

ITEM SPECIAL - PILE ENCASEMENT

ENCASE ALL CAST-IN-PLACE PILES FOR THE CAPPED PILE PIERS IN CONCRETE CONFORMING TO C&MS 511. LOG-292-1627 AND LOG-368-0075: CONCRETE IS TO BE QC1. PROVIDE A CONCRETE SLUMP BETWEEN 6 TO 8 INCHES WITH THE USE OF A SUPERPLASTICIZER. PLACE THE CONCRETE WITHIN A FORM THAT CONSISTS OF POLYETHYLENE PIPE (707.33), OR PVC PIPE (707.42). LOG-287-0885: CONCRETE IS TO BE QC SCC. THE ENCASEMENT SHALL PLACED TO THE LIMITS SHOWN FOR EACH BRIDGE PER THE PIER ENCASEMENT DETAILS. POSITION THE PIPE SO THAT AT LEAST 3 INCHES OF CONCRETE COVER IS PROVIDED AROUND THE EXTERIOR OF THE PILE.

ALL REINFORCING STEEL IS TO BE UNCOATED.

THE DEPARTMENT WILL MEASURE PILE ENCASEMENT BY THE NUMBER OF FEET. THE DEPARTMENT WILL DETERMINE THE SUM AS THE LENGTH MEASURED ALONG THE AXIS OF EACH PILE FROM THE BOTTOM OF THE ENCASEMENT TO THE TOP OF THE ENCASEMENT AS SHOWN IN THE PLANS. THE DEPARTMENT WILL NOT PAY FOR GALVANIZING PROVIDED BEYOND THE PROJECT REQUIREMENTS. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM - SPECIAL, PILE ENCASEMENT.

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 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.

DESIGN STRESS: ASTM A709
 GRADE 50 - YIELD
 STRENGTH 50 KSI

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: PLATES FOR PILE REPAIR ON BRIDGE LOG-287-0068.

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

THIS ITEM SHALL CONSIST OF THE REMOVAL OF ANY LOOSE CONCRETE, CLEANING OF THE REINFORCING STEEL LOCATED ON THE UNDERSIDE OF THE EXISTING SLAB DECK 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 REINFORCING STEEL OR PLATES. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVES WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

FOR SURFACE PREPARATION OF THE PILE REPAIR (LOG-287-0068), REMOVE ALL DIRT AND DEBRIS BY HAND. REMOVE EXISTING PAINT WHERE LOOSE OR FLAKING WITH HAND SCRAPERS OR POWER TOOLS. ALL DEBRIS SHALL BE COLLECTED AND REMOVED OFF SITE.

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 X 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 517 - DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN

FOR LOG-287-0068, IN ADDITION TO RETROFITTING THE EXISTING BRIDGERAIL, PROVIDE NEW BRIDGE RAIL PANELS.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE: HIGH- PRESSURE WATER BLASTING WITH, OR WITHOUT, ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

ITEM 519 - PATCHING CONCRETE BRIDGE DECK, TYPE B

THIS ITEM OF WORK SHALL BE IN ACCORDANCE WITH PROPOSAL NOTE 512 - ITEM SPECIAL PATCHING CONCRETE BRIDGE DECKS, WITH THE FOLLOWING REVISIONS: REMOVE AND PATCH ONLY UNSOUND PROBLEM AREAS MARKED OUT BY THE ENGINEER, INCLUDING EXISTING BRIDGE JOINTS, BACKWALLS AND APPROACH SLABS; AFTER EXISTING ASPHALT WEARING SURFACE AND WATERPROOFING REMOVAL ON THE DECK; THE ENTIRE CONCRETE SURFACE IS NOT TO BE SOUNDED TO REPAIR ALL POTENTIAL UNSOUND AREAS.

THIS ITEM APPLIES ON THE FOLLOWING STRUCTURE(S): LOG-287-0068 AND LOG-287-0885

ITEM 530 - STRUCTURES, MISC.: ABUTMENT REFACING

IN AREAS DESIGNATED IN THE PLANS, PERFORM ALL WORK AS DESCRIBED IN CMS 519 WITH REVISIONS AS DESCRIBED IN THIS NOTE AND WITH EXCEPTION THAT THE ENTIRE ABUTMENT FACE SHALL BE EXTENDED 6 INCHES AND AS DETAILED IN THE PLANS.

THE FOLLOWING NOTE ARE REVISIONS TO CMS 519 BY SECTION.

519.04 PREPARATION OF SURFACE

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

519.05 PLACING OF REINFORCING STEEL

REINFORCING TO BE THE REINFORCING STEEL SHOWN IN THESE PLANS.

519.06 PLACING, FINISHING, AND CURING OF CONCRETE

CONCRETE USED SHALL BE QC SCC.

THE PROPOSED FORM SYSTEM MUST BE SUBMITTED, AND ACCEPTED BY THE PROJECT ENGINEER PRIOR TO THE INSTALLATION OF ANY FORMWORK. 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.

519.08 BASIS OF PAYMENT

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS, INCLUDING REMOVAL OF UNSOUND CONCRETE AND DETAILED DRAINS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 530 - STRUCTURES, MISC.: ABUTMENT REFACING.

DOWEL HOLES AND REINFORCING STEEL SHALL BE PAID FOR SEPARATELY.

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 3/4".

DESIGN AGENCY



DISTRICT 7
ENGINEERING

DESIGNER

DHG

REVIEWER

LCG 07/14/21

PROJECT ID

99855

SHEET TOTAL

P.06 44