

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> 9/17/2019 </u>	ADDENDUM NO. _____	DATED _____
ADDENDUM NO. _____	DATED _____	ADDENDUM NO. _____	DATED _____
ADDENDUM NO. _____	DATED _____	ADDENDUM NO. _____	DATED _____

Number	Description
1	Revised Bid Items; Revised or Added Plan Sheet Nos. 8001-8003, 8011; Amendment EBS Download Required.

TOTAL ADDENDA: 1
(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.

BR-0060-03(020)/ 105333301000

Marshall County(ies)

Revised 01/26/2016

Bridge Replacement on SR 4 over the BNSF Railway & MS Central Railroad Company, Bridge No. 75.3, known as Federal Aid Project No. BR-0060-03(020) / 105333301 in Marshall County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
Roadway Items					
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0020	201-B001		1	Acre	Clearing and Grubbing
0030	202-A001		1	Lump Sum	Removal of Obstructions
0040	202-B005		6,024	Square Yard	Removal of Asphalt Paved Ditch, All Depths
0050	202-B050		802	Linear Feet	Removal of Concrete Combination Curb & Gutter
0060	202-B052		421	Square Yard	Removal of Concrete Driveways, All Depths
0070	202-B080		461	Square Yard	Removal of Concrete Sidewalk
0080	202-B165		6	Each	Removal of Inlets, All Sizes
0090	202-B191		767	Linear Feet	Removal of Pipe, 8" And Above
0100	202-B215		16	Each	Removal of Sign Including Post & Footing
0110	203-A001	(E)	12,417	Cubic Yard	Unclassified Excavation, FM, AH
0120	203-EX020	(E)	7,944	Cubic Yard	Borrow Excavation, AH, FME, Class B9
0130	203-G001	(E)	500	Cubic Yard	Excess Excavation, FM, AH
0140	206-A001	(S)	848	Cubic Yard	Structure Excavation
0150	209-A005		7,763	Square Yard	Geotextile Stabilization, Type V, Non-Woven
0160	211-B001	(E)	3,543	Cubic Yard	Topsoil for Slope Treatment, Contractor Furnished
0170	213-C001		4	Ton	Superphosphate
0180	216-A001		1,018	Square Yard	Solid Sodding
0190	217-A001		10	Square Yard	Ditch Liner
0200	219-A001		453	Thousand Gallon	Watering [\$20.00]
0210	220-A001		4	Acre	Insect Pest Control [\$30.00]
0220	221-A001	(S)	30	Cubic Yard	Concrete Paved Ditch
0230	223-A001		7	Acre	Mowing [\$50.00]
0240	224-A001		1,200	Square Yard	Soil Reinforcing Mat
0250	225-A001		7	Acre	Grassing
0260	225-B001		4	Ton	Agricultural Limestone
0270	225-C001		15	Ton	Mulch, Vegetative Mulch
0280	226-A001		7	Acre	Temporary Grassing
0290	234-A001		2,500	Linear Feet	Temporary Silt Fence
0300	237-A002		2,728	Linear Feet	Wattles, 20"
0310	239-A001		800	Linear Feet	Temporary Slope Drains
0320	246-A001		1,300	Linear Feet	Sandbags

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0330	249-A001		100	Ton	Riprap for Erosion Control
0340	304-B002	(GT)	3,610	Ton	Granular Material, Class 3, Group D
0350	403-A003	(BA1)	1,047	Ton	12.5-mm, ST, Asphalt Pavement
0360	403-A006	(BA1)	1,178	Ton	19-mm, ST, Asphalt Pavement
0370	403-A015	(BA1)	768	Ton	9.5-mm, ST, Asphalt Pavement
0380	407-A001	(A2)	854	Gallon	Asphalt for Tack Coat
0390	413-E001		70	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
0400	502-A001	(C)	149	Square Yard	Reinforced Cement Concrete Bridge End Pavement
0410	503-C010		60	Linear Feet	Saw Cut, Full Depth
0420	601-B001	(S)	44	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0430	601-B002	(S)	2	Cubic Yard	Class "C" Structural Concrete, Minor Structures
0440	602-A001	(S)	3,198	Pounds	Reinforcing Steel
0450	603-ALT003	(S)	528	Linear Feet	18" Type A Alternate Pipe
0460	603-CA011	(S)	936	Linear Feet	18" Reinforced Concrete Pipe, Class III
0470	603-CA026	(S)	792	Linear Feet	24" Reinforced Concrete Pipe, Class III
0480	603-CB003	(S)	4	Each	18" Reinforced Concrete End Section
0490	603-CB004	(S)	2	Each	24" Reinforced Concrete End Section
0500	603-CE002	(S)	40	Linear Feet	22" x 13" Concrete Arch Pipe, Class A III
0510	603-CE008	(S)	64	Linear Feet	29" x 18" Concrete Arch Pipe, Class A III
0520	603-CE028	(S)	32	Linear Feet	58" x 36" Concrete Arch Pipe, Class A III
0530	603-CF002	(S)	2	Each	22" x 13" Concrete Arch Pipe End Section
0540	603-CF003	(S)	2	Each	29" x 18" Concrete Arch Pipe End Section
0550	603-CF007	(S)	2	Each	58" x 36" Concrete Arch Pipe End Section
0560	604-A001		1,027	Pounds	Castings
0570	605-AA003	(S)	36	Square Yard	Geotextile for Subsurface Drainage, Type V, Non-Woven
0580	605-O003	(S)	64	Linear Feet	4" Perforated Sewer Pipe for Underdrains, SDR 35
0590	605-P003	(S)	52	Linear Feet	4" Non-perforated Sewer Pipe for Underdrains, SDR 35
0600	605-W001	(GY)	2	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains, Type A, FM
0610	606-B001		175	Linear Feet	Guard Rail, Class A, Type 1
0620	606-D022		4	Each	Guard Rail, Bridge End Section, Type I
0630	606-E007		4	Each	Guard Rail, Terminal End Section, Non-Flared
0640	608-B001	(S)	1,010	Square Yard	Concrete Sidewalk, With Reinforcement
0650	609-D001	(S)	78	Linear Feet	Combination Concrete Curb and Gutter Type 1

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0660	609-D012	(S)	1,314	Linear Feet	Combination Concrete Curb and Gutter Type 3A Modified
0670	612-B001		24	Cubic Yard	Flowable Fill, Non-Excavatable
0680	613-D005		7	Each	Adjustment of Manhole
0690	614-A001	(S)	600	Square Yard	Concrete Driveway, Without Reinforcement
0700	614-B001	(S)	253	Square Yard	Concrete Driveway, With Reinforcement
0710	615-A002	(S)	40	Linear Feet	Concrete Bridge End Barrier, 33.5"
0720	617-A001		48	Each	Right-of-Way Marker
0730	618-A001		1	Lump Sum	Maintenance of Traffic
0740	619-A1003		5,291	Linear Feet	Temporary Traffic Stripe, Continuous White, Paint
0750	619-A2003		5,822	Linear Feet	Temporary Traffic Stripe, Continuous Yellow, Paint
0760	619-A5002		349	Linear Feet	Temporary Traffic Stripe, Detail, Paint
0770	619-A6004		311	Linear Feet	Temporary Traffic Stripe, Legend, Paint
0780	619-D1001		221	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0790	619-D2001		224	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0800	619-G4001		12	Linear Feet	Barricades, Type III, Double Faced
0810	619-G4005		72	Linear Feet	Barricades, Type III, Single Faced
0820	619-G5001		60	Each	Free Standing Plastic Drums
0830	619-G7001		3	Each	Warning Lights, Type "B"
0840	620-A001		1	Lump Sum	Mobilization
0850	626-C001		5,291	Linear Feet	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0860	626-E002		5,822	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0870	626-G004		349	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0880	626-H002		311	Linear Feet	Thermoplastic Double Drop Legend, White
0890	627-L001		63	Each	Two-Way Yellow Reflective High Performance Raised Markers
0900	630-A001		25	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0910	630-A003		27	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0920	630-C003		97	Linear Feet	Steel U-Section Posts, 3.0 lb/ft
0930	630-F006		22	Each	Delineators, Guard Rail, White
0940	630-F007		22	Each	Delineators, Guard Rail, Yellow
0950	630-G005		4	Each	Type 3 Object Markers, OM-3R or OM-3L, Post Mounted
0960	699-A001		1	Lump Sum	Roadway Construction Stakes
0970	815-A007	(S)	25	Ton	Loose Riprap, Size 300
0980	815-E001	(S)	67	Square Yard	Geotextile under Riprap
0990	815-F002	(S)	12	Ton	Sediment Control Stone

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
1000	907-619-E3001		4	Each	Changeable Message Sign
1010	907-899-A001		1	Lump Sum	Railway-Highway Provisions
ALTERNATE GROUP AA NUMBER 1					
1020	304-F001	(GT)	7,513	Ton	3/4" and Down Crushed Stone Base
ALTERNATE GROUP AA NUMBER 2					
1030	304-F002	(GT)	7,513	Ton	Size 610 Crushed Stone Base
ALTERNATE GROUP AA NUMBER 3					
1040	304-F003	(GT)	7,513	Ton	Size 825B Crushed Stone Base
ALTERNATE GROUP BB NUMBER 1					
1050	605-W002	(GY)	16	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains, Type B, FM
ALTERNATE GROUP BB NUMBER 2					
1060	605-W003	(GY)	16	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains, Type C, FM
Bridge Items					
1070	501-K001		853	Square Yard	Transverse Grooving
1080	803-D007	(S)	2,625	Linear Feet	HP 14 x 89 Steel Piling
1090	803-P003	(S)	845	Linear Feet	30" Steel Pipe Piling, Wall Thickness 0.500"
1100	804-C026	(S)	764	Linear Feet	110' Prestressed Concrete Beam, Type IV
1110	804-C095	(S)	902	Linear Feet	65' Prestressed Concrete Beam, Type IV
1120	805-A001	(S)	97,542	Pounds	Reinforcement
1130	813-A002	(S)	484	Linear Feet	Concrete Railing, 32"
1140	813-B001	(S)	480	Linear Feet	Concrete-Steel Railing
1150	815-D001	(S)	95	Cubic Yard	Concrete Slope Paving
1160	907-803-B001	(S)	1	Each	Conventional Static Pile Load Test [\$5,000.00]
1170	907-803-I003	(S)	1	Each	PDA Test Pile, HP Steel Pile
1180	907-803-I004	(S)	1	Each	PDA Test Pile, Steel Pipe Pile
1190	907-803-J001	(S)	2	Each	Pile Restrike
1200	907-804-A002	(S)	226	Cubic Yard	Bridge Concrete, Class AA
1210	907-804-A004	(S)	336	Cubic Yard	Bridge Concrete, Class BD

ADDENDUM

STATE MISS. PROJECT NO. BR-0060-03(020)

DESCRIPTION OF SHEETS	WORKING NUMBER	SHEET NUMBER
DETAILED INDEX (BRIDGE)	DI-BR-1	8001
SUMMARY OF QUANTITIES (BRIDGE)	SO-BR-1	8002
SR4 ACROSS BNSF RAILWAY AND MS CENTRAL RAILROAD CO. OVERPASS AT STA. 116+31.45		
LAYOUT, ESTIMATED QUANTITIES, & GENERAL NOTES, EXHIBIT "B-1"		8003
FOUNDATION & GENERAL NOTES, EXHIBIT "B-1"		8004
END BENTS 1 & 4 DETAILS		8005
END BENT DETAILS		8006
INT. BENTS 2 & 3 DETAILS		8007
SPANS NO. 1, 2, & 3 DETAILS		8008
SPAN DETAILS		8009
LIGHTING BRACKET DETAILS		8010
PEDESTRIAN RAIL DETAILS, EXHIBIT "B-1"		8011
65 FT. BEAM DETAILS BEAM NO. 65-1 & 65-2		8012
110 FT. BEAM DETAILS BEAM NO. 110-1		8013
BEARING PAD, SOLE PLATE, AND BEAM BEVEL DETAILS		8014
MISCELLANEOUS SPAN DETAILS		8015
GENERALIZED SOIL PROFILE		8016
BRIDGE EROSION CONTROL PLAN, EXHIBIT "B-1"	ECBR-1	8017
RAILING DETAILS	RD-32	8018

BRIDGE DIVISION REVISIONS		
DATE	SHEET NO.	BY
9/11/19	8002, 8003, & 8011	B-J, SEY, & JLW

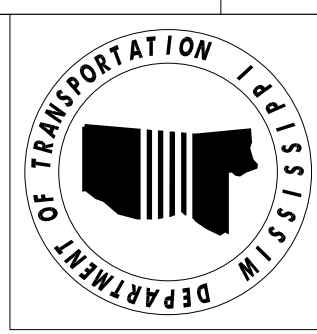
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
OVERPASS AT STA. 116+31.45
DETAILED INDEX
(BRIDGE)

FMS: 105333 / 301000
COUNTY: MARSHALL
PROJECT NUMBER: BR-0060-03(020)

DESIGNER: Josh. Wilshire
DETAILER: Josh. Wilshire
CHECKER: Spencer Yates
ISSUE DATE: 2018-02-06

REG. PROFESSIONAL ENGINEER - CIVIL WORKS
REP. DIR. OF SURVEYING, 6851 STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

WORKING NUMBER: DI-BR-1
SHEET NUMBER: 8001



ADDENDUM

STATE PROJECT NO.
MISS. BR-0060-03(020)

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	QUANTITIES	
			PRELIMINARY	FINAL
	Bridge Summary			
501-K001	Transverse Grooving	SY	853	
907-803-B001	Conventional Static Pile Load Test	EA	1	
803-D007	HP 14 x 89 Steel Piling	LF	2,625	▲
907-803-I003	PDA Test Pile, HP Steel Pile	EA	1	▲
907-803-I004	PDA Test Pile, Steel Pipe Pile	EA	1	▲
907-803-I001	Pile Restrike	EA	2	▲
803-P003	30" Steel Pipe Piling, Wall Thickness 0.500"	LF	845	
907-804-A002	Bridge Concrete, Class AA	CY	226	
907-804-A004	Bridge Concrete, Class BD	CY	336	
804-C026	110' Prestressed Concrete Beam, Type IV	LF	764	
804-C095	65' Prestressed Concrete Beam, Type IV	LF	902	
805-A001	Reinforcement	LBS	97,542	
813-A002	Concrete Railing, 32"	LF	484	
813-B001	Concrete-Steel Railing	LF	480	
815-D001	Concrete Slope Paving	CY	95	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES (BRIDGE ITEMS) PROJECT BR-0060-03(020) 105333-301000	WORKING NUMBER SQ-BR-1
MARSHALL COUNTIES DESIGNER <u>Trent Wilson, PE</u> CHECKER <u>Barbara Jones, PE</u> DETAILER ISSUE DATE <u>09/29/2017</u>	SHEET NUMBER 8002
09/11/2019 Revised Pay Items and Quantities. By <u>BJ</u>	Date 09/29/2017



DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
 DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

ADDENDUM

VPC Sta. 114+90.000
EL. 615.752

VPI Sta. 117+80.000
EL. 627.35

VPI Sta. 118+93.699 BK =
Sta. 2+08.860 AH =
EL. 611.924

STATE PROJECT NO.
MISS. BR-0060-03(020)

*VERTICAL CLEARANCE NOTE:

Vertical clearance shown is the minimum clearance as measured from the highest top of rail elevation to the lowest girder elevation within the railroad right of way.

CONSTRUCTION NOTE:

The contractor shall verify the station along SR 4 at the intersection of E SR 4 and E Railroads prior to beginning work to ensure that all minimum clearance requirements will be provided.

BRIDGE REMOVAL NOTE:

The contractor must submit existing bridge deck and rail demolition plans to the Railroads and must have the plans approved prior to removal (allow for a minimum of 30 days for review).

NOTE: The Contractor to apply the following information, using seven (7) inch high black lettering and numbering on a white background in a conspicuous location on the North and South side of the structure near the center line of the existing East railroad track below:

DOT No. 66724P
MP 528.35

NOTE: Minimum construction clearances for falsework and any other temporary structures shall be as follows below:

- 15'-0" Horizontal from the centerline of track
- 21'-6" Vertical from the top of rail track

STEEL PIPE PILE NOTES:

PDA test piles shall be driven with an approved impact hammer as an indicator. Test pile or production pile at the location shown in the PDA TEST PILE SCHEDULE and will be paid for as test piles only. The first PDA test pile driven shall be an indicator. PDA Test pile as shown on the Foundation Plan. The indicator PDA Test pile shall be driven continuously using an approved impact hammer. The full length of the indicator PDA Test pile shall be monitored using PDA until the PDA indicator test results are satisfactory. PDA results for test piles to driving any PDA Test Piles. Based on the results of the PDA indicator Test Piles, the plan lengths of the PDA Test Piles may change. Therefore, recommend ordering PDA Test Piles after analysis of the PDA indicator Test Pile is complete. Remaining test piles all be driven as a continuous operation. To the tip elevation shown in the PDA TEST PILE SCHEDULE unless otherwise directed by the Director of Structures, State Bridge Engineer. Permanent piles shall be driven to an elevation no higher than the elevation shown in the REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE.

The Director of Structures, State Bridge Engineer may authorize test piles driven outside the structural limits. When feasible, bearing piles shall be driven full length and be spliced, only, as approved by the Director of Structures, State Bridge Engineer. Welding shall be done by the ELECTRIC ARC process. Welders shall be certified and electrodes shall be approved. When loading tests are required, the maximum test load shall be approved by the Engineer. PDA test piles shall require a 1 day and 7 day restrike unless pile lengths and driving criteria shall be provided based on the results of the PDA test piles.

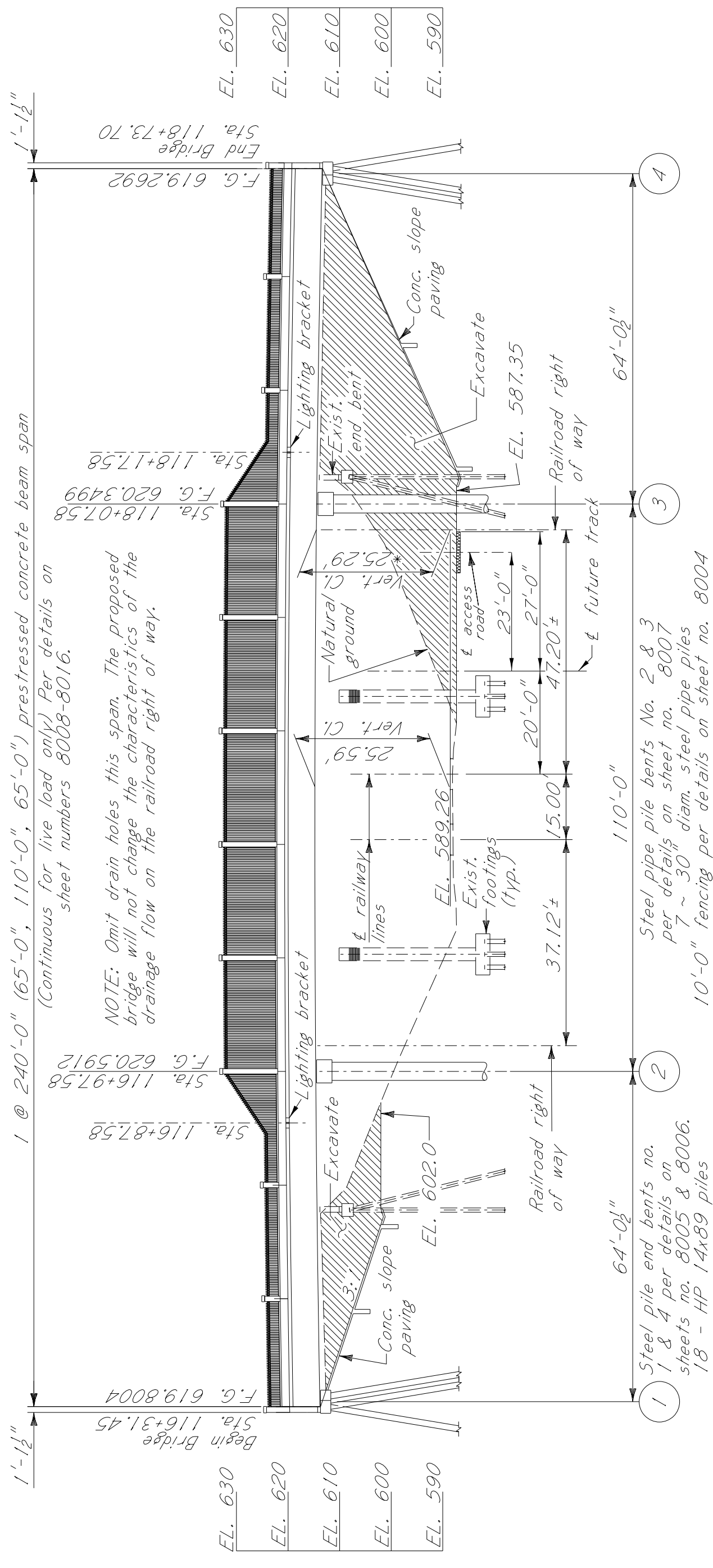
The required ultimate pile bearing shown in the REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE includes the LRPD resistance factor for PDA of 0.65. Pile hammer leads used for all PDA Test piles and PDA restrikes shall be large enough to provide a minimum of 3" clearance on each side of the pile in order to properly place and protect PDA gages. Steel pipe piles shall be driven with a maximum rated energy no less than 70,000 ft-lbs to the tip elevations specified unless the Contractor's drivability analysis utilizing the Contractor's selected alternative hammer is approved by the Director of Structures, State Bridge Engineer. All Steel Pipe Piles shall be ASTM A252, Grade 3 (Fy = 45,000 psi.). Steel Pipe Piles are intended to be open ended. Welding shall comply with AWS D1.5 Bridge Welding Code and be performed by a certified welder.

NOTE: The elevation of the existing top of rail shall be verified prior to beginning construction.

Total length of bridge = 242'-3"

I @ 24'-0" (65'-0", 110'-0", 65'-0") prestressed concrete beam span (Continuous for live load only) Per details on sheet numbers 8008-8016.

NOTE: Omit drain holes this span. The proposed bridge will not change the characteristics of the drainage flow on the railroad right of way.



ELEVATION WITH PROFILE ALONG APPROACH ROADWAY

Scale: 1"=20'-0"

PILE NOTES:

Test piles shall be driven as permanent piles at the location shown in the PDA TEST PILE SCHEDULE and will be paid for as test piles only. The Director of Structures, State Bridge Engineer may authorize test piles driven outside the structural limits. Test piles shall be driven as a continuous operation. To the bearing capacity and the tip elevations shown in the PDA TEST PILE SCHEDULE, unless otherwise directed by the Director of Structures, State Bridge Engineer.

Permanent piles shall be driven to an elevation no higher than the elevation shown in the REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE. The tip elevation of piling, for hydraulic structures, may be determined by the scour line. When feasible, bearing piles shall be driven full length and be spliced, only, as approved by the Director of Structures, State Bridge Engineer. The ELECTRIC ARC process. Welders shall be certified and electrodes shall be approved. When loading tests are required, the maximum test load shall be one and one half (1 1/2) times the minimum pile bearing capacity's.

PDA Test piles shall require a 1 day and 7 day restrike unless otherwise directed by the Engineer. Pile lengths and driving criteria shall be provided based on the results of the PDA Test piles. The required ultimate pile bearing shown in the REQUIRED ULTIMATE PILE BEARING AND TIP ELEVATION SCHEDULE includes the LRPD resistance factor for PDA of 0.65. Pile hammer leads used for all PDA Test piles and PDA restrikes shall be large enough to provide a minimum of 3" of clearance on each side of the pile in order to properly place and protect PDA gages. Steel HP Piles shall be driven with a maximum rated energy no less than 35,000 ft-lbs to the tip elevations specified unless the Contractor's drivability analysis utilizing the Contractor's selected alternative hammer is approved by the Director of Structures, State Bridge Engineer.

NOTE:

The girder deflection diagrams shown in these plans were prepared and intended for design and estimation purposes only. Actual bridge girder deflections may differ from the deflection diagrams shown in these plans. It is the Contractor's responsibility to construct the bridge to meet the requirements of the plans and specifications including, but not limited to, the requirements for bridge deck smoothness. Prior to construction, the Contractor shall submit three (3) copies of a proposed BRIDGE SUPERSTRUCTURE CONSTRUCTION PLAN to the Director of Structures, State Bridge Engineer for review, through the Project Engineer. The Contractor shall include all calculations, elevations and/or grade elevations. This submittal shall also include an erection and construction procedure that addresses the construction means and methodologies used by the Contractor and shall consider effects including, but not limited to, construction phasing, pouring schedules, applied permanent and construction loading, and shall include calculations and details of temporary girder bracing systems used to ensure girder stability and to counter the effects of girder tilt. After girder erection and prior to deck construction, the Contractor shall submit deck thickness verification calculations for each girder. These calculations shall include a comparison of the erected girder top flange profiles versus the plan deck grade elevations over each girder plus the anticipated girder deflection due to applied permanent dead load and creep. Three (3) copies of the deck thickness verification calculations and any proposed remediation measures to correct for thin deck areas shall be submitted to the Director of Structures, State Bridge Engineer for review, through the Project Engineer. The BRIDGE SUPERSTRUCTURE CONSTRUCTION PLAN and the deck thickness verification calculations shall be prepared and stamped by a Mississippi Registered Professional Engineer.

REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE

Bent No.	Pile Type & Size	Ultimate Bearing (Tons)	Est. Length (ft.)	Controlling Limit	LRPD Resistance Factor
1	HP 14x89	146	75	Strength I	0.65
2	30" Steel Pipe Pile 1/2"	354	65	Strength I	0.65
3	30" Steel Pipe Pile 1/2"	354	65	Strength I	0.65
4	HP 14x89	146	75	Strength I	0.65

NOTE: The LRPD Load Resistance Factor of 0.65 has been applied to the Required Ultimate Bearing.

PDA TEST PILE SCHEDULE

Bent No.	Min. Length (ft.)	Tip Elev.
1	85	527.4
2	85	528.4

ESTIMATED QUANTITIES

Item	Trans. Grooving	Conventional Static Load Test	HP 14x89 Steel Piling	PDA Test Pile	PDA Test Steel Pipe Pile	Pile Restrike	30" Diam. Steel Pipe Piling	Bridge Concrete Class 44	Bridge Concrete Class 80	110 Ft. Pres. Conc. Beam Type-IV	Reinforce-ment	Concrete Steel Railing	Concrete Slope Paving
Location	S.Y.			Each	Each	Each	L.F.	C.Y.	C.Y.	L.F.	L.F.	C.Y.	C.Y.
Spans	853.33		2550.0	1	1	1	845.0	86.62	336.36	764.17	75.469	480.00	
End bents		1						139.60					
Int. bents								226.22					
Totals	853.33	1	2550.0	1	1	2	845.0	226.22	336.36	764.17	97.542	480.00	94.50



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
OVERPASS AT STA. 116+31.45
BIRMINGHAM SUBDIVISION RR MP 528.35
SR 4 ACROSS BNSF RAILWAY &
MS CENTRAL RAILROAD CO.
LAYOUT - EXHIBIT "B-1"

FMS: 105333 / 301000
COUNTY: MARSHALL
PROJECT NUMBER: BR-0060-03(020)
DESIGNER: Josh Wilshute
CHECKER: Spencer Yates
DETAILER: Josh Wilshute
ISSUE DATE: 01/18/2016
REP. DIR. OF STRUCTURES, MISS. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

DATE: 9/11/19
REVISION: Removed Test Pile

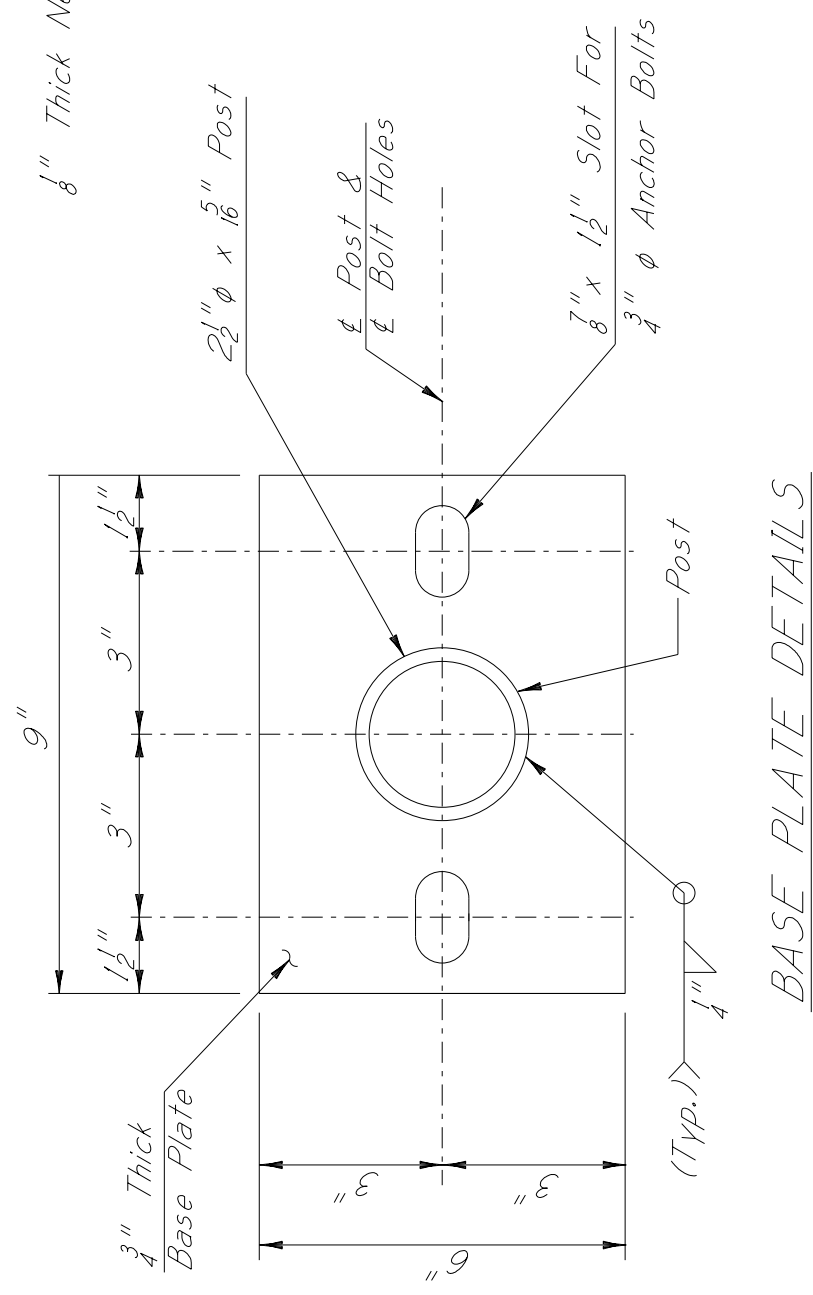
WORKING NUMBER: 1 OF 14
SHEET NUMBER: 8003

NOTE: For addition notes and details, see sheet no. 8004.

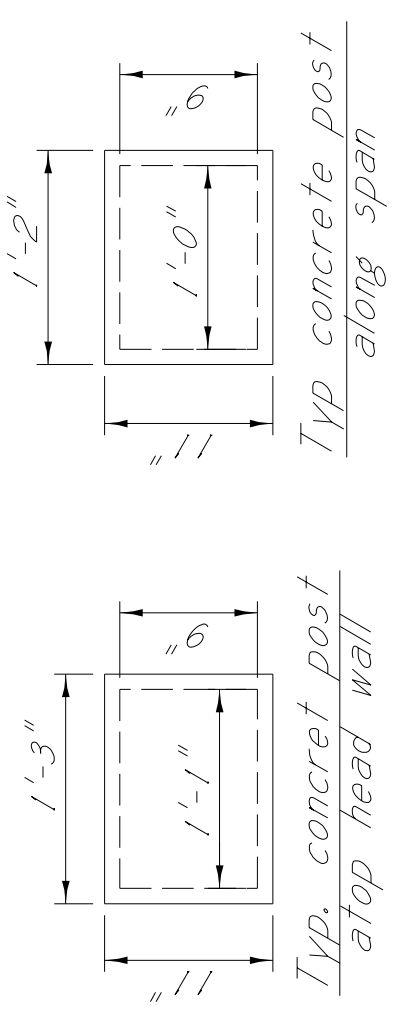
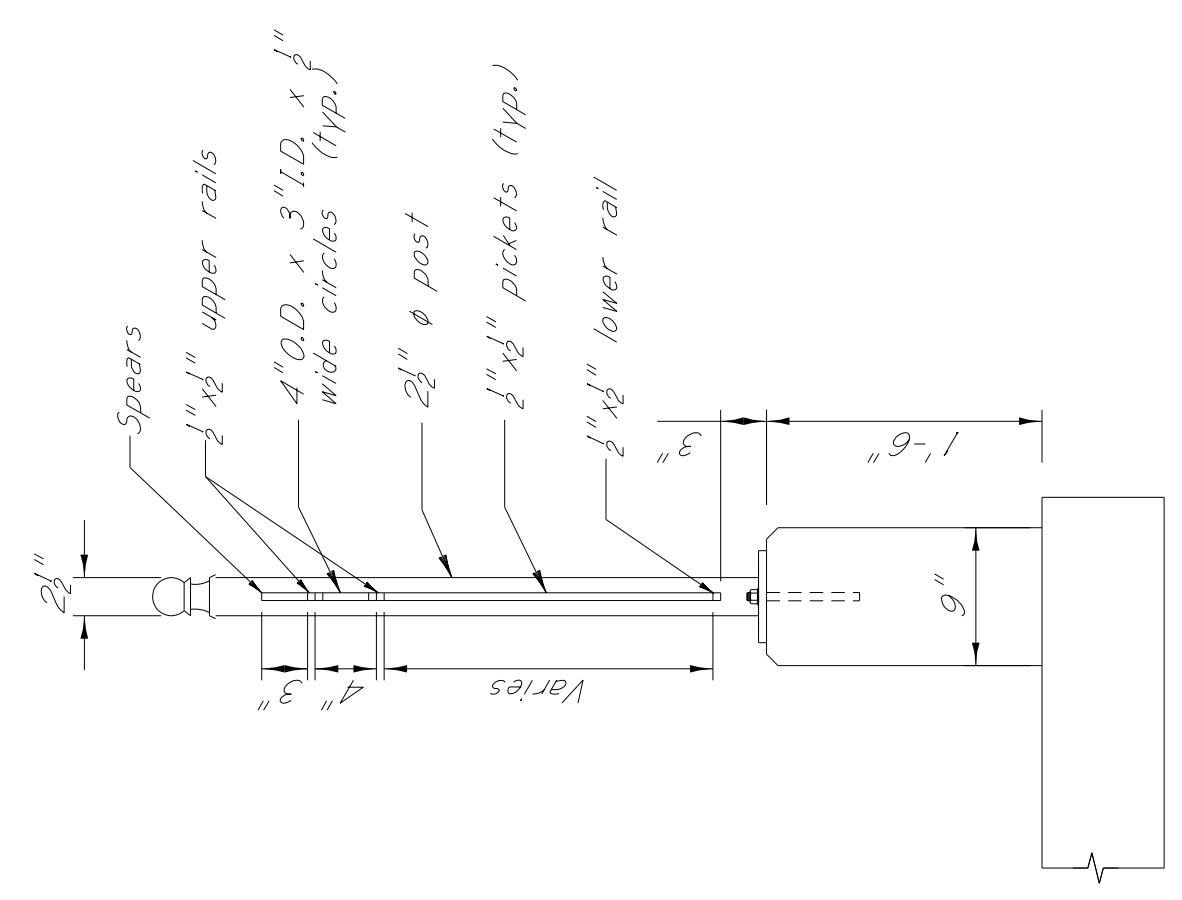
DESIGN DATA:
Specifications: A.A.S.H.T.O., LRFD 2014 & 2016 Interims
Loading: HL-93
Roadway width: 36'-0" Gutter to gutter
Concrete: Class "AA" (14,000 p.s.i.)
Concrete: Class "BD" (14,000 p.s.i.)
Stay-in-place metal deck forms: 18lbs/sqft (between flanges)
SEISMIC DESIGN DATA:
Seismic Performance Zone: Zone 2
Site Class Definition: Site Class "c"
Importance Category: Other

ADDENDUM

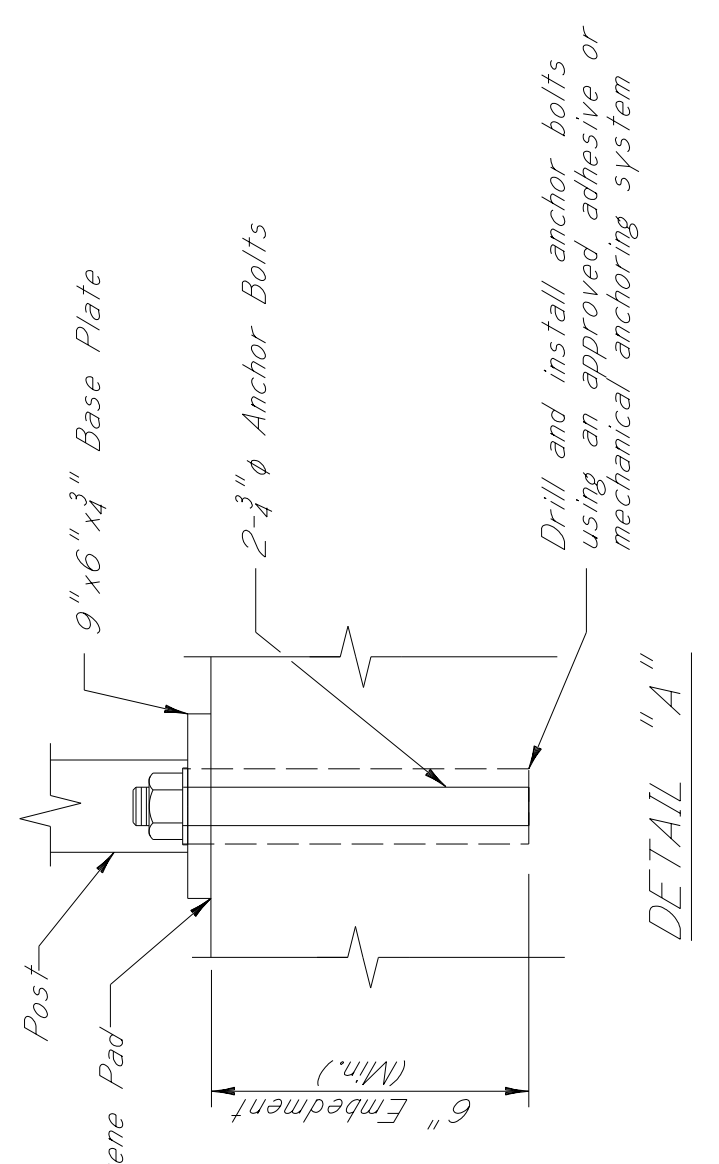
STATE PROJECT NO.
MISS. BR-0060-03(020)



BASE PLATE DETAILS

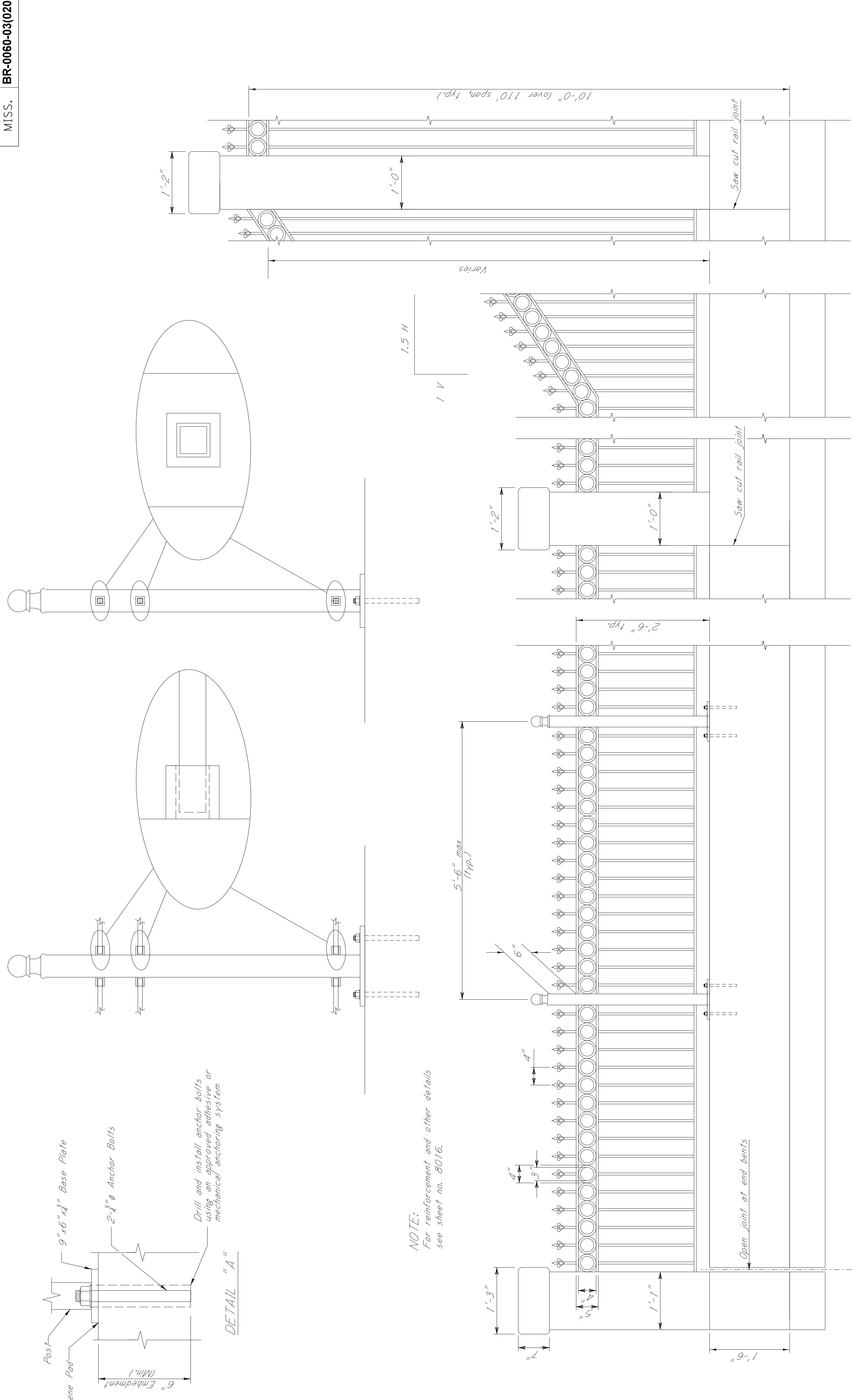


Typ. concrete post atop head wall
Typ. concrete post along span



DETAIL "A"

NOTE:
For reinforcement and other details see sheet no. 8016.



GENERAL NOTES:
 All Dimensions Are Measured Along & Rail.
 All Steel Tubing Shall Conform To A.S.T.M. Specifications A500 Grade B.
 All Steel Plates Shall Conform To AASHTO Specifications A709 Grade 50 Unless Otherwise Noted.
 All Welding Shall Be Done By The Electric Arc Process And Shall Conform To The ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.
 Certification For All Welders To Be Used On This Project Shall Be Submitted To The Director Of Structures, State Bridge Engineer Through The Shop Inspector.
 Anchor Bolts Shall Be Fabricated From A.S.T.M. Designation A36 Steel Nuts For Shall Be In Accordance With A.S.T.M. Designation A563 Washers Galvanizing A153.
 Anchorage Hardware Shall Be In Accordance With A.S.T.M. Designation A153.
 Nuts Shall Be Tapped Oversize The Minimum Amount Required For Proper Assembly.
 Prior To Any Fabrication, The Fabricator Shall Have Shop Drawings, Welding Procedures And A Procedure For Storage And Handling Of Welding Electrodes, State Wires And Flux Which Have Been Approved By The Director Of Structures, State Bridge Engineer. No Fabrication Shall Begin Until All Submittals Have Been Authorized By The Director Of Structures, State Bridge Engineer.
 All Areas Of The Pedestrian Barrier Rail Fabrication Which Can Retain Water Shall Be Provided With A 3/8 inch Diameter Drain Hole.
 Chamfer All Concrete Edges Unless Otherwise Noted.
 The Fabricator Shall Ensure That The Steel Rail Has No Sharp Edges Or Protrusions.
 All Concrete Used In The Pedestrian Rail Shall Be Class "BD".

SHOP DRAWING NOTE:
 Prior to fabrication, pedestrian rail shop drawings shall be submitted to the Director of Structures, State Bridge Engineer, for review and approval.

PAINT NOTE:
 Structural steel surfaces shall be cleaned and then painted with one shop coat of inorganic zinc, one field intermediate coat of zinc rich epoxy primer and one top coat of inorganic zinc. Final top coat shall be gloss black. (Not a separate pay item. Paint and coating shall be absorbed under pay item 813-8001, Concrete-Steel Railings.)

DATE	REVISION	BY
9/11/19	Added Note	FLW



FMS: 105333 / 301000
 COUNTY: MARSHALL
 PROJECT NUMBER: BR-0060-03(020)

DESIGNER: Josh Wilshiro
 CHECKER: Spencer Yates
 DATE: 9/11/19
 ISSUE DATE: 9/11/19
 PROJECT NUMBER: BR-0060-03(020)

WORKING NUMBER
 9 OF 14
 SHEET NUMBER
 8011