

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	28878(04)			

DESCRIPTION	REVISIONS	DATE

COMMON GENERAL NOTES - BRIDGES "A" & "B" (CONTINUED)

HYDRODEMOLITION:

Hydrodemolition shall be required to prepare the existing Bridge Deck for the new Concrete Overlay. Remove the top 1" of the existing concrete slab by hydrodemolition.

Scarification of the existing Bridge Deck shall be accomplished using small, portable equipment. Large cold milling machinery shall not be allowed on the Bridge Deck. The proposed method of scarifying the Bridge Deck and the equipment used shall be approved by the Engineer prior to the start of construction.

Hydrodemolition shall be performed in accordance with Section 505 of the Standard Specifications. Slab defect areas that are less than 5" in depth shall be monolithically filled with Class AA Concrete during the overlay operation. Slab defect areas that are greater than 5" in depth shall be repaired and paid for separately by "CLASS C BRIDGE DECK REPAIR" in accordance with Section 513 of the Standard Specifications and as shown in the plans. The areas and types of Bridge Deck repair shall be determined in the field by the Engineer.

All materials removed from Bridges "A" and "B" shall become the property of the Contractor and shall be disposed of in a manner approved by the Engineer.

All costs of the Hydrodemolition including scarification, disposal of removed materials, vacuuming, shielding, water control, jack hammering in areas inaccessible to the hydrodemolition equipment, and all other aspects of work necessary to prepare the deck for the placement of a new concrete overlay shall be included in the price bid per Square Yard of "HYDRODEMOLITION".

CLASS AA CONCRETE:

All concrete shall be placed in the dry. All exposed edges shall have a 3/4" chamfer unless noted or shown on plans. All chamfer strips shall be sized lumber. All Class AA Concrete shall be air-entrained.

Concrete for Superstructure including proposed Deck Overlay, Superstructure Repairs, Approach Slab, and Retro-Fit Concrete Parapet shall be Class AA, f'c = 4,000 p.s.i. minimum strength at 28 days. When vibrating concrete containing epoxy coated reinforcing steel, the vibrator shall be equipped with a sheath designed to prevent damage to the epoxy coating.

The Class AA Concrete used for the 5" reinforced concrete overlay shall have steel and polypropylene fiber blend additives such as Novomesh 850 manufactured by Propex, PSI Crimped Steel Fiber FB manufactured by Euclid Chemical or approved equal. Fiber additives shall conform to Section 701.15 of the Standard Specifications and Special Provision Section 435 "Fiber Reinforced, Bonded Portland Cement Concrete Overlay". Application rate shall be a minimum of 40 pounds of fiber reinforcement per cubic yard of concrete. Fiber reinforcement will not be measured for payment. All costs of fiber reinforcement to be included in the price bid per Cubic Yard of "CLASS AA CONCRETE".

Repairing of damaged areas of the Bridge Deck less than 5" deep (including all Class A & B Bridge Deck Repair) shall be included in the price bid per Cubic Yard of "CLASS AA CONCRETE". Repairs less than 5" deep shall be placed monolithically with the overlay course.

RAPID CURE JOINT SEALANT:

Pay item includes the expansion joints at the abutments and the longitudinal construction joints in the new concrete overlay & sealing the existing Slope Wall joints at the abutments shall be sealed with a backer rod and rapid cure joint sealant as shown in the plans.

All costs including materials, labor, equipment and incidentals necessary to complete the work as shown in the plans shall be included in the price bid per Linear Foot of "RAPID CURE JOINT SEALANT".

CONCRETE DECK FINISHING:

Overhanging slab forms will be required to be of sufficient strength to support the weight of the concrete, forms, finishing machine, and other construction loads. Prior to finishing operations, a proposal stipulating the type of finishing machine and the finishing procedure will be submitted to the Engineer. This proposal shall set forth any areas in which a mechanical finisher cannot be used and the methods for finishing these areas. Concrete shall not be placed until this proposal is approved by the Engineer.

APPROACH SLAB:

Class AA Concrete shall be used in the Approach Slabs. The quantity given is based on the actual square yards of the Approach Slabs. All costs of concrete, reinforcing steel, rapid cure joint sealant, excavation, labor, equipment, and other incidentals necessary to complete the work as specified shall be included in the price bid per Square Yard of "APPROACH SLAB".

CLEANING BRIDGE DECK:

The Bridge Deck shall be cleaned of all debris. The Contractor shall conform with Section 104.10 of the Standard Specifications. This debris shall become the property of the Contractor and shall be disposed of in a manner approved by the Engineer.

All cost of cleaning the Bridge Deck and Approach Slabs shall be included in other items of work.

PENETRATING WATER REPELLENT SURFACE TREATMENT:

A penetrating water repellent surface treatment shall be applied to the following concrete surfaces of the bridge:

- (a) Front, sides, and exposed areas of the Abutment Caps and Wingwalls.
- (b) All exposed areas of the Pier Caps.
- (c) Roadway face, top, and outside face of the existing Raised Curb.
- (d) Roadway face, top, and outside face of the Retro-fit Concrete Parapet.
- (e) Roadway face, top, and outside face of the Concrete Approach Parapet and Raised Curb.
- (f) Outside face and under Deck Slab Fascia.

All costs associated with the use of Penetrating Water Repellent Surface Treatment including the cost of materials, labor, equipment and incidentals shall be included in the price bid per Square Yard of "WATER REPELLENT (VISUALLY INSPECTED)".

CONCRETE SLOPE WALL:

Item "Slope Wall (4)" shall be used to repair portions of top panel sections of existing Slope Walls along the front slopes of Abutment Nos. 1 & 2 at Bridges "A" & "B" as shown in the plans. See Sheet Nos. 21 and 34 for details.

All costs of the "SLOPE WALL (4)" installation including Class A Concrete, reinforcing steel, lap splices, backer rod, rapid cure joint sealant, preformed joint filler, polystyrene, excavation, Aggregate Base (Type A), Unclassified Backfill, labor, equipment and other incidentals shall be included in the price bid per Square Yard of "SLOPE WALL (4)".

(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A):

Item "(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)" consists of removal & replacement of all electrical conduit, mounting hardware and fixtures for the lighting attached to the existing pier caps. The Contractor shall be responsible for attaching the new conduit & lighting fixtures to the bridges once all repairs are completed.

All costs of electrical conduit, attachment, light fixtures, mounting hardware, labor, equipment, and incidentals necessary to complete the work as shown on in the plans shall be included in the price bid per Lump Sum of "(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)".

COMMON SPECIAL ENVIRONMENTAL NOTES FOR BRIDGES "A" & "B"

DEQ PERMIT FOR SBR PROJECTS OVER HIGHWAYS OR RAILROADS:

If the Contractor elects to build a road(s) to perform work, the Contractor will be responsible for effective erosion and sediment control in accordance with the DEQ OKR10 General Construction regulations. If the area of disturbance is one or more acres and is not already covered by a DEQ permit, the Contractor will be required to obtain a DEQ Storm Water Construction Permit which will include an application (Notice of Intent) to DEQ prior to earth disturbing activities, a Storm Water Pollution Prevention Plan, and the installation and maintenance of erosion and sediment controls. In addition, the Contractor will be responsible for permanent stabilization measures after removal of the work road(s). All costs associated with the Contractor's work road including a DEQ permit, erosion and sediment controls and permanent stabilization, etc. will be the responsibility of the Contractor.

SWALLOW PLAN NOTE FOR BRIDGE REHABILITATION PROJECT

Migratory birds are protected by the federal Migratory Bird Treaty Act. Many birds commonly use bridges and culverts for nesting. The nesting season for most bird species extends from April 1 to August 31. The project was surveyed for migratory bird nests in February 2017. Although no nests were observed, the survey is only valid until the start of the 2017 nesting season (beginning April 1). The Resident Engineer shall contact the ODOT biologist at 405-521-2515 if any bird use of the existing structure is observed. If birds are observed then painting, repair, retrofit, rehabilitation, or demolition of the existing bridges shall be conducted between September 1 and March 3 (when migratory bird nests are not occupied).

28878(04)		PAY QUANTITIES		US-64/SH-51 WB OVER SHERIDAN ROAD	
ITEM	DESCRIPTION	UNIT	QUANTITY		
0200	BRIDGE "A" (NBI 16554)				
501(G)	CLSM BACKFILL (BR-2)	C.Y.	105.800		
504(A)	APPROACH SLAB (BR-1)	S.Y.	481.600		
504(B)	SAW-CUT GROOVING (BR-1)	S.Y.	1,307.800		
504(E)	CONCRETE PARAPET (BR-10)	L.F.	480.800		
504(G)	RAPID CURE JOINT SEALANT	L.F.	873.700		
505(E)	HYDRODEMOLITION	S.Y.	869.200		
509(A)	CLASS AA CONCRETE (BR-1)(BR-3)	C.Y.	129.600		
510(C)	SLOPE WALL (4")	S.Y.	76.200		
511	MECHANICAL SPLICES (BR-1)	EA.	243.000		
511(B)	EPOXY COATED REINFORCING STEEL (BR-1)	LB.	25,540.000		
513(C)	CLASS C BRIDGE DECK REPAIR (BR-11)	S.Y.	72.000		
515(A)	WATER REPELLENT (VISUALLY INSPECTED) (BR-1)(BR-5)	S.Y.	862.000		
520(A)	PREPARATION OF CRACKS, ABOVE WATER (BR-6)	L.F.	156.000		
520(C)	EPOXY RESIN, ABOVE WATER (BR-7)	GAL.	5.200		
521(A)	PNEUMATICALLY PLACED MORTAR (BR-8)	S.Y.	32.800		
535	(SP) CORROSION INHIBITOR (SURFACE APPLIED) (BR-9)	S.Y.	34.200		
540	(PL) REPAIR OF BRIDGE ITEMS (BR-4)	S.Y.	32.800		
542	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	LSUM	1.000		
619(B)	REMOVAL OF BRIDGE ITEMS	LSUM	1.000		

28878(04)		PAY QUANTITIES		US-64/SH-51 EB OVER SHERIDAN ROAD	
ITEM	DESCRIPTION	UNIT	QUANTITY		
0201	BRIDGE "B" (NBI 16555)				
501(G)	CLSM BACKFILL (BR-2)	C.Y.	105.800		
504(A)	APPROACH SLAB (BR-1)	S.Y.	481.600		
504(B)	SAW-CUT GROOVING (BR-1)	S.Y.	1,307.800		
504(E)	CONCRETE PARAPET (BR-10)	L.F.	480.800		
504(G)	RAPID CURE JOINT SEALANT	L.F.	873.700		
505(E)	HYDRODEMOLITION	S.Y.	869.200		
509(A)	CLASS AA CONCRETE (BR-1)(BR-3)	C.Y.	129.600		
510(C)	SLOPE WALL (4")	S.Y.	76.200		
511	MECHANICAL SPLICES (BR-1)	EA.	243.000		
511(B)	EPOXY COATED REINFORCING STEEL (BR-1)	LB.	25,540.000		
513(C)	CLASS C BRIDGE DECK REPAIR (BR-11)	S.Y.	72.000		
515(A)	WATER REPELLENT (VISUALLY INSPECTED) (BR-1)(BR-5)	S.Y.	862.000		
520(A)	PREPARATION OF CRACKS, ABOVE WATER (BR-6)	L.F.	156.000		
520(C)	EPOXY RESIN, ABOVE WATER (BR-7)	GAL.	5.200		
521(A)	PNEUMATICALLY PLACED MORTAR (BR-8)	S.Y.	32.800		
535	(SP) CORROSION INHIBITOR (SURFACE APPLIED) (BR-9)	S.Y.	34.200		
540	(PL) REPAIR OF BRIDGE ITEMS (BR-4)	S.Y.	32.800		
542	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	LSUM	1.000		
619(B)	REMOVAL OF BRIDGE ITEMS	LSUM	1.000		

28878(04)		PAY QUANTITIES		US-64/SH-51 WB & EB OVER SHERIDAN ROAD	
ITEM	DESCRIPTION	UNIT	QUANTITY		
0600	STAKING				
642(B)	0096 CONSTRUCTION STAKING LEVEL 11	LSUM	1.000		

28878(04)		PAY QUANTITIES		US-64/SH-51 WB & EB OVER SHERIDAN ROAD	
ITEM	DESCRIPTION	UNIT	QUANTITY		
0640	CONSTRUCTION				
641	1399 MOBILIZATION	LSUM	1.000		

BR-1:
Payment for this item will be based on the plan quantities only. See Section 109.01.B of the Standard Specifications.

BR-2:
To be used at the discretion of the Engineer and as noted in the plans for filling voids under Approach Slabs & Slope Wall Panels.

BR-3:
Payment includes all costs for Class A & B Bridge Deck Repair.

BR-4:
Quantity shown is for repair to the superstructure, abutment, & pier concrete.

To be used at the discretion of the Engineer in locations where substructure concrete deterioration is severe. This pay item may be used in lieu of Pneumatically Placed Mortar. For additional information, see the General Note "(PL) REPAIR BRIDGE ITEMS" on Sheet No. 3.

BR-5:
Includes 26.00 S.Y. at each Abutment, 28.00 S.Y. at each Pier, 468.00 S.Y. at the Superstructure, and 87.00 S.Y. at each Approach Slab.

BR-6:
Includes 30.00 L.F. at each Abutment, 12.00 L.F. at each Pier, and 60.00 L.F. at the Superstructure.

BR-7:
Includes 1.00 GAL. at each Abutment, 0.40 GAL. at each Pier, and 2.00 GAL. at the Superstructure.

BR-8:
Includes 6.05 S.Y. at each Abutment, 2.70 S.Y. at each Pier, and 3.40 S.Y. at the Superstructure.

BR-9:
Includes 17.10 S.Y. for repairs at each Abutment.

BR-10:
Price bid includes cost of Raised Curb and Concrete Barrier at the Approach Slabs.

BR 11:
To be used at the discretion of the Engineer and as noted in the plans for repairs of the existing bridge deck after the hydrodemolition process.

US-64/SH-51 WB & EB OVER SHERIDAN RD. TULSA COUNTY		DESIGN	JCS	6/15
BRIDGES "A" & "B"		DETAIL	S.JL	12/16
SUMMARY OF PAY QUANTITIES AND NOTES (BRIDGE) (SHEET 2 OF 2)		CHECK	BRT	12/16
		GARVER		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION			
	JOB PIECE NO. 28878(04)	SHEET NO. 4		

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