

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	M004608	8	21

DESIGN DATA

SPECIFICATIONS - 2002 AASHTO LFD 17TH ED. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES
 CONCRETE: SUPERSTRUCTURE CLASS "AA" 24 HOUR ACCELERATED STRENGTH -- $f'_c = 3,500$ PSI
 RAPID SETTING PATCH MATERIALS -- $f'_c = 4,000$ PSI
 POLYMER CONCRETE -- $f'_c = 5,000$ PSI (24 HOURS) (PIER CAP SPALL REPAIR AND EDGE GIRDER CONCRETE ADJACENT TO CABLE GUIDE TUBE)
 REINFORCEMENT STEEL: GRADE 60, $f_y = 60,000$ PSI

NOTIFICATION

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST 14 DAYS PRIOR TO THE START OF CONSTRUCTION AND AT LEAST 72 HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERNS OR CLOSING ANY STREET TO TRAFFIC.

GEORGIA PORTS AUTHORITY 950 W RIVER ST SAVANNAH, GA (912) 964-3925	US COAST GUARD 1297 N LIGHTNING RD SAVANNAH, GA (912) 652-4353
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SEQUENCE OF REPAIRS

THE CONTRACTOR SHALL SEQUENCE REPAIRS SO AS TO NOT DAMAGE ANY PREVIOUSLY PERFORMED WORK. SUBMIT TO THE ENGINEER FOR APPROVAL THE CONTRACTOR'S PROPOSED SEQUENCE OF REPAIRS. ANY DEVIATION FROM THE SEQUENCE PROVIDED BELOW REQUIRES REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.

1. PATCH PIER DELAMINATIONS AND SPALLS (PIER CONCRETE REPAIRS) WHERE IDENTIFIED IN THE PLANS AND AT THE DISCRETION OF THE ENGINEER, JACK BEAMS PRIOR TO SPALL REPAIRS. SEE SHEETS 13 FOR DETAILS.
2. REPLACE JOINT SEAL AND HEADER (DECK JOINT REPAIRS), SEE SHEET 12 .
3. THE FOLLOWING REPAIRS MAY BE PERFORMED IN ANY ORDER SO AS TO NOT IMPACT ANY PREVIOUS REPAIRS OR REQUIRE PERFORMING THE REPAIR AGAIN LATER:
 - A. REPAIR THE STEEL ANCHOR PIPE CRACK (CABLE ANCHOR PIPE CRACK REPAIR), SEE SHEETS 14 AND 15 FOR DETAILS.
 - B. PATCH CABLE ANCHORAGE DELAMINATIONS AND SPALLS (CABLE ANCHORAGE REPAIRS), SEE SHEET 16 FOR DETAILS.
 - C. FILL ANCHORAGE COVERS WITH GREASE, SEE SHEET 16.
 - D. TOUCH UP PAINT ON STEEL GUIDE TUBE, SEE SHEET 16.
 - E. REPLACE CABLE STAY PROTECTIVE TAPE (CABLE PROTECTION REPAIRS), SEE SHEET 17 FOR DETAILS.
 - F. TIGHTEN LOOSE T-BOLT CLAMPS, SEE SHEET 17 FOR DETAILS.
 - G. TIGHTEN AND/OR REPLACE MISSING SCREWS IN ANCHORAGE COVER, SEE SHEET 17 FOR DETAILS.
 - H. APPLY MISSING SEALANT ON LOWER NEOPRENE BOOTS, SEE SHEET 17.
 - I. ADD FLOWABLE FILL TO END BENT (END BENT REPAIRS), SEE SHEET 18 FOR DETAILS.
 - J. PATCH VOID IN CONCRETE AT CABLE SWIO AND PIER 20N (MISCELLANEOUS CONCRETE REPAIRS), SEE SHEET 19 FOR DETAILS.
 - K. REPAIR FRACTURED APPROACH PAVEMENT, SEE SHEET 19 FOR DETAILS.
 - L. SEAL CONCRETE CRACKS, SEE SHEET 19 .
 - M. REPLACE GROUT END PATCHES FOR TRANSVERSE POST-TENSIONING TIES, SEE SHEET 19 FOR DETAILS.

UTILITIES


THERE ARE NO KNOWN UTILITIES ALONG THE BRIDGE.

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 IN. 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 16'-9" ABOVE ALL ROADWAYS CROSSING UNDER BRIDGE.
 EXISTING BRIDGE PLANS - ORIGINAL AND REHABILITATION 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](http://www.dot.ga.gov/doingbusiness/research/pages/roaddesignsearch.aspx) THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER BR009-2(61) AND WAS REHABILITATED UNDER PROJECT NUMBER CSNHS-M0002-00 (373).
 SHOP DRAWINGS - WHEN SUBMITTING SHOP DRAWINGS FOR THIS PROJECT TO THE DOT GENERAL OFFICE, SUBMIT THEM TO THE BRIDGE MAINTENANCE UNIT.
 DIMENSIONS AND ELEVATIONS - VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO ORDERING MATERIALS OR BUILDING FORMS. LIGHT LINES INDICATE THE EXISTING STRUCTURE AND HEAVY LINES INDICATE THE NEW STRUCTURE.
 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.
 EXISTING REINFORCEMENT - BEND EXISTING REINFORCEMENT TO BE UTILIZED IN NEW CONSTRUCTION IN A MANNER TO PROVIDE THE MAXIMUM LAP POSSIBLE OR AS SHOWN ON THE PLANS. THOROUGHLY CLEAN EXISTING REINFORCEMENT OF CONCRETE SCALE AND RUST BEFORE BONDING INTO NEW CONSTRUCTION.
 EXISTING SLOPE PAVING - TAKE CARE TO PREVENT DAMAGING THE EXISTING SLOPE PAVING. REPAIR ANY DAMAGE THAT OCCURS TO THE SLOPE PAVING.
 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.
 PAINT - CLEAN AND PAINT ALL NEW STRUCTURAL STEEL AND SPOT CLEAN AND PAINT EXISTING STRUCTURAL STEEL AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS.
 SALVAGED MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.
 STEEL - ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GRADE 50 (ASTM A709) UNLESS OTHERWISE NOTED.
 HIGH STRENGTH BOLTS - ALL BOLTS SHALL BE HIGH STRENGTH BOLTS MEETING THE REQUIREMENTS OF AASHTO M164 (ASTM A325, TYPE 1). BOLTS SHALL BE 7/8 IN. DIAMETER IN 15/16 IN. DIAMETER HOLES UNLESS OTHERWISE NOTED. HIGH STRENGTH BOLTS SHALL HAVE A HARDENED WASHER UNDER THE NUT AND THE TURNED ELEMENT.
 ANCHOR BOLTS - SHALL CONFORM TO ASTM TYPE 316 STAINLESS STEEL UNLESS OTHERWISE NOTED.
 NAVIGATIONAL CLEARANCE - USE OF FALSEWORK, FORMWORK, AS WELL AS OTHER CONSTRUCTION METHODS AND PROCEDURES SHALL BE SCHEDULED AND PERFORMED IN SUCH A WAY THAT IT SHALL NOT INTERFERE WITH OR CAUSE UNAUTHORIZED INTERRUPTIONS TO NAVIGATION. THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES IN SUCH A MANNER THAT BOAT TRAFFIC HAS FREE PASSAGE UNDER THE BRIDGE AT ALL TIMES. THE EXTENT AND LIMITS OF ANY PROPOSED ENCROACHMENT ON THE NAVIGATIONAL CLEARANCE SHALL BE SUBMITTED TO THE COAST GUARD FOR APPROVAL. NO ENCROACHMENT SHALL BE CAUSED UNTIL RECEIPT OF WRITTEN AUTHORIZATION FROM THE COAST GUARD IS RECEIVED. THE CONTRACTOR SHALL COMPLY WITH THE REGULATIONS SET FORTH BY THE FEDERAL AVIATION ADMINISTRATION IN CONNECTION WITH AIR NAVIGATION AND AERIAL OBSTRUCTION MARKINGS AND LIGHTING.
 POLYMER CONCRETE - FOR PATCHING EDGE GIRDER CONCRETE ADJACENT TO THE CABLE GUIDE TUBE REPAIRS AND PIER 19S SPALL REPAIRS, A METHYL-METHACRYLATE (MMA) POLYMER CONCRETE MEETING THE REQUIREMENTS OF SECTION 837 OF THE STANDARD SPECIFICATIONS SHALL BE USED. THE MATERIAL SHALL BE MIXED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE COST OF THE POLYMER CONCRETE FOR THESE PATCHING OPERATIONS AS WELL AS ALL NECESSARY EQUIPMENT, LABOR, AND ACCESS NEEDED DURING THIS OPERATION SHALL BE INCLUDED IN THE OVERALL PROJECT COST. THE CONSTRUCTION REQUIREMENTS OF SPECIAL PROVISION 521 APPLY FOR THE SPALL REPAIRS INVOLVING THE POLYMER CONCRETE.
 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 MISCELLANEOUS CABLE ANCHOR REPAIRS IDENTIFIED IN THE PLANS, CLEANING AND BENDING OF EXISTING REINFORCEMENT, WATERPROOFING, CLEANING OUT ALL EXISTING DECK SCUPPERS AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

SUMMARY OF BRIDGE QUANTITIES

ITEM NO.	QUANTITY	UNIT	PAY ITEM
449-1350	35	LF	PREFORMED SILICONE JOINT SEAL, BRIDGE NO. 1, PIER NO. 12N
449-1620	82	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETH COPOLYMER, NITROGEN-BLWN SEAL, BRIDGE NO. 1, PIER NO. 23S
449-1620	94	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETH COPOLYMER, NITROGEN-BLWN SEAL, BRIDGE NO. 1, PIER NO. 10S
449-1620	70	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETH COPOLYMER, NITROGEN-BLWN SEAL, BRIDGE NO. 1, PIER NO. 2S
449-1620	25	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETH COPOLYMER, NITROGEN-BLWN SEAL, BRIDGE NO. 1, PIER NO. 5 (RAMP 0-I)
449-1620	25	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETH COPOLYMER, NITROGEN-BLWN SEAL, BRIDGE NO. 1, PIER NO. 9 (RAMP 0-I)
449-1705	70	LF	ELASTOMERIC PROFILE BRIDGE JOINT SEALS, BRIDGE NO. 1, PIER NO. 2N
518-1000	LUMP	LS	RAISE EXISTING BRIDGE, STA 140+85.00
521-3000	874	SF	PATCHING CONCRETE BRIDGE
527-0020	288	EA	PROTECTIVE BOOT REPAIRS
527-0040	7	EA	STEEL ANCHOR PIPE CRACK REPAIR
527-0050	75	LF	CABLE STAY PROTECTIVE TAPE REPAIR
528-0500	1	LS	EPOXY PRESSURE INJECTION OF CONCRETE CRACKS, BRIDGE NO. 1
535-1105	LUMP	LS	PAINTING EXISTING STEEL STRUCTURE, BRIDGE I.D. NO. 1
540-1202	LUMP	LS	REMOVAL OF PARTS OF EXISTING BRIDGE, BR. NO. 1
600-0001	1	CY	FLOWABLE FILL

BRIDGE NO. 1				1780 CORPORATE DRIVE SUITE 400 NORCROSS, GA 30093 PHONE (770) 931-8005 FAX (770) 931-8555	
GEORGIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING-OFFICE OF BRIDGE DESIGN AND MAINTENANCE					
GENERAL NOTES TALMADGE MEMORIAL BRIDGE					
CHATHAM COUNTY				M004608	
SCALE: NO SCALE U.N.O.				6/16/2014	
DESIGNED <u>M.L.K.</u>		CHECKED <u>A.D.K.</u>		REVIEWED <u>C.B.B.</u>	
DRAWN <u>M.A.C.</u>		GOVT LMSGN <u>B.M.U.</u>		APPROVED _____	

DATE	REVISIONS
06/20/14 <td>BY <u>M.L.K.</u> / <u>M.A.C.</u> DESCRIPTION: UPDATED PAY ITEM</td>	BY <u>M.L.K.</u> / <u>M.A.C.</u> DESCRIPTION: UPDATED PAY ITEM

DRAWING NO. 35-002	BRIDGE SHEET 8 OF 21
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