ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0006432
CSBRG-0006-00(432)
GDOT District 2 - Tennille
Morgan County
CR 251/Seven Islands Road @ Big Indian Creek & Overflow

OFFICE Design Policy & Support

DATE May 20, 2011

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

Attached is the approved Revised Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Jimmy Smith, District Engineer
George Brewer, District Preconstruction Engineer
Jamie Lindsey, District Utilities Engineer
Jim Kitchings, District Environmentalist
Renee Decker, Project Manager
BOARD MEMBER - 10th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT

Project Number: CSBRG-0006-00(432)
County: Morgan
P. I. Number: 0006432
Federal Route Number: N/A
State Route Number: N/A
County Route Number: 251

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

In order to provide the opening space under the bridge required by the bridge hydraulic analysis, the two proposed approved concept bridge structures over Big Indian Creek and Big Indian Creek Overflow for project CSBRG-0006-00 (432) in Morgan County are proposed to be revised. It is recommended that the two proposed bridges structures be revised to a single 350-ft long x 30-ft wide out to out bridge structure.

Submitted for approval:

DATE 3/22/11 — Adolfo A. Guzman, P.E. – Clark Patterson Lee

DATE 3/24/11 — Office Head /District Engineer

DATE 3/24/11 — Project Manager

Recommendation for approval:

DATE 4/13/11 — Glenn Bowman * / KLP
State Environmental Administrator

DATE 5/4/11 — Ben Rabun * / KLP
State Bridge Design Engineer

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).

DATE 4-14-11 — Cynthia L Vanke
State Transportation Planning Administrator

*Recommendation on file

REVISED PROJECT CONCEPT REPORT

P.I. Number: 0006432
Project Number: CSBRG-0006-00(432)
County: Morgan

Need and Purpose:
This bridge (Structure ID 211-0056-0) was built in 1936 and consists of a single span of steel beams on masonry abutments. The bridge is currently gross posted at 3 tons and has a Sufficiency Rating of 26.52. The deck is exhibiting delamination under the asphalt in the gutter line. The exterior stringers exhibit permanent deflection. The 2nd and 3rd floor beams show a slight sweep to the left. The masonry abutments have minor cracking between the stones and the mortar. Replacement of this structurally deficient bridge is recommended.

This bridge (Structure ID 211-0057-0) was built in 1936 and consists of a single span of steel beams on masonry abutments. The bridge is currently gross posted at 3 tons and has a Sufficiency Rating of 26.80. The deck is currently overlaid with 3 inches of asphalt. The underside of the deck is showing map cracking with light efflorescence forming. The exterior stringers exhibit permanent deflection up to 1 ½ inches. All stringers and floor beams exhibit minor to moderate corrosion. The masonry abutments have minor cracking between the stones and the mortar. Replacement of this structurally deficient bridge is recommended.

Project Location:
Project CSBRG-0006-00(432), in Morgan County has an approximate total length of 0.681 miles. The purpose of the project is to replace the substandard bridges over Big Indian Creek and Big Indian Creek Overflow in Morgan County. The bridges over Big Indian Creek and Overflow are located between mile post 1.84 and 2.24 on CR 251/Seven Island Road, approximately three miles east of the Town of Godfrey. The new bridge will be constructed on the existing alignment and traffic will be rerouted to a detour utilizing the existing county and state roads.

Description of the approved project:
The approved concept for project CSBRG-0006-00(432) is to improve the bridge infrastructure at County Road (CR) 251/Seven Island Road at Big Indian Creek and overflow in Morgan County, Georgia. The proposed project would serve to replace the existing two bridges which have substandard load capacity and deck geometry with two new bridge structures. One 240 ft x 30 ft over Big Indian Creek and the other 160 ft x 30 ft over Big Indian Creek overflow.

PDP Classification: Major_____ Minor__X___

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

Functional Classification: Rural Major Collector

U. S. Route Number(s): N/A **State Route Number(s):** N/A
County Road Number(s): 251

Traffic (AADT):

Base Year: 700 (2009) Design Year: 1000 (2029)

Updated Traffic (AADT):

Base Year: 740 (2012) Design Year: 1060 (2032)

Approved Programmed Schedule:

P.E.: 2005 R/W: LOCL Construction: 2012

VE Study Required Yes ( ) No (X)

Benefit/ Cost Ratio N/A (Bridges are structurally deficient, LOS for traffic remains constant regardless of whether the bridges are or are not replaced)

Is the Project located in an Ozone Non-attainment area? Yes ( ) No (X)

Is the Project located in a PM2.5 Non-attainment area? Yes ( ) No (X)

Approved Features:	**Proposed Features:**
The proposed approved project concept would serve to replace the existing two bridges which have substandard load capacity and deck geometry. The deck geometry currently consists of a 24 foot bridge over Big Indian Creek and a 23.6 foot bridge for the overflow. The replacement bridges will have 30 foot out to out decks to meet current standards. The side barriers would also be brought up to current standards with a minimum height of 28 inches.	The two proposed concept approved bridge structures will be revised to a single 350 ft long by 30 ft wide out to out bridge structure over Big Indian creek and Big Indian Creek overflow.

Reason for Change:

Initially, two new bridge structures, one 240 ft x 30 ft over Big Indian Creek and the other 160 ft x 30 ft over Big Indian Creek overflow, were proposed. The hydraulic studies of these proposed approved concept structures determined that a 350 ft long x 30 ft out to out bridge would be required at this location with the removal of fill from the island between the bridges instead of the two approved concept structures. This is to provide the opening space under the bridge that is required by the bridge hydraulic analysis.

Potential Environmental Impact of the Proposed Revision:
The proposed revision will not have any additional effects on the environmental impact. The development of the current environmental document was done using the revised concept features rather than the original proposed features, therefore; there will not be any effects to the environmental or projects schedule.

Have Proposed revision been reviewed by environmental staff: (X) Yes ( ) No

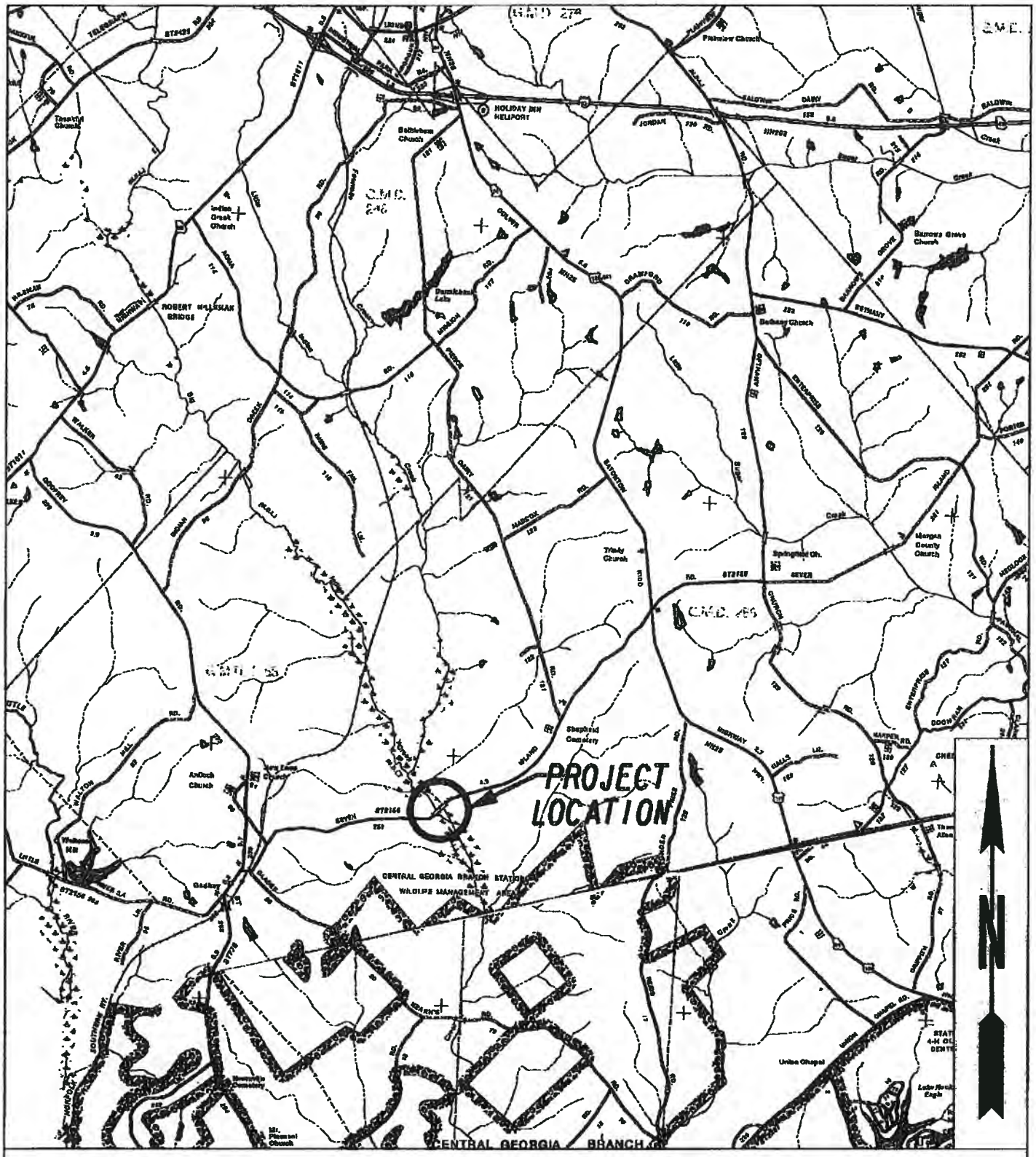
Updated Cost Estimate	
Base Construction Cost	$2,017,854.02
Engineering and Inspection	$ 100,892.70
Fuel & Asphalt Adjustment	$ 214,036.80
Total Construction Cost	**$2,332,783.52**
Right-of-Way	$ 250,000.00
Utilities (reimbursable)	$ 0.00
Environmental Mitigation	$ 0.00

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:
1. Sketch Map
2. Cost Estimates
3. Typical Sections
4. Construction Plan Sheets

Concur: _____
Director of Engineering

Approve: _____ Date: 05/19/2011
Chief Engineer



LOCATION SKETCH
PROJECT NO. CSBRG-0006-00 (432)
P.I. NO. 0006432
MORGAN COUNTY

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Print Form

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. CSBRG-0006-00(432) , MORGAN COUNTY **OFFICE** Tennille Design

CR 251/SEVEN ISLAND ROAD @ BIG INDIAN CREEK & OVERFLOW BRIDGE REPLACEMENT [10-FT LANES WITH 6-FT SHOULDERS]

DATE 5/11/2011

P.I. No. 0006432

FROM Douglas A. Smith, District Design Engineer

TO Ronald E. Wishon, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

MNGT LET DATE 12/16/2011

PROJECT MANAGER Renee' Decker

MNGT R/W DATE 3/18/2011

PROGRAMMED COST (TPro W/OUT INFLATION)		**LAST ESTIMATE UPDATE**	
CONSTRUCTION	$ 1,948,689.00	DATE	4/30/2010
RIGHT OF WAY	$ 175500.00	DATE	8/31/2010
UTILITIES	$	DATE	

REVISED COST ESTIMATES

CONSTRUCTION*	$ 2,332,783.52
RIGHT OF WAY	$ 250000.00
UTILITIES**	$

* Costs contain 5 % Engineering and Inspection and % Construction Contingencies.

** Costs contain % contingency.

REASON FOR COST INCREASE

Updated Construction Cost Estimate and R/W Cost Estimate for concept revision. Concept revised to show replacing the two existing bridges with one bridge.

Revised: February 9, 2009

CONTINGENCY SUMMARY

Construction Cost Estimate:	$ 2,017,854.02	(Base Estimate)
Engineering and Inspection:	$ 100,892.70	(Base Estimate x 5 %)
Construction Contingency:	$	(Base Estimate x %)
		(The Construction Contingency is based on the Project Improvement Type in TPro.)
Total Fuel Adjustment	$ 114,621.32	(From attached worksheet)
Total Liquid AC Adjustment	$ 99,415.48	(From attached worksheet)
Construction Total:	$ 2,332,783.52	
Utility Cost Estimate:	$	
Utility Contingency:	$	%
Utility Total:	$	

REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Cost

Attachments

c: Genetha Rice-Singleton, State Program Control Administrator

Date 5/11/2011

P.I. Number 6432 County Morgan

Project Number CSBRG-000-6-00(432) [10-ft lanes with 6-ft shoulders]

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

ENTER FPL DIESEL	4.079
ENTER FPM DIESEL	9.178

ENTER FPL UNLEADED	3.862
ENTER FPM UNLEADED	8.6895

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

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)	4520.000	0.29	1310.80	0.15	678.00	
Excavations paid as specified by Sections 206 (CUBIC YARD)	26109.000	0.29	7571.61	0.15	3916.35	
GAB paid as specified by the ton under Section 310 (TON)	3060.000	0.29	887.40	0.24	734.40	
Hot Mix Asphalt paid as specified by the ton under Sections 400(TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402(TON)	2693.000	2.90	7809.70	0.71	1912.03	
PCC Pavement paid as specified by the square yard under Section 430(SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
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

Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams_____ (LF) Section 507				8.00		1.50		
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				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				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		
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		

SUM QF DIESEL=	17579.51	SUM QF UNLEADED=	7240.78

DIESEL PRICE ADJUSTMENT($)	$82,462.84
UNLEADED PRICE ADJUSTMENT($)	$32,158.48

ASPHALT CEMENT PRICE ADJUSTMENT
(BITUMINOUS TACK COAT 125% MAX)

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS
ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

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

ENTER APL 604 ENTER APM 1359

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
		585	2.5126	

TMT = 2.5126

PRICE ADJUSTMENT($)	$1,821.16

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL 604 ENTER APM 1359

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

125.00%	INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	HMA	JMF AC%	AC	REMARKS
402-3101	9.5 mm SP	368	5.00	18.40	
402-3121	25 mm SP	1750	5.00	87.50	
402-3190	19 mm SP	575	5.00	28.75	
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	134.65	

PRICE ADJUSTMENT($)	$97,594.32

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 604 ENTER APM 1359

125.00%	INCREASE ADJUSTMENT

Use this side for Asphalt Emulsion Only

L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)

TMT =

REMARKS:

Use this side for Asphalt Cement Only

L.I.N.	TYPE	TACK (GALLONS)

TMT =

REMARKS:

MONTHLY PRICE ADJUSTMENT($)	

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

DIESEL PRICE ADJUSTMENT($)	$82,462.84
UNLEADED PRICE ADJUSTMENT($)	$32,158.48
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	$1,821.16
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	$97,594.32
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	

REMARKS:

TOTAL ADJUSTMENTS	$214,036.80

DWM 10/08

DATE : 05/10/2011
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0006432_RHD SPEC YEAR: 01
DESCRIPTION: BRIDGE REPLACEMENT ON COUNTY ROAD 251OVER BIG INDIAN CREEK

ITEMS FOR JOB 0006432_RHD

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - CSBRG-0006-00(432)	1.000	50000.00	50000.00
0010	201-1500		LS	CLEARING & GRUBBING - CSBRG-0006-00(432)	1.000	25000.00	25000.00
0015	205-0001		CY	UNCLASS EXCAV	4520.000	19.39	87650.48
0020	206-0002		CY	BORROW EXCAV, INCL MATL	26109.000	7.14	186609.12
0030	310-1101		TN	GR AGGR BASE CRS, INCL MATL	3060.000	19.84	60726.07
0035	318-3000		TN	AGGR SURF CRS	100.000	20.06	2006.62
0045	402-3101		TN	REC AC 9.5 MM SP,TPI, BL 1 INCL BM & HL	368.000	84.00	30912.55
0047	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1750.000	69.59	121797.95
0050	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	575.000	77.22	44402.62
0055	413-1000		GL	BITUM TACK COAT	585.000	3.68	2157.54
0060	433-1000		SY	REINF CONC APPROACH SLAB	174.000	156.25	27188.54
0065	441-0301		EA	CONC SPILLWAY, TP 1	2.000	1731.33	3462.66
0070	500-3200		CY	CL B CONC	1.000	423.56	423.57
0075	550-2180		LF	SIDE DR PIPE 18",H 1-10	244.000	26.13	6377.51
0080	550-3618		EA	SAFETY END SECTION 18",SD,6:1	8.000	578.28	4626.30
0085	576-1015		LF	SLOPE DRAIN PIPE, 15 IN	50.000	29.52	1476.45
0095	634-1200		EA	RIGHT OF WAY MARKERS	19.000	94.20	1789.82
0100	641-1100		LF	GUARDRAIL, TP T	88.000	57.52	5062.09
0105	641-1200		LF	GUARDRAIL, TP W	1330.000	15.58	20725.42
0110	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	591.19	1182.38
0115	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	2.000	1820.62	3641.25
0120	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	700.000	1.87	1315.01
0125	603-2181		SY	STN DUMPED RIP RAP, TP 3, 18"	4200.000	30.96	130049.93
0130	603-7000		SY	PLASTIC FILTER FABRIC	4200.000	3.64	15303.71
0135	700-6910		AC	PERMANENT GRASSING	7.000	726.50	5085.53
0140	700-7000		TN	AGRICULTURAL LIME	15.000	51.33	770.04
0145	700-7010		GL	LIQUID LIME	10.000	22.52	225.21
0150	700-8000		TN	FERTILIZER MIXED GRADE	4.000	496.29	1985.18
0155	700-8100		LB	FERTILIZER NITROGEN CONTENT	200.000	3.04	608.20
0160	710-9000		SY	PERM SOIL REINFORCING MAT	2460.000	3.74	9209.31
0165	716-2000		SY	EROSION CONTROL MATS, SLOPES	18850.000	1.05	19961.02
0170	163-0232		AC	TEMPORARY GRASSING	4.000	480.65	1922.63
0175	163-0240		TN	MULCH	70.000	234.80	16436.28
0180	163-0300		EA	CONSTRUCTION EXIT	2.000	1100.43	2200.88
0185	163-0503		EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	4.000	474.75	1899.03
0190	163-0520		LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	500.000	14.97	7485.48
0195	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	62.000	216.46	13420.58
0200	163-0529		LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	600.000	3.24	1949.37
0205	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	4800.000	0.66	3179.23

JOB ESTIMATE REPORT

0210	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	995.000	1.09	1088.52
0215	165-0050	LF	MAINT OF SILT RETENTION BARRIER	250.000	1.78	446.79
0220	165-0071	LF	MAINT OF SEDIMENT BARRIER - BALED STRAW	600.000	1.03	621.94
0225	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	4.000	149.57	598.32
0230	165-0101	EA	MAINT OF CONST EXIT	2.000	579.97	1159.95
0235	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	2.000	396.05	792.11
0240	167-1500	MO	WATER QUALITY INSPECTIONS	12.000	970.40	11644.89
0245	170-2000	LF	STAKED SILT RETENTION BARRIER	500.000	4.20	2102.32
0250	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	9600.000	2.87	27628.22
0255	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	22.000	15.70	345.48
0260	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	47.000	20.14	946.71
0265	636-2070	LF	GALV STEEL POSTS, TP 7	234.000	8.13	1903.40
0270	652-5451	LF	SOLID TRAF STRIPE, 5 IN, WHITE	3980.000	0.12	514.53
0275	652-5452	LF	SOLID TRAF STRIPE, 5 IN, YELLO	3980.000	0.11	443.33
0280	657-1054	LF	PRF PL SD PVMT MKG,5",WH,TP PB	820.000	4.08	3349.01
0285	657-6054	LF	PRF PL SD PVMT MKG,5",YW,TP PB	820.000	4.28	3517.74
0290	540-1101	LS	REM OF EX BR, STA NO - 30+63	1.000	25000.00	25000.00
0295	540-1101	LS	REM OF EX BR, STA NO - 32+84	1.000	75000.00	75000.00
0300	543-9000	LS	CONSTR OF BRIDGE COMPLETE - CSBRG-0006-00(432)	1.000	945000.00	945000.00

ITEM TOTAL 2017854.00
INFLATED ITEM TOTAL 2017854.02

TOTALS FOR JOB 0006432_RHD

ESTIMATED COST: 2017854.02
CONTINGENCY PERCENT (0.0): 0.00
ESTIMATED TOTAL: 2017854.02

Preliminary Right of Way Cost Estimate

Date: May 6, 2011
Project: CSBRG-0006-00 (432), Morgan County
Existing/Required R/W: Varies
Project Termini: Bridge Replacement
Project Description: Replace Bridge at S.R. 251
(Seven Island Road Bridge)

P.I. Number: 0006432
No. Parcels: 5

Land: 2.701 Acres – Residential/Agricultural @ $15,000.00 =	$40,515.00
TOTAL	
Improvements: Shed, Fence, Misc. Buildings	$60,000.00
TOTAL	**$100,515.00**

Net Cost		$ 100,515.00
Scheduling Contingency	55 %	$ 55,283.25
Adm/Court Cost	60 %	$ 93,478.95
TOTAL		$ 249,277.20

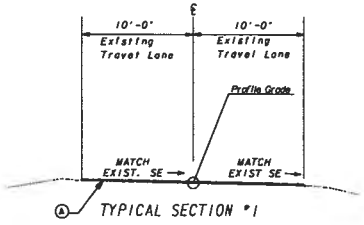
Total Cost (Rounded) $250,000.00

Freddie C. Law

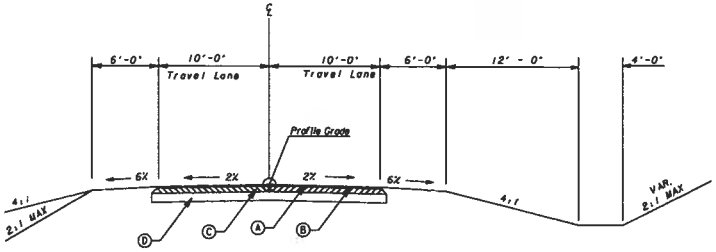
Prepared By: _____
Wilbur Smith Associates
Freddie Law: G.C. Appraiser-3539

Reviewed/Approved: _____
Howard P. Copeland
R/W Administrator

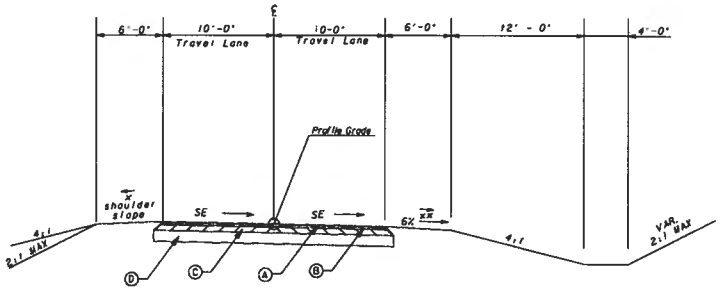
DATE	TIME	PRF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
USER		PENTABLE		GA	CSBRG-0006-0014321		



TYPICAL SECTION #1
OVERLAY SECTION
NOT TO SCALE
(MATCH EXISTING SE)
STA. 18+75.00 TO 19+25.00
STA. 43+50.00 TO 44+00.00



TYPICAL SECTION #2
TANGENT SECTION
NOT TO SACLE
STA. 19+25.00 TO 20+84.50
STA. 29+74.03 TO 34+02.00



TYPICAL SECTION #3
SUPERELEVATED SECTION
NOT TO SCALE
STA. 20+84.50 TO STA. 29+74.03
STA. 34+02.00 TO STA. 43+50.00

* GUARDRAIL REQ'D ON ALL 2:1 SLOPES

x SHOULDER TO SLOPE AT NORMAL RATE, HOWEVER, THE ALGEBRAIC DIFFERENCE IN PAVING SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%. MINIMUM SHOULDER SLOPE TO BE 2%.

xx SHOULDER TO SLOPE AT NORMAL RATE OR SUPERELEVATION RATE, WHICHEVER IS GREATER.

S.E. RATE	shoulder slope
2.0% OR 3.0%	4.0%
4.0% OR 5.0%	2.0%
6.0% OR 7.0%	1.0%
8.0 % +	0.0%

(A) 137.5 LBS. PER SQ YD ASPHALT CONCRETE 9.5MM SUPERPAVE (TP. 1)
(B) 220 LBS. PER SQ YD ASPHALT CONCRETE 19MM SUPERPAVE
(C) 770 LBS. PER SQ YD ASPHALT CONCRETE 25MM SUPERPAVE
(D) GRADED AGGREGATE BASE - 12 IN.

Clark Patterson Lee
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FAX (770) 521-0040
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SCALE - 1" = 5'

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

CR 251/SEVEN ISLAND RD @ BIG INDIAN CREEK & OVERFLOW

DRAWING No. 5-01

DATE###	TIME###	##PW#	##DG##	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
#USER#		##PENTABLE##		GA	CSBG-0006-0014321		

*** STANDARD CROSS - SLOPE MAY BE VARIED - AS DIRECTED BY THE ENGINEER - TO BEST FIT THE EXISTING ROADWAY AS PER SECTION 149 OF THE STANDARD SPECIFICATIONS. SEE "ALLOWABLE RANGES TABLE " BELOW.

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO 'BEST FIT' EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A: NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES 0.5% OR LESS
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0200 FT/FT - DESIRABLE	0.0200 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

B: SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR S.E. RATE EXISTING IN FIELD (WHICHEVER IS GREATER)

C: SUPERELEVATION TRANSITION LENGTH)LENGTH FROM FLAT TO FULL S.E.)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

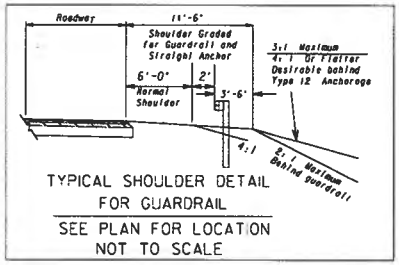
*LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS - SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D: POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE OUT SHALL BE AT THE SAME RATE AS THE S.E. TRANSITION.

E: SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).

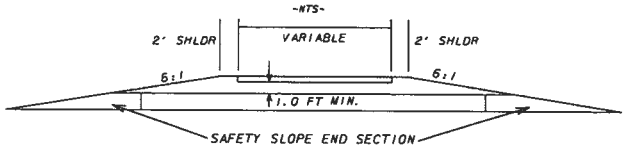


TYPICAL SHOULDER DETAIL
FOR GUARDRAIL

SEE PLAN FOR LOCATION
NOT TO SCALE

DRIVEWAY TYPICAL SECTION

-NTS-



NOTE: SEE DRIVEWAY PROFILES FOR PAVING LIMITS.

RESIDENTIAL DRIVEWAYS

ASPHALT DRIVES WILL BE PAVED WITH THE FOLLOWING:
135 lbs/yd^2 RECYC. ASPH. CONC. 9.5 mm SUPERPAVE
220 lbs/yd^2 RECYC. ASPH. CONC. 19 mm SUPERPAVE
6" GRADED AGGREGATE BASE

COMMERCIAL DRIVEWAYS

ASPHALT DRIVES WILL BE PAVED WITH THE FOLLOWING:
135 lbs/yd^2 RECYC. ASPH. CONC. 9.5 mm SUPERPAVE
440 lbs/yd^2 RECYC. ASPH. CONC. 19 mm SUPERPAVE
8" GRADED AGGREGATE BASE

CONCRETE DRIVEWAYS

COMMERCIAL DRIVES - 8" CONCRETE
RESIDENTIAL DRIVES - 6" CONCRETE

ALL DRIVES WILL BE PAVED TO THE R/W LINE OR TIE-IN POINT, WHICHEVER IS GREATER.

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SCALE = 1" = 5'

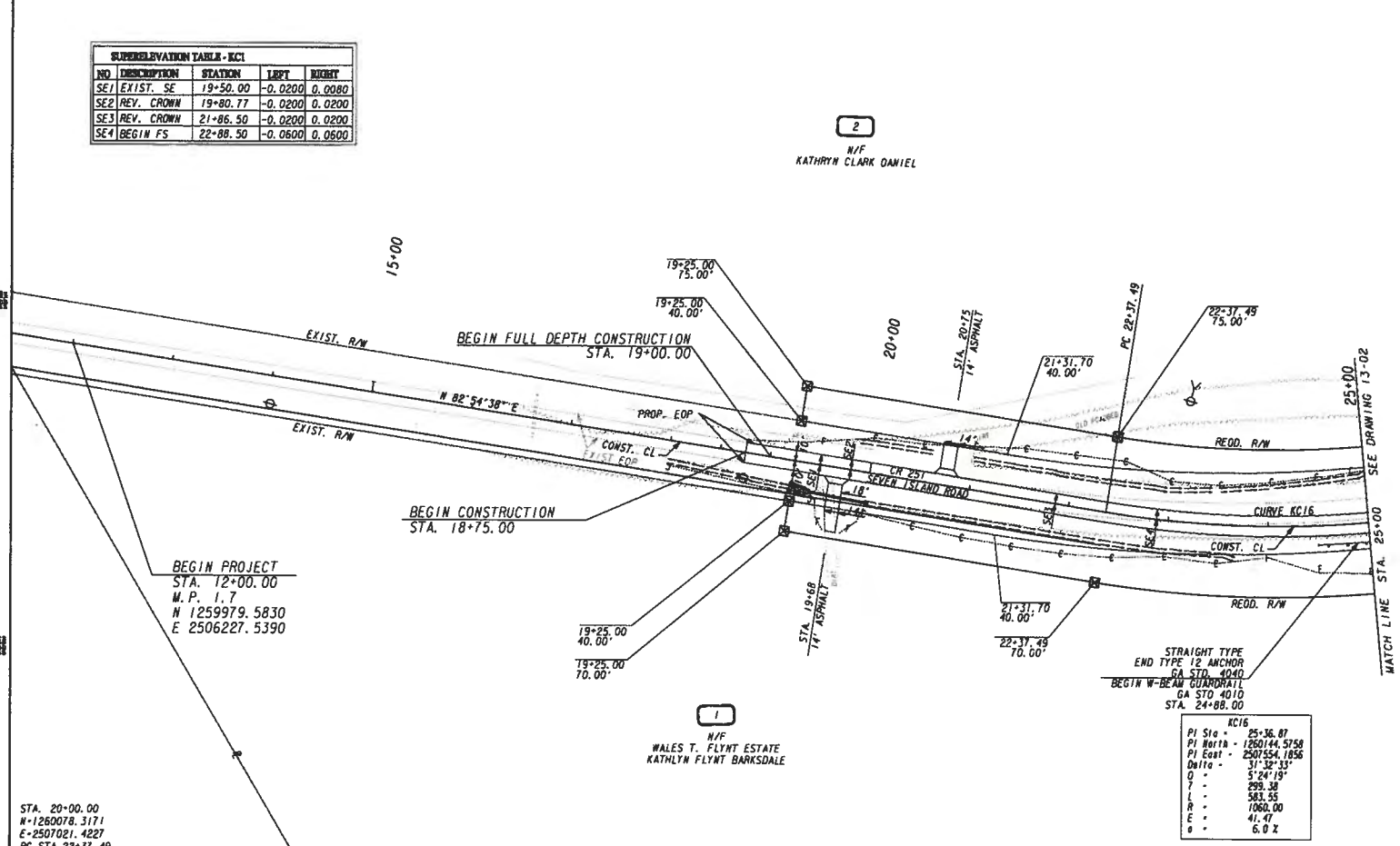
REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:
TYPICAL SECTIONS
CR 251/SEVEN ISLAND RD @
BIG INDIAN CREEK & OVERFLOW

DRAWING No. 5-02

DATE####	TIME####	#PRF#	#DGN#	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
##USER#		##PENTABLE##		GA	CSBRG-0006-00(432)		

SUPERELEVATION TABLE - KC1				
NO	DESCRIPTION	STATION	LEFT	RIGHT
SE1	EXIST. SE	19+50.00	-0.0200	0.0080
SE2	REV. CROWN	19+80.77	-0.0200	0.0200
SE3	REV. CROWN	21+86.50	-0.0200	0.0200
SE4	BEGIN FS	22+88.50	-0.0600	0.0600



KC16	
PI Sta =	25+36.87
PI North =	1260144.5758
PI East =	2507554.1856
Delta =	31°32'33"
D =	5°24'19"
T =	299.38
L =	583.55
R =	1060.00
E =	41.47
e =	6.0 %

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

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

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SCALE IN FEET
0 50 100 200

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

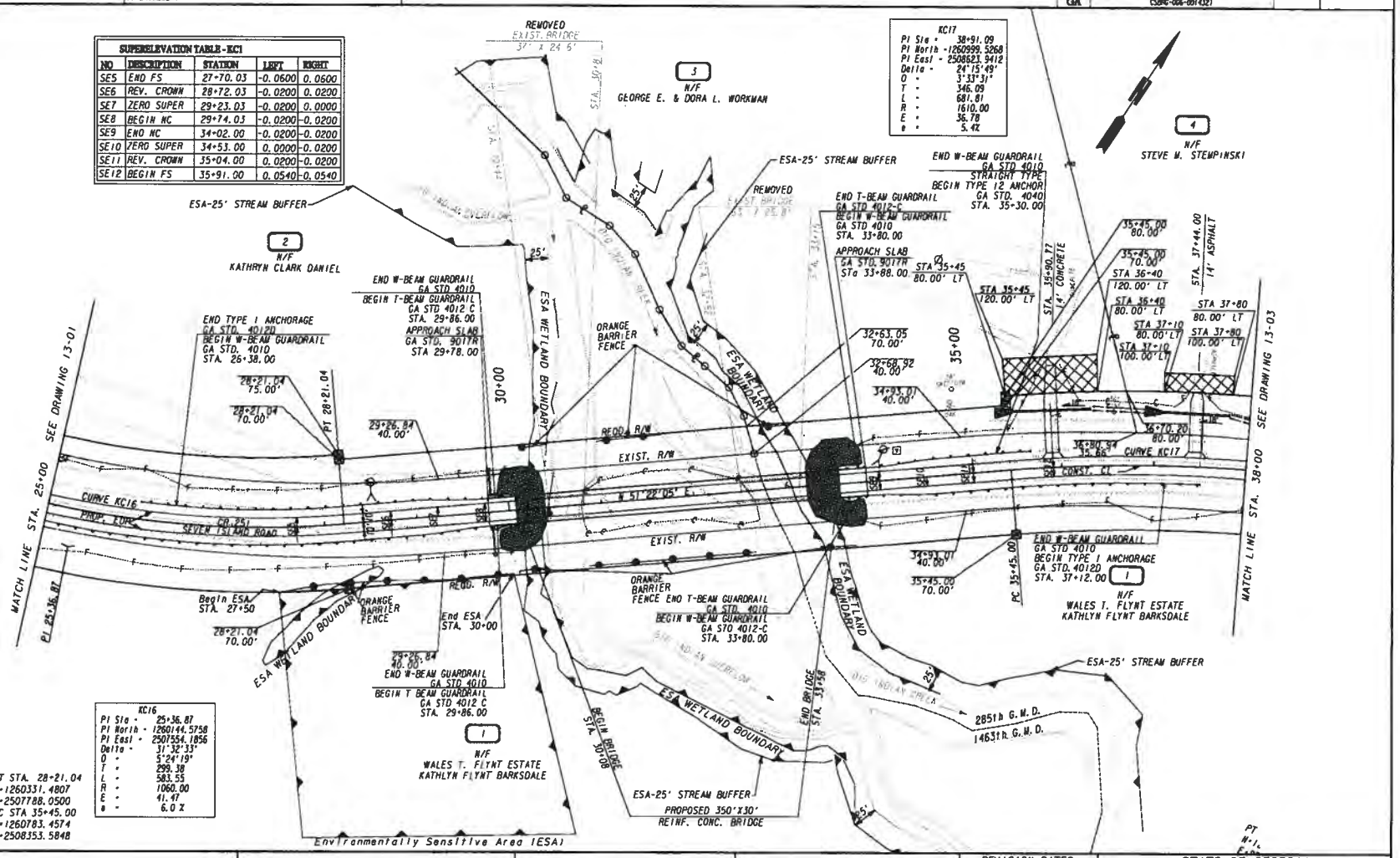
MAINLINE PLAN

CR 251/SEVEN ISLAND RD @
BIG INDIAN CREEK & OVERFLOW

DRAWING NO. 13-01

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSBRG-006-0014321		

SUPERELEVATION TABLE - KC1				
NO	DESCRIPTION	STATION	LEFT	RIGHT
SE5	END FS	27+70.03	-0.0600	0.0600
SE6	REV. CROWN	28+72.03	-0.0200	0.0200
SE7	ZERO SUPER	29+23.03	-0.0200	0.0000
SE8	BEGIN NC	29+74.03	-0.0200	-0.0200
SE9	END NC	34+02.00	-0.0200	-0.0200
SE10	ZERO SUPER	34+53.00	0.0000	-0.0200
SE11	REV. CROWN	35+04.00	0.0200	-0.0200
SE12	BEGIN FS	35+91.00	0.0540	-0.0540



KC16	
PI Sta -	25+36.87
PI North -	1260144.5758
PI East -	2507554.1856
Delta -	31°32'33''
D -	5°24'19''
T -	299.38
L -	583.55
R -	1060.00
E -	41.47
e -	6.0 %

PT STA. 28+21.04
N=1260331.4807
E=2507788.0500
PC STA 35+45.00
N=1260783.4574
E=2508353.5848

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

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

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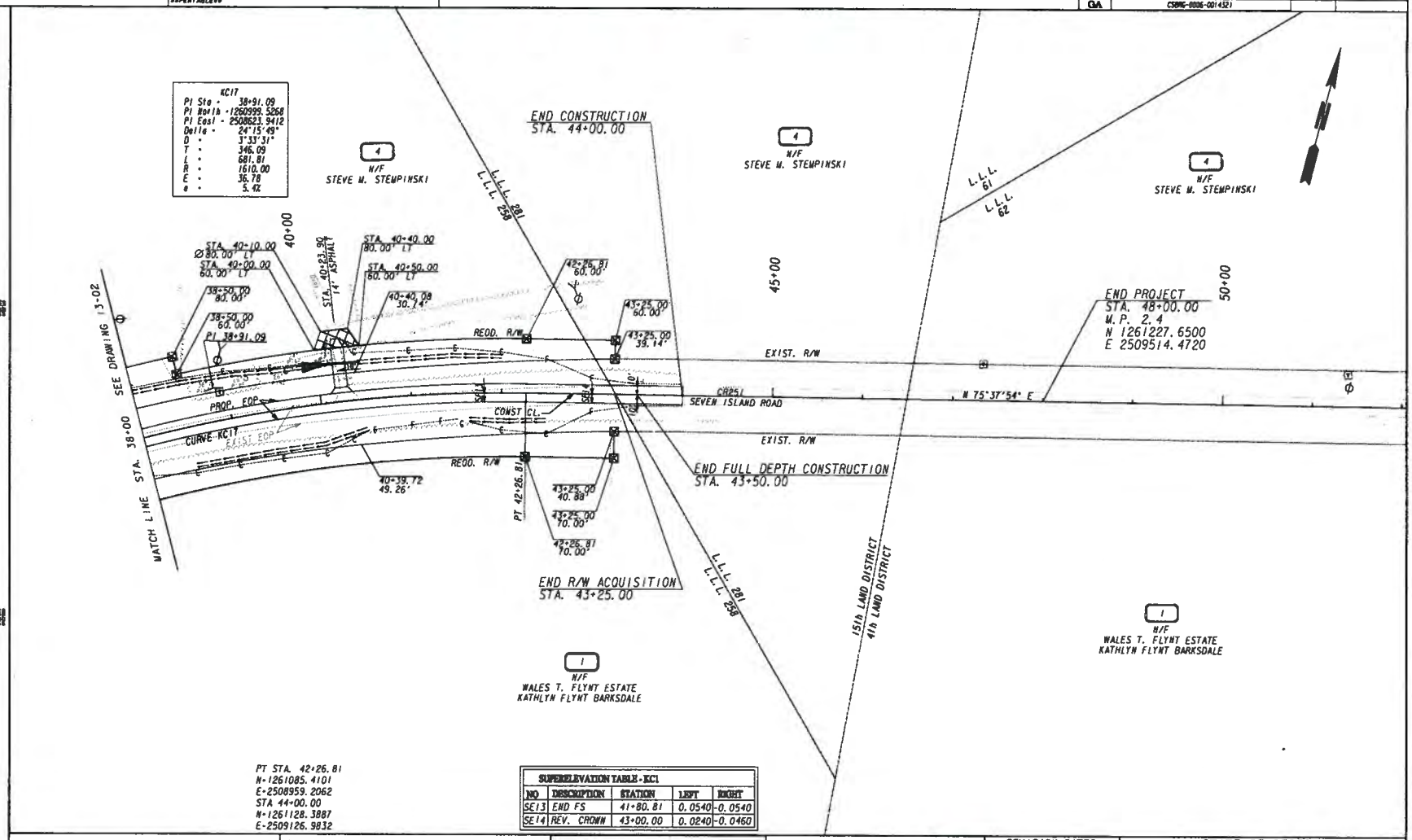
SCALE IN FEET
0 50 100 200

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:
MAINLINE PLAN
CR 251/SEVEN ISLAND RD @
BIG INDIAN CREEK & OVERFLOW

DRAWING NO. 13-02

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSBRG-0006-0014321		



SUPERELEVATION TABLE - KC1				
NO	DESCRIPTION	STATION	LEFT	RIGHT
SE13	END FS	41+80.81	0.0540	-0.0540
SE14	REV. CROWN	43+00.00	0.0240	-0.0460

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

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

Clark Patterson Lee
DESIGN PROFESSIONALS

SCALE IN FEET
0 50 100 200

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

MAINLINE PLAN

CR 251/SEVEN ISLAND RD @
BIG INDIAN CREEK & OVERFLOW

DRAWING No. 13-03