## $S \ E \ C \ T \ I \ O \ N \quad 9 \ 0 \ 5 \ -- \ P \ R \ O \ P \ O \ S \ A \ L \quad (CONTINUED)$

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):

ADDE	NDUM NO.	1	DATED	5/3/201	17	ADDENDUM NO		DATED		
ADDE	NDUM NO	2	DATED	5/18/20	17	ADDENDUM NO		DATED		_
Number 1 2	Revised NTB Amendment E Revised Tabl	Desc No 6391 BS Downlo e of Conte & 6394; BS Downl	ription , 6392, 6393, bad Required. ents; Revised N Add NTB N	& 6394; NTB Nos.	TOT (Mu Resj DA BY TIT ADI CIT PHC FAX	TAL ADDENDA: st agree with total add pectfully Submitted, TE	2 denda issue Contrac Signat	ed prior to opening		
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Rankin & Hinds County(ies)

Revised 01/26/2016

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#### (REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET OF SECTION 905 AS ADDENDA) 05/18/2017 05:09 PM

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

## SECTION 904 - NOTICE TO BIDDERS NO. 5983

CODE: (SP)

DATE: 01/07/2016

**SUBJECT:** Bridge Repair Permits

## PROJECT: STP-0020-01(222) / 107138307000 & BR-0055-02(247) / 107402301000 Rankin & Hinds Counties

The Department has acquired Nationwide Permit No. 3 (Special Conditions Attached) for repair and maintenance of bridge(s).

Copies of said permit(s) are on file with the Department.

#### SPECIAL CONDITIONS NATIONWIDE PERMIT No. 3

#### **Maintenance**

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be

placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

<u>Notification</u>: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (<u>Authorities</u>: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404))

<u>Note</u>: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act section 404(f) exemption for maintenance.



#### STATE OF MISSISSIPPI PHIL BRYANT GOVERNOR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY GARY C. RIKARD, EXECUTIVE DIRECTOR March 6, 2017

Certified Mail No. 7012 3460 0003 2548 6988

Ms. Jennifer Mallard Regulatory Branch Chief U.S. Army Corps of Engineers, Vicksburg District 4155 Clay Street Vicksburg, Mississippi 39183-3435

Dear Ms. Mallard:

Re: US Army Corps of Engineers Nationwide Permit No. 3 Warren County COE No. MVK-2017-114 WQC No. WQC2017003

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing, to the U.S. Army Corps of Engineers, an applicant for a Federal License or permit to conduct the following activity:

US Army COE, Nationwide Permit No. 3:

Nationwide Permits are general permits issued on a nationwide basis to streamline the authorization of activities that have no more than minimal and cumulative adverse effects on the aquatic environment. The U.S. Army Corps of Engineers issues NWPs to authorize certain activities that require Department of the Army permits under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

#### 3. Maintenance.

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most

recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200-foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist

of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

*Notification:* For activities authorized by paragraph (b) of this NWP, the permittee must submit a preconstruction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.

**Note:** This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act section 404(f) exemption for maintenance. [MVK-2017-114, WQC2017003].

The Office of Pollution Control certifies that the above-described activity will be in compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

- 1. The permittee shall obtain appropriate wastewater permits and/or approvals for the proposed activity prior to the commencement of construction activities.
- 2. For projects greater than five acres of total ground disturbances including clearing, grading, excavating, or other construction activities, the applicant shall obtain the necessary coverage under the State of Mississippi's Large Construction Storm Water General NPDES Permit. For projects greater than one, to less the five acres of total ground disturbances including clearing, grading, excavating, or other construction activities, the applicant shall follow the conditions and limitations of the State of Mississippi's Small Construction Storm Water General NPDES Permit. No construction activities shall begin until the necessary approvals and/or permits have been obtained.
- 3. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

4. The turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50-Nephelometric Turbidity Units.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If we can be of further assistance, please contact us.

Sincerely, Harry M. Wilson, P.E., DEE Chief, Environmental Permits Division

HMW: ld

- cc: U.S. Army Corps of Engineers, Mobile District Attn: Mr. Craig Litteken
  - U.S. Army Corps of Engineers, Memphis District Attn: Mr. Tim Fudge
  - U.S. Army Corps of Engineers, Nashville District Attn: Mr. Timothy Wilder
  - U.S. Army Corps of Engineers, New Orleans District Attn: Mr. Michael Farabee

Ms. Willa Brantley, Department of Marine Resources

- Mr. David Felder, U.S. Fish and Wildlife Service
- Mr. William Ainsley, Environmental Protection Agency

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

#### SECTION 904 -NOTICE TO BIDDERS NO. 6392

CODE: (SP)

DATE: 05/18/2017

#### **SUBJECT:** Scope of Work

## PROJECT: STP-0020-01(222) / 107138307 & BR-0055-02(247) / 107402/301 - Hinds and Rankin Counties

The contract documents do not include an official set of construction plans but may, by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings". All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

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. Work for which no pay item is provided will not be paid for directly and shall therefore be considered an absorbed item of work.

It shall be the responsibility of the Contractor to protect existing structures from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Engineer, any structures damaged during the life of the contract. No payment will be made for replacement or repair of damaged items.

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the hydraulic crossing below the structure. All debris, including any material that has accumulated on the bridge caps, shall become the property of the Contractor and shall be removed from the construction site.

Work on the project shall consist of the following:

#### STP-0020-01(222) / 107138307

#### **Bridge Painting:**

This work shall consist of removing all of the existing paint, cleaning the exposed structural steel, and painting all of the existing structural steel on the following bridges:

Interstate 20 westbound over the Pearl River at the Hinds/Rankin county line

- 2 -

Bridge# 46.4A Bridge ID # 11385 Approximate Area-44,000 square feet

Interstate 20 eastbound over the Pearl River at the Hinds/Rankin county line

Bridge# 46.4B Bridge ID # 11386 Approximate Area-64,900 square feet

# Note: All of the structural steel girders and bridge components on this bridge shall be abrasive blasted, as referenced in 907-845.03.7.6, and repainted.

The above square footage is for information purposes only and is approximate and will not be measured for payment. Actual square footage may be more or less than given above but shall not be a basis for additional compensation. Payment shall be made by lump sum regardless of over-run or under-run of the above approximate square footage under Pay Item No. 907-845-A, Coating Existing Structural Steel.

A containment system shall be required for this project. The Contractor shall design, install and maintain a containment system in accordance with Special Provision 907-845 to assure that the traveling public, including waterway traffic, will not be exposed to construction debris and materials during the cleaning and painting process. The Contractor will be required to properly dispose of all debris at an approved landfill.

Incidental work such as project clean up, debris disposal, and other incidental work necessary to complete the project will not be measured for separate payment and will be considered absorbed items.

#### General Epoxy Repair & Drop Slab Repair:

Repair concrete spalled areas on the bridge as directed by the Project Engineer using epoxy mortar. **Repair areas shall include, but are not limited to, the concrete drop slabs on the underside of the bridge deck.** Spalled areas where pack rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing using 3500 psi pressure. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details on the information plans.

- 1. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List.
- 2. Silica Sand: The materials shall be bagged general purpose cleaning sand.
- 3. Epoxy Mortar Mix: The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the manufacturer.
- 4. General:

- a. A Representative of the epoxy manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.
- b. Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.
- c. Acetone alcohol may be used to clean and lubricate trowels.
- d. Curing time shall be in accordance with the manufacturer's recommendations.
- 5. All items of work related to epoxy repair shall be paid for under pay item 907-824-PP: Bridge Repair, Epoxy Repair.

#### Joint Repair & Sealing:

The joint repair shall include removal of all existing joint material, joint preparation, saw cutting, installation of the preformed joint seal and other necessary work per the included standard drawings or as directed by the Engineer. Removal of all material associated with armor, sliding plate, or neoprene expansion joints shall be paid under Pay Item No. 202-B, Removal of Existing Joint Material. Removal of material from all other joint types will not be paid directly and shall be considered an absorbed item of work.

After the existing joint material has been removed, the joints shall then be saw cut as per the Joint Repair Standard Drawings. Saw cuts will be paid for under either Pay Item Nos. 907-823-B, Saw Cut, Type 1 or 907-823-B, Saw Cut Type II. No saw cuts are to be made to any joints that are currently  $2\frac{1}{2}$ " wide or greater. The joints are then to be repaired, if necessary, with epoxy mortar or an approved equivalent. This work will be paid for under Pay Item No. 808-A, Joint Preparation.

The joint shall then be sealed by one of the three approved manufacturers listed in Special Provision 907-823 and installed according to the manufacturer's specifications.

## **Cap Cleaning:**

The surface of all caps shall be cleaned to the satisfaction of the Engineer and paid for under Pay Item No. 907-824-PP Bridge Repair, Pressure Wash and Clean Bent.

#### **Replace Bearing Plates:**

All masonry plates along with countersunk bolts and existing anchor bolts at Intermediate Bents No. 20L & 21L of Bridge 46.4A and Intermediate Bents No. 20R & 21R of Bridge 46.4B shall be removed and replaced. Proposed base plates shall be fabricated as shown below in the Proposed Base Plate Details. Existing anchor bolts shall be ground to 1/4" below the concrete surface and grouted with epoxy mortar. Payment for this work shall be made under Pay Item No. 907-824-PP095 Bridge Repair, Base Plate Replacement.

The Contractor shall verify all dimensions of the existing structure prior to beginning work. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.

All structural steel shall conform to A.S.T.M designation A709 grade 50. All bolts shall be galvanized

and meet or exceed designation A.S.T.M. A325. All steel shall be new. Nuts and washers shall conform to A.S.T.M. A563, Grade DH and A.S.T.M. F436, galvanized. Nuts shall be tapped oversize the minimum amount required for proper assembly. Nuts shall be heavy hex and tapped for a <sup>1</sup>/<sub>4</sub>" set screw or jam nut can be installed. All bolts shall be galvanized in accordance with A.S.T.M. A153.

Swedge bolt anchoring system shall be one of the following products:

- A. "HIT RE 500-V3 Epoxy Adhesive Anchor" shall be as manufactured by Hilti, Inc.
- B. "Ultabond 1300" shall be as manufactured by Adhesive Technology Corp.
- C. "EPCON C6+" shall be as manufactured by ITW Ramset/Red head.

Installation of the anchoring system shall be performed in strict accordance with the manufacture's recommendations. A representative of the manufacturer shall be present for sufficient time to assure that the Contractor is properly schooled in the installation of anchoring system.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing base plates and anchor bolts at Intermediate Bents No. 20L & 21L of Bridge 46.4A and Intermediate Bents No. 20R & 21R of Bridge 46.4B. The beam end shall only be raised to <sup>1</sup>/4" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

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 arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.

Jacks shall be coupled to a common manifold. Jacking point shall be under the bottom flange of the steel beam at the bent and no jacking points will be allowed under any diaphragm or bay. After the beam is raised into position, temporary blocking shall be provided to secure the beam in this position while work is being performed. Temporary blocking points shall be under the bottom flange of the steel beam at the bent and no temporary blocking will be allowed under any diaphragm or bay.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.



#### **Traffic Control Plan**

The Contractor shall erect and maintain construction signing and provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas in accordance with the <u>Traffic Control Plan</u>. Payment shall be included in the price bid for Pay Item No. 907-618-A, Maintenance of Traffic.

#### BR-0055-02(247) / 107402/301000

#### Joint Repair & Sealing:

All open joints in bridge shall be resealed. The joint repair shall include removal of all existing joint material, joint preparation, saw cutting, installation of the preformed joint seal and other necessary work per the included standard drawings or as directed by the Engineer. All concrete approach slab joints shall be sealed. If the bridge has an asphalt approach, the joint between the asphalt and concrete shall not be disturbed. Removal of material from joints will not be paid directly and shall be considered an absorbed item of work.

After the existing joint material has been removed, the joints shall then be saw cut as per the Joint Repair Standard Drawings. Saw cuts will be paid for under Pay Item No. 907-823-B, Saw Cut, Type 1. The joints are then to be repaired, if necessary, with epoxy mortar or an approved equivalent. This work will be paid for under Pay Item No. 808-A, Joint Preparation.

Joints shall then be sealed by one of the three approved Manufacturers listed in Special Provision 907-823 and installed according to the manufacturer's specifications.

For joint No. 7, 8, 9, and 11 the existing epoxy grout, installed in previous repair project, shall be removed. The Contractor shall submit a demolition plan for this item of work to the Director of Structures, State Bridge Engineer through the Project Engineer to be approved prior to construction. After the existing joint material has been removed, a portion of the bridge deck shall then be removed. This work will be paid for under Pay Item No. 202-B, Removal of Bridge Deck. Refer to the Joint Detail sheet included for further details. The concrete to be put back shall be High Early Strength concrete and will be paid for under Pay Item 907-804-A, Bridge Concrete, Class AA. For additional details on Joint repair for joint No. 7, 8, 9, and 11 see the Joint Repair Drawings included. After deck slab has been poured back to correct dimension, saw cuts shall be made for joint material seats. Saw cuts will be paid for under Pay Item No. 907-823-B, Saw Cut, Type I. The joints shall then be sealed by one of the three approved manufacturers listed in Special Provision 907-823 and installed according to the Manufacturer's specifications.

#### **Epoxy Repair:**

Repair concrete spalled or unsound areas on the bridge as directed by the Project Engineer using epoxy mortar. Repair areas shall include, but are not limited to, the concrete drop slabs on the underside of the bridge deck. Spalled areas where pack rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing using 3500 psi pressure. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions

and details on the information plans.

- 1. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List.
- 2. Silica Sand: The materials shall be bagged general purpose cleaning sand.
- 3. Epoxy Mortar Mix: The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the manufacturer.

- 7 -

- 4. General:
  - a. A Representative of the epoxy manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.
  - b. Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.
  - c. Acetone alcohol may be used to clean and lubricate trowels.
  - d. Curing time shall be in accordance with the manufacturer's recommendations.
- 5. All items of work related to epoxy repair shall be paid for under pay item 907-824-PP: Bridge Repair, Epoxy Repair.

Repair the damaged bearing areas of the box girders at the end bents with epoxy mortar subsequent to the removal of the existing neoprene bearings. The Contractor shall repair box girder ends to the original bridge plan dimensions. Repair spalls in box girders and bent caps with epoxy mortar or equivalent as directed by the Project Engineer. Repair bridge railing end at Bent No. 18 with epoxy mortar or an equivalent product. Repair headwall at Bent No. 18 using epoxy mortar or equivalent product. This item of work will be paid for under Pay Item No. 907-824-PP, Bridge Repair, Epoxy Repair.

## **Cap Cleaning:**

Cleaning the two end bent caps shall be performed by removing all large debris by hand. All other debris (dirt & rust) shall be removed by pressure washing the bent caps to the satisfaction of the Project Engineer.

The pressure washer shall be able to maintain 3,500 psi of pressure. The surface of all caps shall be cleaned to the satisfaction of the Engineer and paid for under Pay Item No. 907-824-PP: Bridge Repair, Pressure Wash and Clean Bent.

#### **Bearing Replacements:**

Bearings at the end bents should be removed and replaced according to Neoprene Pad Bearing Details. Existing anchor bolts shall be ground to <sup>1</sup>/<sub>4</sub>" below the concrete surface and grouted with epoxy mortar. All debris removed from the existing structure shall become property of the Contractor and shall be disposed of properly.

The Contractor shall verify all dimensions of the existing structure prior to beginning work. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace

the existing bearings. The box girder shall only be raised to  $\frac{1}{4}$ " from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

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 arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the design engineer's seal.

Jacks shall be coupled to a common manifold and the box girder shall be raised uniformly. Jacking points shall be under the web of the box girder span at each bent and no jacking points will be allowed under any diaphragm or bay. After the box girder span is raised into position, temporary blocking shall be provided to secure the box girder span in this position while the neoprene pads are being installed. Temporary blocking points shall be under the webs of the box girder span at each bent and no temporary blocking will be allowed under any diaphragm or the bays.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

Payment for this work shall be made under Pay Item No. 907-824-PP: Bridge Repair, Bearing Replacement.

#### **Traffic Control Plan**

The Contractor shall erect and maintain construction signing and provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas in accordance with the <u>Traffic Control Plan</u>. Payment shall be included in the price bid for Pay Item No.907-618-A001, Maintenance of Traffic.













PLAN DE TRANSPORT

V28/2017 81 28 AM TCP-E8, DCM

















V28/2017 8:58 AM TCP-N8, DGN





- 24 -EPOXY REPAIR DETAILS



ELEVATION OF BOX GIRDER Showing epoxy repair at ends of box girders at the end bents Bridge 93.1

#### NEOPRENE PAD DETAILS



<u>ELE VA TION</u> (For Bearing Pad NPI)

NEOPRENE PAD DIMENSIONS							
Mark	Thick.	Comp.	Thickness	Count			
NP I	1″		15 " 16	12			

NEOPRENE PAD (NP1) DETAILS Neoprene pads shall not be field cut and Bearing area on log of the cap shall be smooth and true to grade. Elastomer for plain or non-reinforced bearings shall be TO-Durometer, adequate for 800 pounds per square inch design compression stress, and shall be tested to Level I as per Section 714.10 of 2004 Red Book.



## **MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

#### SECTION 904 - NOTICE TO BIDDERS NO. 6394

CODE: (SP)

DATE: 5/18/2017

**SUBJECT:** Lane Closure Restrictions

#### PROJECT: STP-0020-01(222) / 107138307 & BR-0055-02(247) / 107402/301 - Hinds and Rankin Counties

Bidders are hereby advised that lane closure restrictions on the above captioned project shall be as follows:

- Monday through Friday: -- Lane closures will NOT be allowed between the hours of 6:00 AM to 8:00 PM.
- <u>Saturday:</u> -- Lane closures will NOT be allowed between the hours of 9:00 AM to 8:00 PM.
- <u>Sunday:</u> -- Lane closures will NOT be allowed between the hours of 12:00 PM to 7:00 PM.
- **Exception:** -- For concrete bridge deck repair operations only, a lane closure will be allowed to remain in place from 8:00 PM Friday to 6:00 AM Monday.

No exceptions to the above restrictions will be allowed unless specifically approved by the Project Engineer.

Also, no lane closures will be permitted on the following holidays or the day preceding them: New Year's Day, Memorial Day, Easter, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. In the event that one the above mentioned holidays falls during the weekend or on a Monday, no lane closures will be allowed during that weekend or the Friday immediately preceding that holiday. In addition, no lane closures will be allowed the Friday, Saturday, and Sunday following Thanksgiving.

If the lane closure restriction listed above is violated, no excuses will be accepted by the Department and the Contractor will be charged a fee of \$2500.00 for each full or partial five minute period until the roadway is back in compliance with the lane closure restriction requirement.

For the purposes of this contract, official time shall be the announced time available at the Jackson area telephone number (601) 355-9311.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

#### SECTION 904 - NOTICE TO BIDDERS NO. 6395

CODE: (SP)

DATE: 5/9/2017

#### **SUBJECT:** Temporary Construction Signs

## PROJECT: STP-0020-01(222) / 107138307 & BR-0055-02(247) / 107402/301 - Hinds and Rankin Counties

Bidders are hereby advised of the following regarding the installation and removal of Temporary Construction Signs:

Should the Contractor elect to install Temporary Construction Signs by first driving short uchannel sections and then bolting longer u-channel sections to them to achieve the correct height, the short sections shall extend a minimum of four (4) feet from the ground level after they are driven. Furthermore, these short sections <u>shall be removed</u> at the completion of the project.