

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	<u>1</u>	DATED	<u>4/8/2025</u>	ADDENDUM NO.	_____	DATED	_____
ADDENDUM NO.	<u>2</u>	DATED	<u>4/10/2025</u>	ADDENDUM NO.	_____	DATED	_____
ADDENDUM NO.	<u>3</u>	DATED	<u>4/16/2025</u>	ADDENDUM NO.	_____	DATED	_____

Number

Description

- 1 Revised Table of Contents; Revised NTB Nos. 6773 & 6776; Added NTB No. 6786; Amendment EBSx Download Required.
- 2 Revised NTB No. 6786; Amendment EBSx Download Required.
- 3 Revised or Added Plan Sheet Nos. 8001 & 8002; Amendment EBSx Download Required.

TOTAL ADDENDA: 3

(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

Contractor

BY _____

Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President

Address

Secretary

Address

Treasurer

Address

The following is my (our) itemized proposal.

NHPP-7314-01(007)/ 109500301000

Rankin County(ies)

Revised 01/26/2016

BRIDGE DIVISION			
REVISIONS			
DATE	SHEET NO.	BY	DESCRIPTION
04/07/25	8002	CJR	REVISED NOTE

FMS CON: 109500/301000	DESIGNED BY: COURTNEY ROME
PROJECT NO.: NHPF-7314-01(007)	DETAILED BY: COURTNEY ROME
COUNTRY: RANKIN	CHECKED BY: DONALD MCCRARY
	DATE: 2025-04-07

DIR OF STRUCTURES, STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.
DEP. DIR OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - MICAH DEW, P.E.

BRIDGE AT STA. 506+20

WK. NO.
D1-BR-1

SHEET NO
8001

ADDENDUM

***SHEET
NUMBER***

**WORKING
NUMBER**

1008

US 80 OVER PEARL RIVER RELIEF

GENERAL NOTES AND ESTIMATED QUANTITIES

US 80 OVER PEARL RIVER RELIEF REPAIR PLANS

MISCELLANEOUS REPAIR DETAILS

END BENT REPAIR DETAILS

PROPOSED END BENT REPAIR DETAILS

END BENT REPAIR DETAILS

BENT NO. 2 - BENT NO. 8 REPAIR DETAILS

BENT NO. 9 REPAIR DETAILS AND EPOXY MORTAR REPAIR DETAILS

BEAM HANGER ASSEMBLY

BEAM HANGER ASSEMBLY DETAILS

BRIDGE RAIL REPAIR DETAILS

JOINT REPAIR DETAILS

FOR INFORMATION ONLY PLANS

INFORMATION ONLY PLANS

8014 thru 8019

DESIGN DATA

Specifications (Existing Plans).....A-4, S.H.O. 1935
Loading (Existing Plans).....H15
Roadway Width (Existing Plans).....44'-0" (Gutter to Gutter)
Concrete (New).....Class "AA" (4000 psi)
Structural Steel (New).....ASTM A709, Grade 50

INFORMATION PLANS

Bridge US-80 over Pearl River Relief Project No. NHPP-7314-01(007)
For original bridge plans, see Information Plans on sheet nos. 801.4-801.9.
Additional information on the existing bridges is available for inspection in the bridge division.

DEBRIS REMOVAL NOTE

For the duration of the project, care shall be exercised to ensure that no debris fall into the streambed below the structure. The debris that is removed from the bridge shall become the property of the Contractor and shall be removed from the construction site.

SCOPE OF WORK:

- Remove End Bent No. 10 existing backwall, sidewalk section, and rail portion according to details shown on sheet nos. 800.4, 800.5, and 800.7
- Remove necessary pavement and backfill behind End Bent No. 10 backwall in order to construct new approach slab at the end of bridge according to details on Sheet No. 800.5.
- Reset the open joint at Bent No. 9. Prior to resetting the concrete girder span.
- Reset concrete girder Span No. 9 to provide proper alignment and joint opening on bent caps. See CONCRETE GIRDER SPAN RESETTNG NOTES on this sheet for additional information.
- Bent No. 9, and End Bent No. 10, Span 9 - Place necessary grout pad under each beam and install 1/2" continuous neoprene pad under all concrete girders in order for the deck to be at the appropriate grade and elevation. Prior to placement of grout pad and neoprene pad, the bottom surface of the beams, and the top of the cap shall be clean and free from all debris.
- Remove the extra offset concrete and repair spalled concrete areas with epoxy mortar on all intermediate bent caps in accordance with details and notes on Sheet Nos. 800.8 & 800.9. The Project Engineer may specify additional repair locations as needed.
- Install beam hanger assembly at Bent Nos. 2 thru 9 in accordance with details on Sheet Nos. 801.0 and 801.1.
- Reconstruct End Bent No. 10 backwall and portions of the superstructure according to the details and notes on sheet nos. 800.4, 800.6, and 800.7.
- Replace backfill behind End Bent No. 10 backwall and construct new approach slab in accordance with the roadway plans.
- Pressure wash and clean all debris from existing intermediate bent caps and bearings.
- Replace existing open joint at all existing intermediate bent joints and reseal joints in accordance with details shown on sheet no. 801.3.
- Repair concrete bridge rail with structural concrete. In accordance with details and notes on Sheet Nos. 800.9 & 801.2 The Project Engineer may specify additional repair locations as needed.
- Pressure wash all surfaces of the bridge rail and bridge end posts on the right & left side of the bridge and apply spray finish to all surfaces of the rail and the bridge end posts.
- Clean entire bridge roadway surface or debris and seal deck with HYBRID POLYMER Concrete Overlay (curb to curb, length of bridge deck). See HYBRID POLYMER CONCRETE OVERLAY NOTES on this sheet.

HYBRID POLYMER CONCRETE OVERLAY NOTES:

- Hybrid Polymer Concrete overlay shall be placed in accordance with Special Provision Subsection 907-828.03 and with the approved materials outlined in Special Provision Subsection 907-828.02.
- Overlay limits shall be edge to edge of curb and extend the entire length of the bridge deck.
- The overlay shall be placed at a minimum thickness of 1 1/2" and not to exceed 3 1/4".
- Estimated Quantities are based on a thickness of 3 1/4"
- All materials and labor associated with this item of work shall be paid for by the cubic yard of overlay installed under Pay Item No. 907-828-4001, Hybrid Polymer Concrete Overlay.

SITE ACCESS NOTE:

Any clearing of brush or debris for site access around the end bents shall be absorbed under other item numbers.

ESTIMATED BRIDGE QUANTITIES		
PAY ITEM NO.	DESCRIPTION	UNIT
503-C001	Saw Cut, 1-inch	118 LF
805-4001	Reinforcement	1132 LBS
907-804-4002	Bridge Concrete, Class "A4"	10 CY
907-808-4003	Joint Repair Without Epoxy	720 LF
907-823-4001	Preformed Joint Seal, Type I	360 LF
907-823-8001	Saw Cut, Type I	720 LF
907-824-C001	Cap Cleaning	9 EA
907-824-A003	General Epoxy Repair	209 SF
907-824-PP004	Bridge Repair, Concrete Girder Span Resetting, Per Plans	1 LS
907-824-PP006	Bridge Repair, Beam Hanger Assembly (Exterior)	16 EA
907-824-PP006	Bridge Repair, Beam Hanger Assembly (Interior)	24 EA
907-824-PP007	Bridge Repair, Install Bearings, Per Plans	14 EA
907-824-PP007	Bridge Repair, Deck Curb, and Sidewalk Removal and Replacement	4 CY
907-824-PP008	Bridge Repair, Remove End Bent Endwall, Per Plans	58 LF
907-824-PP008	Bridge Repair, Rail Repair	7 LF
907-824-PP008	Bridge Repair, Rail, Curb, and End Post Cleaning, Per Plans	756 LF
907-824-PP008	Bridge Repair, Class II, Spray Finish, Per Plans	756 LF
907-828-4001	Hybrid Polymer Concrete Overlay	37 CY

GENERAL NOTES:

- Mississippi Standard Specifications for Road and Bridge Construction, 2017.
- No change of plans will be permitted except by written approval of the Director of Structures, State Bridge Engineer. Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.
- Prior to construction, dimensions and elevations of the existing structure shall be field verified by the Contractor. The Contractor shall be responsible for adjusting the elements of new construction to ensure proper fit with the existing structure. The Contractor shall submit field measurements showing the required shim plate thickness and slope beneath each existing concrete beam to properly install the beam hanger assemblies as shown on Sheet No. 801.0 & 801.1. These dimensions shall be submitted to the Director of Structures, State Bridge Engineer, prior to fabricating the beam hanger assemblies and shim plates.
- Any damage that occurs to the existing structure during the duration of the project shall be repaired to the satisfaction of the Project Engineer by the Contractor at no additional cost to the State.
- Work for which no pay item is provided in the proposal will not be paid for directly and compensation therefore will be included in the prices and payments for bid items.
- All dimensions and details for the repaired areas shall be in accordance with the original plans that are attached as information plans except as otherwise noted in the plans.
- All areas of existing concrete that will be in contact with new concrete shall be coated with an epoxy binder designed to bond new concrete to old. Epoxy shall be applied according to manufacturer's directions.
- The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of bridge design. A complete set of bracing and jacking plans along with the design calculations shall be submitted to the Director of Structures, State Bridge Engineer, through the Project Engineer, for review prior to construction. All drawings and calculations associated with the structure jacking plan shall bear the design Engineer's seal.
- Bridge concrete shall be class "A4".
- Exposed new concrete surfaces shall receive a Class 2 rubbed or spray finish in accordance with the specifications.
- Chamfer all concrete edges 1/4" unless otherwise noted.
- Reinforcing steel shall be ASTM A615, Grade 60, unless otherwise noted.
- Reinforcement order lists and required placing plans shall be furnished in accordance with Section 805 of the Standard Specifications. Partial submittals are not acceptable.
- The Contractor shall submit a proposed demolition plan with hammer information prior to beginning work to be approved by the Director of Structures, State Bridge Engineer.
- Bar bending details shall be in accordance with "Manual of Practice For Detailing Reinforced Concrete Structures" (ACI 315R-04).

EPOXY MORTAR REPAIR NOTES

General Epoxy Repair shall be done in accordance with Special Provision Subsection 907-824.03.01 and with approved material outlined in Special Provision Subsection 907-824.02.1. All work and material required to perform this item of work shall be paid for under Pay Item No. 907-824-A003, General Epoxy Repair. For EPOXY REPAIR DETAILS and locations of epoxy repairs, see Sheet Nos. 800.7 thru 800.9.

HIGH EARLY STRENGTH BRIDGE CONCRETE NOTE:

New concrete shall be high early strength concrete, as follows:

The concrete mixture design shall be furnished by the Contractor for approval by the materials division. Mixture design parameters are as follows:

Required Strength: 2500 psi before release to traffic
Total Air Content: 3-6%
Maximum Slump: 6 inches

Non-chloride based accelerator may be used if the ambient temperature is 50° F or less, but shall not be used if the ambient temperature is greater than 50° F.

Synthetic structural fibers shall be used. The Contractor shall select a manufacturer from MDOT's Approved Products List, and the manufacturer's recommendations shall be followed for the dosage rate.

 Curing is to be continuous until 2500 psi is attained. Traffic is to be diverted from the repair area until this value is reached. The Contractor may use the Maturity Method per Section 804 to estimate the concrete compressive strength for the purposes of releasing the repair area to traffic. However, final acceptance of the in-place concrete shall be determined using eight concrete test cylinders, which shall be cured in a container next to the concrete placement. Three cylinders are to be tested at eight, sixteen, and twenty-four hours intervals respectively. The three remaining cylinders shall be used to determine the 28-day compressive strength of concrete.

UTILITY NOTE:

Contractor shall be aware that AT&T utility lines run between beams 2 & 3. Contractor shall protect these lines from damage during construction.

DISTURBANCE NOTE:

Any surrounding area that is disturbed in order to accomplish the work described herein shall be restored to its original condition. There will be no separate payment for this work.

RAIL CLEANING NOTE:

Railing cleaning should be performed by pressure washing the railings to the satisfaction of the Project Engineer. The pressure washer shall be able to maintain 3 500 psi of pressure. Class II Spray Finish shall be applied to the railing after the cleaning is complete.

SPRAY FINISH NOTE:

Spray finish shall be in accordance with Specification 804.03.19.3.2 - Spray Finish and Pay Item No. 907-824-PP008: Bridge Repair, Class II Spray Finish. Per Plans. The rail and curb surfaces are to be concrete gray, as to match the existing concrete on the rail, and white on the end posts as to match respective existing conditions. Spray finish shall be applied to the bridge according to the locations shown on Sheet No. 800.5.

SAWCUT NOTES:

The Contractor shall verify depth of reinforcing steel before making any sawcuts. Existing reinforcement to be retained shall be carefully preserved and blast cleaned. Any damage to reinforcing steel shall be repaired to the satisfaction of the Engineer at no additional cost to the State. Sawcut pay items for certain work items are specified on other repair sheets herein.

CONCRETE GIRDER SPAN RESETTING NOTES:

The Contractor shall lift and Span no. 9 to the position in which the span was originally constructed. The final positions of the span shall satisfy the following criteria:

- The spans shall be square to and centered on the approach roadway alignment.
- The gutterlines and rails shall align along the entire length of the bridge.
- Transverse edge of end span nearest the end bent shall be positioned 1'-0 1/2" (± 1/2") from back edge (fill side) of the end bent cap.
- All joints at intermediate bents shall be set to "A" dimension shown on Sheet No. 801.5 Centerline of the joint shall align with the centerline of the bent cap.

Acceptable criteria listed above is based on the dimensions given in the original plans. Acceptable criteria does not consider the fact that the as-built positions may vary from the original plans. Prior to beginning the repositioning process, the Contractor shall take all field measurements needed to verify that all given criteria can be satisfied. If the Contractor determines that an acceptable position within the specified tolerances is unobtainable, the Project Engineer shall be notified.

The Concrete girder span shall be lifted and free of both bent caps prior to moving. The Contractor shall not attempt to reposition the concrete girder spans while they bear on the cap beams. The Contractor may elect to lift span using any of the following general methods:

- A span may be jacked from natural ground below.
- A span may be lifted using a crane(s).
- A span may be lifted using a gantry that bears on adjacent spans or natural ground.

The Contractor may encounter beams that are still attached to the bent caps by the original #6 dowel bars. Dowels bars that still provide connection between the beams and the bent caps shall be cut so that the span may be lifted freely. Cutting may be done by wire saw, drilling with a steel coring bit, or any other means approved by the Project Engineer. Any Concrete removed while cutting the dowels bars shall be replaced with epoxy mortar. The Contractor may not attempt to detach spans from dowels by applying additional lifting force.

The Contractor shall submit detailed working drawings and design calculations to the Director of Structures, State Bridge Engineer through the Project Engineer for review. Those drawings and calculations shall be stamped by a Mississippi registered Professional Engineer and shall bear the design engineer's seal and signature. By reviewing these drawings, the Reviewer shall assume no liability upon himself or the State or Mississippi, nor shall this relieve the Contractor for the sufficiency of their method. The Contractors Engineer shall provide an analysis of the existing spans to prove that the spans will not be overstressed or damaged by the chosen method of lifting and resetting the spans. Please note these are cast-in-place concrete girder spans with structural rail members that may help support the spans. The working drawings shall include sizes, dimensions, and material specifications for all members used. This information shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review before any work is started.

All costs for the concrete girder span resetting including labor, material, and equipment, shall be included in the price bid for Bridge Repair, Concrete Girder Span Resetting, Per Plans.

Prior to resetting the concrete girder Span No. 9 in the final location, neoprene pads shall be in place under each beam at Bent No. 9 and End Bent No. 10. For additional notes regarding the neoprene pads, see Sheet No. 801.0. The neoprene pad cost of placement and material shall be paid for under item no. 907-824-PP006, Bridge Repair, Install Bearings, Per Plans.

BENT CAP CLEANING NOTES:

Bent cap cleaning shall be done in accordance with Special Provision Subsection 907-824.03.3. This item of work shall be paid for under Pay Item No. 907-824-C001, Cap Cleaning, EA.

GROUT NOTE

Non-shrink Grout shall be "Sure-Grip Grout" As manufactured by American Highway Technology (Dayton Superior Corp.) or approved equal, applied according to manufacturer's directions.

EPOXY ANCHOR NOTES

- Rebar anchoring system shall be one of the following products:
 - "HIT-RE500 V3 Epoxy Adhesive Anchor" Shall be as manufactured by Hilti Inc., www.hilti.com.
 - "Ultra-bond 1300" Shall be as manufactured by Adhesives Technology Corp., www.atcepoxy.com
 - "Epocon C6" Shall be as manufactured by ITW Ramsel/Red Head, www.itwredhead.com
- Installation shall be in strict accordance with manufacturer's recommendations.
- A representative of the anchoring system must be present for a sufficient time to ensure that the Contractor is properly schooled in the installation of the anchoring system.

CONTRACTOR SUBMITTALS:

(The following list is NOT exhaustive of all submittals that may be required to fulfill the work herein)

- Shim plate thickness for the beam assembly details as shown on Sheet Nos. 801.0 & 801.1.
- Field Measurements showing the existing conditions of Span No. 9 and that the resetting criteria can be achieved.
- Resetting plan to support superstructure during concrete girder span resetting, and end wall replacement as outlined in the CONCRETE GIRDER SPAN RESETTING NOTES above.
- Jacking/lifting plan for superstructure support during other repairs (if applicable).
- Fabricator's shop drawings for all aspects of the beam assembly details, as shown on Sheet Nos. 801.0 and 801.1.
- Existing dimensions of the existing endwall at End Bent No. 10.
- Existing and Final joint opening widths to be used at each bent and the joint supplier.

SPECIAL PROVISIONS:

907-824: General Epoxy Repair
907-824: Cap Cleaning
907-828: Hybrid Polymer Concrete Overlay



ADDENDUM

DESIGNED BY: BRADEN WELLS
DETAILED BY: BRADEN WELLS
CHECKED BY: DONALD MCCRARY
DATE: 2025-04-07

FMS CON: 109500/301000
PROJECT NO.: NHPP-7314-01(007)
COUNTY: RANKIN

GENERAL NOTES AND ESTIMATED QUANTITIES
BRIDGE AT STA. 506+20
DIR. OF STRUCTURES, STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E. DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - MICAH DEW, P.E.