

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW REINFORCING STEEL OF THE SAME SIZE AND COATING AT NO COST TO THE DEPARTMENT.

ITEM 514 - FIELD PAINTING, MISC.: ZINC RICH PRIMER

THIS ITEM SHALL CONSIST OF THE REMOVAL OF ANY LOOSE CONCRETE, CLEANING OF THE PRESTRESSING STRANDS/REINFORCING STEEL, AND APPLICATION OF A ZINC RICH PRIMER LOCATED ON THE BOTTOM OF THE EXISTING BOX BEAM SUPERSTRUCTURE. THE LOOSE CONCRETE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. ALL DEBRIS SHALL BE COLLECTED AND REMOVED OFF SITE. BLAST CLEAN ALL EXPOSED PRESTRESSING STRANDS/REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVES WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING. APPLY A ZINC RICH PRIMER, PER CMS 708.02B, OVER ALL EXPOSED STEEL SURFACES. THE APPLICATION OF THE PRIMER SHALL FOLLOW CMS 514 AND ALL MANUFACTURER SPECIFICATIONS.

PAYMENT FOR ALL EQUIPMENT, LABOR, AND MATERIALS NEEDED SHALL BE MADE UNDER ITEM 514 - FIELD PAINTING, MISC.: ZINC RICH PRIMER.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

A 2" DEEP (1/2)" WIDE STRIP SHALL BE SAWCUT OUT OF THE ASPHALT ABUTTING CONCRETE AS DETAILED IN THE PLANS. IN LIEU OF SAWCUTTING AFTER CONSTRUCTION, THIS JOINT MAY BE FORMED DURING CONSTRUCTION. JOINT SEALER AS PER 705.04 SHALL BE USED TO SEAL THE JOINT CREATED.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 621 - RAISED PAVEMENT MARKER REMOVED

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

- AUG-29-0767 = 5 EA
- AUG-33-1281 = 0 EA
- AUG-66-1981 = 4 EA
- AUG-197-1424 = 5 EA

RAISED PAVEMENT MARKINGS ARE NOT TO BE INSTALLED ON THIS PROJECT. THE PAY ITEM FOR THEM HAS BEEN INTENTIONALLY EXCLUDED FOR THIS REASON.

RAISED PAVEMENT MARKERS REMOVED AND PAVEMENT MARKINGS

THE FOLLOWING ARE THE ESTIMATED QUANTITIES FOR THE PERMANENT PAVEMENT MARKINGS.

BRIDGE LOCATION	STATION TO STATION	646		
		EDGE LINE, 6"	CENTER LINE (DASHED)	CENTER LINE (DOUBLE SOLID)
		MILE	MILE	MILE
AUG-29-0767	403+29 TO 407+75	0.169	0.084	
AUG-33-1281	685+29.70 TO 690+22.55	0.187		0.093
AUG-66-1981	1070+41.38 TO 1073+90.51	0.132	0.066	
AUG-197-1424	752+45.89 TO 756+25.31	0.144		0.072
TOTALS CARRIED TO GENERAL SUMMARY		0.632	0.150	0.165

ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN

844.01 DESCRIPTION INSTALL CONCRETE PATCHES USING GALVANIC ANODES PER SUPPLEMENTAL SPECIFICATION 844 EXCEPT AS NOTED BELOW. ALL CONCRETE PATCHES SHALL BE PLACED TO THE EXISTING SURFACE UNLESS OTHERWISE DETAILED IN THE PLANS.

844.02 MATERIALS CONCRETE USED SHALL BE QC SCC PER C&MS 499, 511. ALL OTHER REQUIREMENTS LISTED IN SS844.02 APPLY.

844.04 GALVANIC ANODE INSTALLATION INSTALL ANODE UNITS AND REPAIR MATERIAL IMMEDIATELY FOLLOWING PREPARATION AND CLEANING OF STEEL REINFORCEMENT. REPAIR MATERIAL SHALL BE PLACED NO LATER THAN ONE (1) WEEK AFTER CONCRETE REMOVAL UNLESS APPROVED BY THE ENGINEER. GALVANIC ANODES SHALL BE INSTALLED IN THE LOCATIONS AND SPACING AS SPECIFIED IN THE PLANS. IN NO CASE, SHALL THE SPACING EXCEED 18 INCHES.

THE CONTRACTOR SHALL PERFORM HIS WORK AS TO NOT DAMAGE THE EMBEDDED ANODES OR CREATE ANY AIR VOIDS AROUND THE EMBEDDED ANODES WHILE SETTING FORMWORK OR PLACING CONCRETE.

844.06 QUALITY CONTROL THE PROPOSED FORM SYSTEM MUST BE SUBMITTED, AND ACCEPTED BY THE PROJECT ENGINEER PRIOR TO THE INSTALLATION OF ANY FORMWORK. THE FORM SYSTEM SHALL NOT BE SUPPORTED THROUGH THE PATCH. THE FORM SYSTEM SHALL PROVIDE ENOUGH HEAD PRESSURE TO ENSURE THE PATCH IS FULLY CONSOLIDATED AND NULL OF VOIDS. THE FORM SYSTEM SHALL INCORPORATE VENTS ALONG THE TOP OF THE PATCH TO ALLOW ENTRAPPED AIR TO ESCAPE DURING CONCRETE PLACEMENT. THE FORM SYSTEM SHALL INCORPORATE A GATE/VALVE SYSTEM CAPABLE OF CONTAINING THE SELF CONSOLIDATING CONCRETE ONCE CONCRETE PLACEMENT IS COMPLETE.

844.08 BASIS OF PAYMENT PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 844 CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN

PAYMENT WILL INCLUDE REMOVAL OF THE UNSOUND CONCRETE, FORMWORK, PLACEMENT OF THE QC SCC CONCRETE MIX.

ITEM 848-SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN

PREPARE CONCRETE SURFACE USING HYDRODEMOLITION ACCORDING TO SUPPLEMENTAL SPECIFICATION 848 EXCEPT THAT DEPTH OF HYDRODEMOLITION, "D" SHALL BE:

- AUG-29-0767 = 1/2"
- AUG-33-1281 = 1/2"
- AUG-66-1981 = 3/4"
- AUG-197-1424 = 3/4"

TRAFFIC PROTECTION DURING HYDRODEMOLITION

IN ACCORDANCE WITH TRAFFIC PROTECTION REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 848, FALSEWORK SHALL BE PLACED IN BETWEEN THE EXISTING BEAMS ON THE AUG-33-1281 STRUCTURE ABOVE ALL U.S. 33 TRAFFIC PRIOR TO HYDRODEMOLITION.

ITEM 848-REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY

AS PER SS848.19, NO HYDRODEMOLITION IS TO BE PERFORMED ON THE AUG-33-1281 STRUCTURE UNTIL THE UNBONDED VARIABLE THICKNESS EXISTING CONCRETE OVERLAY HAS BEEN REMOVED TO THE ENGINEER'S APPROVAL.

ITEM 848 - TEST SLAB

ONLY ONE TEST SLAB IS NEEDED FOR THE PROJECT. THE TEST SLAB IS TO BE PERFORMED PER SS848 BEFORE THE OVERLAY POUR, REGARDLESS OF THE ORDER THE BRIDGES ARE CONSTRUCTED.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS ACCORDING C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002 TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

APPLY A PRIME COAT IN THE SHOP. REPAIR OF COATINGS DAMAGED DUE TO WELDING, HANDLING, ETC..
DESIGN STRESS: ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI
THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM.
END CROSSFRAMES AND PLATES

DESIGN AGENCY



DISTRICT 7 ENGINEERING

DESIGNER
PJB

REVIEWER
DHG 10-28-21

PROJECT ID
108075

SHEET TOTAL
P.04 45