

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0011690 **OFFICE** Design Policy & Support
Henry County
GDOT District 3 - Thomaston **DATE** 10/26/2015
Bridge Replacement: CR 131 at Walnut
Creek North East of McDonough

Kim Phillips
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
Darryl VanMeter, State Innovative Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Hiral Patel, State Environmental Administrator
Ben Rabun, 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
Michael Presley, District Engineer
Adam Smith, District Preconstruction Engineer
Scott Parker for District Utilities Engineer
Kevin VanHouten, Project Manager
BOARD MEMBER - 10th Congressional District

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

Project Type:	<u>Bridge Replacement</u>	P.I. Number:	<u>0011690</u>
GDOT District:	<u>3</u>	County:	<u>Henry</u>
Federal Route Number:	<u>N/A</u>	State Route Number:	<u>N/A</u>
	Project Number:		<u>N/A</u>

The project proposes to replace the structurally deficient 2-lane bridge on CR 131/Elliott Road over Walnut Creek with a new 2-lane bridge. The roadway approaches on both sides of the bridge will be improved to conform to GDOT standards.

Submitted for approval:

<u><i>Steven Gaines</i></u>	<u>8-19-15</u>
Steven Gaines, American Consulting Professionals	Date
<u><i>Albert Shelby</i></u>	<u>8-26-15</u>
State Program Delivery Engineer	Date
<u><i>Kevin B. Van Houtte</i></u>	<u>08-24-2015</u>
GDOT Project Manager	Date

Recommendation for approval:

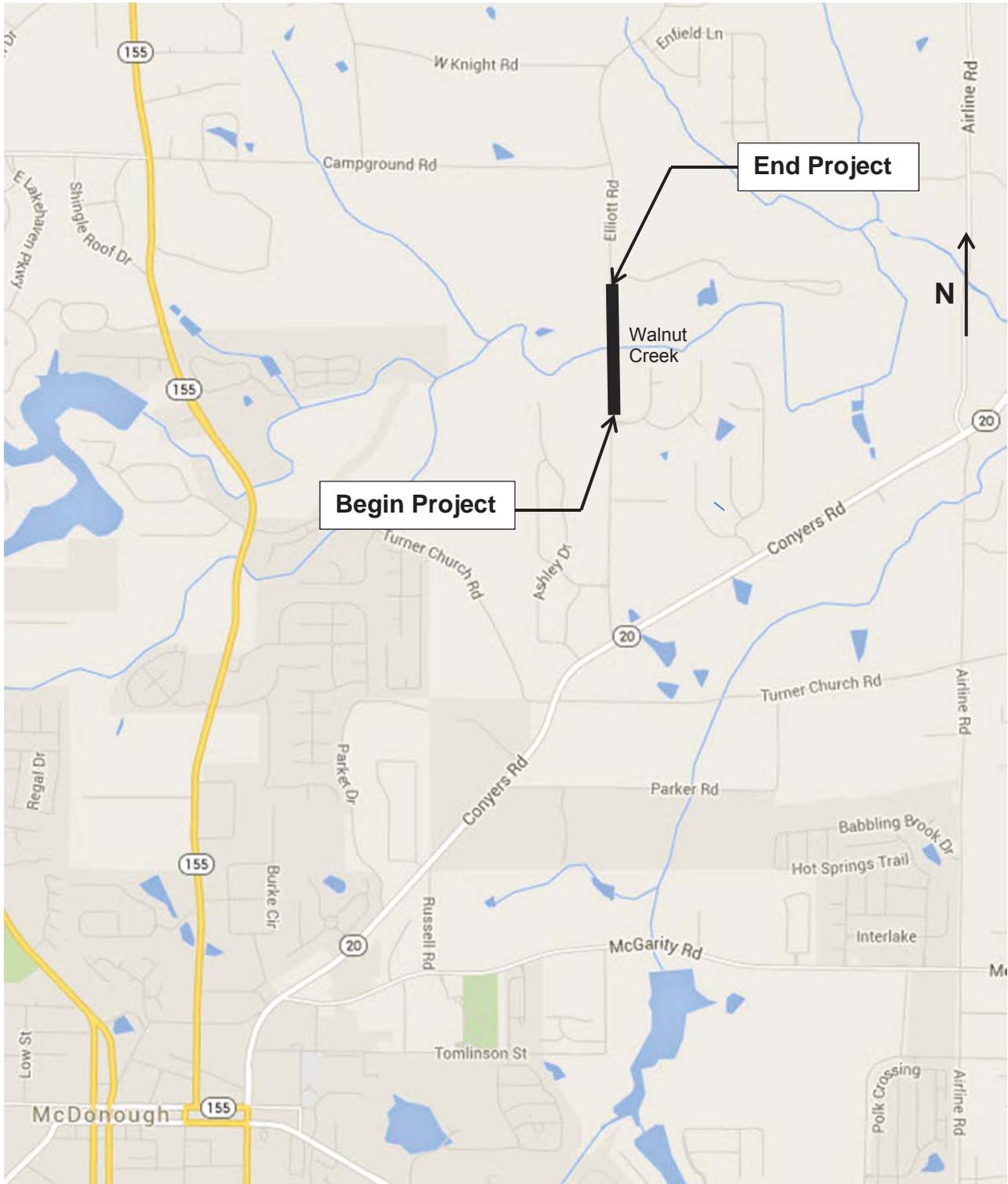
* <u><i>HIRAL PATEL</i></u>	<u>8/31/2015</u>
State Environmental Administrator	Date
* <u><i>KEN WERHO</i></u>	<u>9/1/2015</u>
State Traffic Engineer	Date
* <u><i>LISA MYERS</i></u>	<u>9/1/2015</u>
Project Review Engineer	Date
* <u><i>LEE WPKINS</i></u>	<u>9/17/2015</u>
State Utilities Engineer	Date
_____ District Engineer	Date
* <u><i>BEN RABUN</i></u>	<u>9/3/2015</u>
State Bridge Engineer	Date

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

* <u><i>CYNTHIA L. YANDYKE</i></u>	<u>9/3/2015</u>
State Transportation Planning Administrator	Date

* RECOMMENDATION ON FILE - *[Signature]*

PROJECT LOCATION MAP



CR 131/Elliott Road over Walnut Creek
PI# 0011690
Henry County

PLANNING AND BACKGROUND

Project Justification Statement: This bridge (Structure ID 151-5008-0; CR 131 over Walnut Creek) was built in 1960. The bridge consists of five spans of concrete precast slab units on timber piles and concrete columns under concrete caps. The design vehicle used for this bridge is below the current standards. This bridge is currently posted. The overall condition of this bridge would be classified as poor to good. The deck and superstructure are in good condition with some minor problems. The substructure is in poor condition due to advanced deterioration of the timber piles. Due to the structural integrity of the bridge, the poor condition of the substructure and the bridge being posted replacement is recommended.

Existing conditions: The project is located on a section of CR 131/Elliott Road that is a south-north route providing connectivity between SR 20 to the south and East Lake Road to the north. The project is located in central Henry County, and the area in the immediate vicinity is of a rural character with low density residential or undeveloped, wooded properties. There are no commercial or industrial land uses on the corridor. The functional classification of CR 131/Elliott Road is rural local road with a posted speed limit of 45 mph.

The typical section of existing Elliott Road is 2 – 10.5' width travel lanes with variable width rural shoulders and roadway ditches. The existing Elliott Road Bridge over Walnut Creek was constructed in 1960 and consists of a two-lane structure measuring 120 feet in length and 25 feet-6 inches in width. The existing six spans superstructure is comprised of precast slab units with a maximum superstructure depth of 20 inches. The main channel span is 40 feet long and the remaining spans are 20 feet long. The existing bridge was closed in December 2014 due to deterioration of the substructure. Henry County repaired the bridge with a 5- year warranty on the repairs. The bridge is currently open to traffic, but is posted for load.

Other projects in the area:

SR 20 from Newton County Line to CS992/McGarity Road (PI# M005017)
Roadway Maintenance

MPO: Atlanta Regional Commission (ARC)

TIP #: HE-196

Congressional District(s): 10

Federal Oversight: PoDI Exempt State Funded Other

Projected Traffic (TBD): AADT

Current Year (2012-GeoCounts): 2300 Open Year (2019): 3300 Design Year (2039): 4200

Traffic Projections Performed by: GDOT

Functional Classification (Mainline): Rural Local Road

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

Warrants met: None Bicycle Pedestrian Transit

Pedestrian Warrants (DPM 9.4.1)	Warrant Not Met	Warrant Met
Corridors with Pedestrian Travel Generators/Destinations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pedestrian Traffic	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pedestrian Crashes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Need Identified by Local Government, MPO or Regional Commission	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Bicycle Warrants (DPM 9.4.2)	Warrant Not Met	Warrant Met
Designated Bike Route (US, State, Regional or Local)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Existing Bikeway Linkage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Corridors with Bicycle Travel Generators/Destinations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bridge Deck Replacement/Rehabilitation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bicycle Crashes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Transit Warrants (DPM 9.4.3)	Warrant Not Met	Warrant Met
Corridors with Fixed Route Transit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pedestrian Transit Users	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

DESIGN AND STRUCTURAL

Description of the proposed project: The project is located 0.5 miles northeast of the City of McDonough, and proposes to replace the structurally deficient 2-lane bridge on CR 131/Elliott Road over Walnut Creek with a new 2-lane bridge. The roadway approaches on both sides of the bridge will be improved to conform to GDOT standards for a total length of approximately 0.25 miles.

Major Structures:

Structure	Existing	Proposed
Bridge # 151-5008-0	Total Bridge Length = 120'-0" Total Bridge Width = 25'-6" Clear Bridge Width = 24'-0" Lane Width = 2 - 10'-0" Shoulder Width = 2'-0" Sufficiency Rating = 58.10	Total Bridge Length = 135'-0" Total Bridge Width = 41'-3" Clear Bridge Width = 38'-0" Lane Width = 2 - 11'-0" Shoulder Width = 8'-0"
<i>Retaining walls (not including gravity walls)</i>	None	100' Length Wall adjacent to AT&T Site

Mainline Design Features: CR 131 Elliott Road (Local Road)

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	10.5'	11'-12'	11'
- Median Width & Type	None	None	None
- Outside Shoulder or Border Area Width	5'	8'	8'
- Outside Shoulder Slope	Varies	6%	6%
- Inside Shoulder Width	None	None	None
- Sidewalks	None	None	None
- Auxiliary Lanes	None	None	None
- Bike Lanes	None	None	None
Posted Speed	45 mph		45 mph
Design Speed	N/A	45 mph	45 mph
Min Horizontal Curve Radius	N/A	643'	N/A
Maximum Superelevation Rate	6%	6%	NC
Maximum Grade	9%	9%	9%
Access Control	None	None	None
Design Vehicle (Roadway)	N/A	S-BUS36	S-BUS36
Design Vehicle (Bridge)	H-15	HL-93	HL-93
Pavement Type	Asphalt	Asphalt	Asphalt
Clear Zone	N/A	24'	24'

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: None

Lighting required: No Yes

Off-site Detours Anticipated: No Undetermined Yes

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"/>	

Total Displacements: 0

Location and Design approval: Not Required Required**CONTEXT SENSITIVE SOLUTIONS**

Issues of Concern: None

Context Sensitive Solutions Proposed: None

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document:

GEPA: NEPA: CE EA/FONSI EISMS4 Permit Compliance – Is the project located in a MS4 area? No Yes

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	X		
2. Forest Service/Corps Land	X		
3. CWA Section 404 Permit		X	
4. Tennessee Valley Authority Permit	X		
5. Buffer Variance	X		
6. Coastal Zone Management Coordination	X		
7. NPDES		X	
8. FEMA		X	
9. Cemetery Permit	X		
10. Other Permits		X	
11. Other Commitments		X	Special provisions for Altamaha shiner; Possibly provisions for bats and migratory birds (swallows)
12. Other Coordination	X		

Is a PAR required? No Yes Completed – Date:**Environmental Comments and Information:****NEPA/GEPA:** The NEPA Document is currently under development, and a Categorical Exclusion (CE) is anticipated.**Ecology:** Two jurisdictional resources including Walnut Creek and one intermittent stream were identified during the delineation activities in January 2015. No wetlands are present within the project limits. No suitable habitat was present for either the black-spored quillwort (*Isoetes melanospora*) or dwarf sumac (*Rhus michauxii*). One state-listed species, the Altamaha shiner (*Cyprinella xaenura*), was found within Walnut Creek. No Critical Habitat, Essential Fish Habitat, or habitat for bald eagles occur within the project corridor. Evidence of nesting habitat for migratory birds was present within the project corridor. Potential habitat for bats was present in the project corridor, but no evidence of roosting or foraging bats was identified. The Ecology Resource Survey Report and Protected Aquatic Species Survey Report were approved by GDOT on July 9, 2015. An Ecology Assessment will be conducted after the concept team meeting.**History:** A Historic Resource Survey Report (HRSR) was completed and the property located north and west of the proposed crossing has been determined eligible for the National Register. SHPO concurrence was received on July 2, 2015.

Archeology: Shovel testing was conducted at the project area in March 2015. No archaeological resources were identified during field survey. The GDOT Archeological Short Form for Negative Findings was approved on May 22, 2015. By agreement, because no archaeological resources were located within the project's area of potential effect, no signed concurrence from the SHPO is required.

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

The project consists of a bridge replacement with no additional travel lanes. The project is exempt from the PM2.5 project level conformity determination, though confirmation on the level of analysis will be needed by the GDOT interagency group. A qualitative analysis for MSATs will be conducted. A CO hot spot analysis is not required.

Noise Effects: The level of noise study is anticipated to be a screening. There are no close noise sensitive sites and the project would be considered a Type III project unless we are raising the bridge by more than 2 feet.

Public Involvement: The anticipated level of public involvement is one PIOH and one detour meeting.

Major stakeholders: Traveling Public, Property Owners

Mitigation: No mitigation costs are anticipated based on the preferred alternative

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: It is anticipated that the bridge will be closed during construction, so no issues regarding construction staging or maintenance of traffic are anticipated.

Early Completion Incentives recommended for consideration: No Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting: N/A

Concept Meeting: 7-22-15

Other coordination to date: 3-10-15 Meeting with Henry County (Refer to Attached Meeting Minutes)

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

Project Cost Estimate Summary and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	Henry County	GDOT	GDOT	GDOT	
\$ Amount	\$600,000	\$513,000	\$200,000	\$1,605,000	\$0	\$2,918,000
Date of Estimate	7-29-15	7-22-15	7-22-15	7-30-15	7-30-15	

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

ALTERNATIVES DISCUSSION**Alternative selection:****Alternative 1 (Preferred): Maintain Existing Horizontal Alignment – Offsite Detour**

This alternative proposes to remove and reconstruct the existing bridge over Walnut Creek and portions of the approach roadway by maintaining the existing horizontal alignment. The vertical alignment of the roadway would be improved by reconstructing the substandard vertical curve on the south side of the bridge to current AASHTO standards. Utility drives would be provided for access to HCWSA sanitary sewer facilities and an AT&T site. An offsite detour would be utilized following SR 20 to Airline Road to East Lake Road (Refer to attached offsite detour map). Due to the low volume of traffic on Elliott Road there are no concerns regarding traffic volumes on the proposed detour legs during construction. Henry County has indicated approval of utilizing an offsite detour for the project since the inception of the project development.

Estimated Property Impacts:	Minor	Estimated Total Cost:	\$2,918,000
Estimated ROW Cost:	\$513,000	Estimated CST Time:	9 Months

Rationale: This alternative was selected because it met the goal outlined in the project justification statement of replacing the structurally deficient bridge with a proposed bridge while maintaining the existing horizontal geometry. The existing tangent horizontal alignment of Elliott Road will be maintained, and impacts to adjacent properties on both sides of the road will be balanced. The additional costs and impacts associated with an on-site detour are avoided through use on an off-site detour.

No-Build Alternative: Retain Existing Bridge

This alternative proposes to retain the existing bridge with not reconstruction or rehabilitation.

Estimated Property Impacts:	None	Estimated Total Cost:	0
Estimated ROW Cost:	0	Estimated CST Time:	0

Rationale: This alternative was not selected because it did not meet the goal outlined in the project justification statement, which required replacing the structurally deficient bridge with a proposed bridge.

Alternative 2: Shift Horizontal Alignment 12' to the West – Offsite Detour

This alternative proposes to remove and reconstruct the existing bridge over Walnut Creek and portions of the approach roadway by shifting the existing horizontal alignment 12' to the west. The purpose of the alignment shift is to minimize impacts to an AT&T site on the east side of Elliott Road. The shift in horizontal alignment would require introduction of four horizontal curves into the existing tangent alignment. A design exception for curve lengths would be required to minimize the total project length. The vertical alignment of the roadway would be improved by reconstructing the substandard vertical curve on the south side of the bridge to current AASHTO standards. Utility drives will be provided for access to HCWSA sanitary sewer facilities and an AT&T site. An offsite detour would be utilized following SR 20 to Airline Road to East Lake Road (Refer to attached offsite detour map). Due to the low volume of traffic on Elliott Road there are no concerns regarding traffic volumes on the proposed detour legs during construction. Henry County has indicated approval of utilizing an offsite detour for the project since the inception of the project development.

Estimated Property Impacts:	Minor	Estimated Total Cost:	\$2,918,000
Estimated ROW Cost:	\$513,000	Estimated CST Time:	9 Months

Rationale: This alternative was not selected because it introduced four horizontal curves into an existing horizontal alignment and would require a design exception for curve length. In addition, impacts to the parcels on the west side of the road would be much more significant than the east side of the road. The benefits of maintaining the existing alignment outweigh the potential minimization of impacts to the AT&T site.

Alternative 3: Maintain Existing Horizontal Alignment – Onsite Detour

This alternative proposes to remove and reconstruct the existing bridge over Walnut Creek and portions of the approach roadway by maintaining the existing horizontal alignment. The vertical alignment of the roadway would be improved by reconstructing the substandard vertical curve on the south side of the bridge to current AASHTO standards. Utility drives will be provided for access to HCWSA sanitary sewer facilities and an AT&T site. An onsite detour would be constructed on the east or west side of Elliott Road utilizing temporary pavement and a temporary bridge structure. Traffic would be maintained on the detour during construction, and the detour would be removed after the proposed construction is completed.

Estimated Property Impacts:	Minor	Estimated Total Cost:	\$3,318,000
Estimated ROW Cost:	\$613,000	Estimated CST Time:	12 Months

Rationale: This alternative was not selected because the addition on an onsite detour would cost approximately \$300,000 more in construction costs and \$100,000 more in right-of-way costs than the preferred alternative. In addition, the installation of the onsite detour would increase property impacts, environmental impacts and utility impacts. The construction duration would also be increased. Henry County has indicated approval of utilizing an offsite detour for the project since the inception of the project development.

Comments: None

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection
 - b. Completed Liquid AC Cost Adjustment forms
 - c. Utilities
4. S I & A Report(s)
5. Henry County Meeting Minutes (3-10-15)
6. Concept Team Meeting Minutes (7-22-15)
7. Preliminary Link Volume Traffic
8. Offsite Detour Map

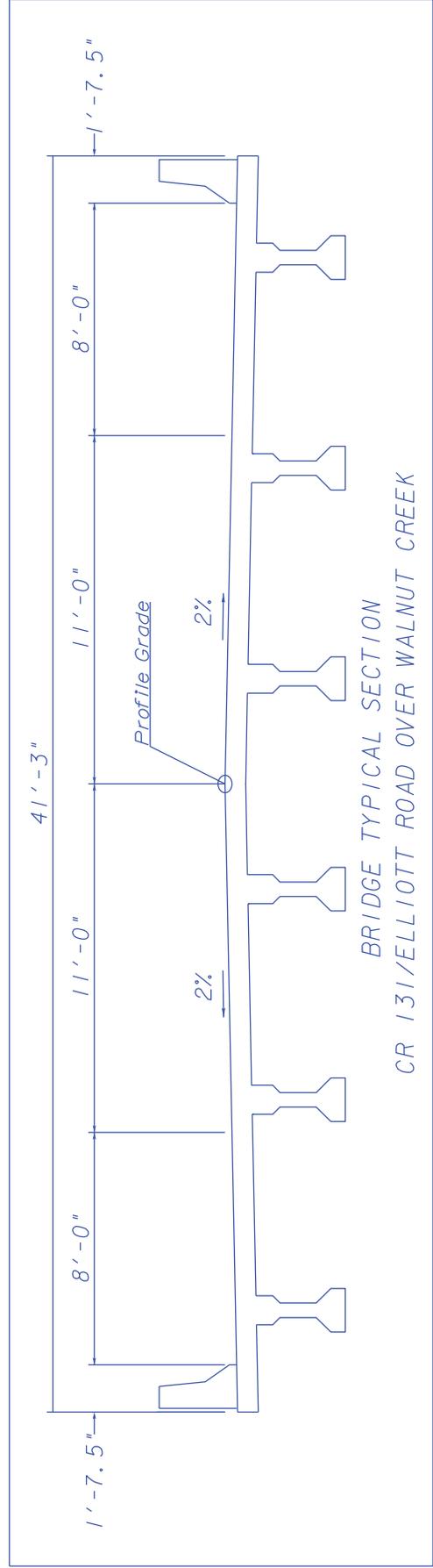
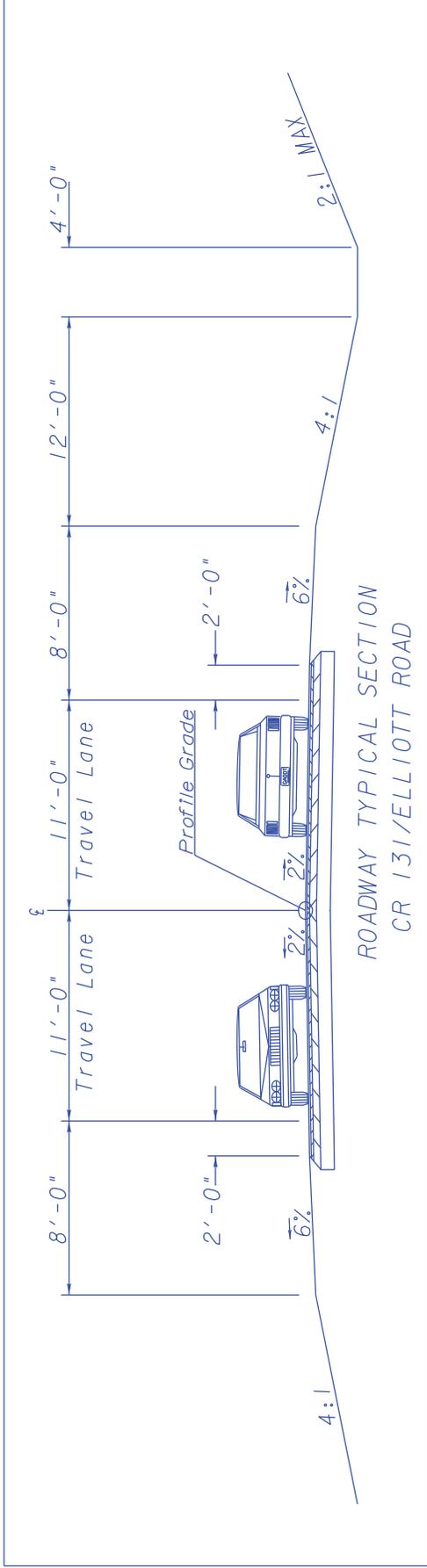
APPROVALS

Concur: 
Director of Engineering

Approve: 
Chief Engineer

10.22.15
Date

ELLIOTT ROAD OVER WALNUT CREEK (PI# 0011690)
 TYPICAL SECTIONS



JOB ESTIMATE REPORT

JOB NUMBER : 0011690
 DESCRIPTION: CR 131/ELLIOTT ROAD OVER WALNUT CREEK

SPEC YEAR: 13

ITEMS FOR JOB 0011690

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	310-1101		TN	GR AGGR BASE CRS, INCL MATL	2800.000	24.84	69562.42
0010	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	750.000	86.61	64963.20
0015	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	380.000	94.07	35748.81
0020	402-4510		TN	RECYL AC 12.5 MM SP,GP2ONLY,INC P-MBM&HL	240.000	116.06	27856.02
0025	413-1000		GL	BITUM TACK COAT	600.000	4.86	2920.16
0030	150-1000		LS	TRAFFIC CONTROL - 0011690	1.000	50000.00	50000.00
0035	210-0100		LS	GRADING COMPLETE - 0011690	1.000	200000.00	200000.00
0040	318-3000		TN	AGGR SURF CRS	500.000	22.18	11093.36
0045	436-1000		LF	ASPH CONC CURB - 0011690	1200.000	13.42	16107.12
0050	641-1100		LF	GUARDRAIL, TP T	1000.000	36.99	36993.45
0055	641-1200		LF	GUARDRAIL, TP W	200.000	20.73	4146.47
0060	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	894.69	1789.38
0065	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	2.000	2119.91	4239.83
0070	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	2000.000	1.34	2698.22
0075	441-0301		EA	CONC SPILLWAY, TP 1	4.000	1764.87	7059.51
0078	500-3900		CY	CL B CONC, INCL REINF STEEL	50.000	500.00	25000.00
0079	550-2180		LF	SIDE DR PIPE 18,H 1-10	200.000	39.20	7840.90
0080	550-1180		LF	STM DR PIPE 18,H 1-10	100.000	54.97	5497.64
0085	550-3318		EA	SAFETY END SECTION 18,STD,4:1	4.000	858.80	3435.21
0089	550-3618		EA	SAFETY END SECTION 18,SD,6:1	12.000	409.76	4917.19
0090	163-0001		LS	EROSION CONTROL, NON-REFUNDABLE DEDUCT	1.000	200000.00	200000.00
0095	636-1033		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	50.000	21.80	1090.02
0100	636-2070		LF	GALV STEEL POSTS, TP 7	150.000	8.99	1349.93
0105	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	3000.000	0.60	1810.20
0110	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	3000.000	0.64	1948.56
0115	654-1001		EA	RAISED PVMT MARKERS TP 1	30.000	5.89	176.85
0120	433-1000		SY	REINF CONC APPROACH SLAB	300.000	173.91	52173.98
0125	540-1101		LS	REM OF EX BR, STA NO - 16+50	1.000	75000.00	75000.00
0130	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 0011690	1.000	526000.00	526000.00

ITEM TOTAL 1441418.41
 INFLATED ITEM TOTAL 1441418.43

TOTALS FOR JOB 0011690
 ESTIMATED COST: 1441418.43
 CONTINGENCY PERCENT (10.0): 144141.84
 ESTIMATED TOTAL: 1585560.27

PROJ. NO. N/A CALL NO.
 P.I. NO. 0011690
 DATE 7/27/2015

INDEX (TYPE) DATE INDEX Link to Fuel and AC Index:
 REG. UNLEADED Jul-15 \$ 2.660 <http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>
 DIESEL
 LIQUID AC \$ 466.00

LIQUID AC ADJUSTMENTS

PA-(((APM-APL)/APL))*TMTxAPL

Asphalt
 Price Adjustment (PA) 19152.6 \$ 19,152.60
 Monthly Asphalt Cement Price month placed (APM) \$ 745.60
 Monthly Asphalt Cement Price month project let (APL) \$ 466.00
 Total Monthly Tonnage of asphalt cement (TMT) 68.5

ASPHALT	Tons	%AC	AC ton
Leveling	0	5.0%	0
12.5 OGFC	0	5.0%	0
12.5 mm	240	5.0%	12
9.5 mm SP	0	5.0%	0
25 mm SP	750	5.0%	37.5
19 mm SP	380	5.0%	19
	1370		68.5

BITUMINOUS TACK COAT

Price Adjustment (PA) \$ 720.55 \$ 720.55
 Monthly Asphalt Cement Price month placed (APM) \$ 745.60
 Monthly Asphalt Cement Price month project let (APL) \$ 466.00
 Total Monthly Tonnage of asphalt cement (TMT) 2.577060553

Bitum Tack	Gals	gals/ton	tons
	600	232.8234	2.577060553

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA) \$ 0 \$ -
 Monthly Asphalt Cement Price month placed (APM) \$ 745.60
 Monthly Asphalt Cement Price month project let (APL) \$ 466.00
 Total Monthly Tonnage of asphalt cement (TMT) 0

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

TOTAL LIQUID AC ADJUSTMENT

\$ 19,873.15

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **Henry County, P.I. # 0011690**

OFFICE Thomaston

FROM Scott Parker, District Utilities Engineer

DATE 7/22/15

TO Kevin Van Houten, Project Manager

SUBJECT **PRELIMINARY UTILITY COST (ESTIMATE)**

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

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
GPD		100,000
AT&T	15,000	75,000
ComCast	15,000	
HCWA	70,000	
HCW-SS	10,000	25,000
AGL	30,000	
TOTALS	\$ 140,000	\$ 200,000

Total Preliminary Utility Cost Estimate **\$340,000**.

If you have any questions, please contact Scott Parker at 706-646-7605.

KG/

cc: Lee Upkins, State Utilities Engineer (*via: e-mail*)



Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID: 151-5008-0

Henry

SUFF. RATING: 58.10

Location & Geography

Structure ID:	151-5008-0	*104 Highway System:	0- Inventory Route is not on the NHS
200 Bridge Information:	06	*26 Functional Classification:	19- Urban - Local
*6A Feature Int:	WALNUT CREEK	*204 Federal Route Type:	0 - Not located on a Federal Aid Route
*6B Critical Bridge:		*110 Truck Route:	0
*7A Route No Carried:	CR00131	206 School Bus Route:	0
*7B Facility Carried:	ELLIOTT ROAD	217 Benchmark Elevation:	0000.00
9 Location:	.5 MI NE OF McDONOUGH C.L	218 Datum:	0- Not Applicable
2 Dot District:	Thosmaen	*19 Bypass Length:	6
207 Year Photo:	2012	*20 Toll:	3- On a Free Road or Non-Highway
*91 Inspection Frequency:	24	*21 Maintenance:	02-County Highway Agency.
92A Fract Crit Insp Freq:	0	*22 Owner:	02-County Highway Agency.
92B Underwater Insp Freq:	00	*31 Design Load:	2- H 15
92C Other Spc. Insp Freq:	00	37 Historical Significance:	5- Not eligible for the National Register of Historic Places
*4 Place Code:	00000	205 Congressional District:	3 - THREE
*5 Inventory Route(O/U):	1	27 Year Constructed:	1960
Type:	4 - County	106 Year Reconstructed:	0
Designation:	1- Mainline	33 Bridge Median:	0-None
Number:	00131	34 Skew:	0
Direction:	0: Not applicable	35 Structure Flared:	No
*16 Latitude:	33.0000- 28.9536	38 Navigation Control:	0- Navigation is not controlled by an Agency
*17 Longitude:	84.0000- 7.4274	213 Special Steel Design:	0- Not applicable or other
98 Border Bridge:	MP: 0.00	267 Type of Paint:	0- Not Applicable.
99 ID Number:	% Shared:00	*42 Type of Service On:	1-Highway
*100 STRAHNET:	0000000000000000	Type of Service Under:	5-Waterway
12 Base Highway Network:	0- The Feature is not a STRAHNET route.	214 Movable Bridge:	0
13A LRS Inventory Route:	1	203 Type Bridge:	0- Multip -K. Timber-G. A. No Bean- O. Concrete
13B Sub Inventory Route:	1512013100	259 Pile Encasement:	3
*101 Parallel Structure:	0.00	*43 Structure Type Main:	1-Concrete
*102 Direction of Traffic:	N. No parallel structure exists	45 No.Spans Main:	5
*264 Road Inventory Mile Post:	2- Two Way	44 Structure Type Appr:	0- Other
*208 Inspection Area:	001.97	46 No Spans Appr:	0
Engineer's Initials:	Area 03	226 Bridge Curve Horz	0 Vert: 1.00
* Location ID No:	gmc	111 Pier Protection	N - Navigation Control item coded 0, or Feature not a waterway
	151-00131X-001.97S	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:	1
Curb Material:	1- Concrete.
239 Handrail	0- None.
*240 Median Barrier Rail:	0- None.
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3- Both sides.
Fwd:	3- Both sides.
Oppo. Dir. Rear:	0- None.
Oppo. Fwd:	0- None.
244 Approach Slab	0- None.
224 Retaining Wall:	0- None.
233 Posted Speed Limit:	45
236 Warning Sign:	0.00
234 Delineator:	1.00
235 Hazard Boards:	0
237 Utilities Gas:	31- Side Left.
Water:	32- Side Right.
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



Bridge Inventory Data Listing

Processed Date: 7/30/2015

Parameters: Bridge Serial Num

Structure ID: 151-5008-0

Programming Data

201 Project No: UNKNOWN
 202 Plans Available: 0- No Plans Available.
 249 Prop Proj No: 00000000000000000000000011690
 250 Approval Status: 0000
 251 PI Number: 0011690
 252 Contract Date: 02/01/1901
 260 Seismic No: 00000
 75 Type Work: 31- Replacement
 94 Bridge Imp. Cost: \$469
 95 Roadway Imp. Cost: \$47
 96 Total Imp Cost: \$703
 76 Imp Length: 1441
 97 Imp Year: 2013
 114 Future ADT: 4200 Year: 2031

Measurements:

*29 ADT 2800 Year: 2011
 109 % Trucks: 1
 * 28 Lanes On: 2 Under: 0
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 40
 * 49 Structure Length: 120
 51 Br. Rwdy. Width: 24.00
 52 Deck Width: 25.50
 * 47 Tot. Horiz. Cl: 24
 50 Curb / Sidewalk Width: 0.60 / 0.60
 32 Approach Rdwy. Width: 20
 *29 Shoulder Width:
 Rear Lt: 5.00 Type: 8 - Rt: 5
 Fwd. Lt: 5.00 Type: 8 - Grass Rt: 5
 Pavement Width:
 Rear: 20.00 Type: 2 - Asphalt.
 20.00 Type: 2 - Asphalt.
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail: 0- Does not meet standards
 Transition: 3- Inspected feature exists but does not meet current or construction data standards
 App. G. Rail: 0- Does not meet standards
 App. Rail End: 2- Inspected feature meets acceptable construction date 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 "

Hydraulic Data

215 Waterway Data:
 High Water Elev: 0000.0 Year: 1900
 Flood Elev: 0000.0 Freq: 00
 Avg Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000
 113 Scour Critical U. No Load Rating: no scour critical data entered.
 216 Water Depth: 02.1 Br. Height: 21.3
 222 Slope Protection: 1
 221 Spur 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: 151-00131X-001.97S

65 Inventory Rating Method: 1-Load Factor (LF)
 63 Operating Rating Method: 1-Load Factor (LF)
 66 Inventory Type: 2 - HS loading. Rating: 20
 64 Operating Type: 2 - HS loading. Rating: 33
 231 Calculated Loads:
 H-Modified: 18 0
 HS-Modified: 21 0
 Type 3: 17 1
 Type 3s2: 29 0
 Timber: 25 0
 Piggyback: 00 0
 261 H Inventory Rating: 14
 262 H Operating Rating: 12
 67 Structural Evaluation: 6
 58 Deck Condition: 7 - Good Condition
 59 Superstructure Condition: 7 - Good Condition
 * 227 Collision Damage:
 60A Substructure Condition: 6 - Satisfactory Condition
 60B Scour Condition: 7 - Good Condition
 60C Underwater Condition: N - Not Applicable
 71 Waterway Adequacy: 7 - Better than present minimum criteria.
 61 Channel Protection Cond.: 7
 68 Deck Geometry: 2
 69 UnderCir. HorzVert: N
 72 Appr. Alignment: 6 - Minor reduction of vehicle operating speed required.
 62 Culvert: N - Not Applicable
Posting Data
 70 Bridge Posting Required 4. 0.1 - 9.9% below
 41 Struct Open, Posted, CL: P. Posted for load
 * 103 Temporary Structure: 0
 232 Posted Loads
 H-Modified: 21
 HS-Modified: 00
 Type 3: 17
 Type 3s2: 00
 Timber: 37
 Piggyback 00
 253 Notification Date: 02/01/1901
 258 Fed Notify Date: 02/01/1901

Elliott Road over Walnut Creek (PI# 0011690)
Henry County Review Meeting Minutes
March 10, 2015

Attendees: Kevin VanHouten, GDOT
Terry McMickle, Henry County DOT
David Simmons, Henry County DOT
Roque Romero-Muniz, Henry County SPLOST
Chae Yi, Henry County SPLOST
Fritz Jacques, HCWSA
Randy Crumbley, HCWSA
Steven Gaines, American Consulting Professionals

A review meeting was conducted on March 10, 2015, in the Henry County SPLOST Conference Room. The purpose of the meeting was to review the project development history, concept alternatives and utility impacts for the project.

Project Development History

The project development history was discussed. The development of concept alternatives has commenced utilizing aerial photography and 2' GIS contours from Henry County. Environmental studies have commenced, including development of history report, stream & wetland delineation and UST survey. No wetlands have been identified in the project area, and two streams have been delineated (Walnut Creek and tributary). Terry McMickle commented that a recent bridge repair had been completed with a five year warranty, and the County would like to see the proposed bridge installed in a timely manner. Kevin VanHouten commented that he will submit the request for the PIOH at the same time the concept team meeting is scheduled. The detour meeting and PIOH can be combined since this is a minor project.

Existing Conditions

The horizontal alignment for Elliott Road is in a tangent section for the entirety of the project area. The existing vertical curve to the south of the bridge does not meet design criteria for the posted speed limit of 45 mph. Existing utilities include gas, overhead power and AT&T facilities on the east side of the road, and a 6" waterline (HCWSA) on the west side of the road. A sanitary sewer line and easement (HCWSA) with gates runs perpendicular to the road just north of the existing bridge.

Proposed Alternatives

The development of the conceptual profile indicates that a significant elevation increase will be required to meet 45 mph vertical curve design criteria for the sag curve south of the existing bridge. Two concept alternatives were discussed: Alternative #1 (maintain existing alignment) and Alternative #2 (shift alignment 10'-12' to West with 2000' horizontal curves).

The advantages of Alternative #1 include maintaining the existing tangent alignment and balancing impacts on both sides of the road. The main disadvantage of this alternative is the impact to existing utilities on the east side of the road, including the AT&T site, poles and gas facilities. It appears that a retaining wall will be required to avoid impacts. The combination of this wall and guardrail extending from the bridge will make access difficult to these utilities. The main advantage of Alternative #2 is reducing impacts to existing utilities on the east side of the road. The disadvantages include introducing horizontal curvature into the existing tangent alignment and additional impacts to property owners on the west side of the road. The possibility of adding an access road to the east side of the AT&T site was discussed along with questions about impacts to the driveways and sight distance. Terry McMickle commented that the County could accept shifting the road to the west as long as a minimum curve length of 7.5 times the speed design was maintained. Kevin VanHouten suggested scheduling an initial concept team meeting at the district office to discuss the two alternatives with GDOT personnel.

Action Items:

GDOT

- Schedule Initial Concept Team Meeting

American Consulting Professionals

- Review driveway access and site distance for access drive to AT&T
- Prepare concept layouts for ICTM with existing utilities, utility access drives, required guardrail and retaining walls
- Develop off-site detour routes for ICTM

Henry County DOT

- Contact property owner on Elliott Road regarding flooding of road during 1994 storm event

Elliott Road over Walnut Creek (PI# 0011690)
Concept Team Meeting Minutes

Attendees: Kevin VanHouten, GDOT -Program Delivery
Michael Williams, GDOT - Construction
Scott Parker, GDOT - Utilities
David English, GDOT - Engineering Services
Adam Smith, GDOT - Preconstruction
Jeff Franklin, GDOT - Right-of-Way
Krystal Stovall-Dixon, GDOT - Program Delivery
Keisha Jackson, GDOT - Environmental Services
Paul Alimia, GDOT - Environmental Services
Steven Gaines, American Consulting Professionals
Katherine Mooney, American Consulting Professionals

A Concept Team Meeting was conducted on July 22, 2015, in GDOT District 3 Auditorium A with Kevin B. VanHouten, Project Manager from the Office of Program Delivery officiating. The purpose of the meeting was to review the project development history, concept layouts, concept report and receive comments from GDOT offices. These minutes are summary in nature and do not attempt to document every item discussed nor statement made. Should your recollection differ from what is contained herein or you wish to add something, please contact Kevin B. VanHouten at 706-741-3469, or via e-mail at kvanhouten@dot.ga.gov.

I. Introduction

Each member was provided with a concept report draft and meeting agenda. Layouts of two concept alternatives were displayed as a visual aid. Introductions were made by all personnel.

II. Project Overview

Steven Gaines gave an overview of the project characteristics and project development history. The existing off-system bridge over Elliott Road is structurally deficient and must be replaced per the project justification statement. Two alternatives were developed utilizing an off-site detour. Henry County has indicated approval for closing the road during construction since the inception of the project. Both alternatives would reconstruct the substandard vertical curve on the south side of the bridge to current AASHTO standards. Utility drives would be provided for access to HCWSA sanitary sewer facilities and an AT&T site. An offsite detour would be utilized following SR 20 to Airline Road to East Lake Road. Due to the low volume of traffic on Elliott Road there are no concerns regarding traffic volumes on the proposed detour legs during construction.

The first alternative proposes to remove and reconstruct the existing bridge over Walnut Creek and portions of the approach roadway by maintaining the existing horizontal alignment. The second alternative proposes to remove and reconstruct the existing bridge over Walnut Creek and portions of the approach roadway by shifting the existing horizontal alignment 12' to the west. The purpose of the alignment shift is to minimize impacts to an AT&T site on the east side of Elliott Road. The shift in horizontal alignment would require introduction of four horizontal curves into the existing tangent alignment. A design exception for curve lengths would be required to minimize the total project length.

The first alternative was selected because it met the goal outlined in the project justification statement of replacing the structurally deficient bridge with a proposed bridge while maintaining the existing horizontal geometry. The existing tangent horizontal alignment of Elliott Road will be maintained, and impacts to adjacent properties on both sides of the road will be balanced. The benefits of maintaining the existing alignment outweigh the potential minimization of impacts to the AT&T site.

An overview of environmental activities and issues was provided. Two jurisdictional streams (Walnut Creek and Walnut Creek Tributary) are present within the project limits. No wetlands were identified during project field reviews. One state-listed species, the Altamaha shiner was found in Walnut Creek during field surveys. A Historic Resource Survey Report was completed, and the property located north and west of the proposed crossing (Crumbley Farm) has been determined eligible for the National Register. It is anticipated that the preferred alternative will have minor impacts to this resource which require a small area of temporary or permanent easement.

III. Comments from GDOT Office

A. Design

- 11' travel lanes should be considered for the project. A design variance will not be required since both 11' and 12' are now considered standard.

B. Bridge

- No Comments (No Personnel Present)

C. Environmental

- A Categorical Exclusion (CE) will be required for the project. A Programmatic Categorical Exclusion (PCE) will not be possible due to the offsite detour.

D. Utilities

- Impacts to the AT&T site on the east side of Elliott Road need to be avoided due to the high cost of relocation (\$1 Million).
- Scott Parker will follow-up with AT&T to ensure that a retaining wall and relocated utility access drive will be acceptable.
- The current utility estimate is \$265,000 (\$125,000 Reimbursable and \$140,000 Non-Reimbursable). This estimate is high because the proposed design will not directly impact the sanitary sewer line.

E. Right of Way

- The Right-of-Way estimate is \$513,000 for 7 parcels. The draft concept report and concept layout show 10 impacted parcels. Henry County is funding the right-of-way for the project.

F. Traffic Operations

- The offsite detour route was discussed. No GDOT personnel had ridden through the detour. The route was reviewed during the meeting using Google Earth, and it was determined that the bridge on Airline Road over Walnut Creek had adequate barrier protection. The project is off-system, so the detour roads will not need to become temporary state routes. A local support letter will need to be obtained from the Henry County DOT, Henry County School Board and Henry County EMS.
- The development of driveway profiles for drives adjacent to guardrail installations need to consider the effects of guardrail on sight distance.

G. Construction

- A constructability review meeting will required for the project.
- The development of design plans needs to consider the location of the crane for the bridge.

H. Maintenance

- Maintenance is a County issue because the project is off-system.

I. Location

- American Consulting is performing the survey for the project. A pre-survey meeting at the project site needs to be scheduled.

J. District Engineer/Area Office

- No Comments

K. District Preconstruction

- Comments were provided in discussion for other offices

L. Program Delivery

- The concept report need to be submitted on 8-5-15 per the project schedule.
- Kevin Van Houten spoke with Dave Peters regarding the use of the limited scope concept report template for this project. Dave stated that this format was acceptable. The PDP does not allow the limited scope format for projects with off-site detours. Kevin will follow-up with Dave to confirm.
- The concept report may be submitted prior to receiving the local support letter for the offsite detour.

M. County Comments

- No Comments (No Personnel Present)

Action Items:

GDOT

- Develop Revised Right-of-Way Cost Estimate
- Develop Revised Utility Cost Estimate
- Develop Local Support Letter
- Provide Schematic of Conforming Plan

American Consulting Professionals

- Submit Concept Report for Review
- Prepare Construction Cost Estimate in CES
- Schedule Pre-Survey Meeting

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Henry County
P.I. # 0011690

OFFICE Planning

DATE July 21, 2015

FROM Cynthia L. VanDyke, State Transportation Planning Administrator

TO Albert Shelby, State Program Delivery Engineer
Attention: Kevin B. VanHouten

SUBJECT **Preliminary Link Volume Traffic** for CR 131/ELLIOTT ROAD @ WALNUT CREEK 0.50 MI NE OF MCDONOUGH.

The Link Volume Traffic is below:

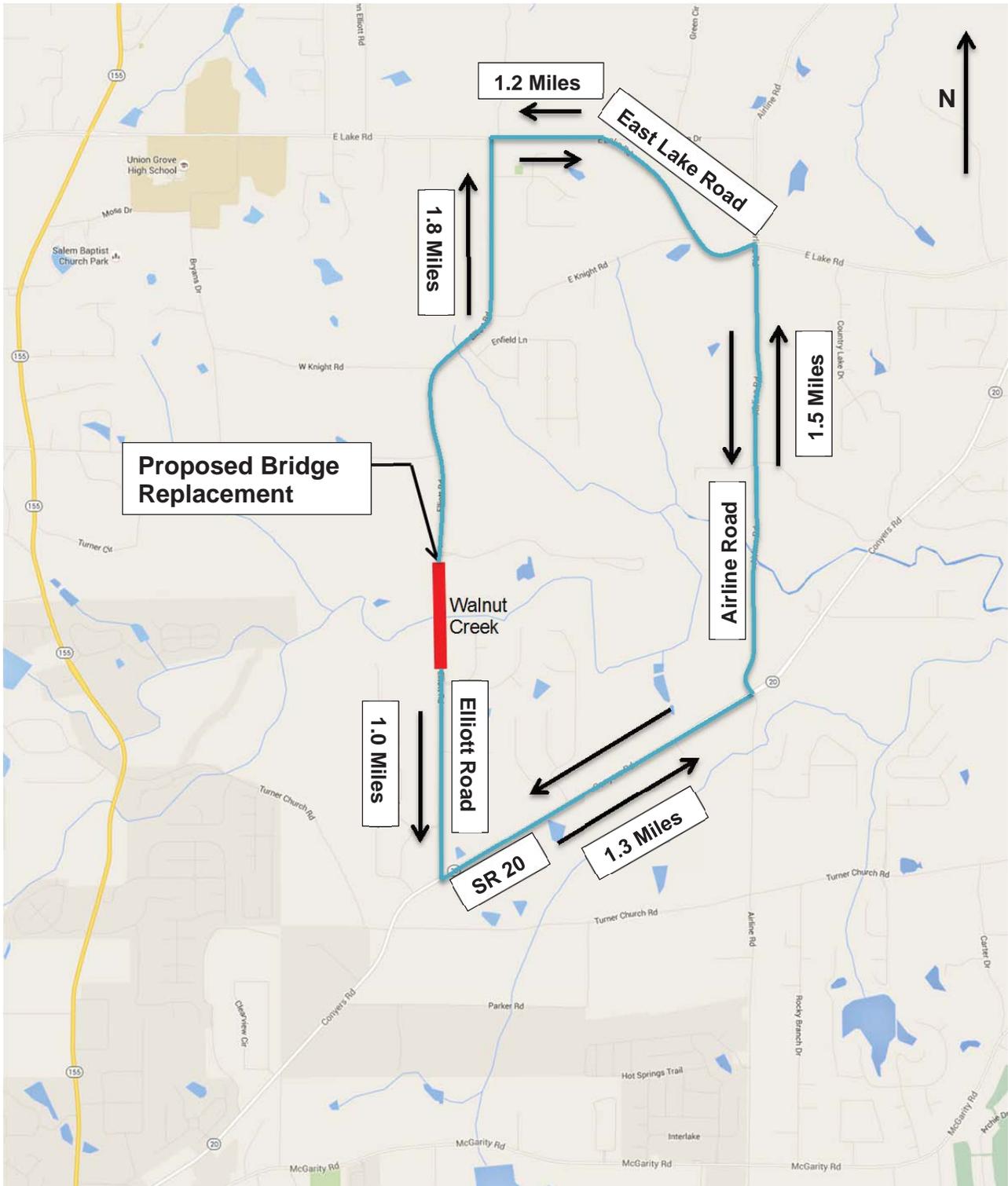
**BUILD = NO BUILD
TC # 0151- 8107**

2009 AADT	2850
2012 AADT	2300 (COUNTS OVER SUMMER BREAK
2009 DHV	315
2019 AADT	3300
2019 DHV	365
2039 AADT	4200
2039 DHV	465
K	10%
D	60%
T	4%
S.U.	3%
COMB.	1%
24 HOUR T	5%
S.U.	4%
COMB.	1%

If you have any questions concerning this information please contact Abby Ebodaghe at (404) 631-1923.

CLV/afe

OFFSITE DETOUR MAP
SR 20 to Airline Road to East Lake Road



CR 131/Elliott Road over Walnut Creek
PI# 0011690
Henry County