



# Heath & Lineback Engineers

I N C O R P O R A T E D

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February 15, 2011

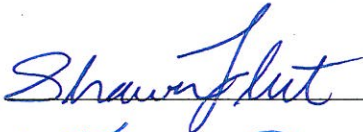
Mr. Bobby Hilliard, P.E.  
Georgia Department of Transportation  
One Georgia Center  
600 West Peachtree Street, NW, 25<sup>th</sup> Floor  
Atlanta, GA 30308  
Attn: Mr. Robert Murphy

RE: NH000-003-03-(053) – Clarke County  
US78/SR10 (Atlanta Highway) over SR 10 Loop Interchange Improvement  
PI No. 122890  
**Consultant QC/QA Certification Letter**


Dear Mr. Hilliard:

This letter is to certify that the below specified milestone/contract document has been prepared in accordance with GDOT standards and has been confirmed by review that the presentation and information is accurate based on Heath and Lineback Engineers internal quality control and quality assurance policies, procedures and measures.

Milestone/Contract Document: **Revised Concept Report**

PM signature:  Date: 2-15-11

QC signature:  Date: 2/15/11

QA signature:  Date: 2/15/11

Very truly yours,  
Heath & Lineback Engineers, Inc.

  
Shawn Fleet, P.E.  
Project Manager

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE**      NH000-0003-03-(053), Clarke County      **OFFICE:** Program Delivery  
              *P.I. No.: 122890*  
              *US78/SR10 AT SR10 Loop Interchange*      **DATE:** February 15, 2011

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

**TO**          *Brent A. Story, P.E., - State Design Policy Engineer*  
              *Attn: Dave Peters*

**SUBJECT**   **Revised Project Concept Report**

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The following are the reasons for the changes in the concept:

- The approved typical section for US 78 (Atlanta Highway) provides 12 ft travel lanes. The typical section for Atlanta Highway is to be revised to reduce lane widths from 12 ft to 11 ft, due to a Value Engineering Study Implementation.
- The approved typical sections provide a 4 ft bike lane along both sides of US 78 (Atlanta Highway). The typical section for Atlanta highway is to be revised to remove the 4 ft bike lanes due to a Value Engineering Study Implementation.
- The approved typical sections along Huntington Road, Jennings Mill Road and all minor side roads provide 16 ft wide urban shoulders. Typical sections for Huntington Road, Jennings Mill Road and all minor side roads are to be revised to reduce the shoulder width from 16 ft to 10 ft, due to a Value Engineering Study Implementation. This is accomplished by reducing the width of the 6 ft grass buffer area to 2 ft and the 2.5 ft grass area outside the sidewalk to 6 inches.

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

*Distribution:*

*Glenn Bowman - State Environmental Administrator*  
*Paul Liles - State Bridge Engineer*  
*Cindy VanDyke - State Transportation Planning Administrator*

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**REVISED PROJECT CONCEPT REPORT**

Project Number: NH000-0003-03-(053)

County: Clarke

P. I. Number: 122890

Federal Route Number: 78

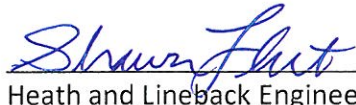
State Route Number: 10 & 10 Loop

**Changes and reasons for changes:**

Typical Sections: The typical section for Atlanta Highway is to be revised to remove the 4 ft bike lanes and reduce the lane widths to 11 ft. The typical section for Huntington Road, Jennings Mill Road and all minor side roads will be revised to have 10 ft urban shoulders. These changes are due to a Value Engineering Implementation.

**Submitted for approval:**

DATE 2-15-2011



Heath and Lineback Engineers

DATE \_\_\_\_\_

Office Head

DATE \_\_\_\_\_

Project Manager

**Recommendation for approval:**

DATE \_\_\_\_\_

State Environmental Administrator

DATE \_\_\_\_\_

State Bridge Design Engineer

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

DATE \_\_\_\_\_

State Transportation Planning Administrator

## REVISED PROJECT CONCEPT REPORT

PROJECT NO.: NH000-0003-03-(053)  
 CLARKE COUNTY  
 PI NO.: 122890

### Need & Purpose:

The proposed project was identified by and is a component of the Madison-Athens-Clarke County-Oconee Regional Transportation Study (MACORTS) adopted in September 1997. This interchange is significant regionally in that it provides access to and between SR 10 Loop, which is a perimeter route around the city of Athens, from Atlanta Highway (SR 10/US 78), which provides access to the Georgia Square Mall located west of the interchange. It also serves a wide variety of other shopping, eating, and employment opportunities in the immediate vicinity. The primary need of the project is mobility; however, a secondary need of safety would also be addressed by the proposed project.

Roadways are rated for operational effectiveness using a level-of-service (LOS). LOS is a standard means of classifying traffic conditions associated with various traffic volume levels and traffic flow conditions. There are six levels of service at which a roadway can operate, represented by the letters "A" through "F". Each level is defined by a maximum value for the ratio of traffic volume (V) to facility capacity (C). A LOS of A is when volume is well below capacity and traffic is flowing freely. LOS of "B" is when traffic flow is steady but the presence of other vehicles begins to be noticeable. A LOS of "C" allows for steady traffic flow, but speeds and maneuverability are more closely controlled by the higher volumes. LOS of "D" is approaching an unsteady flow in which speed and maneuverability are severely restricted. LOS of "E" is when traffic flow is reduced to a slow but relatively uniform speed, and traffic volume is equal to or nearly equal to capacity and maneuverability is extremely difficult. The lowest LOS of "F" is when the volume greatly exceeds the capacity and lengthy delays occur.

The build year (2011) average daily traffic (ADT) is 56,150 along Atlanta Highway. The projected ADT for design year (2031) is 78,250. This is an increase of 22,100 vehicles per day, a 28 percent increase in traffic volume. SR 10 Loop would see an increase to 50,500 VPD by 2031, from 2011 projected counts of 36,000 VPD. The current LOS, no build LOS, and Build LOS is shown in the below table for each intersection.

**Weekday Peak Hour Levels of Service**

Intersection	No-Build 2011		No-Build 2031		Build 2011		Build 2031	
	AM	PM	AM	PM	AM	PM	AM	PM
Huntington Road at Atlanta Highway	B	D	C	F	E	C	D	C
Southbound Loop Ramp at Atlanta Highway	B	D	D	F	A	B	A	B
Northbound Loop Ramp at Atlanta Highway	A	C	D	F	A	A	A	A
Jennings Mill Road at Atlanta Highway	F/B*	F/E*	F*	F*	A	B	A	B

\*Northbound/westbound left-turn movements for Stop sign control

Significant accident issues also exist at this interchange. In 2003, 2004, and 2005 there were 103, 63, and 67 accidents respectively. While there have been no fatalities there have been

many injuries. In 2003, 2004, and 2005 there were 28, 27, and 20 injuries respectively. Below the Accident Rates per 100 Million Vehicle Miles table shows that accident rates and injury rates at SR 10 Loop and Atlanta Highway are higher than the statewide averages for similar roadways in Georgia.

**Accident Rates per 100 Million Vehicle Miles**

Year	SR 10/ Atlanta Hwy Accident Rate	SR 10/ Atlanta Hwy Injury Rate	SR 10/ Atlanta Hwy Fatality Rate	Statewide Accident Rate	Statewide Injury Rate	Statewide Fatality Rate
2003	1,648	448	0.00	613	243	1.27
2004	921	395	0.00	637	247	1.31
2005	987	295	0.00	727	278	1.87

The SR 10 & US 78 (Eastbound) over SR 10 Loop (structure ID 059-0020-0) has a sufficiency rating of 83.32. This bridge should be replaced because:

1. There is shear cracking in the three intermediate bents. These bents were repaired previously and must now be replaced.
2. The deck has cracking and deterioration throughout the structure. The metal stay in place forms under the widening section have severe rust, indicating problems within the deck near these rusted areas.
3. The edge beams are shallow and need to be replaced throughout the structure.

The SR 10 & US 78 (Westbound) over SR 10 Loop (structure ID 059-0021-0) has a sufficiency rating of 44.66. This bridge should be replaced because:

1. There is shear cracking in the three intermediate bents. The bents were repaired previously and must now be replaced.
2. The deck has cracking and deterioration throughout the structure and should be replaced.
3. The edge beams are shallow and need to be replaced throughout the structure.

The new loop ramps and additional lanes provided by this project would facilitate the flow of traffic to and from SR 10 Loop to Atlanta Highway as well as the through traffic on Atlanta Highway by eliminating many conflicting turning movements. The relocated Jennings Mill Road provided by this project would improve traffic safety and will facilitate the flow of traffic to and from Jennings Mill Road and a large shopping center to Atlanta Highway by adding a traffic signal and increasing the distance between the intersection of the northbound exit ramp and the Jennings Mill Road along Atlanta Highway.

**Project Location:**

This project is located in the city of Athens in southwest Clark County for a total length of 0.82 miles and beginning Mile Log is 2.68 and End Mile Log is 3.57.

**Description of the approved concept:**

The approved concept consists of improvements to the SR 10 Loop/Atlanta Highway (SR 10/US 78) interchange in Athens, Georgia and the widening of Atlanta Highway in the interchange vicinity for a total project length of .82 mile.

SR 10 Loop is a four lane facility with a forty-foot depressed median and a 55 mph posted speed limit. Atlanta Highway (SR 10/US 78) consists of 4 to 6 lanes, urban shoulders and a variable width raised median and depressed median. The medians range from 8' to 40' wide. The posted speed limit on Atlanta Highway (SR 10/US 78) is 45 mph.

Huntington Road and Jennings Mill Road have posted speeds of 25 mph and 35 mph, respectively, with Huntington Road being 2 to 4 lanes, with urban shoulder and a variable width raised median and Jennings Mill Road being a 2 lane roadway with six foot rural shoulders.

Accident data within the limits of the project indicate a significant problem on Atlanta Highway. Continuous commercial development along Atlanta Highway corridor will increase traffic volumes to 78,250 vehicles per day (VPD) by the year 2031, from year 2011 counts of 56,150 VPD. SR 10 Loop will see an increase of nearly 14,500 VPD to 50,500 VPD by year 2031.

The approved concept proposes construction of a new loop ramp from Atlanta Highway westbound to SR 10 Loop southbound, realigning the existing loop ramp from Atlanta Highway eastbound to SR 10 Loop northbound, and widening Atlanta Highway by adding four lanes and lengthening several turn lanes. In addition, the project includes improvements to the Huntington Road and Atlanta Highway intersection and relocating the Jennings Mill Road intersection.

Atlanta Highway will be widened to a 7 to 8 lane urban facility with 8' to 40' raised median, 4' bike lanes, 5' sidewalks, 16' shoulders and left turn lanes added or modified at various locations. SR 10 Loop will remain four lanes with a 40' depressed median. Improvements to SR 10 Loop include adding a deceleration / storage lane to the southbound exit ramp, adding a southbound entrance loop ramp with an acceleration lane on SR 10 Loop, and realigning the northbound loop ramp and the acceleration lane on SR 10 Loop. Huntington Road will be widened to add left and right turn lanes in both directions with 5' sidewalks and 16' shoulders. Jennings Mill Road intersection with Atlanta Highway will be relocated approximately 300' east of its current location. Relocated Jennings Mill Road will consist of 2 lanes with curb and gutter, 5' sidewalks, and 16' shoulders. All lanes within the project are to be designed 12 ft wide.

DESIGN SPEEDS	
Atlanta Highway	45 mph
Jennings Mill Road	35 mph
Huntington Road	25 mph
SR 10 Loop	55 mph
SR 10 Loop - Entrance Loop Ramps	30 mph
SR 10 Loop - Exit Ramps	45 mph

**PDP Classification:** Major  Minor

**Federal Oversight:** Full Oversight (  ), Exempt(X), State Funded (  ), or Other (  )

**Functional Classification:** Urban Principal Arterial

**U. S. Route Number(s):** 78 **State Route Number(s):** 10

**Traffic (AADT) as shown in the approved concept:**

Atlanta Hwy	Base Year: <u>(2006) - 60,800</u>	Design Year: <u>(2026) - 85,200</u>
SR 10 Loop	Base Year: <u>(2006) - 34,600</u>	Design Year: <u>(2026) - 48,400</u>

**Updated Traffic Data (AADT):**

Atlanta Hwy	Base Year: <u>(2011) - 56,150</u>	Design Year: <u>(2031) - 78,250</u>
SR 10 Loop	Base Year: <u>(2011) - 36,000</u>	Design Year: <u>(2031) - 50,500</u>

**Approved Programmed/Schedule:**

P.E. 1999 R/W: 2011 Construction: 2018

**VE Study Required** Yes (X) No (  )

**Benefit/Cost Ratio** Not Available

**Is the project located in an Ozone Non-Attainment area?**  Yes  No

**Is the project in a PM2.5 Non-Attainment area?**  Yes  No

**Approved features:**

- The approved typical section for US 78 (Atlanta Highway) provides 12 ft travel lanes.
- The approved typical sections provide 4 ft bike lanes along both sides of US 78 (Atlanta Highway).
- The approved typical sections provide 16 ft wide urban shoulders along Huntington Road, Jennings Mill Road and all minor side road.

**Proposed features:**

- The typical section for Atlanta Highway is to be revised to reduce lane widths from 12 ft to 11 ft due to a Value Engineering Study Implementation.
- The typical section for Atlanta Highway is to be revised to remove the 4 ft bike lanes due to a Value Engineering Study Implementation.
- Typical sections for Huntington Road, Jennings Mill Road and all minor side roads are to be revised to reduce the shoulder width from 16 ft to 10 ft, due to a Value Engineering Study Implementation. This is accomplished by reducing the width of the 6 ft grass

buffer area to 2 ft and the 2.5 ft grass area outside the sidewalk to 6 inches.

**Reasons for changes:**

ROW is the highest cost item on this project. Reducing the pavement section widths and shoulder widths will result in significant cost savings (pavement and ROW) and also reduce / minimize the amount of new ROW required to construct the project. The bike lane would not tie to any proposed bike routes designated by GDOT or Athens-Clarke County.

**Potential Environmental Impacts of Proposed Revision:**

Since the proposed revision will reduce the overall foot print of the project, environmental effects are also reduced.

- **Have Proposed Revisions Been Reviewed by Environmental Staff** (X) YES ( ) NO
- **Environmental Responsibilities (Studies/Documents/Permits):** GDOT

**Revised cost estimates:**

- Construction
  - Base Construction Cost  
\$17,914,809.66
  - Engineering and Inspection (5%)  
\$895,740.48
  - Fuel & Asphalt Adjustment  
\$3,948,359.75
  - Total Construction Cost (with NO construction contingencies)  
\$22,758,909.89
- Right-of-Way  
\$8,238,000
- Utilities (Reimbursable)  
\$0,000,000
- Utility Contingencies  
\$0,000,000

**Recommendation:** It is recommended that the proposed revision to the concept be approved for implementation.

**Attachments:**

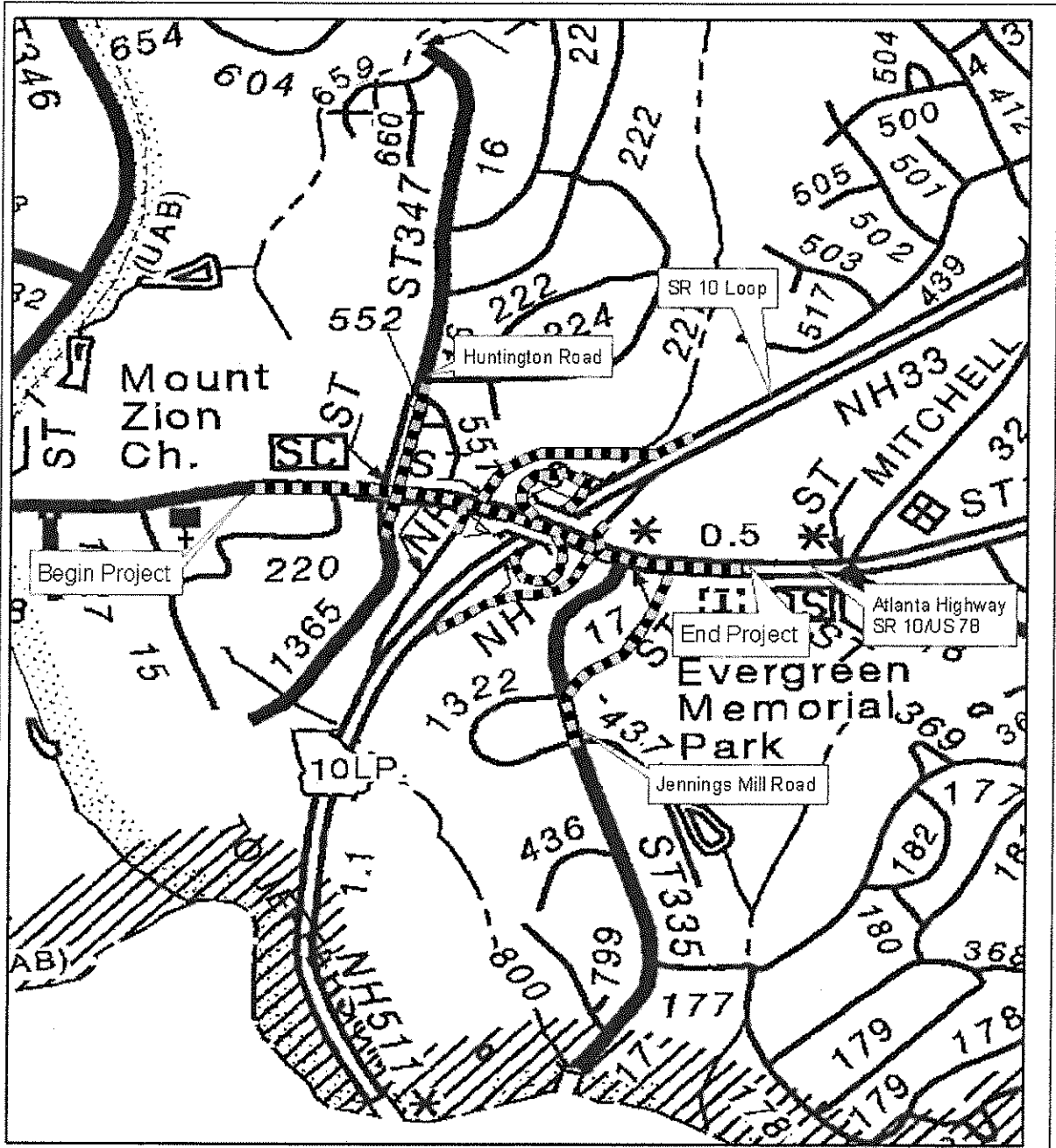
1. Location map
2. Roadway Typical Section
3. Cost Estimate Summary
4. Construction Cost Estimate
5. Fuel & Asphalt Adjustment
6. Right of Way Cost Estimate
7. VE Study Implementation Letter
8. Traffic Diagram



**Concur:** \_\_\_\_\_  
Director of Engineering

**Approve:** \_\_\_\_\_  
Chief Engineer

**Date:** \_\_\_\_\_



	Clarke County Project NH-003-3(53) PI No. 122890	<b>Project Location Map</b>  Scale 0 570 1,140 1,710 Feet	
	SR 10 Loop/Atlanta Highway Interchange Improvements		





# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## ----- INTERDEPARTMENT CORRESPONDENCE

**FILE PROJECT No.**  ,  **OFFICE**   
 **DATE**

**P.I. No.**

**FROM**

**TO** Ronald E. Wishon, Project Review Engineer

**SUBJECT REVISIONS TO PROGRAMMED COSTS**

**PROJECT MANAGER**

**MNGT LET DATE**

**MNGT R/W DATE**

**PROGRAMMED COST (TPro W/OUT INFLATION)**

**CONSTRUCTION** \$

**RIGHT OF WAY** \$

**UTILITIES** \$

**LAST ESTIMATE UPDATE**

**DATE**

**DATE**

**DATE**

**REVISED COST ESTIMATES**

**CONSTRUCTION\*** \$

**RIGHT OF WAY** \$

**UTILITIES** \$

\* Costs contain  % Engineering and Inspection

**REASON FOR COST INCREASE**

**CONTINGENCY SUMMARY**

Construction Cost Estimate:	\$ 17,914,809.66	(Base Estimate)
Engineering and Inspection:	\$ 895,740.48	(Base Estimate x 5 %)
Total Fuel Adjustment	\$ 1,456,682.48	(From attached worksheet)
Total Liquid AC Adjustment	\$ 2,491,677.27	(From attached worksheet)
<b>Construction Total:</b>	<b>\$ 22,758,909.89</b>	

**REIMBURSABLE UTILITY COST**

Utility Owner	Reimbursable Cost
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
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Attachments

c: Genetha Rice-Singleton, State Program Control Administrator

JOB ESTIMATE REPORT

JOB NUMBER : 122890 SPEC YEAR: 01

DESCRIPTION: NH000-0003-03(053) - CLARKE  
US78/SR10 (ATLANTA HWY) & SR 10 LOOP INTERCHANGE IMPROVEMENT

ITEMS FOR JOB 122890

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000	LS		TRAFFIC CONTROL - 122890	1.000	250000.00	250000.00
0007	150-5010	EA		TRAF CTRL, PORTABLE IMPACT ATTN	7.000	7694.05	53858.39
0010	153-1300	EA		FIELD ENGINEERS OFFICE TP 3	1.000	79134.11	79134.11
0015	201-1500	LS		CLEARING & GRUBBING - 122890	1.000	300000.00	300000.00
0020	208-0100	CY		IN PLACE EMBANKMENT	125114.000	5.84	731252.54
0025	318-3000	TN		AGGR SURF CRS	3500.000	14.68	51402.82
0030	433-1100	SY		REF CONC APPR SL/INCL CURB	823.000	189.43	155908.08
0035	441-0104	SY		CONC SIDEWALK, 4 IN	7618.000	22.63	172459.79
0038	441-0301	EA		CONC SPILLWAY, TP 1	11.000	2036.25	22398.83
0040	441-0302	EA		CONC SPILLWAY, TP 2	1.000	2075.90	2075.91
0045	441-0740	SY		CONC MEDIAN, 4 IN	7311.000	23.46	171563.80
0050	441-4020	SY		CONC VALLEY GUTTER, 6 IN	49.000	35.35	1732.46
0055	441-6222	LF		CONC CURB & GUTTER/ 8"X30"TP2	19013.000	10.29	195706.51
0056	441-6740	LF		CONC CURB & GUTTER/ 8"X30" TP7	1535.000	11.46	17603.63
0060	456-2012	GLM		INTENT. RUMB. STRIPS - GRND-IN-PL (CONT)	1.400	764.77	1070.68
0065	643-0010	LF		FIELD FENCE WOVEN WIRE	3244.000	5.41	17564.22
0075	620-0100	LF		TEMP BARRIER, METHOD NO. 1	7560.000	20.26	153194.10
0080	634-1200	EA		RIGHT OF WAY MARKERS	192.000	82.85	15908.06
0082	436-1000	LF		ASPH CONC CURB - 4 IN	4584.000	11.81	54180.36
0085	641-1100	LF		GUARDRAIL, TP T	464.000	37.82	17552.83
0090	641-1200	LF		GUARDRAIL, TP W	9176.000	13.03	119629.44
0095	641-5001	EA		GUARDRAIL ANCHORAGE, TP 1	8.000	651.86	5214.90
0100	641-5012	EA		GUARDRAIL ANCHORAGE, TP 12	26.000	1800.11	46802.87
0105	643-8200	LF		BARRIER FENCE (ORANGE), 4 FT	5568.000	1.50	8363.53
0110	500-3101	CY		CLASS A CONCRETE	28.000	422.44	11828.39
0115	511-1000	LB		BAR REINF STEEL	1992.000	0.81	1617.05
0117	610-9099	LS		REM WINGWALLS/PARAPETS, STA - 168+95 LT, SR 10 LOOP	1.000	2500.00	2500.00
0125	550-1180	LF		STM DR PIPE 18", H 1-10	10093.000	26.05	262925.68
0126	550-1181	LF		STM DR PIPE 18", H 10-15	386.000	30.67	11842.28
0127	550-1183	LF		STM DR PIPE 18", H 20-25	92.000	37.42	3442.68
0130	550-1240	LF		STM DR PIPE 24", H 1-10	2178.000	33.92	73888.45
0131	550-1241	LF		STM DR PIPE 24", H 10-15	229.000	30.90	7077.98
0132	550-1243	LF		STM DR PIPE 24", H 20-25	188.000	48.63	9143.94
0135	550-1300	LF		STM DR PIPE 30", H 1-10	739.000	43.60	32222.74
0140	550-1360	LF		STM DR PIPE 36", H 1-10	516.000	51.02	26327.67
0141	550-1361	LF		STM DR PIPE 36", H 10-15	222.000	62.51	13878.70
0143	550-1480	LF		STM DR PIPE 48", H 1-10	87.000	69.51	6047.80
0145	550-4215	EA		FLARED END SECT 15 IN, ST DR	1.000	434.29	434.30
0150	550-4218	EA		FLARED END SECT 18 IN, ST DR	13.000	474.64	6170.33
0155	550-4274	EA		FLARED END SECT 24 IN, ST DR	12.000	627.20	7526.49
0160	550-4230	EA		FLARED END SECT 30 IN, ST DR	4.000	665.25	2661.01
0165	550-4236	EA		FLARED END SECT 36 IN, ST DR	5.000	939.44	4697.25
0170	668-1100	EA		CATCH BASIN, GP 1	110.000	1980.10	217811.86
0175	668-1110	LF		CATCH BASIN, GP 1, ADDL DEPTH	153.000	154.90	23700.90

STATE HIGHWAY AGENCY

JOB ESTIMATE REPORT

0176	668-1200	EA		CATCH BASIN, GP 2	6.000	2243.72	13462.33
0177	668-1210	LF		CATCH BASIN, GP 2, ADDL DEPTH	37.000	225.62	8348.28





Untitled

Code	Description	Quantity	Unit	Rate	Total
0415	165-0030				
0420	165-0041				
0422	165-0087				
0425	165-0070				
0430	165-0101				
0435	165-0105				
0440	167-1000				
0445	167-1500				
0450	171-0030				
0452	441-0204				
0455	603-2180				
0460	603-7000				
0465	700-6910				
0470	700-7000				
0475	700-7010				
0480	700-8000				
0485	700-8100				
0490	710-9000				
0495	715-2200				
0500	716-2000				
0505	615-1200				
0510	647-2160				
0515	647-2170				
0520	682-6222				
0525	682-6233				
0530	935-1113				
0535	935-1511				
0540	935-3101				
0545	935-3602				
0550	935-4010				
0555	935-6562				
0557	935-8000				
0560	500-2110				
0565	500-3200				
0570	515-2020				
0575	516-1100				
0580	621-3021				
0585	621-3022				
0587	621-3125				
0590	621-4021				
0595	621-4022				
0600	621-4023				
0605	621-4062				
0610	621-4063				
0615	615-1200				
0620	636-1041				
0625	639-4004				
0630	639-4014				
0635	647-1000				
0640	647-1000				
0645	647-1000				
0650	647-1000				
0655	682-6233				
0660	938-1100				
0665	938-1200				
0670	938-1210				
0675	636-1020				
0680	636-1033				
LF	MAINT OF TEMP SILT FENCE, TP C	25095.000		0.53	13463.72
LF	MAINT OF CHECK DAMS - ALL TYPES	20200.000		0.62	12674.69
EA	MAINT OF SILT CONTROL GATE, TP 3	22.000		94.06	2069.54
LF	MAINT OF BALED STRAW EROSION CHECK	139.000		1.58	220.33
EA	MAINT OF CONST EXIT	24.000		415.28	9966.77
EA	MAINT OF INLET SEDIMENT TRAP	93.000		44.95	4181.17
EA	WATER QUALITY MONITORING AND SAMPLING	2.000		525.82	1051.64
MO	WATER QUALITY INSPECTIONS	28.000		390.29	10928.24
LF	TEMPORARY SILT FENCE, TYPE C	50190.000		2.57	129063.59
SY	PLAIN CONC DITCH PAVING, 4 IN	8318.000		24.53	204090.95
SY	STN DUMPED RIP RAP, TP 3, 12"	295.000		33.16	9784.23
SY	PLASTIC FILTER FABRIC	295.000		3.21	947.46
AC	PERMANENT GRASSING	39.000		574.54	22407.19
TN	AGRICULTURAL LIME	121.000		45.55	5512.26
GL	LIQUID LIME	98.000		18.55	1818.19
TN	FERTILIZER MIXED GRADE	39.000		410.63	16014.74
TN	FERTILIZER NITROGEN CONTENT	1950.000		1.71	3336.12
LB	PERM SOIL REINFORCING MAT	200.000		4.36	873.53
SY	BITUM TRTD KOVING, WATERWAYS	551.000		1.10	608.57
SY	EROSION CONTROL MATS, SLOPES	20226.000		0.89	18109.75
LF	DIRECTIONAL BORE - 3"	1055.000		10.37	10945.23
EA	PULL BOX, PB-6	11.000		1116.05	12276.58
EA	PULL BOX, PB-7	4.000		1890.63	7562.55
LF	CONDUIT, NONMETL, TP 2, 2 IN	1820.000		5.26	9583.52
LF	CONDUIT, NONMETL, TP 3, 2 IN	925.000		3.50	3240.77
LF	OUT PLNT FBR OPT CBL, LOOSE TB, SM, 24 FBR	3065.000		2.15	6615.96
LF	OUT PLNT FBR OPT CBL, DROP, SM, 6 FBR	60.000		3.24	194.85
EA	FIBER OPTIC CLOSURE, UNDRGRD, 6 FIBER	4.000		612.11	2448.46
EA	FBR, OP. CLOS., FDC PRE-TERM., TYP. A, 6	4.000		605.12	2420.51
EA	FIBER OPTIC SPLICE, FUSION	14.000		62.12	869.74
EA	EXT TRNSVR, DRP&RPT, 1310SM, (SIGNAL JOBS)	4.000		1926.36	7705.47
LS	TESTING	1.000		3000.00	3000.00
LF	CONCRETE PARAPET, SPCL DES	1329.000		259.86	345366.49
CY	CL 8 CONC	25.000		300.52	7513.11
LF	GALV STEEL PIPE HDRAIL, 2", ROUD	155.000		49.46	7666.38
LF	ALUM HANDRAIL, STD 3626	1329.000		50.21	66733.14
LF	CONCRETE BARRIER, TYPE 21	303.000		184.00	55752.00
LF	CONCRETE BARRIER, TYPE 22	255.000		362.00	92310.00
LF	CONC BARRIER, TP 25S, MODIFIED	268.000		354.22	94932.15
LF	CONCRETE SIDE BARRIER, TY 2A	676.000		373.41	252428.83

STATE HIGHWAY AGENCY

DATE : 01/26/2011  
PAGE : 4

JOB ESTIMATE REPORT

0595	621-4022			562.73	500267.49
0600	621-4023			700.22	605691.82
0605	621-4062			425.50	19147.50
0610	621-4063			631.50	94093.50
0615	615-1200			12.21	3408.06
0620	636-1041			35.54	4406.99
0625	639-4004			5492.26	21969.06
0630	639-4014			6417.22	77006.73
0635	647-1000			100000.00	100000.00
0640	647-1000			100000.00	100000.00
0645	647-1000			100000.00	100000.00
0650	647-1000			100000.00	100000.00
0655	682-6233			3.73	2083.16
0660	938-1100			5801.14	110221.66
0665	938-1200			362.03	362.03
0670	938-1210			482.05	1446.17
0675	636-1020			12.05	17816.76
0680	636-1033			19.30	4440.18
LF	CONCRETE SIDE BARRIER, TY 2B	889.000		562.73	500267.49
LF	CONCRETE SIDE BARRIER, TY 2C	865.000		700.22	605691.82
LF	CONCRETE SIDE BARRIER, TY 6B	45.000		425.50	19147.50
LF	CONCRETE SIDE BARRIER, TY 6C	149.000		631.50	94093.50
LF	DIRECTIONAL BORE - 5 IN	279.000		12.21	3408.06
SF	HWY SIGNS, TP 2MAT, REFL SH TP 9	124.000		35.54	4406.99
EA	STRAIN POLE, TP IV	4.000		5492.26	21969.06
EA	STR POLE, TP 4, INCL LUMIN. ARM	12.000		6417.22	77006.73
LS	TRAF SIGNAL INSTALLATION NO - 1	1.000		100000.00	100000.00
LS	TRAF SIGNAL INSTALLATION NO - 2	1.000		100000.00	100000.00
LS	TRAF SIGNAL INSTALLATION NO - 3	1.000		100000.00	100000.00
LS	TRAF SIGNAL INSTALLATION NO - 4	1.000		100000.00	100000.00
LF	CONDUIT, NONMETL, TP 3, 2 IN	558.000		3.73	2083.16
EA	INT VIDEO DET SYS ASMBLY, TP A	19.000		5801.14	110221.66
EA	PROGRAMMING MONITOR, TYPE A	1.000		362.03	362.03
EA	OUTPUT EXPANSION MODULE, TP A	3.000		482.05	1446.17
SF	HWY SGN, TP1MAT, REFL SH TP3	1478.000		12.05	17816.76
SF	HWY SIGNS, TP1MAT, REFL SH TP 9	230.000		19.30	4440.18

Untitled

ITEM	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
0684	636-2070				
0685	636-2080				
0689	638-1001				
0690	638-1001				
0694	638-1001				
0695	638-1001				
0700	653-0120				
0705	653-0130				
0710	653-1501				
0715	653-1502				
0720	653-1704				
0725	653-1804				
0730	653-3501				
0735	653-6004				
0740	653-6006				
0745	654-1001				
0750	654-1003				
0755	432-0207				
0760	432-0214				
0765	432-5010				
0770	446-1100				
LF	GALV STEEL POSTS, TP 7	1644.000			11148.64
LF	GALV STEEL POSTS, TP 8	144.000			1283.04
LS	STR SUPPORT OVHD SIGN, TP I, STA 1	1.000			61100.00
LS	STR SUPPORT OVHD SIGN, TP I, STA 2	1.000			61100.00
LS	STR SUPPORT OVHD SIGN, TP I, STA 3	1.000			61100.00
LS	STR SUPPORT OVHD SIGN, TP I, STA 4	1.000			61100.00
EA	THERM PVMT MARK, ARROW, TP 2	71.000			61100.00
EA	THERM PVMT MARK, ARROW, TP 3	9.000			4792.92
LF	THERMO SOLID TRAF ST 5 IN, WHI	32815.000			706.27
LF	THERMO SOLID TRAF ST, 5 IN YEL	35837.000			8203.75
LF	THERMO SOLID TRAF STRIPE, 24", WH	1005.000			8959.25
LF	THERMO SOLID TRAF STRIPE, 8", WH	9793.000			3538.65
GLF	THERMO SKIP TRAF ST, 5 IN, WHI	24805.000			15940.16
SY	THERM TRAF STRIPING, WHITE	2057.000			3807.82
SY	THERM TRAF STRIPING, YELLOW	226.000			5634.62
EA	RAISED PVMT MARKERS TP 1	1921.000			674.88
EA	RAISED PVMT MARKERS TP 3	70.000			5527.62
SY	MILL ASPH CONC PVMT/ 1.75" DEP	4074.000			270.82
SY	MILL ASPH CONC PVMT, 3.5" DPTH	29059.000			4074.00
SY	MILL ASPH CONC PVMT, VARB DEPTH	8110.000			48767.69
LF	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	14923.000			21738.69
					40638.16

ITEM TOTAL 17914809.66  
 INFLATED ITEM TOTAL 17914809.66

TOTALS FOR JOB 122890  
 ESTIMATED COST: 17914809.70  
 CONTINGENCY PERCENT ( 0.0 ): 0.00  
 ESTIMATED TOTAL: 17914809.70

P.I. Number 122890

County CLARKE

Date 2/11/2011

Project Number NH000-0003-03(053)

**Special Provision, Section 109-Measurement and Payment  
FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)**

ENTER FPL DIESEL	3.254
ENTER FPM DIESEL	7.322

ENTER FPL UNLEADED	2.99
ENTER FPM UNLEADED	6.7275

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

<b>INCREASE ADJUSTMENT</b>
<b>125.00%</b>

<b>INCREASE ADJUSTMENT</b>
<b>125.00%</b>

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)		0.29		0.15		
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)	56951.000	0.29	16515.79	0.24	13668.24	
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)	3646.000	2.90	10573.40	0.71	2588.66	
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	85375.000	2.90	247587.50	0.71	60616.25	
PCC Pavement paid as specified by the square yard under Section 430 (SY)	25599.000	0.25	6399.75	0.20	5119.80	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211	224.00	34.23	7.6675	8.00	61.34	1.50	11.50	
Class __Concrete (CY) Section 500	25.00	300.52	7.5130	8.00	60.10	1.50	11.27	Class B
Class __Concrete (CY) Section 500	37.00	422.44	15.6303	8.00	125.04	1.50	23.45	Class A
Class __Concrete (CY) Section 500	418.00	193.16	80.7409	8.00	645.93	1.50	121.11	Class AA
Superstru Con Class__(CY) Section 500	1486.00	625.14	928.9580	8.00	7431.66	1.50	1393.44	SS Class AA
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
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Stru Steel Plan Quantity (LB) Section 501	278630.00	0.64	178.3232	8.00	1426.59	1.50	267.48	
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams____ (LF) Section 507	5920.00	207.93	1230.9456	8.00	9847.56	1.50	1846.42	72 BT
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511	70562.00	0.64	45.1597	8.00	361.28	1.50	67.74	
Stru Reinf Plan Quantity(LB) Section 511	278630.00	0.64	178.3232	8.00	1426.59	1.50	267.48	
Bar Reinf Steel (LB) Section 511	1900.00	0.64	1.2160	8.00	9.73	1.50	1.82	
Piling____inch (LF) Section 520	4750.00	174.41	828.4475	8.00	6627.58	1.50	1242.67	HP 14x89
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
<b>SUM QF DIESEL=</b>		<b>309099.84</b>		<b>SUM QF UNLEADED=</b>		<b>87247.34</b>		
<b>DIESEL PRICE ADJUSTMENT(\$)</b>				<b>\$1,156,682.51</b>				
<b>UNLEADED PRICE ADJUSTMENT(\$)</b>				<b>\$299,999.97</b>				



## ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

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

ENTER APL

ENTER APM

MISSING APL OR APM

MISSING APL OR APM

Use this side for Asphalt Emulsion Only		
L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT =		<input style="width: 100px;" type="text"/>
REMARKS:		

Use this side for Asphalt Cement Only		
L.I.N.	TYPE	TACK (GALLONS)
TMT =		<input style="width: 100px;" type="text"/>
REMARKS:		

MONTHLY PRICE ADJUSTMENT(\$)

MISSING APL OR APM

### ADJUSTMENT SUMMARY

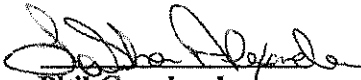
FUEL PRICE ADJUSTMENT ( <i>ENGLISH 125% MAX</i> )	
DIESEL PRICE ADJUSTMENT(\$)	<u>\$1,156,682.51</u>
UNLEADED PRICE ADJUSTMENT(\$)	<u>\$299,999.97</u>
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	<u>\$26,224.47</u>
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	<u>\$2,465,452.80</u>
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	<u>MISSING APL OR APM</u>

REMARKS:

**TOTAL ADJUSTMENTS**

**\$3,948,359.75**

# Preliminary Right of Way Cost Estimate



**Phil Copeland**  
 Right of Way Administrator  
 By: Lashone Alexander

Date: November 5, 2010  
 Project: NH-003-3(53) Clarke UPDATE  
 Existing/Required R/W: Varies/Varies  
 Project Termini : SR 10 Loop at Atlanta Highway Interchange  
 Project Description: 4 lane with median

P.I. Number: 122890  
 No. Parcels: 36

**Land:**

Commercial			
R/W	124,580 sf @ \$ 7.25/ sf =	\$	903,200
ESMT	126,760 sf @ \$ 7.25/ sf X 50% =	\$	459,500
Residential			
R/W	4.34 ac. @ \$ 30,000/ ac. =	\$	130,200
ESMT	0.09 ac. @ \$ 30,000/ ac. X 50% =	\$	1,400

\$ 1,494,300

**Improvements :**

Signs, Fencing and Misc. Site Improvements

\$ 307,500

**Relocation:**

2 Commercial @ \$ 25,000 =	\$ 50,000
0 Residential @ \$ 25,000 =	\$ 0

\$ 50,000

**Damage :**

0 Proximity	\$ 0
0 Cost to Cure	\$ 0
10 Consequential	\$ 1,470,000

\$ 1,470,000

\$ 3,321,800

Net Cost	\$ 3,321,800
Scheduling Contingency 55 %	1,827,000
Adm/Court Cost 60	<u>3,089,300</u>
	\$ 8,238,100

**Total Cost \$ 8,238,000**

Note: The Market Appreciation (40%) is not included in this updated Preliminary Cost Estimate.

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

**FILE:** NH-003-3(53) Clarke  
P. I. No.: 122890  
U.S. 78/S.R. 10 Interchange

**OFFICE:** Engineering Services

**DATE:** December 5, 2007

**FROM:** Brian Summers, P.E., Project Review Engineer *RES*

**TO:** Babs Abubakari, P.E., State Consultant Design Engineer

**SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & ECC	Implement	Comments
A-2	Investigate a Developer Proposal to connect the Southbound Off Ramp to Huntington Court	\$115,000	No	Would result in ramp traffic being in conflict with traffic entering and exiting the developed property which would be a safety concern.
A-7	Change the Urban Shoulder width from 16 feet to 10 feet	\$204,000 (proposed) \$102,000 (revised)	Yes/Partial	The shoulder width will remain 16 feet on the mainline to better accommodate Utility Relocations and will be changed to 10 feet on the side roads.
A-7A	Eliminate the 2 1/2 foot grassed area between the sidewalk and Retaining Wall	\$21,000	No	Since the 16 foot shoulder will be retained on the mainline this would not apply since this would cut the shoulder width to 13.5 feet on the mainline.
B-7	Shift the on-ramp location slightly to the West and use a 100 foot radius curve	\$33,000 (proposed) \$16,500 (revised)	Yes/Partial	The on-ramp location will stay the same but a 100 foot radius will be used.



ALT No.	Description	Savings PW & LCC	Implement	Comments
B-7A	Close existing driveway at the Logans Steakhouse and provide a wider common access at Sta. 60+00 - 11. for Logans as well as adjacent property owners.	-54,000 (Cost Increase)	Yes	This is recommended for safety reasons. Access agreements should be obtained from the property owners to allow this to occur.
B-10	Eliminate the 4 foot Bike Lanes	\$473,000 (proposed) \$687,100 (revised)	Yes	This should be done. The revised cost savings includes bridge savings which was not initially included.
B-11	Reduce the 12 foot travel lanes to 11 feet	\$497,000 (proposed) \$718,900	Yes	This should be done. The revised cost savings includes bridge savings which was not initially included.
B-12	Close the Median Opening at Sta. 68+75 and provide a Type B Median Opening at Timothy Road and Jennings Mill Road	-\$186,000 (proposed) \$20,000 (revised)	Yes/partial	The median opening should be closed but the Type B Median Opening at Timothy Road and Jennings Mill Road will not be done since it would involve additional Right of Way impacts.
F-1	Eliminate the Concrete Curb and Gutter from a section on Jennings Mill Road	\$177,000	No	A land use permit utilizing an urban section to minimize impacts on the cemetery has already been obtained from the court system. Since a cemetery is involved any changes would require another permit delaying the project schedule.
C-2	Use MSE Walls and two - 93 foot spans and delete Bike Lanes on the bridge over S.R. 10	\$1,845,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive than what was proposed.
C-2A	Use MSE Walls and one - 165 foot span and delete Bike Lanes on the bridge over S.R. 10.	\$1,376,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive than what was proposed.
C-2B	Use two - 57 foot spans and two - 93 foot spans and delete the Bike Lanes on the	\$1,231,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive

ALT No.	Description	Savings PW & LCC	Implement	Comments
C-2C	Use two 67.5 foot spans and one 165 foot span and delete the Bike Lane on the bridge over S.R. 10.	\$675,000	No	A more detailed cost estimate done by the Design Consultant revealed that this VE Alternative is more expensive than what was proposed.
A-1	Eliminate the short in-and-out steps in the Proposed Right of Way lines	Design Suggestion	Yes	This should be done.
B-2	Verify the superelevation match at the bridge	Design Suggestion	Yes	This should be done.
D-1	Review Drainage Structure locations and ensure they are within the Proposed Right of Way	Design Suggestion	Yes	This should be done.
E-1	Modify the Concrete Barrier End Treatments on the two Loop Ramps	Design Suggestion	Yes	This should be done.
L-1/2	Eliminate the Parapet and Pipe Handrail over the Retaining Walls	Design Suggestion	No	The Parapet and Pipe Handrail are required to provide pedestrian safety.

A meeting was held on November 29, 2007 to discuss the above recommendations. Allen Krivsky and Shawn Fleet with Heath and Lineback, Mike Huithecock with Consultant Design, and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance.

Additional information was provided on December 4, 2007.

The results above reflect the consensus of those in attendance and those who provided input.

Approved: Gerald M. Ross Date: 1/8/07  
Gerald M. Ross, P. E., Chief Engineer

BKS/REW

Attachments

NH-003-3(53) Clarke  
P.I. No. 122890  
VE Study Implementation  
Page 4.

c: Gus Shanine  
Todd Long  
James Magnus  
Randy Davis  
Robert Simpson  
Kevin DeWitt  
Mike Hathcock  
Doug Franks  
Amber Perkins  
Ken Werho  
Lisa Myers

