

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	HPPNH-0012-01(085)	727	1146

LEFT BRIDGE CONSISTS OF

- 3 - 120'-0" BULB TEE, 63 IN, PSC BEAM SPANS ----- 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 = 5'-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)

RIGHT BRIDGE CONSISTS OF

- 2 - 60'-0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - 120'-0" BULB TEE, 63 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 3 - 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 = 5'-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)

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,  $f_c = 8,000$  PSI  
PSC BEAM ALLOWABLE TENSION ----- 537 PSI  
SUBSTRUCTURE ----- CLASS AA,  $f_c = 3,500$  PSI

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

PRETENSIONING STRANDS: -----  $f_p = 270,000$  PSI

DRAINAGE DATA

DRAINAGE AREA ----- 18.18 SQ MILES

NORMAL STAGE			
FLOOD FREQUENCY	DISCHARGE	VELOCITY	AREA OF OPENING UNDER FLOODSTAGE
50 YEAR	4670 CFS	2.64 FPS	1769 SQ FT
100 YEAR	5520 CFS	2.79 FPS	1978 SQ FT
500 YEAR	7870 CFS	3.21 FPS	2452 SQ FT

  

ABNORMAL STAGE - COOSA RIVER			
FLOOD FREQUENCY	DISCHARGE	VELOCITY	AREA OF OPENING UNDER FLOODSTAGE
50 YEAR	4670 CFS	2.64 FPS	1769 SQ FT
100 YEAR	5520 CFS	2.67 FPS	2067 SQ FT
500 YEAR	7870 CFS	3.00 FPS	2623 SQ FT

UTILITIES

NONE

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS 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.

WAITING PERIOD - NONE REQUIRED

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2 LT, 2 RT, 3 LT, 3 RT, AND 4 RT.

SEAL CONCRETE - PROVIDE SEAL CONCRETE AT BENTS 2 LT, 2 RT, 3 LT, 3 RT, AND 4 RT. CONCRETE, REINFORCING STEEL (NUMBER OF COLUMN TIE BARS AND LENGTH OF VERTICAL COLUMN BARS), AND SEAL CONCRETE QUANTITIES ARE BASED ON AN ASSUMED WATER SURFACE ELEVATION OF 584.00 AND SHALL BE ADJUSTED BY THE ENGINEER IF NECESSARY AT TIME OF CONSTRUCTION. EXTEND VERTICAL COLUMN BARS A MINIMUM OF 2'-9" INTO CAP. KEY SEALS 1'-0" MINIMUM INTO ROCK.

FOOTING ELEVATIONS - DO NOT LOWER FOOTING ELEVATIONS, AS SHOWN ON THE PLANS, MORE THAN 3'-0" WITHOUT THE APPROVAL OF THE STATE BRIDGE ENGINEER. THIS SAME REQUIREMENT APPLIES TO THE SEAL CONCRETE.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILE POINTS - REINFORCE ALL PILE TIPS AT BENTS 1 LT, 1 RT, 4 LT, AND 5 RT IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATIONS.

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

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 AT BENT 4 LT TO 1 7/8" AND BENT 1 RT AND 5 RT TO 1 1/4". 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.

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.

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.

TRAFFIC DATA

TRAFFIC ----- ADT = 9600(2010)  
ADT = 19600(2030)

DESIGN SPEED ----- 65 MPH

TRUCKS ----- 12 %

24 HR TRUCKS ----- 15 %

DIRECTIONAL ----- 52

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITIES		UNIT	PAY ITEM
	LEFT BRIDGE	RIGHT BRIDGE		
211-0300	490	675	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	1440	1440	SY	GROOVED CONCRETE
500-1006	LUMP	----	LS	SUPERSTR CONCRETE, CL AA, BR NO - 3 LT (481)
500-1006	----	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 3 RT (466)
500-2100	706	706	LF	CONCRETE BARRIER
500-3002	200	269	CY	CLASS AA CONCRETE
500-3700	250	340	CY	SEAL CONC
507-9002	----	581	LF	PSC BEAMS, AASHTO TYPE II, BR NO - 3 RT
507-9031	2127	----	LF	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO - 3 LT
507-9031	----	1420	LF	PSC BEAMS, AASHTO, BULB TEE, 63 IN, BR NO - 3 RT
511-1000	35799	48143	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 3 LT (104422)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 3 RT (106767)
520-0353	----	14	EA	H-PILE POINTS, HP 12 X 53
520-0573	20	----	EA	H-PILE POINTS, HP 14 X 73
520-1125	----	380	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-1147	470	----	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)
525-1000	4	6	EA	COFFERDAM
603-2024	1350	1350	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	1350	1350	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 3 LT. & RT.

GEORGIA  
DEPARTMENT OF TRANSPORTATION  
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

GENERAL NOTES  
SR 1 LOOP (WEST ROME BYPASS)  
OVER BEECH CREEK  
FLOYD COUNTY HPPNH-0012-01(085)

SCALE: NO SCALE AUGUST 2009



JOB NO. 2077-026	BRIDGE SHEET 2 OF 19	BY	DATE	DESIGNED <u>LSW</u>	CHECKED <u>RJS/JLA</u>	REVIEWED <u>WEI/WMD</u>
				DRAWN <u>RAR</u>	DESIGN GROUP <u>RAG</u>	APPROVED <u>PVL</u>

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