

**BRIDGE CONSISTS OF**

- 2 - 130'-0" BULB TEE, 72 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - PSC PILE END BENTS ----- SPECIAL DESIGN
- 1 - CONCRETE INTERMEDIATE BENT ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)  
(L = 4'-6"; W = 1'-1"; H = 2'-8")
- SQUARE PRESTRESSED CONCRETE PILES ----- GA. STD. 3215 (2-22-84)
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- CONCRETE BARRIERS - TEMPORARY ----- GA. STD. 4961 (2-1-01)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

**TRAFFIC DATA**

TRAFFIC ----- ADT = 1800 (2012)  
ADT = 2600 (2032)  
DESIGN SPEED ----- 45 MPH  
TRUCKS ----- 8 %  
DIRECTIONAL ----- 66/34 %

**UTILITIES**

NONE

**DESIGN DATA**

SPECIFICATIONS ----- AASHTO, 17TH EDITION, 2002  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)  
TYPICAL HS20 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 SHEET  
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEET  
SUBSTRUCTURE ----- CLASS AA,  $f'_c = 3,500$  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, 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 REFORCING STEEL.
- CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES  $\frac{3}{8}$ " UNLESS OTHERWISE NOTED.
- PROTECTIVE PLATFORMS - PROVIDE PROTECTIVE PLATFORMS AT THIS SITE, SEE SECTION 510 OF THE GEORGIA DOT SPECIFICATIONS. MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 17'-6" ABOVE I-75.
- TEMPORARY SHORING - INCLUDE THE COST OF TEMPORARY SHORING AS NECESSARY FOR BRIDGE CONSTRUCTION IN OVERALL BID SUBMITTED.
- TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.
- TEMPORARY BARRIERS, METHOD 2 - PLACE TEMPORARY BARRIERS AS SHOWN ON THE PLANS AND GEORGIA STANDARD NO. 4960 TO PROVIDE FOR TWO 12'-0" TRAFFIC LANES. SUPPLY AND USE THE BARRIER IN ACCORDANCE WITH SPECIAL PROVISION SECTION 620.
- EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY CONTACTING THE PLANS REPRODUCTION OFFICE AT (404) 347-0600. THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER 1-401-1(3).

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.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING THE PILE TIP ELEVATIONS SHOWN, ALLOW PILES TO FREEZE A MINIMUM OF 24 HOURS AND RESTRIKE WITH A WARM HAMMER.

BENT NUMBER	PILE TIP ELEVATION
1	272
2	272
3	277

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:  
ONE 16 IN SQ PSC X 23 FT AT BENT 2 LEFT  
ONE 20 IN SQ PSC X 43 FT AT BENT 3 RIGHT

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.

ABUTMENT SOIL REINFORCING DEVICE INSERTS - INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS FOR SOIL REINFORCING DEVICES AT ABUTMENTS IN THE OVERALL BID SUBMITTED.

FILL SETTLEMENT - PROTECT PILES DRIVEN AT BENTS 1 AND 3 FROM NEGATIVE SKIN FRICTION WHEN USED IN CONJUNCTION WITH MECHANICALLY STABILIZED EARTH WALLS, SEE SECTION 551 OF THE GEORGIA DOT SPECIFICATIONS. DRIVE PILES AT END BENTS BEFORE WALL LEVELING PADS ARE CONSTRUCTED.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE  $\frac{3}{8}$ " EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO  $1\frac{1}{4}$ ". 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.

RIDING QUALITY - THE FINISHED BRIDGE DECK AND APPROACH SLABS SHALL MEET THE RIDE QUALITY REQUIREMENTS AS SPECIFIED IN SUB-SECTION 500.3.06.E OF THE GEORGIA DOT SPECIFICATIONS FOR STATE ROUTES WITH FOUR LANES OR MORE.

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.

**SUMMARY OF QUANTITIES**

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0200	160	CY	BRIDGE EXCAVATION, GRADE SEPARATION
500-0100	1502	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO -1 (483)
500-2100	506	LF	CONCRETE BARRIER
500-3002	166	CY	CLASS AA CONCRETE
507-9032	1799	LF	PSC BEAMS, AASHTO, BULB TEE, 72 IN, BR NO -1
511-1000	26268	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (107592)
520-2216	770	LF	PILING, PSC, 16 IN SQ
520-2220	550	LF	PILING, PSC, 20 IN SQ
520-3216	1	EA	TEST PILE, PSC, 16 IN SQ
520-3220	1	EA	TEST PILE, PSC, 20 IN SQ
520-4216	1	EA	LOAD TEST, PSC, 16 IN SQ (IF REQD)
520-4220	1	EA	LOAD TEST, PSC, 20 IN SQ (IF REQD)
540-1101	LUMP	LS	REMOVAL OF EXISTING BR, STA NO - 50+00
620-0200	260	LF	TEMPORARY BARRIER, METHOD NO. 2



USE ON CONSTRUCTION

BRIDGE NO. 1

**CSI CIVIL SERVICES, INC.**  
CONSULTING ENGINEERS  
620 PEACHTREE ST., N.E., STE 3008  
ATLANTA, GA 30308 (404)685-8000

GEORGIA  
**DEPARTMENT OF TRANSPORTATION**  
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

GENERAL NOTES  
CR 418 (OMEGA-ELDORADO RD.) OVER I-75  
TIFT COUNTY NHS00-0000-00(765)

SCALE: 1" = 20'-0" MAY 2011



BRIDGE SHEET  
2 OF 13

DATE	05/13/2011
BY	
REVISIONS	
REPAIR CHANGES	

DESIGNED	FRO	CHECKED	RK / GRH	REVIEWED	WEI / WMD
DRAWN	JRC	DESIGN GROUP	EJC	APPROVED	PVL