

REVISIONS		
REV. NO.	DESCRIPTION	DATE

GENERAL NOTES

SPECIFICATIONS:

Comply with the requirements of the 2009 Oklahoma Standard Specifications for Highway Construction, except as modified by the Plans and Special Provisions.

VERIFICATION OF EXISTING CONDITIONS:

All dimensions of the existing bridge components shown on the Plans are approximate. The Contractor shall verify all dimensions necessary to complete the work and shall be solely responsible for the accuracy thereof.

Bidders shall fully inform themselves of the nature of the work and condition under which it will be performed. The Contractor shall adopt methods consistent with good construction practice and shall take all necessary precautions to prevent damage to the existing bridge or attachments. Any damage to the existing bridge structure or roadway due to the Contractor's negligence shall be repaired at the Contractor's expense, to the satisfaction of the Engineer.

Construction plans for the existing bridge structures may be obtained from the Reproduction Branch of the Oklahoma Department of Transportation. Ask for:

Bridge 'A' F.A.P. No. BRM-8401(14) Structure A, US-64 over Arkansas River; in Tulsa County.

Bridge 'B' F.A.P. No. BRM-8401(14) Structure B, US-64 over Arkansas River Overflow; in Tulsa County.

Bridge 'C' F.A.P. No. I-44-2(200)090 Structure B, I-44 over Arkansas River; Widening Project: 0637(44) Bridge 'B'; in Tulsa County.

Bridge 'D' F.A.P. No. I-44-2(149)090 Structure E, I-44 over Arkansas River; Widening Project: 0637(44) Bridge 'A'; in Tulsa County.

LANE CLOSURE:

The Engineer reserves the right to prohibit lane closures during holidays or special events. All work requiring the closing or narrowing of one lane of traffic on the bridges shall be performed during daylight hours only unless approved by the Engineer. The contractor shall make every effort to reopen these lane closures as soon as possible.

REMOVED MATERIAL:

All material and debris removed during this project shall become the property of the Contractor and shall be disposed of in a manner approved by the Engineer.

CLEANING BRIDGE SEATS AND PIER CAPS:

All bridge seats and pier caps shall be swept clean of all debris at the conclusion of work. All costs for cleaning the bridge seats and pier caps shall be included in other items of work.

CLEANING OF DECK DRAINS AND DRAINS AT END OF BRIDGE:

All parapet/rail openings, deck drains and drains at the ends of bridge shall be checked for functionality and cleared of all debris as needed to ensure that water drains from the bridge normally. The method for cleaning the drains shall be approved by the Engineer and shall be paid for in other items of work.

EXISTING LIGHTING AND ELECTRICAL:

Lights and electrical conduits on the bridgeS shall not be removed or disturbed. If any part is removed or damaged during construction, it shall be replaced in the original condition at the Contractor's expense, to the satisfaction of the Engineer.

SPECIAL BRIDGE NOTES

- (1) REHABILITATED EXPANSION JOINTS:
REPAIR BRIDGE ITEM (TYPE A) (BRIDGES 'A' AND 'B')
REPAIR BRIDGE ITEM (TYPE B) (BRIDGES 'C' AND 'D')

Remove existing expansion angles, expansion anchor bars (where required) and existing concrete on the bridge deck side of existing expansion joint and down full depth as shown in the plans. Replace existing expansion device with new Sealed Expansion Joint in accordance with the bridge standards and section 415, subsection 504.04(C) and subsection 506.05(H) of the 2009 Oklahoma Standard Specifications for Highway Construction and as shown in the plans.

The new deck concrete shall be finished by hand tining beginning within 2 feet of the concrete curb or parapet and run continuously across the width of the deck to within 2 feet of the opposite curb or parapet. No tining shall be done within 6" of any joint.

Contractor is allowed to use Early Strength Concrete at no additional cost to ODOT. All costs including labor, equipment, material, and incidentals necessary to complete the work as shown in the plans shall be included in the price bid per each of "REPAIR BRIDGE ITEM (TYPE A)" for Bridges 'A' and 'B' and "REPAIR BRIDGE ITEM (TYPE B)" for Bridges 'C' and 'D'.

- (2) REHABILITATED CONSTRUCTION JOINT SAW AND SEAL: (BRIDGES A & B)
(See Sheet "DETAILS OF REPAIR BRIDGES 'A' & 'B' (SHEET 2 OF 2))

Saw existing Construction Joints as shown in the plans and seal with Backer Rod and Rapid Cure Joint Sealant placed in accordance with Section 415 and Subsection 701.08G of the Standard Specifications for Highway Construction and as shown in the plans.

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

- (3) TRAFFIC MARKER REMOVAL:
REPAIR BRIDGE ITEM (TYPE C) (BRIDGES A, B, C & D)

Remove all Traffic Markers and repair the area(s) of removal with Class A Bridge Deck Repair or per Engineer direction. Estimated quantities:

Bridge A: 135
Bridge B: 50
Bridge C: 24
Bridge D: 24

All costs including labor, equipment, material, and incidentals necessary to complete the work as shown in the plans shall be included in the unit price bid per EACH of "REPAIR BRIDGE ITEM (TYPE C)"

- (4) STRUCTURE REPAIR WITH PNEUMATICALLY PLACED MORTAR:
(BRIDGES A, B, C & D)

The pay item "Pneumatically Placed Mortar" consists of repairing surface areas of the Structure.

The actual extent of the repairs shall be determined in the field by the engineer. The repairs shall be in accordance with section 521 of the 2009 Oklahoma Standard Specifications for Highway Construction and in a manner approved by the engineer.

The removal of deteriorated concrete shall be done using hand tools. Power tools will not be allowed unless hand tools prove incapable of excavating all deteriorated concrete to sound concrete and as approved by the engineer. Should power tools be necessary, power tools shall be of a 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 mortar application, blast clean the concrete surface and reinforcing steel free of debris and corrosion. Apply Pneumatically Placed Mortar to replace deteriorated concrete. Build up mortar to match the original lines and grades of the substructure.

The contractor may propose and use as an alternate one of the following repair methods:

- (1) Cast-In-Place Concrete
- (2) Pre-Placed Aggregate Concrete
- (3) Formed and Pumped Concrete and Mortar
- (4) Troweling and Dry-Packing of Repair Mortar

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 surface preparation methods, patching material, bonding agents, material placing methods, and finishing methods. The contractor shall test repair an area to verify the effectiveness of the proposed repair method prior to commencement of the work. Faulty repairs shall be replaced at the contractor's expense to the satisfaction of the engineer.

All costs including labor, equipment, material, and incidentals necessary to complete the work described above shall be included in the price bid per square yard of "PNEUMATICALLY PLACED MORTAR".

- (5) BEAM ENDS REPAIR: (BRIDGE A)
REPAIR BRIDGE ITEM (TYPE D)
(See Sheet "DETAILS OF REPAIR BRIDGES 'A' & 'B' (SHEET 2 OF 2))

An estimated quantity of 10 Beam Ends need repair as per the following description and as directed by the Engineer:

The Contractor shall remove unsound concrete from portion of beam to be wrapped and clean any exposed reinforcing steel. Apply Corrosion Inhibitor and Pneumatically Placed Mortar. Apply FRP to Beam End per drawing. All work shall be in accordance with 2009 Specifications.

All costs including labor, equipment, material, and incidentals necessary to complete the work described above shall be included in the price bid per EACH of "REPAIR BRIDGE ITEM (TYPE D)".

- (6) CLASS B BRIDGE DECK REPAIR: (BRIDGES A, B, C & D)

The pay item "Class B Bridge Deck Repair" has been estimated to be used as directed by the engineer to repair any area of the deck requiring such repair. The location and extent of the deck repair shall be as shown in the plans or as determined in the field by the engineer. Payment for actual repairs shall be done in accordance with section 513.04D(2) and subsection 701.20 of the 2009 Oklahoma Standard Specifications for Highway Construction.

Early strength concrete shall be used at no additional cost to ODOT. All cost of repair including labor, equipment, material, and incidentals necessary to complete the work as described above shall be included in the price bid per square yard of "CLASS B BRIDGE DECK REPAIR".

- (7) FLOOD COATING TREATMENT: (BRIDGES A, B, C & D)

A flood coat deck seal shall be applied to the driving surface of the Bridge Deck and Approach Slabs. The Contractor must protect all traffic striping from the flood coat deck seal. Any traffic striping rendered ineffective or damaged during the flood coat seal application shall be replaced at the Contractor's expense to the satisfaction of the Engineer.

The Contractor must prevent the flood coat deck seal from penetrating any joint that has been sealed with silicone. If flood coat deck seal penetrates any silicone joint the Contractor, at his own expense, will be required to:

- 1) After bulk cure, remove all flood coat deck seal from these joints.
- 2) Remove and replace the silicone joint sealant.

The application of the flood coat shall be in accordance with Section 523.04E of the Standard Specification and shall be performed only after all other work is complete.

All costs including labor, equipment, material, and incidentals necessary to complete the work described above and as shown in the plans shall be included in the unit price bid per Square Yard of "DECK AREA SEALED (FLOOD COATS)".

- (8) PAINTING BEARINGS AND DIAPHRAGM BOLTS: (BRIDGE A)

The exposed end areas of intermediate diaphragm bolts (outside beams) and all bearings (except those being replaced) shall be cleaned and painted with a zinc-rich paint system in accordance with section 512 of the 2009 Oklahoma Standard Specifications for Highway Construction and as directed by the Engineer.

There is an estimated quantity of 150 Bearings on Bridge A which need painting. All costs for completing the work as specified including labor, materials and incidentals shall be included in the unit bid price per Lump Sum of "PAINTING EXISTING STRUCTURES" and "COLLECTION AND HANDLING OF WASTE".

- (9) BEARING ASSEMBLIES REPLACEMENT: (BRIDGE A)
REPLACE BRIDGE ITEM (TYPE A)

Bearing Assemblies are to be replaced as determined in the field by the Engineer. An estimated total of 10 bearings will need replacement. There is an estimated 95 pounds of TYPE 3 Weathering Steel per Bearing Assembly.

All cost of repair including labor, equipment, material, and incidentals necessary to complete the work as described above shall be included in the price bid per EACH of "REPLACE BRIDGE ITEM (TYPE A)".

- (10) PAINTING BEARINGS: (BRIDGE C & D)

Bearing Assemblies shall be cleaned/sand blasted and painted with a zinc-rich paint system in accordance with section 512 of the 2009 Oklahoma Standard Specifications for Highway Construction and as directed by the Engineer.

There is an estimated quantity of 160 bearings per Bridge which need painting. Some Bearing Assemblies have missing hardware, an estimated quantity of 100 lb. of structural steel should be included in this work item.

All costs for completing the work as specified including labor, materials and incidentals shall be included in the unit bid price per Lump Sum of "PAINTING EXISTING STRUCTURES".

BRIDGES 'A' - 'D' JOINT MAINT. GENERAL NOTES	TULSA COUNTY		
	Design	N/A	N/A
	Detail	RWM	6/16
	Check	KMS	6/16
Squad: MAYFIELD Engr: ELYAZGI			
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION		SHEET NO. AB01
JOB/PIECE NO. 31944(04)			