

ITEM SPECIAL - COATING EXISTING STEEL (URETHANE TOP COAT)

SECTION 514.03 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL APPLY TO THIS ITEM.

THIS ITEM SHALL CONSIST OF THE APPLICATION OF ONE COAT OF URETHANE TO ALL STEEL ELEMENTS OF THE BRIDGE. THE TOP COAT SHALL POSSESS A COLOR CLOSELY APPROACHING FEDERAL STANDARD NO. 595-15200. THE COLOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION. THE TOTAL DRY FILM THICKNESS OF THIS COAT SHALL NOT BE LESS THAN TWO AND ONE-HALF (2.5) MILS. IF MORE THAN ONE COAT IS NECESSARY TO OBTAIN THE REQUIRED MIL THICKNESS THAT COST SHALL BE BORNE BY THE CONTRACTOR.

WHEN THE AVERAGE DRY FILM THICKNESS OF THIS COAT IS LESS THAN THE SPECIFIED TWO AND ONE-HALF MILS BUT IS AT LEAST TWO MILS, THE CONTRACT PRICE FOR THIS ITEM SHALL BE REDUCED IN DIRECT PROPORTION TO THE PERCENT DEFICIENCY OF COATING UP TO 20%. IF THE DEFICIENCY OF COATING IS MORE THAN 20% (I.E. THE AVERAGE DRY FILM THICKNESS IS LESS THAN TWO MILS) THE WORK FOR THIS ITEM SHALL BE CONSIDERED UNSATISFACTORY AND SHALL BE RECOATED AT THE FULL EXPENSE OF THE CONTRACTOR, INCLUDING ALL LABOR, EQUIPMENT, AND MATERIAL.

AT LEAST 24 HOURS BUT NO MORE THAN FIVE DAYS SHALL ELAPSE AFTER THE APPLICATION OF THE INTERMEDIATE COAT AND BEFORE THE APPLICATION OF THE TOP COAT. SURFACES SHALL IN ALL CASES BE CLEAN BEFORE THE TOP COAT IS APPLIED.

THE CONTRACTOR SHALL USE SOME OF THE URETHANE TO TOUCH UP THE SPOTS WHERE TOOKE GAUGE READINGS WERE MADE IN THE URETHANE TOP COAT.

THE COMPLETION DATE OF THE TOP COAT (MONTH AND YEAR) AND THE DESIGNATION U3E6U2 $\frac{1}{2}$ SHALL BE STENCILED IN A CONTRASTING COLOR AT FOUR LOCATIONS. LOCATIONS SHALL BE NEAR THE END OF EACH OUTSIDE GIRDER, ON THE OUTSIDE WEB, AT THE CORNER OF THE BRIDGE AS DIRECTED BY THE ENGINEER.

A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT FOR AT LEAST THE FIRST DAY THAT THIS COATING IS APPLIED.

THE COST OF THE MANUFACTURER'S REPRESENTATIVE, MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO ACCOMPLISH THIS ITEM OF WORK SHALL BE INCLUDED IN THE PRICE BID.

ITEM SPECIAL - BURYING END ANCHOR ASSEMBLY

THIS WORK SHALL CONSIST OF PLACING EMBANKMENT TO BURY THE GUARD RAIL END ANCHOR ASSEMBLIES AS SHOWN IN THE PLANS AND SECTIONS ON SHEET 12.

EMBANKMENT SHALL BE ACCORDING TO ITEM 203 AND SEEDING AND MULCHING SHALL BE ACCORDING TO ITEM 659.

THIS ITEM SHALL INCLUDE THE EMBANKMENT, SEEDING AND MULCHING, LABOR, EQUIPMENT AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK OF BURYING ONE END ANCHOR ASSEMBLY AS PER THESE PLANS AND NOTES.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	BURYING END ANCHOR ASSEMBLY

ITEM SPECIAL- REPAIRING BRIDGE TERMINAL ASSEMBLY

THIS WORK SHALL CONSIST OF DISASSEMBLING THE RAIL AND POSTS, IF NECESSARY; REMOVING ALL EXISTING CONCRETE ANCHOR BOLTS, CORE DRILLING DOWEL HOLES, PROVIDING NEW ANCHORS AND GROUTING THEM IN PLACE, AND REATTACHING THE EXISTING RAIL AND POSTS.

ALL WORK MUST BE COMPLETED THE DAY IT IS STARTED WITH NO BRIDGE TERMINAL ASSEMBLY ALLOWED TO REMAIN INCOMPLETE OR UNANCHORED OVERNIGHT.

GALVANIZED ANCHORS SHALL HAVE A MINIMUM 2 $\frac{1}{2}$ " OF 7/8 N.C. THREAD. ANCHORS SHALL BE 7/8" X 12" MACHINE BOLTS, 13" LONG NO. 7 GRADE 60 REBARS, OR 13" SWEDEGED STUDS. GALVANIZED HEX NUTS AND WASHERS SHALL BE INCLUDED. ANCHORS SHALL BE IMBEDDED 10 INCHES.

DOWEL HOLES FOR THE ANCHORS SHALL BE 10" DEEP AND A MINIMUM DIAMETER OF 1 3/8". DOWEL HOLES SHALL BE CORE DRILLED, IMPACT OR ROTARY HAMMERS SHALL NOT BE USED.

GROUTING OF THE ANCHORS SHALL CONFORM TO SS-853 AND SS-956. TEMPORARY ANCHORS USED FOR THE CORE DRILLING, IF NEEDED, SHALL BE INSET IN THE CURB CONCRETE AND THE HOLES AND ANCHORS FILLED AND COVERED WITH THE SAME GROUT AS USED FOR THE ANCHORS. ANY ADDITIONAL COST FOR THIS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR THIS ITEM.

THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO REMOVE AND REPLACE THE BRIDGE TERMINAL ASSEMBLY ANCHOR BOLTS AS PER THESE NOTES AND PLANS.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	REPAIRING BRIDGE TERMINAL ASSEMBLY

ITEM SPECIAL - PLUGGING SCUPPER

THIS WORK SHALL CONSIST OF PLUGGING THE SCUPPER DOWNSPOUT PIPE AND FILLING THE SCUPPER WITH A MAGNESIUM PHOSPHATE CONCRETE. AS SHOWN ON SHEET 12.

REMOVAL SHALL NOT DAMAGE OR SHATTER THE CONCRETE THAT IS TO REMAIN, AND SHALL NOT CUT, ELONGATE OR DAMAGE THE REINFORCING STEEL IN ANY WAY. THE CONCRETE MAY BE REMOVED BY CHIPPING OR HAND DRESSING. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 35 POUND CLASS.

THE MATERIAL TO BE USED SHALL BE A BLEND OF MAGNESIA AND SELECT AGGREGATE WITH AN ACTIVATOR. THE MATERIAL SHALL BE HORN 240 CONCRETE, FASTCRETE, BOSTIK 276, FIVE STAR HIGHWAY PATCH OR SET 45. ALL MATERIALS SHALL BE STORED AND INCORPORATED IN THE WORK AS RECOMMENDED BY THE MANUFACTURER.

THE SCUPPER AND SURROUNDING CONCRETE TO BE FILLED WITH CONCRETE SHALL BE THOROUGHLY CLEANED BY SANDBLASTING FOLLOWED BY AN AIR BLAST. SURFACES SHALL BE MADE FREE OF PAINT, SPALLS, LAITANCE AND ALL TRACES OF FOREIGN MATERIAL. HAND TOOLS MAY BE NEEDED. THE PREPARED SURFACES SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

THE MIXING, PROPORTIONING, PLACING AND CURING PROCEDURES, AND THE TOOLS, EQUIPMENT, LABOR AND MATERIAL USED TO FILL THE SCUPPER SHALL BE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. CLEAN, SOUND 3/8 INCH AGGREGATE SHALL BE ADDED TO THE MAGNESIUM PHOSPHATE MATERIALS AT THE RATE OF 25 POUNDS PER BAG OF CEMENT.

FHWA REGION	STATE	PROJECT
5	OHIO	

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LAKE COUNTY
LAK-528-1.92

PLAN NO. BR-16-87

ALL PLUGGING OF SCUPPERS SHALL BE DONE PRIOR TO THE PLACEMENT OF THE HMMW.

THE COST OF PLUGGING THE SCUPPER DOWNSPOUT, INCLUDING CONCRETE REMOVAL AND ALL LABOR, EQUIPMENT AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK OF PLUGGING ONE SCUPPER SHALL BE INCLUDED IN THIS ITEM.

PAYMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	PLUGGING SCUPPER

ITEM SPECIAL - SCUPPER DOWNSPOUT EXTENSION

THIS WORK SHALL CONSIST OF EXTENDING THE EXISTING SCUPPER DOWNSPOUTS, BY WELDING A SECTION OF DOUBLE EXTRA STRONG PIPE TO THE DOWNSPOUT AS SHOWN IN THE PLANS.

ONLY THOSE SCUPPERS WHICH HAVE NOT BEEN PLUGGED SHALL BE EXTENDED. ALL WORK SHALL BE PER CMS ITEM 518 OF THE CMS.

ALL WORK FOR THIS ITEM SHALL BE COMPLETED PRIOR TO THE PAINTING OF THIS STRUCTURE.

ALL MATERIALS, LABOR, EQUIPMENT AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK OF EXTENDING ONE EXISTING SCUPPER SHALL BE INCLUDED.

PAYMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	SCUPPER DOWNSPOUT EXTENSION

ITEM SPECIAL - SEALING OF CONCRETE SURFACES

A SEALER SHALL BE APPLIED TO THE EXPOSED CONCRETE SURFACES OF THE BRIDGES AS LISTED BELOW. SEE THE PROPOSAL FOR SEALER MATERIAL AND SURFACE PREPARATION REQUIREMENTS, AND APPLICATION RATES AND PROCEDURES.

1. ALL PIER COMPONENTS FROM THE GROUND OR WATER LINE UP.
2. ABUTMENT BRIDGE SEATS AND BACKWALLS

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 BRIDGE DEPARTMENT				
GENERAL NOTES				
BRIDGE NO. LAK-528-0192 OVER THE GRAND RIVER				
LAKE COUNTY OHIO				
DESIGNED DATE Jca	TRACED DATE JLP	CHECKED DATE DWL	REVIEWED DATE GWM	REVISED DATE 6/13