DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-0198-01(020) Hall
P.I. No.: 132610
SR 60 from SR 136 to CR 158

OFFICE: Engineering Services

DATE: August 24, 2011

FROM: Ronald E. Wishon, State Project Review Engineer REW

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Otis Clark

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held June 20-23, 2011. Responses were received on August 24, 2011. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
R-1	Eliminate construction of the proposed 780 ft bridge over Squirrel Creek, lower the proposed grade from Sta. 59+00 to Sta. 75+00 and extend the existing triple 10 ft x 9 ft culverts	$4,115,890	Yes	This will be done.
R-2	Revise the horizontal and vertical alignment between Sta. 28+00 and Sta. 48+00 to reduce the earthwork and ROW impacts	$1,808,726	Yes	This will be done. A Design Exception will be required to increase the vertical grade to 9%.
R-3.0	End SR 60 construction 1500 ft past the intersection of Yellow Creek Road in lieu of 3350 ft past the intersection	Proposed = $1,197,788 Actual = $1,183,004	Yes, with modifications	This will be done. The taper to the existing roadway will end at Sta. 284+00 in order to avoid impacts to a historic property.

R-3.1	Eliminate curb and gutter, closed drainage system, median and sidewalk in the transition area from Sta. 284+00 to the end of the project at Sta. 297+50	Proposed = $227,193 Actual = $151,462	Yes, with modifications	This will be done from Sta. 275+00 to the end of the project at Sta. 284+00.
R-3.2	Realign the proposed roadway from Sta. 265+00 to Sta. 294+00 to stay on the existing roadway section without shifting west	$750,000	No	This will not be done. Because R-3.0 and R-3.1 will be implemented, R-3.2 cannot be done.
R-5	Reduce ROW width from 150 ft to 100 ft for entire length of roadway	$5,647,228	Yes	This will be done. Easements for construction and maintenance of slopes will be required where the construction limits footprint is wider than 100 ft.
R-7	Eliminate proposed retaining wall #1 located from Sta. 48+04 Lt. to Sta. 52+09	$207,315	Yes	This will be done, pending environmental acceptance at PAR meeting.
R-9	Construct roundabout at Old Dahlonega Highway and Kanady Road	$49,440	No	After further review of the proposed roundabout, an additional cost of $123,000 would be incurred in order to construct the roundabout. See attachments 1 and 2.
R-10	Install corrugated median for TS#2 from Sta. 48+50 to Sta. 60+50 and Sta. 158+85 to Sta. 173+50	$13,905	Yes, with modifications	This will be done from Sta. 53+00 to Sta. 68+50. A 12 ft flush median will be used for the other locations.
R-13	Construct project with 5-lane section (12 ft flush median) in lieu of 4-lane divided with 20 ft raised median	Cost Increase ($-467,859)	Yes, with modifications	This will be done except from Sta. 53+00 to Sta. 67+00 at Squirrel Creel. A 4 ft corrugated median will be used at that location.
R-14	Redesign to maintain existing alignment from Sta. 100+00 to Sta. 124+00 and Sta. 208+00 to Sta. 234+00, and at Sta. 265+00	$1,000,000	Yes	This will be done.
R-16	Construct sidewalk on only one side instead of both sides of roadway	$321,353	No	Since this is a route to the elementary school, sidewalks are required on both sides of SR 60.

R-21	Eliminate proposed retaining wall #2 located from Sta. 54+42 Lt. to Sta. 57+45	$155,103	Yes	This will be done, pending environmental acceptance at PAR meeting.
R-22	Eliminate realignment of side roads: Jerry Burress Rd.; Wahoo Rd.; Old Dahlonega Hwy. and Kanady Rd.; Hopewell Rd.; Bark Camp Rd.; Elrod Rd.; and Yellow Creek Rd.	Proposed = $1,367,420 Actual = $1,106,853	Yes	This will be done at all locations except Yellow Creek Road. Yellow Creek Road will be realigned due to the existing skew.
R-23	Eliminate profile change on side roads intersecting SR 60 at Twin Oaks Lane, Marlow Road and Seminole Drive	Proposed = $792,419 Actual = $524,059	Yes	This will be done at all locations except Twin Oaks Lane. The profile for Twin Oaks Lane will remain unchanged.

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

Approved: _____ **Date:** 8/26/11
Gerald M. Ross, PE, Chief Engineer

REW/LLM
Attachments
c: Russell McMurry
Bobby Hilliard/Stanley Hill/Otis Clark
Sam Pugh
James Harry
Randall Davis
Ken Werho
Lisa Myers
Matt Sanders

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **STP00-0198-01(020), Hall County**
Widening and Reconstruction of SR 60 from SR 136 to Yellow Creek Rd.
P.I. No. 132610

OFFICE Program Delivery

FROM Bobby Hilliard, P.E., State Program Delivery Engineer

DATE August 24, 2011

TO Ronald E. Wishon, State Project Review Engineer
Attn.: Lisa Myers

SUBJECT **Response to Value Engineering Study Alternatives**

Attached are the responses for the Value Engineering Study. This office concurs with the responses.

If you have any questions or require further information please call Otis Clark at (404) 631-1577.

BKH: SH: OC

c: Russell McMurry

Heath & Lineback Engineers, Inc.
2390 CANTON ROAD-BUILDING 200-MARIETTA, GEORGIA 30066-5393
e-mail: hle@heath-lineback.com
(770) 424-1668-Fax (770) 424-2907

R-1.0: Eliminate construction the proposed 780' bridge over Squirrel Creek, lower the proposed grade from STA. 59+00 to 75+00, extend the existing triple 10'x9' culverts, complete PAR if necessary.
VE Team Savings: $4,115,890

Yes, will implement.

R-2.0: Revise the horizontal and vertical alignment of the proposed SR60 between STA. 28+00 and 48+00 to reduce the earthwork and reduce the ROW impacts.
VE Team Savings: $1,808,726

Yes, will implement. However, a design exception will be required to increase the vertical grade to 9.00%.

R-3.0: End SR60 construction 1500 feet past the intersection of yellow creek road in lieu of going 3350 feet past the intersection.(The intersection is the logical termini for the project.)
VE Team Savings: $1,197,788

Yes, will implement. However, taper to existing will end at STA. 284+00 to avoid impact to a historic property.
Revised saving: $1,183,004

R-3.1: Eliminate curb and gutter, close drainage system, median and sidewalk in transition area from STA. 284+00 to the end of project at STA. 297+50 (1350 LF)
VE Team Savings: $227,193
Revised saving: $151,462

Yes, will implement. However, station range will be from STA. 275+00 to STA. 284+00.

R-3.2: Realign the proposed roadway from STA. 265+00 to STA. 294+00 to stay on the existing roadway section without shifting west.
VE Team Savings: $750,000

No, will not implement. Because we are implementing R-3.0 and taper to existing road will end at STA. 284+00. Therefore this item cannot be implemented.

R-5.0: Reduce ROW width from 150' to 100' for entire length of project.
VE Team Savings: $5,647,228

Yes, we will implement. However, easements for construction and maintenance of slopes and drainage will be required. Construction limits footprint is wider than 100'.

R-7.0: Eliminate proposed retaining wall #1 located from STA. 48+04 left to STA. 52+09 left on SR60.
VE Team Savings: $207,315

Yes, will implement. Pending environmental acceptance at PAR meeting.

R-9.0: Construct a roundabout at Old Dahlonega Highway and Kanady Road.
VE Team Savings: $49,440

No, will not implement due to an additional cost of $123,000 for the proposed roundabout based on our calculations. See attachments 1 and 2.

R-10.0: Install corrugated median for typical section #2 limits from STA 48+50 to STA 60+50 and STA 158+85 to STA 173+50.
VE Team Savings: $13,905

Yes, will implement. However, station range will be from STA. 53+00 to STA. 68+50. 12-feet flush median will be used for other locations.

R-13.0: Construct project with 5-lane flush 12' median in lieu of 4-lane divided with 20 foot raised median.
VE Team Savings: $467,859

Yes, will implement, with an exception from STA. 53+00 to STA. 67+00 at squirrel Creek where 4' corrugated median will be used.

R-14.0: Redesign to keep new construction on existing roadway alignment STA. 100+00 to STA. 124+00, and STA. 208+00 to STA 234+00 and STA 265+00.
VE Team Savings: $1,000,000

Yes, will implement.

R-16.0: Construct sidewalk on only one side instead both sides of roadway.
VE Team Savings: $321,353

No, will not implement because routes to elementary school are required from both sides of SR 60.

R-21.0: Eliminate proposed retaining wall #2 located from STA. 54+42 left to STA. 57+45 left on SR60.
VE Team Savings: $155,103

Yes, will implement. Pending environmental acceptance at PAR meeting.

R-22.0: Eliminate realignment of side roads: Jerry Burress Rd, Wahoo Rd, Old Dahlonega HWY, and Kanady Rd.; Hopewell Rd.; Bark Camp Rd.; Elrod Rd.; Yellow Creek Rd.
VE Team Savings: $1,367,420

Yes will implement. However, Yellow Creek Road will realign due to skew.
Revised saving: $1,106,853

R-23.0: Eliminate profile change on side roads intersecting SR 60 at Twin Oaks lane, Marlow Road, Seminole Drive.
VE Team Savings: $792,419

Yes, will implement. However, Twin Oaks Lane profile will remain unchanged.
Revised saving: $524,059

Attachment 1

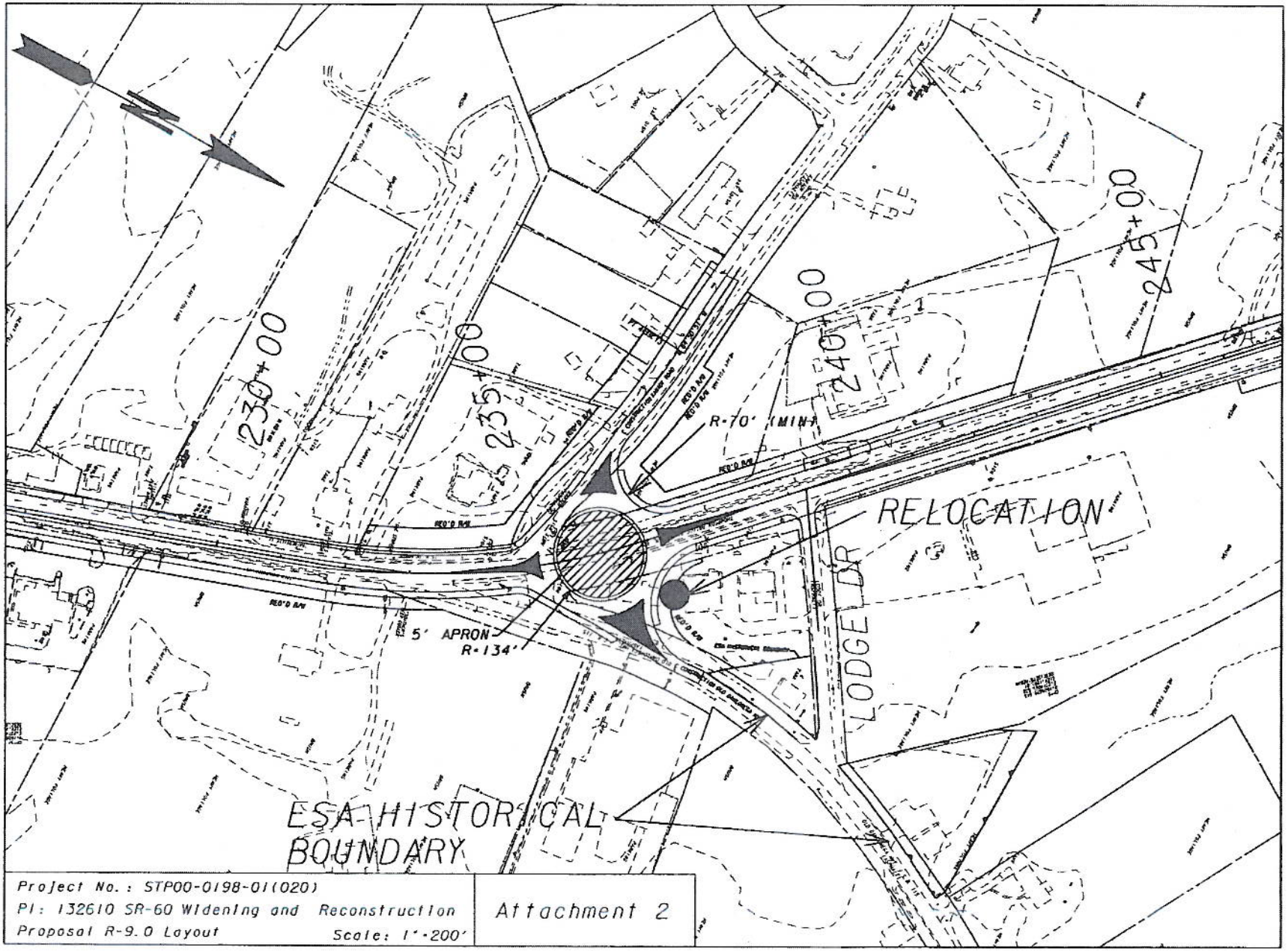
Project No.: STP00-0198-01(020)

PI: 132610

Proposal No.: R-9.0

Roundabout Option					
	Unit	QTY	Unit Cost	Total Cost	Remarks
New Traffic Signal	EA	0	0	0	
Curb, Gutter & Sidewalk	LF	880	50	44,000	
Concrete Apron	SY	970	30	29,100	144' Inside circle Diameter with 5' Apron
Concrete Raised Median	SY	760	22	16,720	Islands
144'Diameter Roundabout with landscape	SY	1	100,000	100,000	A=3.14*67^2/9
Pavement (Entire intersection)	SY	3,791	70	265,370	
R/W +Scheduling Conten.+Adm/Court Cost	SF	29,421	3.94	115,919	Based on approved RW Cost Estimate
Relocation+Scheduling Conten.+Adm/Court Cost	EA	1	166,000	166,000	Based on approved RW Cost Estimate
			Total=	**737,109**	

Original Design					
	Unit	QTY	Unit Cost	Total Cost	Remarks
New Traffic Signal	EA	1	125,000	125,000	
Curb, Gutter & Sidewalk	LF	400	50	20,000	
Concrete Apron	SF	0	0	0	
Concrete Raised Median	SY	0	0	0	
144'Diameter Roundabout with landscape	SY	0	0	0	
Pavement (Entire Intersection)	SY	5,606	70	392,420	Based on approved RW Cost Estimate
R/W +Scheduling Conten.+Adm/Court Cost	SF	19,392	4	76,404	
Relocation+Scheduling Conten.+Adm/Court Cost	EA	0		0	
			Total=	**613,824**	



Project No.: STP00-0198-01(020)
PI: 132610 SR-60 Widening and Reconstruction
Proposal R-9.0 Layout
Scale: 1"=200'

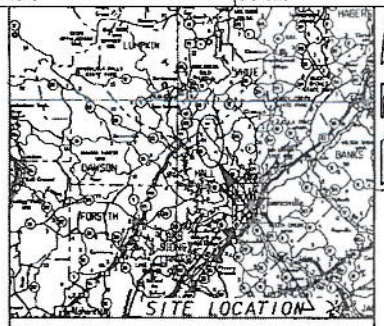
Attachment 2

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	STP00-0198-01(020)		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED
SR 60 WIDENING FROM SR 136 TO YELLOW CREEK RD
STP00-0198-01(020)
FEDERAL AID PROJECT

STATE ROUTE #60
P.I. NO. 132610



LOCATION SKETCH

NOTE:
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", "GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR "DEPARTMENT" WHERE THE CONTEXT THEREOF BEARS THE STATE HIGHWAY DEPARTMENT OF GEORGIA, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

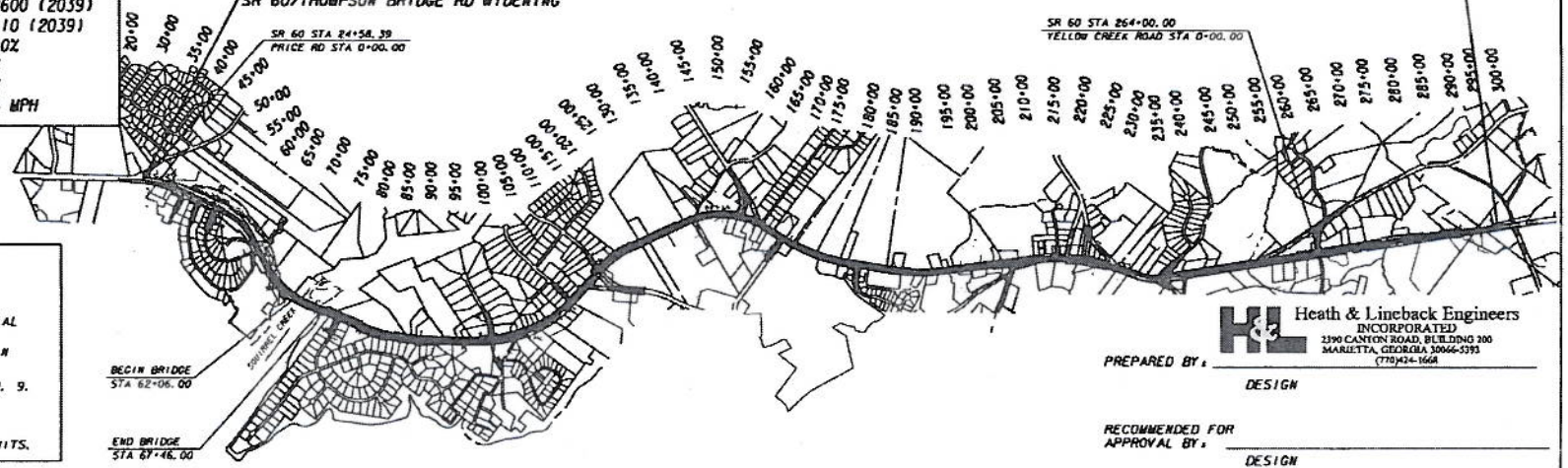
DESIGN DATA:
TRAFFIC A.D.T.: 16850 (2019)
TRAFFIC A.D.T.: 20600 (2039)
TRAFFIC D.H.V.: 2110 (2039)
DIRECTIONAL DIST: 50%
% TRUCKS: 8%
24 HR. TRUCKS %: 9%
SPEED DESIGN: 45 MPH

BEGIN PROJECT STP00-0198-01(020)
SR 60/THOMPSON BRIDGE RD WIDENING

END PROJECT STP00-0198-01(020)
SR 60/THOMPSON BRIDGE RD WIDENING

SR 60 STA 24+58.39
PRICE RD STA 0+00.00

SR 60 STA 264+00.00
YELLOW CREEK ROAD STA 0+00.00



BEGIN BRIDGE
STA 62+06.00

END BRIDGE
STA 67+46.00

LOCATION & DESIGN APPROVAL DATE:

FUNCTIONAL CLASS:
URBAN PRINCIPLE ARTERIAL

THIS PROJECT IS 100% IN HALL COUNTY AND IS 100% IN CONG. DIST. NO. 9.

PROJECT DESIGNATION:
DESIGNED IN ENGLISH UNITS.

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

LENGTH OF PROJECT COUNTY: HALL	COUNTY No. 139 Project No. STP00-0198-01(020) MILES
NET LENGTH OF ROADWAY	5.12
NET LENGTH OF BRIDGES	0.10
NET LENGTH OF PROJECT	5.22
NET LENGTH OF EXCEPTIONS	0.00
GROSS LENGTH OF PROJECT	5.22

SCALE IN FEET
0 1000 2000 4000

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

PREPARED BY: _____
DESIGN

RECOMMENDED FOR APPROVAL BY: _____
DESIGN

DATE CHIEF ENGINEER

PLANS COMPLETED	
REVISIONS	

PRECONSTRUCTION STATUS REPORT FOR PI:132610-

SR 60 FM SR 136 TO CR 158/YELLOW CREEK RD IN MURRAYVILLE

PROJ ID :	132610-	**MPO:**	Gainesville	**PRIORITY CODE:**		**MGMT LET DATE :**	10/15/2015
COUNTY :	Hall	**TIP #:**	GH-038	**DOT DIST:**	1	**MGMT ROW DATE :**	06/15/2013
LENGTH (MI)	4.31	**MODEL YR :**	2015	**CONG. DIST:**	9	**BASELINE LET DATE:**	10/20/2015
PROJ NO.:	STP00-0198-01(020)	**TYPE WORK:**	Widening	**BIKE:**	N	**SCHED LET DATE :**	1/19/2016
PROJ MGR:	Clark, Otis	**CONCEPT:**	ADD 4R	**MEASURE:**	M	**WHO LETS?:**	GDOT Let
AOHD Initials:	SSH	**PROG TYPE:**	Reconstruction/Rehabilitation	**NEEDS SCORE:**	5	**LET WITH :**	
OFFICE :	Program Delivery	**Prov. for ITS:**	N	**BRIDGE SUFF:**			
CONSULTANT:	Consultant Design (DOT contract)	**BOND PROJ :**					
SPONSOR :	GDOT						
DESIGN FIRM:	Heath & Lineback Engineers, Inc.						

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%
				Concept Development	6/11/1997	10/10/1997	100
				Concept Meeting	4/13/2000	4/13/2000	100
				PM Submit Concept Report	6/24/1997	6/24/1997	100
				Concept Report Review and Comments	9/2/1997	9/2/1997	100
				Management Concept Approval Complete	**9/17/1997**	**10/10/1997**	**100**
	9/22/2011		9/22/2011	Revise or Re-validate Approved Concept	1/15/2007		25
	5/31/2011		9/15/2011	Value Engineering Study	3/10/2011		83
				Public Information Open House Held	5/31/2007	5/31/2007	100
	10/11/2012		12/1/2011	**Environmental Approval**	**8/15/2007**		25
5/25/2012	7/19/2012	10/7/2011	12/1/2011	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0
5/20/2011	6/9/2011			Mapping	12/26/2008	1/15/2009	100
6/13/2011	7/15/2011	9/12/2011	10/14/2011	Field Surveys/SDE			0
7/19/2011	**2/25/2013**	**10/18/2011**	**5/27/2013**	**Preliminary Plans**			0
4/22/2011	9/1/2011	9/9/2011	1/19/2012	Underground Storage Tanks			0
10/29/2014	4/14/2015	1/28/2015	7/14/2015	404 Permit Obtainment			0
3/26/2013	3/26/2013	6/25/2013	6/25/2013	PFPR Inspection			0
1/30/2013	3/12/2013	5/1/2013	6/11/2013	R/W Plans Preparation			0
3/13/2013	**4/23/2013**	**6/12/2013**	**7/23/2013**	**R/W Plans Final Approval**			0
5/2/2013	5/6/2013	8/1/2013	8/5/2013	L & D Approval			0
5/22/2013	6/18/2013	8/21/2013	9/17/2013	R/W Authorization			0
9/25/2013	10/8/2013	12/25/2013	1/7/2014	Stake R/W			0
10/25/2011	6/12/2012	1/24/2012	9/11/2012	Soil Survey			0
5/7/2013	**2/17/2014**	**8/6/2013**	**5/19/2014**	**Final Design**			0
3/18/2014	3/18/2014	6/17/2014	6/17/2014	FFPR Inspection			0
3/26/2014	4/8/2014	6/25/2014	7/8/2014	Submit FFPR Responses (OES)			0

PROGRAMMED FUNDS

Activity	Approved	Proposed	Cost	Fund	Status	Date Auth
PE	1997	1997	6,343,154.08	Q24	AUTHORIZED	1/13/1997
ROW	2012	2013	4,281,669.51	L200	PRECST	
CST	2017	2017	63,166,617.72	L200	PRECST	

Cost Estimate Amount

Activity	Amount	Date
PE	$6,343,154.08	
ROW	$3,802,000.00	11/30/2006
CST	$52,855,000.00	11/15/2007

STIP AMOUNTS

Activity	Cost	Fund
PE	0.00	Q24
ROW	4,625,714.34	L200
CST	0.00	L200

District Comments

SCHEDULE Update needed: ROW FY14, LET FY17- Resolving Logical Termini Issues

PDD: MAINT TOOK CARE OF IMMEDIATE NEED. 8/6/98.
Bridge: NO BRIDGE REQUIRED
Design: CONCPT VAL/PLANNING REVIEWING LOGICAL TERMINI ISSUES
EIS: DEA|NotApvd|OnSched|Pugh(1.6.11)
LGPA: REQ HALL DO UTIL 3-96|GAINESVILLE REF DO UTL 9-19-00|RESCISSION LETTER SENT TO GAINESVILLE & HALL 11-4-05.
Location:
Prog. Develop: RW STIP AMENDMENT #15 6-2010
Programming: WILL NOT QUALIFY FOR 33P|PR2/P=2-25-97|#1 1-06|#2 8-06|#3 3-2011
ROW: R/W funding drawndown 4/22/09 (FJW)
Traffic Op: RJC:REVWD S/M PLANS TO DIST 10-21-98 $-*!
Utility: OCD SUE,Tk3,Ct1
Engr Services: VE Scheduled June 20-23, 2011
EMG: RECST/REHAB(WIDENING)FLY 6398/05;C=M/S/D AS PER CHUCK HASTY

Prel. Parcel CT:	134	**Total Parcel in ROW System:**		**Cond. Filed:**		**Acquired by:**	DOT
Under Review:		**Options - Pending:**		**Relocations:**		**Acquisition MGR:**	
Released:		**Condemnations- Pend:**		**Acquired:**		**R/W Cert Date:**	

DEEDS CT: