

**GENERAL NOTES**

**(11) MECHANICAL SPLICES: (BRIDGES A & B)**

Mechanical Splices shall be used to connect the transverse reinforcing steel in the Approach Slabs as specified or as shown in the plans. The Mechanical Splices shall be Erico Lenton or an approved equal. The Mechanical Splices shall satisfy the requirements of Section 511.04 C of the Standard Specifications and shall be installed in accordance with the manufacturer's specifications. All cost of installing the Mechanical Splices including the cost of materials, labor, equipment and incidentals shall be included in the unit price bid per Each of "MECHANICAL SPLICES".

The lengths of reinforcing steel bars with Mechanical Splices shown in the Phase I construction bar lists include the length of the Mechanical Splice. The lengths of reinforcing steel bars to be engaged into Mechanical Splices shown in the Phase II construction bar lists do not include any additional length for engagement into the Mechanical Splices.

The actual Mechanical Splice engagement lengths shall be determined by the Mechanical Splice manufacturer, and the lengths of the reinforcing steel bars to be engaged into Mechanical Splices shall be adjusted accordingly. The cost to adjust the length of any reinforcing steel shown in the plans to accommodate the Mechanical Splices will not be measured for payment and shall be included in the unit price bid per Each of "MECHANICAL SPLICES".

**(12) REMOVAL OF BRIDGE ITEMS: (BRIDGES A & B)**

The pay item "REMOVAL OF BRIDGE ITEMS" shall include the removal and disposal of all items to be removed from the existing bridges as specified or shown in the plans including any approach roadway pavement necessary for the installation of the new approach slabs and material excavated for the installation of the new approach slabs.

All costs necessary to complete the work as specified or as shown in the plans including the cost of sawing, cutting, demolition, cleaning & straightening reinforcing steel, containment and removal of debris, materials, labor, equipment and incidentals shall be included in the price bid per Lump Sum of "REMOVAL OF BRIDGE ITEMS".

**(13) DRAINS AT END OF BRIDGE: (BRIDGE A)**

The Slope Drain and Splash Basin shall be constructed as shown on sheet "DETAILS OF DRAINS AT END OF BRIDGE". Class "C" Concrete shall be used in the construction of the drains at the ends of the bridge.

All costs of the Slope Drains and Splash Basins including material, labor, equipment, and incidentals necessary to complete the work as shown in the plans shall be included in the price bid per Cubic Yard of "CLASS "C" CONCRETE".

**(14) ANCHORAGE INTO EXISTING CONCRETE: (BRIDGES A & B)**

The Contractor shall have the option of the methods by which the new anchor bolts shown in the plans are to be anchored into the concrete of the existing bridge. The method must be approved by the Engineer.

Drilling into the existing concrete to install the anchorage shall be accomplished without cutting existing concrete reinforcing steel bars. Prior to drilling, the Contractor shall locate and mark the existing concrete reinforcing steel bars with nondestructive tools, equipment and methods approved by the Engineer. If existing reinforcing steel bars are encountered during drilling, the drilling shall cease and the hole shall be grouted. The hole shall then be relocated to clear the existing reinforcing steel bars. Any adjustment in the locations of the new anchor bolts from the original locations shall be the minimum amount necessary to avoid cutting the existing concrete reinforcing steel bars and shall be approved by the Engineer.

All cost to anchor the new anchor bolts into the existing bridge as specified or shown in the plans including the cost of locating existing concrete reinforcing steel bars, drilling, repairing flawed drill holes, anchoring into the existing concrete, materials, labor, equipment and incidentals shall be included in other items of work.

**△ (18) ROADWAY PAVEMENT AND PATCHING: (BRIDGE A & B)**

This item to be used as directed by the Engineer to maintain traffic during construction, and to provide a smooth transition from the existing roadway to the approach slab. Cost of these items include sawing and removal of the existing pavement. The Existing Concrete Pavement is estimated at 10 inches.

**GENERAL NOTES**

**(15) REPAIR BRIDGE ITEM (TYPE B): (BRIDGE A)**

The median barriers between Northbound and Southbound lanes contain approximately 6 Linear Feet of damaged and missing concrete that shall be replaced with Class AA Concrete. The actual extent of the repairs shall be determined in the field by the Engineer. The repairs shall be in accordance with Section 502 of the Standard Specification for Highway Construction and in a manner approved by the Engineer.

The removal of deteriorated concrete shall be done using power tools of such size approved by the Engineer such that their use does not cause damage to the sound concrete.

Any damage done to the existing reinforcing steel during the removal process shall be repaired at the Contractor's expense to the satisfaction of the Engineer. Any deteriorated reinforcing steel with a section loss greater than 50%, as determined by the Engineer, shall be reported to the Bridge Engineer for remedial action.

Prior to new barrier construction, cut away the damaged section of the parapet six feet from the beginning of the damaged section. Clean and straighten existing longitudinal reinforcing steel and existing reinforcing steel from bridge deck until free of debris and corrosion. Replace FS bars as needed for reconstruction. Form concrete to match the original lines and faces of the surrounding parapets.

The Contractor shall submit a proposed work plan of the repair method to be used to the Engineer for his approval. The work plan should include cutback methods, concrete forms, material placing methods, and finishing methods. Faulty repairs shall be replaced at the Contractor's expense and to the satisfaction of the Engineer.

All costs including labor, equipment, concrete, reinforcing steel, and incidentals necessary to complete the work described above shall be included in the price bid per Square Yard of "BRIDGE REPAIR (TYPE B)".

**ENVIRONMENTAL MITIGATION NOTES**

**△ MIGRATORY BIRD:**

Migratory birds are protected by the federal Migratory Bird Treaty Act. These birds commonly use bridges and culverts for nesting. The nesting season for the birds runs from April 1 to August 31. Any activities which would destroy active nests or harm eggs or birds would violate the Migratory Bird Treaty Act. Migratory birds use of bridge NBI No. 19235 & 19245 has been observed during the initial survey conducted as part of the biological studies in 2016. The Resident Engineer will evaluate the contractor's proposed work methods and conclude whether the proposed work would pose disruption to any nesting birds before work near the structure is authorized. If the proposed work will harm any nesting birds, the bridge may be netted prior to April 1 or the work delayed until the nesting season is complete. Methods other than netting must be pre-approved by the ODOT Biologist.

**AIRPORT:**

The following Airport/Airfield is located within 4 miles of this project: Harvey Young Airport. This action may require notifying the Federal Aviation Administration (FAA) of proposed construction via FAA Form 7460-1 prior to construction.

32565(05) PAY QUANTITIES				
0200 BRIDGE "A"				
ITEM	DESCRIPTION	UNIT	QUANTITY	
201	0181	SELECTIVE CLEARING	(9)	LSUM 1.00
411(I)	6310	SUPERPAVE, TYPE S4(PATCH)(PG64-220K)	(18)	TON 100.00
414(E)	0225	FULL DEPTH P.C. CONCRETE PATCHING (PLACEMENT ONLY)	(18)	S.Y. 600.00
414(G)	5275	P.C. CONCRETE FOR PAVEMENT	(18)	C.Y. 100.00
501(G)	6309	CLSM BACKFILL	(BR-2) (5)	C.Y. 6.00
504(A)	1304	APPROACH SLAB	(BR-1) (10)	S.Y. 817.90
504(B)	1305	SAW-CUT GROOVING	(BR-1)	S.Y. 734.00
504(C)	6250	SEALED EXPANSION JOINT	(BR-1) (1)	L.F. 128.20
504(G)	6390	RAPID CURE JOINT SEALANT	(BR-1) (2)	L.F. 658.20
509(D)	1331	CLASS C CONCRETE	(13)	C.Y. 32.00
511	6306	MECHANICAL SPLICES	(BR-1) (11)	EA. 620.00
513(B)	6019	CLASS B BRIDGE DECK REPAIR	(6)	S.Y. 11.50
521(A)	6210	PNEUMATICALLY PLACED MORTAR	(4)	S.Y. 32.00
523(C)	6570	DECK AREA SEALED (FLOODCOATS)	(BR-1) (3)	S.Y. 3364.00
525(A)	0100	(SP)NEST PREVENTION - NETTING		LSUM 1.00
540	4510	(PL) REPAIR BRIDGE ITEM (TYPE A)	(7)	LSUM 1.00
540	4520	(PL) REPAIR BRIDGE ITEM (TYPE B)	(15)	LSUM 1.00
545	4815	(PL) REPLACE BRIDGE ITEM (TYPE A)	(BR-1)(8)(14)	EA. 7.00
619(B)	2500	REMOVAL OF BRIDGE ITEMS	(12)	LSUM 1.00

32565(05) PAY QUANTITIES				
0201 BRIDGE "B"				
ITEM	DESCRIPTION	UNIT	QUANTITY	
414(E)	0225	FULL DEPTH P.C. CONCRETE PATCHING (PLACEMENT ONLY)	(18)	S.Y. 600.00
414(G)	5275	P.C. CONCRETE FOR PAVEMENT	(18)	C.Y. 100.00
501(G)	6309	CLSM BACKFILL	(BR-2) (5)	C.Y. 2.00
504(A)	1304	APPROACH SLAB	(BR-1) (10)	S.Y. 776.80
504(B)	1305	SAW-CUT GROOVING	(BR-1)	S.Y. 692.80
504(C)	6250	SEALED EXPANSION JOINT	(BR-1) (1)	L.F. 121.80
504(G)	6390	RAPID CURE JOINT SEALANT	(BR-1) (2)	L.F. 371.80
511	6306	MECHANICAL SPLICES	(BR-1) (11)	EA. 620.00
513(B)	6019	CLASS B BRIDGE DECK REPAIR	(6)	S.Y. 10.00
521(A)	6210	PNEUMATICALLY PLACED MORTAR	(4)	S.Y. 51.00
523(C)	6570	DECK AREA SEALED (FLOODCOATS)	(BR-1) (3)	S.Y. 3673.00
525(A)	0100	(SP)NEST PREVENTION - NETTING		LSUM 1.00
540	4510	(PL) REPAIR BRIDGE ITEM (TYPE A)	(7)	LSUM 1.00
545	4815	(PL) REPLACE BRIDGE ITEM (TYPE A)	(BR-1)(8)(14)	EA. 15.00
619(B)	2500	REMOVAL OF BRIDGE ITEMS	(12)	LSUM 1.00

**MOBILIZATION:**  
THIS PROJECT IS MANDATORILY TIED WITH TULSA COUNTY JOB PIECE 31672(04). THE COSTS FOR MOBILIZATION FOR THIS PROJECT SHALL BE INCLUDED IN THE UNIT PRICE BID PER LUMP SUM OF "MOBILIZATION" ON THE PROJECT WITH THE JOB PIECE 31672(04).

BRIDGES "A" AND "B"		DIVISION 8		Design	N/A	N/A
				Detail	RLA	5/16
				Check	KMS	6/16
				Supv	MAYFIELD	
				Eng.	ELYAZGI	
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION		JOB PIECE NO. 32565(05)		SHEET NO. A02

**GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE, SHEET 2 OF 2)**