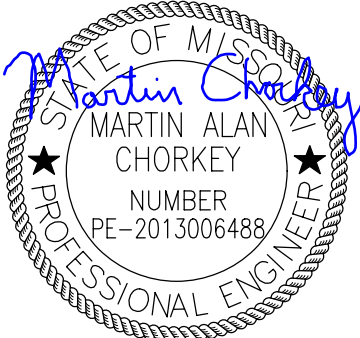


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	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636
	<b>Horner &amp; Shifrin, Inc.</b> 401 S. 18 <sup>th</sup> Street Suite 400 St. Louis, MO 63103 Certificate of Authority #000159 Consultant Phone #314-531-4321
	JOB NO. J5S3526 Maries County, MO Date Prepared: 11/2/2023
Date: 11-2-23	
Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: A thru D	

JOB SPECIAL PROVISIONS (BRIDGE)

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A. CONSTRUCTION REQUIREMENTS

**1.0 Description.** This provision contains general construction requirements for this project.

**2.0 Construction Requirements.** The plans and the asbestos and lead inspection report for the existing structure(s) are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

**2.1** In order to assure the least traffic interference, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

**2.2** Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with [Sec 704](#). A qualified rapid set concrete patching material will not be permitted for half-sole repair, deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.

**2.3** The existing slab for the bridge(s) to be redecked was constructed as composite or non-composite as shown in the table below.

Bridge No.	Type of deck
A1470	Composite

**2.4** Provisions shall be made to prevent any debris and material from falling into the waterway. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense.

**2.5** Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**2.6** Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

**2.7** SSPC-SP2 and SSPC-SP3 surface preparation shall be in accordance with the environmental regulations in [Sec 1081](#) and collection of residue shall be in accordance with [Sec 1081](#) for collection of blast residue. SSPC-SP6, SSPC-SP10 and SSPC-SP11 surface preparation shall be in accordance with the approved blast media and environmental regulations in [Sec 1081](#) and collection of blast residue shall be in accordance with [Sec 1081](#).

**2.8** Before fabrication of new metalwork, the contractor shall make the necessary measurements in the field to verify dimensions of the existing structure where new members are affected. Any deviation of the dimensions shown on the plans shall be called to the engineer's attention. The contractor shall be responsible for developing all required dimensional adjustments and coordinating the implementation of the dimensional adjustments with all involved fabricators and subcontractors.

**JOB SPECIAL PROVISIONS (BRIDGE)**

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**2.9** Exposed girder/beam areas that are not faying surfaces or not covered by concrete that are scratched, damaged by the contractor or by field welding operations shall be touched up with Gray Epoxy-Mastic Primer (non-aluminum) in accordance with [Sec 1081](#). The areas shall receive the coating system as shown on the plans.

**3.0 Coating Information.**

**3.1 Straps Removal.** Exposed portions of straps for stay-in-place forms shall be removed prior to surface preparation. Straps need not be removed in areas that are not being painted. Flame cutting will not be permitted. The contractor shall exercise care not to damage the existing structure during removal. Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**3.2 Slab Drains and Stay-In-Place Forms.** The stay-in-place forms, slab drains and slab drain brackets shall not be recoated, overcoated or damaged during the painting operation. Any portion of the slab drain bracket that is blast cleaned shall be recoated with System G. Any damage sustained as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**3.3 Existing Bridge Information.** The informational plans may be used by bidders in determining the amount of steel to be cleaned and painted/coated with the full understanding that the State accepts no responsibility for accuracy of the estimated tons of existing steel shown in the table below. The bidder's acceptance and use of the estimate shown below shall be no cause for claim for any final adjustment in the contract unit price for the work involved in repainting. Each bidder is expected to carefully examine the structure(s), investigate the condition of existing paint and prepare their own estimate of quantities involved before submitting a bid. Surface preparation and applying field coatings to the structural steel shall be based on the contract plan quantities. No final measurements will be made.

Bridge No.	Estimated Tons			Existing Paint System	Lead Based
	Coating System		Total		
	System G	Calcium Sulfonate			
A1470	17	0	17	A	Yes

**3.4 Environmental Contact.** Environmental Section may be contacted at the below address or phone number. The Missouri Department of Health may be contacted at (573) 751-6102.

MoDOT - Design Division - Environmental Section  
 P.O. Box 270  
 105 W. Capitol Ave., Jefferson City, MO 65102  
 Telephone: (573) 526-4778

**3.5 Approved Smelter and Hazardous Waste Treatment, Storage and Disposal Facility.** The following is the approved smelter and hazardous waste treatment, storage and disposal facility:

Doe Run Company - Resource Recycling Division - Buick Facility  
 Highway KK  
 Boss, MO 65440  
 Telephone: (573) 626-4813

**4.0 Method of Measurement.** No measurement will be made.

**5.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

**B. REMOVAL OF EXISTING BEARINGS**

**1.0 Description.**

**1.1** With the deck removed, this work shall consist of but is not limited to raising and supporting existing girders and/or beams at the locations specified on the plans, removing and disposing of the existing bearings and anchor bolts and performing all other required preparations prior to installing new bearings and anchor bolts as shown on plans.

**1.2** The responsibility for the design and construction of falsework required to support the girders and/or beams during bearing removal and new bearing installation shall rest solely with the contractor. The design shall ensure that the falsework can support all applicable dead loads and any construction loads. The design shall also provide an adequate factor of safety when selecting the temporary support members. The falsework design and working plans including detailed computations shall be signed, sealed and stamped by a registered professional engineer in the State of Missouri in accordance with Authentication of Certain Documents in [Sec 107](#).

**1.3** Existing girders and/or beams shall be subject to minimal construction loading by performing this work with the existing deck removed.

**1.4** Existing bearing top plates shall be removed and girder and/or beam surfaces cleaned and coated before placement of new bearings. The removal of the existing bearing top plate and cleaning shall be completed in such a manner as to not cause any damage to the existing bottom flange. Method of removal shall be as approved by the engineer.

**2.0 Construction Requirements and Materials.**

**2.1 Raising and Supporting the Superstructure.**

**2.1.1** Before beginning operations, the contractor shall submit to the engineer for review the method and sequence of operation proposed to be used in performing this work. With the deck removed, the contractor shall exercise caution when supporting the structural steel and shall raise the girders and/or beams the minimum extent necessary to perform this work with a maximum raise of 1/4 inch. Raising the girders and/or beams at the location of reset bearings shall be performed in a manner to prevent any damage to the adjoining steel. The lifting operation shall be performed only when authorized, but such authorization shall not relieve the contractor of responsibility for the safety of the operation or for damage to the structure. Any damage caused by the contractor's operations shall be repaired at the contractor's expense as approved by the engineer.

**2.1.2** Temporary timber supports (bearing stiffeners) shall be placed between the girder and/or beam flanges at each jacking location to prevent flange rotation. Permanent steel stiffening angles shall be designed and attached to the beam web when the beam web thickness is not adequate to support the jacking load.

JOB SPECIAL PROVISIONS (BRIDGE)

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**2.1.3** Raising the girders and/or beams shall be performed simultaneously and shall be performed in a manner to prevent any damage to the adjoining steel.

**2.1.4** Existing end diaphragms at joint may require loosening or be completely removed in order to install new bearings as authorized by the engineer.

**2.1.5** Bolts of existing end diaphragms that must be loosened or removed shall be replaced with like size galvanized high strength bolts with washer under head and nut.

**2.2 Bearing Removal.**

**2.2.1** After the structural members are supported, the contractor shall remove the existing bearings.

**2.2.2** The contractor shall remove the existing pintles to flush with the top of the existing steel beam seat.

**2.3 Cleaning and Painting.** Faying surfaces where existing end diaphragms will be reconnected and inside of drilled holes and the bottom surface of existing flange which will become faying surfaces of new connections shall be cleaned and painted with one coat of gray epoxy-mastic primer (non-aluminum).

**3.0 Method of Measurement.** Final measurement for removal of the existing bearings and preparation for the installation of the new bearings will be made per each.

**4.0 Basis of Payment.** Payment for furnishing and placing all temporary falsework (including stiffeners), materials, removals, disposal of all falsework, labor, tools, equipment and all incidentals necessary to complete this item will be considered completely covered by the contract unit price for Removal of Existing Bearings.

C. DEFLECTION AND HAUNCHING

**1.0 Description.** The contractor shall determine dead load deflections and haunching based on field measurements and/or existing bridge plans and these shall be adjusted based on the difference between the new and existing dead load weights.

**2.0 Construction Requirements.** In order to properly form the haunches for the new deck, the contractor shall survey top of deck elevations above each beam including centerline of roadway and along each beam line (top or bottom flange) prior to deck removal followed by surveying elevations of the beams (top or bottom flange) after deck removal.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

D. NON-DESTRUCTIVE TESTING

**1.0 Description.** This work shall consist of performing non-destructive testing on the welds of all existing top flange cover plates.

## **2.0 Construction Requirements.**

**2.1** After the concrete deck is removed, the steel that is to remain will be inspected by the engineer. In addition to this inspection, the welds and adjacent base metal at the ends of the top cover plates shall have non-destructive (magnetic particle) testing performed. Non-destructive testing shall be performed by an acceptable testing agency. The contractor shall submit to the engineer and Bridge Division ([Fabrication@modot.mo.gov](mailto:Fabrication@modot.mo.gov)) the following documentation for each individual performing non-destructive testing (NDT): their certifications, current eye exam and the NDT company written practice, including the Level III individual certification used for written practice. Personnel performing the tests shall be qualified for SNT-TC-1A Level II.

**2.2** The length of weld to be tested and the base metal, one inch either side of the weld, shall be cleaned of all rust prior to the testing. On cover plates with square ends, the weld shall be tested one inch from each corner along the ends of the cover plate plus 6 inches back along the side from each corner of the plate. On cover plates with tapered ends, the weld shall be tested along the end of the cover plate, along tapered edges and 6 inches back along the cover plate from end of taper.

**2.3** If fatigue cracks are found, the cracks are expected to be very small and may be located in the base metal at the toe of the welds. Any cracks discovered by testing, regardless of length, shall be marked and reported to the engineer. All repairs shall be made by a certified welder in accordance with [Sec 712.6](#). Any repair work and retesting of the repair work required, as a result of this inspection, will be paid for in accordance with [Sec 109](#). This shall not relieve the contractor from responsibility to repair any damage caused by this work at the contractor's expense. Any delay or inconvenience caused by this inspection requirement will be non-compensable and effect on time of performance non-excusable.

**3.0 Method of Measurement.** Measurement of non-destructive testing will be to the nearest linear foot. The extent of non-destructive testing may vary from the estimated quantities, but the contract unit price shall prevail regardless of the variation. Final measurements will not be made except for authorized changes during construction, or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

**4.0 Basis of Payment.** Accepted quantities of non-destructive testing will be paid for at the contract unit price. Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for Non-Destructive Testing.