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.	1	DATED	9/22/2022	ADDENDUM NO.		DATED	
ADDENDUM NO	2	DATED	9/23/2022	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Revised Table of Contents; Revised Notice to Bidder No. 4483; Added S.P No. 907-234-1; Revised Bid Items; Amendment EBSx Download Required.
2	Revised Notice to Bidder No. 4483; Revised Bid Items; Amendment EBSx Download Required.

TOTAL ADDENDA: 2
(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.

STBG-1679-00(001)/ 108843301000

Noxubee County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 4483 **CODE: (SP)**

DATE: 09/23/2022

SUBJECT: Scope of Work

PROJECT: STBG-1679-00(001) / 108843301 -- Noxubee County

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".

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 Director of Structures, State Bridge Engineer, any structures damaged by the Contractor 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 any fabrication or construction.

During construction, care shall be exercised to ensure that no debris falls into any hydraulic crossings below the structures. 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 repairs to bridge number 135.9 (15721) located on SR 145 over Horse Hunters Creek in Noxubee County.

Scope of Work Bridge 135.9 (15721):

- Painting of Superstructure
- Repair Beam Ends
- General Epoxy Repair
- Undersealing at End bent 1
- Riprap Placement
- Cap Cleaning

For additional information and details, see work related items below and on the drawings. At the Contractor's request, Bridge Division will provide a complete set of As-Built plans for the existing bridge.

Painting of Superstructure

All of the structural steel in the superstructure shall be abrasive blasted, as referenced in 907-845.03.7.6, and repainted. The square footage of 3,400 sq. ft. given 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 the lump sum regardless of over-run or under-run of the above approximate square footage.

A containment 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.

After the prime coat is applied in accordance with the Scope of Work and Special Provisions, beam support plates and angles shall be installed in accordance with standard drawings.

Repair Beam Ends (Removal of Corbels, Installation of Web Support Plates, and Angles)

The steel beams of the bridge shall be repaired in the locations indicated on the beam layout sheets. The type of repair for each beam is shown in attached drawings. Exterior beams require the removal of a concrete corbel prior to repair as shown in the attached drawings. Removal of concrete corbels is considered an absorbed item. All beam end repair locations shall be completed prior to applying the intermediate and top coat in accordance with Special Provision No. 907-845, Coating Existing Structural Steel. For additional information see Standard Drawings and Structural Steel Notes in the Scope of Work. Repair of Beam Ends will be paid for under Pay Item No. 907-824-PP006, Bridge Repair, Beam End Repair.

General Epoxy Repair

All epoxy repairs shall be performed in accordance with the details shown on the drawings and in accordance with the notes herein. Concrete spalled areas on the bridge shall be required as directed by the Project Engineer and the locations listed on the drawings using epoxy mortar. The Contractor shall determine the depth of reinforcement prior to any saw cutting. Spalled areas where pack rust has developed around or on reinforcement shall be blasted clean prior to repairing the spalled location. Hammers used for removal shall be limited to 30 pounds. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions as shown in the information plans, unless noted otherwise.

Materials:

1. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List and meet the requirements of ASTM C881, Type I, Grade 2, Class C.
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.

Applications:

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.

The cost of saw cutting, removing spalled or cracked concrete, cleaning exposed reinforced steel, patching material, labor and any miscellaneous materials necessary to complete the repairs as shown shall be paid for on a square feet basis as Bridge Repair. This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

Undersealing at End Bent 1

In order to fill the void below End Bent 1, the void under the end bent cap shall be filled with injectable urethane compound material meeting the required properties in table below. Prior to injection, the site shall be prepared according to the Manufacturer's recommendations.

Urethane compound shall be installed in strict accordance with Manufacturer's instructions. All labor, preparations, and materials associated with filling the voids underneath the bent caps shall be included in Pay Item No. 907-420-A001: Undersealing.

REQUIRED URETHANE COMPOUND PROPERTIES		
PROPERTY	MIN. REQUIREMENT	ASTM TEST METHOD
Density	4.0 pcf	D 1622
Tensile Strength	100 psi	D 1622
Compressive Strength	90 psi	D 1621

Cap Cleaning

The surface of all caps shall be cleaned to the satisfaction of the Engineer. All large debris shall be removed by hand. All other debris (including dirt and rust) shall be removed by pressure washing the bent caps. The pressure washer shall be able to maintain 3,500 psi of pressure. This work shall be performed last and will be paid under Pay Item No. 907-824-PP006, Bridge Repair, Cap Cleaning.

Structural Steel Notes

1. Prior to construction, certification for all welders and a procedure for storage and handling of welding electrodes to be used on this project shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval.

2. All welding shall be done by the electric arc process and shall conform to the ANSI/AASHTO/AWS D1.5 bridge welding code, the latest edition of the AASHTO Guide Specification for Highway Bridge Fabrication with high performance steel, when applicable, and as directed herein.
3. All welds shall be discontinued ¼" or ½" from the ends of the support plates and angles.
4. All structural steel used on this project shall be new and shall conform to A.S.T.M. designation Grade 50.
5. All 7/8" diameter bolts shall be galvanized and conform to A.S.T.M. F3125, Grade A325.
6. All bolts shall be hot dip galvanized in accordance with the requirements of A.S.T.M. F2329 or galvanized by the Mechanical Process in accordance with the requirements of A.S.T.M. B695, Class 50 coating. Maximum hardness for high strength bolts shall 33 Rockwell C (Rc).
7. Each high strength bolt shall be tightened to provide, when all bolts in the joint are tight, at least a minimum tension as follows: 3/4" diameter bolts = 28,250 lbs., 7/8" diameter bolts = 39,250 lbs., & 1" diameter bolts = 51,250 lbs.
8. Nuts and washers shall conform to A.S.T.M. A563, Grade DH and A.S.T.M. F436, galvanized.
9. Nuts shall be heavy hex.
10. Nuts shall be tapped oversize the minimum amount required for proper assembly.
11. Direct tension indicators shall meet the requirements of A.S.T.M. F959 and shall be galvanized by the mechanical process meeting the requirements of A.S.T.M. B695, Class 50 coating.
12. High strength bolts, nuts, or direct tension indicators shall not be reused after tightening.

RIPRAP NOTES

1. The natural ground from the north side of the channel to Bent 5 shall be sloped at a 2:1 slope.
2. Riprap shall be placed in accordance with the "Riprap Placement Plan" in the drawings.
3. Riprap in the channel shall be removed and placed in the area without riprap between Bent 1 and Bent 2 as shown on the "Riprap Placement Plan" drawings.
4. Riprap to be placed on the north side of the channel shall be paid for under pay item 815-A007, Loose Riprap, Size 300.
5. Riprap to be removed from the channel and reset shall be paid for under pay item No. 249-B: Remove and Reset Riprap.

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 TRAFFIC CONTROL PLAN. Payment shall be included in the price bid for Pay Item No. 618-A: Maintenance of Traffic.

FMS CON1108843/301000

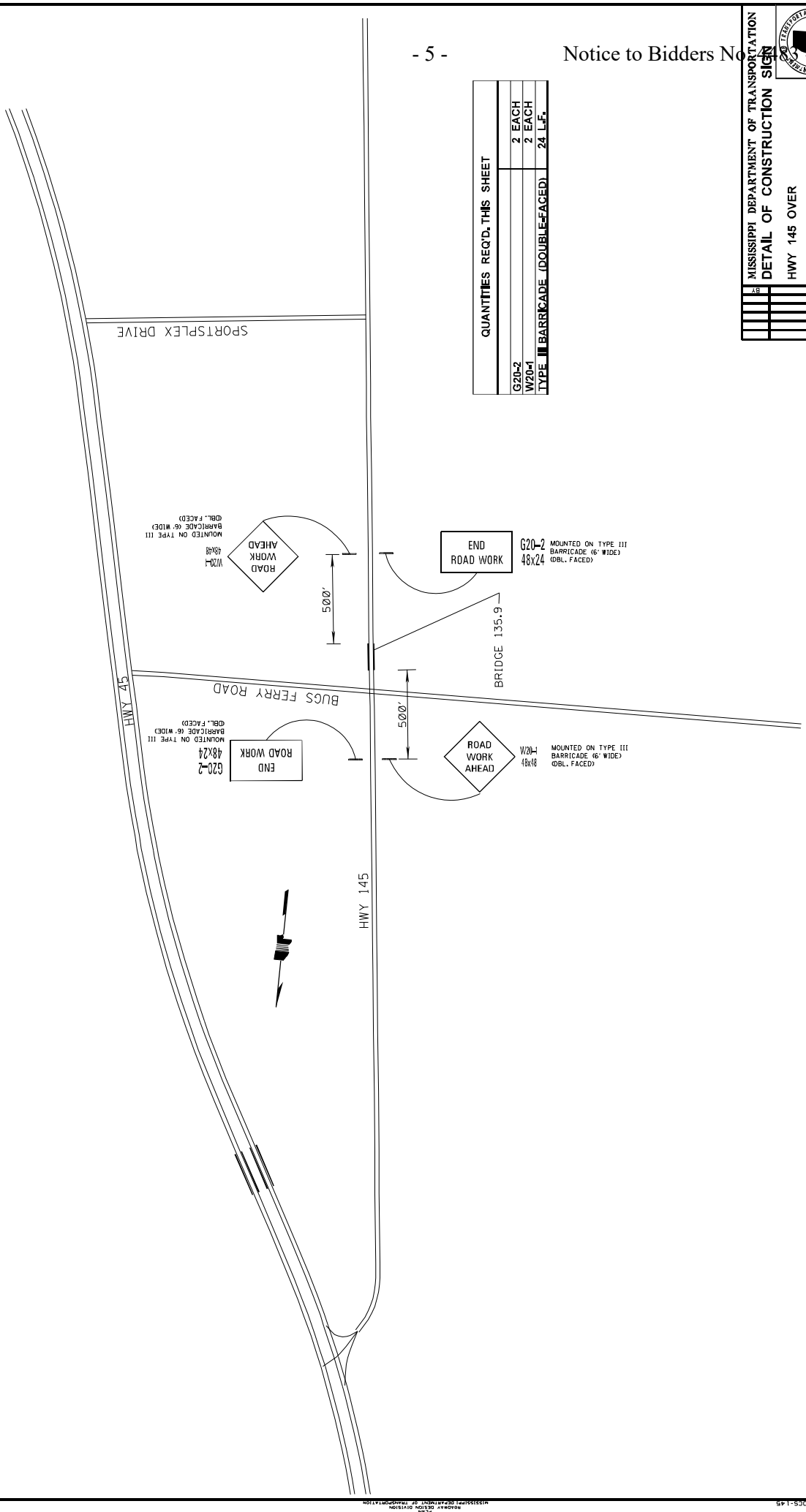
STATE	PROJECT NO.
MISS.	STBG-1679-00(001)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
DETAIL OF CONSTRUCTION SIGN
HWY 145 OVER
HORSE HUNTERS CREEK
PROJ. NO.: STBG-1679-00(001)
COUNTY: NOXUBEE
FILE NAME: DCS-145.dgn
DESIGN TEAM
CHECKED
DATE

WORKING NUMBER DCS-1
SHEET NUMBER 2

BY	REVISION	DATE

QUANTITIES REQ'D. THIS SHEET	
G20-2	2 EACH
W20-1	2 EACH
TYPE III BARRICADE (DOUBLE-FACED)	24 L.F.



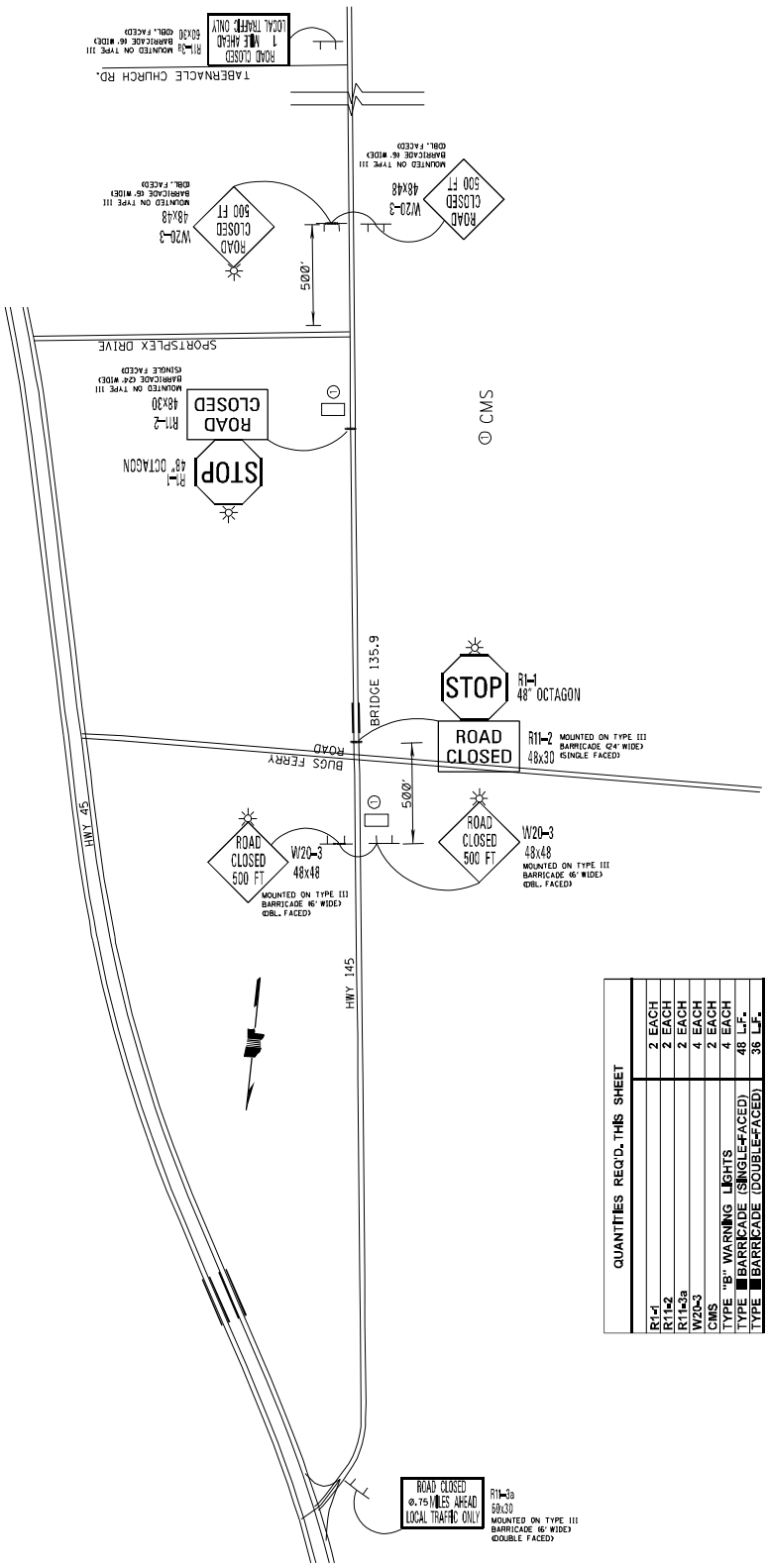
FMS CON1108843/301000

STATE	PROJECT NO.
MISS.	STBG-1679-00(001)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL
HWY. 145 OVER
HORSE HUNTERS CREEK
PROJ. NO.: STBG-1679-00(001)
COUNTY: NOXUBEE
FILE NAME: TC-SH-1-SR145.dgn
DESIGN TEAM: BASS CHECKED UPDATE DATE UPDATE

BY	REVISION	DATE

WORKING NUMBER TC-1
SHEET NUMBER 3

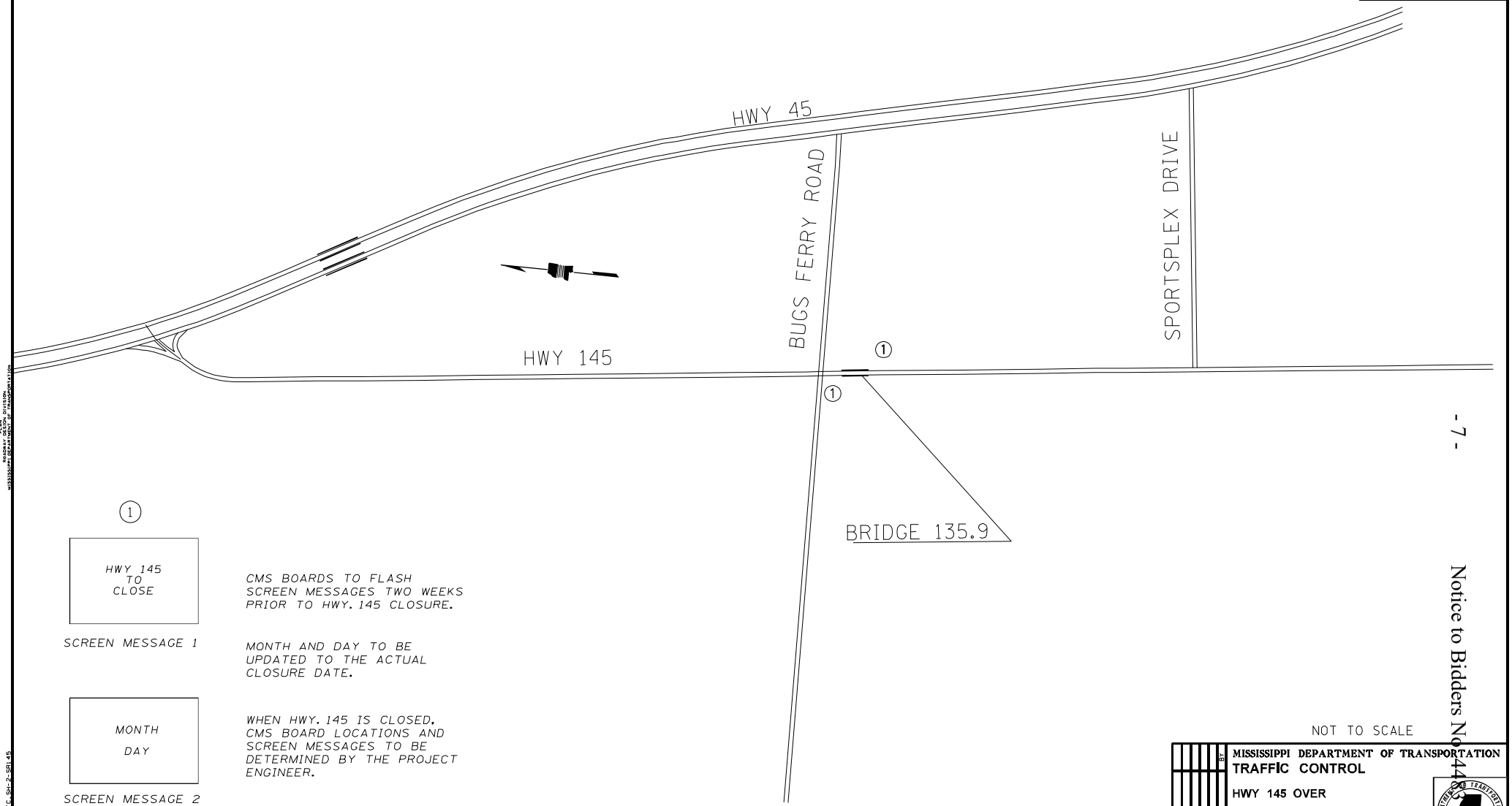


QUANTITIES REQ'D. THIS SHEET

R1-1	2 EACH
R11-2	2 EACH
R11-3a	2 EACH
W20-3	4 EACH
CMS	2 EACH
TYPE "B" WARNING LIGHTS	4 EACH
TYPE ■ BARRICADE (SINGLE-FACED)	48 L.F.
TYPE ■ BARRICADE (DOUBLE-FACED)	36 L.F.

FMS CON#108843/301000

STATE	PROJECT NO.
MISS.	STBG-1679-00(001)



1

HWY 145 TO CLOSE

SCREEN MESSAGE 1

CMS BOARDS TO FLASH SCREEN MESSAGES TWO WEEKS PRIOR TO HWY. 145 CLOSURE.

MONTH AND DAY TO BE UPDATED TO THE ACTUAL CLOSURE DATE.

MONTH

DAY

SCREEN MESSAGE 2

WHEN HWY. 145 IS CLOSED, CMS BOARD LOCATIONS AND SCREEN MESSAGES TO BE DETERMINED BY THE PROJECT ENGINEER.

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

HWY 145 OVER

HORSE HUNTERS CREEK

CMS LOCATIONS

PROJ. NO.: STBG-1679-00(001)

COUNTY: NOXUBEE

FILE NAME: TC_SH-2-SR145.dgn

DESIGN TEAM CHECKED DATE

WORKING NUMBER TC-2

SHEET NUMBER 4

- 7 -

Notice to Bidders No. 2022-

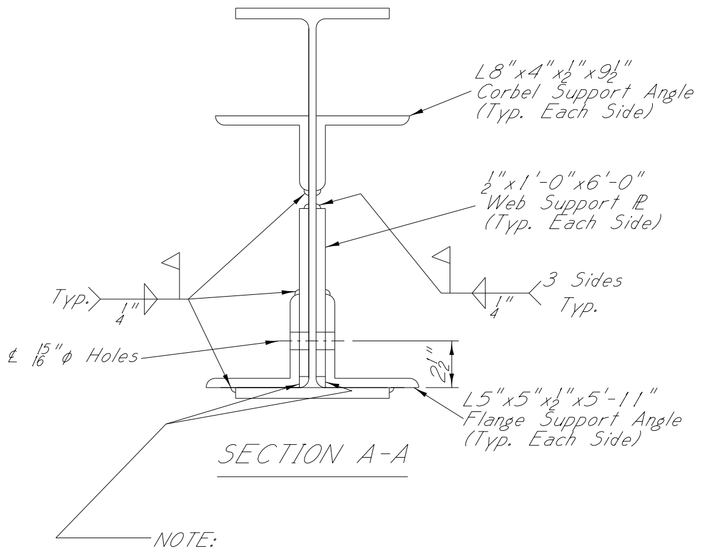
PLAN PREPARED BY DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

8/26/2022 2:51:42 PM C:\SH-2-SR145

SR 145 OVER HORSE HUNTERS CREEK - BEAM LAYOUT

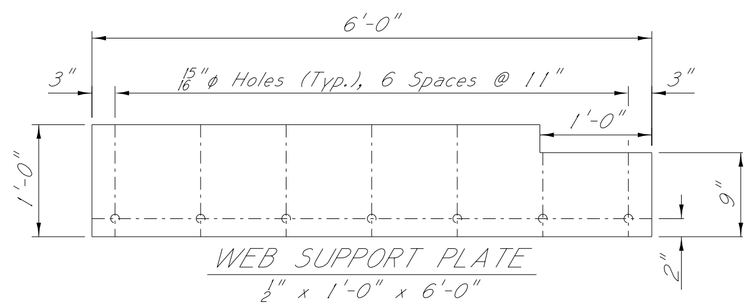
Showing locations of beam end repairs

○ - Indicates a location for Beam End Repair
28 Beams This Bridge

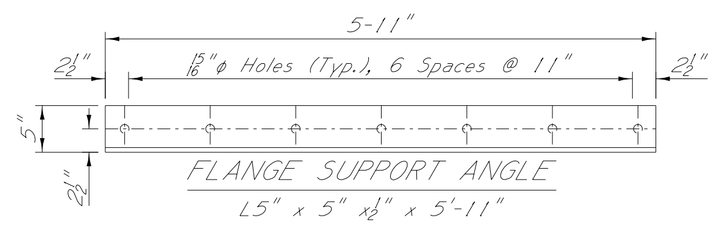


SECTION A-A

NOTE:
Small space shall be left above flange so web support plate can be placed flat against web. Cope the corner of the angles so flange support angle can be placed flat against web support plate and bottom flange of the existing girder.

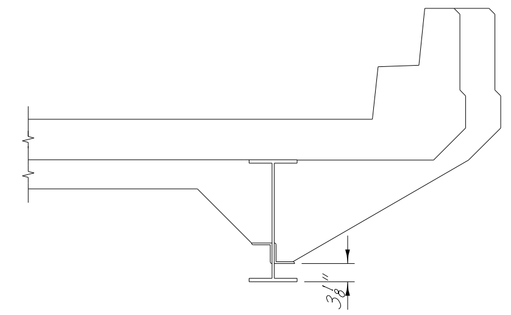


WEB SUPPORT PLATE
½" x 1'-0" x 6'-0"



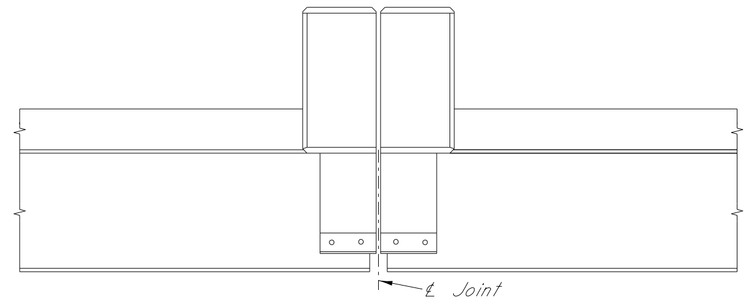
FLANGE SUPPORT ANGLE
L5" x 5" x½" x 5'-11"

**NOTE:
Both ends of support angle shall be field welded to the web support plates and to bottom flange of girder with ¼" Field Fillet Weld.



END ELEVATION OF EXTERIOR INTERMEDIATE BENT

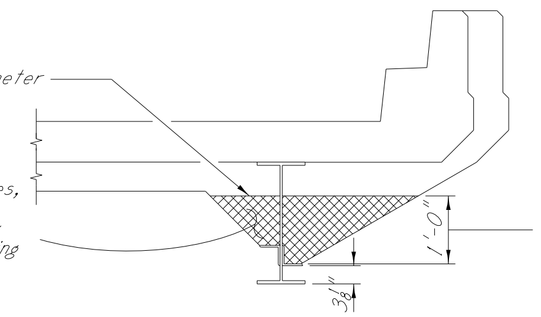
Showing existing concrete corbel and support angles.



SIDE ELEVATION OF EXTERIOR INTERMEDIATE BENT

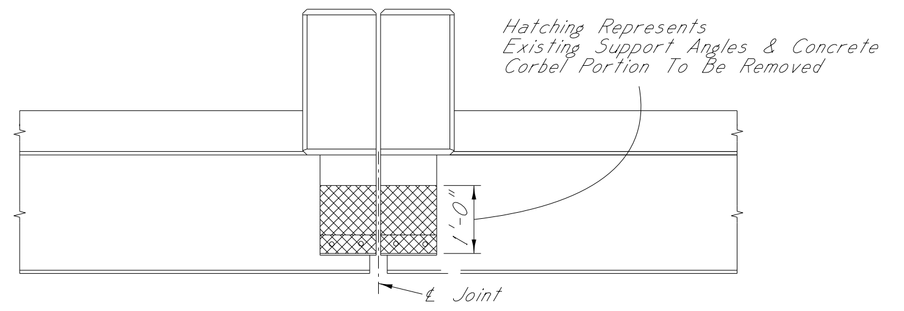
Showing existing concret corbel and support angles.

NOTE:
Prior to installing concrete corbel support angles, the roughened bottom surface of the concrete corbel shall be smoothed and sealed with epoxy mortar. All reinforcement protruding from existing concrete corbel shall be cut off and ground ¼" below surface of concrete.



END ELEVATION OF EXTERIOR INTERMEDIATE BENT

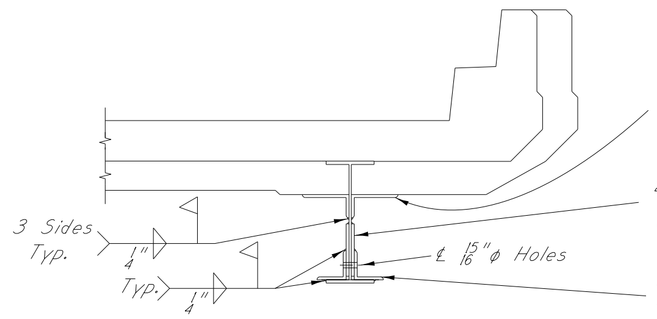
Showing portion of concrete corbel and support angles to be removed.



SIDE ELEVATION OF EXTERIOR INTERMEDIATE BENT

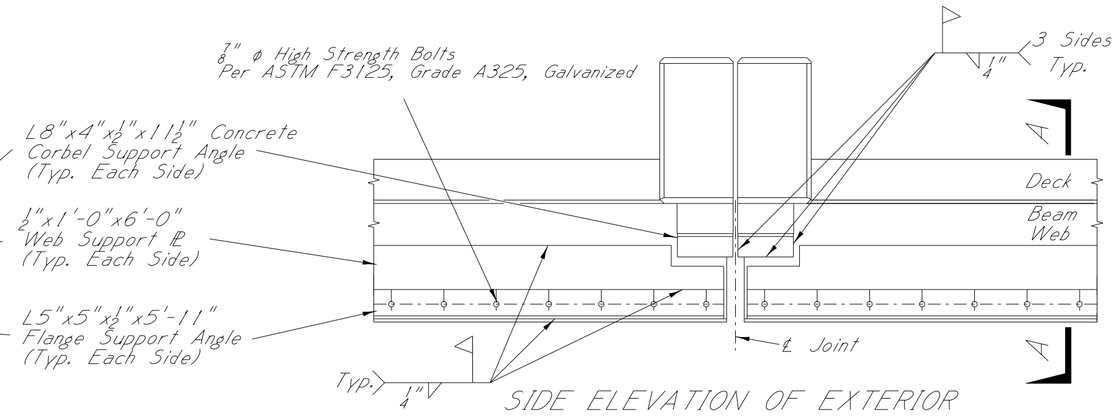
Showing portion of concrete corbel and support angles to be removed.

CONSTRUCTION SEQUENCE NOTE:
1. Portion of existing concrete corbel and support angle shall be removed.
2. Reinforcement protruding from existing concrete corbel shall be cut off and ground ¼" below surface of concrete.
3. Bottom of concrete corbel shall be smoothed and sealed with epoxy mortar.
4. Girder repair areas shall be cleaned and prepared in accordance with the original Scope of Work.
5. Install support plates and angles as shown in the details on this sheet. Support plates and angles shall be centered about the repair area.
6. Install ⅞" diameter high strength bolts in accordance with details on this sheet.
7. Epoxy mortar and removal of concrete corbels shall be an absorbed item.
8. Paint all repair areas with an intermediate and topcoat in accordance with 907-845.



END ELEVATION OF EXTERIOR INTERMEDIATE BENT

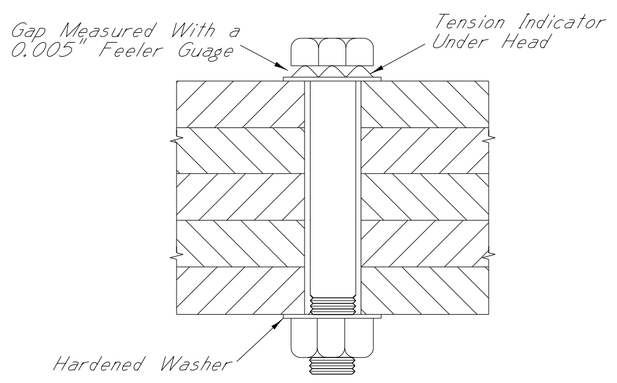
Showing new concrete corbel support angles and girder repair.



SIDE ELEVATION OF EXTERIOR INTERMEDIATE BENT

Showing new concrete corbel support angles and girder repair.

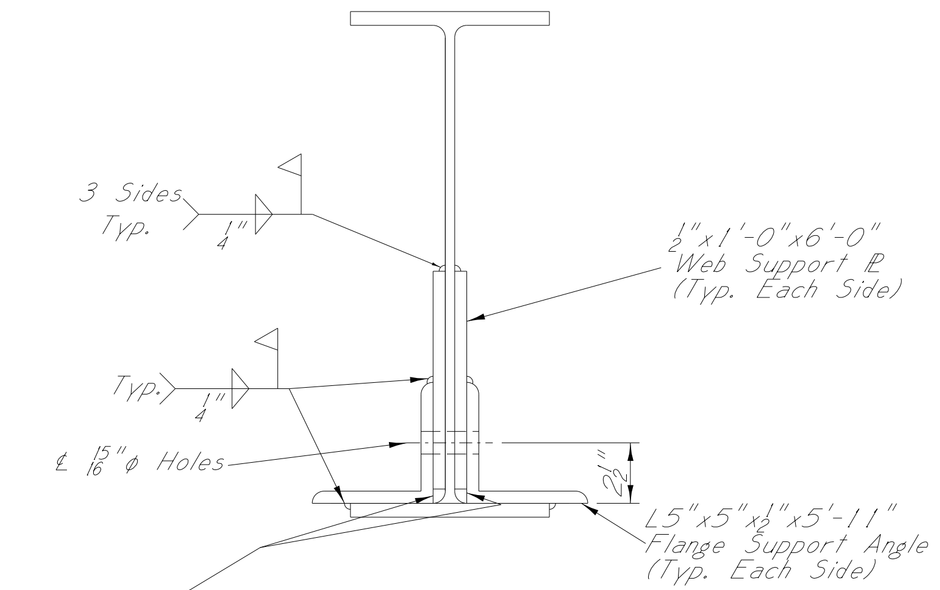
*NOTE:
Web Support Plate shall be placed ½" from beam end.



DIRECT TENSION INDICATOR INSTALLATION

NOTE:
For structural steel notes, see Scope of Work

REPAIR DETAILS FOR EXTERIOR GIRDERS



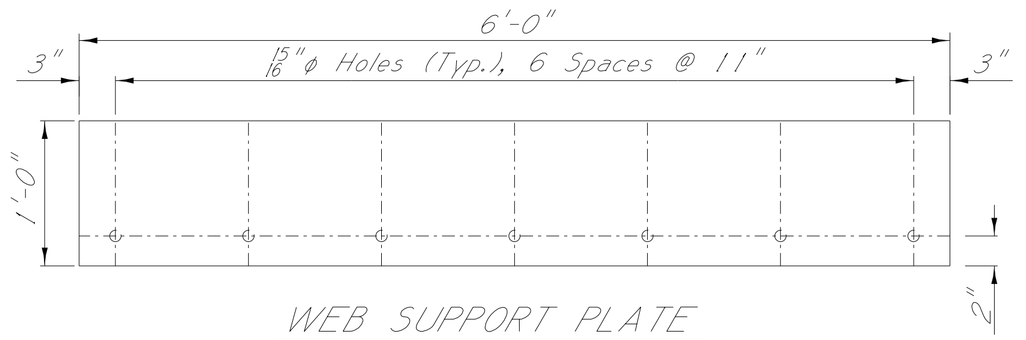
Beam Repair Details

Showing location and installation of plates and angles

NOTE:
Small space shall be left above flange so web support plate can be placed flat against web. Cope the corner of the angles so flange support angle can be placed flat against web support plate and bottom flange of the existing girder.

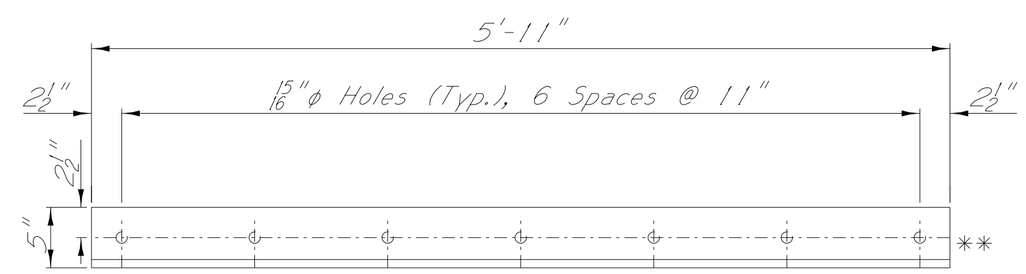
CONSTRUCTION SEQUENCE NOTE:

1. Girder repair areas shall be abrasive blasted and painted with a primer coat.
2. Install support plates and angles as shown in the details on this sheet. Support plates and angles shall be centered about the repair area.
3. Install 7/8" diameter high strength bolts in accordance with details on this sheet.
4. Paint all repair areas with an intermediate and topcoat in accordance with 907-845.



WEB SUPPORT PLATE

1/2" x 1'-0" x 6'-0"



FLANGE SUPPORT ANGLE

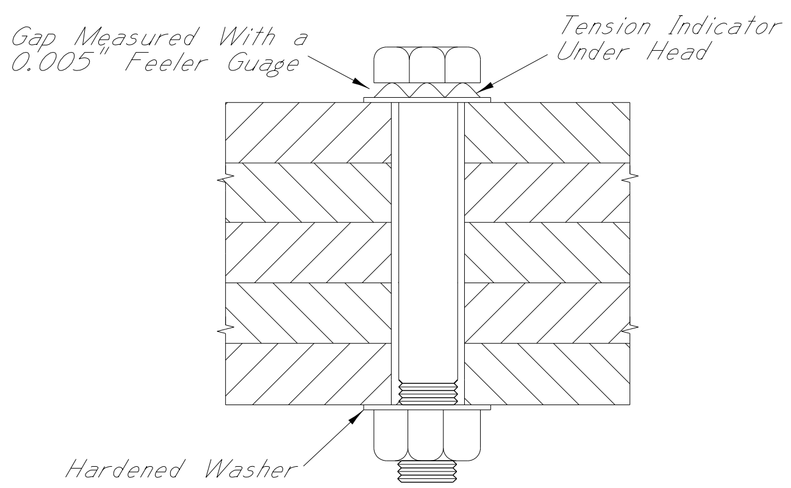
L5" x 5" x 1/2" x 5'-11"

**NOTE:
Both ends of support angle shall be field welded to the web support plates and to bottom flange of girder with 1/4" Field Fillet Weld.

NOTE:
Web Support Plate shall be placed 1/2" from beam end.

NOTE:
For structural steel notes, see Scope of Work

*NOTE:
Web Support Plate shall be placed 1/2" from endwall at Bent 1, Beam 1 and 3, Span 1 and Bent 6, Beam 2, Span 5.



DIRECT TENSION INDICATOR INSTALLATION

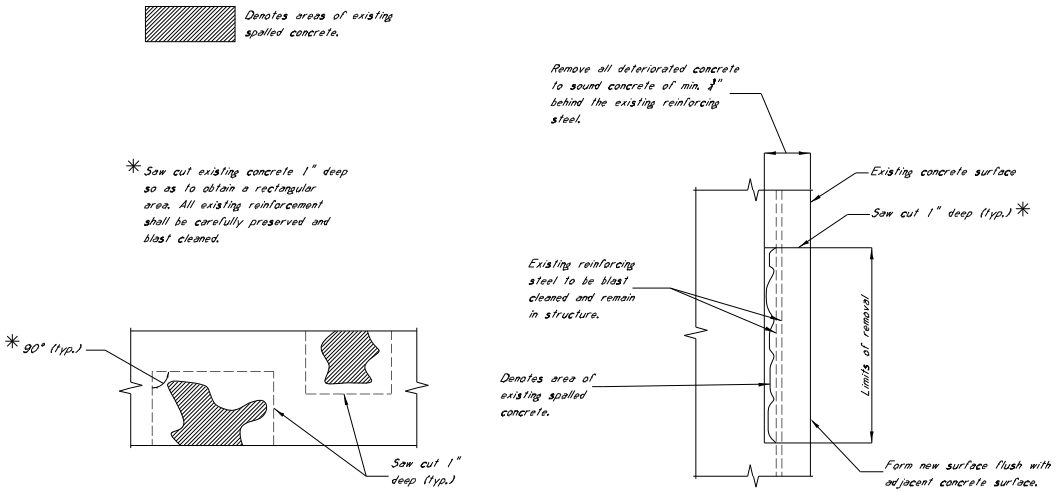
REPAIR DETAILS FOR INTERIOR GIRDERS

Epoxy Mortar Repair Notes:

1. Repair concrete spalled areas on the bridge as directed by the Project Engineer using epoxy mortar.
2. Repair all concrete spalled areas listed on this page as directed by the Project Engineer.
3. Repair any additional concrete spalled areas not listed on this page as directed by the Project Engineer.
4. Spalled areas where pact rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing (using 3500 psi pressure). Hammers used for removal shall be limited to 30 pounds.
5. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details as shown in the information plans, unless noted otherwise.
6. Materials:
   a. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List and meet the requirements of ASTM C881, Type I, Grade 2, Class C.
   b. Silica Sand: Silica sand material shall be bagged general purpose blast cleaning sand.
   c. Epoxy Mortar Mix: Epoxy mortar mix shall consist of part liquid epoxy and part clean, dry sand mixed in the ratio recommended by the manufacturer.
7. Application:
   a. A representative of the epoxy manufacturer must be present for sufficient time to ensure the Contractor is properly schooled in the use of the epoxy materials.
   b. Prior to placement of the mortar mix the prepared surface shall be lightly primed with neat epoxy.
   c. Curing time shall be in accordance with manufacturer's recommendations.
8. The cost of saw cutting, removing spalled or cracked concrete, cleaning exposed reinforcing steel, patching material, labor and any miscellaneous materials necessary to complete the repairs as shown shall be paid for on a square feet basis as Bridge Repair, Epoxy Repair. This item shall be bid such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

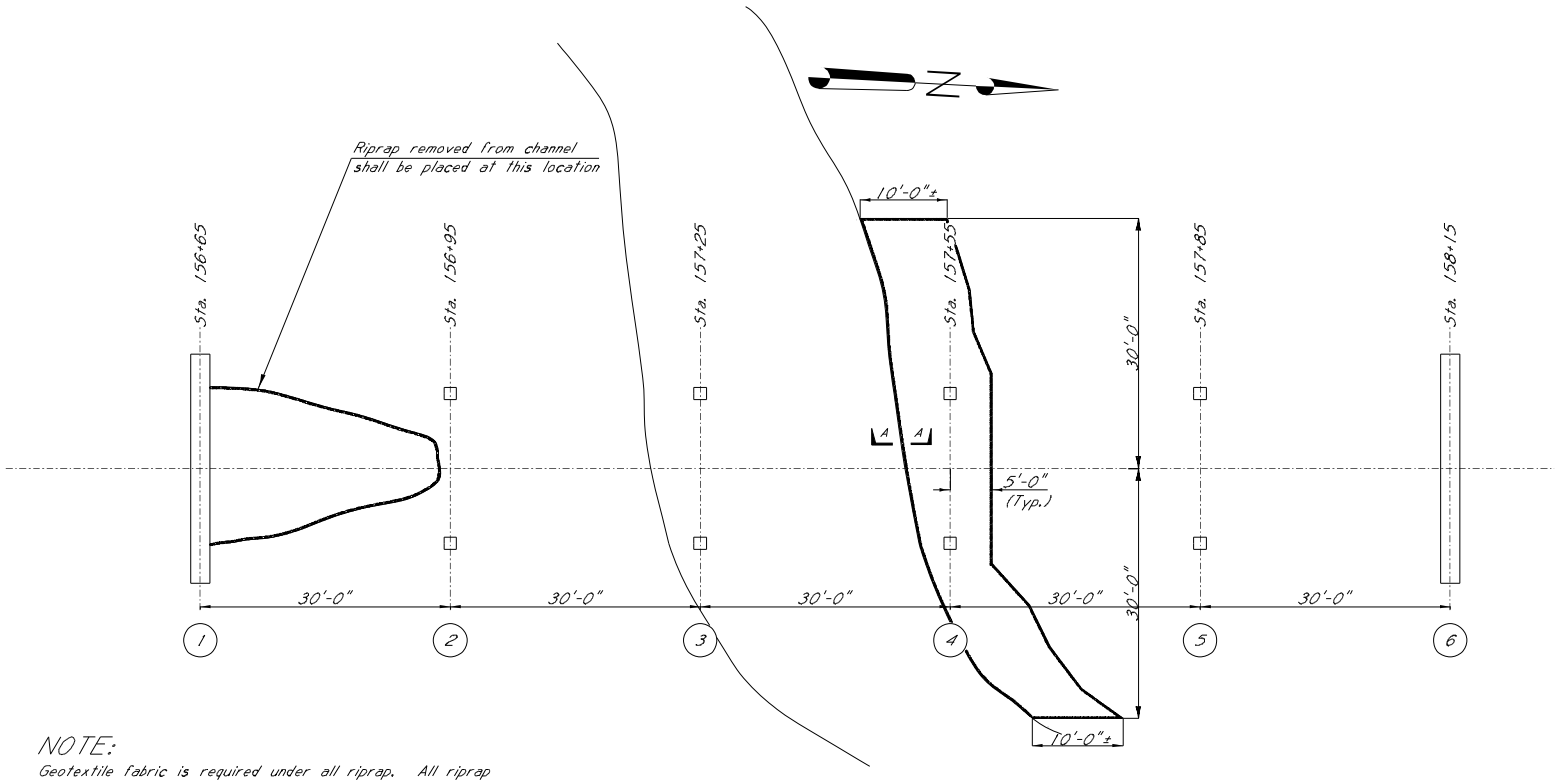
Spall Locations To Be Repaired:

1. Endwall of Bent 1 Near Beam 1
2. Endwall of Bent 1 Near Beam 2
3. Endwall of Bent 1 Near Beam 3
4. Endwall of Bent 6 Near Beam 1
5. Endwall of Bent 6 Near Beam 2
6. Drop Slabs at Several Locations
7. East side Pile at Bent 5



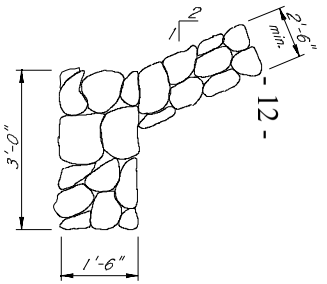
SPALL REPAIR DETAILS

Details above are for spalled areas where rebar is exposed.



RIPRAP PLACEMENT PLAN

Showing locations riprap placement



SECTION A-A

Riprap Toe Detail

NOTE:

Geotextile fabric is required under all riprap. All riprap and geotextile fabric shown on the bridge plans are included in the bridge quantities.

NOTE:

1. *No dirt can be pushed into the creek.*
2. *No silt or spills shall enter the waterway.*
3. *If a work platform is needed, riprap may be placed. - (This is considered an absorbed item)*
4. *Minimize disturbance to existing banks.*
5. *Clearing shall be kept to a minimum and grubbing only where required. - (This is considered an absorbed item)*
6. *Turbidity barrier shall be used.*

Bridge Preservation on SR 145 over Horse Hunters Creek (Bridge No. 135.9), known as Federal Aid Project No. STBG-1679-00(001) / 108843301 in Noxubee County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	618-A001		1	Lump Sum	Maintenance of Traffic
0020	619-D1001		16	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0030	619-D2001		200	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0040	619-G4001		36	Linear Feet	Barricades, Type III, Double Faced
0050	619-G4005		48	Linear Feet	Barricades, Type III, Single Faced
0060	619-G7001		4	Each	Warning Lights, Type "B"
0070	620-A001		1	Lump Sum	Mobilization
0072	907-234-F001		100	Linear Feet	Turbidity Barrier
0080	907-619-E3001		2	Each	Changeable Message Sign
			Bridge Items		
0090	249-B001		53	Cubic Yard	Remove and Reset Riprap
0100	815-A007	(S)	122	Ton	Loose Riprap, Size 300
0108	815-E001	(S)	111	Square Yard	Geotextile under Riprap
0120	907-420-A001		5,000	Pounds	Undersealing
0130	907-824-PP003		40	Square Feet	Bridge Repair, Epoxy Repair
0140	907-824-PP006		6	Each	Bridge Repair, Cap Cleaning
0150	907-824-PP006		14	Each	Bridge Repair, Exterior Beam End Repair
0160	907-824-PP006		14	Each	Bridge Repair, Interior Beam End Repair
0170	907-845-A001	(S)	1	Lump Sum	Coating Existing Structural Steel Structural Steel