

BRIDGE CONSISTS OF

- 1 - 86'-0" BULB TEE, 54 IN, PSC BEAM SPAN ----- SPECIAL DESIGN
- 2 - PSC PILE END 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")
- SQUARE PRESTRESSED CONCRETE PILES ----- GA. STD. 3215 (2-22-84)
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (10-20-97)

DRAINAGE DATA

DRAINAGE AREA ----- 7.81 SQ MILES

FLOOD FREQUENCY	DISCHARGE	VELOCITY	AREA OF OPENING UNDER HIGHWATER
50 YEAR	1037 CFS	3.09 FPS	335.90 SQ FT
100 YEAR	1234 CFS	3.39 FPS	364.08 SQ FT
500 YEAR	1738 CFS	4.06 FPS	428.32 SQ FT

TRAFFIC DATA

TRAFFIC ----- ADT = 2600 (2006)  
ADT = 4300 (2026)  
DHV = 430 (2026)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 7 %

24 HR TRUCKS ----- 9 %

DIRECTIONAL ----- 60 %

UTILITIES

NONE

DESIGN DATA

SPECIFICATIONS ----- AASHTO 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  
PSC BEAMS ----- CLASS AAA,  $f_c = 6,000$  PSI  
PSC BEAM ALLOWABLE TENSION ----- 465 PSI  
SUBSTRUCTURE ----- CLASS A,  $f_c = 3,000$  PSI

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

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

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.

WORKING DRAWINGS - WHEN SUBMITTING SHOP DRAWINGS FOR THIS PROJECT TO THE D.O.T. GENERAL OFFICE FOR REVIEW, THEY SHALL BE SENT TO THE OFFICE OF CONSULTANT DESIGN.

REINFORCING STEEL - ALL REINFORCING STEEL SHALL BE PLACED AND TIED IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. WELDING OF REINFORCING STEEL WILL NOT BE PERMITTED.

CHAMFER - ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED  $\frac{3}{8}$  INCH UNLESS OTHERWISE NOTED.

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

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

EXISTING BRIDGE PLANS - PLANS FOR EXISTING BRIDGE MAY BE PURCHASED BY CONTACTING THE PLANS REPRODUCTION OFFICE AT (404) 656-5401. THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER ER-S-3.

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAIL.

PILING - JETTING OR SPUDDING OF PSC PILING MAY BE NECESSARY AT THIS SITE TO ACHIEVE THE INDICATED PLAN DRIVING OBJECTIVE. AT CONTRACTOR'S OPTION, PREDRILLING MAY BE USED AS PER SPECIAL PROVISION SECTION 520.

PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING A PILE TIP ELEVATION OF 162, PILES SHALL BE ALLOWED TO FREEZE A MINIMUM OF 24 HOURS AND BE RESTRUCK WITH A WARM HAMMER.

TEST PILES - DRIVE A TEST PILE AT THE FOLLOWING LOCATION:  
ONE 20" SQ PSC 60 FT AT BENT 1.

SMOOTH DOWEL BARS - SMOOTH DOWEL BARS SHALL BE PLACED IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUTED 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.

GROOVED CONCRETE - THE ENTIRE LENGTH OF THE BRIDGE SHALL BE GROOVED 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 GEORGIA DOT OFFICE OF MATERIALS AND RESEARCH. ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES SHALL BE USED FOR MANUAL SHIELDED METAL ARC WELDING.

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

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

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-0100	401	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (143)
500-2100	160	LF	CONCRETE BARRIER
500-3101	38	CY	CLASS A CONCRETE
507-9030	423	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
511-1000	4612	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (31561)
520-2220	650	LF	PILING, PSC, 20 IN SQ
520-3220	1	EA	TEST PILE, PSC, 20 IN SQ
520-4220	1	EA	LOAD TEST, PSC, 20 IN SQ (IF REQD)
540-1101	LUMP		REMOVAL OF EXISTING BR, STA NO - 111+83
603-2024	755	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	755	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 1

Heath & Lineback Engineers  
INCORPORATED  
12 POWDER SPRINGS STREET, SUITE 210  
MARIETTA, GEORGIA 30064

GEORGIA  
DEPARTMENT OF TRANSPORTATION  
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

GENERAL NOTES

S.R. 135 OVER DARK BAY CREEK

ATKINSON COUNTY BR-0000-00(688)

SCALE: NO SCALE

SEPTEMBER 2004

DESIGNED	BKA	CHECKED	KJK	REVIEWED	GBL
DRAWN	BKA	DESIGN GROUP	EJC	APPROVED	PVL

BRIDGE SHEET  
2 OF 9

REVISIONS  
DATE

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