

BRIDGE CONSISTS OF

- 3 - 101'-4" BULB TEE, 54 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 11 - 138'-0" BULB TEE, 72 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 103'-0" BULB TEE, 54 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 14 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 2 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; 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)

TRAFFIC DATA

TRAFFIC ----- ADT = 5,850 (2014)
ADT = 9,000 (2034)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 8.5 %

24 HR TRUCKS ----- 7.5 %

DIRECTIONAL ----- 60 %

UTILITIES

NO UTILITIES ON BRIDGE

EXISTING UTILITIES

OVERHEAD UTILITY LOCATED 15 FEET DOWNSTREAM FROM EXISTING BRIDGE

DESIGN DATA

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

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
BARRIER ----- 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: ----- $f'_p = 270,000$ PSI

STEEL H-PILES: ----- $f_y = 50,000$ PSI

DRAINAGE DATA

DRAINAGE AREA ----- 712.5 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	33,700 CFS	0.67 FPS	50,305 SQ FT	0.01 FT
100 YEAR	38,000 CFS	0.75 FPS	50,859 SQ FT	0.01 FT
500 YEAR	48,800 CFS	0.93 FPS	52,383 SQ FT	0.01 FT

GENERAL NOTES

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

SHOP DRAWINGS - SUBMIT SHOP DRAWINGS TO ENGINEER OF RECORD (EOR) FOR INITIAL REVIEW AND APPROVAL. ONCE APPROVED AND STAMPED BY EOR, EOR SHALL SUBMIT 6 STAMPED SETS TO THE GEORGIA DOT OFFICE OF BRIDGES AND STRUCTURES FOR REVIEW AND APPROVAL.

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.

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

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE OBTAINED ON THE GDOT WEBSITE AT:
HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX

THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER SAP-961(3) (PROJECT ID NO. H016585).

WAITING PERIOD - DO NOT BEGIN WORK AT BENT 16 UNTIL THE COMPLETED END FILLS HAVE BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 60 DAYS. PILES AT BENT 1 HAVE BEEN DESIGNED TO ACCOMODATE SETTLEMENT. NO WAITING PERIOD REQUIRED AT BENT 1.

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2-8 AND 13-15.

SEAL CONCRETE - PROVIDE SEAL CONCRETE AT BENTS 2-8 AND 13-15. 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 329.41 AND SHALL BE ADJUSTED BY THE ENGINEER IF NECESSARY AT TIME OF CONSTRUCTION. EXTEND VERTICAL COLUMN BARS A MINIMUM OF 2'-9" INTO CAP.

MASS CONCRETE - BRIDGE CONTAINS COMPONENTS SUBJECT TO MASS CONCRETE REQUIREMENTS, SEE SPECIAL PROVISION SECTION 500 - CONCRETE STRUCTURES. NO SEPARATE MEASUREMENT AND PAYMENT WILL BE MADE FOR MASS CONCRETE. INCLUDE ALL COSTS, INCLUDING INCIDENTALS, IN THE PRICE BID SUBMITTED FOR CONCRETE.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

STEEL H-PILES - USE STEEL FOR H-PILES THAT MEETS THE REQUIREMENTS OF ASTM A 709 GR 50.

PILOT HOLES - 24" MAXIMUM DIAMETER PILOT HOLES MAY BE USED TO ADVANCE PILES PAST EXISTING RIPRAP. ELEVATION AS FOLLOWS:

BENT 3	ELEV. 311.50
BENT 4	ELEV. 308.50
BENT 6	ELEV. 286.50
BENT 7	ELEV. 296.00
BENT 8	ELEV. 302.00
BENT 13	ELEV. 307.00

PILE POINTS - REINFORCE ALL PILE TIPS AT BENTS 3, 5, & 6 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATIONS.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1, 5, AND 15.

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 1/2". 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 TESTING. 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 BUILD PROJECT - THIS IS A DESIGN BUILD PROJECT AND QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0300	767	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	8128	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (2737)
500-2100	3844	LF	CONCRETE BARRIER
500-3002	1313	CY	CLASS AA CONCRETE
500-3700	436	CY	SEAL CONC
507-9030	2013	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
507-9033	7553	LF	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO - 1
511-1000	266086	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (599383)
520-0597	22	EA	H-PILE POINTS, HP 14 X 117
520-1147	450	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-1173	1040	LF	PILING IN PLACE, STEEL H, HP 14 X 102
520-1179	4605	LF	PILING IN PLACE, STEEL H, HP 14 X 117
520-5000	305	LF	PILOT HOLES
524-0010	1237	LF	DRILLED CAISSON - 84 IN
525-1000	10	EA	COFFERDAM

RIP-RAP AND FILTER FABRIC QUANTITIES INCLUDED IN ROADWAY QUANTITIES

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRSTO-0076-01(036)	153	267

RELEASED FOR CONSTRUCTION: 11/14/2014

BRIDGE NO. 1

		MICHAEL BAKER CORPORATION 3595 ENGINEERING DRIVE NORCROSS, GEORGIA 30092 (770) 263-9118	
		GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES	
GENERAL NOTES			
S.R. 47 OVER LITTLE RIVER (CLARKS HILL LAKE)			
LINCOLN/COLUMBIA COUNTY BRSTO-0076-01(036)			
SCALE: NONE		NOVEMBER 2014	
DESIGNED	BSB/ANZ	CHECKED	JCR/AWB
DRAWN	BSB	DESIGN GROUP	DLC
REVIEWED	WMD/DLC	APPROVED	BFR

DRAWING NO.	35-005
BRIDGE SHEET	5 OF 33

DATE	BY	REVISIONS