ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0012883
Gwinnett County
GDOT District 1 - Gainesville
Western Gwinnett Bikeway Extension
Multi-Use Trail

OFFICE Design Policy & Support

DATE 1/20/2016

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:

Hiral Patel, 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
Darryl VanMeter, State Innovative Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Lee Upkins, State Utilities Engineer
Richard Cobb, Statewide Location Bureau Chief
Brent Cook, District Engineer
Brandon Kirby, District Preconstruction Engineer
Robby Oliver, District Utilities Engineer
Charles Robinson, Project Manager
BOARD MEMBER - 4th and 7th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

Project Type:	Enhancement	P.I. Number:	0012883
GDOT District:	1	County:	Gwinnett
Federal Route Number:	N/A	State Route Number:	N/A
Project Number:	N/A		

Western Gwinnett Bikeway Extension multi-use trail from 2500 ft west of Rogers Bridge Road in Duluth to McGinnis Ferry Road in Suwanee along Peachtree Industrial Blvd. Includes a multi-use trail connection on new location from around Riverglen Circle (Peachtree Industrial Blvd Bridge over Suwanee Creek) to connect with Suwanee Creek Park and ~~potential~~ A spur to connect to existing Suwanee Trail Network.

Submitted for approval:

Consultant Designer & Firm or GDOT Concept/Design Phase Office Head & Office — Date

Local Government Sponsor — Date 9/30/15

State Program Delivery Engineer — Date 9/17/15

GDOT Project Manager — Date 9/4/15

Recommendation for approval:

* HIRAL PATEL — State Environmental Administrator — Date 10/5/2015

* KEN WERHO — State Traffic Engineer — Date 10/1/2015

* LISA MYERS — Project Review Engineer — Date 10/1/2015

* LEE UPKINS — State Utilities Engineer — Date 9/29/2015

* BRANDON KIRBY — District Engineer — Date 9/30/2015

* BEN RABUN — State Bridge Engineer — Date 10/28/2015

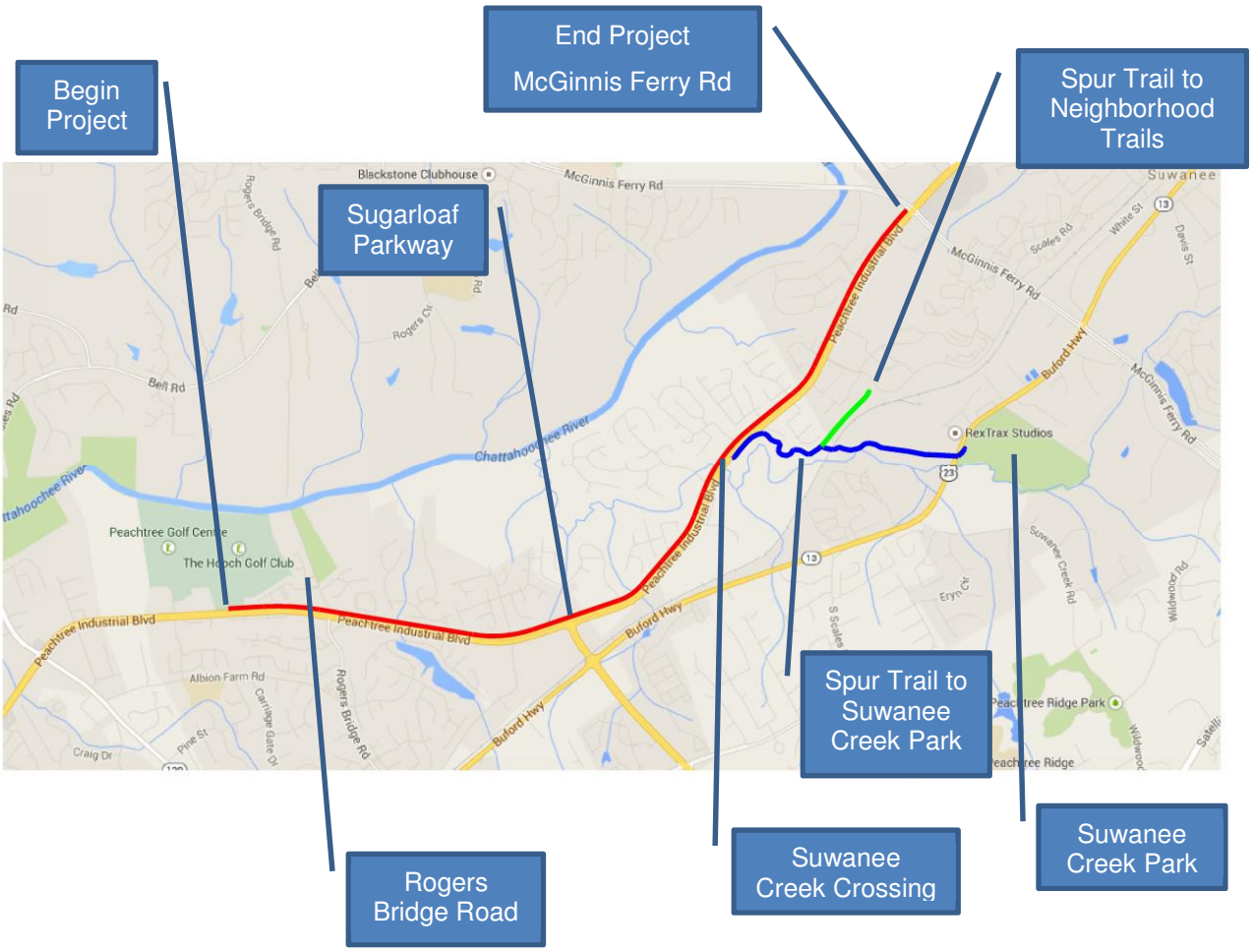
☒ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).

☐ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

* CINTHIA L. VANDIKE — State Transportation Planning Administrator — Date 10/6/2015

Georgia Department of Transportation

PROJECT LOCATION MAP



Western Gwinnett Bikeway Extension

PI No. 0012883

Gwinnett County, GA

PLANNING AND BACKGROUND

Project Justification Statement:
This project is included in the Atlanta Regional Commision's (ARC) FY 2014-2019 Transportation Improvement Program and is funded by TAP and local funds. It is also included in the County's 2014 Special Purpose Local Option Sales Tax (SPLOST) Citizens Project Selection Committee's Recommended Projects List.

This project would complete the Western Gwinnett Bikeway from Rogers Bridge Road to McGinnis Ferry Road. With the recent completion the area west of Rogers Bridge Road (Western Gwinnett Bikeway II) and the proposed segment would tie to the existing multi-use path along McGinnis Ferry Road. This link will close a gap in the much larger Gwinnett County bikeway and trail system and connect at least five large county and city parks and the City of Duluth to the City of Suwanee. When complete, the bikeway will connect at least seven cities, in total, in both Fulton and Gwinnett counties.

This project is mentioned in the Gwinnett County "Open Space & Greenway Master Plan Update" (April 2014), and will connect to the Lower Suwanee Greenway. The proposed improvements will accomodate alternative transportation modes that will enhance bicycle and sidewalk LOS. The proposed multi-use trail will be located on one side of Peachtree Industrial Boulevard.

The project terminis beginning is dictated by the end of the Western Gwinett Bikeway II about 2500 feet West of Rogers Bridge Road, and ending at at McGinnis Ferry Road to tie into the existing trail system along that roadway for a total of 4.00 miles. A connection will be made near the existing bridge of Peachtree Industrial Boulevard at Suwanee Creek and ties into the existing trail system in Suwanee Creek Park for a total of 2.46 miles. A spur will connect this trail extension to the existing trail system in Suwanee for a total of 0.74 miles.

Existing conditions:
Peachtree Industrial Boulevard is a four lane highway with a divided grassed median. There are right and left turn lanes at intersections, sideroads, and neighborhoods. Some sections have curb and gutter, and others have rural shoulders. There are steep grades along the corridor with guardrail in place. There are currently unconnected sections of sidewalks and trails along the shoulder. The bikeway will connect the larger sections and widen any other sections as needed. There are two existing bridges over Suwanee Creek, a culvert between Canterbury Walk Drive and Grayridge Drive, and another culvert between Prince Charles Drive and Longlake Way. There are numerous median openings along Peachtree Industrial Boulevard and some of them are signalized.

Other projects in the area:
121530 – Peachtree Parkway (SR 141) Widening
0002393 – SR 13 from Sugarloaf Pkwy to SR 20 in Buford (Widening)
0012626 – SR 120; McGinnis Ferry Rd & State Bridge Rd – ITS System Expansion

MPO: Atlanta Regional Commission (ARC)

TIP #: *GW-384*

TIA Regional Commission: N/A

Congressional District(s): 7

Federal Oversight: ☐ PoDI ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic: N/A

Functional Classification (Mainline): Urban Principal Arterial

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

Warrants met: ☐ None ☒ Bicycle ☒ Pedestrian ☐ Transit

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒ No ☐ Yes

Intial Pavement Type Selection Report Required? ☒ No ☐ Yes

Feasible Pavement Alternatives: ☐ HMA ☐ PCC ☐ HMA & PCC

This is a multi-use trail project and does not require a Pavement Evaluation.

DESIGN AND STRUCTURAL

Description of the proposed project:

The project will install a multi-use trail from 2500 West of Rogers Bridge Road to McGinnis Ferry Road along Peachtree Industrial Blvd. A new location segment will connect to Suwanee Creek Park, and a spur from this extension will coneect to the existing Suwanee Trail System. There are two existing bridges and multiple culverts along Peachtree Industrial Blvd. The trail includes some sections of boardwalk and at least one pedestrian bridge.

Major Structures:

Structure	Existing	Proposed
135-0102-0 – MP 4.76 – PIB at Suwanee Crk	2 lanes, 70 ft span length max, 280 ft structure length, 47.90 ft roadway width, 50.90 ft deck width, no curb or sidewalk	Retain Existing Bridge
135-5191-0 – MP 4.75 – PIB at Suwanee Crk	2 lanes, 120 ft span length max, 478 ft structure length, 37.30 ft roadway width, 40.90 ft deck width, no curb or sidewalk	Retain Existing Bridge
Culvert		Retain Existing Culvert, possible extension
Culvert		Retain Existing Culvert, possible extension
Pedestrian Bridge	N/A	Over Suwanee Creek

Mainline Design Features: Peachtree Industrial Blvd – Urban Principal Arterial

Roadway name/identification and Functional Classification

Feature	Existing	Standard*	Proposed
Typical Section			
- **Number of Lanes**	**4**	**4**	**4**
- **Lane Width(s)**	**12'**	**11'-12'**	**12'**
- **Median Width & Type**	**Depressed Grass**	**Depressed Grass**	**Depressed Grass**
- **Outside Shoulder or Border Area Width**	**Varies**	**12'**	**16.5'-24.5'**
- **Outside Shoulder Slope**	**Varies**	**2%**	**2%**
- **Sidewalks**	**Intermittent**	**5'**	**10'-12'**
- **Auxiliary Lanes**	**11'-12'**	**11'-12'**	**11'-12'**
Posted Speed	**45**		**45**

Pavement Type	Asphlat	Asphalt	Asphalt

*According to current GDOT design policy if applicable

Major Interchanges/Intersections:
Rogers Bridge Road – Signalized Intersection
Chattahoochee Drive – Signalized Intersection
Sugarloaf Parkway – Signalized Intersection
Station Center Blvd – Signalized Intersection
McGinnis Ferry Road – Signalized Intersection

Lighting required: ☒ No ☐ Yes

Off-site Detours Anticipated: ☒ No ☐ Yes ☐ Undetermined

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	☒	☐	☐	
2. Lane Width	☒	☐	☐	
3. Shoulder Width	☒	☐	☐	
4. Bridge Width	☒	☐	☐	
5. Horizontal Alignment	☒	☐	☐	
6. Superelevation	☒	☐	☐	
7. Vertical Alignment	☒	☐	☐	
8. Grade	☒	☐	☐	
9. Stopping Sight Distance	☒	☐	☐	
10. Cross Slope	☒	☐	☐	
11. Vertical Clearance	☒	☐	☐	
12. Lateral Offset to Obstruction	☒	☐	☐	
13. Bridge Structural Capacity	☒	☐	☐	

Design Variances to GDOT Standard Criteria anticipated:

GDOT Standard Criteria	Reviewi ng Office	No	Undeter-mined	Yes	Appvl Date (if applicable)
1. Access Control/Median Openings	DP&S	☒	☐	☐	
2. Intersection Sight Distance	DP&S	☒	☐	☐	
3. Intersection Skew Angle	DP&S	☒	☐	☐	
4. Lateral Offset to Obstruction	DP&S	☒	☐	☐	
5. Rumble Strips	DP&S	☒	☐	☐	
6. Safety Edge	DP&S	☒	☐	☐	
7. Median Usage	DP&S	☒	☐	☐	
8. Roundabout Illumination Levels	DP&S	☒	☐	☐	
9. Complete Streets	DP&S	☒	☐	☐	
10. ADA & PROWAG	DP&S	☒	☐	☐	
11. GDOT Construction Standards	DP&S	☒	☐	☐	

12. GDOT Drainage Manual	DP&S	☒	☐	☐	
13. GDOT Bridge & Structural Manual	Bridges	☒	☐	☐	

VE Study anticipated: ☒ No ☐ Yes ☐ Completed – Date:

UTILITY AND PROPERTY

Temporary State Route needed: ☒ No ☐ Yes ☐ Undetermined

Railroad Involvement:
There is an existing railroad that will have to be crossed in the connection from Peachtree Industrial Blvd to Suwanee Creek Park. This railroad belongs to Norfolk Southern RR. There will have to be coordination with the railroad in order to cross over or under the railroad. It may be possible to cross under the railway at the existing bridge over Suwanee Creek.

Utility Involvements:
Atlanta Gas Light – Gwinnett
ATT – Telecom (Fiber Optic)
Charter Communications – Gwinnett CATV
Fulton County Sewer
Georgia Power
Gwinnett County Public Utilities Water
Gwinnett County Public Utilities Sewer
Jackson EMC
CerturyLink Telecom

SUE Required: ☒ No ☐ Yes ☐ Undetermined

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way (ROW): Existing width: 190-300 ft. Proposed width: _____ft.
Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined
Easements anticipated: ☐ None ☒ Temporary ☒ Permanent ☐ Utility ☐ Other

Anticipated total number of impacted parcels: 22
Displacements anticipated: Businesses: _____
Residences: _____
Other: _____
Total Displacements: _____

Location and Design approval: ☐ Not Required ☒ Required

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern:
Potential environmental and cultural resource impacts on the project corridor include the following:

Impacts to stream buffers
Gaps in mobility and Bikeway Connections

Context Sensitive Solutions Proposed:

Issue: Minimize impacts to environmentally sensitive areas (ESAs) and to historically significant structures/areas (Sdection 4(f) Resources). Protect the natural systems by managing erosion, sedimentation, and stormwater runoff.

Solution: Efforts will be made to minimize project impacts to ESAs and Section 4(f) resources. Temporary structural and vegetative erosion measures and permanent infiltration trenches will be evaluated to help protect downstream areas from sedimentation and pollution. Enhanced swales and infiltration trenches will also be evaluated to provide water quality treatment and channel protection.

Issue: Complete connections between existing trail systems for pedestrians and bicyclists. Add mobility along Peachtree Industrial Boulevard.

Solution: Add a multi-use pathway along Peachtree Industrial Boulevard to connect the Cities of Dultuh and Suwanee and continue the bikeways that are existing in these locations. The trail will fill in the gaps between the cities and the neighborhoods along the corridor and create safer conditions.

Issue: Preserve greenspace and create and interconnected greenspace program that provides connectivity to local trail systems.

Solution: The proposed multiuse path will connect the existing Gwinnett Bikeway System to another existing system along McGinnis Ferry Road, to connect the City of Duluth and the City of Suwanee. It will also be able to connect multiple neighborhoods and Suwanee Creek Park.

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document:

GEPA: ☐ **NEPA:** ☒ CE ☐ EA/FONSI ☐ EIS

MS4 Permit Compliance – Is the project located in a MS4 area? ☐ No ☒ Yes
MS4 compliance will be assured using the latest guidelines set forth by the Georgia DOT Drainage Manual.

Environmental Permits/Variances/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/Corps Land	☒	☐	
3. CWA Section 404 Permit	☐	☒	NWP or Regional Permit
4. 33 USC 408 Decision	☒	☐	
5. Tennessee Valley Authority Permit	☒	☐	
6. Buffer Variance	☐	☒	A SBV is expected
7. Coastal Zone Management Coordination	☒	☐	
8. NPDES	☐	☒	
9. FEMA	☐	☒	FEMA flood zones in the area
10. Cemetery Permit	☒	☐	

11. Other Permits	☒	☐	
12. Other Commitments	☒	☐	
13. Other Coordination	☒	☐	

Is a PAR required? ☒ No ☐ Yes ☐ Completed – Date:

Environmental Comments and Information:

NEPA/GEPA: The level of NEPA documentation is expected to be a Categorical Exclusion (CE). No significant NEPA concerns.

Ecology: There are multiple jurisdictional waters located within the project corridor. There is no habitat for T&E species. Impacts to jurisdictional waters are expected to be minor and a Nationwide or Regional 404 permit is expected. A stream buffer variance is also expected.

History: A potentially eligibile railroad and railroad bridge is located within the corridor. Its eligibility will be determined as part of the history survey and report. If deemed eligible, the project would likely not have an adverse effect on these resources.

Archeology: Sereral previously identified archaeological sites were located within the study corridor by a literature search. An archaeology field survey and report will be completed to determine if they still exist and identify any other archaeological resources.

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
Carbon Monoxide hotspot analysis: ☐ Required ☒ Not Required ☐ TBD
CO Hotspot modeling will not be required due to the project type.

Noise Effects: Noise expected to be cleared with Type III Noise Screening since it is a mutliuse trail.

Public Involvement: Public Information Open House.

Major stakeholders: GDOT, Gwinnett County, City of Suwanee, City of Duluth, Public and Neighborhoods in the area, Norfolk Southern RR, ARC.

CONSTRUCTION

Issues potentially affecting constructability/construction schedule:
Issue: There are potentially high walls that will have to be placed along Peachtree Industrial Blvd. to protect neighborhoods and homes that are below grade and steep slopes. Standard GDOT walls will be assumed but potentially special design walls may have to be designed. Some walls may be as tall as 20 feet and will run for several hundred feet. There are two potential locations, one near the beginning of the project near Rogers Bridge Road, and another near Canterbury Subdivision.

Issue: Railroad coordination will be necessary for this project due to the crossing under of the existing railroad bridge. Early coordination will keep the process moving quickly and efficiently. Potential coordination will be needed for drainage design, landscaping, and fencing.

Issue: There is an existing sewer easement that runs along Suwanee Creek and will be parallel with the spur trail section. This will require coordination between the trail and the utility and may necessitate the need for a larger pavement section in order to facilitate traffic for access and maintenance.

Issue: Existing grades in some locations are more than acceptable by AASHTO Guidelines. There will have to be a combination in design to keep grades to maximum requirements, without introducing additional length in the trail by items like switchbacks, and also preserving the natural surroundings. This is especially true around the tie in to the trail within Suwanee Creek Park.

Issue: Existing rock is present around Suwanee Creek and will require reducing cut sections in order to minimize issues with construction and removal of the rock.

Early Completion Incentives recommended for consideration: ☒ No ☐ Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting:
February 12, 2015
The project location was discussed and it was confirmed that the trail would be on the north/west side of Peachtree Industrial Blvd. The typical section was also discussed, and that a minimum buffer of 5 feet behind the curb was preferred. It was confirmed that asphalt was the material of choice. (Minutes Attached)

Concept Meeting:
June 22, 2015
Concept Project Team Meeting with all interested parties. See attached meeting minutes and notes.

Other coordination to date: *N/A*

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Pond and Company / Gwinnett County
Design	Pond and Company / Gwinnett County
Right-of-Way Acquisition	Gwinnett County
Utility Coordination (Preconstruction)	Pond and Company / Gwinnett County
Utility Relocation (Construction)	Contractor
Letting to Contract	Gwinnett County
Construction Supervision	Gwinnett County
Providing Material Pits	Contractor
Providing Detours	N/A
Environmental Studies, Documents, & Permits	GT Hill / Pond and Company / Gwinnett County
Environmental Mitigation	Gwinnett County
Construction Inspection & Materials Testing	Gwinnett County

Project Cost Estimate Summary and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	Federal / Local					
$ Amount	1,125,000	1,670,000	110,550	6,878,300	437,340	10,221,190
Date of Estimate		03-27-15	08-11-15	08-31-15	08-13-15	

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

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative: *Multi-Use Trail from 2500 ft West of Rogers Bridge Road to McGinnis Ferry Road on Peachtree Industrial Blvd. An extension from Suwanee Creek to Suwanee Creek Park, and possible spur to existing Suwanee Trail System.*			
Estimated Property Impacts:	**22**	**Estimated Total Cost:**	**$10,221,190**
Estimated ROW Cost:	**$1,670,000**	**Estimated CST Time:**	**1 year**
Rationale: *This project will meet all the project goals and complete the Western Gwinnett Bikeway Corridor.*			

No-Build Alternative:			
Estimated Property Impacts:	**$0**	**Estimated Total Cost:**	**$0**
Estimated ROW Cost:	**$0**	**Estimated CST Time:**	**$0**
Rationale: *This alternative does not meet the project goal of providing pedestrian and bike access along the corridor.*			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
    a. Construction including Engineering and Inspection and Contingencies
    b. Completed Liquid AC Cost Adjustment forms
    c. Right-of-Way
    d. Utilities
4. S I & A Report(s)
5. Concept Level Hydrology Study for MS4 Permit
6. Minutes of Stakeholder Meeting
7. Minutes of Concept Meeting

APPROVALS

Concur: _____
Director of Engineering

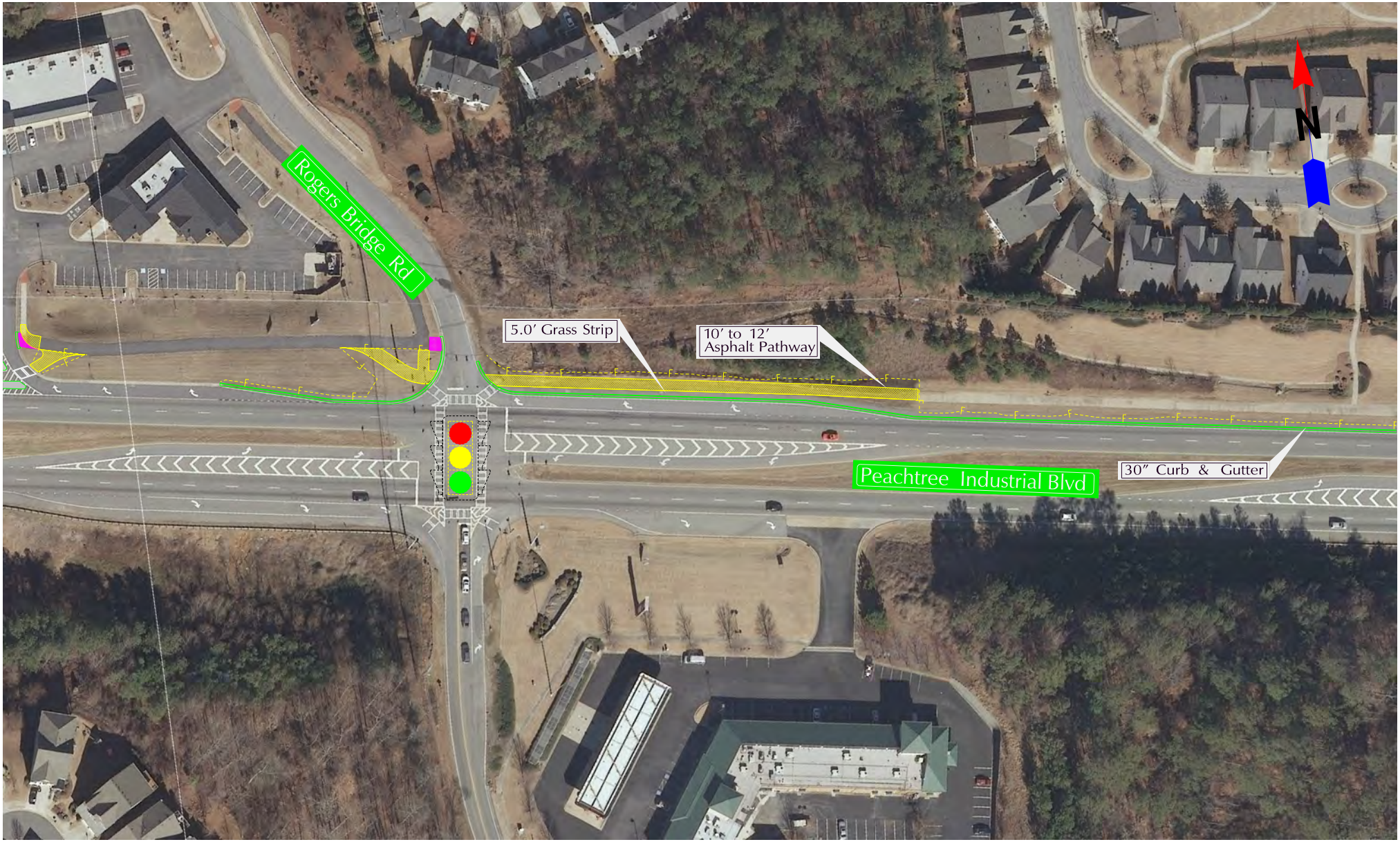
Approve: Margaret B. Pirkle _____ 12.22.15
Chief Engineer Date

ATTACHMENT 1

CONCEPT LAYOUT

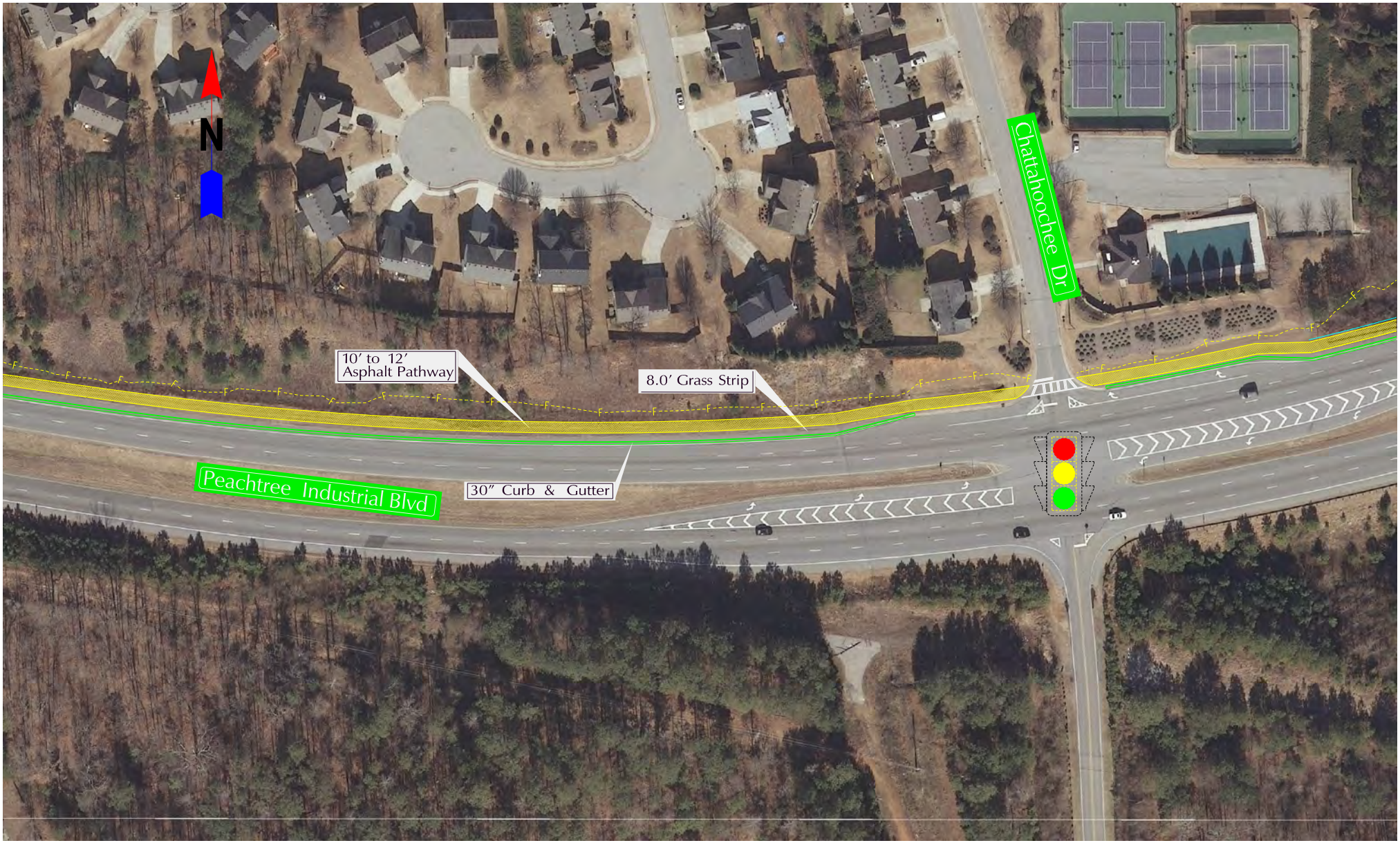
N
Peachtree Industrial Blvd
10′ to 12′
Asphalt Pathway
30″ Curb & Gutter
5.0′ Grass Strip
Retaining Wall

N
Retaining Wall
10′ to 12′
Asphalt Pathway
5.0′ Grass Strip
Peachtree Industrial Blvd
30″ Curb & Gutter

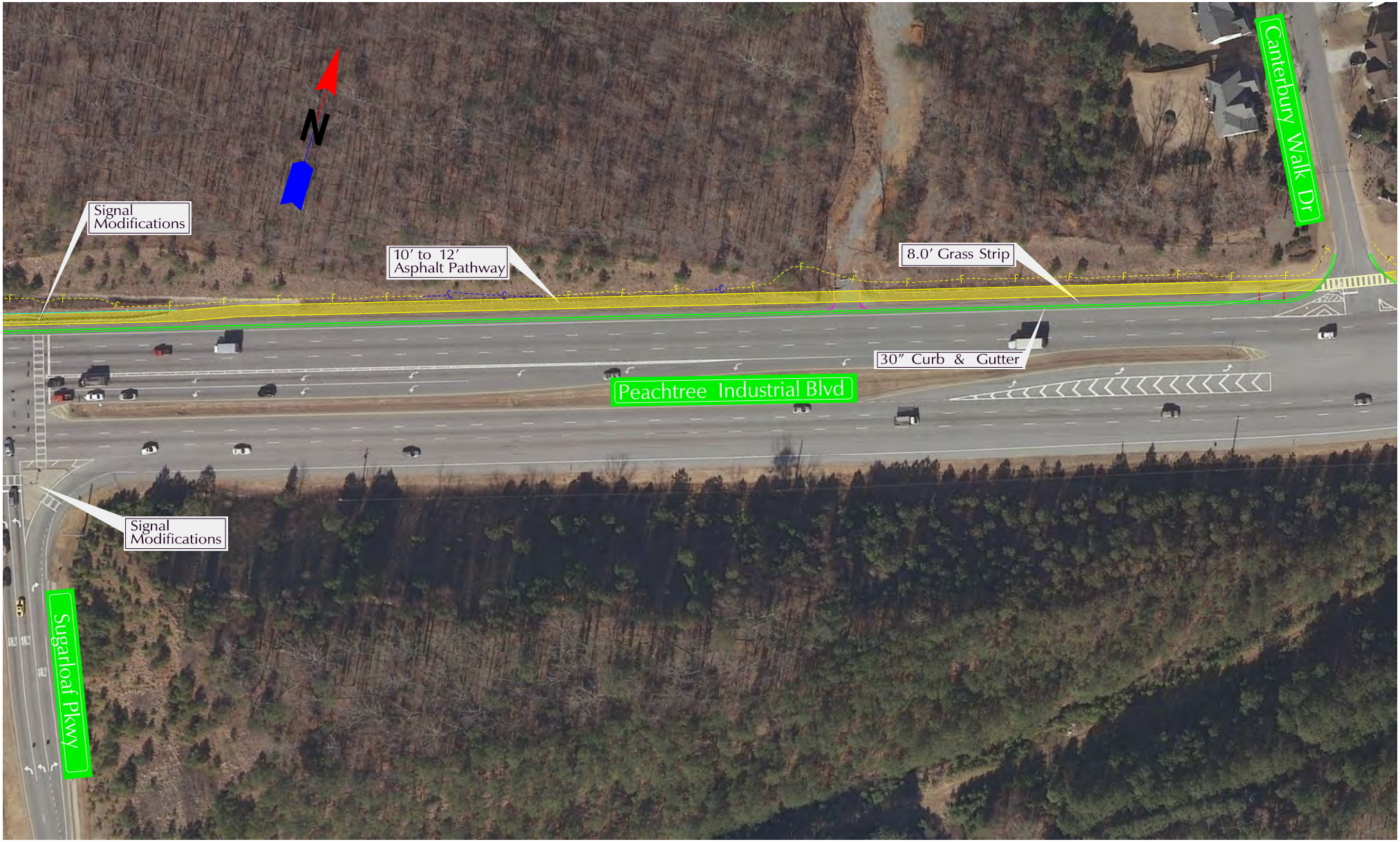

Rogers Bridge Rd
5.0′ Grass Strip
10′ to 12′
Asphalt Pathway
Peachtree Industrial Blvd
30″ Curb & Gutter
N

N
Prince Charles Dr
10' to 12'
Asphalt Pathway
Peachtree Industrial Blvd
5.0' Grass Strip
30" Curb & Gutter

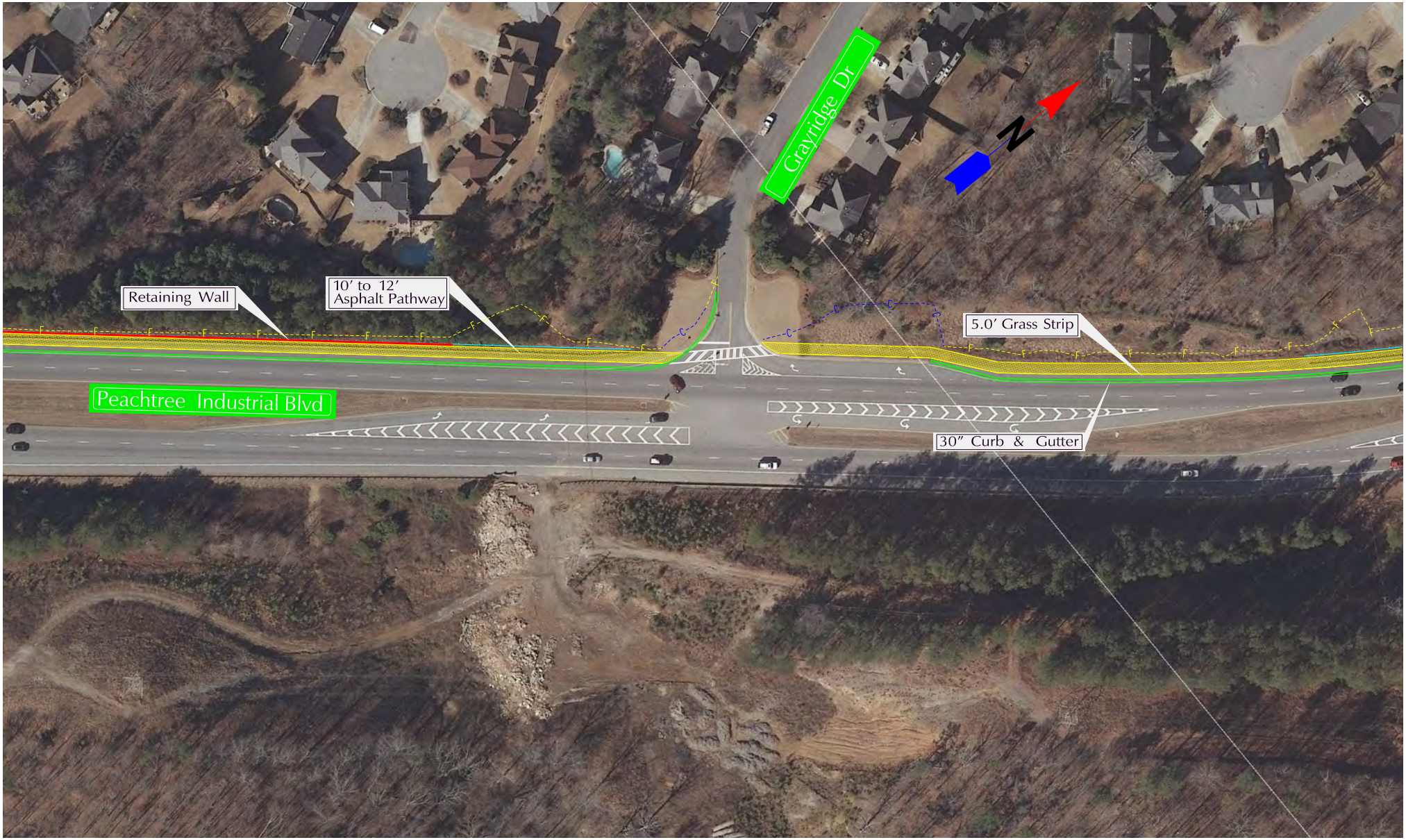
Castlemaine Dr
10′ to 12′
Asphalt Pathway
8.0′ Grass Strip
30″ Curb & Gutter
Peachtree Industrial Blvd
N


N
10′ to 12′
Asphalt Pathway
8.0′ Grass Strip
30″ Curb & Gutter
Peachtree Industrial Blvd
Chattahoochee Dr

N
Signal Modifications
5.0' Grass Strip
10' to 12' Asphalt Pathway
30" Curb & Gutter
Peachtree Industrial Blvd
Sugarloaf Pkwy

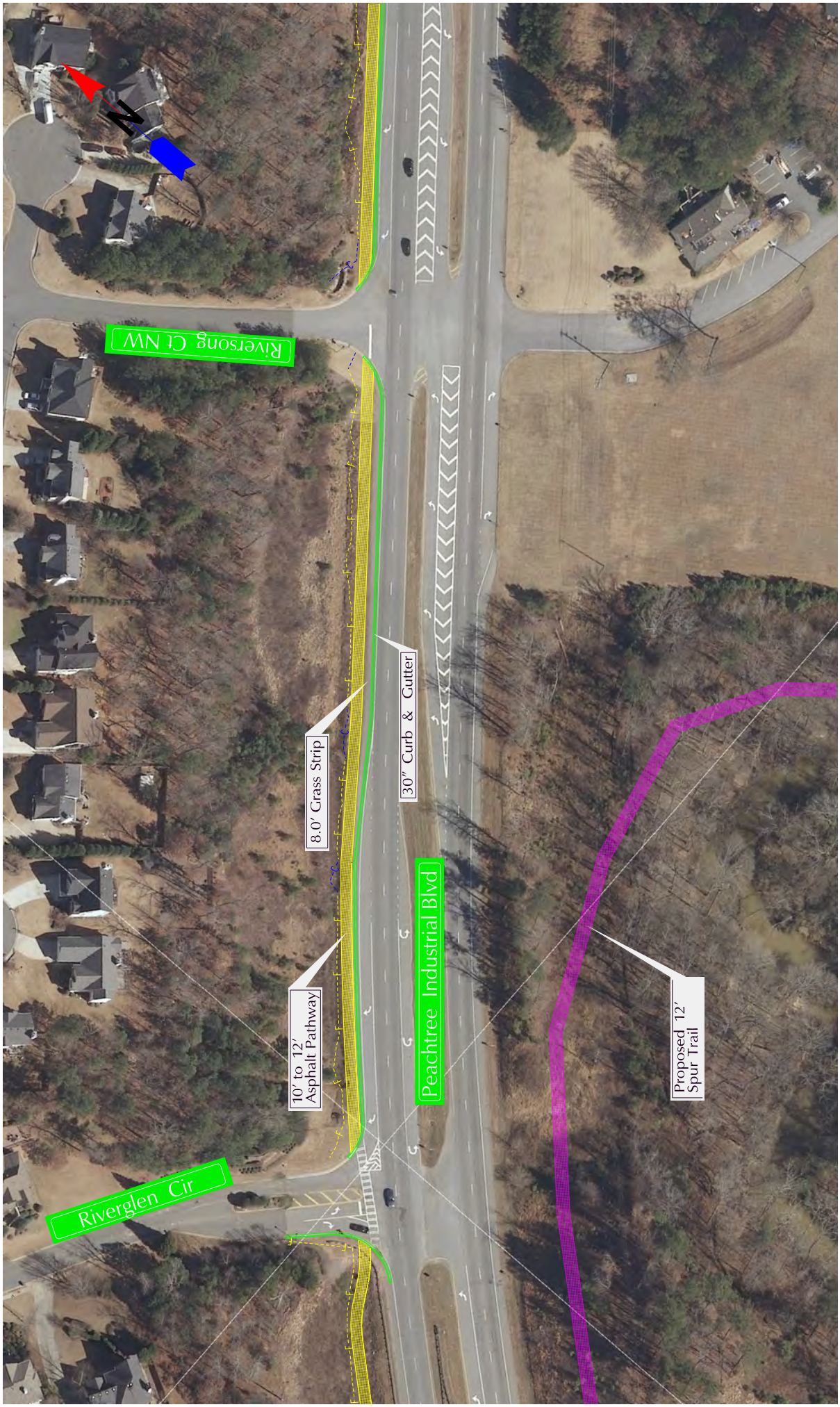

N
Signal Modifications
10′ to 12′ Asphalt Pathway
8.0′ Grass Strip
Canterbury Walk Dr
30″ Curb & Gutter
Peachtree Industrial Blvd
Signal Modifications
Sugarloaf Pkwy

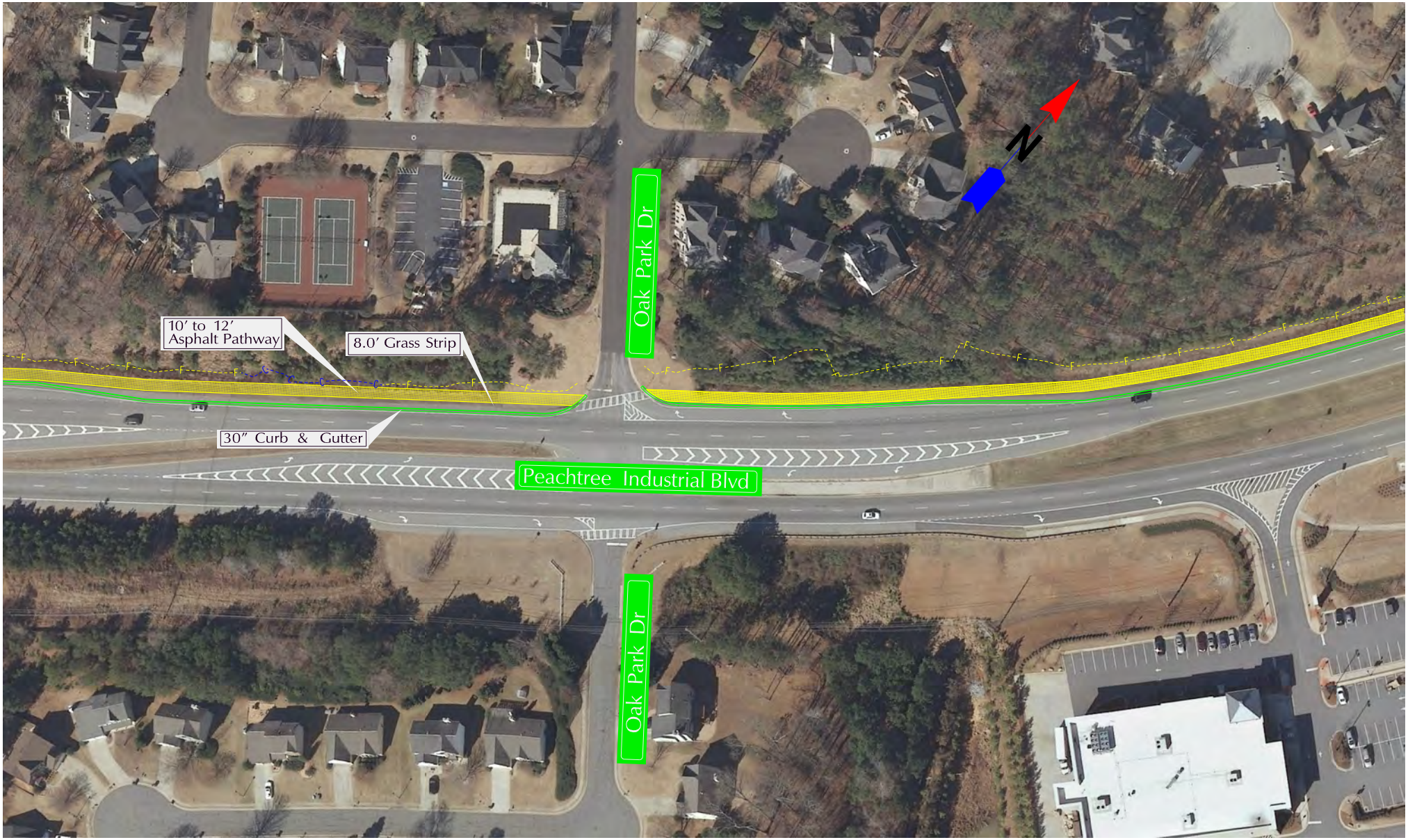
5.0' Grass Strip
30" Curb & Gutter
Retaining Wall
10' to 12'
Asphalt Pathway
Peachtree Industrial Blvd
Canterbury Walk Dr
N


Retaining Wall
10′ to 12′
Asphalt Pathway
Peachtree Industrial Blvd
Grayridge Dr
N
5.0′ Grass Strip
30″ Curb & Gutter

N
10′ to 12′
Asphalt Pathway
5.0′ Grass Strip
30″ Curb & Gutter
Peachtree Industrial Blvd
Peachtree Crest Dr

N
10' to 12'
Asphalt Pathway
Peachtree Industrial Blvd
Proposed 12'
Spur Trail
Suwanee Creek
Noblin Ridge Dr


N
Riverglen Cir
Riversong Ct NW
Peachtree Industrial Blvd
10' to 12'
Asphalt Pathway
8.0' Grass Strip
30" Curb & Gutter
Proposed 12'
Spur Trail


10′ to 12′
Asphalt Pathway
8.0′ Grass Strip
30″ Curb & Gutter
Oak Park Dr
Peachtree Industrial Blvd
Oak Park Dr
N

N
5.0' Grass Strip
30" Curb & Gutter
Station Center Blvd
Vista Point Ln
Peachtree Industrial Blvd
10' to 12'
Asphalt Pathway

N
10' to 12'
Asphalt Pathway
30" Curb & Gutter
5.0' Grass Strip
Peachtree Industrial Blvd
Church View Ln

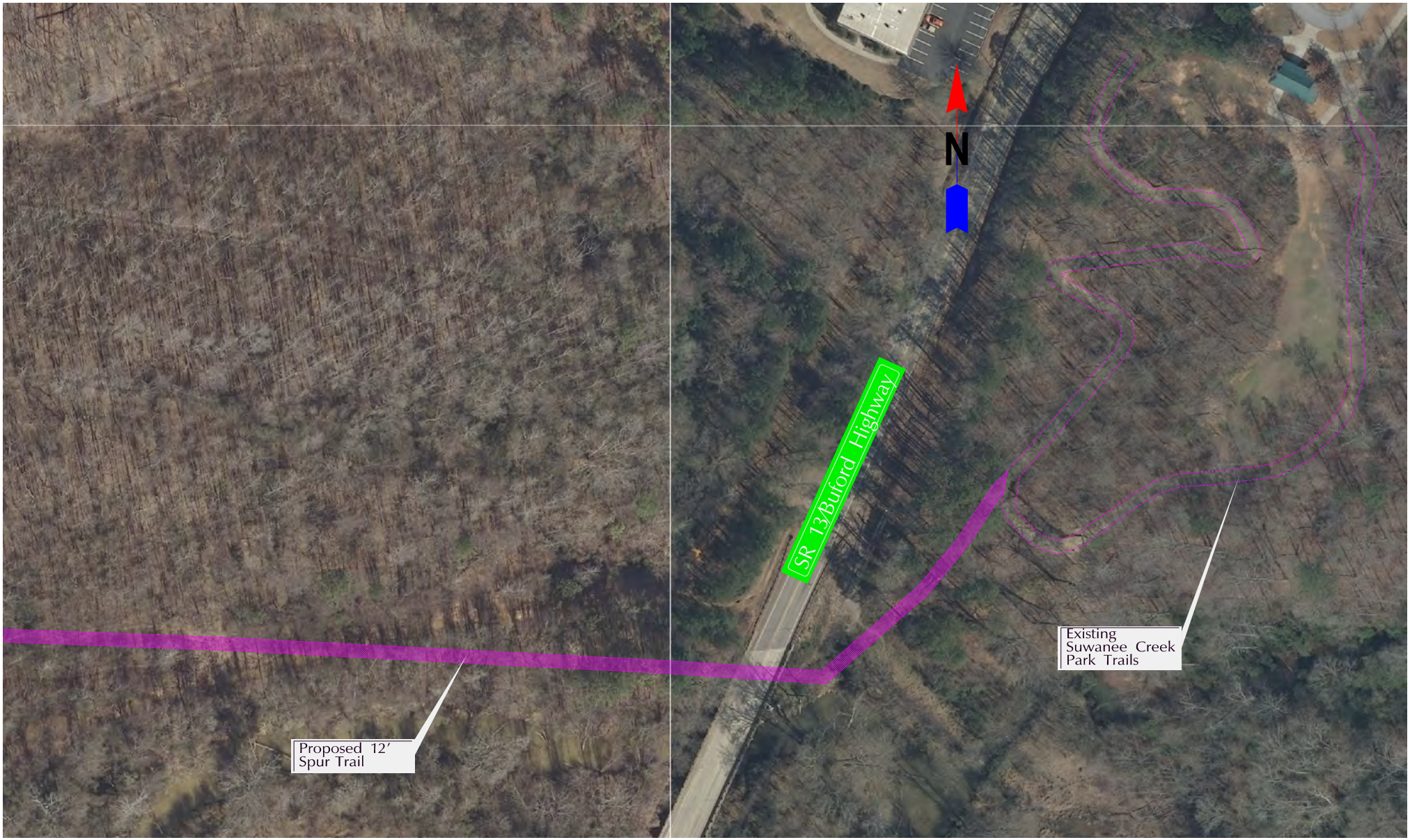
N
5.0' Grass Strip
Peachtree Industrial Blvd
30" Curb & Gutter
10' to 12'
Asphalt Pathway
Grand Vista Approach

N
McGinnis Ferry Rd
McGinnis Ferry Rd
10' to 12'
Asphalt Pathway
Peachtree Industrial Blvd
5.0' Grass Strip
30" Curb & Gutter
Ten Pin Alley Ln

N
Proposed 12'
Spur Trail

Proposed 12'
Spur Trail
Connection
Proposed 12'
Spur Trail
Norfolk Southern RR
N

N
Proposed 12'
Spur Trail


N
SR 13/Buford Highway
Existing
Suwanee Creek
Park Trails
Proposed 12'
Spur Trail

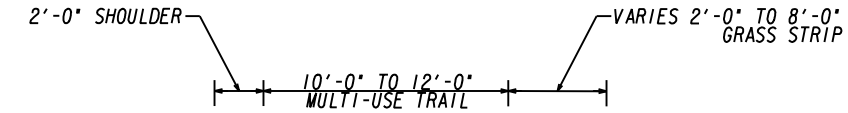
Proposed 12'
Spur Trail
Connection
Norfolk Southern RR
N

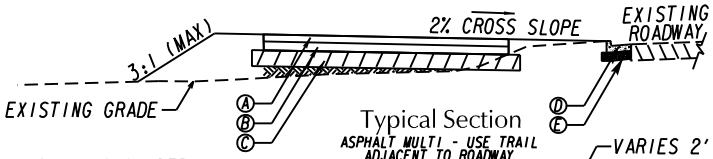
N
Station Center Blvd
Existing Neighborhood Trail
Proposed 12' Spur Trail Connection

ATTACHMENT 2

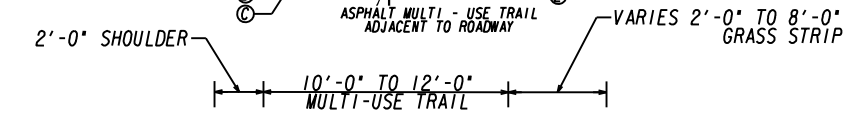
TYPICAL SECTIONS

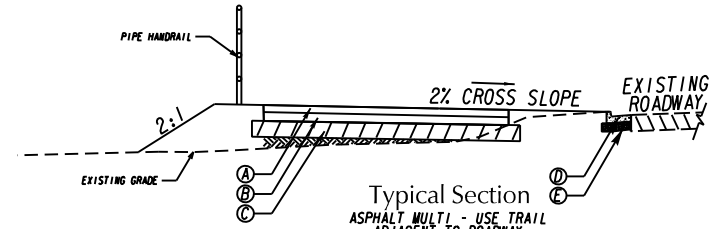
WESTERN GWINNETT BIKEWAY EXTENSION TYPICAL SECTIONS



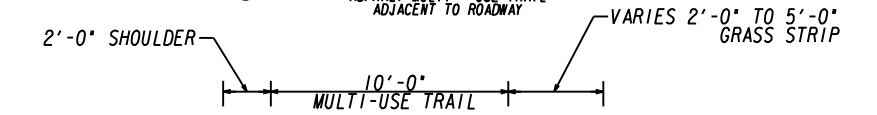


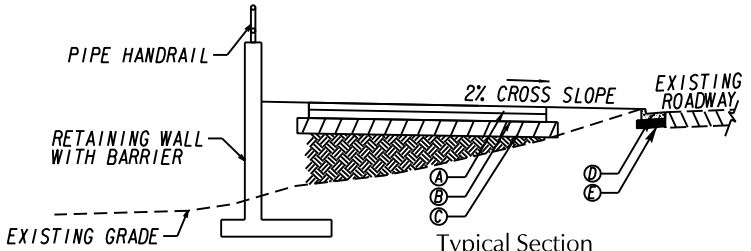
Typical Section
ASPHALT MULTI - USE TRAIL ADJACENT TO ROADWAY



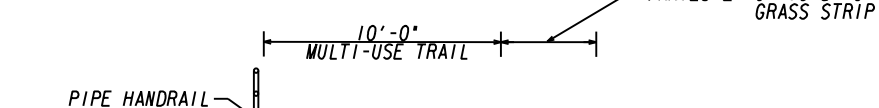


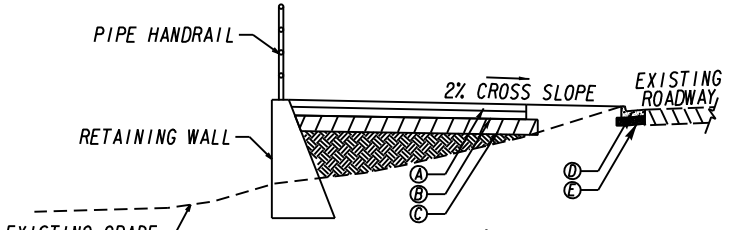
Typical Section
ASPHALT MULTI - USE TRAIL ADJACENT TO ROADWAY



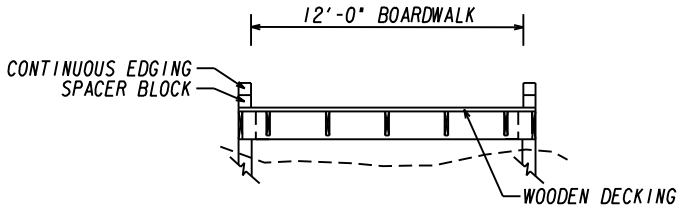


Typical Section
CONCRETE MULTI - USE TRAIL ADJACENT TO ROADWAY
WALL SECTION OPTION 1

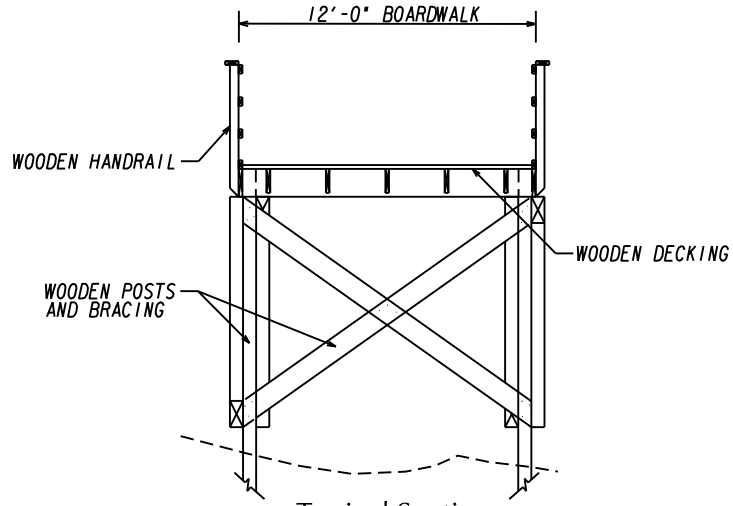




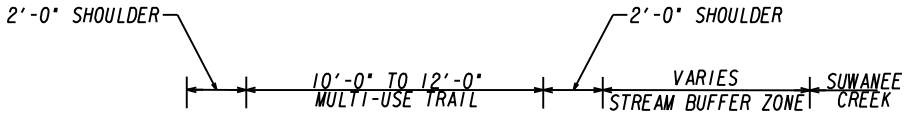
Typical Section
CONCRETE MULTI - USE TRAIL ADJACENT TO ROADWAY
WALL SECTION OPTION 2

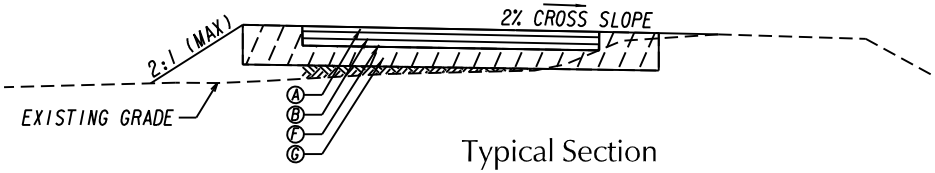


Typical Section
WOODEN BOARDWALK



Typical Section
ELEVATED WOODEN BOARDWALK WITH HANDRAILS





Typical Section
ASPHALT MULTI - USE TRAIL ADJACENT TO STREAM (SPUR TRAIL)

Ⓐ RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME (1 INCH)
Ⓑ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (1.5 INCH)
Ⓒ GR AGGR BASE CRS, 4 INCH, INCL MATL
Ⓓ CONC CURB & GUTTER, 6 IN X 30 IN, TP 2
Ⓔ GR AGGR BASE CRS, 12 INCH, INCL MATL

Ⓐ RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME (1.5 INCH)
Ⓑ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (2.0 INCH)
Ⓕ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (3.0 INCH)
Ⓖ GR AGGR BASE CRS, 6 INCH, INCL MATL

ATTACHMENT 3

DETAILED COST ESTIMATES

Programmed Costs

Construction

Liquid AC Cost Adjustments

Right of Way

Utilities

Impacts and Mitigation Costs

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. **0012883** **OFFICE** Program Delivery

PROJECT DESCRIPTION

WESTERN GWINNETT BIKEWAY EXTENSION

DATE August 31, 2015

Kimberly Nesbitt for

From: Albert V. Shelby, III, State Program Delivery Engineer

To: Lisa L. Myers, State Project Review Engineer

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Charles A. Robinson

MGMT LET DATE 5/15/2018

MGMT ROW DATE 2/15/2017

PROGRAMMED COSTS (TPro W/OUT INFLATION)			**LAST ESTIMATE UPDATE**	
CONSTRUCTION	$	4,800,000.00	DATE	N/A
RIGHT OF WAY	$	384,000.00	DATE	N/A
UTILITIES	$	0	DATE	N/A

REVISED COST ESTIMATES

CONSTRUCTION*	$	6,878,300.64
RIGHT OF WAY	$	1,670,000.00
UTILITIES	$	110,550.00

*Cost Contains 10 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

The current cost estimates are based on the inital funds programmed for the project. The construction cost estimate is based on the completion of a concept layout. The Right of Way (ROW) cost increase is attributed to a preliminary ROW cost estimate based on a concept layout. There were some preliminary reimbursable costs identified during the concept phase. Additionally, a 10% contingency factor was used based on the the scope in the concept phase.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	$ 5,810,723.63	Base Estimate From CES		
B. ENGINEERING AND INSPECTION (E & I):	$ 290,536.18	Base Estimate (A) x	5	%
C. CONTINGENCY:	$ 610,125.98	Base Estimate (A) + E & I (B) x See % Table in "Risk Based Cost Estimation" Memo	10	%
D. TOTAL LIQUID AC ADJUSTMENT:	$ 166,914.85	Total From Liquid AC Spreadsheet		
E. CONSTRUCTION TOTAL:	$ **6,878,300.64**	(A + B + C + D = E)		

REIMBURSABLE UTILTY COSTS

UTILITY OWNER	REIMBURSABLE COST
Gwinnett County Public Utilities Water	$85,400
Gwinnett County Public Utilities Sewer	$1,950
Gwinnett County DOT	$23,200
TOTAL	**$ 110,550.00**

ATTACHMENTS:

Detailed Cost Estimate Printout From TRAQS
Liquid AC Adjustment Spreadsheet

SR 11/US 129 FROM CR 304 NORTH TO CR 236

PROJ. NO.		CALL NO.	7/22/2014
P.I. NO.	0012883		
DATE	8/31/2015		

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Jul-14	$ 2.497
DIESEL		$ 2.725
LIQUID AC		$ 470.00

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)			**157948.2**	**$**	**157,948.20**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 752.00		
Monthly Asphalt Cement Price month project let (APL)			$ 470.00		
Total Monthly Tonnage of asphalt cement (TMT)			560.1		

ASPHALT	Tons	%AC	AC ton
Leveling	0	5.0%	0
12.5 OGFC	0	5.0%	0
12.5 mm	3447	5.0%	172.35
9.5 mm SP	2585	5.0%	129.25
25 mm SP		5.0%	0
19 mm SP	5170	5.0%	258.5
	11202		**560.1**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$ 8,966.65**	**$**	**8,966.65**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 752.00		
Monthly Asphalt Cement Price month project let (APL)			$ 470.00		
Total Monthly Tonnage of asphalt cement (TMT)			31.79663213		

Bitum Tack Gals	gals/ton	tons
7403	232.8234	31.7966321

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)			**0**	**$**	**-**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 752.00		
Monthly Asphalt Cement Price month project let (APL)			$ 470.00		
Total Monthly Tonnage of asphalt cement (TMT)			0		

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

TOTAL LIQUID AC ADJUSTMENT **$ 166,914.85**

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 0012883

JOB NUMBER *0012883* **FED/STATE PROJECT NUMBER**

SPEC YEAR: *13*

DESCRIPTION: *WESTERN GWINNETT BIKEWAY*

ITEMS FOR JOB 0012883

0001 - ROADWAY ITEMS

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	$100,000.00000	TRAFFIC CONTROL - LS	$100,000.00
0010	210-0100	1.000	LS	$200,000.00000	GRADING COMPLETE - LS	$200,000.00
0015	310-1101	9852.000	TN	$20.60686	GR AGGR BASE CRS, INCL MATL	$203,018.78
0020	402-3103	2585.000	TN	$84.79892	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	$219,205.21
0025	402-3103	7403.000	TN	$3.77000	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	$27,909.31
0405	402-3113	3447.000	TN	$77.61385	RECYL AC 12.5MM SP,GP1/2,BM&HL	$267,534.94
0410	402-3190	5170.000	TN	$72.99148	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	$377,365.95
0030	441-0018	2000.000	SY	$49.74134	DRIVEWAY CONCRETE, 8 IN TK	$99,482.68
0035	441-0748	200.000	SY	$43.57053	CONC MEDIAN, 6 IN	$8,714.11
0040	441-4030	500.000	SY	$44.69587	CONC VALLEY GUTTER, 8 IN	$22,347.94
0045	441-6222	20000.000	LF	$11.22807	CONC CURB & GUTTER/ 8X30TP2	$224,561.40
0050	500-3201	973.000	CY	$565.46459	CL B CONC, RET WALL	$550,197.05
0055	515-2015	2000.000	LF	$55.50000	GALV STEEL PIPE HANDRAIL - HANDRAIL	$111,000.00
0060	641-1200	8000.000	LF	$15.83232	GUARDRAIL, TP W	$126,658.56
0065	641-5001	7.000	EA	$921.46621	GUARDRAIL ANCHORAGE, TP 1	$6,450.26
0070	641-5012	7.000	EA	$1,940.28859	GUARDRAIL ANCHORAGE, TP 12	$13,582.02
0385	999-2010	1.000	LS	$1,266,300.00000	DESIGN COMPLETE BOARDWALK, LESS THAN 30 IN HEIGHT	$1,266,300.00
0390	999-2010	1.000	LS	$792,540.00000	DESIGN COMPLETE BOARDWALK, MORE THAN 30 IN HEIGHT	$792,540.00
0395	999-2010	1.000	LS	$190,000.00000	DESIGN COMPLETE PEDESTRIAN BRIDGE	$190,000.00
					SUBTOTAL FOR ROADWAY ITEMS:	**$4,806,868.21**

0002 - DRAINAGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0075	550-1180	3164.000	LF	$33.94333	STM DR PIPE 18,H 1-10	$107,396.70
0080	550-1240	2120.000	LF	$43.97930	STM DR PIPE 24,H 1-10	$93,236.12
0085	550-1360	1044.000	LF	$54.77297	STM DR PIPE 36,H 1-10	$57,182.98
0090	550-4218	8.000	EA	$590.33507	FLARED END SECT 18 IN, ST DR	$4,722.68
0095	611-4003	4.000	EA	$1,605.00000	RECONSTR MISC DRAINAGE STR	$6,420.00
0100	611-8000	24.000	EA	$1,526.60132	ADJUST CATCH BASIN TO GRADE	$36,638.43
0105	668-1100	65.000	EA	$2,210.05170	CATCH BASIN, GP 1	$143,653.36
0115	668-1105	5.000	EA	$2,500.00000	CATCH BASIN, GP 1, SPCL DES	$12,500.00
0110	668-1110	28.000	LF	$194.33813	CATCH BASIN, GP 1, ADDL DEPTH	$5,441.47
0135	668-2100	12.000	EA	$1,979.12704	DROP INLET, GP 1	$23,749.52
0140	668-2105	12.000	EA	$2,500.00000	DROP INLET, GP 1, SPCL DES	$30,000.00
0145	668-2115	32.000	LF	$250.00000	DROP INLET,GP 1,A DEP,SPC DES	$8,000.00
0120	668-4300	12.000	EA	$1,908.66253	STORM SEW MANHOLE, TP 1	$22,903.95
0125	668-4311	20.000	LF	$187.86244	ST SEW MANHOLE,TP 1,A DEP,CL 1	$3,757.25
0130	668-4400	4.000	EA	$2,770.70938	STORM SEW MANHOLE, TP 2	$11,082.84
					SUBTOTAL FOR DRAINAGE:	**$566,685.30**

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 0012883

0003 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0235	163-0232	9.000	AC	$260.83598	TEMPORARY GRASSING	$2,347.52
0240	163-0240	214.000	TN	$206.50089	MULCH	$44,191.19
0160	163-0528	256.000	LF	$3.52479	CONSTR AND REM FAB CK DAM -TP C SLT FN	$902.35
0155	163-0550	88.000	EA	$105.20911	CONS & REM INLET SEDIMENT TRAP	$9,258.40
0205	165-0030	15064.000	LF	$0.51273	MAINT OF TEMP SILT FENCE, TP C	$7,723.76
0200	165-0041	2560.000	LF	$1.17252	MAINT OF CHECK DAMS - ALL TYPES	$3,001.65
0195	165-0105	88.000	EA	$27.26279	MAINT OF INLET SEDIMENT TRAP	$2,399.13
0190	167-1000	5.000	EA	$200.54046	WATER QUALITY MONITORING AND SAMPLING	$1,002.70
0165	171-0030	15600.000	LF	$2.72295	TEMPORARY SILT FENCE, TYPE C	$42,478.02
0170	603-2018	396.000	SY	$61.31000	STN DUMPED RIP RAP, TP 1, 18	$24,278.76
0175	603-7000	2132.000	SY	$3.71222	PLASTIC FILTER FABRIC	$7,914.45
0180	643-8200	800.000	LF	$1.30622	BARRIER FENCE (ORANGE), 4 FT	$1,044.98
0215	700-6910	9.000	AC	$976.87556	PERMANENT GRASSING	$8,791.88
0220	700-7000	9.000	TN	$124.51961	AGRICULTURAL LIME	$1,120.68
0225	700-8000	7.000	TN	$608.55942	FERTILIZER MIXED GRADE	$4,259.92
0230	700-8100	450.000	LB	$2.90891	FERTILIZER NITROGEN CONTENT	$1,309.01
0210	700-9300	15000.000	SY	$4.33829	SOD	$65,074.35
0185	716-2000	4996.000	SY	$1.06067	EROSION CONTROL MATS, SLOPES	$5,299.11
					SUBTOTAL FOR EROSION CONTROL:	**$232,397.86**

0004 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0245	610-6515	32.000	EA	$74.53213	REM HIGHWAY SIGN, STD	$2,385.03
0400	610-9001	20.000	EA	$71.85771	REM SIGN	$1,437.15
0250	611-5551	20.000	EA	$134.63176	RESET SIGN	$2,692.64
0255	636-1020	332.000	SF	$14.07724	HWY SGN,TP1MAT,REFL SH TP3	$4,673.64
0260	636-1033	252.000	SF	$19.89564	HWY SIGNS, TP1MAT,REFL SH TP 9	$5,013.70
0265	636-2070	732.000	LF	$8.49893	GALV STEEL POSTS, TP 7	$6,221.22
0270	653-1501	216.000	LF	$1.02252	THERMO SOLID TRAF ST 5 IN, WHI	$220.86
0275	653-1502	1400.000	LF	$0.61921	THERMO SOLID TRAF ST, 5 IN YEL	$866.89
0280	653-1704	624.000	LF	$4.99881	THERM SOLID TRAF STRIPE,24,WH	$3,119.26
0285	653-1804	14280.000	LF	$2.15346	THERM SOLID TRAF STRIPE, 8,WH	$30,751.41
0290	653-3501	672.000	GLF	$0.40905	THERMO SKIP TRAF ST, 5 IN, WHI	$274.88
0295	653-6004	860.000	SY	$3.86316	THERM TRAF STRIPING, WHITE	$3,322.32
					SUBTOTAL FOR SIGNING AND MARKING:	**$60,979.00**

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 0012883

0005 - SIGNAL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0310	610-6873	5.000	EA	$1,500.00000	REM CONC STRAIN POLE	$7,500.00
0315	639-2002	200.000	LF	$4.34227	STEEL WIRE STRAND CABLE, 3/8	$868.45
0320	639-3004	1.000	EA	$9,945.13627	STEEL STRAIN POLE, TP IV	$9,945.14
0325	639-5000	4.000	EA	$6,857.25407	PRESTRESSED CONC STR POLE, TP- STRAIN POLE	$27,429.02
0300	647-1000	1.000	LS	$17,500.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 1	$17,500.00
0360	647-1000	1.000	LS	$17,125.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 2	$17,125.00
0365	647-1000	1.000	LS	$17,250.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 3	$17,250.00
0370	647-1000	1.000	LS	$6,375.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 4	$6,375.00
0375	647-1000	1.000	LS	$13,500.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 5	$13,500.00
0380	647-1000	1.000	LS	$9,375.00000	TRAF SIGNAL INSTALLATION NO - INSTALLATION NO. 6	$9,375.00
0330	682-6219	70.000	LF	$8.22889	CONDUIT, NONMETL, TP 2, 1 IN	$576.02
0335	682-6222	1650.000	LF	$5.21406	CONDUIT, NONMETL, TP 2, 2 IN	$8,603.20
0340	682-6233	350.000	LF	$6.73000	CONDUIT, NONMETL, TP 3, 2 IN	$2,355.50
0345	682-9950	160.000	LF	$15.53000	DIRECTIONAL BORE - DIRECTIONAL BORE	$2,484.80
0350	937-8030	1.000	LS	$1,665.73000	TESTING - INTERSECTION VIDEO DETECTION	$1,665.73
0355	937-8530	1.000	LS	$1,240.40000	TRAINING - INTERSECTION VIDEO DETECTION	$1,240.40
					SUBTOTAL FOR SIGNAL:	**$143,793.26**

TOTALS FOR JOB 0012883

ITEMS COST:	**$5,810,723.63**
COST GROUP COST:	**$0.00**
ESTIMATED COST:	**$5,810,723.63**
CONTINGENCY PERCENT:	**0.00**
ENGINEERING AND INSPECTION:	**0.00**
ESTIMATED COST WITH CONTINGENCY AND E&I:	**$5,810,723.63**

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 3/27/2015 Project: N/A
Revised: County: Gwinnett
PI: N/A

Description: Western Gwinnett Bikeway
Project Termini: PIB South of Rogers Road to McGinnis Ferry Road

Existing ROW: Varies
Parcels: 22 Required ROW: Varies

Land and Improvements		$1,164,487.50
Proximity Damage	*$0.00*	
Consequential Damage	*$0.00*	
Cost to Cures	*$0.00*	
Trade Fixtures	*$0.00*	
Improvements	*$10,000.00*	
Valuation Services		$62,500.00
Legal Services		$164,850.00
Relocation		$44,000.00
Demolition		$45,000.00
Administrative		$189,000.00
TOTAL ESTIMATED COSTS		$1,669,837.50
TOTAL ESTIMATED COSTS (ROUNDED)		***$1,670,000.00***

Preparation Credits	Hours	Signature
Benjamin M. Garland Jr.	4	

Prepared By: CG#: GAL 270880 3/27/15
Approved By: CG#: 286999 08/19/2015 (DATE)

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

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Land and Improvements	**Agriculture**	**Residential**	**Commercial**	**Industrial**
1	Estimate Low (ac)	$0.00	$45,000.00	$108,900.00	$12,000.00
2	Estimate High (ac)	$0.00	$300,000.00	$522,720.00	$200,000.00
3	Estimate Used (ac)	$0.00	$175,000.00	$400,000.00	$40,000.00
4	Fee Simple Area (ac)	0.00	1.53	0.46	1.85
5	Fee Simple Estimate	$0.00	$267,750.00	$184,000.00	$74,000.00
6	Perm Esmt Area (ac)	0.00	0.37	0.87	1.71
7	Perm Esmt Factor	0%	50%	50%	50%
8	Perm Esmt Estimate	$0.00	$32,375.00	$174,000.00	$34,200.00
9	Temp Esmt Area (ac)	0.00	0.00	0.00	0.00
10	Temp East Factor	0%	0%	0%	0%
11	Temp Esmt Estimate	$0.00	$0.00	$0.00	$0.00
12	Proximity Damages	$0.00	$0.00	$0.00	$0.00
13	Consequential Damages	$0.00	$0.00	$0.00	$0.00
14	Cost to Cures	$0.00	$0.00	$0.00	$0.00
15	Improvements	$0.00	$10,000.00	$0.00	$0.00
16	Trade Fixtures	$0.00	$0.00	$0.00	$0.00
17					
18	PROPERTY TYPE TOTALS	$0.00	$310,125.00	$358,000.00	$108,200.00
19			SUB TOTAL PROPERTY TYPES		$776,325.00
20			Counter Offers and Condemnation Increases		$388,162.50
21					
22			**GRAND TOTAL LANDS AND IMPROVEMENTS**		$1,164,487.50

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Valuation Services	**Agriculture**	**Residential**	**Commercial**	**Industrial**
1	Appraisals (# of Parcels)	0	14	4	4
2	Estimated Fees (per Parcel)	$1,500.00	$2,000.00	$3,000.00	$2,500.00
3	TOTAL APPRAISALS	$0.00	$28,000.00	$12,000.00	$10,000.00
4	Sign Estimates	0	0	0	0
5	Estimated Fees	$0.00	$0.00	$250.00	$0.00
6	TOTAL SIGN ESTIMATES	$0.00	$0.00	$0.00	$0.00
7	Specialty Reports	0	0	0	0
8	Estimated Fees	$0.00	$0.00	$0.00	$2,500.00
9	TOTAL SPECIALTY REPORTS	$0.00	$0.00	$0.00	$0.00
10	Septic/Well Reports	0	0	0	0
11	Estimated Fees	$0.00	$0.00	$0.00	$0.00
12	TOTAL SEPTIC/WELL REPORTS	$0.00	$0.00	$0.00	$0.00
13					
14					
15					
16	TOTAL VALUATION FEES	$0.00	$28,000.00	$12,000.00	$10,000.00
17			SUB TOTAL VALUATION SERVICES		$50,000.00
18			Updates and Incidentals (Min $2,500 or 25%)		$12,500.00
19			**GRAND TOTAL VALUATION SERVICES**		$62,500.00

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Legal Services	**Parcels**	**Estimated Fees**		**TOTALS**
1	Meeting with Attorney	22	$125.00		$2,750.00
2	Preliminary Titles	22	$200.00		$4,400.00
3	Closing and Final Title	22	$300.00		$6,600.00
4	Recording Fees	22	$50.00		$1,100.00
5	Condemnation Filing	4	$5,000.00		$20,000.00
6	Litigation Costs	4	$25,000.00		$100,000.00
7	Updates and Incidentials	4	$7,500.00		$30,000.00
8					
9					
10					
11					
12					
13					
14					
15					
16					
17			**GRAND TOTAL LEGAL SERVICES**		$164,850.00

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Relocation	**Displacements**	**Estimated Costs**		**TOTALS**
1	Business Displacement	0	$15,000.00		$0.00
2	Residential Tenant	0	$20,000.00		$0.00
3	Residential Owner	0	$40,000.00		$0.00
4	Pro-Rata Taxes	22	$1,000.00		$22,000.00
5	Property Pin Replacement	22	$1,000.00		$22,000.00
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17			**GRAND TOTAL RELOCATION**		$44,000.00

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Demolition	**Items/Improvements**	**Estimated Costs**		**TOTALS**
1	Residential Structures	0	$15,000.00		$0.00
2	Commercial Structures	0	$25,000.00		$0.00
3	Hotels/Apartments	0	$60,000.00		$0.00
4	UST's - Dispensers	0	$50,000.00		$0.00
5	Billboards	0	$8,000.00		$0.00
6	Signs - Light Standards	10	$1,500.00		$15,000.00
7	Water Vaults	2	$15,000.00		$30,000.00
8	Gas/Water Service Separation	0	$2,500.00		$0.00
9					
10					
11					
12					
13					
14					
15					
16					
17			**GRAND TOTAL DEMOLITION**		$45,000.00

Georgia Department of Transportation
Preliminary ROW Cost Estimate Worksheet

Project/County/PI N/A Gwinnett N/A

		A	B	C	D
	Administrative	**Parcels**	**Man hours per Parcel**		**TOTALS**
1	Pre-Acquisition	22	40		$44,000.00
2	Acquisition	22	100		$110,000.00
3	Relocation	0	50		$0.00
4	Administrative Appeals	6	50		$15,000.00
5	Post-Acquisition	4	100		$20,000.00
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17			**GRAND TOTAL INHOUSE**		$189,000.00

COST ESTIMATE				
Western Gwinnett Multi-Use Path, Golf Driving Range to McGinnis Ferry Road Including Spur Path to Buford Highway				
PI No 0012883		August 11, 2015		4+ miles long

Utility (Non-Reimbursable)	Quantity	Unit	Cost Per Unit	Cost
Georgia Power Transmission	0	Mono Pole Struct	$ 100,000.00	$ -
Georgia Power Distribution	8	Pole	$ 28,000.00	$ 224,000.00
Georgia Power	3	Pole	$ 2,850.00	$ 8,550.00
Lighting				
CATV (Aerial)	0	Feet	$ 8.00	$ -
1 Coax & 1 Fiber				
AT&T Distribution				
Underground Cut	0	Feet	$ 235.00	$ -
Underground Cable	0	Feet	$ 55.00	$ -
Direct Bury				
Overhead 3 Wires	0	Feet	$ 65.00	$ -
2 Attachments				
Norfolk Southern Railroad				
Easement to build path and	1	Each	$ 100,000.00	$ 100,000.00
occupy railroad property				
Atlanta Gas Light				
6 IN HP STL	0	Feet	$ 60.00	$ -
4 IN MP HDPE	0	Feet	$ 24.00	$ -
Stopple Valves	0	Each	$ 7,500.00	$ -
Gas Service Conn	0	Each	$ 2,000.00	$ -

Utility (Reimbursible)	Quantity	Unit	Cost Per Unit	Cost
Water				
12 IN DIP	0	Feet	$ 85.00	$ -
All other size DIP	200	Feet	$ 68.00	$ 13,600.00
Long side feeds	6	Each	$ 1,500.00	$ 9,000.00
Short side feeds	6	Each	$ 750.00	$ 4,500.00
Vaults relo or new	2	Each	$ 6,500.00	$ 13,000.00
Wet cut ins	0	Each	$ 4,000.00	$ -
Tapping sleeve	0	Each	$ 6,500.00	$ -
Fire hydrants	4	Each	$ 5,600.00	$ 22,400.00
Relo fire hyd	0	Each	$ 2,100.00	$ -
Adjust valve boxes	2	Each	$ 600.00	$ 1,200.00

Adjust manholes	6	Each	$	3,250.00	$	19,500.00
Class "B" Concrete	8	Cyd	$	275.00	$	2,200.00
Sanitary Sewer						
24 IN DIP Force main	0	Feet	$	150.00	$	-
Sanitary Sewer MH	0	Each	$	10,300.00	$	-
Abandon Exist SS MH	0	Each	$	850.00	$	-
Adjust SS MH	3	Each	$	650.00	$	1,950.00
Traffic/ATMS/ITS						
Raise/Adjust - Type 7 Pullbox	4	Each	$	1,500.00	$	6,000.00
Raise/Adjust - Type 5 Pullbox	8	Each	$	2,150.00	$	17,200.00
Non-Reimbursable Total					**$**	**332,550.00**
Reimbursable Total					**$**	**110,550.00**

Western Gwinnett Bikeway Preliminary Waters Impacts and Mitigation Costs

		Impact		
		Stream Impact	**Wetland Impact**	**Buffer Impact**
Resource No.	Resource Type	**Linear Feet**	**Sq FT**	**Sq FT**
PS 1		10		
PS 1 Buffer				
PS 2		30		
PS 2 Buffer				
IS 3				
IS 3 Buffer				470
EC 4				
EC 4 Buffer				
PS 5				
PS 5 Buffer				
WL 6				
PS 7				
PS 7 Buffer				
IS 8				
IS 8 Buffer				
PS 9				
PS 9 Buffer				
PS 10				
PS 10 Buffer				750
PS 11				
PS 11 Buffer				
OW 12			2586	
OW 12 Buffer				3470
WL 13			1738	
WL 14			10140	
PS 15				
PS 15 Buffer				
WL 16			11395	
PS 17		33		
PS 17 Buffer				
WL 18				
PS 19		64		
PS 19 Buffer				4200
WL 20			6571	
PS 21				
PS 21 Buffer				
PS 22		38		
PS 22 Buffer				
		Stream Impact	**Wetland Impact**	**Buffer Impact**
TOTAL		**175**	**32430**	**8890**
Mit Crdts Est.		1146	9	225
Cost		**$ 45,840.00**	**$ 382,500.00**	**$ 9,000.00**
Cost per credit		$40s	$42,500	$40s

ATTACHMENT 4

BRIDGE INVENTORY REPORTS

Processed Date:4/7/2015

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:135-0102-0 | **Gwinnett** | **SUFF. RATING: 96.20**

Location & Geography

Structure ID:	135-0102-0
200 Brdge Information:	06
*6A Feature Int: *6B Critical Bridge:	SUWANEE CREEK
*7A Route No Carried:	CR01954
*7B Facility Carried:	P'TREE IND BLVD (NBL)
9 Location:	1 MI N OF DULUTH
2 Dot District:	4841100000 - D1 DISTRICT ONE GAINESVILLE
207 Year Photo:	2014
*91 Inspection Frequency:	24 Date: 01/15/2014
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	00 Date: 02/01/1901
92C Other Spc. Insp Freq:	00 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	4 - County
Designation:	1- Mainline
Number:	02947
Direction:	0. Not applicable
*16 Latitude:	34.0000- 1.9716 HMMS Prefix:
*17 Longtitude:	84.0000- 6.4290 HMMS Suffix:
	MP: 0.00
98 Border Bridge:	% Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0- The Feature is not a STRAHNET route.
12 Base Highway Network:	1
13A LRS Inventory Route:	1352195400
13B Sub Inventory Route:	0.00
*101 Parallel Structure:	L. Left structure of parallel bridges
*102 Direction of Traffic:	1- One Way
*264 Road Inventory Mile Post:	010.58
*208 Inspection Area:	Area 07 Initials: JPD
Engineer's Initials:	jpd
* Location ID No:	135-02947F-010.58N

*104 Highway System:	1-Inventory Route is on the NHS
*26 Functional Classification:	14- Urban - Other Principal Arterial
*204 Federal Route Type:	S - Secondary. No: 02947
105 Federal Lands Highway:	0. Not applicable
*110 Truck Route:	0
206 School Bus Route:	1
217 Benchmark Elevation:	0000.00
218 Datum:	0- Not Applicable
*19 Bypass Length:	1
*20 Toll:	3- On a Free Road or Non-Highway
*21 Maintanance:	02-County Highway Agency.
*22 Owner:	02-County Highway Agency.
*31 Design Load:	6- HS 20 + Mod (2-24,000# Axles @ 4ft Ctrs., when they govern)
37 Historical Significance:	5- Not eligible for the National Register of Historic Places
205 Congressional District:	7 - SEVEN
27 Year Constructed:	1982
106 Year Reconsrtucted:	0
33 Bridge Median	1-Open
34 Skew:	0
35 Structure Flared:	No
38 Navigation Control:	0- Navigation is not controlled by an Agency
213 Special Steel Design:	0- Not applicable or other
267 Type of Paint:	0- Not Applicable.
*42 Type of Service On:	1-Highway
Type of Service Under:	5-Waterway
214 Movable Bridge:	0
203 Type Bridge:	O - Multip - O. Concrete O. Concrete - O. Concrete
259 Pile Encasement	3
*43 Structure Type Main:	5-Prestressed Concrete 2-Stringer/Multi-Beam or Girder
45 No.Spans Main:	4
44 Structure Type Appr:	0- Other 0- Other
46 No Spans Appr:	0
226 Bridge Curve Horz	1 Vert: 0.00
111 Pier Protection	N - Navigation Control item coded 0, or Feature not a waterway
107 Deck Structure Type:	
108 Wearing Structure Type:	
Membrane Type:	
Deck Protection:	

Signs & Attachments

225 Expansion Joint Type:	03- Compression seal.
242 Deck Drains:	0- None.
243 Parapet Location:	0- None present.
Height:	0.00
Width:	0.00
238 Curb Height:	0
Curb Material:	0- None.
239 Handrail	9- Concrete New Jersey Type Barrier 9- Concrete New Jersey
*240 Median Barrier Rail:	0- None.
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	6- Both sides, approach and continuous.
Fwrd:	6- Both sides, approach and continuous.
Oppo. Dir. Rear:	0- None.
Oppo. Fwrd:	0- None.
244 Aproach Slab	3- Forward and Rear.
224 Retaining Wall:	0- None.
233Posted Speed Limit:	55
236 Warning Sign:	0.00
234 Delineator:	0.00
235 Hazard Boards:	0
237 Utilities Gas:	00- Not Applicable
Water:	00- Not Applicable
Electric:	00- Not Applicable
Telephone:	00- Not Applicable
Sewer:	00- Not Applicable
247 Lighting Street:	0
Navigation:	0
Aerial:	0- Not
*248 County Continuity No.:	00

"The Information contained in this File/Report is the property of GDOT and may not be released to any other party without the written consent of the Data Custodian. Please dispose of this information by shredding or other confidential method."

Processed Date:4/7/2015

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:135-0102-0

Programming Data

201 Project No:	F-190-1 (2)
202 Plans Available:	4- Plans in InfoImage.
249 Prop Proj No:	STP-190-1 (9) 02
250 Approval Status:	0000
251 PI Number:	121673-
252 Contract Date:	07/24/1998
260 Seismic No:	00000
75 Type Work:	0- Not Applicable 1- Work to be done by contract
94 Bridge Imp: Cost:	$1,094
95 Roadway Imp. Cost:	$109
96 Total Imp Cost:	$1641
76 Imp Length:	0
97 Imp Year:	2013
114 Furure ADT:	50430 Year:2032

Hydralic Data

215Waterway Data:	
High Water Elev:	0916.0 Year:1950
Flood Elev:	0916.9 Freq:100
Avg Streambed Elev:	0000.0
Drainage Area:	00050
Area of Opening:	000000
113 Scour Critical	U. No Load Rating; no scour critical data entered.
216 Water Depth:	6.3 Br.Height:29.7
222 Slope Protection:	1
221Spur Dikes Rear	0 Fwd:0
219 Fender System	0- None.
220 Dolphin:	
223 Culvert Cover:	000
Type:	0- Not Applicable
No. Barrels:	0
Width:	0.00 Height:0
Length:	0 Apron:0
*265 U/W Insp. Area	0 Diver:ZZZ
*Location ID No:	135-02947F-010.58N

Measurements:

*29 ADT	33620Year:2012
109 %Trucks:	1
* 28 Lanes On:	2 Under:0
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	70
* 49 Structure Length:	280
51 Br. Rwdy. Width	47.90
52 Deck Width:	50.90
* 47 Tot. Horiz. Cl:	48
50 Curb / Sidewalk Width	0.00 / 0.00
32 Approach Rdwy. Width	37
*229 Shoulder Width:	
Rear Lt:	7.50 Type:2 - Rt:6
Fwd. Lt:	7.50 Type:2 - Rt:6
Pavement Width:	
Rear:	23.60 Type: 2- Asphalt.
	24.10 Type: 2- Asphalt.
Intersaction Rear:	0 Fwd: 0
36Safety Features Br. Rail:	1- Meets current standards
Transition:	1- Meets current standards
App. G. Rail:	1- Meets current standards
App. Rail End:	1- Meets current standards
53 Minimum Cl. Over:	99'99"
Under:	N- Feature not a highway or railroad. 0.00'0.00"
*228 Minimum Vertical Cl	
Act. Odm Dir::	99 ' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00'00 "
55 Lateral Undercl. Rt:	N- Feature not a highway or railroad. 0.00
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	7.40
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:0000 Sub:0000

65 Inventory Rating Method:	1-Load Factor (LF)
63 Operating Rating Method:	1-Load Factor (LF)
66 Inventory Type:	2 - HS loading. Rating: 32
64 Operating Type:	2 - HS loading. Rating: 80
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	30 0
Type 3:	30 0
Type 3s2:	40 0
Timber:	37 0
Piggyback:	00 0
261 H Inventory Rating:	25
262 H Operating Rating	78
67 Structural Evaluation:	7
58 Deck Condition:	7 - Good Condition
59 Superstructure Condition:	8 - Very Good Condition
* 227 Collision Damage:	0
60A Substructure Condition:	7 - Good Condition
60B Scour Condition:	7 - Good Condition
60C Underwater Condition	N - Not Applicable
71 Waterway Adequacy:	8-Equal to present desirable criteria.
61 Channel Protection Cond.:	6
68 Deck Geometry:	9
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	7-Between 8 and 6
62 Culvert:	N - Not Applicable

Posting Data

70 Bridge Posting Required	5. Equal to or above legal loads
41 Struct Open, Posted, CL:	A. Open, no restriction
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	02/01/1901

"The Information contained in this File/Report is the property of GDOT and may not be released to any other party without the written consent of the Data Custodian. Please dispose of this information by shredding or other confidential method."

Processed Date:4/7/2015

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:135-5191-0 | **Gwinnett** | **SUFF. RATING: 98.40**

Location & Geography

Structure ID:	135-5191-0
200 Brdge Information:	06
*6A Feature Int:	SUWANEE CREEK
*6B Critical Bridge:	
*7A Route No Carried:	CR01954
*7B Facility Carried:	P'TREE IND BLVD (SBL)
9 Location:	1 MI N OF DULUTH
2 Dot District:	4841100000 - D1 DISTRICT ONE GAINESVILLE
207 Year Photo:	2014
*91 Inspection Frequency:	24 Date: 01/15/2014
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	00 Date: 02/01/1901
92C Other Spc. Insp Freq:	00 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	4 - County
Designation:	1- Mainline
Number:	02947
Direction:	0. Not applicable
*16 Latitude:	34.0000- 1.9554 HMMS Prefix:
*17 Longtitude:	84.0000- 6.4248 HMMS Suffix:
	MP: 0.00
98 Border Bridge:	% Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0- The Feature is not a STRAHNET route.
12 Base Highway Network:	1
13A LRS Inventory Route:	1352195400
13B Sub Inventory Route:	0.00
*101 Parallel Structure:	R. Right structure of parallel bridges
*102 Direction of Traffic:	1- One Way
*264 Road Inventory Mile Post:	010.59
*208 Inspection Area:	Area 07 Initials: JPD
Engineer's Initials:	jpd
* Location ID No:	135-02947F-010.59N

*104 Highway System:	1-Inventory Route is on the NHS
*26 Functional Classification:	14- Urban - Other Principal Arterial
*204 Federal Route Type:	S - Secondary. No: 02947
105 Federal Lands Highway:	0. Not applicable
*110 Truck Route:	0
206 School Bus Route:	1
217 Benchmark Elevation:	0000.00
218 Datum:	0- Not Applicable
*19 Bypass Length:	1
*20 Toll:	3- On a Free Road or Non-Highway
*21 Maintanance:	02-County Highway Agency.
*22 Owner:	02-County Highway Agency.
*31 Design Load:	6- HS 20 + Mod (2-24,000# Axles @ 4ft Ctrs., when they govern)
37 Historical Significance:	5- Not eligible for the National Register of Historic Places
205 Congressional District:	7 - SEVEN
27 Year Constructed:	2000
106 Year Reconsrtucted:	0
33 Bridge Median	1-Open
34 Skew:	15
35 Structure Flared:	No
38 Navigation Control:	0- Navigation is not controlled by an Agency
213 Special Steel Design:	0- Not applicable or other
267 Type of Paint:	0- Not Applicable.
*42 Type of Service On:	1-Highway
Type of Service Under:	5-Waterway
214 Movable Bridge:	0
203 Type Bridge:	Z - Unkno - O. Concrete O. Concrete - O. Concrete
259 Pile Encasement	3
*43 Structure Type Main:	5-Prestressed Concrete 2-Stringer/Multi-Beam or Girder
45 No.Spans Main:	4
44 Structure Type Appr:	0- Other 0- Other
46 No Spans Appr:	0
226 Bridge Curve Horz	1 Vert: 0.00
111 Pier Protection	N - Navigation Control item coded 0, or Feature not a waterway
107 Deck Structure Type:	
108 Wearing Structure Type:	
Membrane Type:	
Deck Protection:	

Signs & Attachments

225 Expansion Joint Type:	02- Open or sealed concrete joint (silicone sealant).
242 Deck Drains:	1- Open Scuppers.
243 Parapet Location:	0- None present.
Height:	0.00
Width:	0.00
238 Curb Height:	0
Curb Material:	0- None.
239 Handrail	9- Concrete New Jersey Type Barrier 9- Concrete New Jersey
*240 Median Barrier Rail:	0- None.
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	6- Both sides, approach and continuous.
Fwrd:	6- Both sides, approach and continuous.
Oppo. Dir. Rear:	0- None.
Oppo. Fwrd:	0- None.
244 Aproach Slab	3- Forward and Rear.
224 Retaining Wall:	0- None.
233Posted Speed Limit:	55
236 Warning Sign:	0.00
234 Delineator:	0.00
235 Hazard Boards:	0
237 Utilities Gas:	00- Not Applicable
Water:	00- Not Applicable
Electric:	00- Not Applicable
Telephone:	00- Not Applicable
Sewer:	00- Not Applicable
247 Lighting Street:	0
Navigation:	0
Aerial:	0- Not
*248 County Continuity No.:	00

"The Information contained in this File/Report is the property of GDOT and may not be released to any other party without the written consent of the Data Custodian. Please dispose of this information by shredding or other confidential method."

Processed Date:4/7/2015

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:135-5191-0

Programming Data

201 Project No:	STP-190-1(9) 02
202 Plans Available:	1- Plans at General Office.
249 Prop Proj No:	00000000000000000000000000
250 Approval Status:	0000
251 PI Number:	0000000
252 Contract Date:	02/01/1901
260 Seismic No:	00000
75 Type Work:	0- Not Applicable 0- Initial Inventory
94 Bridge Imp: Cost:	$1,868
95 Roadway Imp. Cost:	$187
96 Total Imp Cost:	$2801
76 Imp Length:	0
97 Imp Year:	2013
114 Furure ADT:	50430 Year:2032

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:0000
Flood Elev:	0000.0 Freq:000
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	8. Foundation stable for conditions; scour above footing
216 Water Depth:	4 Br.Height:33
222 Slope Protection:	1
221Spur Dikes Rear	0 Fwd:0
219 Fender System	0- None.
220 Dolphin:	
223 Culvert Cover:	000
Type:	0- Not Applicable
No. Barrels:	0
Width:	0.00 Height:0
Length:	0 Apron:0
*265 U/W Insp. Area	0 Diver:ZZZ
*Location ID No:	135-02947F-010.59N

Measurements:

*29 ADT	33620 Year:2012
109 %Trucks:	1
* 28 Lanes On:	2 Under:0
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	120
* 49 Structure Length:	478
51 Br. Rwdy. Width	37.30
52 Deck Width:	40.90
* 47 Tot. Horiz. Cl:	37
50 Curb / Sidewalk Width	0.00 / 0.00
32 Approach Rdwy. Width	37
*229 Shoulder Width:	
Rear Lt:	7.50 Type:2 - Rt:6
Fwd. Lt:	7.50 Type:2 - Rt:6
Pavement Width:	
Rear:	24.00 Type: 2- Asphalt.
	24.00 Type: 2- Asphalt.
Intersaction Rear:	0 Fwd: 0
36Safety Features Br. Rail:	1- Meets current standards
Transition:	1- Meets current standards
App. G. Rail:	1- Meets current standards
App. Rail End:	1- Meets current standards
53 Minimum Cl. Over:	99'99"
Under:	N- Feature not a highway or railroad. 0.00'0.00"
*228 Minimum Vertical Cl	
Act. Odm Dir::	99 ' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00'00 "
55 Lateral Undercl. Rt:	N- Feature not a highway or railroad. 0.00
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	8.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:0000 Sub:0000

65 Inventory Rating Method:	2-Allowable Stress (AS)
63 Operating Rating Method:	2-Allowable Stress (AS)
66 Inventory Type:	2 - HS loading. Rating: 45
64 Operating Type:	2 - HS loading. Rating: 93
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	30 0
Type 3:	33 0
Type 3s2:	40 0
Timber:	37 0
Piggyback:	00 0
261 H Inventory Rating:	28
262 H Operating Rating	60
67 Structural Evaluation:	7
58 Deck Condition:	8 - Very Good Condition
59 Superstructure Condition:	8 - Very Good Condition
* 227 Collision Damage:	0
60A Substructure Condition:	7 - Good Condition
60B Scour Condition:	8 - Very Good Condition
60C Underwater Condition	N - Not Applicable
71 Waterway Adequacy:	9-Superior to present desirable criteria.
61 Channel Protection Cond.:	8
68 Deck Geometry:	6
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	7-Between 8 and 6
62 Culvert:	N - Not Applicable

Posting Data

70 Bridge Posting Required	5. Equal to or above legal loads
41 Struct Open, Posted, CL:	A. Open, no restriction
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	02/01/1901

"The Information contained in this File/Report is the property of GDOT and may not be released to any other party without the written consent of the Data Custodian. Please dispose of this information by shredding or other confidential method."

ATTACHMENT 5

CONCEPT LEVEL HYDROLOGY STUDY

Concept Level Hydrology Study Summary

This analysis comprises of the Western Gwinnett Bikeway Corridor from 2500 feet West of Rogers Bridge Road to McGinnis Ferry Road with new location to Suwanee Creek Park and possible spur to existing Suwanee Trail System for the purpose of determining the extent to meet the MS4 permit requirements.

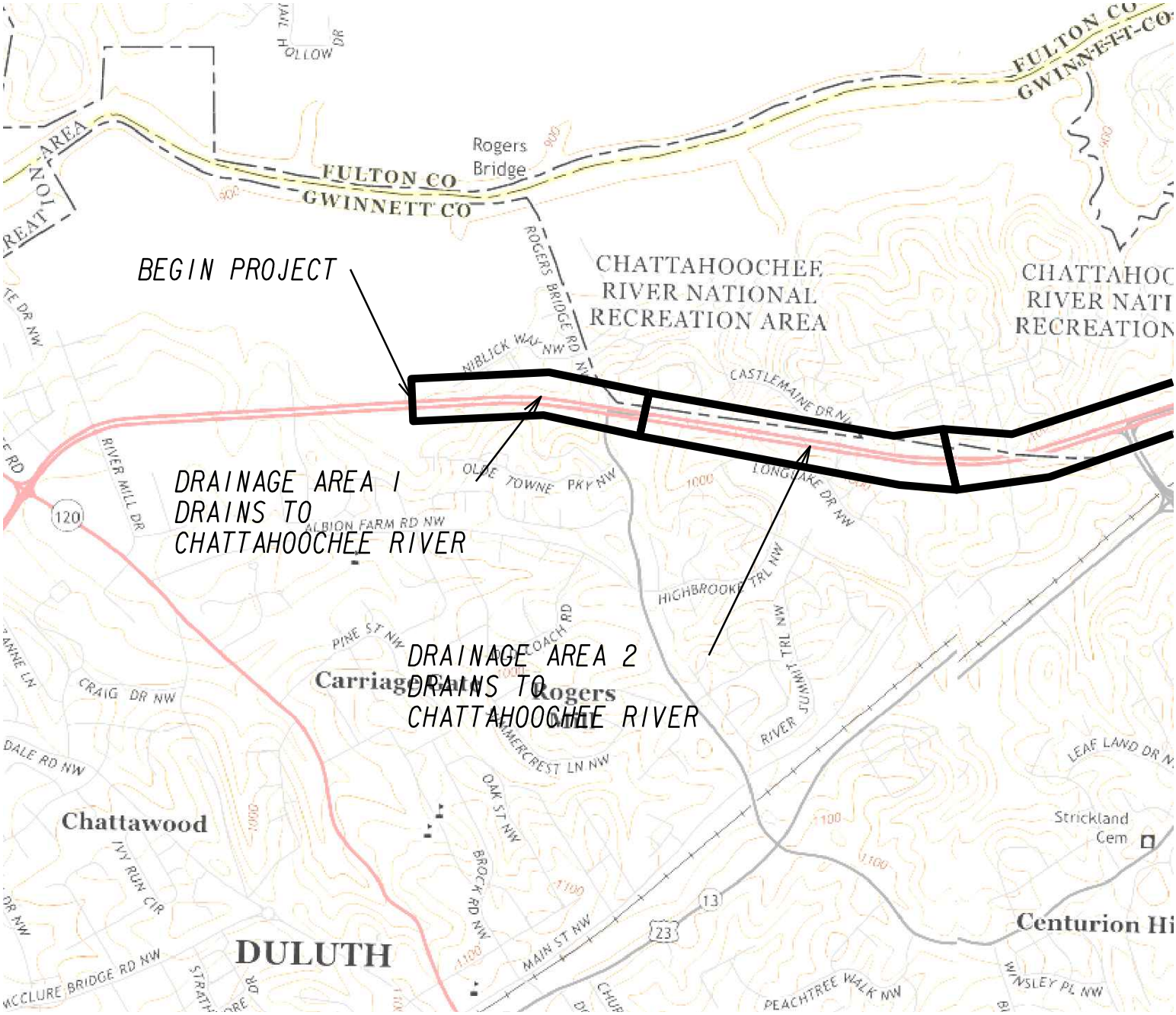
When designing a project that will only be reconstructing the shoulder (addition of impevious area in the form of a trail) of an existing roadway for most sections, certain issues should be kept in mind. The only water that will have to be treated for Water Quality (WQv) is the runoff from the added impervious area (the area of the trail itself). This can become an issue if the runoff from the existing roadway mixes with the runoff from the proposed impervious area. One way is to solve this issue is to bypass the roadway runoff with a separate drainage system or a bypass structure. Another possible solution would be to reverse the flow of runoff from the shoulder away from the curb and gutter. Runoff from the roadway cannot be ignored, and the drainage design should include protection from flooding and increasing existing flows if feasible. The addition of curb and gutter will only add concentrated flow and make flooding and erosion more of an issue.

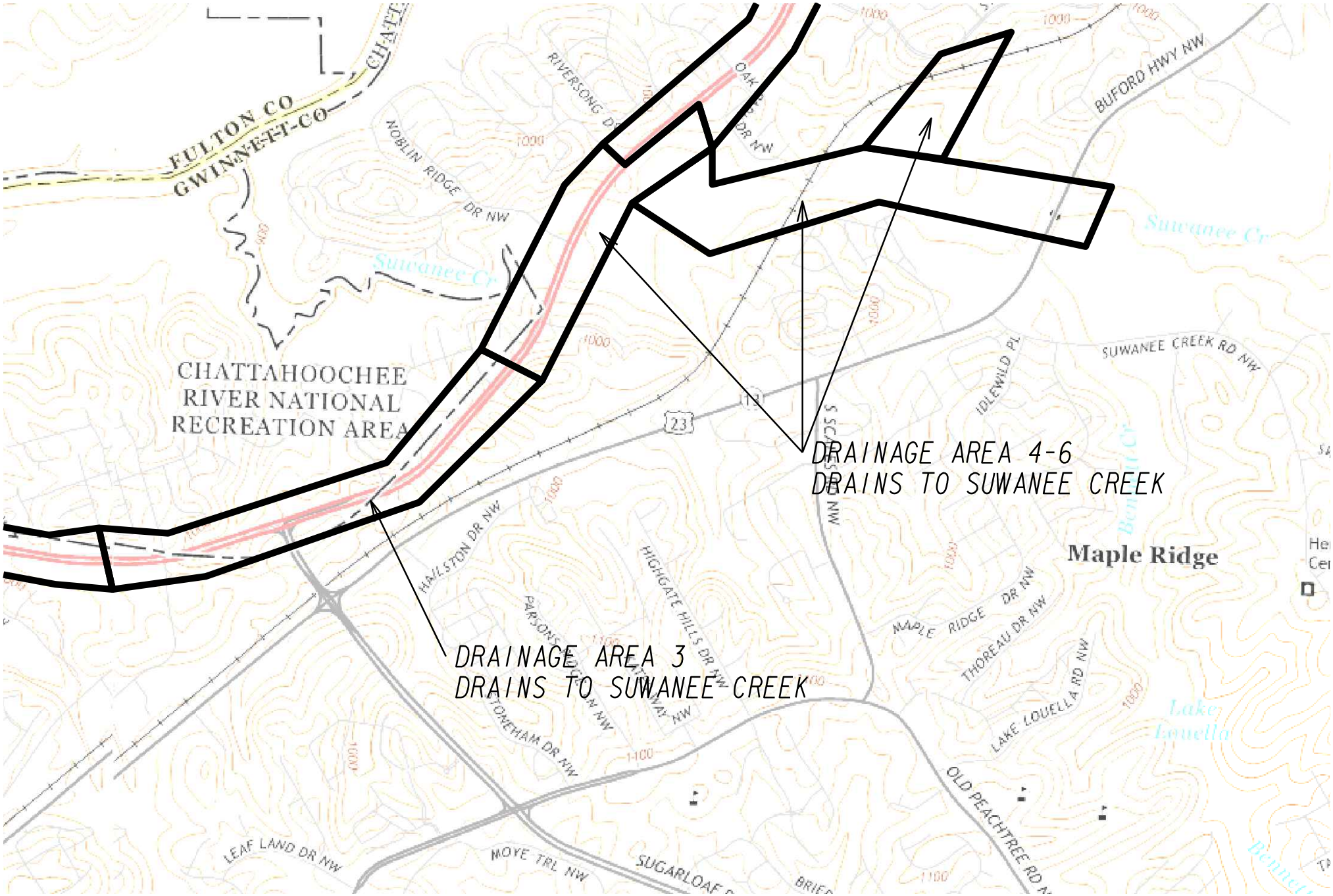
Due to the existing terrain and existing right of way along the corridor, there will be multiple design challenges to meet MS4 permit requirements. There are multiple locations where they are very high slopes which would make installation of any type of BMP very hard. There are some locations where there is an existing right of way that may be large enough to install smaller BMPs to treat the runoff. The most feasible BMPs for this project will be small BMPs that can either be adjacent to the trail, or small swales and bioretention basins.

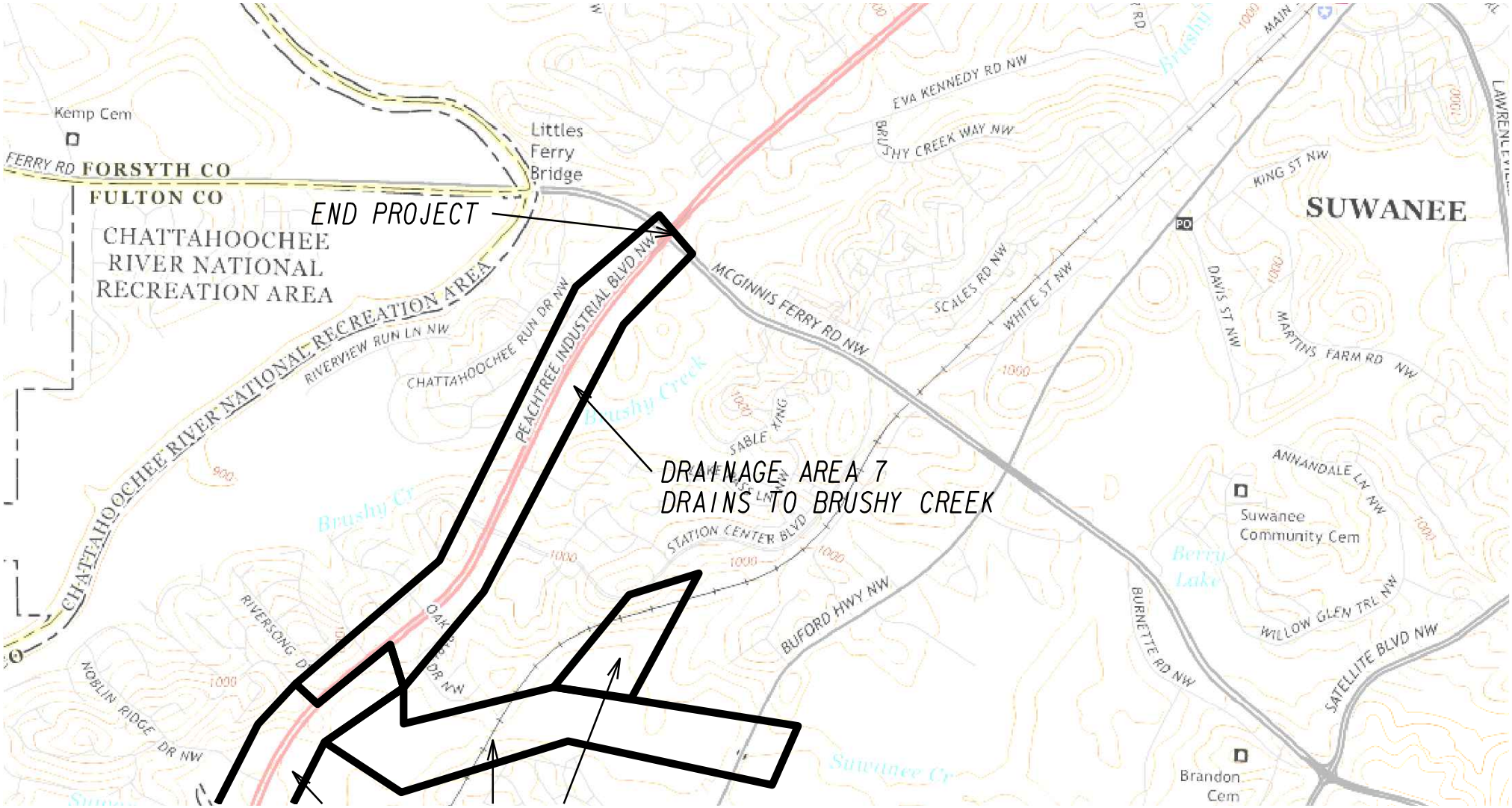
No Project Level Exemptions or Outfall Level Exemptions apply for this project. Infeasibility requirements will be reviewed during the design process and documented.

The major waters in the area are: The Chattahoochee River, Suwanee Creek, and Brushy Creek. Ultimately, they all drain to the Chattahoochee River.

The following sheets show potential drainage areas to be accounted for and their resulting drainage basins/waters.


BEGIN PROJECT
DRAINAGE AREA 1
DRAINS TO
CHATTAHOOCHEE RIVER
DRAINAGE AREA 2
DRAINS TO
CHATTAHOOCHEE RIVER
FULTON CO
GWINNETT CO
Rogers
Bridge
CHATTAHOOCHEE
RIVER NATIONAL
RECREATION AREA
ROGERS BRIDGE RD
NIBLICK WAY NW
CASTLEMAINE DR NW
OLDE TOWNE PKY NW
LONGLAKE DR NW
ALBION FARM RD NW
HIGHBROOKE TRL NW
RIVER MILL DR
PINE ST NW
COACH RD
Carriage
Rogers
CRAIG DR NW
DALE RD NW
RIVER SUMMIT TRL NW
LEAF LAND DR
Chattawood
IVY RUN CIR
OAK ST NW
BROCK RD NW
MAIN ST NW
DULUTH
Strickland
Cem
Centurion
PEACHTREE WALK NW
WINSLEY PL NW
120
13
23


FULTON CO
GWINNETT CO
CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA
NOBLIN RIDGE DR NW
RIVERSONG D
OAK
DR NW
BUFORD HWY NW
Suwanee Cr
SUWANEE CREEK RD NW
IDLEWILD PL
23
DRAINAGE AREA 4-6
DRAINAGE AREA 3
DRAINAGE AREA 3
DRAINS TO SUWANEE CREEK
HAILSTON DR NW
HIGHGATE HILLS DR NW
PARSONS
TOMEHAM DR NW
Maple Ridge
MAPLE RIDGE DR NW
THOREAU DR NW
LAKE LOUELLA RD NW
Lake Lowella
OLD PEACHTREE RD
LEAF LAND DR NW
MOYE TRL NW
SUGARLOAF


END PROJECT
DRAINAGE AREA 7
DRAINS TO BRUSHY CREEK
Kemp Cem
FERRY RD
FORSYTH CO
FULTON CO
CHATTAHOOCHEE
RIVER NATIONAL
RECREATION AREA
CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA
Littles
Ferry
Bridge
RIVERVIEW RUN LN NW
CHATTAHOOCHEE RUN DR NW
PEACHTREE INDUSTRIAL BLVD NW
MCGINNIS FERRY RD NW
EVA KENNEDY RD NW
BRUSHY CREEK WAY NW
SCALES RD NW
WHITE ST NW
KING ST NW
SUWANEE
DAVIS ST NW
MARTINS FARM RD NW
Brushy Creek
Brushy Cr
SABLE XING
STATION CENTER BLVD
BUFORD HWY NW
ANNANDALE LN NW
Suwanee
Community Cem
Berry
Lake
WILLOW GLEN TRL NW
BURNETTE RD NW
SATELLITE BLVD NW
RIVERSONG DR
OAK
DR NW
NOBLIN RIDGE DR NW
Suwanee Cr
Brandon
Cem
LAWRENCE
MAIN

ATTACHMENT 6

MINUTES OF STAKEHOLDER MEETING

Pond & Company, Inc.

Architects
Engineers
Planners

3500 Parkway Lane
Suite 600
Norcross, GA 30092

P 678.336.7740
F 678.336.7744
www pondco.com

MEETING MINUTES

Project : Western Gwinnett Bikeway Extension
Pond Project No. : 1150210
Meeting : Concept Coordination Meeting
Meeting Location : Gwinnett County DOT Small Conference Room
Meeting Date : 02/12/15
Minutes prepared by : Arwin Lopez
Prepared on : February 12, 2015
Copies: File
Attendees

Attendees:

Name	Company/Dept./Branch	email	phone
Brittney Bulfinch	GCDOT	Brittney.Bulfinch@gwinnettcounty.com	770-822-7489
Marty Allen	City of Suwanee	MAllen@suwanee.com	770-945-8996
Nick Colonna	City of Duluth	NColona@duluthga.net	770-476-1790
Margie Shames Pozin	City of Duluth	MPozin@duluthga.net	678-957-7284
Bryon Letourneau	Pond & Company	LetourneauB@pondco.com	678-336-7740
Arwin Lopez	Pond & Company	LopezA@pondco.com	678-336-7740

PURPOSE OF MEETING: To obtain concurrence of concept design which places the proposed bikeway on the north/west side of Peachtree Industrial Blvd. The meeting also intended to inform stakeholders of the project next steps.

Bryon Letourneau began the meeting explaining the overall concept design, and pointed out that the design has the bikeway located on the north/west side of Peachtree Industrial Blvd. He also explained that this updated concept design has a shoulder typical section consisting of a 2.5 foot Curb and Gutter adjacent to the travel lane and a 5 to 2 foot grassed strip, a 10 to 12 foot asphalt paved Pathway/Bikeway, and a 2 foot shoulder behind the bikeway. He also pointed out the location of a trail spur that would connect the Suwanee Creek Park and Station Center Blvd.

All in attendance agreed on the location of the proposed bikeway. Marty agreed with the location of the spur trail.

Bryon informed that with their concurrence of the location of the Bikeway and Spur Trail, Pond & Co. would like to proceed with engaging GDOT with the concept display. He described the sequence of task such as the concept report development, preparation for other stakeholder meetings, and survey kick-off. He informed that GT Hill is currently assessing the environmental resources for the project.

Bryon proceeded with asking if the 5 foot buffer behind the curb was okay.

Everyone agreed that the 5 foot buffer was okay but would like more wherever possible.

Bryon also asked about their thoughts of the termini of the bikeway, which is up to McGinnis Ferry Road.

Marty stated that the City of Suwanee plans to build a section of sidewalk from Grand Vista Approach to the north.

Bryon asked if the bikeway material should be asphalt.

Everyone in attendance agreed that asphalt was the preferred material. However, Nick stated that he would confirm if asphalt is the City of Duluth's preferred material.

Bryon stated that the concept report would be developed to include both the bikeway and trail spur as one whole project. He also would like to present this concept to GDOT.

The City of Duluth and Suwanee would like a copy of the concept designs.

Bryon emphasized that the displays are a concept and should not be presented in any public meetings.

Nick presented the idea of adding art design to the proposed retaining walls.

A discussion was made regarding strategy of approaching other stakeholders such as public, business owners, and railroad.

It was agreed that the railroad should be engaged separately and that a public meeting would be beneficial.

Bryon continued with giving an overview of the project schedule.

ACTION ITEMS:

- Pond: Forward requested concept displays to the City of Duluth and Suwanee.
- Gwinnett DOT: Brittney to coordinate with GDOT to schedule a concept meeting.
- City of Duluth: Nick will confirm the City's preference for the paving material for the bikeway.

ATTACHMENTS:

Meeting Agenda
Draft Project Schedule

The above is the understanding of the meeting by the representatives of Pond & Company. Please direct any questions or comments to Bryon Letourneau at the above contact information.

END OF MEETING MINUTES

ADDITIONAL COMMENTS:

Pond & Company, Inc.

Architects
Engineers
Planners

3500 Parkway Lane
Suite 600
Norcross, GA 30092

P 678.336.7740
F 678.336.7744
www pondco.com

Stakeholder Meeting #1 Agenda
Western Gwinnett Bikeway Extension
Gwinnett County Department of Transportation

Meeting Location: Gwinnett County DOT Conference Room
Meeting Date: February 12, 2015; 10:00 am

<u>Agenda Items</u>

Review Current Concept Layouts

Discuss Spur Trail Concept

Discuss Current Overall Project Concept

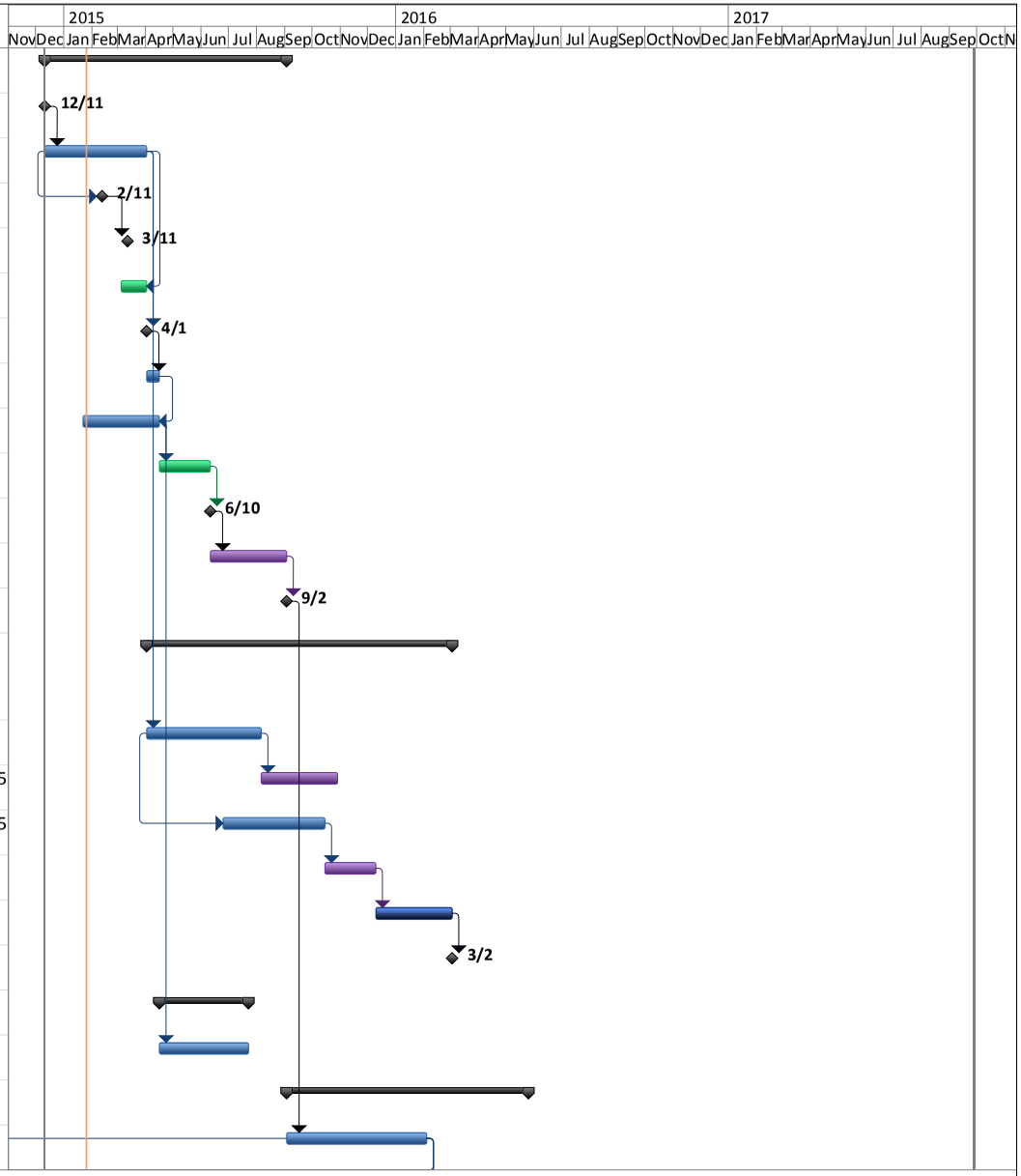
Discuss Further Development of Project Concept

Discuss Environmental Process

Discuss Any Other Known Design Issues

Discuss Project Schedule

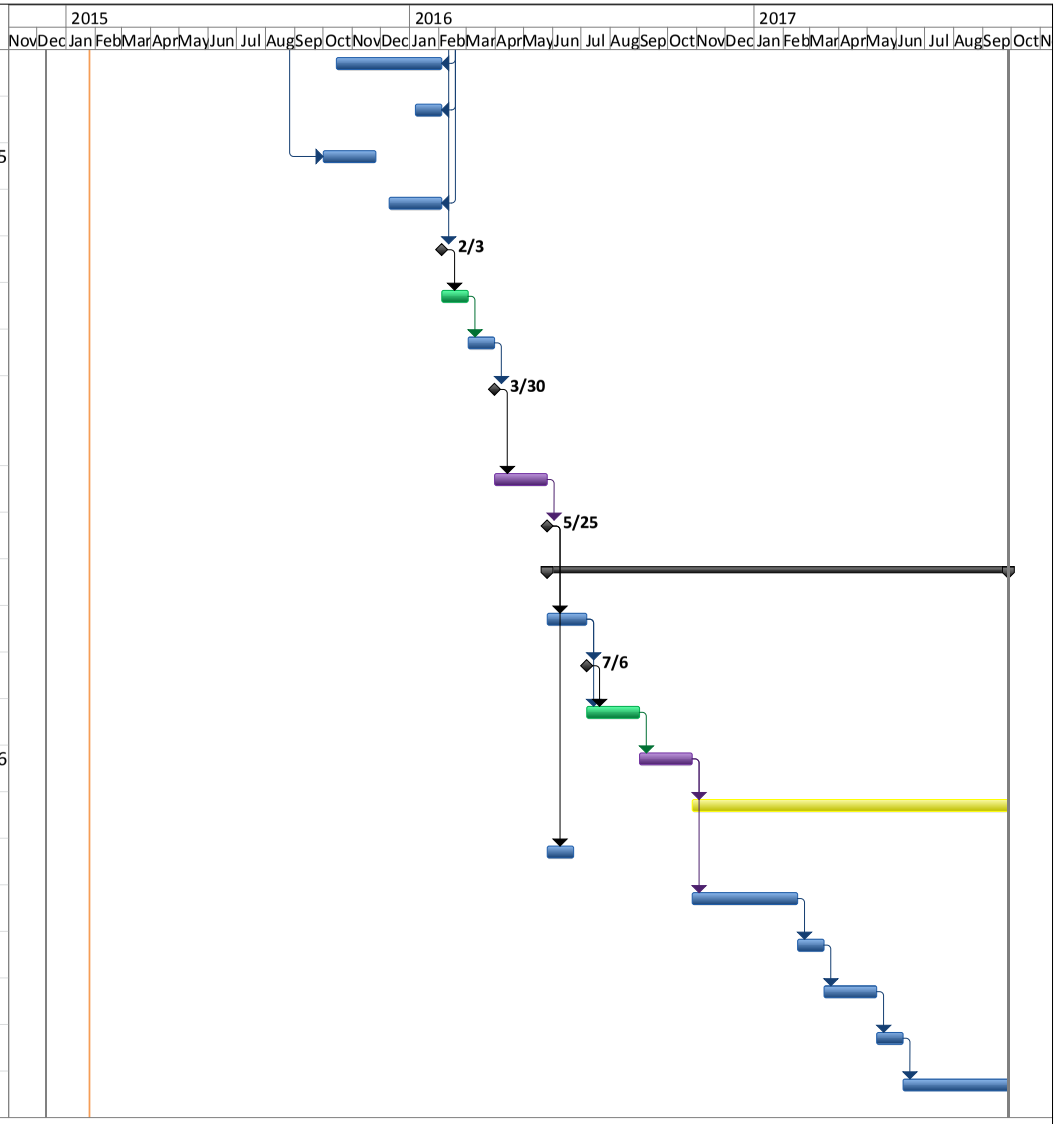
ID	Task Name	Duration	Start	Finish
1	**PHASE 1 - CONCEPT PLANS**	**190 days**	**Thu 12/11/14**	**Wed 9/2/15**
2	KICK OFF MEETING	0 days	Thu 12/11/14	Thu 12/11/14
3	DEVELOP CONCEPT	80 days	Thu 12/11/14	Wed 4/1/15
4	STAKEHOLDER MEETING # 1	0 days	Wed 2/11/15	Wed 2/11/15
5	STAKEHOLDER MEETING # 2	0 days	Wed 3/11/15	Wed 3/11/15
6	PIOH ADVERTISEMENT (IF NEEDED)	20 days	Thu 3/5/15	Wed 4/1/15
7	PIOH HELD	0 days	Wed 4/1/15	Wed 4/1/15
8	PIOH RESPONSES	10 days	Thu 4/2/15	Wed 4/15/15
9	CONCEPT REPORT	60 days	Thu 1/22/15	Wed 4/15/15
10	COUNTY REVIEW	40 days	Thu 4/16/15	Wed 6/10/15
11	SUBMIT CONCEPT REPORT TO GDOT	0 days	Wed 6/10/15	Wed 6/10/15
12	GDOT CONCEPT REPORT REVIEW	60 days	Thu 6/11/15	Wed 9/2/15
13	FINAL CONCEPT REPORT APPROVAL	0 days	Wed 9/2/15	Wed 9/2/15
14	**PHASE 2: ENVIRONMENTAL DOCUMENTATION & PERMITTING**	**240 days**	**Thu 4/2/15**	**Wed 3/2/16**
15	SPECIAL STUDIES (HIST., ARCH., ECOL., AIR/NOISE)	90 days	Thu 4/2/15	Wed 8/5/15
16	SPECIAL STUDIES REVIEW	60 days	Thu 8/6/15	Wed 10/28/15
17	PREPARE CATEGORIAL EXCLUSION (CE)	80 days	Thu 6/25/15	Wed 10/14/15
18	GDOT REVIEW/ADDRESS COMMENTS/RESUBMIT	40 days	Thu 10/15/15	Wed 12/9/15
19	FHWA REVIEW/ADDRESS COMMENTS/RESUBMIT	60 days	Thu 12/10/15	Wed 3/2/16
20	FHWA APPROVAL OF CE	0 days	Wed 3/2/16	Wed 3/2/16
21	**PHASE 3: DATABASE PREPARATION**	**70 days**	**Thu 4/16/15**	**Wed 7/22/15**
22	PROPERTY & TOPOGRAPHIC SURVEY	70 days	Thu 4/16/15	Wed 7/22/15
23	**PHASE 4: PRELIMINARY PLANS**	**190 days**	**Thu 9/3/15**	**Wed 5/25/16**
24	PLANS PRODUCTION	110 days	Thu 9/3/15	Wed 2/3/16



Project: Western Gwinnett Bikew
Date: Mon 1/26/15

Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

ID	Task Name	Duration	Start	Finish
25	DRAINAGE REPORT/HYDRO ANALYSIS	80 days	Thu 10/15/15	Wed 2/3/16
26	COST ESTIMATING	20 days	Thu 1/7/16	Wed 2/3/16
27	UTILITY COORDINATION - FIRST SUBMITTAL	40 days	Thu 10/1/15	Wed 11/25/15
28	UTILITY COORDINATION - SECOND SUBMITTAL	40 days	Thu 12/10/15	Wed 2/3/16
29	SUBMIT PRELIMS TO GCDOT FOR REVIEW	0 days	Wed 2/3/16	Wed 2/3/16
30	COUNTY REVIEW	20 days	Thu 2/4/16	Wed 3/2/16
31	INCORPORATE GCDOT COMMENTS	20 days	Thu 3/3/16	Wed 3/30/16
32	SUBMIT PRELIMS TO GDOT FOR REVIEW/PFPR SCHEDULING	0 days	Wed 3/30/16	Wed 3/30/16
33	GDOT REVIEW	40 days	Thu 3/31/16	Wed 5/25/16
34	PRELIMINARY FIELD PLAN REVIEW	0 days	Wed 5/25/16	Wed 5/25/16
35	**PHASE 5: FINAL PLANS**	**350 days**	**Thu 5/26/16**	**Wed 9/27/17**
36	PREPARE RIGHT OF WAY PLANS & TABLES	30 days	Thu 5/26/16	Wed 7/6/16
37	SUBMIT RIGHT OF WAY PLANS FOR APPROVAL	0 days	Wed 7/6/16	Wed 7/6/16
38	R/W PLAN REVIEW (GCDOT & GDOT)	40 days	Thu 7/7/16	Wed 8/31/16
39	R/W PLAN APPROVAL	40 days	Thu 9/1/16	Wed 10/26/16
40	R/W ACQUISITION	12 mons	Thu 10/27/16	Wed 9/27/17
41	ADDRESS FIELD PLAN REVIEW COMMENTS	20 days	Thu 5/26/16	Wed 6/22/16
42	FINAL PLANS PREPARTION	80 days	Thu 10/27/16	Wed 2/15/17
43	UTILITY COORDINATION	20 days	Thu 2/16/17	Wed 3/15/17
44	EPD REVIEW AND APPROVAL OF EROSION / MS4	40 days	Thu 3/16/17	Wed 5/10/17
45	COST ESTIMATING	20 days	Thu 5/11/17	Wed 6/7/17
46	PREPARE BID PACKAGE / SPECIAL PROVISIONS	80 days	Thu 6/8/17	Wed 9/27/17



Project: Western Gwinnett Bikew
Date: Mon 1/26/15

Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

ATTACHMENT 7

MINUTES OF CONCEPT MEETING

Georgia Department of Transportation

WESTERN GWINNETT BIKEWAY EXTENSION
P.I. No. 0012883 - Gwinett County
Concept Team Meeting – June 22, 2015

Project: WESTERN GWINNETT BIKEWAY EXTENSION

Meeting Location: District 1 Office (2505 Athens Highway, Gainesville, GA 30507)

Meeting Date: June 22, 2015

Minutes Prepared By: Mark Edwards

Minutes Prepared On: June 24, 2015

ATTENDEES:

Name	Company /Dept/Branch	Email Address
Charles Robinson	GDOT	chrobinson@dot.ga.gov
Chris Parypinski	MAAI	cparypinski@maai.net
Jim Simpson	MAAI	jsimpson@maai.net
Jesse Vance	GC-DWR	jesse.vance@gwinnettcounty.com
Brittney Bulfinch	GCDOT	brittney.bulfinch@gwinnettcounty.com
John Ray	GCDOT	john.ray@gwinnettcounty.com
Mark Edwards	Pond & Company	edwardsm@pondco.com
Bryon Letourneau	Pond & Company	letourneaub@pondco.com
Daniel Sabia	Pond & Company	sabiad@pondco.com
Joel Cantoran	GDOT	jcantoran@dot.ga.gov
Matt Needham	GDOT	mneedham@dot.ga.gov
John Gay	GA Power	jcgay@southernco.com
Richard Crowe	GDOT	rcrowe@dot.ga.gov
Kevin D. York	GDOT	kevyork@dot.ga.gov
Robby Oliver	GDOT	roliver@dot.ga.gov

Georgia Department of Transportation

PURPOSE OF MEETING:

The Concept Team Meeting was held to discuss the concept report that was prepared for the WESTERN GWINNETT BIKEWAY EXTENSION project. This meeting is the first opportunity for representatives from GDOT, Gwinnett County, Pond & Company, and utility companies to discuss this multi-use path project together.

The following is a summary of what was discussed at the Concept Coordination Meeting:

PROJECT DESCRIPTION

The proposed project will install a multi-use trail from approximately 2500 feet west of Rogers Bridge Road to McGinnis Ferry Road along Peachtree Industrial Blvd, on the northwest side. A proposed spur will travel along Suwanee Creek and connect to Suwanee Creek Park. An additional spur is proposed which would tie into the existing Suwanee Trail System. The proposed multi-use trail includes some sections of boardwalk and one pedestrian bridge.

PROJECT SCHEDULE

- Revised project schedule has been recommended for approval. Waiting on GDOT management to give it final approval.
    - December 2016 – Environmental Certification
    - February 2017 – ROW Authorization
    - June 2018 – Let Contract
    - July 2016 – PFPR

CONCEPT REPORT DISCUSSION

- Anticipated to be a Gwinnett County let project.
    - Need to complete local let approval form in the future.
- Project Concept is public information and can be accessed through TransPi.
- Enhancement project.
- Anticipated to be a C.E.
- Final section of a greenway that has been underway in Gwinnett County since 1999. Will tie into the existing trail at the beginning of the project, just south of Rogers Bridge Rd (near the Hooch Golf Club), and at the end of the project, along McGinnis Ferry Rd.
- Path will travel along the northwest side of Peachtree Industrial Blvd.
    - Project intends to install 30”curb and gutter in locations where it is not currently in place. Project will maintain a 2’-8’ grass strip and a 10’-12’ asphalt pathway.
    - Project will include a significant spur trail to Suwannee Creek Park. Spur trail will be mostly boardwalk.
    - Project will cross under three bridges – Peachtree Industrial Blvd, Buford Hwy, and Norfolk Southern Railroad.
- Will connect several multi-use trails in Norcross, Duluth and Suwannee.
- Existing lane configuration of Peachtree Industrial Blvd consists of a 4 lane divided highway with a grassed median.
    - Challenges include the bridge over Suwannee Creek and the existing culverts that cross PIB.
    - PIB is an urban principal arterial.
    - PIB is now a 45 MPH road.

- One pedestrian bridge is proposed in order to cross over Suwanee Creek.
- There are a number of signalized intersections along PIB.
    - Some strain poles will need to be relocated.
- No design exceptions or design variances are anticipated.
- Railroad crossing of Suwanee Creek is a double arched bridge, with one of the arches spanning the creek. Proposing to run the trail under the other arch.
    - No coordination with the railway has taken place to date.
- AGL has a 6" plastic main on the south side of PIB. Also have a 16" steel main located in the GA Power easement.
- S.U.E. is not anticipated. Only impacts to utilities will be due to roadside drainage and walls.
- It is anticipated that ROW will need to be acquired.
    - It is estimated that 22 parcels will be impacted.
- Environmental studies are underway – currently working on the CE.
- Lots of ecology work will be involved in this project.
- Railroad and bridge are most likely historic.
- Enhanced chance for archeological findings along the creek.
- Project is in a MS4 area – design and report are underway.
- Project will impact greater than 1 acre, so NPDES will be required.
- Project is in an Ozone Non-attainment area, but CO hotspot analysis will not be necessary due to the project type.
- Project was previously discussed at the Feb. 12, 2015 Initial Concept Meeting.
    - Discussed the need to maintain a 5' grass strip, and use a 2' grass strip next to right turn lanes.
    - Confirmed that project would be an asphalt trail to match the other sections that have been installed.
- Total estimated Project Cost = $9.94 million
    - PE = $1.13 million
    - ROW= $1.67 million
    - Utilities = $0.44 million
    - Construction = $6.7 million
- The only alternative to this project is a no-build alternate.
    - Small adjustments to the trail alignment may be made due to environmental findings, but it will ultimately be the same project.

CONCEPT LAYOUT DISCUSSION

- Limits are based on Gwinnett County GIS.
- Proposed wall, between the beginning of the project and Rogers Bridge Rd, will be substantial.
    - Could be as tall as 20' and will run for several hundred feet.
- Existing asphalt path to the west of Rogers Bridge Rd can be maintained.
- Existing concrete path on the east and west side of Prince Charles Dr. can be maintained.
- Some right turn lanes along PIB where a 2' grass strip will be necessary.
- Both sides of the road near Chattahoochee Dr. are being redeveloped.
    - Some concerns about waters in this area.
- Sugarloaf Parkway will require signal modification.
    - Plan to pull path closer to the road in this area to minimize impacts.
- Proposed wall, past Canterbury Subdivision, will be substantial.
    - Could be as tall as 20' and will run for several hundred feet.

- At Suwanee Creek, plan to cross at creek level with shortest pedestrian bridge possible.
    - This is also where the proposed spur will begin.
- Not expecting to substantially impact the signal at Vista Point Ln.
- For the stream near Grand Vista Approach it is not anticipated that the existing culvert will need to be extended.
    - May need to raise the existing parapet at this location.
- There are a couple of proposed projects along the corridor that will be constructed prior to the Western Gwinnett Bikeway Extension.
    - There is an existing City of Duluth sidewalk project from Grand Vista Approach to McGinnis Ferry.
    - There is also an existing widening project from Grand Vista Approach to Moore Rd.
        - May require additional survey once completed.
- Spur alignment will be dependent on determinations made by the environmental sub consultant and Pond & Company landscape architects.
    - Will determine what areas need to be boardwalk, and what areas can be asphalt.
- Second Spur is proposed just beyond the railroad bridge.
    - Will connect to existing neighborhood trails.
    - Pretty challenging grades are present that will make this connection difficult.

RISK PLAN DISCUSSION

- Roadway Design – Potential risks include bridging Suwanee Creek, large wall sections, railroad coordination, spur design, going under Buford Hwy.
- Environmental – Potential risks include the waters that are present on the site, and possibility of archeology.
- Utility – Long time frame of railroad coordination.
- ROW – No anticipated risk. Looks like it will take close to a year to acquire.

Additional Discussion

- Add page numbers to the concept report.
- HMA is checked next to “Feasible Pavement Alternatives”. This needs to be removed.
- Correct note to state that a “SBV” is expected.
- Add specifics to the environmental section. Since this work has begun we should be able to expand on what is included in the concept report. Add number of waters identified, etc.
- Break out cost further.
    - Provide more information for signals and erosion control.
- Need to provide an environmental mitigation cost estimate.
- Bridges should be designed in accordance with Load and Resistance Factor Design (LRFD).
- Utility submittals will be handled by Moreland Altobelli.
- Need to provide preliminary wall details on the typical sections for bridge department to begin evaluating.
- Use GDOT template for cost estimates; remove contingency, E&I, etc.

SITE VISIT DISCUSSION

- Need to coordinate with GDOT on hydrology study requirements.
- Need to show floodplain and all other required information on drawings.
- Proposed trail will run along an existing utility easement along the creek.
    - Will need to coordinate with utilities to ensure that trail is not covering up their pipe.
- Proposed trail will need to follow the existing terrain down to Suwanee Creek and back up again.
    - Will need to meet AASHTO vertical slope requirements. Avoid switchbacks if possible.

- Boardwalk will be used to make sure trail does not have to go all the way down to the creek banks and ensure that trail will avoid flooding.

- Rock is present near Suwanee Creek. Try to avoid cut situations during design.
- Will try to make use of existing utility easement to cross Suwanee Creek.
- From stains on bridge supports it appears as if water has risen at least 6' from the stream banks.
- Since PIB is 45 MPH, curb will be placed at the edge of the existing striping. This should reduce the size of the walls that will need to be constructed.
    - Try to keep walls within the existing tree line.
    - Foundation for walls will be deep.
        - Look into Gravix Walls, P Walls, and Soldier Pile Walls.
    - Walls will need to have a barrier.
    - Make sure ROW accounts for wall footprint.
- It will be a very tight fit beneath the Buford Hwy Bridge.
- Consider going along Buford Hwy to tie into Suwanee Creek Park. Significant grade change from Creek to Park with current alignment.

ACTION ITEMS

- Incorporate requested revisions into the concept report and attachments.
- Break out cost estimate further and update CES.
- Provide preliminary wall details on the typical sections.
- Resubmit concept report.