

BRIDGE CONSISTS OF

- 2 - 40'-0" TYPE I MOD PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 105'-0" BULB TEE, 63 IN, PSC BEAM SPAN ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 2 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 2'-8")
(L = 4'-3"; W = 1'-1"; H = 2'-8")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)
- CONCRETE BARRIERS - TEMPORARY ----- GA. STD. 4960 (5-10-07)
- DETAILS OF PRECAST TEMPORARY BARRIERS ----- GA. STD. 4961 (9-8-06)

DRAINAGE DATA

DRAINAGE AREA ----- 42.4 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	5,930 CFS	6.65 FPS	892 SQ FT	0.44 FT
100 YEAR	6,960 CFS	7.00 FPS	994 SQ FT	0.54 FT
500 YEAR	9,450 CFS	7.93 FPS	1,192 SQ FT	0.83 FT

TRAFFIC DATA

TRAFFIC ----- ADT = 4,200 (2013)
ADT = 6,400 (2036)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 5 %

24 HR TRUCKS ----- 10 %

DIRECTIONAL ----- 55 %

UTILITIES

NONE

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

TEMPORARY SHORING - INCLUDE THE COST OF TEMPORARY SHORING AS NECESSARY FOR BRIDGE CONSTRUCTION IN THE OVERALL BID SUBMITTED.

TEMPORARY BARRIERS, METHOD 2 - PLACE TEMPORARY BARRIERS AS SHOWN ON THE PLANS AND GEORGIA STANDARD NO. 4960 TO PROVIDE FOR 1 - 13'-0" TRAFFIC LANE. SUPPLY AND USE THE BARRIER IN ACCORDANCE WITH SPECIAL PROVISION SECTION 620.

TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

GENERAL NOTES - CONTINUED

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX

THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER SAP-1043-A.

EPOXY RESIN ADHESIVE - APPLY EPOXY RESIN ADHESIVE TYPE II TO ALL HARDENED CONCRETE SURFACES JUST PRIOR TO POURING THE CONCRETE FOR THE NEXT STAGE OF CONSTRUCTION, SEE SECTION 886 OF THE GEORGIA DOT SPECIFICATIONS. INCLUDE THE COST OF EPOXY ADHESIVE AND ITS APPLICATION IN THE OVERALL BID SUBMITTED.

WAITING PERIOD - NONE REQUIRED.

FOOTING ELEVATIONS - DO NOT LOWER FOOTING ELEVATIONS AT BENT 3, AS SHOWN ON THE PLANS, MORE THAN 3'-0" WITHOUT THE APPROVAL OF THE STATE BRIDGE ENGINEER.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILOT HOLES - DRILL A 24" DIAMETER PILOT HOLE TO A MINIMUM ELEVATION OF 1920.00 AT BENT 2 FOR EACH PILE. DRILL A 24" DIAMETER PILOT HOLE TO A MINIMUM ELEVATION OF 1941.00 AT BENT 4 FOR EACH PILE.

PILE POINTS - REINFORCE ALL PILE TIPS AT BENT 4 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATION.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT BENT 1.

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1" AT BENT 1 ONLY. SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

EXTERIOR BEAM BRACING - THE CONTRACTOR SHALL PROVIDE BRACING AT SPANS 1 AND 3 BETWEEN EXTERIOR BEAM AND THE FIRST INTERIOR BEAM UNTIL THE DECK HAS BEEN POURED AND THE OVERHANG FORMS REMOVED. ALL COST FOR DESIGNING, PROVIDING, INSTALLING AND REMOVING BRACING SHALL BE INCLUDED IN PRICE BID FOR LUMP - SUPERSTRUCTURE CONCRETE.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

DESIGN DATA

SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY B)

TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA, $f'_c = 3,500$ PSI
PSC BEAMS ----- CLASS AAA, $f'_c =$ SEE BEAM SHEETS
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS
SUBSTRUCTURE ----- CLASS AA, $f'_c = 3,500$ PSI

REINFORCEMENT STEEL: ----- GRADE 60, $f_y = 60,000$ PSI

PRETENSIONING STRANDS: ----- $f'_s = 270,000$ PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0300	541	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	1049	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (351)
500-2100	354	LF	CONCRETE BARRIER
500-3002	202	CY	CLASS AA CONCRETE
507-8900	540	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 1
507-9031	730	LF	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO - 1
511-1000	34739	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (75301)
520-0353	7	EA	H-PILE POINTS, HP 12 X 53
520-1125	196	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-1147	285	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4125	1	EA	LOAD TEST, STEEL H, HP 12 X 53 (IF REQD)
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
520-5000	165	LF	PILOT HOLES
540-1101	LUMP	LS	REMOVAL OF EXISTING BR, STA NO - 36+55
603-2024	1940	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	1940	SY	PLASTIC FILTER FABRIC
620-0200	185	LF	TEMPORARY BARRIER, METHOD NO. 2

BRIDGE NO. 1

DATE		REVISIONS		BY	
GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES					
GENERAL NOTES SR 17/75 OVER HIWASSEE RIVER TOWNS COUNTY BR000-0000-00(302)					
SCALE : NO SCALE U.N.O.				MAY 2013	
DESIGNED	RLF	CHECKED	JKM	REVIEWED	WMD/DLC
DRAWN	JKM	DESIGN GROUP	ACB	APPROVED	BFR

	1780 CORPORATE DRIVE SUITE 400 NORCROSS, GA 30093 PHONE (770) 931-8005 FAX (770) 931-8555	DRAWING NO. 35-002
	BRIDGE SHEET 2 OF 21	

3/12/2014 1:32:24 PM