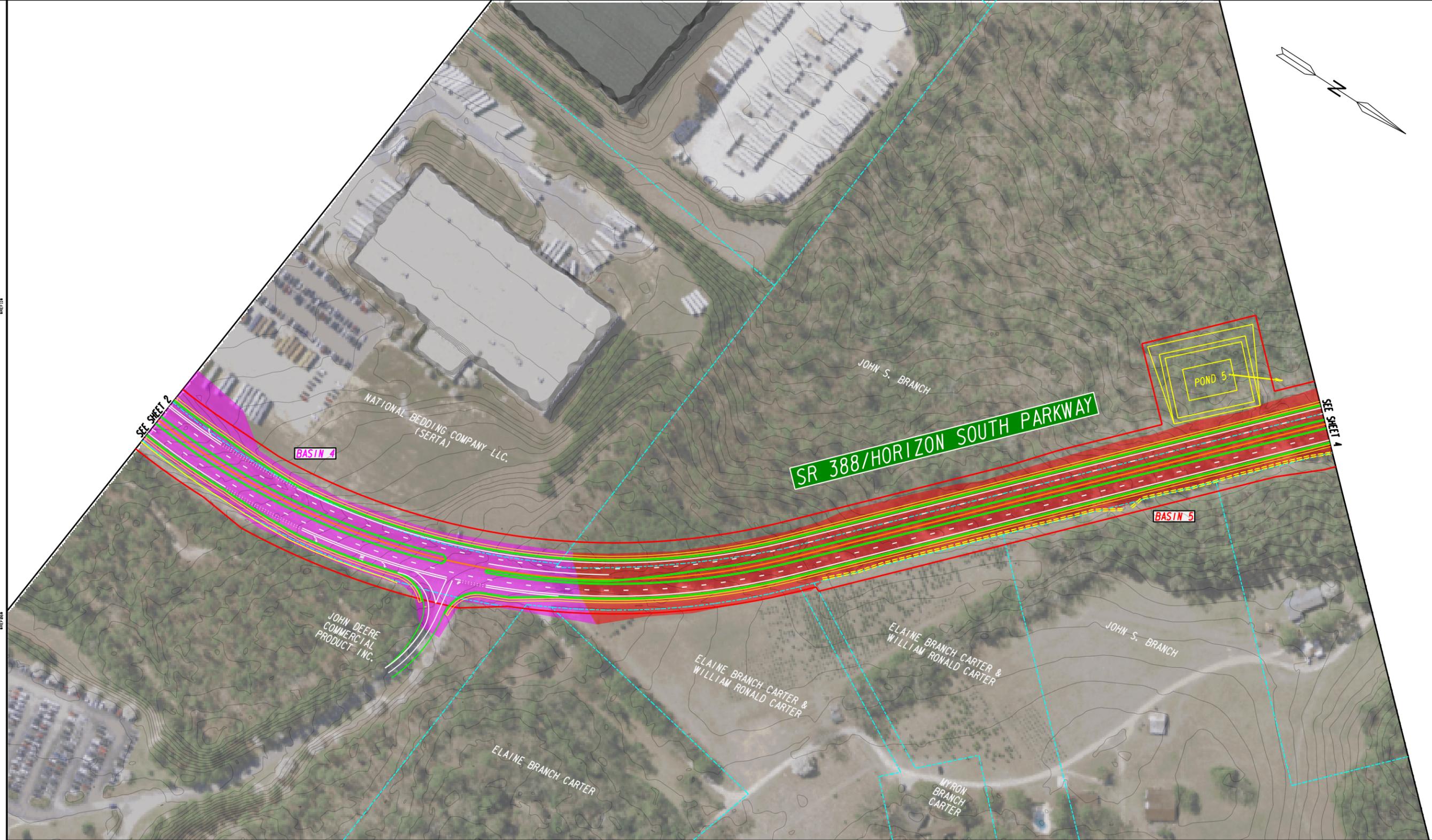
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**MS4 POST-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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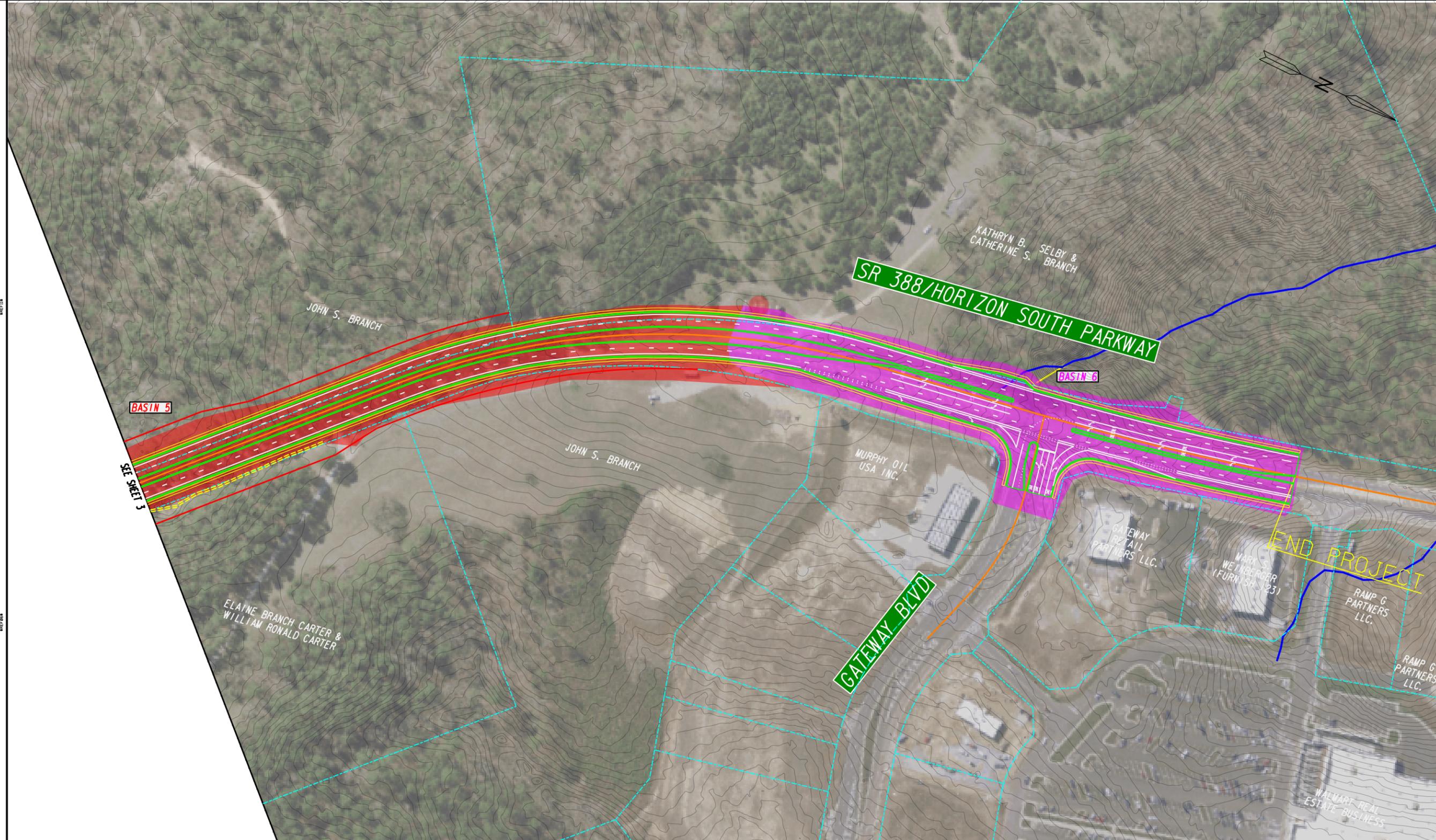
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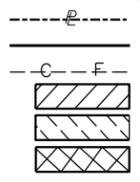
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**MS4 POST-CONSTRUCTION LAYOUT**

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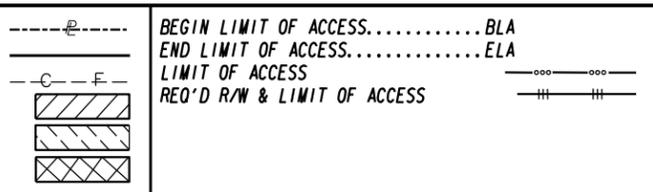
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**MS4 POST-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

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PROPERTY AND EXISTING R/W LINE  
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 OFFICE: PROGRAM DELIVERY  
**MS4 POST-CONSTRUCTION LAYOUT**

SR 388 FROM CR 571 /  
 WRIGHTSBORO RD TO I-20

DRAWING No.  
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# Attachment #7

# **HISTORIC RESOURCES SURVEY REPORT**

**GDOT PROJECT CSSTP-0008-00(351), COLUMBIA COUNTY**

**P.I. No. 0008351**

**HP No. 130830-005**

**Prepared For:**

Georgia Department of Transportation  
Office of Environmental Services  
600 West Peachtree Street, NW  
Atlanta, Georgia 30308  
(404) 631-1100

**Prepared By:**

Edwards-Pitman Environmental, Inc.  
1250 Winchester Parkway  
Suite 200  
Smyrna, Georgia 30080  
(770) 333-9484

**Under Contract With:**

URS Corporation  
400 Northpark Town Center  
1000 Abernathy Road, NE  
Suite 900  
Atlanta, GA 30328  
(678) 808-8800

**October 28, 2013**

**This document has been prepared by Edwards-Pitman Environmental, Inc. for use in compliance with Section 106 of the National Historic Preservation Act of 1966 and subsequent amendments.**

# **SURVEY REPORT**

## **GDOT PROJECT CSSTP-0008-00(351), COLUMBIA COUNTY**

**P.I. No. 0008351**

**HP No. 130830-005**

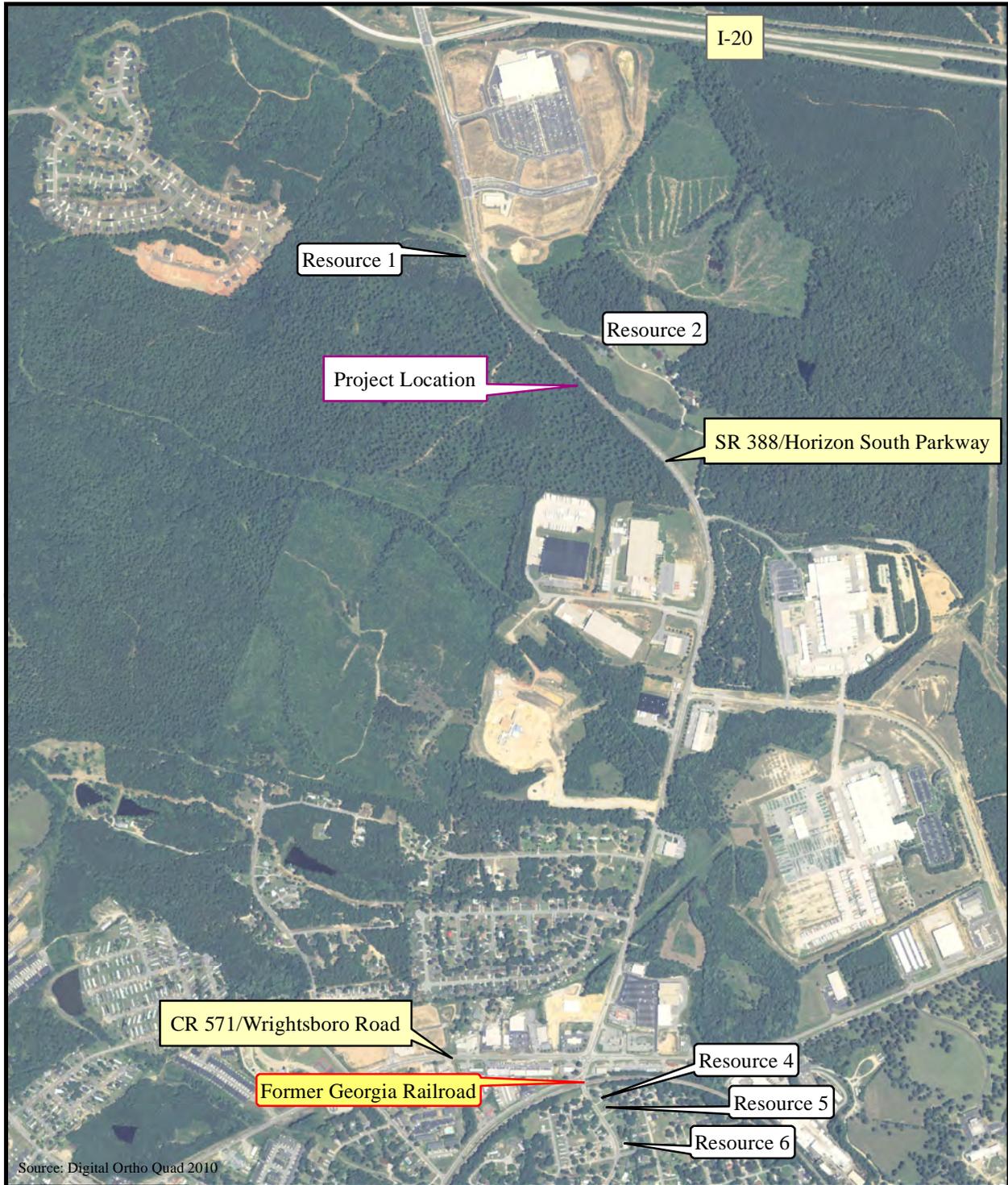
The proposed project was field surveyed for historic properties in compliance with Section 106 of the Georgia Environmental Policy Act. The survey boundary and methodology were established using the *GDOT/FHWA Cultural Resources Survey Guidelines*. These guidelines were established as a result of past interaction with the State Historic Preservation Officer (SHPO) and his staff and were agreed upon by the Federal Highway Administration (FHWA) and the SHPO.

The proposed project would widen a 2.2 mile section of SR 388 in Columbia County, Georgia from approximately 600 feet south of Wrightsboro Road to just south of the I-20 Interchange (see attached Figure 1). The project proposes to widen the existing two lane section to a four lane urban section divided by a raised median with median breaks at designated locations. The project also includes the addition of sidewalks and bike lanes. The existing right-of-way (ROW) varies from 70 to 160 feet. Additional ROW will be required for widening of the existing roadway but the amount has not been determined at this time.

The area of potential effects (APE), as defined in 36 CFR 800.16(d), is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on the nature and the scope of the undertaking, the guidance in the *GDOT/FHWA Cultural Resources Survey Guidelines* and past experience with similar projects, the Department has evaluated and defined the APE for this proposed project. Because of the nature and scope of the undertaking, the area of potential direct effects consists of the project view shed and the proposed right-of-way of the proposed project, within which all construction and ground disturbing activity would be confined (refer to attached graphic). No potential for indirect effects outside this corridor is anticipated as a result of implementation of the proposed project. No additional access to the existing facility would be provided and existing access to the facility would either be maintained or modified. The project would only increase the capacity of the existing roadway to meet anticipated future demand.

The review of existing information on previously identified historic properties revealed that no National Register listed properties, proposed National Register nominations, National Historic Landmarks, or bridges determined eligible for inclusion in the National Register in the updated Georgia Historic Bridge Survey (GHBS) were identified within the proposed project's APE.

In addition, no properties 50 years old or older were identified within the proposed project's APE in the in the 2005 Department of Natural Resources (DNR) Columbia County survey found on the Georgia's Natural, Archaeological, and Historic Resources GIS (GNAHRGIS) database.

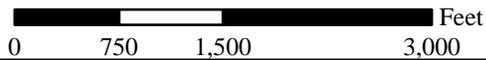


Source: Digital Ortho Quad 2010



**Figure 1. Project Location and Historic Resources Map**

SR 388 from CR 571/Wrightsboro Road to I-20  
 Columbia County  
 Project No. CSSTP-0008-00(351), P.I. No. 0008351



A total of six properties 50 years of age or older not identified in the DNR survey were identified within the proposed project's APE during the field survey. These properties are described in the following table:

<b>Name of Resource</b>	<b>Date of Construction</b>	<b>Type and/or Style</b>	<b>Location</b>	<b>National Register Recommendation</b>
Resource 1	1963	Service Garage	541 Horizon South Parkway	Not Eligible
Resource 2	1913/1950	No Academic Type/Style	670 Lewiston Road	Not Eligible
The former Georgia Railroad (Resource 3)	1833	Railroad	Intersects Katherine Street paralleling Wrightsboro Road	<b>Eligible</b>
Resource 4	1960	Compact Ranch	610 Katherine Street	Not Eligible
Resource 5	1960	Compact Ranch	608 Katherine Street	Not Eligible
Resource 6	1960	Linear Ranch	602 Katherine Street	Not Eligible

In addition to the Georgia SHPO, other potential consulting parties were identified based on the nature of the undertaking and the guidance in the *GDOT/FHWA Cultural Resources Survey Guidelines*. The other potential consulting parties invited to participate in the Section 106 process were the Central Savannah River Area Regional Commission, Columbia County Historical Society, and the Columbia County Commission. The consulting parties were informed of our efforts to identify historic properties by consulting existing information and the results of those efforts and asked to provide information on any unidentified National Register listed or eligible properties within the project's APE by a Notification dated August 29, 2013 (see Notification in the Appendix). A response dated September 3, 2013 was received from the Georgia SHPO to the Department's invitation to become a consulting party in the Section 106 process. No other responses were received.

For each property 50 years old or older identified within the APE, a Property Information Form with attached photographs has been prepared. The Criteria of Eligibility was applied to each property and a recommendation regarding National Register eligibility has been made. For the property recommended eligible for listing in the National Register, a site plan sketch has also been attached to the Property Information Form.

Of the six properties 50 years old or older that were surveyed and to which the Criteria of Eligibility was applied, one has been recommended eligible for inclusion in the National Register of Historic Places. This property is the former Georgia Railroad (Resource 3).

Property Information Forms and Pictures  
Provided Upon Request

# Attachment #8

# *Ranger Consulting, Inc.*

*Geotechnical, Environmental, Drilling, Construction*

3147 Martha Berry Highway, Rome, Georgia 30165; Phone: 706-290-1782; Fax: 706-290-1701

October 30, 2013

Mr. Nick Castronova  
URS Corporation  
400 Northpark Town Center  
1000 Abernathy Road, NE  
Suite 900  
Atlanta, Georgia 30328

RE: Limited Phase I Environmental Site Assessment Report  
SR 388 from CR 571/Wrightsboro Road to Interstate 20  
Project No. CSSTP-0008-00(351)  
PI No. 0008351  
Columbia County, Georgia

Dear Mr. Castronova:

Ranger Consulting, Inc. is pleased to submit the attached draft Limited Phase I Environmental Site Assessment Report. In summation, the report provides documentation of five *Recognized Environmental Concerns (RECs)*.

The five properties Ranger considers to be RECs are as follows:

## **Underground Storage Tank (UST)**

- Golden Pantry #76, 5100 Wrightsboro Road
- Circle K #5374, 5101 Wrightsboro Road
- Murphys Express #8575, 7009 Gateway Boulevard

## **Hazardous Waste (HW)**

- Planet Solutions DBA Circle Environmental of GA and FL, 782 Horizon South Parkway
- Heart to Heart Trucking, 541 Horizon South Parkway

All three of the UST facilities are currently operating as convenience stores and retail fueling facilities. Based upon Environmental Protection Division (EPD) file reviews, it appears that the facilities are operating in compliance with Georgia's Rules for Underground Storage Tank Management. Although the compliance records are in order and there are no records of any confirmed releases at the facilities, it does not negate the possibility that the UST systems could have developed as yet undetected releases of petroleum products to the subsurface. Given the proximity of the UST systems to the proposed corridor, these facilities are considered RECs.

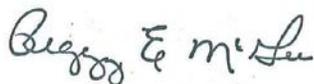
Mr. Castronova  
October 30, 2013  
Page 2

Planet Solutions DBA Circle Environmental of GA and FL is currently operating as an industrial launderer. Planet Solutions is located within an office complex in the southeast quadrant of SR 388 and John Deere Parkway. The business has been at this location since April 2000. Planet Solutions recycles oil-soaked absorbent pads from manufacturing processes utilizing typical dry cleaning equipment and the chemical perchloroethylene (perc). Planet Solutions, a RCRA Large Quantity Generator subject to routine inspections by EPD, has not experienced any violations. Based upon the hazardous materials utilized in the operation, this facility is considered a REC.

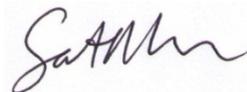
A vacant mechanic shop building appears, due to the oversized bay doors, to have once operated as a mechanic shop for maintenance and repairs of large trucks. This assumption was further enforced by the name of the former business, Heart to Heart Trucking, which was obtained from the City Directory. Numerous attempts to ascertain the history of the site did not yield any information. Based upon the physical characteristics of the building and the nature of the former business inferred by the name, this property is considered a REC.

We appreciate the opportunity to provide you with our services. If you develop any questions regarding the content of the report please call me at (706) 290-1782.

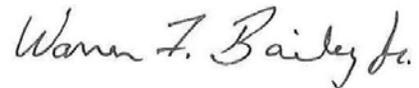
Respectfully,



Peggy McGee  
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**SR 388 from CR 571/Wrightsboro Road to Interstate 20  
Project No. CSSTP-0008-00(351)  
PI No. 0008351  
Columbia County, Georgia**

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**Limited Phase I  
Environmental Site Assessment**

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**Prepared For:**

URS Corporation  
400 Northpark Town Center  
1000 Abernathy Road, NE  
Suite 900  
Atlanta, Georgia 30328

Prepared By:

Ranger Consulting, Inc.  
3147 Martha Berry Highway  
Rome, GA 30165

October 30, 2013

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Appendix D	— Regulatory Records Documentation
Appendix E	— Historic Research Documentation
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## 1.0 SUMMARY

Ranger Consulting, Inc. (Ranger) has performed a *Phase I Environmental Site Assessment* (ESA) in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-05 for the widening of the SR 388 South corridor from just south of CR 571/Wrightsboro Road to just south of Interstate 20 (I-20) in Grovetown, Columbia County, Georgia, hereafter referred to as the Site. The ESA included a site reconnaissance, interviews, historical research, file reviews and database searches for the Site, which is the proposed right-of-way along SR 388 from CR 571/Wrightsboro Road to Interstate 20. Any exceptions to, or deletions from this practice are described in Section 10.0 of this report. The Summary should not be considered a stand-alone document. The complete report including support documentation and limitations should be evaluated in its entirety.

The Site is comprised of multiple properties located immediately adjacent to and/or proximal to the proposed roadway project. A site vicinity map, topographic map and site plan depicting the location of the subject Site and its surrounding topography are included in Appendix A, Figures 1 through 3, respectively. During the course of the ESA the following properties were evaluated for potential environmental concerns:

### On-site

- Golden Pantry #76, 5100 Wrightsboro Road, Parcel No. G04 002
- Golden Pantry #47, 5100 Wrightsboro Road, Parcel No. G04 002
- Circle K #5374, 5101 Wrightsboro Road, Parcel No. G04 007
- Smile Gas, Inc., 5101 Wrightsboro Road, Parcel No. G04 007
- CVS Pharmacy #4589, 869 Horizon South Parkway, Parcel No. G04 010
- John Deere 4000 Focus Factory, 700 Horizon South Parkway, Parcel No. 069 001C
- John Deere 5000 Focus Factory, 4900 John Deere Parkway, Parcel No. 069 001C
- Augusta Bedding, 701 Horizon South Parkway, Parcel No. 069 001G
- Serta Mattress Company, 701 Horizon South Parkway, Parcel No. 069 001G
- MetoKote Corporation, Inc. – Plant 14, 702 Horizon South Parkway, Parcel No. 069 001C
- Owens & Minor Distribution, 777 Horizon South Parkway, Parcel No. 069 001F
- Planet Solutions DBA Circle Environmental of GA and FL, 782 Horizon South Parkway, Parcel No. 069 001J
- National Bedding Company, LLC, 6010 Horizon West Parkway, Parcel No. 069 001G
- Palmetto Industries International, 6001 Horizon West Parkway, Parcel No. 069 001K
- Terminix, 748 Horizon South Parkway, Parcel No. 069 001J
- La Bay Transportation Services, Inc., 776 Horizon South Parkway, Parcel No. 069 001J
- Terminix International, 778A Horizon South Parkway, Parcel No. 069 001J
- Brunner Manufacturing, Inc., 784 Horizon South Parkway, Parcel No. 069 001J
- Bossard, Inc., 792 Horizon South Parkway, Parcel No. 069 001J
- Bearing Distributors, 822 Horizon South Parkway, Parcel No. 069 001J

- Vacant Mechanic Shop Building, 541 Horizon South Parkway, Parcel No. 062 086
- Murphy Express #8575, 4009 Gateway Boulevard, Parcel No. 068 1062
- Walmart Supercenter #5735, 5010 Steiner Way, Parcel No. 068 059Z
- Reliable Equipment Rentals, Inc., 812 Horizon South Parkway, Parcel No. Not Available
- Advance Auto Parts, 812 Horizon South Parkway, Parcel No. G04 009
- United Medical Enterprises, 820 Horizon South Parkway, Parcel No. 069 001J

### **Surrounding**

- J&H Stores Pump & Shop 35/KAK, Inc./Vijay Kumar, 500 Lewiston Road, Parcel No. 068 1058
- Eagle Paint & Body, 5113 Wrightsboro Road, Parcel No. G03 006B
- Dorsey Towing, 5113 Wrightsboro Road, Parcel No. G03 006B
- Harris Tire & Service Center, 5106 Wrightsboro Road, Parcel No. Not Available
- O'Reilly Auto Parts, 5125 Wrightsboro Road, Parcel No. No Available
- Advance Auto Parts #6127, 5140 Wrightsboro Road, Parcel No. G03 001H
- Georgia Iron Works, 5000 Wrightsboro Road, Parcel No. 069 102
- Gilvey's Cleaners, 5108 Wrightsboro Road, Parcel No. G03 001F
- Golden Pantry Food Store, 5108 Wrightsboro Road, Parcel No. G03 001F
- TJ's Laundrette, 5114 Wrightsboro Road, Parcel No. G03 001B
- Smile Gas #109, 311 Robinson Avenue, Parcel No. Not Available
- The Pumping Station #8, 499 Lewiston Road, Parcel No. 061 030D
- Jiffy Lube, 5035 Wrightsboro Road, Parcel No. G04 001
- Lewiston Road and I-20 (inert waste landfill), 450 Lewiston Road, Parcel No. 068 055
- Columbia County Municipal Solid Waste Landfill, 475 Lewiston Road to William Few Parkway, Parcel No. 061 030F
- Columbia County Inert Waste Landfill, 1812 William Few Parkway, Parcel No. 061 028
- Transagri, Inc., 475 Lewiston Road, Parcel No. 061 030F
- Dixie Meter, 475 Lewiston Road, Parcel No. 061 030F

This assessment has revealed evidence of five *recognized environmental conditions* (RECs) and one *historical recognized environmental condition* (HREC) in connection with the Site.

On September 10, 2013 Ranger made a reconnaissance of the Site, which is comprised of numerous properties proximal to the roadway that will be used for right-of-way associated with the proposed road widening project. The Site currently consists predominantly of commercial properties primarily located at the intersection of SR 388 and CR 571/Wrightsboro Road and at or near the SR 388 and I-20 interchange. An industrial park is located on the east and west sides of SR 388 approximately one mile north of the beginning of the project corridor. Two residential subdivisions are located on the west side of SR 388 just north of the commercial area at CR 571/Wrightsboro Road. The Project Site is bordered by forested land, planted fields and private residences. Based upon a review of historical records and interviews, the Project Site

appeared to be undeveloped, with the exception of a few private residences until the early 90's when John Deere was constructed, followed by Augusta Bedding, now known as National Bedding, in the mid-90s. Select photographs of the Site taken by Ranger during the site reconnaissance are included in Appendix B.

The investigation revealed evidence of five properties that would be considered RECs and one property that would be considered an HREC.

- Golden Pantry #76, 5100 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with one 2,000-gallon diesel and three 10,000-gallon gasoline USTs. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Circle K #5374, 5101 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with three 12,000-gallon gasoline, one 10,000-gallon diesel and one 10,000-gallon Temporarily Out of Use tank classified as 'other'. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Planet Solutions DBA Circle Environmental of GA and FL, 782 Horizon South Parkway is currently operating as an industrial launderer. Planet Solutions is located within an office complex in the southeast quadrant of SR 388 and John Deere Parkway. The business has been at this location since April 2000. Planet Solutions recycles oil-soaked absorbent pads from manufacturing processes utilizing typical dry cleaning equipment and the chemical perchloroethylene (perc). Planet Solutions, a RCRA Large Quantity Generator subjected to routine inspections by EPD, has not experienced any violations. Based upon the hazardous materials utilized in the operation, this facility is considered a REC.
- A vacant mechanic shop building located at 541 Horizon South Parkway, appears, due to the oversized bay doors, to have once operated as a mechanic shop for maintenance and repairs of large trucks. This assumption was further enforced by the name of the former business, Heart to Heart Trucking, which was obtained from the City Directory. Numerous attempts to ascertain the history of the site did not yield any information. Based upon the physical characteristics of the building and the nature of the former business inferred by the name, this property is considered a REC.
- Murphy Express #8575 is currently operating as a retail fueling facility with one 12,000-gallon diesel, one 8,000-gallon gasoline and one 20,000-gallon gasoline UST. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.

- J&H Stores Pump & Shop #5 has operated under several different ownerships and names through the years as a retail gas station since the first underground storage tanks (USTs) were installed in 1970. The facility experienced a confirmed release on July 23, 1992. Groundwater contamination was present above Georgia's In-stream Water Quality Standards and more importantly, a nearby stream was impacted by methyl tertiary butyl ether (MTBE), which is a component of petroleum but not yet regulated by the State of Georgia. The Georgia Underground Storage Tank Management Program (USTMP) awarded the facility No Further Action Required (NFAR) status in 2000. In 2005 the Georgia Department of Transportation (GDOT) completed a UST Site Screening, which detected soil contamination. The USTMP elected to allow the initial NFAR status to stand. In 2008 three additional tanks were removed and a second NFAR was awarded.

In 1998, this facility was listed as a RCRA Non-Generator which handled, but did not generate, materials containing benzene. No violations were found regarding this listing. The reported groundwater flow direction is west southwest toward the Site. Although groundwater flow direction is toward the Site, given the NFARs awarded to the facility through the years this property is considered an HREC.

This summary is provided for convenience and should not be substituted for review of the full report, including all attachments as provided herein.

## **2.0 INTRODUCTION**

### **2.1 PURPOSE**

The Phase I ESA was performed in an attempt to identify, to the extent feasible, RECs associated with the proposed widening project of SR 388 South from just south of CR 571/Wrightsboro Road to just south of I-20 located in Grovetown, Columbia County, Georgia, the Site. The ESA is intended to constitute “all appropriate inquiry” into the previous ownership and uses of the Site consistent with good commercial and customary practices as defined by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (42 USC § 9601). In addition, the ESA is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

Phase I ESAs address existing and past uses and conditions relative to the Site. Ranger makes no representation regarding the future or potential use of the Site except for those items explicitly stated in this report.

This assessment was conducted in general accordance with the scope and limitations of the generally accepted *ASTM Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process, Designation: E 1527-05* unless otherwise stated herein. Our assessment, conclusions and recommendations are based on site conditions, observations, interviews, and a review of readily available information, as they existed at the time of our review.

### **2.2 SCOPE OF SERVICES**

Phase I ESAs are described as general characterizations of environmentally sensitive activities and conditions that are identifiable through readily available information and visual, non-invasive observations for the purpose of identifying RECs. ATSM E 1527-05 defines a REC as the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products, even under conditions in compliance with laws.

ASTM E-1527-05 also defines an HREC as an environmental condition which in the past would have been considered a REC, but which may or may not be considered an environmental condition currently.

These terms are not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Services performed for this project include a process involving and/or considering the following:

- Review of available environmental lists published by federal and state agencies (i.e., regulatory database report) in an attempt to identify environmentally sensitive activities (past or present) on the subject and adjoining properties.
- Review of physical characteristics of the Site through field observations and a review of readily available documents including topographic maps, aerial photographs, and historic maps.
- Reconnaissance of reasonably accessible portions of the Site and surrounding areas to visually identify obvious present or past conditions or activities that may pose an environmental threat to the Site.
- Interview of local regulatory agency personnel and others knowledgeable about the history of the Site.
- A qualitative hydrogeologic evaluation of the Site and vicinity using both published topographic maps and field observations.
- Preparation of this report summarizing our services, findings, and conclusions.

A Site vicinity map, topographic map, aerial photograph, Site photograph, regulatory database report, regulatory and/or government agency correspondence, and other supporting documents and information may be included as appendices to this report.

The sampling and testing of soil, air and/or other materials is beyond the scope of this study. The identification of asbestos containing materials (ACM), radon, lead based paint (LBP), lead in drinking water, wetlands, Waters of the United States, Waters of the State, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, rare or endangered species, air quality (including but not limited to vapor intrusion), noise impacts, biological agents and mold are also beyond the ASTM E1527-05 defined scope of this Phase I ESA. No implication is intended as to the relative importance of these additional environmental items, and this list of items is not intended to be all inclusive.

## **2.3 SIGNIFICANT ASSUMPTIONS**

The information gathered during this assessment was information that was available at the time of the assessment and “practically reviewable.” This is, by definition, information that is provided by the source in a manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data. The form of the information is such that the environmental professional can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the property or a geographic area in which the property is located (such as records that are sorted chronologically) are not considered practically reviewable.

In addition, for large databases with numerous records it is common for an unmanageable number of sites to be identified, even within a smaller geographic area such as a zip code. In these cases when so much data is generated that it cannot be feasibly reviewed for its impact on the property, it is considered not practically reviewable.

The information provided herein is that which is publicly available. Information that is publicly available means that the source of the information allows access to the information by anyone upon request at a reasonable time and cost. Additionally, it is possible that unreported disposal of waste or other activities impairing the environmental condition of the Site may have occurred which could not be identified.

## **2.4 LIMITATIONS AND EXCEPTIONS**

### **2.4.1 Limitations**

Ranger has performed this Phase I ESA in general accordance with ASTM E1527-05, which is a limited inquiry into a property's environmental status and is not sufficient to discover every potential source of environmental liability or environmental impact, if any, of the property to be evaluated. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property, and this practice recognizes reasonable limits of time and cost.

Ranger's assessment represents a review of certain information relating to the Site that was obtained by methods described above and does not include sampling or monitoring activities at the Site. While Ranger has used reasonable care to avoid reliance upon data and information that is inaccurate, Ranger is not able to verify the accuracy or completeness of all data and information available during the investigation. Some of the conclusions in this report would be different if the information upon which they are based is determined to be false, inaccurate or incomplete. Ranger shall not be held responsible

for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed by interviewees at the time this investigation was performed.

Ranger makes no legal representations whatsoever concerning any matter including, but not limited to, ownership of any property or the interpretation of any law. Ranger further disclaims any obligations to update the report for events taking place after the time during which the assessment was conducted. This report is not a comprehensive site characterization and should not be construed as such. The opinions presented in this report are based upon the findings derived from a site reconnaissance, a limited review of specified regulatory records and historical sources, and comments made by the interviewees.

Phase I ESAs, by their nature, are limited. Ranger has endeavored to meet what it believes is the applicable standard of care, and, in doing so, is obliged to advise the Client of Phase I ESA limitations. Ranger believes that providing information about limitations is essential to help the Client identify and thereby manage its risks. Through additional research, these risks can be mitigated, but they cannot be eliminated.

The level of inquiry is variable. Not every property will warrant the same level of assessment. Consistent with good commercial or customary practices, the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the User, and the information developed in the course of the inquiry.

Ranger's findings, opinions, and conclusions are based on information which is reasonably ascertainable from standard sources at the time of the assessment through site reconnaissance, visual assessment of surficial conditions, records review, interviews and other standard investigative techniques used in the industry at this time. It is possible that other information exists or may subsequently become known that may impact or change the site assessment after Ranger's services are complete.

In conducting this Phase I ESA and preparing the ESA report, Ranger reviewed, interpreted, and relied upon information provided by others, including, but not limited to, Mr. Nick Castronova, Project Manager for URS Corporation (Client or User), individuals, government authorities, and other entities. Ranger has not performed an independent evaluation of the accuracy or completeness of such information.

Ranger's assessment represents our professional opinion only. Therefore, Ranger cannot, under any circumstances, make a statement of warranty or guarantee, expressed or implied, that RECs, environmental impairment, or environmental impacts are limited to those that are discovered while we are performing the Phase I ESA.

## **2.4.2 Exceptions/Data Gaps**

Data gaps are the lack or inability to obtain information required by ASTM Standard E 1527-05 despite good faith professional efforts to gather such information, such as, but not limited to, the inability to conduct a site visit, inability to conduct interviews, and the inability to establish historical uses of the Site or surrounding properties. Not all data gaps are significant, and a data gap will only be discussed in this section if: 1) a data gap occurs during investigation, and/or 2) the data gap impairs Ranger's ability to meet the objectives of ASTM Standard E 1527-05.

Multiple data gaps were encountered during the site evaluation: The use of the Site was not identified back to the Site's first developed use, chain-of-title was not provided by the Client to Ranger for review, Sanborn maps were not available, the aerial photographs were not consistently available at five year intervals, the City Directories were only available from 1997 to 2012 and the multiple owners of the former 500 Lewiston Road gas station (J&H Stores Pump & Shop #5, KAK, Inc., Vijay Kumar, Pantry #3268, Yogeshwar Enterprises, Depot Food Store #3268, Depot Food Store #131, and Gulf #26503) were not interviewed.

Additionally, the following companies are no longer in business and efforts to contact knowledgeable parties were to no avail.

- Vacant Mechanic Shop Building, 541 Horizon South Parkway
- Gilvey's Cleaners, 5108 Wrightsboro Road
- Harris Tire & Service Center, 5106 Wrightsboro Road
- United Medical Enterprises, 820 Horizon South Parkway
- La Bay Transportation Services, Inc., 776 Horizon South Parkway
- Owens & Minor Distribution, 777 Horizon South Parkway

Therefore, the Site and surrounding area could not be fully investigated in this regard for the historical records research and interviews. However, the data gaps are not considered significant because the apparent past history and current use of the Site were able to be determined by a site reconnaissance, current owner/manager interviews and by using the available historical records and database reports: Environmental Data Resources, Inc. (EDR), U.S. Environmental Protection Agency (EPA) Enforcement and Compliance History Only (ECHO), Georgia Environmental Protection Division (EPD) Leaking Underground Storage Tank (LUST), UST, Solid Waste, Hazardous Waste – Response and Remediation Program and Emergency Response Team files.

## **2.5 SPECIAL TERMS AND CONDITIONS**

None.

## **2.6 USER RELIANCE**

This Phase I ESA report, along with the findings and conclusions contained in the report, either in completed form, summary form, or by extraction, is prepared, and intended, for the sole use of Mr. Nick Castronova, Project Manager for URS Corporation (Client or User), and therefore may not contain sufficient information for other purposes or parties. The Client (URS and Georgia Department of Transportation) is the only intended beneficiary of this report. The contents of Ranger's report will continue to be the property of Ranger. Ranger's report may not be disclosed to, used by, or relied upon by, any person or entity other than the Client without the express written consent of Ranger.

The passage of time may result in changes in technology, economic conditions, site variations, or regulatory provisions which would render the report inaccurate. Reliance on the report after the date of issuance as an accurate representation of current site conditions shall be at the client's sole risk. Should Ranger be required to review the report after six months from its date of submission, Ranger shall be entitled to additional compensation at the existing rates or other such terms as may be agreed between Ranger and the Client.

Authorization for disclosure to a third party or authorization for third-party reliance on any report will be considered by Ranger upon the written request of the Client. Ranger reserves the right to deny authorization to allow disclosure or reliance of Ranger's report to third parties.

## **3.0 SITE DESCRIPTION**

### **3.1 LOCATION AND LEGAL DESCRIPTION**

The Site is a corridor located along SR 388 from approximately 900 feet south of the CR 571/Wrightsboro Road and SR 388 intersection to approximately 800 feet south of the I-20 eastbound on-ramp in Grovetown, Columbia County, Georgia. The Site measures approximately two miles in length.

A Site location map and a topographic map depicting the location of the subject Site and its surrounding topography are included in Appendix A (Figures 1 and 2). The approximate latitude and longitude coordinates of the subject Site are between 33°27'26" north and 82°11'38" west, and 33°28'50" north and 82°11'53" west, respectively.

### **3.2 SITE AND VICINITY GENERAL CHARACTERISTICS**

The Site is located within the Grovetown, Georgia United States Geological Survey (USGS), 7.5-minute series topographic quadrangle map. This map indicates that the Site slopes from a topographic high of approximately 500 feet above mean sea level (msl) to a low of approximately 400 feet msl. Select photographs of the Site taken by Ranger during the site reconnaissance are included in Appendix B.

### **3.3 CURRENT USE(S) OF THE PROPERTIES**

During the site reconnaissance conducted on September 10, 2013, Ranger observed a heavy commercial presence of restaurants, retail stores, two convenience stores with petroleum sales and a high-voltage transmission line at the south end of the corridor at or near the intersection of SR 388 and CR 571/Wrightsboro Road. Also at the south end of the corridor, CSX Railroad crosses just south of CR 571/Wrightsboro Road. Two residential developments are located on the southwest end of the corridor. Approximately 0.4 miles north of CR 571/Wrightsboro Road there is a cellular tower and a public drinking water well located immediately adjacent to the SR 388 right-of-way at the intersection of John Huffman Way. An industrial park is located mid-way of the project corridor. Between the industrial park and the commercial development at the SR 388 and I-20 interchange the area is predominantly forested undeveloped property with a few scattered residential properties. A large Walmart commercial development is located in the southeast quadrant of the SR 388/I-20 interchange at the northern end of the corridor. Across from the Walmart, clearing and grading is ongoing for a large commercial development of unknown origin. Additionally, a vacant mechanic shop building is located just south of the Walmart development.

During the site reconnaissance, evidence of the use and storage of hazardous chemicals and petroleum products was observed at the Site and in the surrounding area. Observations made during the site reconnaissance are further discussed in Section 6 of this report.

The Columbia County Tax Assessor website provided information on the properties being evaluated for environmental concerns that are located along the Site corridor (<http://gis.columbiacountyga.gov/>). Table 1 below summarizes each property. Please refer to Appendix C for a copy of the tax assessor records for individual properties.

**Table 1: Summary of Investigated Properties**

<b>Parcel Number</b>	<b>Owner</b>	<b>Occupant</b>	<b>Address</b>	<b>Property Acreage</b>	<b>Current Use</b>
G04 002	Golden Pantry Food Stores, Inc.	Golden Pantry #76	5100 Wrightsboro Road	0.639	Convenience store with petroleum sales
G04 007	Circle K Stores, Inc. c/o Property Tax Dc17	Circle K #5374	5101 Wrightsboro Road	1.77	Convenience store with petroleum sales
G04 010	Scp 2010-C36-009 LLC c/o CVS Caremark #4589-02	CVS Pharmacy #4589	869 Horizon South Parkway	4.41	Pharmacy and retail store
069 001N	Pitts Herschel J & Koch Josef & Koch Hannelore M	Bearing Distributors	822 Horizon South Parkway	6.75	Bearing distributors
G04 009	Ncp Fees Under Ground Leases LLC	Advance Auto Parts	812 Horizon South Parkway	9.82	Auto parts retailer
069 686	Development Authority of Columbia County	ACS Tower Site	797 Horizon South Parkway	0.463	Cellular tower with diesel AST
069 001J	Horizon Dev Co Inc	Planet Solutions DBA Circle Environmental of GA and FL	782 Horizon South Parkway	6.57	Industrial laundry
069 001F	Mason Holding LLLP	Owens & Minor Distribution	777 Horizon South Parkway	6.44	Former medical facility. No longer in business. Knowledgeable party could not be located.
069 001C	John Deere Commercial Products, Inc.	MetoKote Corporation, Inc. Plant 14 (4000 Bldg)	702 Horizon South Parkway	184.65	Tractor painting
069 001C	John Deere Commercial Products, Inc. (4000 Bldg)	John Deere Commercial Products, Inc. (4000 Bldg)	700 Horizon South Parkway	184.65	Tractor assembly
069 001C	John Deere Commercial Products, Inc. (5000 Bldg)	John Deere Commercial Products, Inc. (5000 Bldg)	700 Horizon South Parkway	184.65	Tractor assembly
069 001K	Flagg Real Estate Holdings	Palmetto Industries International	6001 Horizon West Parkway	4.57	Store/distribute polypropylene bulk bags
069 001G	National Bedding Company LLC	National Bedding Company LLC	6010 Horizon West Parkway	18.97	Mattress, fabrication, warehouse and distributor
062 086	Kathryn B Selby and Catherine S Branch	Heart to Heart Trucking	541 Horizon South Parkway	35.64	Assumed former trucking company and mechanic shop. No longer in business. Knowledgeable party could not be located.
068-1062	Murphy Oil USA, Inc.	Murphy Express #8575	4009 Gateway Blvd.	2.1387	Commercial fueling facility
068-059Z	Walmart Real Estate Business Trust	Walmart	5010 Steiner Way	18.4527	Retail store
068 1058	Ramp G Partners, LLC	J&H Stores Pump & Shop 35	500 Lewiston Road (5020 Steiner Way)	1.9451	Retention pond
061 030F	Columbia County tax records indicate owner information is not available.	Columbia County Municipal Solid Waste Landfill (closed)	475 Lewiston Road	NA	Automotive repair and closed solid waste landfill

**Table 1: Summary of Investigated Properties (continued)**

<b>Parcel Number</b>	<b>Owner</b>	<b>Occupant</b>	<b>Address</b>	<b>Property Acreage</b>	<b>Current Use</b>
068 055	Sandbach LLC	Lewiston Road/I-20 Inert Waste Landfill	450 Lewiston Road	8.14	Closed inert landfill
061 028	Columbia County Board of Commissioners	Columbia County Inert Waste Landfill	1812 William Few Parkway	17.07	Operating inert landfill
069 102	Georgia Iron Works	Georgia Iron Works	5000 Wrightsboro Road	93.62	Foundry
G03 001B	Columbia County historical tax records not available	Harris Tire & Service Center	5106 Wrightsboro Road	1.2252	Assumed tire repair. No longer in business. Knowledgeable party could not be located.
G03 001F	Larry F. Putt	Gilvey's Cleaners	5108 Wrightsboro Road	0.4606	Dry cleaners
G03 006B	Eagle Paint & Body	Eagle Paint & Body	5113 Wrightsboro Road	1.311	Vehicle painting and body repair
G03 001B	Larry F. Putt	TJ's Laundrette	5114 Wrightsboro Road	1.2252	Coin laundry

A review of the City Directory yielded multiple listings of businesses formerly located along and proximal to the project corridor. Table 2 reflects the former and/or current business name, location and past use of the property.

**Table 2: Summary of Site Property Data Excerpted from City Directory**

<b>Name</b>	<b>Address</b>	<b>Past Use</b>
Smile Gas, Inc.	5101 Wrightsboro Road	Convenience store with petroleum sales. Currently operating as Circle K #5374.
Augusta Bedding	701 Horizon South Parkway	Mattress fabrication, warehouse and distributor currently operating as National Bedding Company, LLC.
Serta Mattress Co.	701 Horizon South Parkway	Mattress fabrication, warehouse and distributor currently operating as National Bedding Company, LLC.
Golden Pantry Food Stores	5108 Wrightsboro Road	Current convenience store with petroleum sales. City Directory address incorrect. Correct address is 5100 Wrightsboro Road.
Dorsey Towing	5113 Wrightsboro Road	Leased office space from Eagle Paint & Body. Never operated from this location.
Transagri, Inc.	475 Lewiston Road	Trucking brokerage business leased office space.
Dixie Meter	475 Lewiston Road	Occupied entire building from 1996 till 2006 fabricating and converting large trucks into propane service trucks for refilling residential tanks. The shop was a fully functional mechanic shop, including a paint booth. All waste materials were routinely reclaimed by a local recycler.
Jiffy Lube	5035 Wrightsboro Road	Current auto lubrication service facility. New oil and lubricants stored in above ground storage tanks outside facility and pumped into building through underground lines. Used oil and lubricants stored in above ground tanks and removed and properly disposed of by a recycler on a weekly basis.
Gilvey's Cleaners	5108 Wrightsboro Road	Dry cleaners no longer in business. Knowledgeable party could not be located.
Terminix	748 Horizon South Parkway	Pest control business. All chemicals were stored in accordance with labeled containers. No waste was generated.
La Bay Transportation	776 Horizon South Parkway	Trucking company no longer in business. Knowledgeable party could not be located.
Terminix International	778A Horizon South Parkway	Never operated from this location.
Bruner Manufacturing International	784 Horizon South Parkway	Warehoused and supplied nuts and bolts to John Deere.
Bossard, Inc.	792 Horizon South Parkway	Warehoused and supplied fasteners to John Deere.
Advance Auto Parts	812 Horizon South Parkway	Auto parts retailer.
Reliable Equipment Rentals	812 Horizon South Parkway	Never operated from this location.
United Medical Enterprises	820 Horizon South Parkway	No longer in business. Record search indicates dental equipment supplier/manufacturer.

### **3.4 DESCRIPTIONS OF STRUCTURES, ROADS, OTHER IMPROVEMENTS**

During the site reconnaissance conducted on September 10, 2013, Ranger observed a heavy commercial presence of restaurants, retail stores, two convenience stores with petroleum sales and a high-voltage transmission line at the south end of the corridor at or near the intersection of SR 388 and CR 571/Wrightsboro Road. Also at the south end of the corridor, CSX crosses SR 388 just south of CR 571/Wrightsboro Road. Two residential developments are located on the southwest end of the corridor. Approximately 0.4 miles north of CR 571/Wrightsboro Road Ranger noted a cellular tower and a public drinking water well located immediately adjacent to the SR 388 right-of-way. An industrial park is located mid-way of the project corridor. Between the industrial park and the commercial development at the SR 388 and I-20 interchange the area is predominantly forested undeveloped property with a scattering of private residences. A large Walmart commercial development is located in the southeast quadrant of the SR 388/I-20 interchange. Across from Walmart clearing and grading is ongoing for a large commercial development of unknown origin. Additionally, a vacant mechanic shop building is located just south of the Walmart development.

The City of Grovetown operates a municipally-owned water and sewer utility serving all commercial entities from the SR 388/Wrightsboro Road intersection north to the industrial area at John Deere and Horizon West Parkways. The City of Grovetown also provides water to residential properties.

Columbia County operates a municipally-owned water and sewer utility serving all commercial entities north of the industrial area at John Deere and Horizon West Parkways to the SR 388/I-20 interchange. Columbia County also provides water to residential properties. All residences along the project corridor utilize individual septic systems. Electricity is provided by Georgia Power. Natural gas is provided by Georgia Natural Gas and Scana. Telephone, including fiber optics, is provided by AT&T.

### **3.5 CURRENT USE(S) OF THE ADJOINING PROPERTIES**

Properties with reported environmental concerns were observed individually. All other properties, including those in the immediate vicinity of the Site were examined from the roadway. Adjoining properties include commercial businesses at the south end of the corridor, residential developments to the southwest and undeveloped forested land from the industrial park to the Walmart development. Augusta Technical College is located on the west side of SR 388 at John Huffman Way approximately one-half-mile north of CR 571/Wrightsboro Road. Ongoing clearing and grading for a planned large commercial development is located in the southwest quadrant of SR 388 and I-20 interchange.

## **4.0 USER PROVIDED INFORMATION**

Interviews were conducted with Mr. Nick Castronova of URS Corporation (Client representative).

### **4.1 TITLE RECORDS**

A chain of title report for the Site was not provided by the Client.

### **4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS**

The Client has stated that they are not aware of any environmental liens or activity or use limitations for the Site.

### **4.3 SPECIALIZED KNOWLEDGE**

The Client has stated that they are not aware of any specialized knowledge or experience of the Client that is material to RECs in connection for the Site.

### **4.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION**

The Client has stated that they are not aware of any commonly known or reasonably ascertainable information that is material to RECs in connection with the Site.

### **4.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES**

No valuation reduction or environmental issues were identified by the Client.

### **4.6 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION**

The Client has stated that they are not aware of any owner, property manager or occupant information that is material to RECs in connection with the Site.

### **4.7 REASON FOR PERFORMING PHASE I ESA**

The Phase I ESA is being performed as a requirement for the SR 388 widening project from CR 571/Wrightsboro Road to I-20 (GDOT CSSTP-0008-00(351), Columbia County, PI No. 0008351) in Grovetown, Columbia County, Georgia.

## 5.0 RECORDS REVIEW

### 5.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Environmental Data Resources, Inc. (EDR) of Milford, Connecticut conducted a commercial database search of regulatory databases. This is a review of published governmental records from federal and state environmental regulatory agencies. It was conducted to identify use, generation, storage, treatment or disposal of hazardous substances and petroleum products, and/or release incidents of such materials that may have the potential to impact the Site or nearby sites. The federal and state environmental databases obtained from EDR and reviewed by Ranger were generated in general accordance with the ASTM E-1527-05 guidelines for standard environmental record sources for this assessment. Such reports are typically used to review the potential environmental impact of activities at the Site or nearby sites. The full EDR database search report for this project is included in Appendix D.

#### Standard Environmental Record Sources

Federal NPL site list	1.0 mile
Federal Delisted NPL site list	1.0 mile
Federal CERCLIS list	0.5 mile
Federal CERCLIS NFRAP site list	0.5 mile
Federal RCRA CORRACTS facilities list	1.0 mile
Federal RCRA non-CORRACTS TSD facilities list	0.5 mile
Federal RCRA generators list	Property and adjoining properties
Federal Institutional control/engineering control registries	Property only
Federal ERNS List	Property only
State and tribal lists of hazardous waste sites identified for investigation for remediation:	
• State and tribal equivalent NPL	1.0 mile
• State and tribal equivalent CERCLIS	0.5 mile
State and tribal landfill and/or solid waste disposal site lists	0.5 mile
State and tribal equivalent leaking storage tank lists	0.5 mile
State and tribal registered storage tank lists	Property and adjoining properties
State and tribal Institutional control/engineering control registries	Property only
State and tribal voluntary cleanup sites	0.5 mile
State and tribal Brownfield sites	0.5 mile

The EDR Report includes searches for State and Tribal lists for Indian Reservations, UST and LUST sites. According to the EDR Report, there were no Indian Reservations, Tribal USTs or Tribal LUST sites within the recommended search distances.

Since Tribal lands are not present within the search radii, it can be concluded that there will be no Tribal hazardous waste sites, landfills or solid waste disposal sites, institutional control/engineering control, voluntary cleanup sites and/or Brownfield sites within the recommended search distances.

### **5.1.1 Site**

A total of 15 different regulated facilities were identified within a one-mile radius of the Site from the EDR report. Some of the regulated facilities are listed on multiple regulatory databases; and some of the facilities were combined in the Phase I ESA because they share the same location/business classification information. In addition, five EDR orphan facilities were not mapped in relation to the Site because of inadequate address information. None of the orphan facilities were identified within a 0.25 mile radius of the Site during the reconnaissance or in an office review.

A file review of the facilities on the LUST and the UST regulatory compliance databases was performed on August 22 and October 15, 2013 at the USTMP Office. Information retained from the file review is included in Appendix D. A summary of the information regarding each identified facility is listed below:

- Golden Pantry #76, 5100 Wrightsboro Road is currently operating as a convenience store with retail petroleum sales. The facility has three 10,000-gallon gasoline and one 2,000-gallon diesel UST. Based upon EPD file reviews it appears that the facility is operating in compliance with Georgia's Rules for Underground Storage Tank Management. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Circle K #5374, 5101 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with three 12,000-gallon gasoline, one 10,000-gallon diesel and one 10,000-gallon tank listed as 'other' and marked as Temporarily Out of Use in 1994. From 1994 until the facility was sold in 1999 to Circle K it operated under the name of Smile Gas #70. Based upon EPD file reviews it appears that the facility is operating in compliance with Georgia's Rules for Underground Storage Tank Management. There are telephonic records of three suspected releases at the facility due to operator recordkeeping errors. All three suspected releases were resolved. However, it does not negate the possibility that the UST system could have developed

an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.

- Murphy Express #8575 was identified as a UST site that is currently operating as a retail fueling facility. The files indicate the presence of one 12,000-gallon diesel, one 8,000-gallon gasoline and one 20,000-gallon gasoline UST. Based upon EPD file reviews it appears that the facility is operating in compliance with Georgia's Rules for Underground Storage Tank Management. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.

A search of EPD regulatory databases yielded results for the John Deere facilities on the Watershed Protection Branch and Emergency Response Team (ERT) databases. Reviews of these files were conducted in October 2013. Information retained from these file reviews is included in Appendix D. A summary of the information regarding the John Deere facility is listed below:

- John Deere Commercial Products has two large facilities located along the project corridor at 700 Horizon South Parkway. The John Deere 4000 Focus Factory is located in the northeast quadrant of the intersection of Horizon South Parkway and John Deere Parkway. The John Deere 5000 Focus Factory and RDC facility are located in the southeast quadrant of the same intersection. According to the EDR Report, John Deere is listed on the NPDES, AIRS, RCRA-CESQG, FINDS, SPILLS and TIER 2 databases.

In 2009, approximately 150 gallons of water containing 4.5 grams of corrosion inhibitor and 59.5 grams of biocide spilled from a broken pipe and failed valve on a cooling tower and entered into a storm drain. John Deere repaired the broken pipe. The spill was reported on May 20, 2009. Following the initial reporting, no further remedial action was required.

NPDES permits and Notices of Intent for years ranging from 1998 to 2012 filed with the Watershed Protection Branch were reviewed for the John Deere facilities. No violations were noted.

According to the GA TIER 2 database, John Deere has three tank farms containing a total of 24 ASTs. The tank locations, sizes and content descriptions are included in Table 3.

**Table 3: List of John Deere Facility ASTs**

<b>Location</b>	<b>Tank Identifier</b>	<b>Gallons</b>	<b>Content</b>
4000 Focus Factory Tank Farm	Tank 1	2,000	J20D Transmission Fluid
	Tank 2	2,000	Antifreeze
	Tank 3	2,000	Diesel Fuel #2
	Tank 4	5,000	Diesel Fuel #1
	Tank 5	1,000	10W30 Motor Oil
	Tank 6	1,000	J20C (currently out of order)
	Tank 7	5,000	J20D Transmission Fluid
	Tank 8	10,000	J20D Transmission Fluid
	Tank 9	2,000	Used Oil
	Emergency Generator	180	Diesel Fuel #1
	Fire Water Pump House	250	Diesel Fuel #1
	Engineering Dynamometer Room	112	Diesel Fuel #2
	Electrical Transformer*	200	Mineral Oil
	5000 Focus Factory Tank Farm	Tank 1	3,000
Tank 2		3,000	JD Plus 50 10W30 Engine Oil
Tank 3		3,000	Antifreeze
Tank 4		15,000	J20C Transmission Fluid
Tank 5		1,000	Used Oil
Electrical Transformer*		501	Mineral Oil
RDC Tank Farm	Tank 1	550	J20C Transmission Fluid
	Tank 2	300	JD Plus 50 10W30 Engine Oil
	Tank 3	1,000	J20D Transmission Fluid
	Emergency Generator	90	Diesel Fuel #1
	Electrical Transformer*	222	Mineral Oil

\* Indicates tanks owned by Jefferson Energy.

**5.1.2 Adjoining Properties**

Adjoining sites were not listed on the regulatory databases included in the EDR Report.

**5.1.3 Surrounding Area**

Six properties in the surrounding area were evaluated for environmental concerns; two of which were identified in the EDR Report within the specified search distances relative to the Site. Two of the listed facilities, Smile Gas #109 located at 311 Robinson Avenue and The Pumping Station #8 located at 499 Lewiston Road, are beyond the limits of the radius and are not included as a part of this assessment.

A file review of the facilities on the LUST and the UST regulatory compliance databases was performed on August 22 and October 15, 2013 at the USTMP Office. Information retained from the file review is included in Appendix D. A summary of the information regarding each identified facility is listed below:

- J&H Stores Pump & Shop #5, 500 Lewiston Road, operated over the years under several different ownerships and names (KAK, Inc., Vijay Kumar, Pantry #3268, Yogeshwar Enterprises, Depot Food Store #3268, Depot Food Store #131, and Gulf #26503) through the years as a full service gas station since the first UST's were installed in 1970. The chain of UST ownership is documented in Appendix D. A review of the USTMP regulatory compliance files confirmed that three of the original tanks were removed in 1987 and a fourth was removed in 1992. The USTMP LUST files revealed that a Phase II Assessment performed in 1992 detected petroleum contamination, which led to a confirmed release on July 23, 1992. A used oil and diesel tank were removed in 1993. A Corrective Action Plan – Part B prepared in 1998 indicated groundwater contamination above Georgia's In-stream Water Quality Standards and most importantly a nearby stream was impacted by MTBE, which is a component of petroleum but not yet regulated by the State of Georgia. The USTMP awarded the facility NFAR status in 2000. In 2005 the GDOT completed a UST Site Screening with the installation of several soil borings along the proposed right-of way. The Screening detected soil contamination, however, the USTMP elected to allow the NFAR status to stand. In 2008 three additional tanks were removed. The facility received a second NFAR for the tank closure. Photos of the tank removal, obtained from the USTMP files, are provided in Appendix D. The facility has since been removed and the field reconnaissance determined that the property is currently a retention pond for the Walmart development. Disposition of contaminated soils excavated for the retention pond is unknown.

In 1998, this facility was listed as a RCRA Non-Generator which handled, but did not generate, materials containing benzene. No violations were found regarding this listing. The reported groundwater flow direction is west southwest toward the Site. Although groundwater flow direction is toward the Site, given the NFARs awarded to the facility through the years this property is considered an HREC.

- Georgia Iron Works (GIW) located at 5000 Wrightsboro Road, operated one 1,000-gallon and three 4,000-gallon gasoline USTs that were removed from the ground in 1990. Other than the closure notification, there are no files associated with this facility. If corrective action had been required or performed, it is presumed there would be files available. This property is not considered a REC to the Site relative to the storage of petroleum.

A file review of the facilities on Georgia's Hazardous Waste Management and Solid Waste Management Program's regulatory databases was performed at the office of each program on October 1 and October 15, 2013, respectively. Information retained from the file reviews is included in Appendix D. A summary of the information regarding each identified facility is listed below.

- Georgia Iron Works, located at 5000 Wrightsboro Road, is a white iron foundry facility that has manufactured iron pumps and valves since 1961. GIW was listed on Georgia's Hazardous Site Inventory (HSI) initially as a result of a Phase II Environmental Site Assessment conducted in 1996, which detected tetrachloroethene in soil. Over the years multiple assessments have been conducted, and numerous reports have been submitted to Georgia's Environmental Protection Division (EPD), Response Remediation Program reflecting the presence of several contaminants detected above allowable Risk Reduction Standards in soil, groundwater, surface sediment and surface water. Groundwater and surface water at GIW generally flows to the north. Natural attenuation modeling indicates that the subsurface contaminant plume could migrate approximately 100 feet north of Wrightsboro Road.

Laboratory analysis of surface water samples collected in 2006 from an off-site stream flowing across CR 571/Wrightsboro Road in a northwesterly direction indicate that the metal nickel had reached approximately 500 feet downstream from the edge of the facility, which places the contamination within approximately 150 to 200 feet east of SR 388. The 2012 Annual Progress Report indicates that the groundwater and surface water contamination is naturally attenuating and should not travel beyond the known assessed area. However, EPD is requiring that GIW pursue a more aggressive form of remediation that will be timelier than natural attenuation.

Regardless of the remedial approach, steps have been taken to eliminate the source of contamination and combined with the distance to the Site this property is not considered a REC.

- An unpermitted solid waste landfill, located across I-20 and northwest of the Site was operated by private landowners in the mid-1960's until Columbia County assumed operation in 1974. The landfill accepted all forms of waste, including residential, commercial and industrial. Although there are no records to confirm the limits of the landfill, reportedly the open dumping area began approximately 250 feet west of SR 388 and extended south towards I-20 and north to the creek behind the existing building located at 475 Lewiston Road. The landfill was closed on November 9, 1982 by the placement of a two-foot soil cover over the top of the waste. Following the closure, Columbia County received a 'closure' letter, included in Appendix D, from the Georgia EPD. However, given the distance from the Site and the assumed groundwater flow direction, this site is not considered a REC.
- Columbia County currently operates a permitted inert waste landfill located at 1812 William Few Parkway, just west of and directly behind the closed municipal solid waste landfill (Permit Number PBR-036-08IL). This landfill accepts inert waste such as earth, concrete, cured asphalt, bricks and land clearing debris. Given the type of material deposited at this location, the distance from the Site and the assumed groundwater flow direction, this site is not considered a REC.

- An unpermitted inert landfill, located at 450 Lewiston Road in the northeast quadrant of I-20 and Lewiston Road, was operated by private landowners in the early 2000's. In order to dispose of ground, waste asphalt originating from a nearby I-20 shoulder replacement project on the property, Gilbert Southern Corporation, on behalf of the landowner, Mr. Prather, requested an environmental assessment be conducted of the property by GDOT to have the property considered for use as a common fill site. The resulting environmental assessment for the property (known as "Larry Prather Waste Site #2) resulted in a determination, dated October 30, 2001, that the property was not approved to receive I-20 milled asphalt waste due to the presence of jurisdictional wetlands throughout the proposed site. Despite the DOT determination as well as the presence of wetlands, approximately 40,000 cubic yards of cured, ground asphalt, crushed stone and soil mixture and concrete rubble were reportedly illegally dumped on the property between November 2001 and November 2002.

Mr. Prather received a Notice of Violation from EPD dated January 23, 2003 informing him that cured asphalt may only be disposed of in a permitted inert waste landfill or permitted construction and demolition landfill. The letter stated that Mr. Prather was in violation of the rules as his property was not permitted as either type of landfill at that time. On November 19, 2003, EPD issued a Proposed Consent Order to Mr. Prather regarding the unpermitted inert waste landfill.

Given two options, the first to remove all of the illegally dumped fill and the second to seek an inert landfill permit for the property, Mr. Prather opted to have the property properly permitted as an inert landfill. Mr. Prather received a variance to the inert landfill rule requiring all fill be placed a minimum of 100 feet from all property boundaries. Based on a plat dated October 15, 2001 and revised May 26, 2004, the area filled with 'a cold asphalt/dirt mixture and small amounts of concrete rubble' is located along the western portion of the property and partially extended into the existing 80-foot wide Lewiston Road right-of-way to the west and into the existing 60-foot wide Sugar creek Drive right-of-way to the south. The overall filled area appears to be approximately 560 feet in the north-south direction by 390 feet in the east-west direction. Based on an EPD East Central District Complaint Tracking Record report (Complaint ID 20252), the fill depth on the eastern edge of the filled area was approximately 25 feet deep in January 2003. Following the satisfaction of all requirements stated in the Consent Order EPD-SW-1878, including a deed notification of landfill operations, the property was considered a closed landfill (by the placement of a two-foot soil cover over the top of the waste) as of June 8, 2004. Project pertinent file correspondence, the deed notification and a landfill site plan are provided in Appendix D. Given the type of material deposited at this location, the distance from the Site and the assumed groundwater flow direction, this site is not considered a REC.

#### **5.1.4 Orphan Sites**

Five additional facilities were listed as "unmappable" or "orphan" sites in the EDR database report. These facilities were determined to be located beyond the applicable search distance from the Site based on the information provided and are not considered RECs to the Site.

#### **5.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES**

A review of the facilities listed on EPA's Enforcement & Compliance History Only (ECHO) database, EPD's List of Enforcement Orders and EPD's and EPA's List of Municipal Solid Waste Landfills was performed. There were no facilities noted on the List of Municipal Solid Waste Landfills. Three facilities were listed on EPD's List of Enforcement Orders. Fourteen facilities that are located within the search distance from the Site were listed on the ECHO database, all of which were considered duplicates from the EDR reports and discussed previously with the exception of the five facilities described below. Copies of the database listings and individual data sheets are provided in Appendix D.

- Walmart Supercenter #5735, located at 5010 Steiner Way, which adjoins the beginning of the project, was not listed on the regulatory databases included in the EDR Report. The facility is listed on the ECHO database as a Resource Conservation and Recovery Act (RCRA) – Small Quantity Generator (SQG). No information relative to the details of the listing was provided on the database. The regulatory contact for Walmart informed Ranger that the listing is due to the storage of returned and damaged items that could be considered hazardous. These items are stored on pallets for reclamation and/or disposal by a hazardous waste contractor. Walmart is not considered a REC to the Site.
- CVS Pharmacy #4589, located at 869 Horizon South Parkway, is listed as a RCRA – Conditionally Exempt Small Quantity Generator (CESQG) for photofinishing, pharmacies and drug stores. CVS Pharmacy has a national hazardous waste management program which uses a national, licensed vendor to dispose of all hazardous waste streams. The hazardous waste streams generated include photo processing waste and retail and pharmaceutical products in consumer quantities. CVS Pharmacy #4589 is not considered a REC to the Site.
- Eagle Paint & Body, located at 5113 Wrightsboro Road, is listed as a RCRA – SQG for automotive paint. A state of the art paint booth and material recovery system is utilized for the painting operation. Environmental Alternatives recovers all waste, which is stored in 55-gallon drums, and disposes of it at a reclamation facility on a regular basis. There were no underground storage features or staining from

improperly stored material noted on the property. Eagle Paint & Body is not considered a REC to the Site.

- Harris Tire and Service Center, located at 5106 Wrightsboro Road, is assumed to have been a tire repair center. All attempts to locate knowledgeable parties were to no avail. Given the distance to the Site, Harris Tire and Service Center is not considered a REC to the Site.
- Advance Auto Parts #6127, located at 5140 Wrightsboro Road, is listed as a RCRA Non-Generator for benzene. Advance has been operating in this facility for approximately ten years. Prior to moving to Wrightsboro Road, Advance was located at 812 Lewiston Road within the Grovetown Crossings shopping plaza. Currently, used oil and transmission fluid are disposed of on a regular basis through Safety Kleen, a reclamation contractor. Used batteries are disposed of weekly through an in-house disposal process. An above ground storage tank for used oil is located inside the building. No spillage or stains were observed. Advance Auto Parts #6127 is not considered a REC to the Site.
- Lewiston Road Unpermitted Inert Waste Landfill (Larry Prather-Waste Site #2), located at 450 Lewiston Road, received an Enforcement Order from EPD under the Comprehensive Solid Waste Management Act on January 26, 2004, for operating an unpermitted inert waste landfill. The Order required closure of the landfill.
- Georgia Iron Works, located at 5000 Wrightsboro Road, received two Enforcement Orders from EPD under the Hazardous Site Response Act on July 15, 1999 and November 30, 1999 for non-submission of a Compliance Status Report (CSR). The Orders required completion of the CSR to include plans for corrective action in compliance with risk reduction standards and for implementation of the plan.

### **5.3 PHYSICAL SETTING SOURCES**

The Grovetown, Georgia USGS Topographic Quadrangle Map, the USGS Mineral Resources website, the United States Department of Agriculture (USDA) Natural Resources Conservation Service Soil Survey website, the Geologic Map of Georgia, and the EDR report were reviewed as sources for ascertaining information relative to the physical setting of the Site and surrounding area.

#### **5.3.1 Site And Area Geology**

The Site is located in the Piedmont Geologic Province, a broad plateau region underlain by crystalline rocks up to 600 million years old. The Piedmont trends to the northeast from Alabama to New Jersey. In Georgia, the Piedmont is bounded by the Blue Ridge Range of the Appalachian Mountains to the northwest, and to the southeast, it is bounded

by the leading edge of Coastal Plain sediments, commonly referred to as the “Fall Line”. Numerous episodes of crystal deformation have produced varying degrees of metamorphism, folding and shearing in the underlying rock. The resulting metamorphic rock types in this area of the Piedmont are predominantly a series of Precambrian age schists and gneisses, with scattered granitic or quartzite intrusions.

Residual soils in the Piedmont region are primarily the product of in-situ chemical decomposition of the parent rock. The extent of the weathering is influenced by the mineral composition of the rock and defects such as fissures, faults and fractures. Boundaries between zones of soil, partially weathered rock and bedrock are erratic and poorly defined. Weathering is often more advanced next to fractures and joints that transmit water, and in mineral bands that are more susceptible to decomposition. Boulders and rock lenses are sometimes encountered within the overlying PWR or soil matrix.

According to the Geologic Map of Georgia, 1976, the site is generally underlain by a formation of granitic gneiss undifferentiated and Lower Tertiary-Cretaceous undifferentiated. Based on a soil survey conducted by the USDA Soil Conservation Service, soil types common along the project corridor include Cecil sandy clay loam, Orangeburg sandy loam, Norfolk coarse sandy loam and Berzelia coarse sandy loam.

### **5.3.2 Groundwater**

Groundwater in the Piedmont typically occurs as an unconfined or semi-confined aquifer condition. Recharge is provided by the infiltration of rainfall and surface water through the soil overburden. More permeable zones in the soil matrix, as well as fractures, joints and discontinuities in the underlying bedrock can affect groundwater conditions. The groundwater table in the Piedmont is expected to be a subdued replica of the original surface topography. Based on a review of the topographic maps and visual observations, the northern portion of the project Site generally appears to run along a ridge. The southern portion of the project Site crosses a southeast to northwest flowing stream, Mill Branch. We anticipate the groundwater to generally flow to the west with local groundwater flow varying along the project corridor.

Seventeen public drinking water wells were identified within the applicable radii of the Site by EDR; however, private drinking water wells may exist. The majority of the residences along the Site corridor are quite a distance from the roadway and evidence of drinking water wells wasn't obvious during the visual survey.

## **5.4 HISTORICAL USE INFORMATION**

Ranger attempted to conduct a review of dated reasonably ascertainable environmental reports, historical maps and aerial photographs to gain an understanding of the

development history of the Site. Available historical records reviewed by Ranger were used to review the potential environmental impact of activities on the integrity of the Site.

#### **5.4.1 Topographical Maps**

The 7.5-minute topographic map of the Grovetown, Georgia (1980) depicted the Site as being a roadway surrounded by wooded and cleared land with numerous structures and intersecting roadways throughout. Copies of historical topographic maps from the years 1922, 1948, 1950, 1957, 1971, 1977, and 1980 were obtained by Ranger from EDR. The high-voltage power line is evident in the 1977 map. The maps reviewed did not show any nearby pipelines, landfills or surface mines. Copies of the topographical maps are included in Appendix E.

#### **5.4.2 Historical Aerial Photographs**

To evaluate the previous land uses of the Site and surrounding area, a series of aerial photographs were reviewed. The aerial photographs provide a progressive overview of properties pertaining to this Phase I ESA.

Copies of USGS historical aerial photographs taken in the years 1964, 1971, 1974, 1977, 1999 and 2000 were obtained by Ranger from Microsoft Research Maps. Aerial photographs taken in the years 1973, 1982, 1988 and 1989 were provided by EDR. Additionally, photographs taken in 1994, 1999, 2002, 2005, 2007, 2009, 2010, 2011 and 2013 by Google Earth were also reviewed. These photographs were reviewed in an attempt to identify changes in land use and areas of potential environmental concern. Copies of the aerial photographs are included in Appendix E. Descriptions and interpretations from the aerial photograph reviews are described below.

**1964 Aerial Photograph:** The aerial photograph indicates that the Site is predominantly residentially developed or wooded and agricultural land with no commercial development. A roadway in a configuration similar to the existing SR 388 alignment is present. A high-voltage power line crossing SR 388 is evident near the southern end of the project corridor.

**1971, 1973, 1974 and 1977 Aerial Photographs:** The 1971, 1973, 1974 aerial photographs do not indicate significant change has occurred to the Site or surrounding area. The Site still predominantly appears to be residentially developed or wooded and agricultural land with no commercial development except for the structure that appears to be present on the property formerly occupied by Heart to Heart Trucking and J&H Stores Pump & Shop #5 at 475 and 500 Lewiston Road, respectively. Surrounding land appears to be primarily wooded and agricultural land. In the 1973 through 1977 photographs a cleared area is present on the portion of the property occupied at that time by a solid waste landfill in the northwest quadrant of the SR 388 and I-20 interchange.

**1982, 1988 and 1989 Aerial Photographs:** The 1982 photograph indicates an expansion of the cleared area on the portion of the property occupied at that time by a solid waste landfill in the northwest quadrant of the SR 388 and I-20 interchange. There also appears to be a cleared area behind the solid waste landfill that is currently utilized as a permitted inert landfill by Columbia County. Two residential developments are beginning to take shape near the southern portion of the corridor. In the 1988 and 1989 photographs the solid waste landfill located in the northwest quadrant of the SR 388 and I-20 interchange no longer appears to be operational, however the cleared area appears to have increased significantly since 1988 presumably from closure by the placement of the soil cover. The area is graded up to SR 388.

**1994, 1999 and 2000 Aerial Photographs:** The aerial photographs do not indicate significant change has occurred to the Site or surrounding area. In 1994 the Site still predominantly appears to be wooded and agricultural land with some commercial development at the intersection of SR 388 and CR 571/Wrightsboro Road, including the current day Circle K and Golden Pantry facilities. John Deere 4000 complex is also evident in the 1994 photograph. A gas station is evident in the northwest quadrant of SR 388 and the I-20 interchange. In the 1999 and 2000 photographs, the current industrial complex on Horizon West Parkway including the National Bedding and Palmetto Industries properties is developed with structures similar in configuration to those currently present. A small structure is evident where the current day multi-office complex is located at 740 to 796 Horizon South Parkway. Clearing for the John Deere 5000 facility appears complete. Surrounding land appears to be primarily residentially developed or wooded and agricultural land with increasing commercial development.

**2002, 2005 and 2007 Aerial Photographs:** The 2002 aerial photograph indicates increasing residential and commercial development along the project corridor with decreasing wooded and agricultural land. It also reflects the expansion of the John Deere 5000 facility. The ground is cleared for the inert landfill located in the northeast quadrant of SR 388 and I-20. The cellular tower has been erected and the area for the Grovetown public well appears cleared. The small structure located at 740 to 796 Horizon South Parkway has been increased to its current day size. Increasing development, residential and commercial, is indicated on surrounding land. In the 2005 and 2007 photographs the inert landfill in the northeast quadrant of the SR 388/I-20 interchange appears to be covered over and no longer in use. The remainder of the corridor appears unchanged with the exception of continued commercial presence at the CR 571/Wrightsboro Road intersection.

**2009, 2010 and 2011 Aerial Photograph:** The aerial photographs indicate increasing commercial development along the project corridor and on surrounding land. In the 2009 aerial photograph, the SR 388 bridge and I-20 entrance and exit ramps appear to have been widened. A structure is no longer present on the former J&H Stores Pump & Shop #5 property in the 2009 aerial photograph. Instead, the retention pond associated with the

Walmart shopping center, shown under construction, is visible. In the 2010 aerial photograph the current Walmart and Murphy Express #8575 properties, located at 5010 Steiner Way and 4009 Gateway Boulevard, respectively, are developed with structures similar in configuration to the structures currently present. The 2011 photographs reflect continued commercial presence within the Walmart development.

**Recent Aerial Photograph:** A color aerial photograph of the Site is included in Figure 3 Site Plan (Appendix A). The photograph was obtained from Google Earth. The aerial photograph depicts the Site and surrounding land generally as it appears presently (as of this report date), with the exception of the area in the southwest quadrant of the SR 388 and I-20 interchange which is currently cleared and being graded. The aerial photograph shows this area as being wooded land.

### **5.4.3 Historical City Directories**

Copies of historical city directories were obtained for the years between 1997 and 2012 in approximate five-year intervals. The City Directory is provided in Appendix D. The following facilities of concern were noted on or proximal to the Site during our review of the City Directories.

#### **2012**

- 5000 Wrightsboro Road; Georgia Ironworks Co; ironwork
- 5000 GIW Industries Inc; Georgia Ironworks Co; exporters
- 5035 Wrightsboro Road; Jiffy Lube; auto lubrication serv
- 5100 Wrightsboro Road; Golden Pantry Food Store; convenience stores
- 5101 Wrightsboro Road; Circle K; convenience stores
- 5113 Wrightsboro Road; Dorsey Towing; wrecker serv
- 5113 Wrightsboro Road; Eagle Paint & Body Inc; auto body-rpr & painting
- 5125 Wrightsboro Road; O'Reilly Auto Parts; auto parts & supl-retail-new
- 5140 Wrightsboro Road; Advance Auto Parts; auto parts & supl-retail-new
- 475 Lewiston Road; Transagri, Inc.; trucking
- 499 Lewiston Road; Pumping Station; convenience stores
- 500 Lewiston Road; AT&T Store; cellular telephones
- 700 Horizon South Parkway; John Deere Coml & Cnsmr Equip; garden & lawn equip/supl-mfrs
- 701 Horizon South Parkway; Serta Mattress Co; mattresses-mfrs
- 748 Horizon South Parkway; Terminix; pest control
- 777 Horizon South Parkway; Owens & Minor Inc; physicians & surgeons equip
- 782 Horizon South Parkway; Circle Environmental; waste rdctn dspsl/recycle serv
- 822 Horizon South Parkway; Bearing Distributors Inc; bearings
- 869 Horizon South Parkway; CVS Pharmacy; pharmacies

## 2007

- 5000 Wrightsboro Road; Georgia Ironworks Co; ironwork
- 5035 Wrightsboro Road; Jiffy Lube; auto lubrication serv
- 5100 Wrightsboro Road; Golden Pantry Food Store; convenience stores
- 5101 Wrightsboro Road; Circle K; convenience stores
- 5105 Wrightsboro Road; CVS Pharmacy; pharmacies
- 5108 Wrightsboro Road; Gilvey's Cleaners; cleaners
- 5113 Wrightsboro Road; Dorsey Towing; wrecker serv
- 5113 Wrightsboro Road; Eagle Paint & Body; auto body-rpr & painting
- 5140 Wrightsboro Road; Advance Auto Parts; auto parts & supl-retail-new
- 475 Lewiston Road; City Electric Supply; electric equip/supl-whol
- 499 Lewiston Road; Pumping Station; truck stops & plazas
- 500 Lewiston Road; AT&T Wireless; cellular telephones
- 700 Horizon South Parkway; John Deere Co; farm equip
- 700 Horizon South Parkway; John Deere Commercial Products; genl merchandise-retail
- 701 Horizon South Parkway; Augusta Bedding Co; bedding
- 701 Horizon South Parkway; Serta Mattress Co; mattresses-mfrs
- 748 Horizon South Parkway; Terminix International Co; pest control
- 777 Horizon South Parkway; Owens & Minor Inc; physicians & surgeons equip
- 782 Horizon South Parkway; Circle Environmental; waste rdctn displ/recycle serv
- 792 Horizon South Parkway; Bossard Inc; fasteners-industrial
- 812 Horizon South Parkway; Reliable Equipment Rentals Inc; rental serv-stores & yards
- 820 Horizon South Parkway; United Medical Enterprises; dental equip/supl-mfrs
- 822 Horizon South Parkway; Bearing Distributors Inc; bearings

## 2002

- 5000 Wrightsboro Road; GIW Industries Inc; foundries-steel
- 5035 Wrightsboro Road; Jiffy Lube; auto lubrication serv
- 5101 Wrightsboro Road; Smile Gas Inc; convenience stores
- 5105 Wrightsboro Road; CVS Pharmacy; pharmacies
- 5108 Wrightsboro Road; Golden Pantry Food Store; grocers-retail
- 5113 Wrightsboro Road; Dorsey Towing; wrecker serv
- 5113 Wrightsboro Road; Eagle Paint & Body; auto body-rpr & painting
- 5114 BTJ's Laundrette; laundries-self serv
- 475 Lewiston Road; Dixie Meter & Svc Co; truck canopies caps & shells
- 499 Lewiston Road; Pumping Station; truck stops & plazas
- 500 Lewiston Road; Cingular Wireless; cellular telephones
- 500 Lewiston Road; Depot Food Store, convenience stores
- 541 Lewiston Road; Heart to Heart Trucking; trucking

- 700 Horizon South Parkway; John Deere Co;
- 701 Horizon South Parkway; Serta Mattress Co; mattresses-mfrs
- 702 Horizon South Parkway; MetoKote Corp
- 776 La Bay Transportation Svc Inc; trucking
- 777 Horizon South Parkway; Owens & Minor Inc; physicians & surgeons equip
- 778 A Terminix International; pest control
- 782 Horizon South Parkway; Circle Environmental; waste rdctn displ/recycle serv
- 784 Horizon South Parkway; Brunner Manufacturing Inc; bolts & nuts
- 812 Horizon South Parkway; Advance Auto Parts; auto parts & supl-retail-new
- 822 Horizon South Parkway; Bearing Distributors Inc; bearings

### **1997**

- 700 Horizon South Parkway; John Deere Commercial Products
- 701 Horizon South Parkway; Serta Mattress Co
- 777 Horizon South Parkway; Owens & Minor Medical Augusta Division

Historical research indicates that businesses with addresses from 740 to 796 Horizon South Parkway, with Parcel No. 069 001J are/were located in the same building. All of the businesses leased warehouse/office space, with the exception of Planet Solutions DBA Circle Environmental of GA and FL, which currently operates as an industrial launderer.

#### **5.4.4 Previous Environmental Reports – Site**

Previous environmental reports for the Site were not provided to Ranger for review.

#### **5.4.5 Previous Environmental Reports – Surrounding Sites**

Previous environmental reports for surrounding sites were not provided to Ranger for review.

## **6.0 SITE RECONNAISSANCE**

### **6.1 METHODOLOGY AND LIMITING CONDITIONS**

Ms. Sandra Miller, P.E. and Ms. Peggy McGee conducted a site visit on September 10, 2013. The site visit consisted of an initial site reconnaissance, a walk-through of individual properties perceived to show evidence of environmental concerns and a thorough drive-through of the remaining project corridor. Additionally, an area reconnaissance was conducted as a driving tour to identify facilities within specified regulatory search distances listed within the previously referenced EDR and ECHO reports. This visual and physical reconnaissance of the Site focused primarily on its surface features.

The site reconnaissance was performed in an attempt to identify observed obvious indications of present or past activities that may have caused a significant environmental impact(s) to the Site. Select photographs of the Site taken by Ranger during the site reconnaissance are included in Appendix B.

### **6.2 GENERAL SITE SETTING**

#### **Current Use(s) of the Site**

The proposed road widening Site is approximately two miles in length and is located in Grovetown, Columbia County, Georgia. There is a heavy commercial presence of restaurants, retail stores, two convenience stores with petroleum sales and a high-voltage transmission line at the south end of the corridor at or near the intersection of SR 388 and CR 571/Wrightsboro Road. Also at the south end of the corridor, CSX Railroad crosses SR 388 just south of CR 571/Wrightsboro Road. Two residential developments are located on the southwest end of the corridor. Approximately 0.4 miles north of CR 571/Wrightsboro Road there is a cellular tower with an apparent enclosed backup generator with possible diesel tank. Directly across SR 388 from the cellular tower is a public water supply well, City of Grovetown 10, located immediately adjacent to the SR 388 right-of-way. An industrial park is located mid-way of the project corridor. Between the industrial park and the commercial development at the SR 388 and I-20 interchange the area is predominantly forested undeveloped property. A large Walmart commercial development is located in the southeast quadrant of SR 388 and I-20 interchange. Across from the Walmart, in the southwest quadrant of the SR 388/I-20 interchange, clearing and grading is ongoing for a large commercial development of unknown origin.

### **Past Use(s) of the Site**

Several businesses leased office space in the multi-unit building located at the intersection of John Deere Parkway and SR 388, with addresses ranging from 748 to 792 Horizon South Parkway. Those businesses included Terminix, La Bay Transportation Services, Inc., Bruner Manufacturing, and Bossard, Inc. MetoKote Corporation, Inc. – Plant 14, a painting contractor, was located within the John Deere complex. Owens & Minor, a medical facility leased the building at 777 Horizon South Parkway. Additionally, a vacant mechanic shop building is located just south of the Walmart development. Historical research indicates that Heart to Heart Trucking operated in this building.

### **Current Use(s) of Adjoining Properties**

Adjoining properties in all directions are predominantly private residences and undeveloped forested or agricultural land, with the exception of the commercial properties located at the intersection of CR 571/Wrightsboro Road and the area south of the SR 388 and I-20 interchange as well as those within the Walmart development and those planned for the clearing and grading currently ongoing in the southwest quadrant of SR 388 and I-20 interchange. Augusta Technical College is located mid-way along the project corridor at 3500 John Huffman Way. CSX Railroad runs east/west and crosses just south of CR 571/Wrightsboro Road.

### **Past Use(s) of Adjoining Properties**

Adjoining properties were predominantly agricultural and forested land with a few scattered residential properties up until the early to mid 1980s.

Based upon a review of the LUST files, it appears that a former gas station referred to as J&H Pump & Shop #5 and KAK, Inc. in the EDR report, was located in the southeast quadrant of the I-20 on-ramp with an address of 500 Lewiston Road. A review of the City Directory indicated that Cingular Wireless was located at this address in 2002 and an AT&T Store was located there from 2007 to 2012. However, a search of the Columbia County tax records indicated that the Lewiston Road address is no longer viable. Currently, a retention pond for the Walmart development is located on this property with an address of 5020 Steiner Way.

## **6.3 OBSERVATIONS**

Site observations and conditions identified during Ranger's site reconnaissance are summarized as follows:

### **6.3.1 Structures, Roads and Other Improvements on the Site**

#### **Existing Structures**

At the time of the reconnaissance, the Site was developed with several commercial buildings including retail and convenience stores, several restaurants and private businesses located mainly at the CR 571/Wrightsboro Road intersection and at or near the SR 388 and I-20 interchange and at the CR 571/Wrightsboro intersection. Clearing and grading for a large development of unknown origin was ongoing in the southwest quadrant of the SR 388 and I-20 interchange. An industrial park is located on both sides of SR 388 approximately mid-way of the project corridor. Two residential subdivisions on small side roads are evident along SR 388 between the aforementioned intersections.

#### **Existing Roads**

CR 571/Wrightsboro Road crosses at the southern end of the project corridor. Several smaller roads on the west side of SR 388 lead to residential areas and Augusta Technical College. Two larger side roads lead into both industrial parks on the east and west side of SR 388. Several access roads near the SR 388 and I-20 interchange lead into the Walmart development.

#### **Utilities (Including Sewage Disposal)**

Based upon observations during the site reconnaissance and interviews with local government personnel, the utilities service providers along the Site are as follows: The City of Grovetown operates a municipally-owned water and sewer utility serving all commercial entities at the CR 571/Wrightsboro Road intersection north to the industrial park. The City of Grovetown also provides water service to all of the residences along the project corridor.

Columbia County operates a municipally-owned water and sewer utility serving all commercial entities north of the industrial park to the SR 388 and I-20 interchange. Columbia County provides water to all of the residences north of the industrial park to the I-20 interchange.

All residences along the project corridor utilize individual septic systems. Electricity is provided by Georgia Power. Natural gas is provided by Georgia Natural Gas and Scana. Telephone, including fiber optics, is provided by AT&T.

Large pad-mounted power utility boxes and a pad-mounted transformer were observed in the right-of-way in front of Murphy Express. A pad-mounted transformer was also observed on the 777 Horizon South Parkway (former Owens & Minor) property.

A high-voltage transmission power line running east and west crosses near the southern end of the project corridor.

A cellular tower and public water supply well are located on the east and west sides, respectively, of SR 388 at John Huffman Way.

**Hazardous Substances and Petroleum Products in Connection with Identified Uses:**

Three facilities are currently operating as a gas station and/or convenience store with petroleum sales – Circle K #5374, Golden Pantry #76 and Murphy Express # 8578. All systems appear to be operating in compliance with Georgia’s Rules for Underground Storage Tank Management. Current tank registrations were posted at all three facilities.

The tank basin for Circle K #5374 is located in the northwestern corner of the property and holds one 10,000-gallon diesel, one 10,000-gallon other (Temporarily Out of Use), and three 12,000-gallon gasoline USTs.

The tank basin for Golden Pantry #76 is located in the northeastern corner of the property and holds one 2,000-gallon diesel and three 10,000 gallons gasoline USTs.

The tank basin for Murphy Express is located in the northwest corner of the property and holds one 12,000-gallon diesel, one 8,000-gallon gasoline and one 20,000-gallon gasoline UST.

**Storage Tanks:** A large enclosed pad-mounted power box was observed at the base of the cellular tower, presumably with a back up diesel generator and above ground storage tank (AST). One carbon dioxide AST was observed at the rear of the Circle K #5374 building. Propane ASTs for on-site use and individual containers for retail sales were observed at locations as follows:

- Circle K #5374
- Golden Pantry #76
- CVS Pharmacy #4589
- Private Residences

**Odors:** None observed.

**Pools of Liquid:** None observed.

**Drums:** None observed.

**Hazardous Substances and Petroleum Products Containers (Not in Connection with Identified Uses):** None observed.

**Unidentified Substance Containers:** None observed.

**PCBs (Electrical Transformers):** Pole-mounted transformers were observed throughout the project corridor. In addition, a pad-mounted transformer was observed along the right-of-way in front of Murphy Express. A pad-mounted transformer was also observed on the 777 Horizon South Parkway (former Owens & Minor) property. The transformers appeared to be in good condition and no stains or leaks were noted. Based on our past conversations, electrical utility companies generally accept responsibility for their equipment and any releases or spills associated with their intended use.

**Pits, Ponds and Lagoons:** A retention pond for the Walmart development was located in the southwest quadrant of the SR 388 and I-20 interchange eastbound on-ramp, formerly a gas station known as J&H Stores Pump & Shop #5, KAK, Inc. and Vijay Kumar, which experienced a confirmed petroleum release on July 23, 1992. Disposition of contaminated soils excavated from the retention pond is unknown.

**Stained Soil or Pavement:** None observed.

**Stressed Vegetation:** None observed.

**Solid Waste:** Dumpsters were observed at all of the commercial properties along the project corridor.

**Waste Water (including Storm Water):** Storm water drop inlets were noted along the project corridor beginning at the south end of the corridor north to Horizon West Parkway. Roadside ditches are utilized for surface water drainage along the remainder of the corridor until the curbed areas at the SR 388 and I-20 interchange, which drain into side and surface ditches.

**Wells:** Seventeen public drinking water wells were identified within the applicable radii of the Site by EDR. One of the wells is located on the east side of SR 388 immediately adjacent to the right-of-way at the intersection of John Huffman Way. The City of Grovetown reported that the well is inactive. Although the area is served by the City of Grovetown and Columbia County, private drinking water wells may exist. The majority of the residences along the Site corridor are quite a distance from the roadway and evidence of drinking water wells wasn't obvious during the visual survey.

**Septic Systems:** All private properties along the corridor are serviced by individual septic systems.

**Surface Water:** Mill Branch runs south of the industrial park and crosses SR 388 just south of John Deere Parkway. A small wet weather drainage ditch crosses SR 388 just north of the commercial area near Wrightsboro Road. No other surface water features were observed along the project corridor.

### **6.3.2 Other Observations**

A solid waste landfill, located just west of the Site and south of William Few Parkway, was operated by private landowners in the mid-1960's until Columbia County assumed operation in 1974. Although there are no records to confirm the limits of the landfill, reportedly the open dumping area began approximately 250 feet west of SR 388 and extended south towards I-20 and north to the creek behind the existing Beacon Automotive building. Columbia County Building Department required the installation of a methane monitoring system and two methane monitoring wells be installed as a requirement for the construction of mini warehouses currently located on top of the closed landfill. The only remaining evidence of the closed landfill is the methane wells.

The property at 450 Lewiston Road, formerly Larry Prather Waste Site #2, is currently a vacant lot with sparse vegetation, presumably due to landfill waste existing close to the ground surface preventing adequate ground cover from flourishing.

## 7.0 INTERVIEWS

As part of the Phase I ESA, interviews were conducted with select persons familiar with the Site to provide insight into past activities or conditions material to RECs in connection with the Site.

### 7.1 INTERVIEWS WITH OWNER

George Lamar, owner of Planet Solutions DBA Circle Environmental of GA and FL, provided a tour of his facility and explained the operation, which has been at 782 Horizon South Parkway since April 2000. Planet Solutions recycles oil-soaked absorbent pads from manufacturing processes utilizing typical dry cleaning equipment and the chemical perchloroethylene (perc). Used and unused perc is stored in 55-gallon drums with spill containment. Planet Solutions only accepts synthetic oils, no used oils or any materials considered hazardous. A stainless steel containment system surrounds the dry cleaning equipment. All waste is reclaimed by Universal Environmental on a monthly basis. Mr. Lamar stated that this facility is considered a RCRA Large Quantity Generator, is routinely inspected by EPD and has not experienced any violations.

Edward Jones, previous owner of Dixie Meter and Service Company, formerly located at 475 Lewiston Road, informed Ranger that Dixie Meter owned and occupied the entire building from 1996 till 2006 fabricating and converting large trucks into propane service trucks for refilling residential tanks. The shop was a fully functional mechanic shop, including truck painting. According to Mr. Jones all waste materials were routinely reclaimed by a local recycler. Mr. Jones also informed Ranger of a closed landfill located just to the rear of the building. Mr. Jones recalled that the landfill operated during the late 60s and early 70s and accepted all forms of waste.

Jerry Havens of Gateway Realty is the owner of the building located at 475 Lewiston Road. He leases office and shop space to Wilco Electric, Beacon Automotive, Premium Cabinetry and Buzzy Bee, a pest control company. Mr. Havens stated that Wilco Electric utilizes warehouse space, Premium Cabinetry fabricates cabinets and Buzzy Bee leases office space and does not store chemicals on site. Beacon Automotive shares office space with Mr. Havens, and he confirmed that all waste materials are properly stored for recycling and proper disposal. Mr. Havens further stated that the mini warehouses located behind Beacon Automotive are situated on top of a closed landfill. Prior to construction of the warehouses, Columbia County required that a methane monitoring system be installed inside the structures and two methane monitor wells be installed on the periphery of the site. The warehouses and methane system were built sometime after the plan approval in August 2007. The wells were monitored for approximately four years, but readings were never above reportable levels. Mr. Havens provided a copy of the 'closure' letter, dated December 3, 1982 that Columbia County received from the Georgia EPD. The letter is provided in Appendix D.

Brooks Whitmire, owner of Eagle Paint & Body located at 5113 Wrightsboro Road, allowed Ranger to tour the facilities. Eagle Paint & Body utilizes a state of the art paint booth and material recovery system. Environmental Alternatives recovers all waste, which is stored in 55-gallon drums, and disposes of it at a reclamation facility on a regular basis. There were no underground storage features or staining from improperly stored material noted on the property.

## **7.2 INTERVIEWS WITH SITE MANAGER**

Maxine Martin, Store Manager for Golden Pantry #47 located at 5100 Wrightsboro Road, stated that she has been at this store for 11 years and she is not aware of any spills or releases occurring. Additionally, she stated that although the street address is the same as Golden Pantry #47, she was not aware of the facility ever being referred to as Golden Pantry #47.

April Greene, District Manager and Carlos Gonzalez, Store Manager for Circle K located at 5101 Wrightsboro Road, both stated that they were not aware of any spills or releases since January 2013.

Ida McChill, Assistant Manager for Murphy Express #8578 located at 4009 Gateway Boulevard, stated that in her six months at this location she was not aware of any spills or releases associated with the property. Ms. McChill was not aware of any environmental cleanups at the property.

Brian Hill, Environmental Health and Safety Manager for Georgia Iron Works located at 5000 Wrightsboro Road, stated that GIW casts metal mining equipment. All chemicals are stored in 55-gallon drums. Although there is ongoing corrective action at the site, he was not able to provide details of the corrective action, only that the monitoring wells were still being sampled. He did not provide details of the sampling regimen. The wells are located all across the property. Mr. Hill indicated that there were violations from Georgia EPD for failing to report issues with the baghouse and a leaking tank. He did not reference what the violations were for or what leaked from the tank.

Bruce Bullard, General Manager for Brunner Manufacturing formerly located at 784 Horizon South Parkway, explained that Brunner Manufacturing rented warehouse space approximately six or seven years ago. They occupied this location for less than five years. During that time Bruner supplied nuts and bolts to John Deere.

Diane Morano, Customer Service Logistics Manager for Palmetto Industries located at 6001 Horizon West Parkway, indicated that the facility only stores and distributes polypropylene bulk bags. The bags are manufactured in India.

Jeff Eakin, Plant Manager for Serta International located at 6010 Horizon West Parkway, stated that they have been in the facility for approximately 15 years. They have 55-gallon drums of sewing machine oil stored inside the facility. In addition, they have a 25-gallon diesel fuel mini barrel for the yard dog tractor used to move trailers. Mr. Eakin was unaware of any spills or other incidents of environmental concern on the property.

Kimberly Geary, Environmental Health and Safety Manager for John Deere Commercial Products located at 700 Horizon South Parkway, who has been at the facility for one year, explained that although the John Deere 4000 and 5000 facilities have different addresses, they are on the same parcel of land. John Deere has retained Ms. Christine Butler with Engineered Resources, LLC as their environmental consultant. Ms. Butler was present during the interview and provided site layouts reflecting the locations of their fueling facilities, which are diked and fully contained in accordance with their approved Spill Prevention Control and Countermeasures Plan (SPCC). There is one tank farm at the 4000 facility and two at the 5000 facility. According to Ms. Geary there was a release of biocide to a storm drain in 2009. The release was reported to Georgia EPD. The quantity released was so small that no corrective action was taken. Ms. Geary said no other releases have occurred since.

John Deere no longer paints tractor parts at this location. MetoKote Corporation, Inc. provided painting services and was located inside the 4000 facility. MetoKote ceased operation at John Deere in 2007. Ms. Geary was not aware of any environmental issues associated with MetoKote or the former painting operation.

Matt Flynn, Branch Manager for Terminix formerly located at 748 Horizon South Parkway, informed Ranger that he has been with Terminix for 11 years and worked at the Horizon South Parkway location for one year before they moved to their current location on William Few Parkway. Terminix operated out of the Horizon South Parkway location from approximately 2002 till 2012. Although Mr. Flynn was only at the former location for one year, he is certain that all chemicals are and always have been stored in accordance with the container labeled directions. The operation did not have any waste that required special handling or disposal. Mr. Flynn has no knowledge of any reportable spills at the facility. Mr. Flynn stated that he has no knowledge of the facility ever being located at 778A Horizon South Parkway per the City Directory.

### **7.3 INTERVIEWS WITH OCCUPANTS**

Bob Blair, Salesperson with Bearing Distributors located at 822 Horizon South Parkway, stated that during his 13 years at this location they have only stored and sold bearings and ancillary parts.

## 7.4 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Don Bartles, the Columbia County Solid Waste Department Manager, confirmed that a closed municipal solid waste landfill is located in the northwest quadrant of SR 388 and I-20. Columbia County assumed operations of the landfill from private ownership in 1974. All manner of waste was accepted at the landfill, including but not limited to household, commercial and industrial waste. Although there are no records to confirm the limits of the landfill, Mr. Bartles stated that open dumping area began approximately 250 feet west of SR 388 and extended south towards I-20 and north to the creek behind the existing Beacon Automotive building. Mr. Bartles believes that the landfill began as a borrow pit for the construction of I-20. The landfill was closed in 1982 by the placement of a two-foot soil cover over the top of the waste. Following the closure, Columbia County received a 'closure' letter from the Georgia EPD.

Kevin Fort, with the Columbia County Engineering and Commercial Building and Planning Department informed Ranger that when Havens Mini Storage was constructed on top of the closed landfill, the County required a methane monitoring system and monitoring wells be installed. Mr. Fort provided Ranger with file information that he deemed relevant to our assessment, which included a graphic of the monitoring system and a portion of the report describing the operation of the system. According to Mr. Fort, there are no records of methane sampling and reporting to the County. Methane monitoring system information is provided in Appendix D.

Pam Tucker, Division Director for Columbia County Emergency Operations informed Ranger that there were no records related to historical incidents that may have included hazardous substance spills or releases reported for the Site.

Jerry Campbell, Emergency Response Manager with Georgia's EPD Emergency Response Team was contacted in regards to the Georgia Open Records Act request submitted to EPD. Mr. Campbell said they had Tier II reports for the GIW Industries facility and the John Deere 4000, 5000 facility. Mr. Campbell stated these reports are electronic reports they received following notification of a significant hazardous materials release or petroleum spill. He stated that the reports are only a few pages long, in PDF form and he would email them for review. Copies of these reports are included in Appendix D.

Gilda Knowles with Georgia's Underground Storage Tank Management Program stated that according to the database, the four underground storage tanks formerly located at Georgia Ironworks were removed in 1990. These tanks were removed during the early stages of the program's implementation and there are no further records or files on the facility. It is assumed that there were no corrective action issues associated with the closure.

Jeff Darley, EPD District Manager, stated that he was unaware of any files in his office related to the May 2009 spill which occurred at the John Deere Commercial Products facility at 700 Horizon South Parkway. He searched for the spill in the Complaint Tracking System but was unable to locate any record of it. Mr. Darley said that if John Deere took reasonable steps and contained the source of the spill, EPD would likely not have required any further remedial action after the spill was reported.

Mr. Darley also indicated that he was unaware of any files related to the unpermitted solid waste landfill located at 475 Lewiston Road and William Few Parkway. He said it was likely none existed as the landfill ceased operation not long after the existence of the EPD Solid Waste Management Program.

Mr. Darley said the permitted inert landfill located at 1812 William Few Parkway, is owned and currently being operated by Columbia County. He said Columbia County must soon make a decision as to whether they will close the inert landfill or continue its operation as a solid waste landfill.

## **7.5 INTERVIEWS WITH OTHERS**

Justin Wilson, Regulatory Contact representing Walmart #5735 located at 5010 Steiner Way, stated that the facility is listed as a RCRA Small Quantity Generator (SQG) for the disposal of damaged and returned goods that are considered hazardous materials. Local hazardous waste disposal contractors routinely transport and properly dispose of all material considered hazardous at a hazardous waste facility.

Jerry Havens of Gateway Realty, owner of the building located at 475 Lewiston Road, stated that he leased office space to Transagri, Inc. approximately three years ago. They were tenants for approximately 2.5 years. Mr. Havens stated that Transagri operated a transportation brokerage business by arranging for trucks and drivers to ship cargo. Occasionally trucks were parked on the lot, but no maintenance of any kind was performed.

Becky Lowe, Real Estate Manager with Circle K for seven years, stated that Circle K acquired the property located at 5101 Wrightsboro Road from Smile Gas in 1999, which explained the City Directory listing in 2002 as Smile Gas as well as the UST registration forms in the EPD UST files.

Misti Nehus, US – Canada Environmental Health and Safety Manager for MetoKote Corporation, Inc. – Plant 14 located at 702 Horizon South Parkway, stated that although she never worked at the Grovetown facility, she has been with the company for several years and is familiar with the procedures utilized at the John Deere location. MetoKote was located within the John Deere 4000 facility providing painting services for tractors and equipment. MetoKote is listed with RCRA due to their waste generation of paints and solvents. The waste should have been transported off site. According to Ms. Nehus,

when MetoKote vacates a facility a 'closure assessment' is conducted. For additional information, she suggested we contact Will Davis, corporate council for Metokote.

Will Davis, MetoKote Corporate Council and Eric Kerner, MetoKote Director of Environmental Health and Safety, stated in a conference call with that MetoKote is listed with RCRA due to their waste generation of paints and solvents. MetoKote operated within the John Deere facility until 2009. They were unsure how long MetoKote provided painting services at this location. The waste would have been transported off site by a hazardous materials contractor. Neither was aware of a formal 'closure assessment' conducted when MetoKote vacated the facility, other than a walkthrough with John Deere representatives. To their knowledge MetoKote never experienced a reportable spill, release or violation at the John Deere facility.

Karlie Clemons Webb, an attorney in the Troutman Sanders Environmental and Natural Resources group, provides environmental legal work to CVS Pharmacy nationally. According to Ms. Webb, CVS Pharmacy has a national hazardous waste management program which uses a national, licensed vendor to dispose of all hazardous waste streams. The hazardous waste streams generated include photo processing waste and retail and pharmaceutical products in consumer quantities.

## 8.0 FINDINGS AND OPINIONS

Ranger has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-05 for the SR 388 widening project from I-20 to SR 232/Columbia Road in Grovetown, Columbia County, Georgia.

Findings, opinions, and conclusions reported herein are based on information obtained during the course of our studies and upon our experience. Information provided in this report is relevant to the dates of our site work and should not be relied on to represent conditions at substantially later dates or locations not investigated.

### 8.1 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

#### 8.1.1 On-Site

There were no on-site HRECs identified during the site reconnaissance, interviews, file reviews and/or review of regulatory databases performed by Ranger personnel:

#### 8.1.2 Off-Site

One off-site HREC was identified during the site reconnaissance, interviews, file reviews and/or review of regulatory databases performed by Ranger personnel:

- J&H Stores Pump & Shop #5 reported a petroleum release from the UST system on July 23, 1992. A Corrective Action Plan – Part B prepared in 1998 indicated groundwater contamination above Georgia’s In-stream Water Quality Standards and most importantly a nearby stream was impacted by methyl tertiary butyl ether (MTBE), which is a component of petroleum but not yet regulated by the State of Georgia. The USTMP awarded the facility No Further Action Required (NFAR) status in 2000. In 2005 the GDOT completed a UST Site Screening with the installation of several soil borings along the proposed right-of-way. The Screening detected soil contamination, however, the USTMP elected to allow the NFAR status to stand. In 2008 three additional tanks were removed. The facility received a second NFAR for the tank closure. The facility has since been removed and the field reconnaissance determined that the property is currently a retention pond. Disposition of contaminated soils excavated for the retention pond is unknown.

In 1998, this facility was listed as a RCRA Non-Generator which handled, but did not generate, materials containing benzene. No violations were found regarding this listing. The reported groundwater flow direction is west southwest toward the Site. Although groundwater flow direction is toward the Site, given the NFARs awarded to the facility through the years this property is considered an HREC.

## 8.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

### 8.2.1 On-Site

Five on-site RECs were identified during the site reconnaissance, review of regulatory databases, interviews and/or file reviews performed by Ranger personnel.

- Golden Pantry #76, 5100 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with one 2,000-gallon diesel and three 10,000-gallon gasoline USTs. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Circle K #5374, 5101 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with three 12,000-gallon gasoline and one 10,000-gallon diesel and one 10,000-gallon tank Temporarily Out of Use classified as 'other'. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Planet Solutions DBA Circle Environmental of GA and FL, 782 Horizon South Parkway is currently operating as an industrial launderer. Planet Solutions is located within an office complex in the southeast quadrant of SR 388 and John Deere Parkway. The business has been at this location since April 2000. Planet Solutions recycles oil-soaked absorbent pads from manufacturing processes utilizing typical dry cleaning equipment and chemical perchloroethylene (perc). Planet Solutions, a RCRA Large Quantity Generator subjected to routine inspections by EPD, has not experienced any violations. Based upon the hazardous materials utilized in the operation, this facility is considered a REC.
- A vacant mechanic shop building located at 541 Horizon South Parkway, appears, due to the oversized bay doors, to have once operated as a mechanic shop for maintenance and repairs of large trucks. This assumption was further enforced by the name of the former business, Heart to Heart Trucking, which was obtained from the City Directory. Numerous attempts to ascertain the history of the site did not yield any information. Based upon the physical characteristics of the building and the nature of the former business inferred by the name, this property is considered a REC.
- Murphy Express #8575 is currently operating as a retail fueling facility with one 12,000-gallon diesel, one 8,000-gallon gasoline and one 20,000-gallon gasoline underground storage tank. Based upon EPD file reviews it appears that the facility is operating in compliance with Georgia's Rules for Underground Storage Tank

Management. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, this property is considered a REC.

### **8.2.2 Off-Site**

One off-site REC was identified during the site reconnaissance, review of regulatory databases, interviews and/or file reviews performed by Ranger personnel.

- An unpermitted solid waste landfill, located just west of the Site and south of William Few Parkway, was operated by private landowners in the mid-1960's until Columbia County assumed operation in 1974. The landfill accepted all forms of waste, including residential, commercial and industrial. Although there are no records to confirm the limits of the landfill, reportedly the open dumping area began approximately 250 feet west of SR 388 and extended south towards I-20 and north to the creek behind the existing Beacon Automotive building. The landfill was closed on November 9, 1982 by the placement of a two-foot soil cover over the top of the waste. Following the closure, Columbia County received a 'closure' letter from Georgia's Environmental Protection Division (EPD).

In April 1990, a concerned property owner reported to EPD that laboratory results indicated that contaminants from the landfill had impacted his drinking water well. The residence and drinking water well are located east of the project corridor, implying that groundwater contaminants could have potentially migrated beneath the roadway and across the project corridor. Consequently, this property is considered a REC.

### **8.3 DE MINIMIS CONDITIONS**

None observed.

## 9.0 CONCLUSIONS

Ranger Consulting, Inc. has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 for the SR 388 widening project from CR 571/Wrightsboro Road to I-20 in Grovetown, Columbia County, Georgia. Any exceptions to, or deletions from, this practice are described in Section 10.0 of this report.

This assessment has revealed the following evidence of RECs in connection with the Site. Five RECs were identified during the site reconnaissance, review of regulatory databases, interviews and/or file reviews performed by Ranger personnel.

- Golden Pantry #76, 5100 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with one 2,000-gallon diesel and three 10,000-gallon gasoline USTs. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Circle K #5374, 5101 Wrightsboro Road is currently operating as a convenience store and retail fueling facility with three 12,000-gallon gasoline and one 10,000-gallon diesel and one 10,000-gallon tank Temporarily Out of Use classified as 'other'. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, the property is considered a REC.
- Planet Solutions DBA Circle Environmental of GA and FL, 782 Horizon South Parkway is currently operating as an industrial launderer. Planet Solutions is located within an office complex in the southeast quadrant of SR 388 and John Deere Parkway. The business has been at this location since April 2000. Planet Solutions recycles oil-soaked absorbent pads from manufacturing processes utilizing typical dry cleaning equipment and the chemical perchloroethylene (perc). Planet Solutions, a RCRA Large Quantity Generator subjected to routine inspections by EPD, has not experienced any violations. Based upon the hazardous materials utilized in the operation, this facility is considered a REC.
- A vacant mechanic shop building located at 541 Horizon South Parkway, appears, due to the oversized bay doors, to have once operated as a mechanic shop for maintenance and repairs of large trucks. This assumption was further enforced by the name of the former business, Heart to Heart Trucking, which was obtained from the City Directory. Numerous attempts to ascertain the history of the site did not yield any information. Based upon the physical characteristics of the building and the nature of the former business inferred by the name, this property is considered a REC.

- Murphy Express #8575 is currently operating as a retail fueling facility with one 12,000-gallon diesel, one 8,000-gallon gasoline and one 20,000-gallon gasoline underground storage tank. Based upon EPD file reviews it appears that the facility is operating in compliance with Georgia's Rules for Underground Storage Tank Management. Although there is no record of a confirmed release at the facility, it does not negate the possibility that the UST system could have developed an as yet undetected release of petroleum to the subsurface. Consequently, this property is considered a REC.

## 10.0 DEVIATIONS

Deletions or substantial deviations from the ASTM E-1527-05 standard practice are:

The use of the Site was not identified back to the Site's first developed use, chain-of-title was not provided by the Client to Ranger for review, Sanborn maps were not available, the aerial photographs were not consistently available at five year intervals, the City Directories were only available from 1997 to 2012, the multiple owners of the former 500 Lewiston Road gas station (J&H Stores Pump & Shop #5, KAK, Inc., Vijay Kumar, Pantry #3268, Yogeshwar Enterprises, Depot Food Store #3268, Depot Food Store #131, and Gulf #26503) were not interviewed.

Additionally, the following companies are no longer in business and efforts to contact knowledgeable parties were to no avail:

- Vacant Mechanic Shop Building, 541 Horizon South Parkway
- Gilvey's Cleaners, 5108 Wrightsboro Road
- Harris Tire & Service Center, 5106 Wrightsboro Road
- United Medical Enterprises, 820 Horizon South Parkway
- La Bay Transportation Services, Inc. 776 Horizon South Parkway
- Owens & Minor Distribution, 777 Horizon South Parkway

Therefore, the Site and surrounding area could not be fully investigated in this regard for the historical records research and interviews. However, the data gaps are not considered significant because the apparent past history and current use of the Site were able to be determined by using the available historical records, EDR and US EPA ECHO regulatory database reports, Georgia EPD UST, LUST, Solid Waste, Hazardous Waste-Response and Remediation, and Emergency Response Team files, site reconnaissance, and current owner/manager interviews. Therefore, it is our professional opinion that this data gap is not significant and does not impact the ability to identify RECs, or impact the findings or conclusions of this report.

## **11.0 ADDITIONAL SERVICES**

None provided.

## **12.0 REFERENCES**

### **Environmental Data Resources, Inc.**

- EDR DataMap Corridor Study, Inquiry Number: 3688068.1s, August 08, 2013
- EDR DataMap Well Search Report, Inquiry Number: 3688068.1w, August 08, 2013
- EDR Historical Topographic Map Report, Inquiry Number: 3688068.2, August 06, 2013
- EDR City Directory Image Report, Inquiry Number: 3703414.1, August 27, 2013

### **Environmental Protection Agency, Facility Registry Services**

- Facility Detail Report (<http://epa-echo.gov/>)

### **Georgia Environmental Protection Division, Underground Storage Tank, Solid Waste, Hazardous Waste, and Emergency Response Management Programs**

- Underground Storage Tank Compliance Files
- Leaking Underground Storage Tank Files
- Solid Waste Management Archive Files
- Hazardous Waste Management – Response and Remediation Program Files
- Emergency Response Team Files

### **Columbia County Tax Assessor**

- <http://gis.columbiacountyga.gov/>

### **Microsoft Research Maps (maps courtesy of USGS)**

- <http://msrmaps.com/>

### **U.S. Geological Survey**

- Mineral Resources On-Line Spatial Data (<http://mrdata.usgs.gov/>)

### **Geologic Map of Georgia: Georgia Geological Survey, 1976**

**Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture (USDA)**

- Georgia Online Soil Survey Manuscripts:  
Soil Survey of Columbia, McDuffie and Warren Counties, USDA Soil Conservation Service and the University of Georgia College of Agriculture, Agricultural Experiment Stations, April 1981 ([http://soils.usda.gov/survey/online\\_surveys/georgia/index.html](http://soils.usda.gov/survey/online_surveys/georgia/index.html))

## **13.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS**

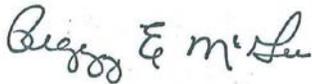
Signatures of the Environmental Professionals are included on the cover letter of this Phase I Environmental Site Assessment.

## 14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

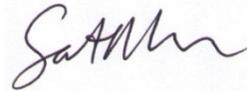
The qualifications of Ranger's Environmental Professional are summarized in Appendix G.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 321.10 of 40 CFR 312.

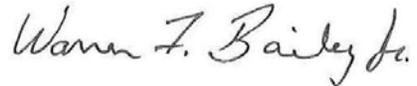
I have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Peggy McGee  
Senior Engineer



Sandra A. Miller, P.E.  
Project Engineer  
Georgia P.E. No. 36138



Warren F. Bailey, Jr., P.E.  
Principal Engineer  
Georgia P.E. No. 11462

Appendices Provided Upon Request

# Attachment #9

# MEETING MINUTES

SR 388 Concept Team Meeting

Project No: CSSTP-0008-00(351)

PI No: 0008351

County: Columbia

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**Meeting Date:** December 4, 2013 (10:00 AM – 12:00 PM)

**Location:** Columbia County – Evans, GA

**Attendees:**

*Matt Schlachter*  
*Steve Exley*  
*Robbie Bennett*  
*Rodney Way*  
*Richard O'Hara*  
*Steve Tiedemann*  
*George Brewer*  
*Michael D. Thomas*  
*Bryan K. Gibbs*  
*Bobby Ramsey*  
*Nick Castronova*  
*Travis McClam*  
*Joe Tiernan*

**Organization & Title:**

*Columbia County, Construction and Maintenance Director*  
*Columbia County, Engineering Manager*  
*Columbia County Development Authority, Executive Director*  
*GDOT/District 2, Area Engineer*  
*GDOT/Office of Environmental Services/ NEPA Analyst*  
*GDOT/Office of TIA, Project Manager*  
*GDOT/Office of Program Delivery, Project Manager*  
*GDOT/Office of Utilities, ADUE*  
*GDOT/Office of Construction, Construction Liaison*  
*John Deere, Logistics Manager*  
*URS Corporation, Project Manager*  
*URS Corporation, Roadway Designer*  
*URS Corporation, Roadway Designer*

**SUBJECT:**

A concept meeting was held on December 4, 2013 with members of GDOT, Columbia County, and URS in attendance. The purpose of the meeting was to discuss the conceptual design and concept report for SR 388 from I-20 to Wrightsboro Road. The meeting began at 10:00 AM with introductions of participants and passing around the sign in sheet. A conceptual roll plot of the design was displayed on the meeting table during the meeting for reference. The following summarizes the meeting:

- Nick began the meeting by providing an overview of the project and also briefly discussing its tie to the SR 388 North project (PI#0008530) including the proposed Diverging Diamond Interchange.
- George commented on the addition of turn lanes on the off-ramp from I-20W to SR 388 which the new DDI will provide to relieve the back up of traffic on the current off-ramp.
- Nick then began going through the concept layout design beginning with Gateway Boulevard at the northern end of the project where it ties to PI#0008350.
- Matt stated that the concept design needed to have the ultimate build out for apartment complex entrance which is currently being built. The construction firm doing the entrance is building it in stages so the concept design needs to be certain to not have just one of the phases in the design. Todd has a copy of the ultimate build out. George Brewer stated that he will get with him to get a copy of the plans.
- Nick then continued south on the project to the John Deere property and asked Bobby for his input on John Deere's needs for smoother traffic movements.
- Matt had a few questions before discussing the John Deere property.
  - a. Is it a possibility to provide truck access behind the church/warehouse instead of having the driveway where it is and possibly giving them access to Horizon West Parkway? While possible, it would require access easements and may not work for trucks accessing the warehouse in the same manner they do now. This can be investigated if the median break is not possible.
  - b. There is no left turn to get out of or into the Food Lion parking lot on either SR 388 or Wrightsboro Road. How do we provide this access? This will need to be up to the customers to use the appropriate entrances and exits depending on where they are going.

# MEETING MINUTES

## SR 388 Concept Team Meeting

Project No: CSSTP-0008-00(351)

PI No: 0008351

County: Columbia

- c. Is it possible to put a continuous island at the CVS to help prevent people from trying to make an illegal left turn out of CVS onto SR 388? The island will be reconfigured to disallow vehicles from making improper movements.
- Steve stated that Wrightsboro Road will not have a median so could allow a left out of CVS onto Wrightsboro road.
  - Bobby stated the truck traffic between Horizon West Parkway and John Deere Parkway was very heavy (about 150-200 trucks per day). A new warehouse is probable from the current employee entrance, the first driveway on John Deere's property from I-20, in the near future.
  - Nick and George suggested a possible realignment of John Deere Parkway to form an intersection at Horizon West Parkway
  - Nick stated that we could still provide 2 median breaks, one at John Deere Parkway/Horizon West Parkway and one at the church/warehouse with the break at John Deere Parkway/Horizon West Parkway possibly being signalized. This will be one of the options provided for review.
  - Robbie stated that the church has a 5 year lease with an option to buy the current building it is in. He is positive that at the rate the congregation is growing that it will outgrow its current space and move out and the space will turn back into a warehouse. He also noted that some space in the building is still being used as warehouse space. Nick stated that if that were possible then we would need to continue to be able to provide for possible truck traffic.
  - Steve asked if it were a possibility to tie the church parcel to Horizon West Parkway? Robbie stated that if that were possible it would be safer for the church members but it would involve other parcels and access agreements.
  - Matt suggested a possibility of a loop road connecting John Deere Parkway to the employee entrance driveway and then creating a connecting T-intersection with the loop road and SR 388 and that would create the signal needed for that intersection. This was possible but may be completed in the future when development plans were more definite for the John Deere site.
  - Nick then asked Bobby if he supported the realignment of John Deere Parkway with Horizon West Parkway to create a signal at that proposed intersection. Bobby said yes. Nick stated that URS will sketch up some alignments for everyone to look at and to comment on.
  - Nick then continued south on the project to the Technical College. Robbie stated that behind the Technical College is a 137 acre lot. There is a possibility of industrial/commercial growth that would connect the apartments building complex currently being built to the existing Technical School which would possibly make the intersection at the Technical School much busier.
  - Matt stated that this entire corridor has a lot of possible growth. We all might want to start looking at pre-acquisition of right of way so we can go ahead and lock it down before all of this growth begins to occur.
  - Nick then continued south along the project to Wrightsboro Road. This intersection will get upgraded to accommodate all of the turning movements. Because of this, the project will impact the railroad.
  - Robbie asked if the upgraded intersection at Wrightsboro Road will be able to handle large trucks and the answer was that it could.
  - Bobby asked if the driveways for John Deere could have truck acceleration lanes along SR 388 going north since it is an uphill grade. The design team said it was a possibility and would be considered.
  - Bobby stated that the largest truck they use has a 53' trailer. Robbie stated that was not the case for others, they used larger trucks up to WB-67. Nick stated that they would keep the design vehicle for the corridor at a WB-67.
  - Nick continued with discussion on the railroad. He stated that we need to begin coordination soon. The tracks are in superelevation at the roadway crossing and the tie-in will be difficult.
  - Matt asked about the proposed stormwater ponds on the project.
  - Nick stated that we could possibly use the existing regional detention pond but will need to run calculations to make sure it can hold the proposed water. May be able to get rid of two ponds that. Designers will need to run calculations during the design phase

# MEETING MINUTES

SR 388 Concept Team Meeting

Project No: CSSTP-0008-00(351)

PI No: 0008351

County: Columbia

- Steve asked about utility issues
  - a. Michael stated that there was some Grovetown water along the project corridor but not much
  - b. Bobby stated that John Deere did have some fiber optic lines connecting its warehouses
- George asked if it were possible to be able to submit the document for approval sometime in January and Nick responded yes.

## Action Items

1. Add Grovetown city limits to the concept layout
2. Rework striping at CVS and Food Lion to allow for some left in/left out on Wrightsboro Road
3. Create additional 4 foot offset at CVS driveway to allow for continuous median
4. John Deere Parkway realignment and truck acceleration lanes onto SR 388
5. Railroad coordination
6. Update traffic report for John Deere Parkway realignment
7. Finalized Utility Cost Estimate

The meeting was then concluded.

Wrightboro Rd

**CONCEPT TEAM MEETING - SIGN-IN SHEET**

Project: TIA-SR 388 from I-20 to SR-232/Columbia Road - Widening, Bicycle, and Sidewalk  
 Meeting Date: ~~November 18~~ December 9, 2013  
 PI: 0008350, Columbia County  
 Place/Room: Columbia County Engineering Office

Name	Title	Company/Office	Phone	E-Mail
STEVIE TIEDEMANN	PROJECT MANAGER	GDOT / OFFICE OF TIA	404-631-1657	STIEDEMANN@DOT.GA.GOV
Rodney Ward	Area Engineer	GDOT / Augusta	706-855-3464	rward@dot.ga.gov
George Brewer	P.M.	GDOT	478-538-8604	gbrewer@dot.ga.gov
Neal O'Brien	GDOT DZ Reconstruct	GDOT Dist 2	478-552-4629	no'Brien@dot.ga.gov
Matt Schlechter	Engineering Director	Col. County	706-868-3356	MSchlechter@ColumbiaCountyGa.gov
Brock Tyson	Traffic Engineer - 2	GDOT / DZ	478-552-4715	br Tyson@dot.ga.gov
STEVE EXLEY	ENG MANAGER	CA Co	706 447 7602	sexley@columbiacountyga.gov
Don BARROD	ROAD CONST. MGR.	Col. Co.	706-877-2918	dbarrodd@columbiacountyga.gov
Joe Tierman	Roadway Designer	URS	678-808-8834	JTierman@URS.COM
Glen Bollinger	TRAFFIC ENGINEER	Columbia County	706 447-7613	gbollinger@columbiacountyga.gov
TRAVIS McCLAM	ROADWAY DESIGNER	URS	404-358-1142	travis-mcclam@URS.COM
Richard Offara	NEPA Analyst	GDOT-OES	404 631 1169	roffara@dot.ga.gov
Michael D. Thomas	ADJUE	GDOT-Utilities	478-232-3325	david.thomas@dot.ga.gov

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# Attachment #10

# Project Sheet

**Project Number:** RC07-000031      **Project Name:** Widen SR 388 from CR 571/Wrightsboro Road to I-20

**GDOT ID:** 0008351

**Project Description:** Widen SR 388 from CR 571/Wrightsboro Road to I-20.

**Regional Commission:** Central Savannah River Area

**County:** Columbia County

Phase	Total Project Cost	Total TIA Amount	Comments (Please note all cost estimates are in 2011 dollars and actual costs for all phases at year of expenditure will be higher):
PE	\$1,533,416	\$1,533,416	
ROW	\$2,445,928	\$2,445,928	
CST	\$19,167,702	\$19,167,702	
UTL	\$3,050,973	\$3,050,973	
<b>Total</b>	<b>\$26,198,019</b>	<b>\$26,198,019</b>	

Public Benefit	Notes
Maximizing the value of Georgia's Assets	This project could potentially maximize the full utility of an existing transportation facility(s). In some cases, bypasses will be necessary. Example benefits could be: mitigating congestion (e.g. operational improvements) and optimizing capital asset management (e.g. resurfacing, rehabilitation). The impacts would apply to this roadway segment, corridor, and/or intersection.
Additional Benefits	This project would benefit the public by providing additional lanes to ease congestion in an area that is currently experiencing major growth. Current average annual daily traffic is 13,010. This project connects Grovetown to I-20. This corridor also has several manufacturing plants that ship and receive product continuously.

## Project Location

