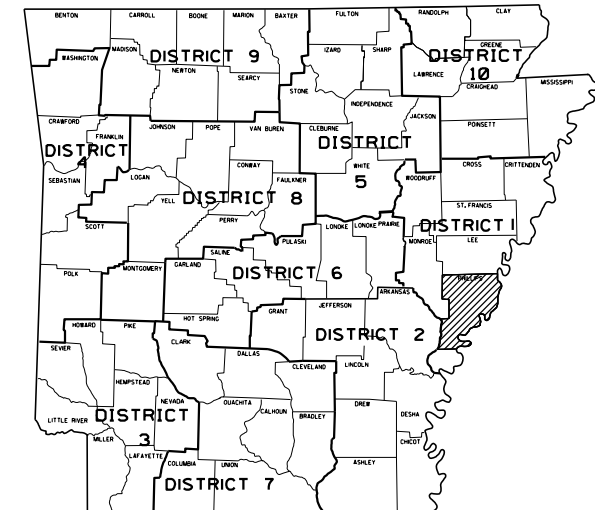


ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS

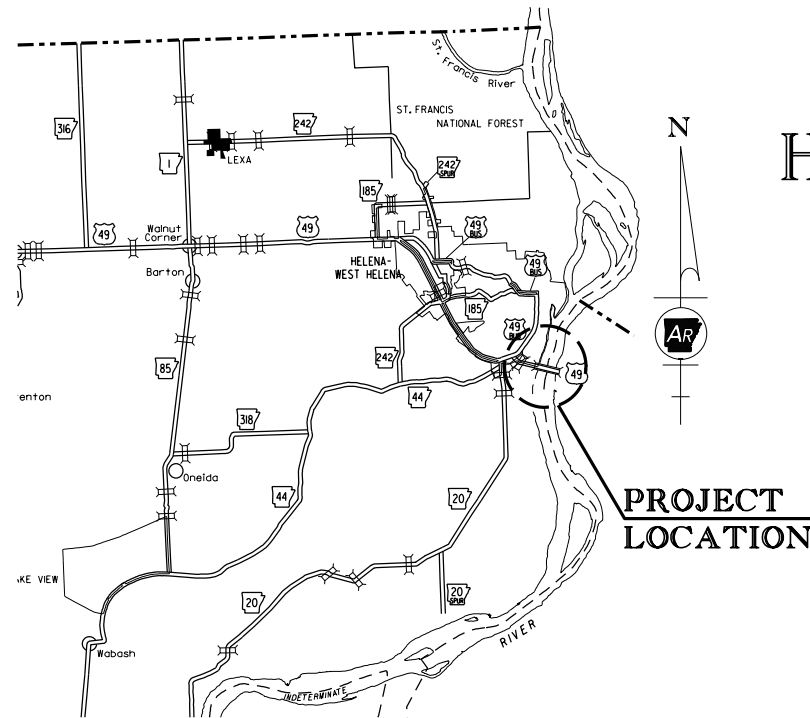


DATE REVISED	DATE REVISION	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	1	37
HWY. 49 MISSISSIPPI RIVER BRIDGE REHAB. (S)						

HWY. 49 MISSISSIPPI RIVER BRIDGE REHAB. (S)
ROUTE 49 SECTION 11
PHILLIPS COUNTY
JOB 110812
FED. AID PROJ. HIPFCS-C0VD(4)



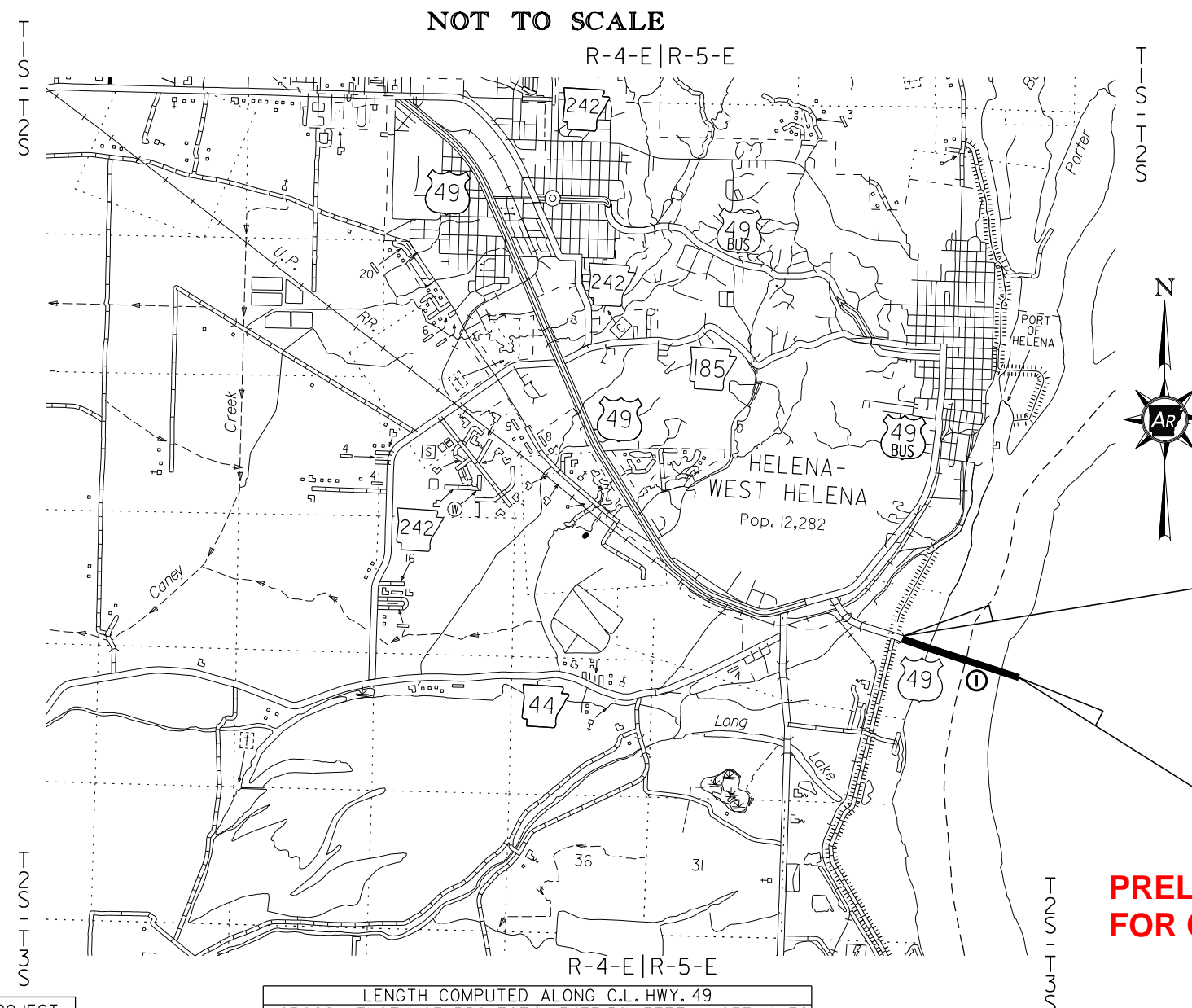
ARKANSAS HIGHWAY DISTRICT 1



VICINITY MAP

BRIDGE DATA (EXISTING)

- ① BRIDGE NO. 02899
- 1199'-6" WEST APPROACH SPANS
(290'-6", 433'-6", 475'-6")
- 3108'-0" MAIN RIVER BRIDGE
(15 @ 42'=630'; 10 @ 42'=420';
18 @ 42'=756'; 16 @ 42'=672';
15 @ 42'=630')
- 887'-0" EAST APPROACH SPANS
(475'-6" & 411'-6")
- 28'-0" CLEAR ROADWAY
5198'-6" BRIDGE LENGTH



BEGIN JOB 110812
LOG MILE 0.543

END JOB 110812
LOG MILE 1.580

**PRELIMINARY - SUBJECT TO REVISIONS
FOR CONSTRUCTIBILITY REVIEW ONLY**

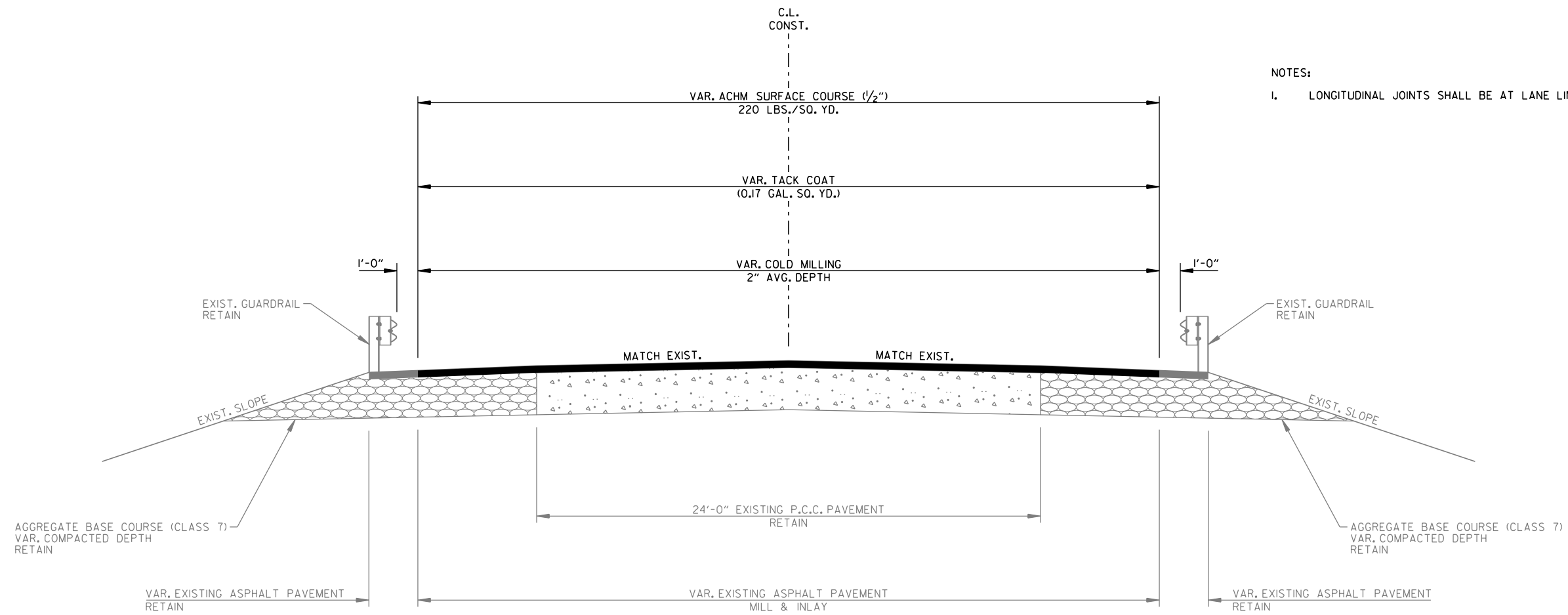
	BEGIN OF PROJECT	MID-POINT OF PROJECT	END PROJECT
LATITUDE	N 34°29'56"	N 34°29'49"	N 34°29'41"
LONGITUDE	W 90°35'50"	W 90°35'19"	W 90°34'47"

LENGTH COMPUTED ALONG C.L. HWY. 49	
GROSS LENGTH OF PROJECT	5473.50 FEET 1.037 MILES
NET LENGTH OF ROADWAY	275.00 FEET 0.052 MILES
NET LENGTH OF BRIDGES	5198.50 FEET 0.985 MILES
NET LENGTH OF PROJECT	5473.50 FEET 1.037 MILES

4/14/2025 4:16:39 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_110812_Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_01_CO_001.dgn
 REVISION DATE: **REVISION**

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	2	37
TYPICAL SECTIONS OF IMPROVEMENT						

PRELIMINARY
 SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY



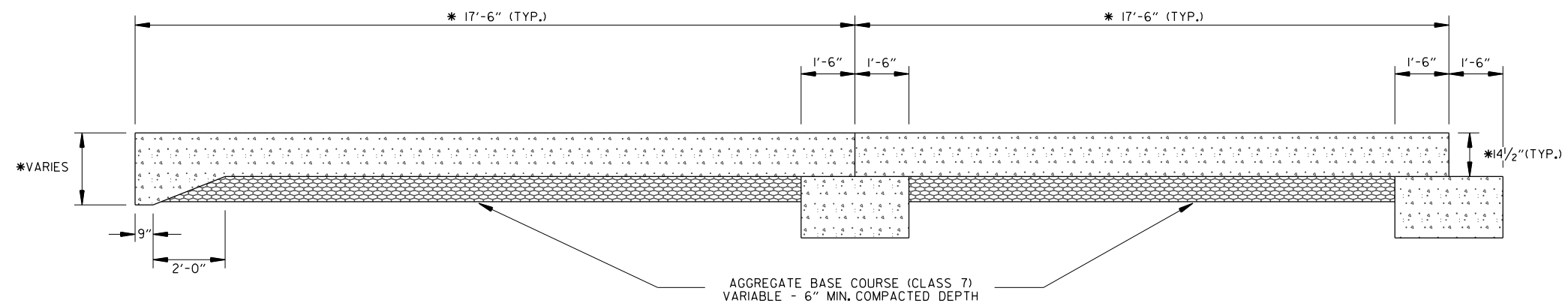
NOTES:
 I. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

HWY. 49 MILL & INLAY
 LOG MILE 0.543 TO LOG MILE 0.562
 LOG MILE 1.561 TO LOG MILE 1.580

4/1/2025 4:16:39 PM
 WORKSPACE: untitled
 Y:\PROJECTS\VAR001_186556_110812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_04_TS_001.dgn
 REVISION DATE: **REVISION**

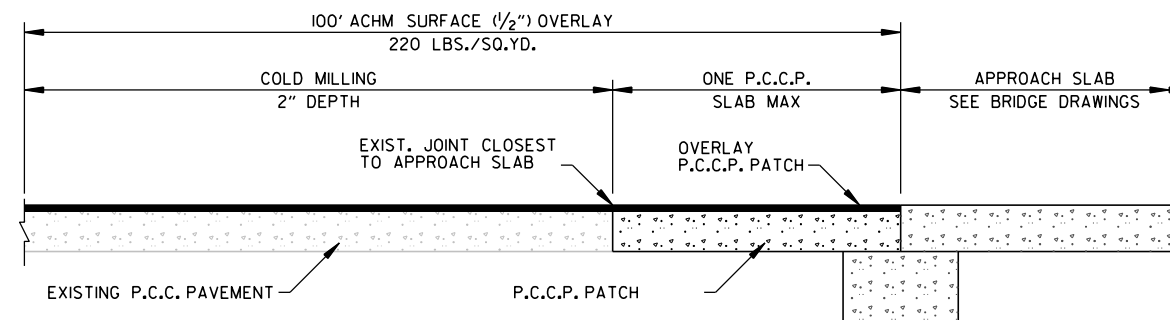
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	3	37
SPECIAL DETAILS						

PRELIMINARY
 SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY



*SEE APPROACH SLAB DETAILS IN BRIDGE DRAWINGS

SECTION OF APPROACH SLAB
 (FOR CONCRETE PAVEMENT)

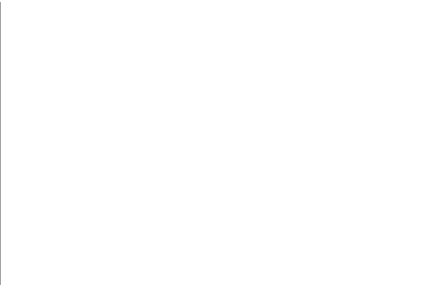
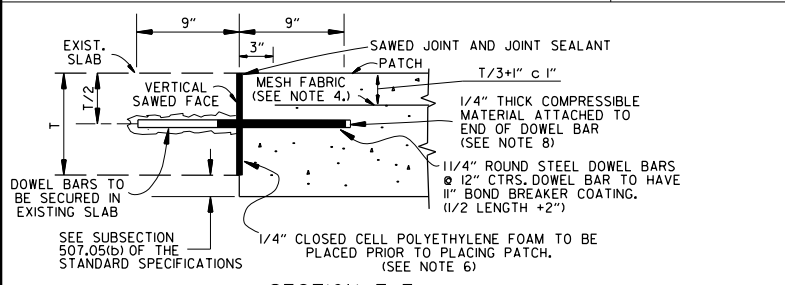
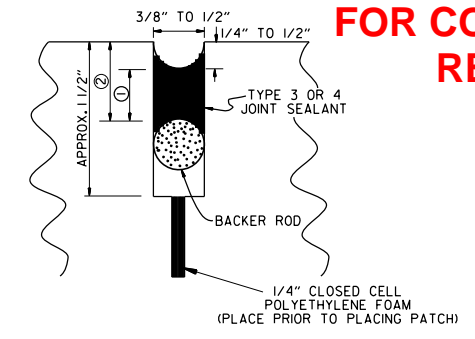
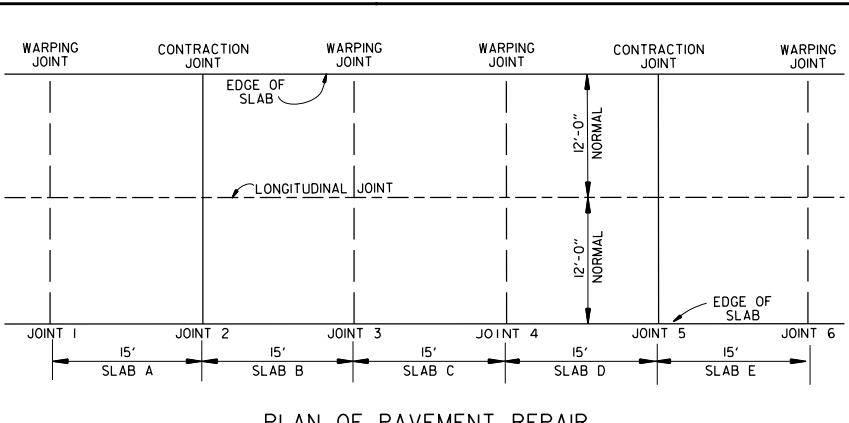
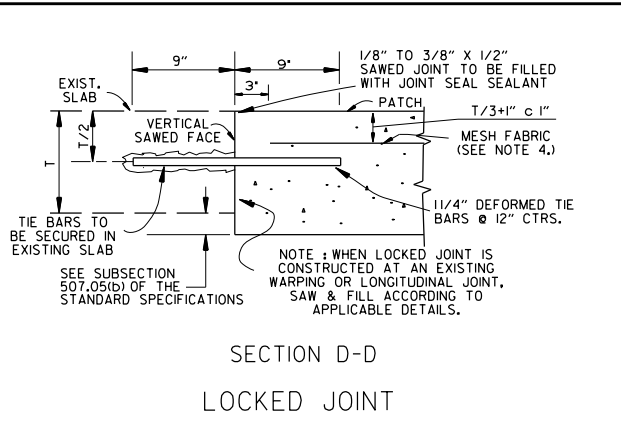
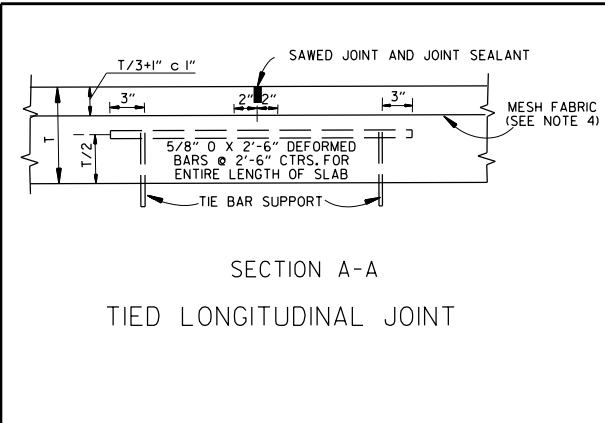


SECTION OF PAVEMENT REPAIR
 AND MILL AND INLAY OF ASPHALT

4/1/2025 4:16:40 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_110812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_05_SD_001.dgn
 REVISION DATE: **REVISION**

SPECIAL DETAILS

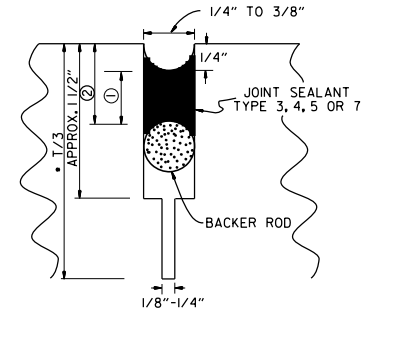
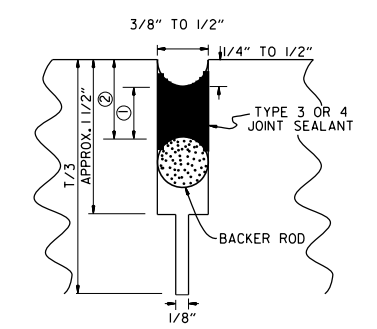
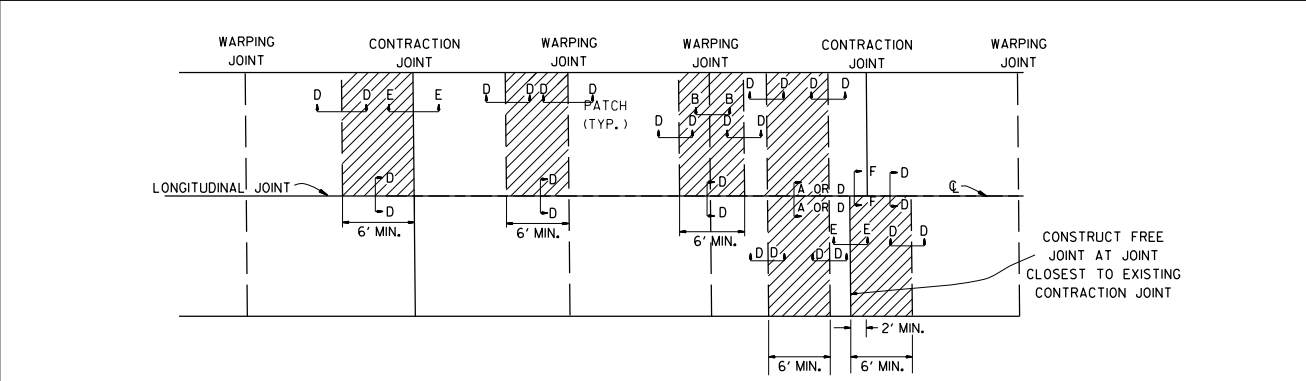
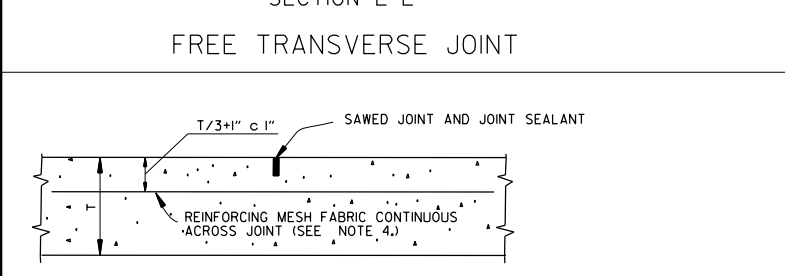
PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY REVIEW ONLY



TYPICAL SLAB REPLACEMENT EXAMPLES

SLAB(S) TO BE RECONSTRUCTED	TYPE OF JOINT TO BE CONSTRUCTED					
	JOINT 1	JOINT 2	JOINT 3	JOINT 4	JOINT 5	JOINT 6
A OR D	LOCKED	FREE	LOCKED	LOCKED	FREE	LOCKED
B OR E	LOCKED	FREE	LOCKED	LOCKED	FREE	LOCKED
A & B OR D & E	LOCKED	CONTRACTION	LOCKED	LOCKED	CONTRACTION	LOCKED
B & C	LOCKED	FREE	WARPING	LOCKED	FREE	LOCKED
B, C & D	LOCKED	FREE	WARPING	WARPING	FREE	LOCKED
C	LOCKED	FREE	LOCKED	LOCKED	FREE	LOCKED

DETAIL OF SAWED FREE TRANSVERSE & FREE LONGITUDINAL JOINT

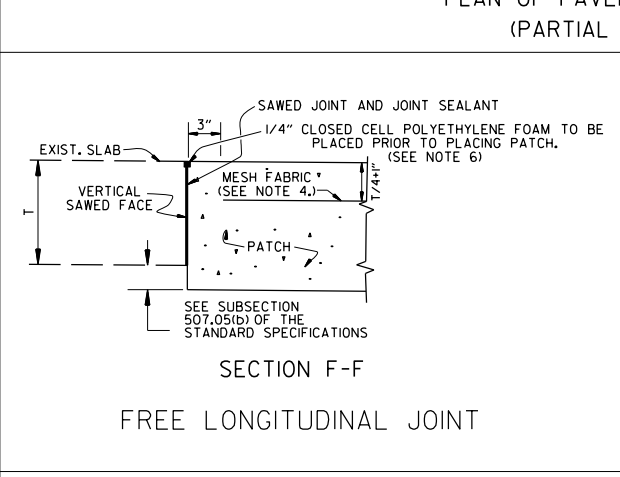
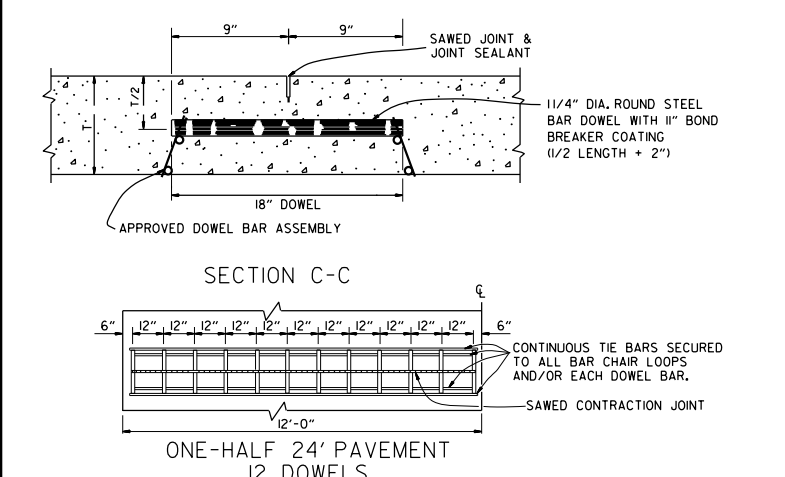


DETAIL OF SAWED CONTRACTION JOINT

*NOTE: T/3 SAW CUT NOT REQUIRED FOR LONGITUDINAL CONSTRUCTION JOINT.

DETAIL OF SAWED TIED LONGITUDINAL JOINT AND WARPING JOINT

SECTION B-B WARPING JOINT



JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
1/4	1/4	3/8	1/2
3/8	1/4	1/2	1/2
1/2	1/4	5/8	1/2

JOINT CONFIGURATION FOR TYPE 5 OR 7 JOINT SEALANT

JOINT WIDTH	SEALANT THICKNESS ①	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH ②
INCHES			
1/4	1/2	3/8	3/4
3/8	3/4	1/2	1

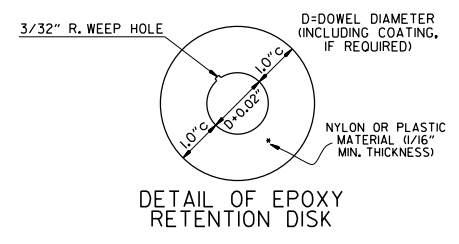
NOTES FOR PAVEMENT REPAIR:

- EXACT SIZE AND LOCATION OF AREA TO BE REPAIRED SHALL BE DETERMINED BY THE ENGINEER. ALL PATCHES SHALL EXTEND ACROSS THE FULL WIDTH OF THE SLAB AS SHOWN IN THESE DETAILS.
- THE FINAL SURFACE FINISH FOR PATCHES SHALL MATCH THAT OF THE EXISTING PAVEMENT.
- WHEN AREA TO BE REPAIRED INCLUDES AN EXISTING JOINT, THE JOINT SHALL BE RECONSTRUCTED TO THE CONFIGURATION SHOWN IN THESE DETAILS.
- ALL REPAIRED AREAS SHALL BE REINFORCED WITH MESH FABRIC AS SHOWN. DEPTH OF MESH PLACEMENT SHALL HAVE A TOLERANCE OF +1 INCH. MESH FABRIC SHALL BE 12 X 12 - W4 X W4 WELDED WIRE FENCE (MINIMUM WIRE SIZE). LAPS SHALL BE MINIMUM 6" IN EACH DIRECTION. MINIMUM COVER AT EDGES SHALL BE 2".
- FORMS FOR PAVEMENT REPAIR SHALL BE METAL UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- CLOSED CELL POLYETHYLENE FOAM SHALL BE SECURED TO SAWED FACE OF EXISTING P.C.C. PAVEMENT WITH ADHESIVE OR ADHESIVE TAPE AS APPROVED BY THE ENGINEER AND TRIMMED FLUSH WITH TOP OF EXISTING SLAB TO PREVENT DISPLACEMENT WHEN THE PATCH IS BEING PLACED.
- WHEN THE PATCH IS PLACED OVER GRANULAR BASE, REMOVE ANY LOOSE BASE MATERIAL, COMPACT REMAINING BASE AS NECESSARY AND PLACE PATCH. WHEN PATCH IS PLACED OVER TREATED BASE, REMOVE ANY LOOSE BASE MATERIAL AND PLACE PATCH.
- 1/4" THICK COMPRESSIBLE MATERIAL SHALL BE ATTACHED TO THE ENDS OF DOWEL BARS AT ALL FREE TRANSVERSE JOINTS (SEE SECTION E-E). THE MATERIAL SHALL BE THE SAME DIAMETER AS THE DOWEL BAR. A PLASTIC CAP OF OTHER TYPE OF DEVICE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH THE DIMENSIONS SHOWN. A TOLERANCE OF PLUS OR MINUS ONE INCH WILL BE ALLOWED FOR VERTICAL AND LATERAL PLACEMENT AND A TOLERANCE OF PLUS OR MINUS 1/4" WILL BE ALLOWED FOR THE TILT AND SKEW.

DETAILS OF PORTLAND CEMENT CONCRETE PAVEMENT PATCHING (MAIN LANES)



4/1/2025 4:16:40 PM
 WORKSPACE: untitled
 Y:\PROJECTS\VAR001_166556_110812_Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_05_SD_001.dgn
 REVISION DATE: **REDATE**

NOTE: FOR 20' PAVEMENT USE 20 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 15' PAVEMENT USE 15 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR 26' PAVEMENT USE 26 DOWELS @ 12" CTRS. WITH 6" SPACING FROM C.L. AND EDGE OF SLAB TO FIRST BAR. FOR PAVEMENT WIDTHS OTHER THAN THOSE SHOWN ABOVE, USE DOWELS AT 12" CTRS. WITH 6" MAX. SPACING FROM C.L. TO FIRST BAR. DISTANCE FROM EDGE OF SLAB TO FIRST BAR SHALL BE ADJUSTED TO MAINTAIN 12" DOWEL BAR SPACING



NOTE: EPOXY RETENTION DISK SHALL BE SLIPPED TIGHTLY OVER THE BARS AND FIRMLY AGAINST THE SLAB FACE AFTER INSERTING THE BAR AND EPOXY INTO HOLE

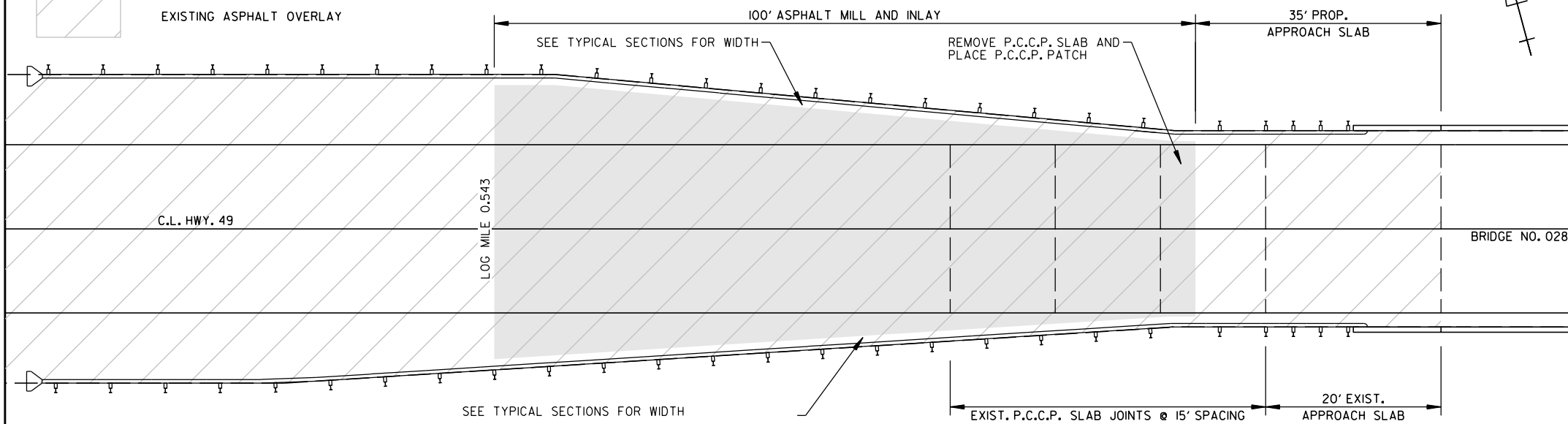
LEGEND

-  2" MILL AND INLAY
-  EXISTING ASPHALT OVERLAY

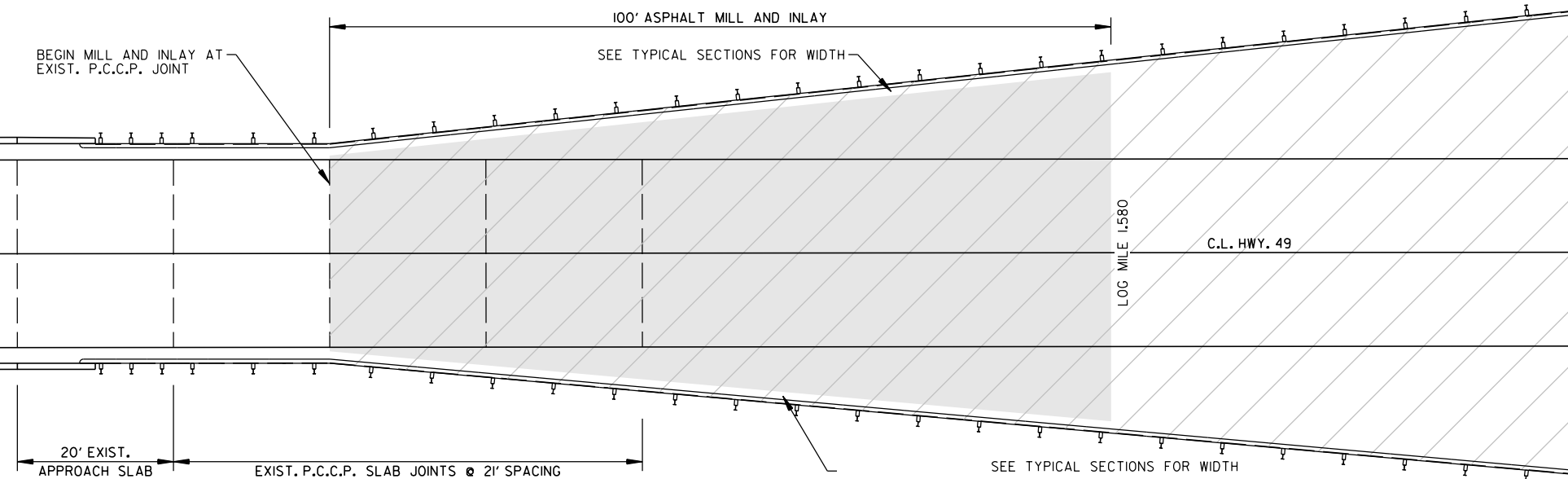
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	5	37

SPECIAL DETAILS

PRELIMINARY
 SUBJECT TO REVISION
FOR CONSTRUCTIBILITY REVIEW ONLY



WEST END PAVEMENT
 (ARKANSAS END)



EAST END PAVEMENT
 (MISSISSIPPI END)

4/1/2025 4:16:40 PM
 WORKSPACE: untitled
 Y:\PROJECTS\VAR001_166556_10812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_05_SD_001.dgn
 REVISION DATE: **REVISION**

SPECIAL DETAILS

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	6	37

PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY

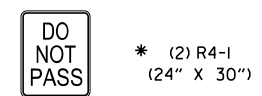
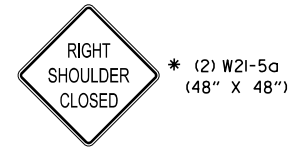
MAINTENANCE OF TRAFFIC DETAILS

LEGEND

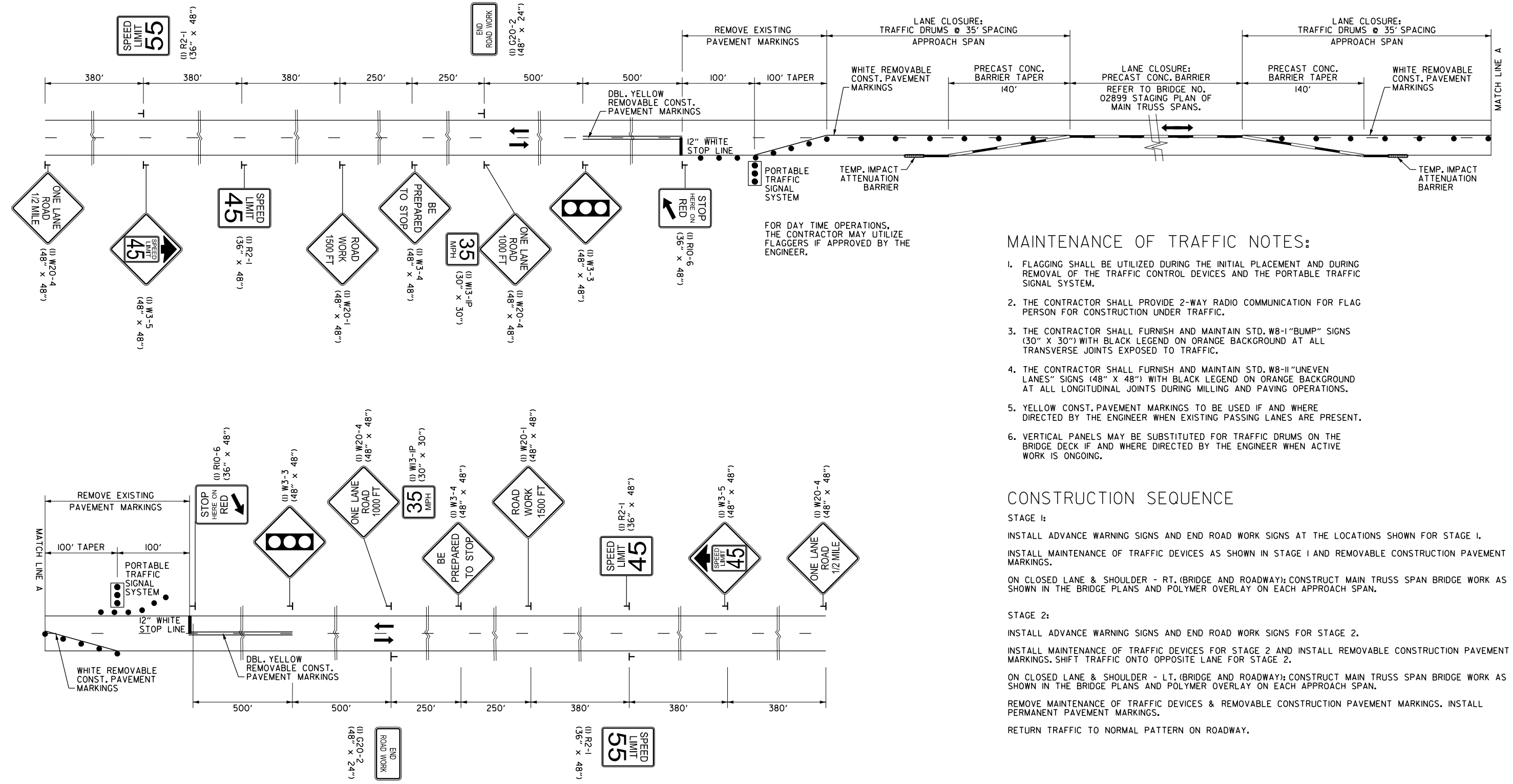
- TRAFFIC DRUM
- T TEMPORARY TRAFFIC SIGN
- TRAFFIC FLOW ARROWS
- ▬ PRECAST CONC. BARRIER WALL

NOTES:

1. FURNISH AND INSTALL PRECAST CONC. BARRIER ALONG THE LENGTH OF THE WORK AREA AND STAGING AREAS PLUS TAPER LENGTH WHILE PERFORMING WORK ON THE MAIN TRUSS SPANS OF THE BRIDGE DECK.
2. MAINTAIN 11' - 0" MINIMUM WIDTH ON LANE REMAINING OPEN. REFER TO STAGE CONSTRUCTION TYPICAL SECTIONS AND BRIDGE DRAWINGS.
3. REFER TO STANDARD DRAWINGS TC-4 AND TC-5 FOR BARRIER PLACEMENT.
4. ONCE WORK ON THE MAIN TRUSS SPANS OF BRIDGE IS COMPLETE, PRECAST CONCRETE BARRIER MAY BE REMOVED AND REPLACED WITH TRAFFIC DRUMS AT 35' SPACING WHILE PERFORMING POLYMER OVERLAY PROCESS FOR EACH APPROACH SPAN.



* TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER



MAINTENANCE OF TRAFFIC NOTES:

1. FLAGGING SHALL BE UTILIZED DURING THE INITIAL PLACEMENT AND DURING REMOVAL OF THE TRAFFIC CONTROL DEVICES AND THE PORTABLE TRAFFIC SIGNAL SYSTEM.
2. THE CONTRACTOR SHALL PROVIDE 2-WAY RADIO COMMUNICATION FOR FLAG PERSON FOR CONSTRUCTION UNDER TRAFFIC.
3. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-1 "BUMP" SIGNS (30" X 30") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL TRANSVERSE JOINTS EXPOSED TO TRAFFIC.
4. THE CONTRACTOR SHALL FURNISH AND MAINTAIN STD. W8-11 "UNEVEN LANES" SIGNS (48" X 48") WITH BLACK LEGEND ON ORANGE BACKGROUND AT ALL LONGITUDINAL JOINTS DURING MILLING AND PAVING OPERATIONS.
5. YELLOW CONST. PAVEMENT MARKINGS TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER WHEN EXISTING PASSING LANES ARE PRESENT.
6. VERTICAL PANELS MAY BE SUBSTITUTED FOR TRAFFIC DRUMS ON THE BRIDGE DECK IF AND WHERE DIRECTED BY THE ENGINEER WHEN ACTIVE WORK IS ONGOING.

CONSTRUCTION SEQUENCE

- STAGE 1:**
- INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE LOCATIONS SHOWN FOR STAGE 1.
 - INSTALL MAINTENANCE OF TRAFFIC DEVICES AS SHOWN IN STAGE 1 AND REMOVABLE CONSTRUCTION PAVEMENT MARKINGS.
 - ON CLOSED LANE & SHOULDER - RT. (BRIDGE AND ROADWAY); CONSTRUCT MAIN TRUSS SPAN BRIDGE WORK AS SHOWN IN THE BRIDGE PLANS AND POLYMER OVERLAY ON EACH APPROACH SPAN.
- STAGE 2:**
- INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS FOR STAGE 2.
 - INSTALL MAINTENANCE OF TRAFFIC DEVICES FOR STAGE 2 AND INSTALL REMOVABLE CONSTRUCTION PAVEMENT MARKINGS. SHIFT TRAFFIC ONTO OPPOSITE LANE FOR STAGE 2.
 - ON CLOSED LANE & SHOULDER - LT. (BRIDGE AND ROADWAY); CONSTRUCT MAIN TRUSS SPAN BRIDGE WORK AS SHOWN IN THE BRIDGE PLANS AND POLYMER OVERLAY ON EACH APPROACH SPAN.
 - REMOVE MAINTENANCE OF TRAFFIC DEVICES & REMOVABLE CONSTRUCTION PAVEMENT MARKINGS. INSTALL PERMANENT PAVEMENT MARKINGS.
 - RETURN TRAFFIC TO NORMAL PATTERN ON ROADWAY.

ADVANCE WARNING
MAINTENANCE OF TRAFFIC DETAILS

4/1/2025 4:16:43 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_166556_10812_Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_06_MOT_001.dgn
 REVISED DATE: **REVIDATE**

LEGEND

- ⊥ TEMPORARY TRAFFIC SIGN
- TRAFFIC FLOW ARROWS

ARKANSAS WELCOME CENTER
AT HELENA/WEST HELENA



(1) M3-3
(24" X 12")

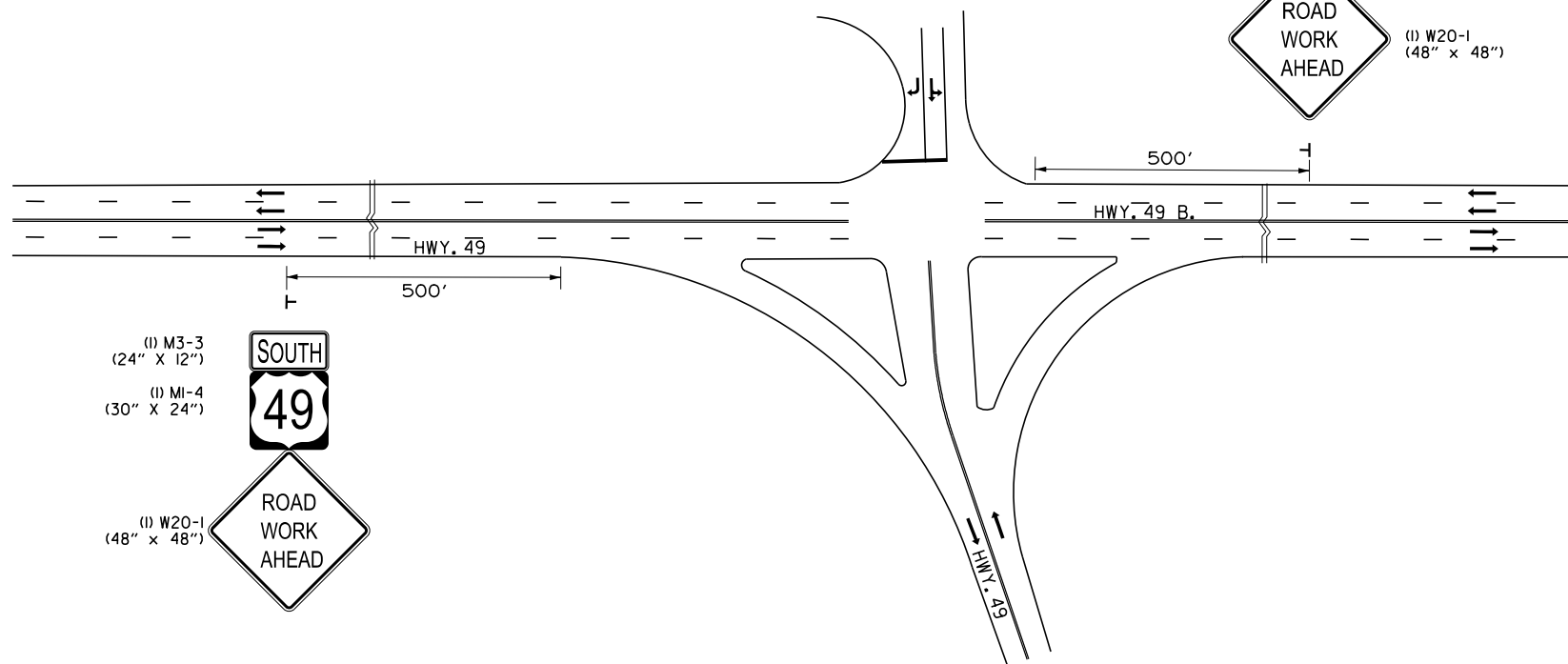
(1) M1-4
(30" X 24")

(1) W20-1
(48" X 48")

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	7	37

MAINTENANCE OF TRAFFIC DETAILS

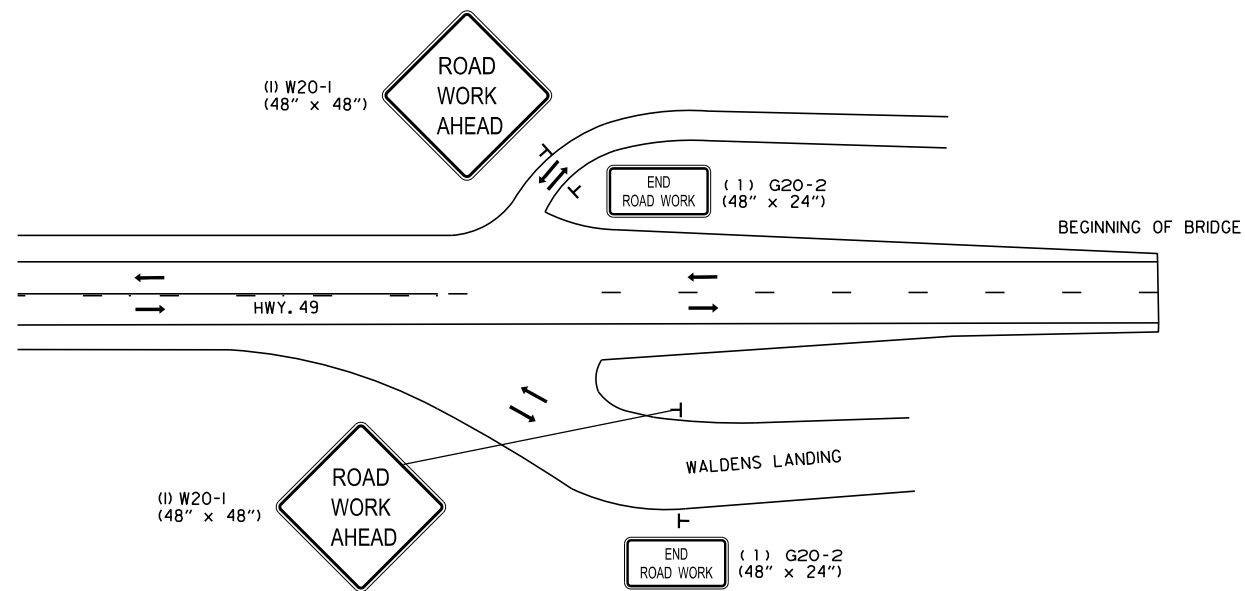
PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY



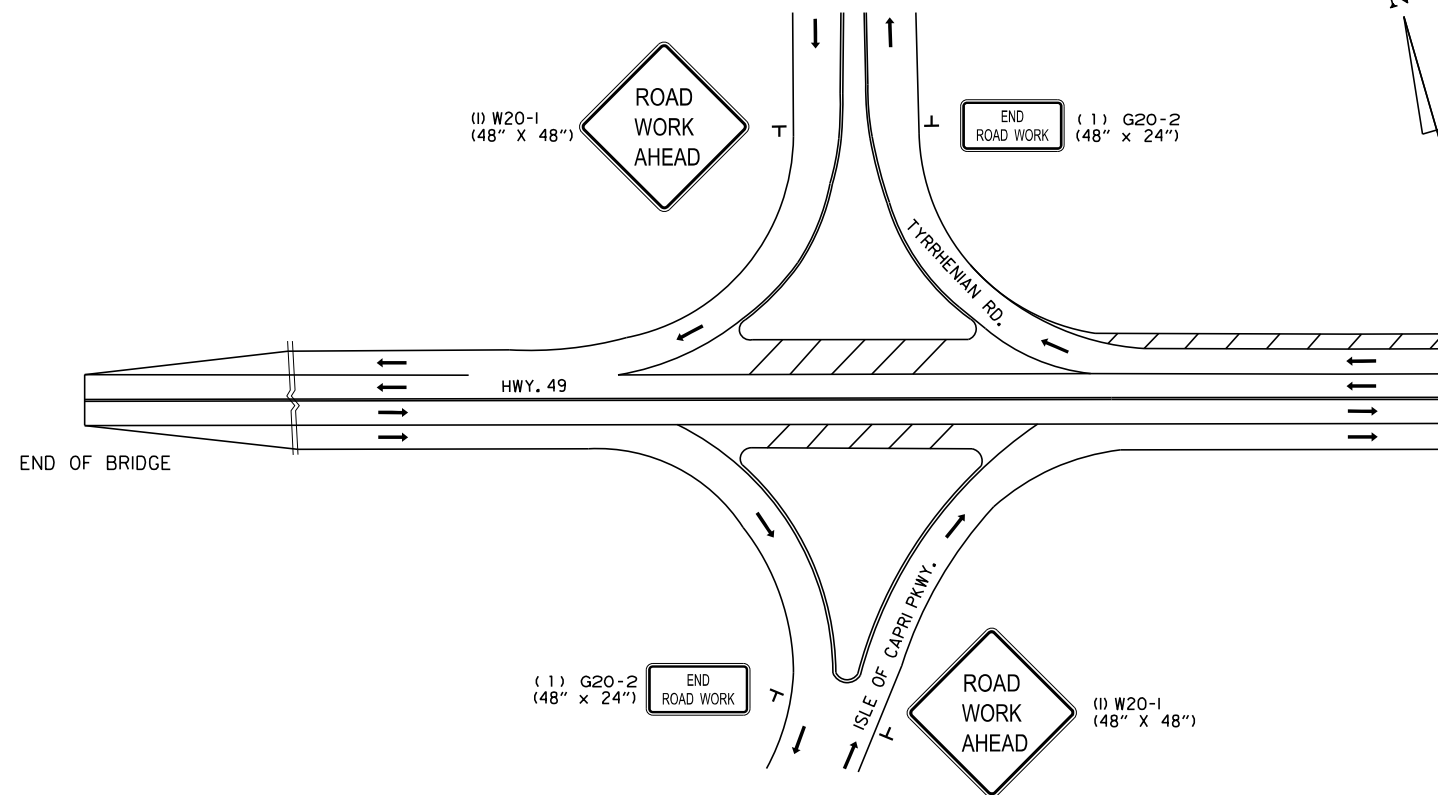
INTERSECTION OF HWY. 49 & HWY. 49 B.

NOTE:

JOB 110708, ARKANSAS MIDLAND RR STR. & APPRS. MAY BE ONGOING DURING THE CONSTRUCTION OF THIS BRIDGE REHAB PROJECT. MAINTENANCE OF TRAFFIC ITEMS ARE SHOWN TO PROVIDE ADVANCE WARNING IF JOB 110708 CONSTRUCTION HAS NOT BEGUN.



WALDENS LANDING & LEVEE RD.







TYRRHENIAN RD. & ISLE OF CAPRI PKWY.

ADVANCE WARNING
MAINTENANCE OF TRAFFIC DETAILS

4/1/2025 4:16:43 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_110812_Hwy_49_Miss_River_Bridge_Preservation\Design\Civil\Drawings\110812_06_MOT_001.dgn
 REVISION DATE: **REVISION**

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	8	37
MAINTENANCE OF TRAFFIC DETAILS						

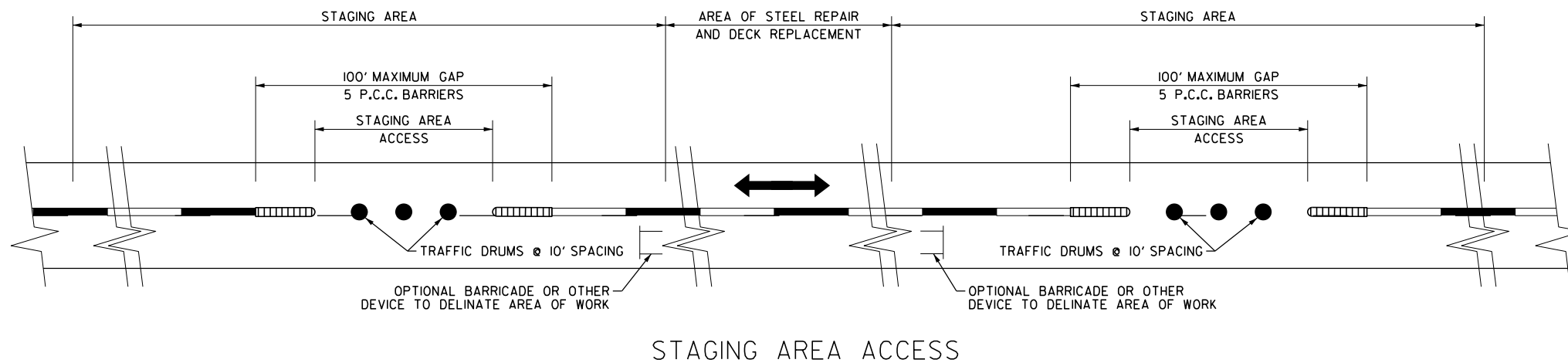
LEGEND

-  TRAFFIC DRUM
-  TRAFFIC FLOW ARROWS
-  PRECAST CONC. BARRIER WALL
-  TEMP. IMPACT ATTENUATION BARRIER

PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY

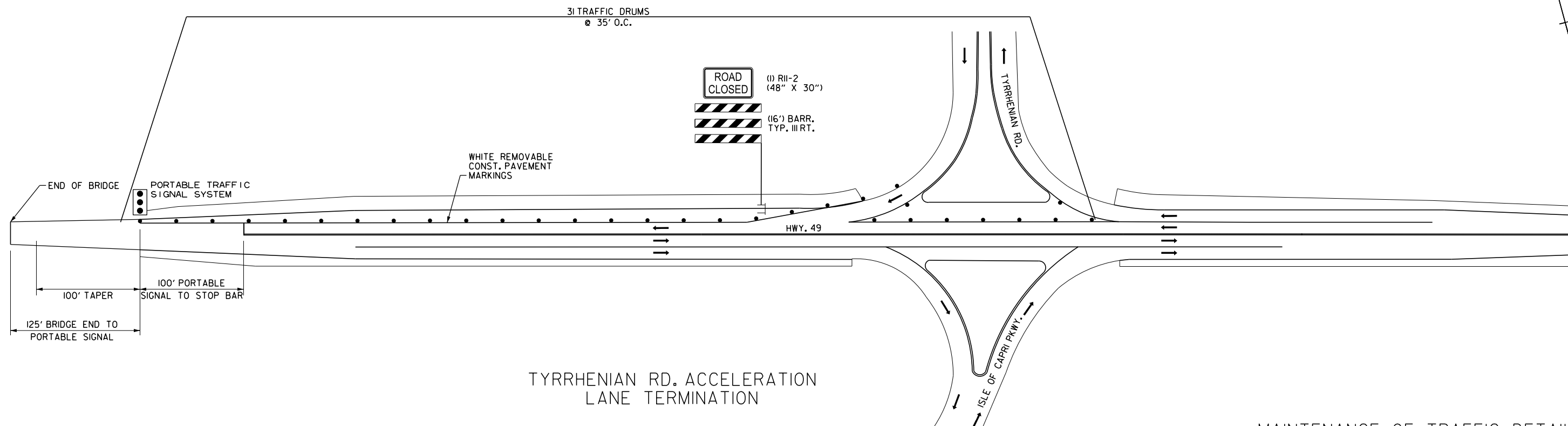
NOTES:

1. STAGING AREA ACCESS SHOULD BE PLACED FAR ENOUGH FROM THE AREA OF STEEL REPAIR AND DECK REPLACEMENT TO ALLOW VEHICLES AND EQUIPMENT ROOM TO SAFELY STOP.
2. VEHICLES AND EQUIPMENT LEAVING STAGING AREAS SHALL ENTER TRAFFIC IN THE SAME DIRECTION AS TRAFFIC AND SHOULD ENTER AT THE END OF THE CURRENT TRAFFIC QUEUE.
3. THERE SHALL BE A MINIMUM DISTANCE OF 200' BETWEEN STAGING AREA ACCESSES. THE CONTRACTOR MUST REQUEST IN WRITING FOR ACCESSES TO BE CLOSER THAN 200' AND IS SUBJECT TO APPROVAL BY THE ENGINEER.
4. THE MAXIMUM NUMBER OF DEVICES (8 TEMP. IMPACT ATTENUATION BARRIERS AND 12 TRAFFIC DRUMS) TO HAVE 4 STAGING AREA ACCESSES WILL BE ALLOWED FOR PAYMENT. THE CONTRACTOR MAY PLACE MORE THAN 4 STAGING AREA ACCESSES, BUT DEVICES NECESSARY FOR ANY ACCESS OVER THE 4 PROVIDED FOR IN THE PLANS WILL NOT PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE UNIT BID PRICE OF OTHER ITEMS.
5. NO GAPS IN THE PRECAST CONCRETE BARRIER WILL BE ALLOWED IN AREAS WHERE STEEL REPAIR AND DECK REPLACEMENT ARE CURRENTLY BEING MADE.
6. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO ONLY HAVE THE EQUIPMENT, VEHICLES, AND MATERIALS NECESSARY FOR THE DAYS WORK IN THE STAGING AREA.
7. THE CONTRACTOR'S EMPLOYEES SHALL NOT PARK PERSONAL VEHICLES IN THE STAGING AREA.
8. THE MAXIMUM GAP BETWEEN P.C.C. BARRIERS IS 100'. THE MAXIMUM GAP IS BASED ON AN IMPACT ATTENUATION BARRIER LENGTH OF 21' TO PROVIDE APPROXIMATE ACCESS OPENING OF 50'. THE CONTRACTOR MUST REQUEST IN WRITING FOR ANY INCREASE IN THE MAXIMUM GAP AND IS SUBJECT TO APPROVAL BY THE ENGINEER.



LEGEND

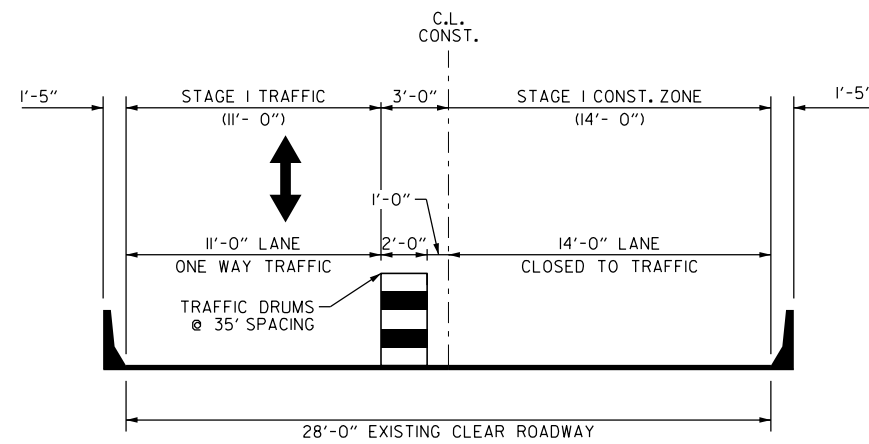
-  TRAFFIC DRUM
-  TRAFFIC FLOW ARROWS



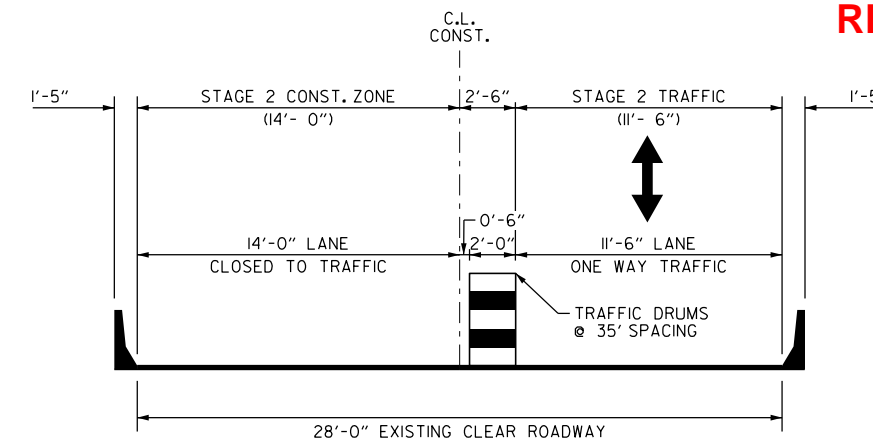
4/1/2025 4:16:43 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_06_MOT_001.dgn
 REVISION DATE: **REVISION**

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	9	37
MAINTENANCE OF TRAFFIC DETAILS						

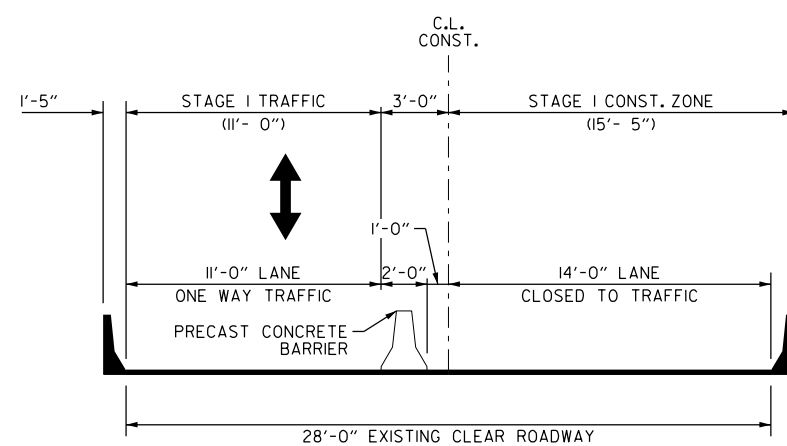
PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY



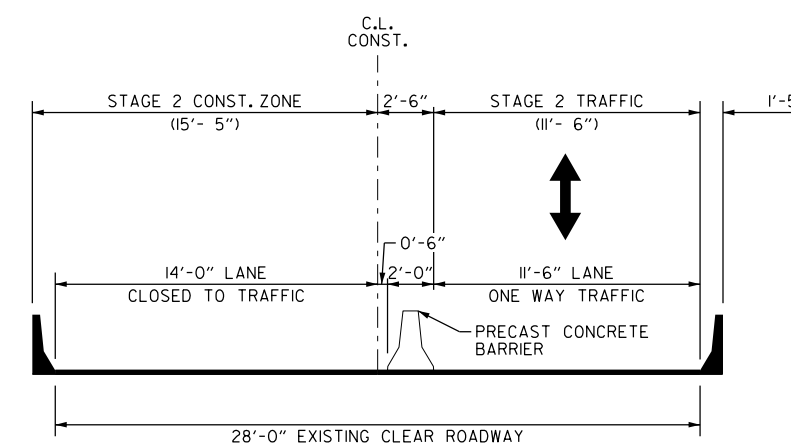
STAGE I CONSTRUCTION
APPROACH SPANS
POLYMER OVERLAY



STAGE 2 CONSTRUCTION
APPROACH SPANS
POLYMER OVERLAY



STAGE I CONSTRUCTION
MAIN TRUSS SPANS
STEEL REPAIR AND DECK REPLACEMENT



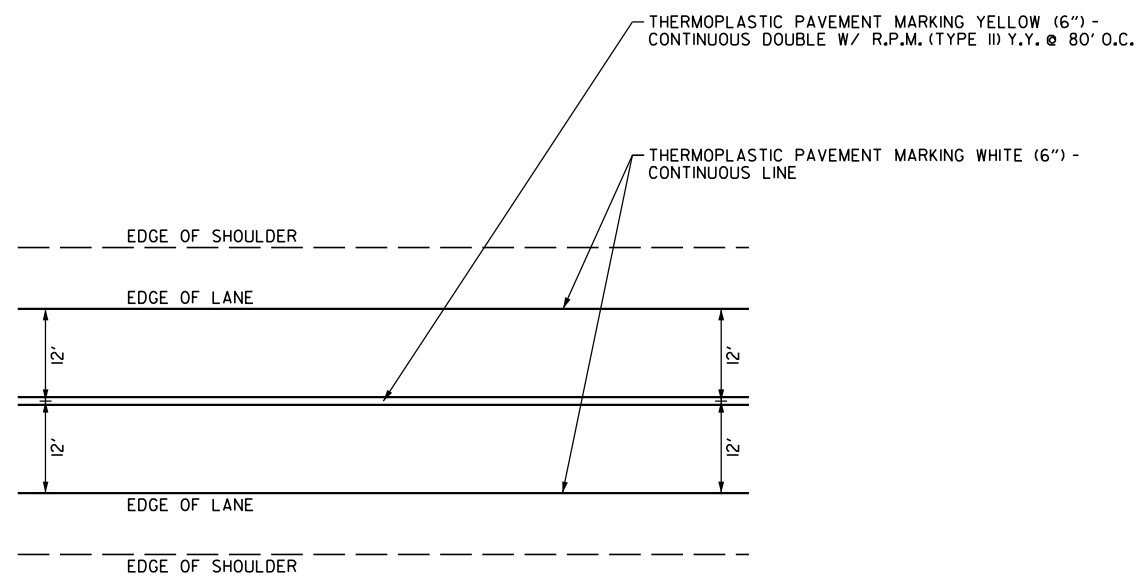
STAGE 2 CONSTRUCTION
MAIN TRUSS SPANS
STEEL REPAIR AND DECK REPLACEMENT

TYPICAL SECTIONS
MAINTENANCE OF TRAFFIC DETAILS

4/1/2025 4:16:44 PM
 WORKSPACE: untitled
 Y:\PROJECTS\VAR001_186556_110812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_06_MOT_001.dgn
 REVISION DATE: **REVISION**

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	10	37
PERMANENT PAVEMENT MARKINGS DETAILS						

PRELIMINARY
SUBJECT TO REVISION
FOR CONSTRUCTIBILITY
REVIEW ONLY



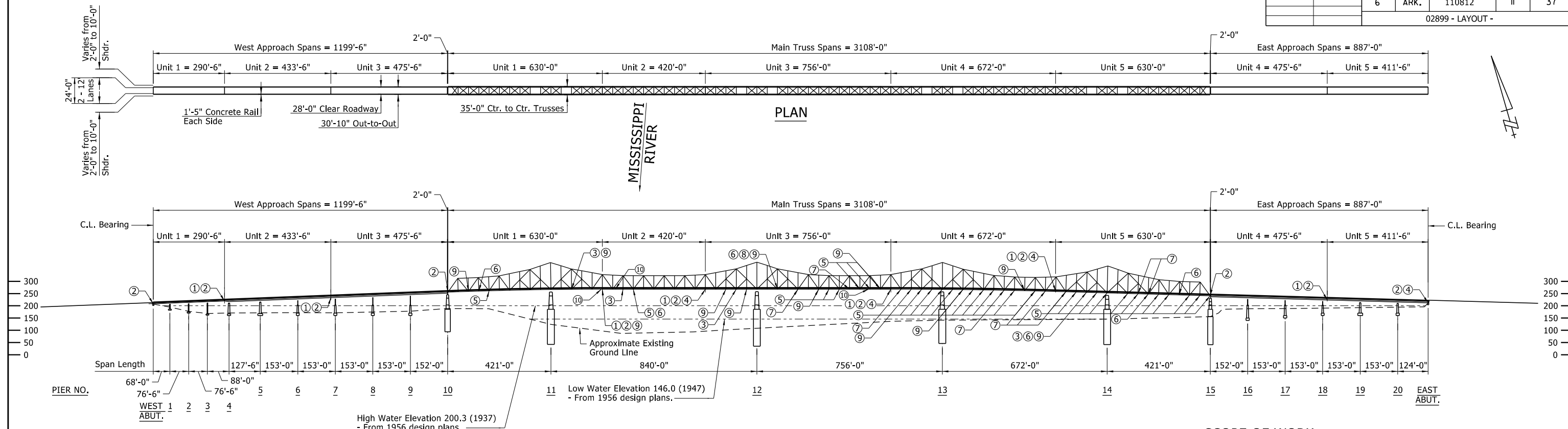
NOTE: THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

TYPICAL PAVEMENT MARKINGS

4/1/2025 4:16:44 PM
 WORKSPACE: untitled
 Y:\Projects\AR001_186556_110812.Hwy 49 Miss River Bridge Preservation\Design\Civil\Drawings\110812_07_PM_001.dgn
 REVISION DATE: **REVISION**

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	II	37

02899 - LAYOUT -



ELEVATION

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the Plans.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 17th Edition (2002)

LIVE LOADING: HS-20

MATERIALS AND STRENGTHS:
 Class S(AE) Concrete (superstructure) f_c = 4,000 psi (See SP JOB 110812 "Lightweight Concrete Aggregate (AE)")
 Class S Concrete (substructure) f_c = 3,500 psi (See SP JOB 110812 "High-Early Strength Concrete")
 Reinforcing Steel (AASHTO M 31 or M 322, Type A) f_y = 60,000 psi
 Reinforcing Steel (ASTM A1035-CS) f_y = 100,000 psi
 Structural Steel (ASTM A709, Gr. 50) F_y = 50,000 psi
 Structural Steel (ASTM A709, Gr. 36) F_y = 36,000 psi

PAINTING: All Grade 50 structural steel, except galvanized members and surfaces in contact with concrete, shall be painted as specified in Subsection 807.75. The color of paint shall be XXXXX and shall match Federal Standard 595B, Color Chip No. XXXXX.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in Subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

PROTECTIVE SURFACE TREATMENT: Class 2 Protective Surface Treatment shall be applied to the roadway surface and to the roadway face and top of the concrete bridge rails in accordance with Section 803.

DETAIL DRAWING NO(S).	DETAIL DRAWINGS
XXXXX-XXXXX	Details of West Abutment Backwall Repair
XXXXX-XXXXX	Details of Elastomeric Bearings
XXXXX-XXXXX	Details of Deck Replacement
XXXXX-XXXXX	Staging Plan of Main Truss Spans
XXXXX-XXXXX	Steel Repairs in Main Truss Spans
XXXXX-XXXXX	Details of Floor Beam Repairs
XXXXX-XXXXX	Details of Floor Beam Shoring
XXXXX-XXXXX	Details of Cross Beam Replacement
XXXXX-XXXXX	Details of Pin and Hanger and Stringer Connection Repairs
XXXXX-XXXXX	Details of Lower Chord Repairs
XXXXX-XXXXX	Details of Windlock Replacement
XXXXX-XXXXX	Details of Expansion Joints and Drainage Systems
XXXXX-XXXXX	Details of East Abutment Floorbeam Replacement
XXXXX-XXXXX	Details of East Abutment Stringer 2 Repair
XXXXX	Details of Type Special Approach Slab
55006	General Notes for Steel Bridge Structures

EXISTING BRIDGE: Existing Bridge No. 02899 (Log Mile 0.569) is 30.8' wide (28.0' clear roadway) and 5198.5' long and consists of three steel superstructure units in the West Approach Spans, five steel truss units in the Main Truss Spans, and two steel superstructure units in the East Approach Span; with a concrete substructure. Plans of the existing structure, if available, may be obtained upon request to the Construction Contract Development Section of the Program Management Division.

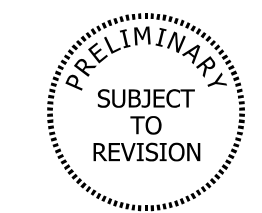
VERIFICATION: Except as noted, components of the existing bridge are to be retained and joined to the proposed work. Information and dimensions shown are based on the existing bridge plans. The Contractor is to adhere strictly to requirements for verification of the geometry of the existing bridge and its relationship to the proposed work described in Subsection 821.02 and make necessary adjustments to fit the proposed work to the existing structure. Payment for this work shall be considered subsidiary to the pay item "Modification of Existing Bridge Structure (Bridge No. 02899)".

REMOVAL AND SALVAGE: Portions of existing Bridge No. 02899 shall carefully be removed by the Contractor during staged construction as detailed in the plans. All material removed from the existing bridge shall become property of the Contractor.

MAINTENANCE OF TRAFFIC: See Roadway Plans.

SCOPE OF WORK

- Replace deck in Main Truss Spans, for details see Dwg. Nos. XXXXX-XXXXX.
- Apply Polymer Overlay to Approach Spans, see SP Job No. 110812 "Polymer Overlay". Clean and Paint All Structural Steel.
- Replace West Abutment Backwall, for details see Dwg. Nos. XXXXX-XXXXX.
- Replace West Approach Slab, see Dwg. No. XXXXX
- Mill and Overlay West and East asphalt approaches, for details see Roadway plans.
- Replace East Approach Thrie-Beam, for details see Roadway plans.
- Replace Abutment Bearings, for details see Dwg. Nos. XXXXX-XXXXX.
- ① Replace lower Wind Locks, for details see Dwg. Nos. XXXXX-XXXXX.
- ② Replace Expansion Joints and Drainage System, for details see Dwg. Nos. XXXXX-XXXXX.
- ③ Repair Stringer Connections, for details see Dwg. Nos. XXXXX-XXXXX.
- ④ Replace select Floor Beams, for details see Dwg. Nos. XXXXX-XXXXX.
- ⑤ Replace Floor Beam Stiffeners, for details see Dwg. Nos. XXXXX-XXXXX.
- ⑥ Replace Pin and Hanger Assemblies in Stringers, for details see Dwg. Nos. XXXXX-XXXXX.
- ⑦ Repair Floor Beam Web, for details see Dwg. Nos. XXXXX-XXXXX.
- ⑧ Repair Floor Beam Top Flange, for details see Dwg. No. XXXXX.
- ⑨ Repair Floor Beam Bottom Flange, for details see Dwg. Nos. XXXXX-XXXXX.
- ⑩ Repair Lower Chord, for details see Dwg. Nos. XXXXX-XXXXX.
- Replace select Cross Beams, see Dwg. Nos. XXXXX-XXXXX for locations and details.



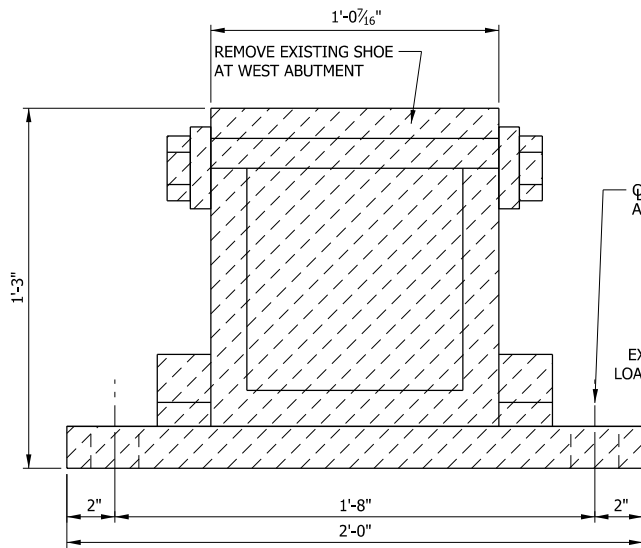
FOR CONSTRUCTIBILITY REVIEW ONLY
 LAYOUT OF BRIDGE
 HWY. 49 OVER MISSISSIPPI RIVER
 HWY. 49 MISSISSIPPI RIVER BRIDGE REHAB. (S)
 PHILLIPS COUNTY
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: MKL	DATE: 01/2025	FILENAME: B110812_LX1.DGN
CHECKED BY: SFH	DATE: 04/2025	SCALE: 1" = 200'
DESIGNED BY: XXX	DATE: XX/XXXX	

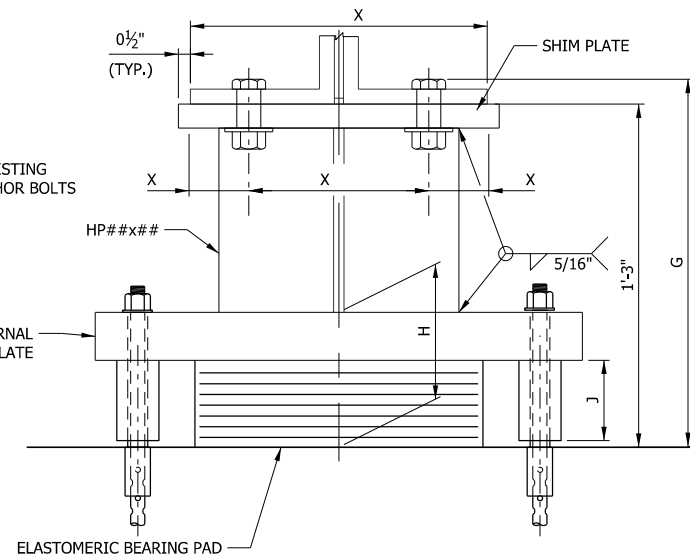
BRIDGE ENGINEER
 PRINT DATE: 4/4/2025
 BRIDGE NO. 02899
 DRAWING NO.

4/4/2025 4:16:44 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_0812_Hwy 49 Miss River Bridge Preservation\Design\BRIDGE\Drawings\B110812_LX1.dgn
 REVISED DATE:

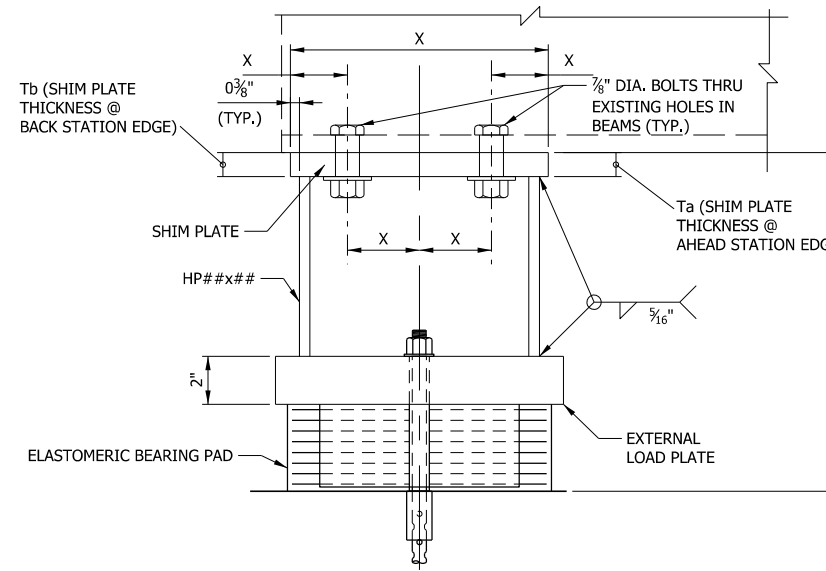
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	13	37
02899 - ELASTOMERIC BEARINGS -						



WEST ABUTMENT SHOE REMOVAL

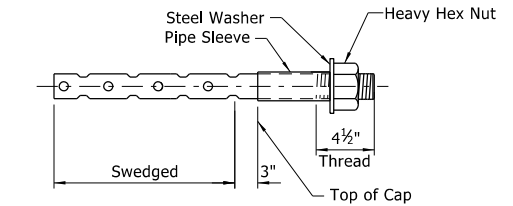


END VIEW



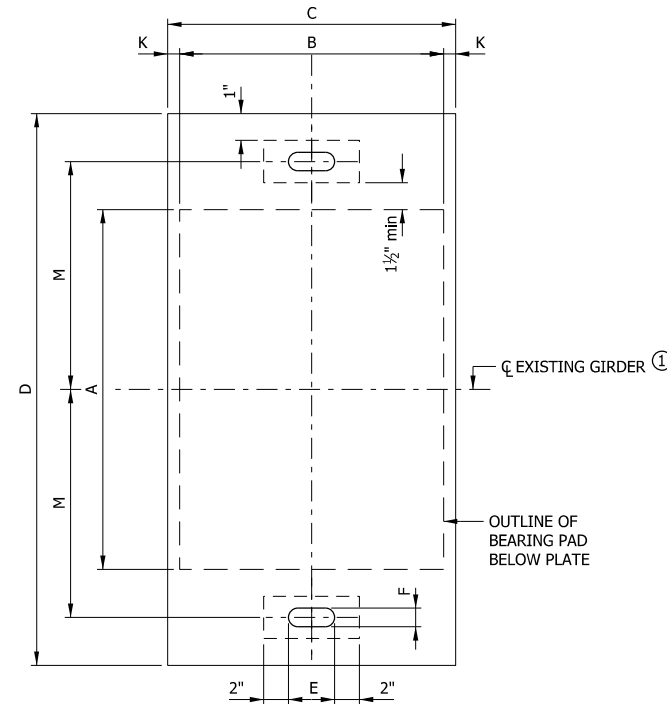
SIDE VIEW

WEST ABUTMENT BEARING DETAILS

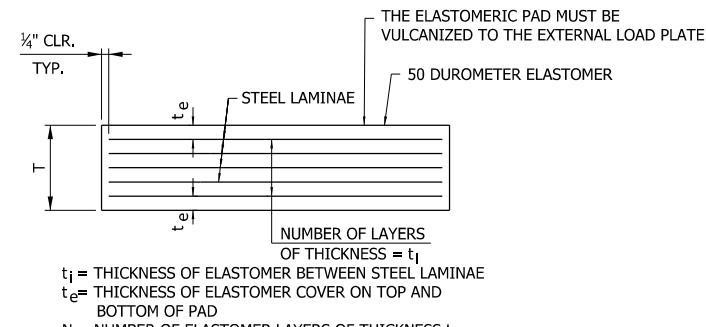


ANCHOR BOLT DETAIL

Note:
Anchor bolts shall be drilled and grouted into place.
Bolts placed in drilled holes shall be accurately set and fixed using a QPL approved epoxy or non-shrink grout that completely fills the holes.



- ① C.L. Elastomeric pad shall be aligned with C.L. Girder.
- ② Maximum Load = Service Load
- ③ Shear Blocks 4 inches or thicker may be fabricated from built-up plates with a 5/16" groove weld on all sides. No plate shall be less than 2" nominal thickness.



ELASTOMERIC BEARING PAD DETAIL

NO SCALE

GENERAL NOTES

Elastomeric bearings shall conform to Section 808 and shall be paid for at the unit price bid for "ELASTOMERIC BEARINGS".

External load plates and shear blocks shall conform to ASTM A709, Grade 50. Pipe sleeves shall be ASTM A500, Grade B, and shall be galvanized to conform to AASHTO M 232, Class C or ASTM B695, Class 50.

External load plates and shear blocks shall be completely fabricated (including bevel, bolt holes and shop welds) and shall be cleaned before vulcanizing to the elastomeric bearing. The surface in contact with the elastomeric bearing shall be cleaned in accordance with Subsection 808.03. Other surfaces shall be blast cleaned in accordance with Subsection 807.84(b) for painted steel.

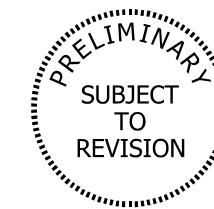
Anchor bolts, washers and nuts shall conform to Subsection 807.07. The anchor bolt grade of steel shall be as specified in the "TABLE OF FABRICATOR VARIABLES". Indentations shall be circular with rounded bottoms and staggered as shown in the details.

Pipe sleeves, anchor bolts, washers and nuts shall be paid for at the unit price bid for "STRUCTURAL STEEL IN PLATE GIRDER SPANS (ASTM A709, Gr. 50)". External load plates, shim plates, and HP bolsters will not be measured or paid for separately, but will be considered incidental to the unit price bid for "ELASTOMERIC BEARINGS".

Bearings shall be seated in accordance with Subsection 808.08. This work and materials are considered subsidiary to the item "ELASTOMERIC BEARINGS" and will not be paid for directly.

TABLE OF FABRICATOR VARIABLES

BRIDGE NO.	LOCATION		BEARING TYPE	NO. OF BEARINGS EACH BENT	MAXIMUM DESIGN LOAD (kips)	ELASTOMERIC PAD										EXTERNAL LOAD PLATE		SHIM PLATE		ANCHOR BOLT							
	ABUTMENT	BEAM OR GIRDER NO.				G	H	A	B	N	t _i	t _e	NO. & THICKNESS OF STEEL LAMINAE	T	C	D	E	F	J	K	M	T _a	T _b	ANCHOR BOLT		PIPE SLEEVE SIZE (Ø x L)	STEEL WASHER SIZE (O.D.)
																								Ø x L	GRADE		
02899	WEST	ALL	EXP.	4																		55					
	EAST	ALL	EXP.	2																		55					



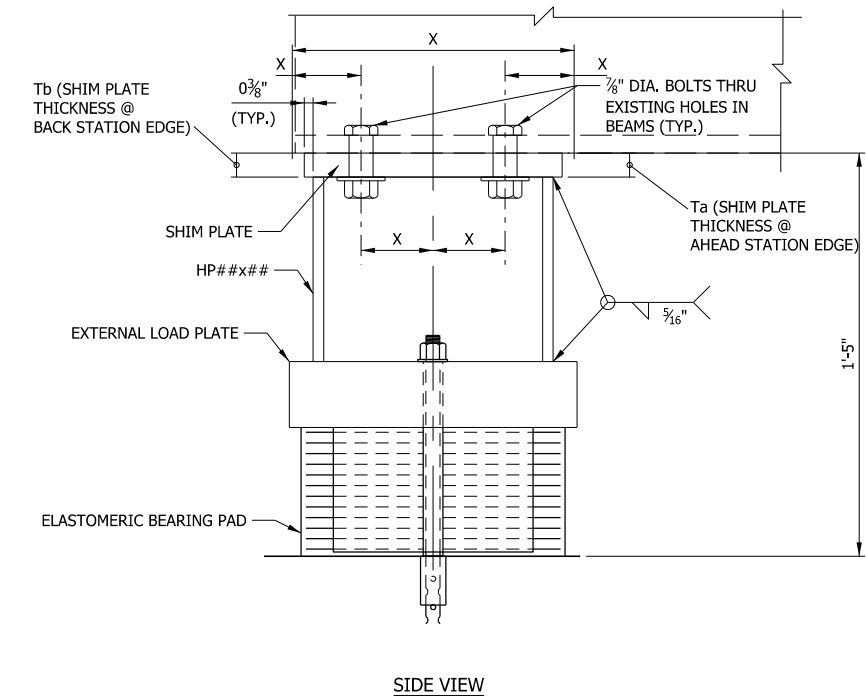
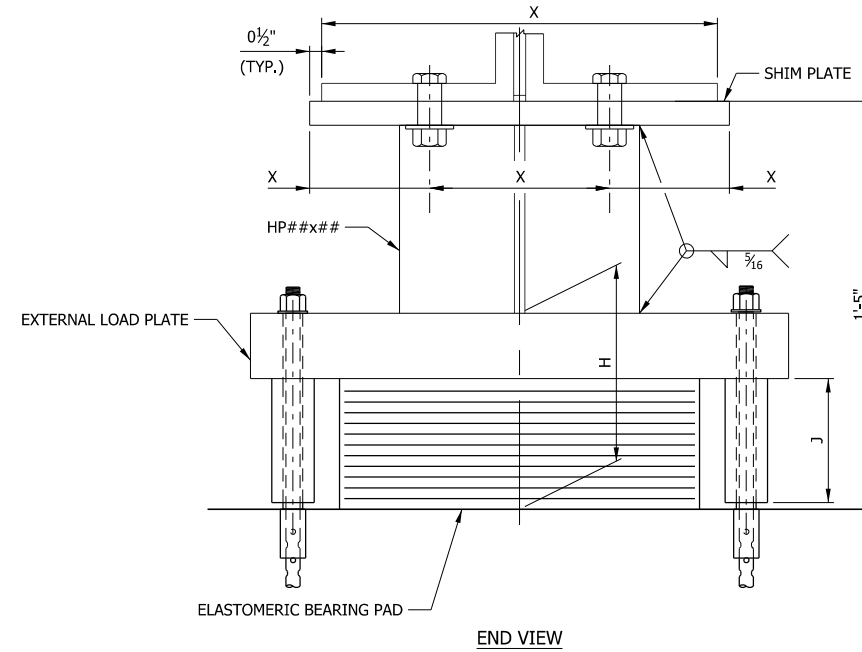
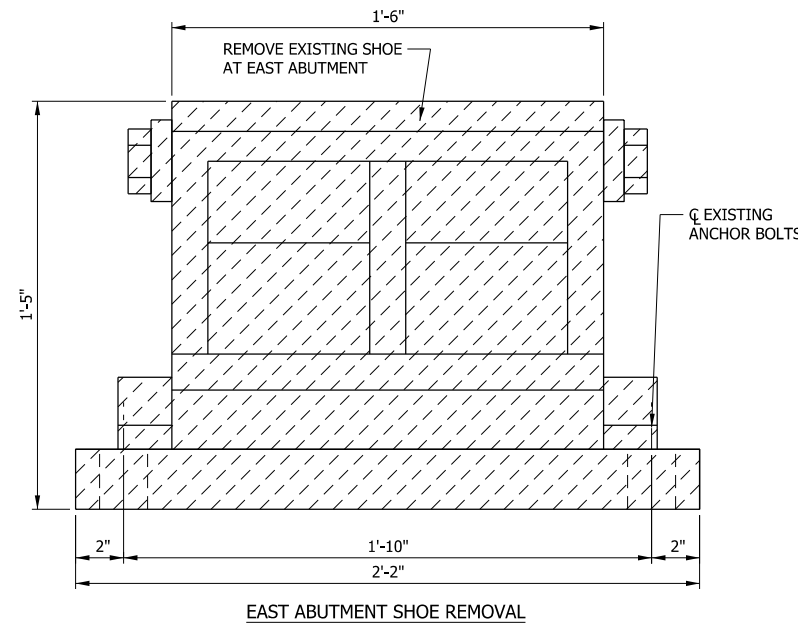
BRIDGE ENGINEER
PRINT DATE: 4/4/2025

FOR CONSTRUCTIBILITY REVIEW ONLY

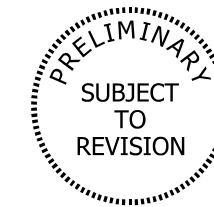
SHEET 1 OF 2
DETAILS OF ELASTOMERIC BEARINGS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.
DRAWN BY: KDH DATE: 01/2025 FILENAME: B110812_EX1.DGN
CHECKED BY: SFH DATE: 04/2025 SCALE: NONE
DESIGNED BY: XXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	14	37
02899 - ELASTOMERIC BEARINGS -						



Note:
For Table of Fabricator Values, Elastomeric Bearing Pad Detail,
Anchor Bolt Detail, and General Notes, see Dwg. No. XXXX.



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

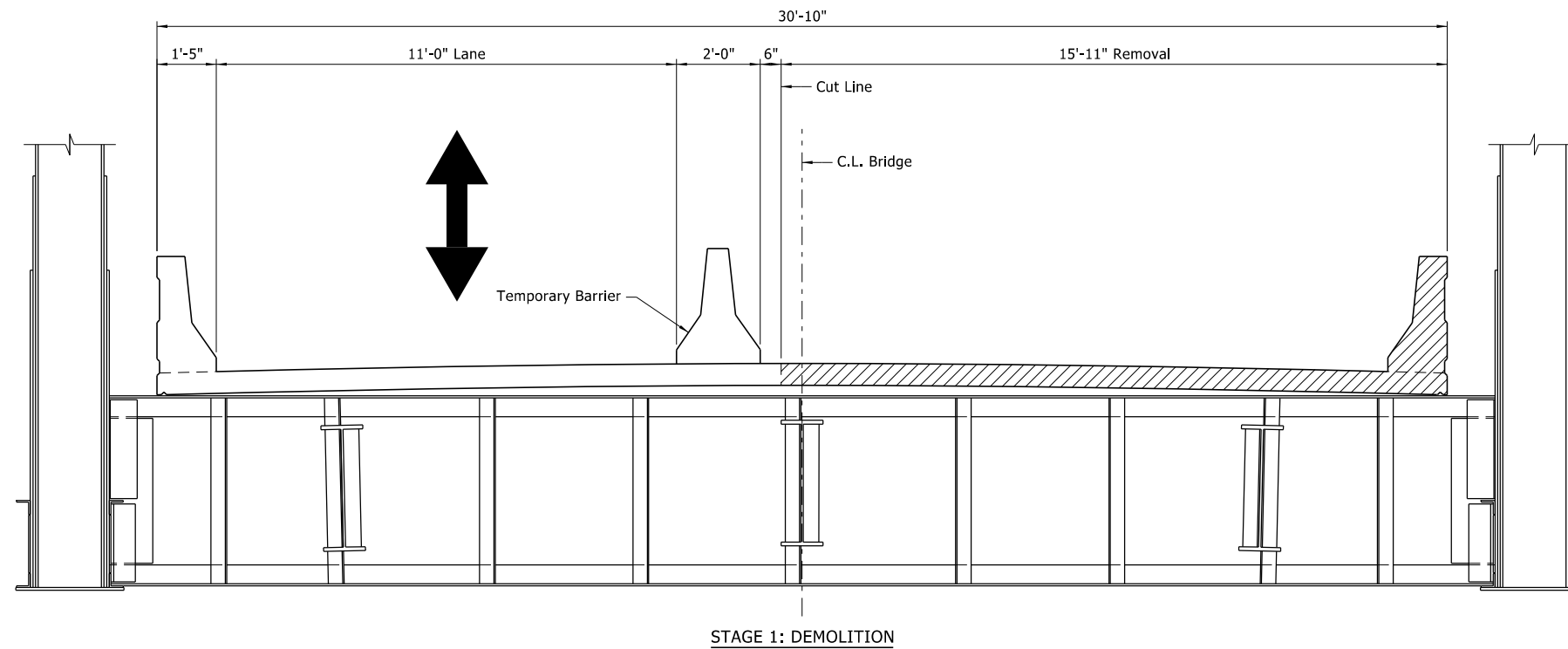
**FOR CONSTRUCTIBILITY
REVIEW ONLY**

SHEET 2 OF 2
DETAILS OF ELASTOMERIC BEARINGS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 01/2025 FILENAME: B110812_EX1.DGN
 CHECKED BY: SFH DATE: 04/2025 SCALE: NONE
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:46 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_EX1.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	15	37
02899 - STAGING DETAILS -						



STAGE 1: DEMOLITION

Notes:

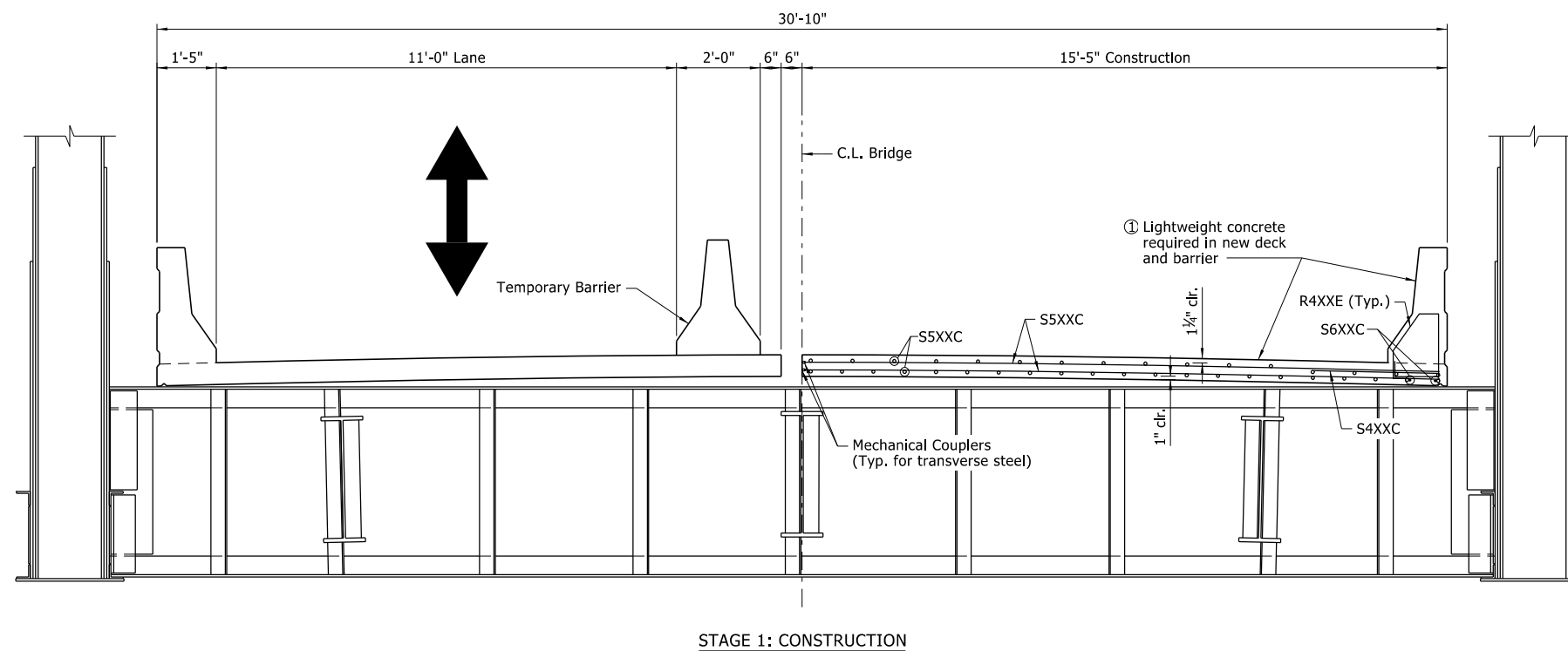
All bars designated with an "E" suffix are to be AASHTO M 31 or M 322, Type A (fy = 60,000 psi) epoxy coated reinforcing steel.

All bars designated with a "C" suffix are to be ASTM A1035-CS (fy = 100,000 psi) reinforcing steel.

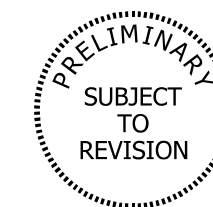
Attach temporary barrier to deck. See Roadway Std. Dwg. No. TC-4.

For Concrete barrier details see Dwg. XXXXX.

- ① Lightweight concrete, see SP JOB 110812 "Lightweight Aggregate Concrete (AE)".



STAGE 1: CONSTRUCTION



FOR CONSTRUCTIBILITY REVIEW ONLY

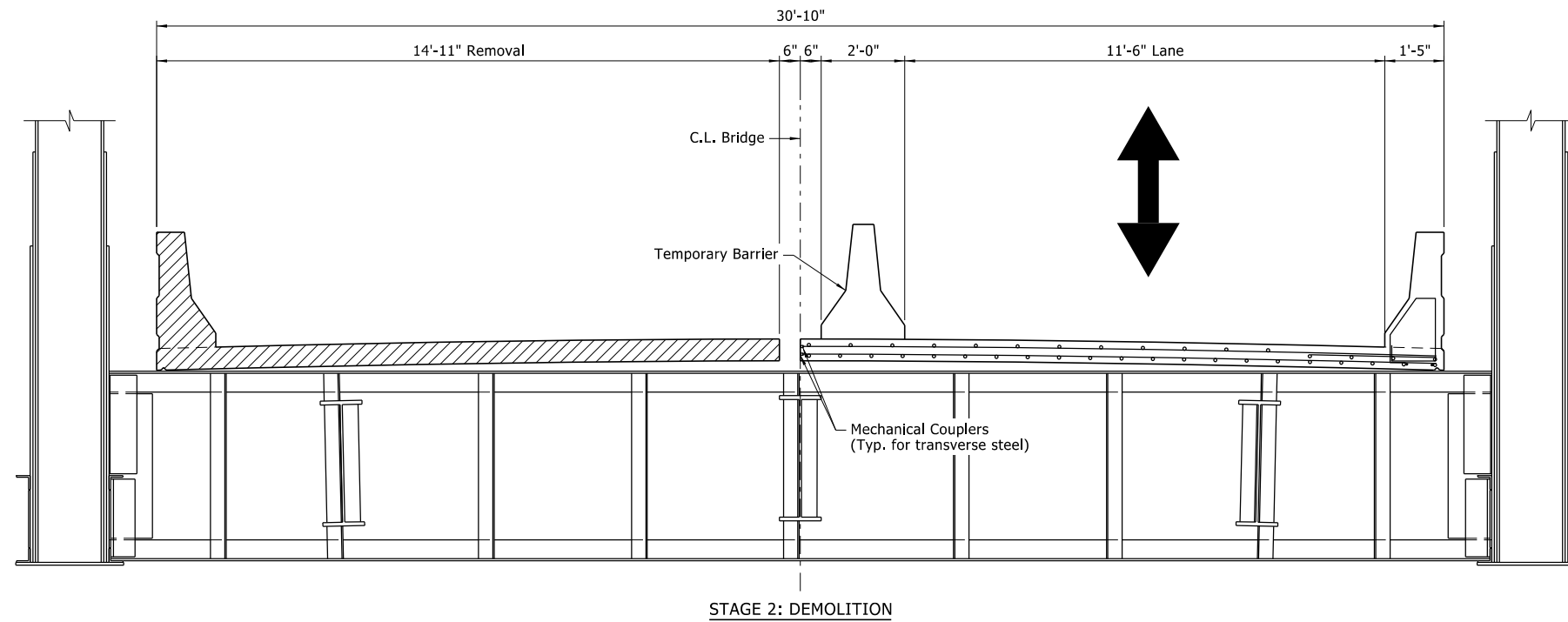
SHEET 1 OF 3
 DETAILS OF DECK REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: DGL DATE: 03/2025 FILENAME: B110812_SX1.DGN
 CHECKED BY: MKL DATE: 03/2025 SCALE: 1/2" = 1'-0"
 DESIGNED BY: MHA DATE: 03/2025
 BRIDGE NO. 02899 DRAWING NO.

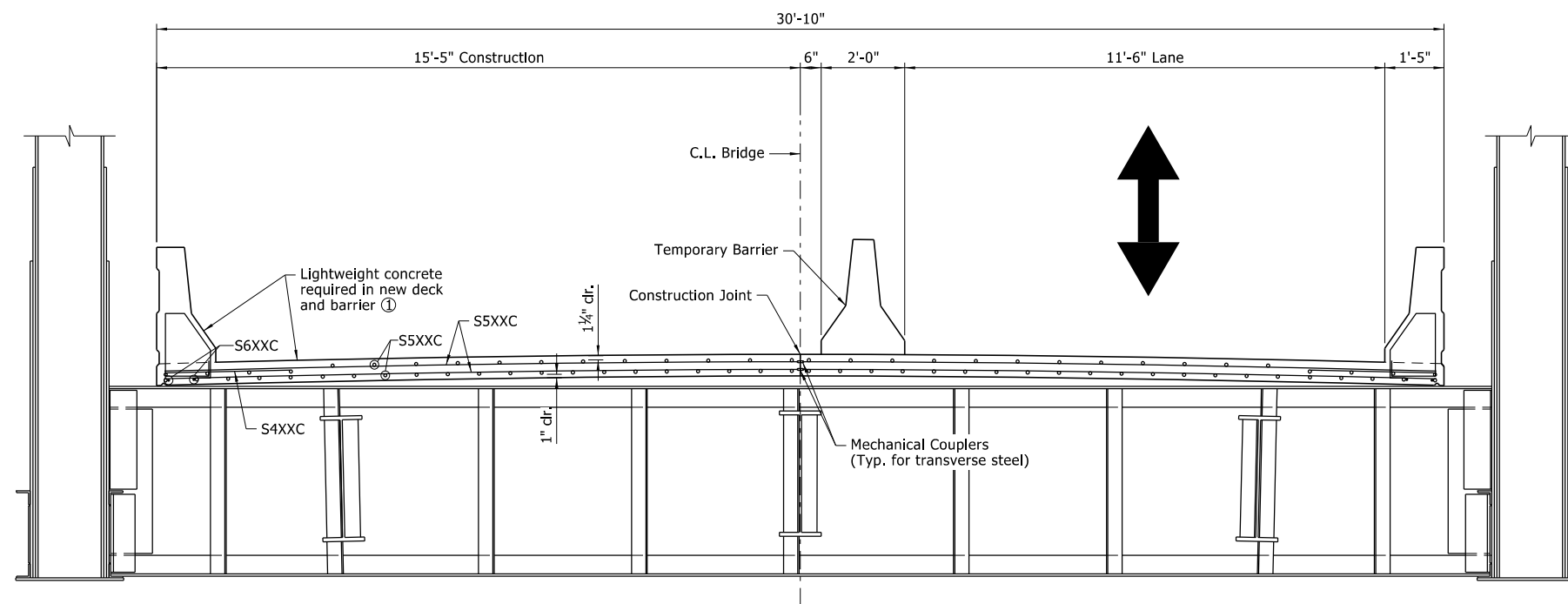
BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

4/4/2025 4:16:46 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812_Hwy_49_Miss_River_Bridge_Preservation\Design\BRIDGE Drawings\B110812_SX1.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	16	37
02899 - STAGING DETAILS -						



STAGE 2: DEMOLITION



STAGE 2: CONSTRUCTION

Notes:

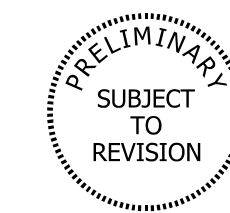
All bars designated with an "E" suffix are to be AASHTO M 31 or M 322, Type A (fy = 60,000 psi) epoxy coated reinforcing steel.

All bars designated with a "C" suffix are to be ASTM A1035-CS (fy = 100,000 psi) reinforcing steel.

Attach temporary barrier to deck. See Roadway Std. Dwg. No. TC-4.

For Concrete barrier details see Dwg. XXXXX.

- ① Lightweight concrete, see SP JOB 110812 "Lightweight Aggregate Concrete (AE)".



FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 2 OF 3

DETAILS OF DECK REPLACEMENT
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: DGL DATE: 03/2025 FILENAME: B110812_SX1.DGN

CHECKED BY: MKL DATE: 03/2025 SCALE: 1/2" = 1'-0"

DESIGNED BY: MHA DATE: 03/2025

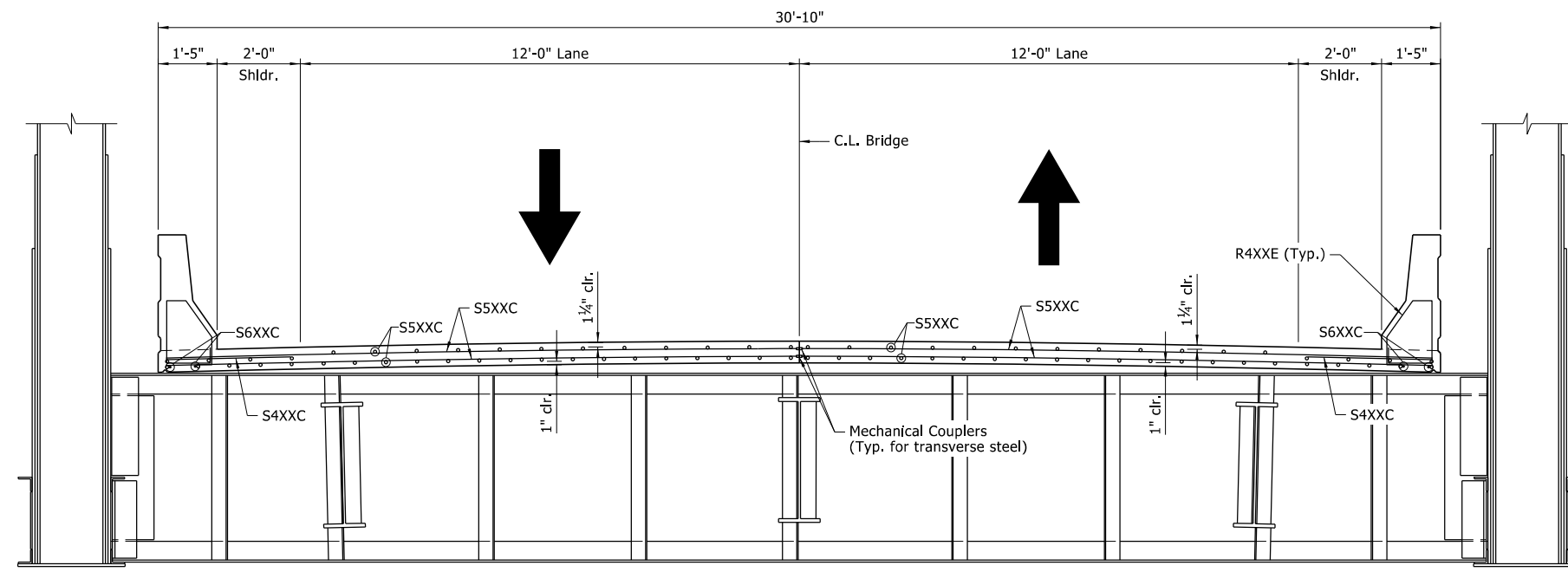
BRIDGE NO. 02899

DRAWING NO.

BRIDGE ENGINEER
PRINT DATE: 4/4/2025

4/4/2025 4:16:46 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812_Hwy_49_Miss_River_Bridge_Preservation\Design\BRIDGE Drawings\B110812_SX1.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	17	37
02899 - STAGING DETAILS -						



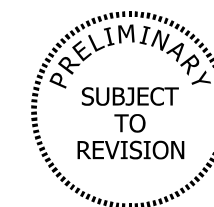
COMPLETED CONSTRUCTION

Notes:

All bars designated with an "E" suffix are to be AASHTO M 31 or M 322, Type A (fy = 60,000 psi) epoxy coated reinforcing steel.

All bars designated with a "C" suffix are to be ASTM A1035-CS (fy = 100,000 psi) reinforcing steel.

4/4/2025 4:16:46 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_SX1.dgn
 REVISED DATE:



BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

**FOR CONSTRUCTIBILITY
 REVIEW ONLY**

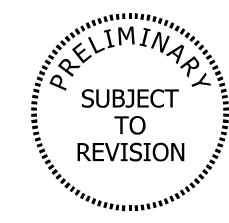
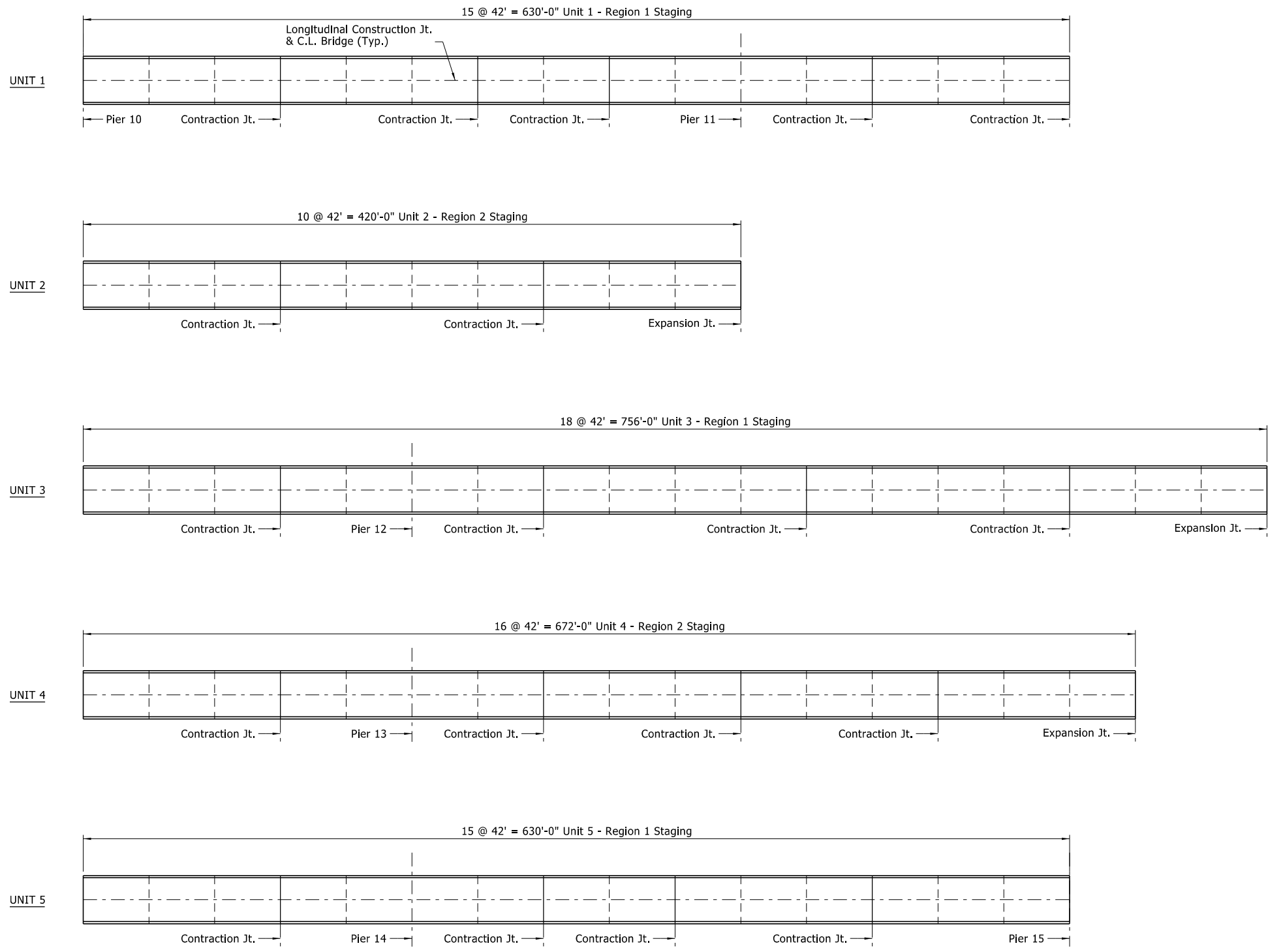
SHEET 3 OF 3
 DETAILS OF DECK REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: DGL DATE: 03/2025 FILENAME: B110812_SX1.DGN
 CHECKED BY: MKL DATE: 03/2025 SCALE: 1/2" = 1'-0"
 DESIGNED BY: MHA DATE: 03/2025
 BRIDGE NO. 02899 DRAWING NO.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	18	37
02899 - STAGING PLAN -						

NOTES:
 In addition to the Stage 1 and 2 Maintenance of Traffic Details shown on Sheet Nos. XX-XX, the Contractor shall perform main spans steel repairs and deck construction in accordance with the Regions shown to facilitate staging areas for materials and equipment.

 The Contractor shall submit for approval a plan to deviate from the Regions shown, as well as anticipated weights and layout of materials and equipment.



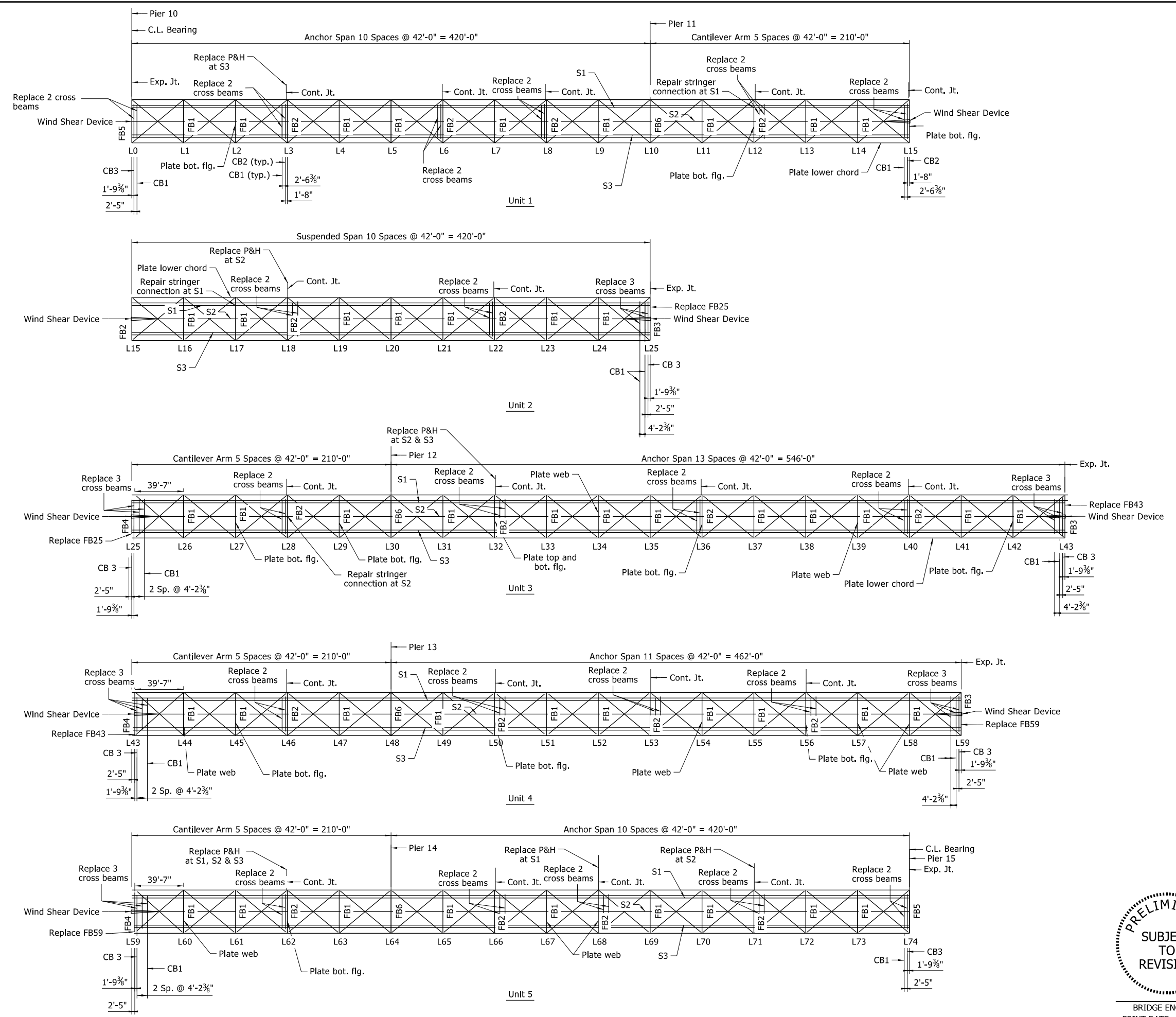
**FOR CONSTRUCTIBILITY
 REVIEW ONLY**
 STAGING PLAN OF MAIN TRUSS SPANS
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_SP1.DGN
 CHECKED BY: SFH DATE: 04/2025 SCALE: 1" = 40'
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

4/4/2025 4:16:47 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\10812_SP1.dgn
 REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	19	37
02899 - MAIN SPAN REPAIRS -						



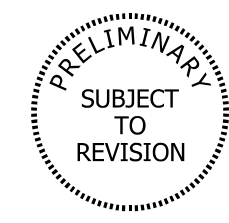
- Legend**
- CB1 - 10 I 25.4
 - CB2 - 10 WF 39
 - CB3 - 8 WF 35
 - S1 - Stringer 1 - 36 WF 150
 - S2 - Stringer 2 - 36 WF 170
 - S3 - Stringer 3 - 36 WF 150

Note: Locations requiring stiffener replacement were not included for clarity. Refer to Dwg. XXXXX for details.

**FOR CONSTRUCTIBILITY
REVIEW ONLY**

STEEL REPAIRS IN MAIN TRUSS SPANS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: SB DATE: 01/2025 FILENAME: B110812_SP2.DGN
 CHECKED BY: HSS DATE: 01/2025 SCALE: 1" = 40'
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

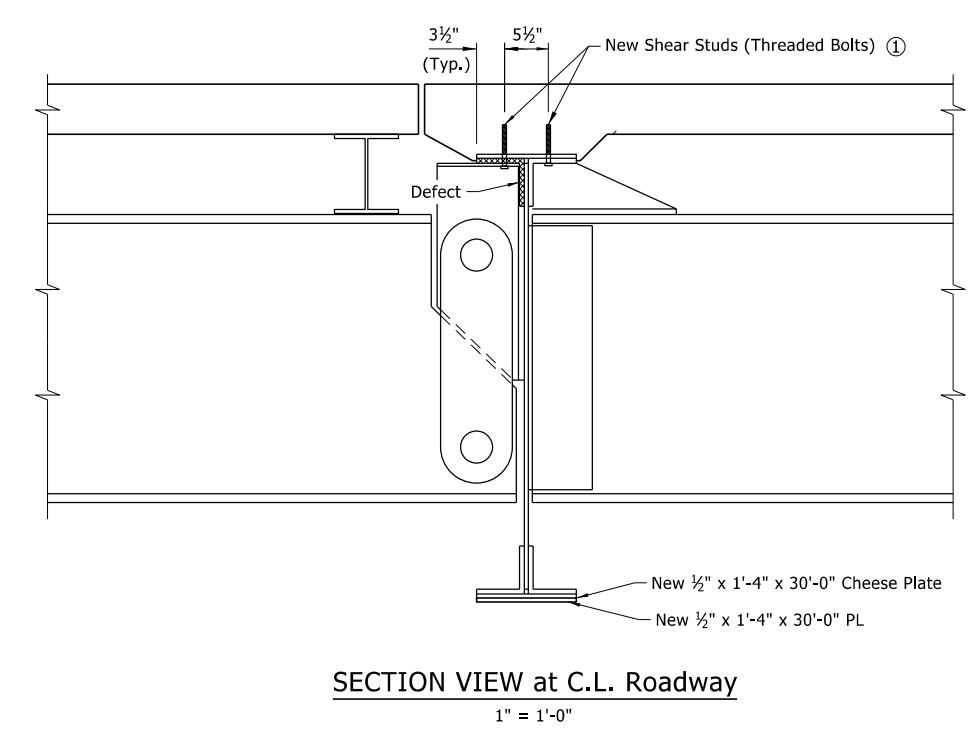
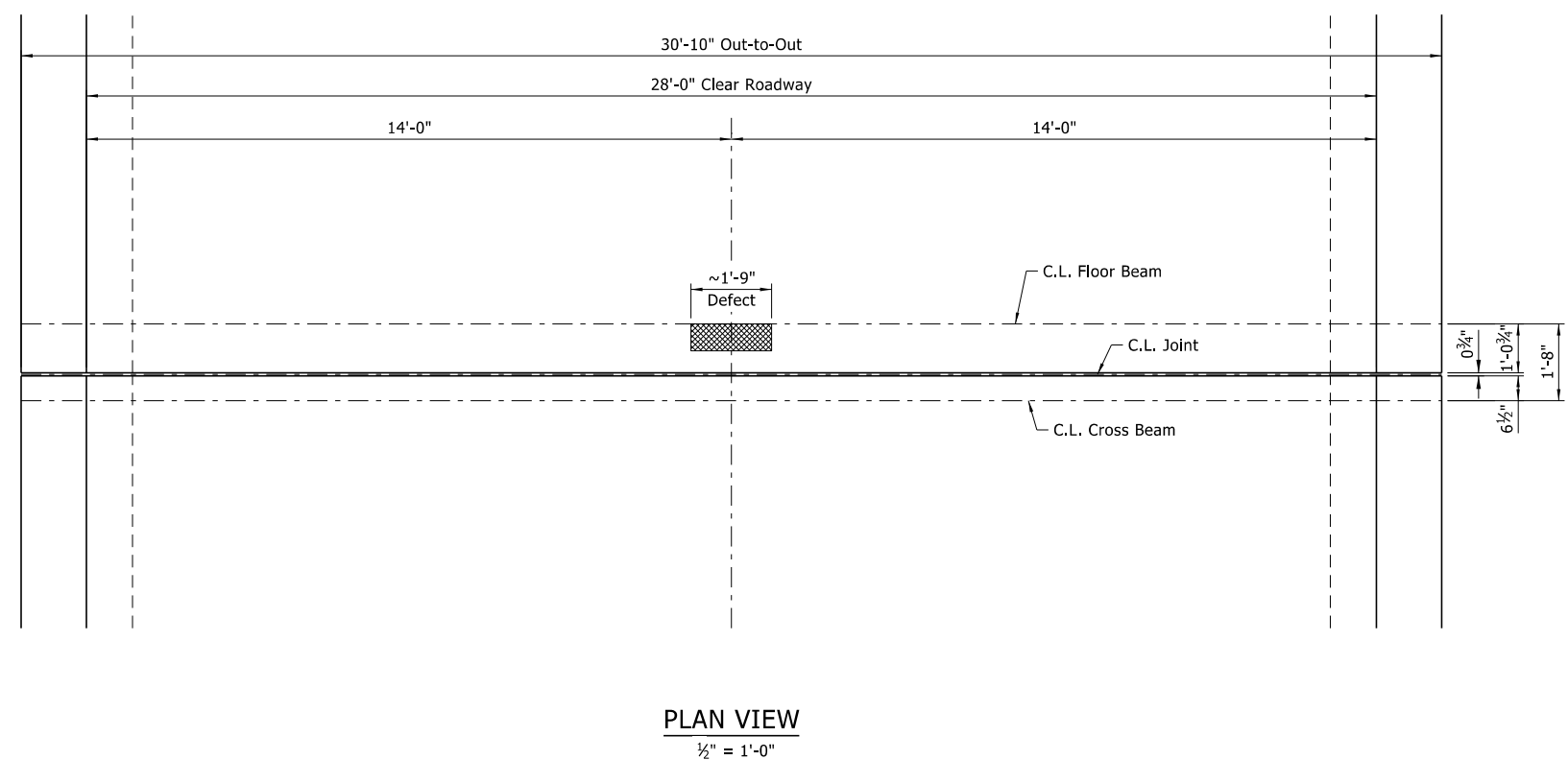
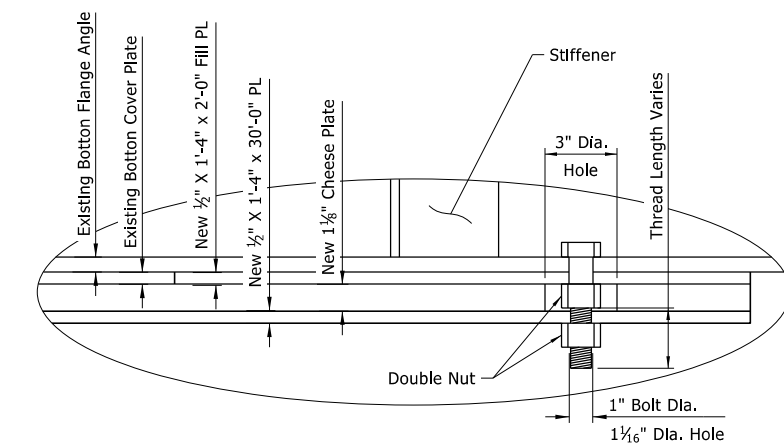
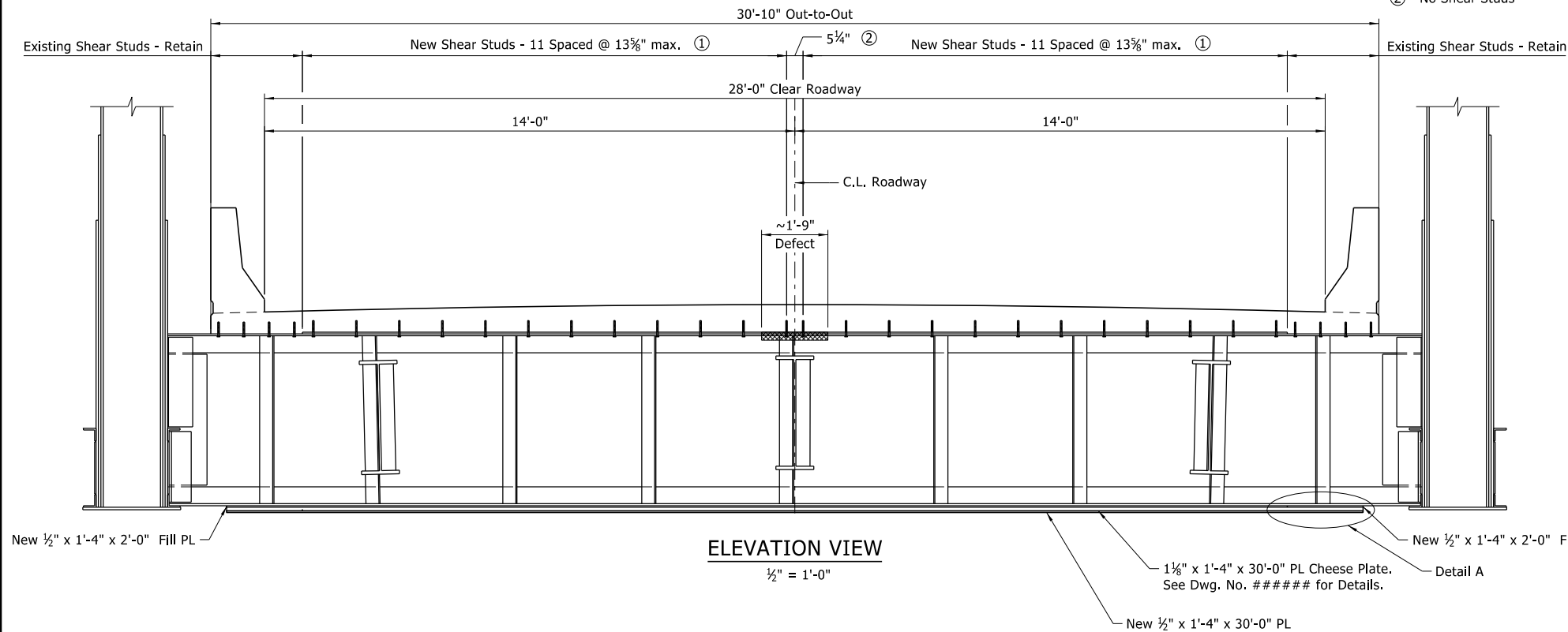


BRIDGE ENGINEER
PRINT DATE: 4/4/2025

4/4/2025 4:16:47 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_166556_10812_Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_SRI.dgn
 REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	20	37
02899 - FLOOR BEAM REPAIRS -						

- Notes:
- In locations where New Shear Studs are required, rivets shall be replaced with threaded bolts one at a time (shown on section view) when deck is removed and before pouring.
 - No Shear Studs



PRELIMINARY
SUBJECT TO REVISION
BRIDGE ENGINEER
PRINT DATE: 4/4/2025

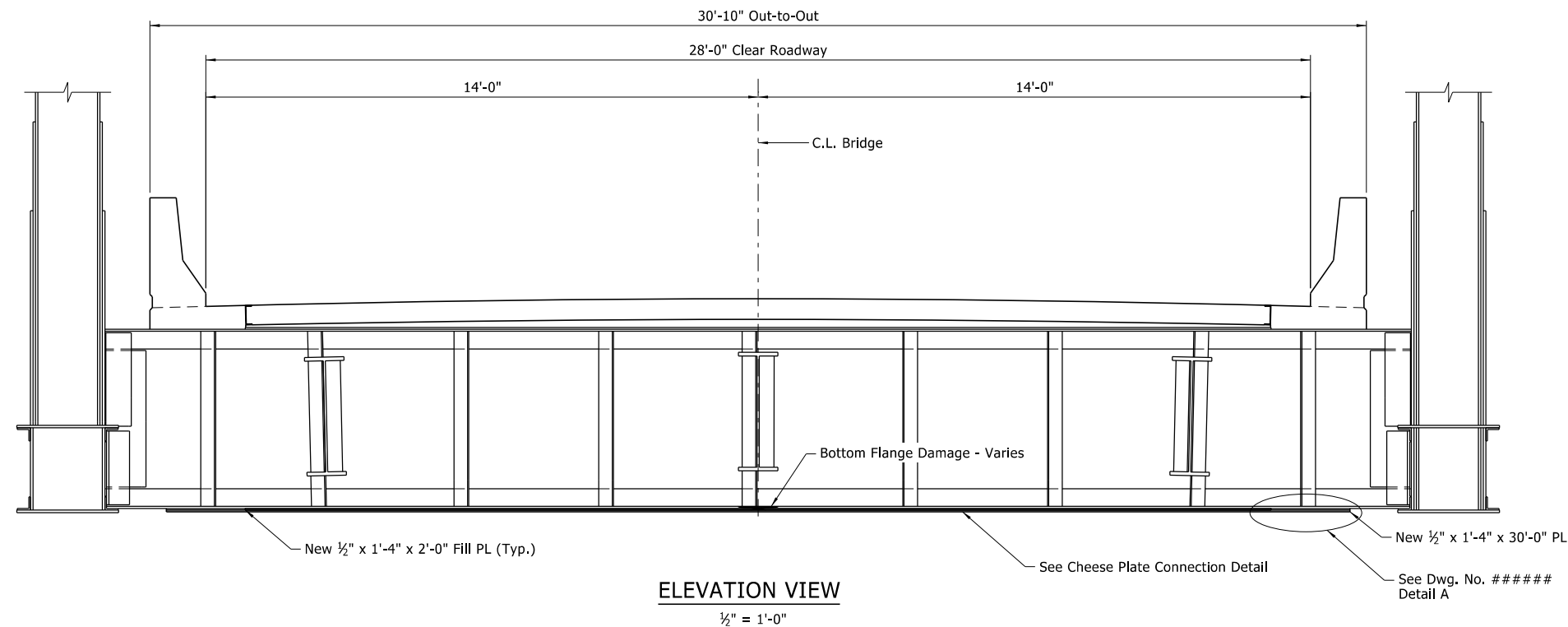
FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 1 OF 4
DETAILS OF FLOOR BEAM REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 04/2025 FILENAME: B110812_FB1.DGN
CHECKED BY: HSS DATE: 04/2025 SCALE: As Shown
DESIGNED BY: XXXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

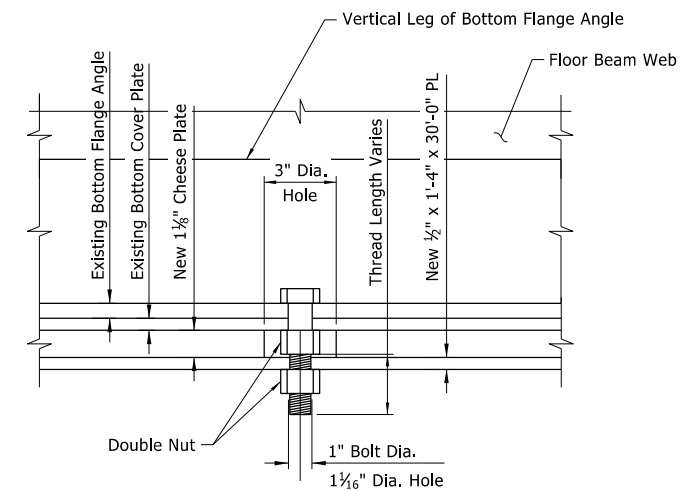
4/4/2025 4:16:47 PM
WORKSPACE: untitled
Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_FB1.dgn
REVISED DATE:

FLOOR BEAM TOP FLANGE REPAIR: PP32

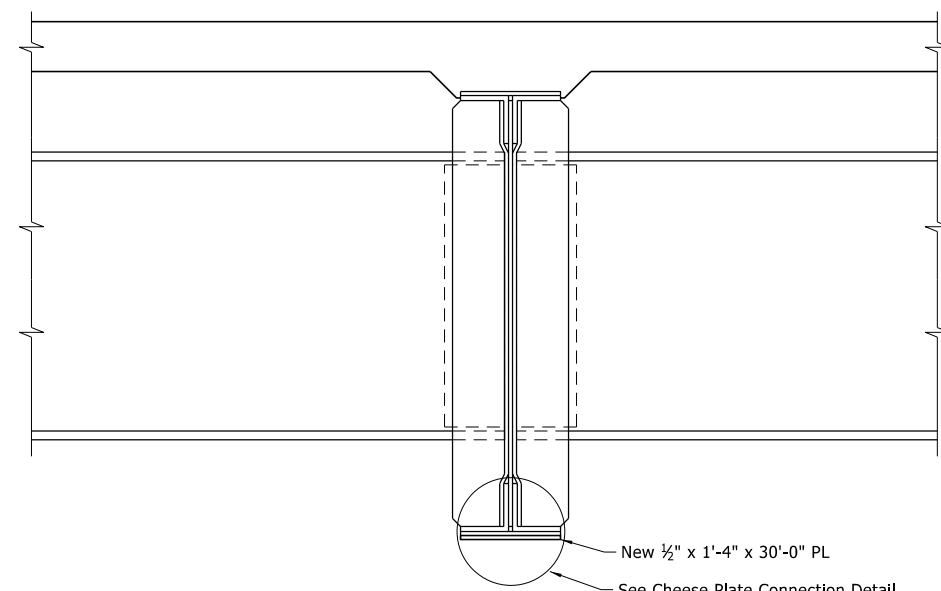
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	21	37
02899 - FLOOR BEAM REPAIRS -						



ELEVATION VIEW
1/2" = 1'-0"

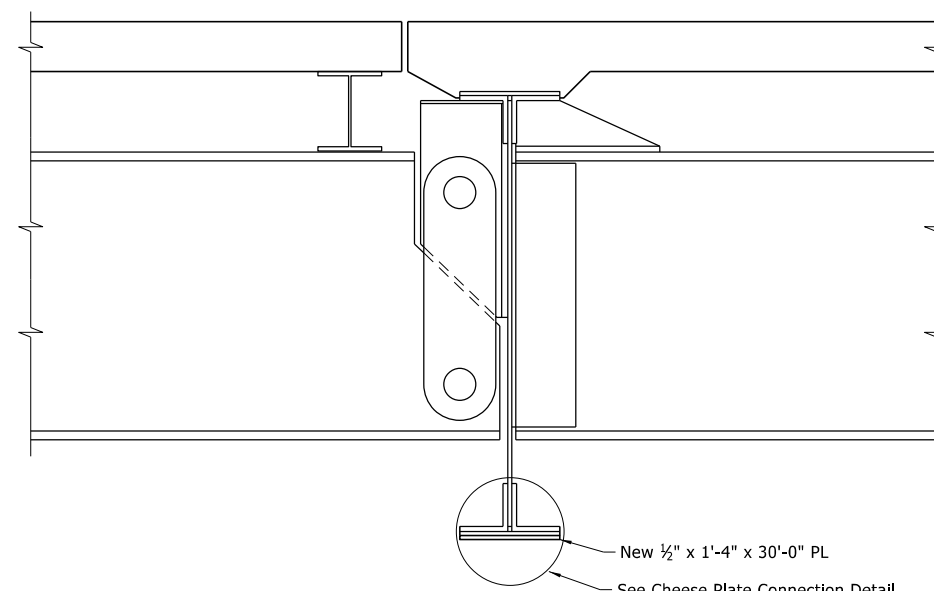


CHEESE PLATE CONNECTION DETAIL
3" = 1'-0"



SECTION VIEW THROUGH FIXED FLOOR BEAM
1" = 1'-0"

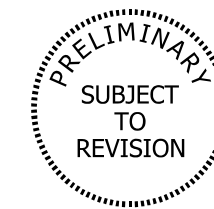
Floor Beam Bottom Flange
Repair Locations:
PP2
PP27
PP29
PP42
PP45



SECTION VIEW THROUGH CONTRACTION JOINT
1" = 1'-0"

Floor Beam Bottom Flange
Repair Locations:
PP12
PP15
PP32
PP36
PP50
PP56
PP62

FLOOR BEAM BOTTOM FLANGE REPAIR



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

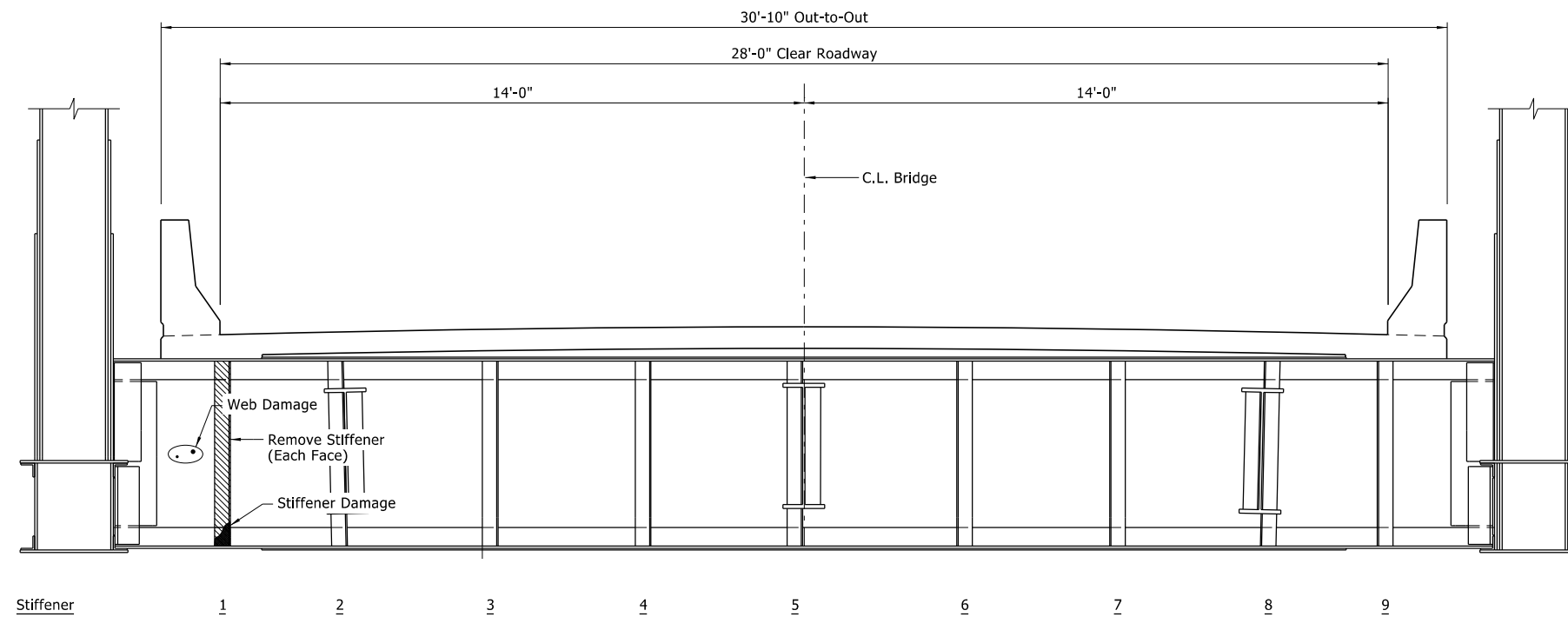
**FOR CONSTRUCTIBILITY
REVIEW ONLY**

SHEET 2 OF 4
DETAILS OF FLOOR BEAM REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_FB2.DGN
CHECKED BY: HSS DATE: 01/2025 SCALE: As Shown
DESIGNED BY: XXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:48 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_FB2.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	22	37
02899 - FLOOR BEAM REPAIRS -						



ELEVATION VIEW: REMOVAL
Looking East

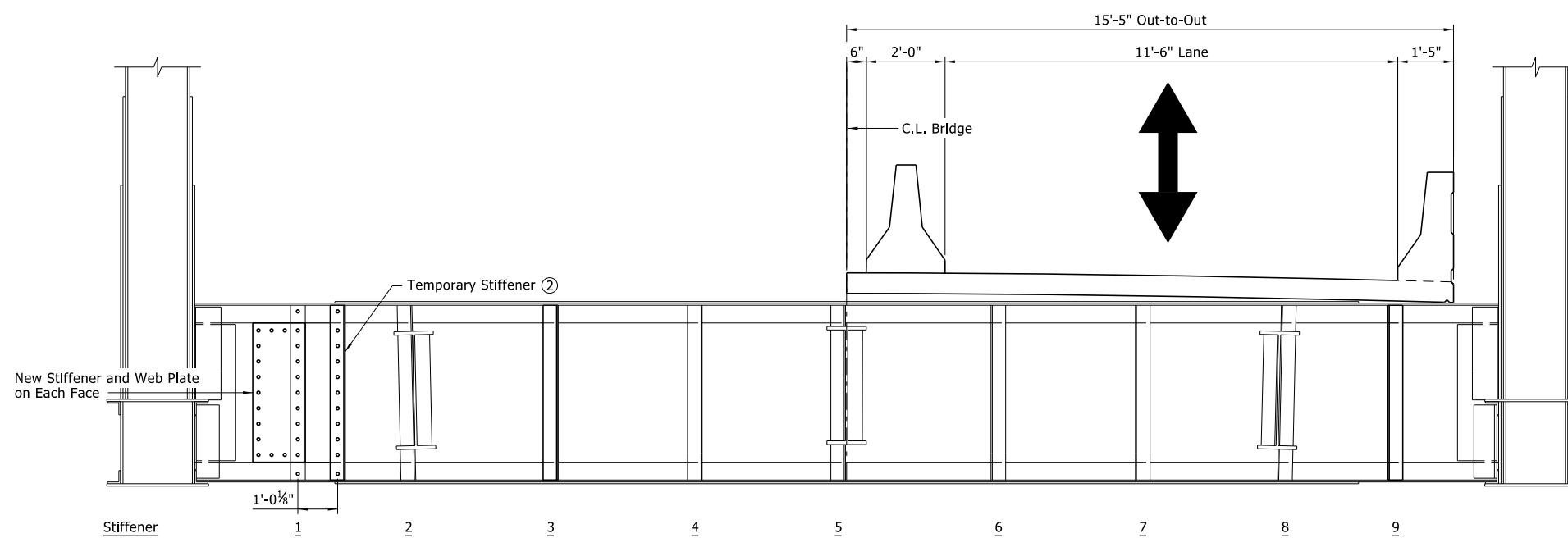
Floor Beam Web Repair and Stiffener Replacement Locations:

Panel Point	Defect Location from Left of Floor Beam
PP34	3'-0"
① PP39	1'-4" & 2'-5"
PP44	3'-4"
PP54	30'-4"
PP57	29'-11"
PP58	30'-8"
PP60	3'-4"
PP67	30'-4"
PP68	3'-4" & 30'-4"

Stiffener Replacement Locations:

Panel Point	Stiffener
PP4	1 & 9
PP18	1 & 9
PP34	1
PP36	9
PP37	1 & 9
PP38	1 & 9
PP40	1 & 9
PP41	1 & 9
PP42	1 & 9
PP44	1 & 9
PP45	1 & 9
PP46	1 & 9
PP47	9
PP48	1
PP49	9
PP50	1 & 9
PP51	1 & 9
PP52	1
PP53	9
PP54	1 & 9
PP55	1 & 9
PP57	9
PP58	9
PP60	1 & 9
PP61	9
PP62	1 & 9
PP63	1 & 9
PP64	9
PP66	1 & 9
PP67	1 & 9
PP68	1 & 9
PP69	9
PP70	9
PP72	1
PP73	9
PP74	1 & 9

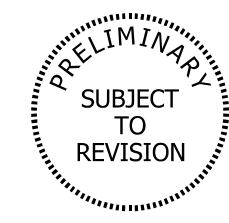
- Notes:
- ① Location does not require replacement of stiffeners.
 - ② A temporary stiffener be installed before the existing stiffener can be removed.



ELEVATION VIEW: REPAIR
Looking East

FLOOR BEAM WEB AND STIFFENER REPAIR

Note to Reviewer: Web and stiffener repair details assumes no shoring needed. Further analyses required to verify.



FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 3 OF 4

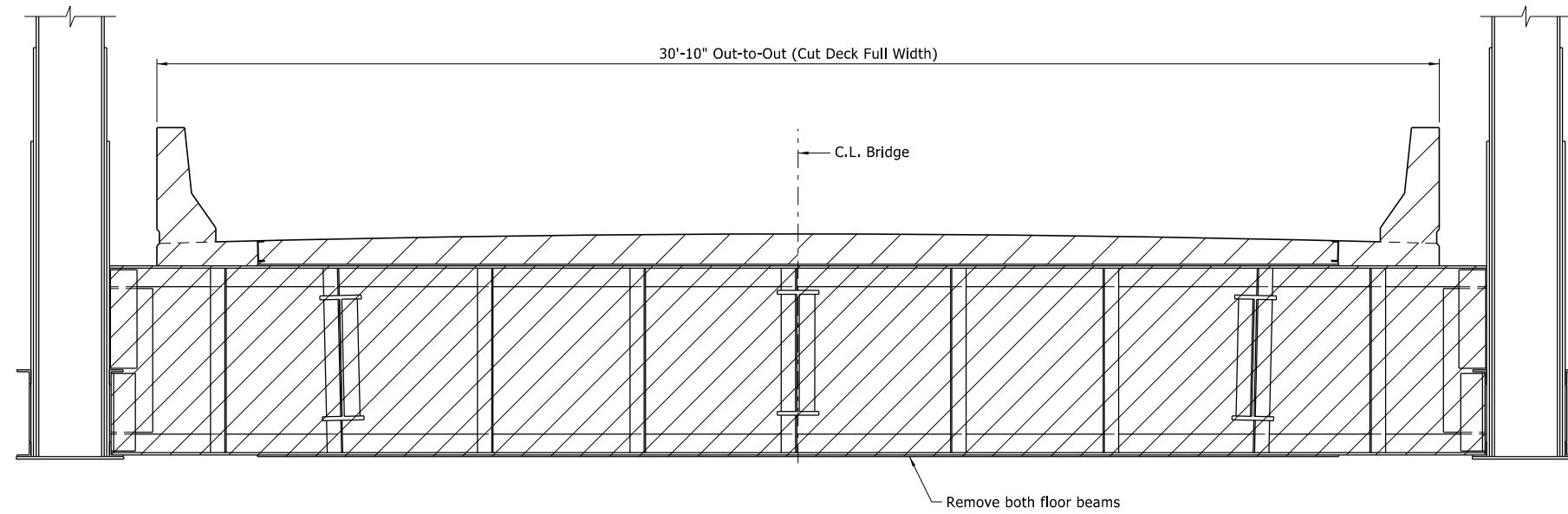
DETAILS OF FLOOR BEAM REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_FB3.DGN
 CHECKED BY: HSS DATE: 01/2025 SCALE: 1/2" = 1'-0"
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

BRIDGE ENGINEER
PRINT DATE: 4/4/2025

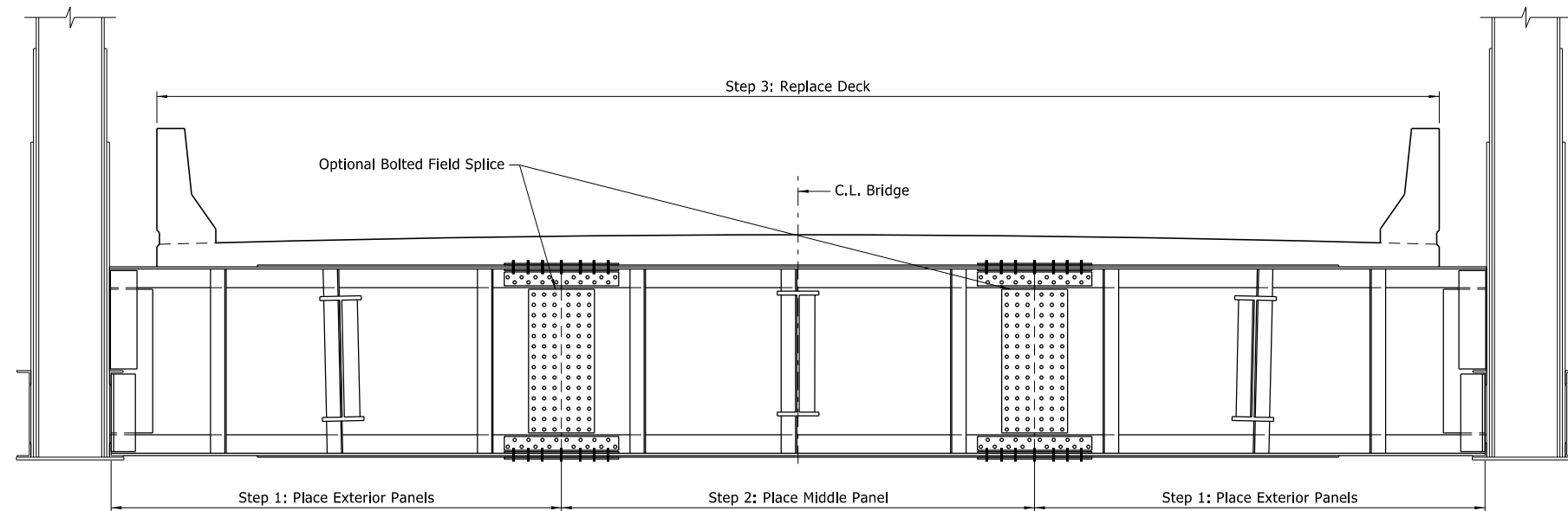
4/4/2025 4:16:48 PM
WORKSPACE: untitled
Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_FB3.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	23	37
02899 - FLOOR BEAM REPAIRS -						



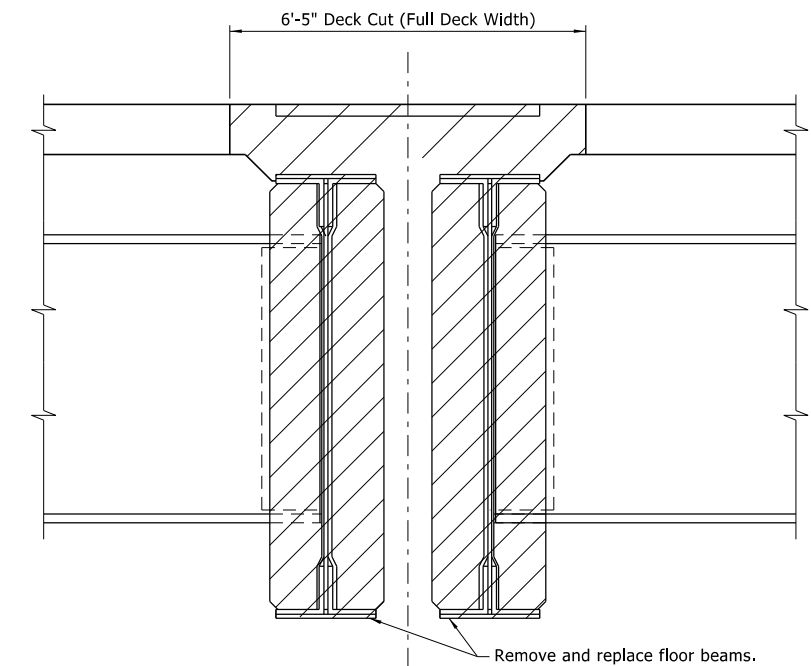
ELEVATION VIEW: REMOVAL

1/2" = 1'-0"



ELEVATION VIEW: REPLACEMENT

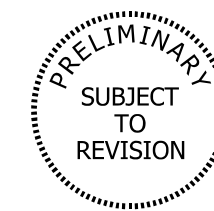
1/2" = 1'-0"



SECTION VIEW

1" = 1'-0"

Note:
Temporary Floor Beam Shoring shall be installed prior to any removal operations to provide support for stringers to remain. See Floor Beam Shoring Details on Dwg. Nos. XXXX-XXXX.



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

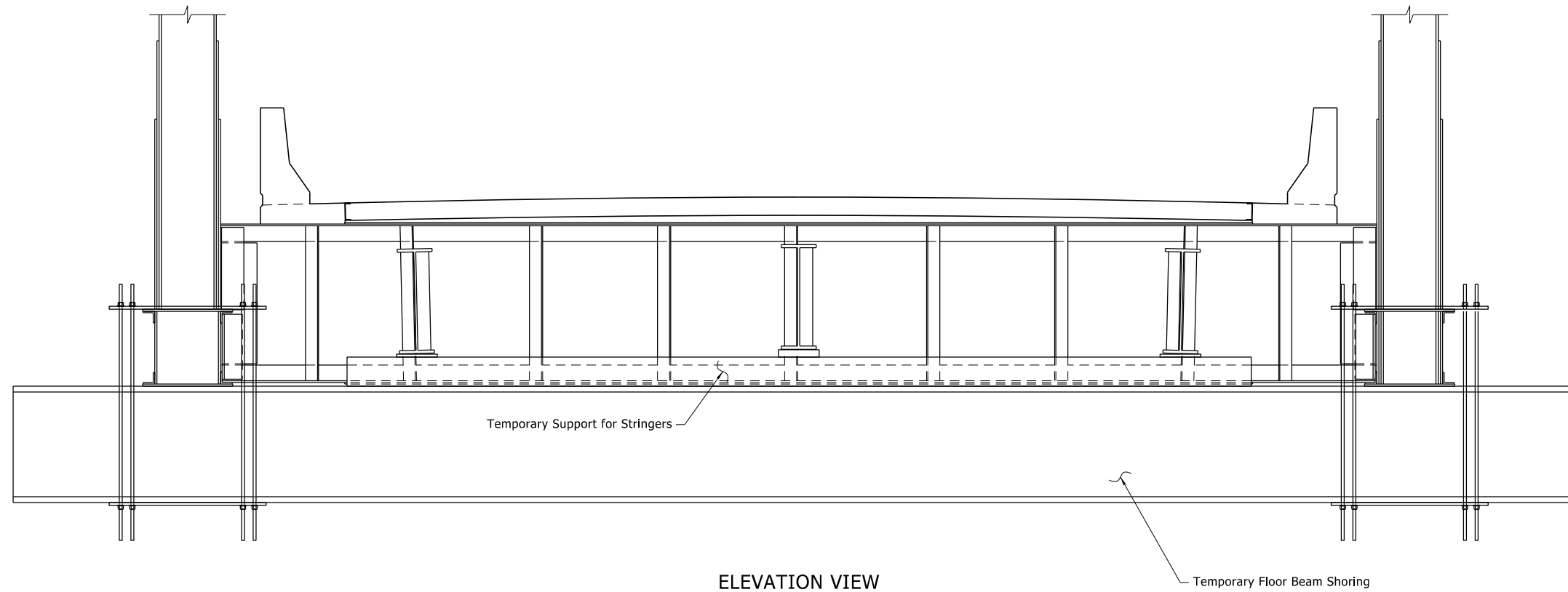
FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 4 OF 4
DETAILS OF FLOOR BEAM REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_FB4.DGN
CHECKED BY: HSS DATE: 01/2025 SCALE: As Shown
DESIGNED BY: XXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

Revised from Replacement to Repair

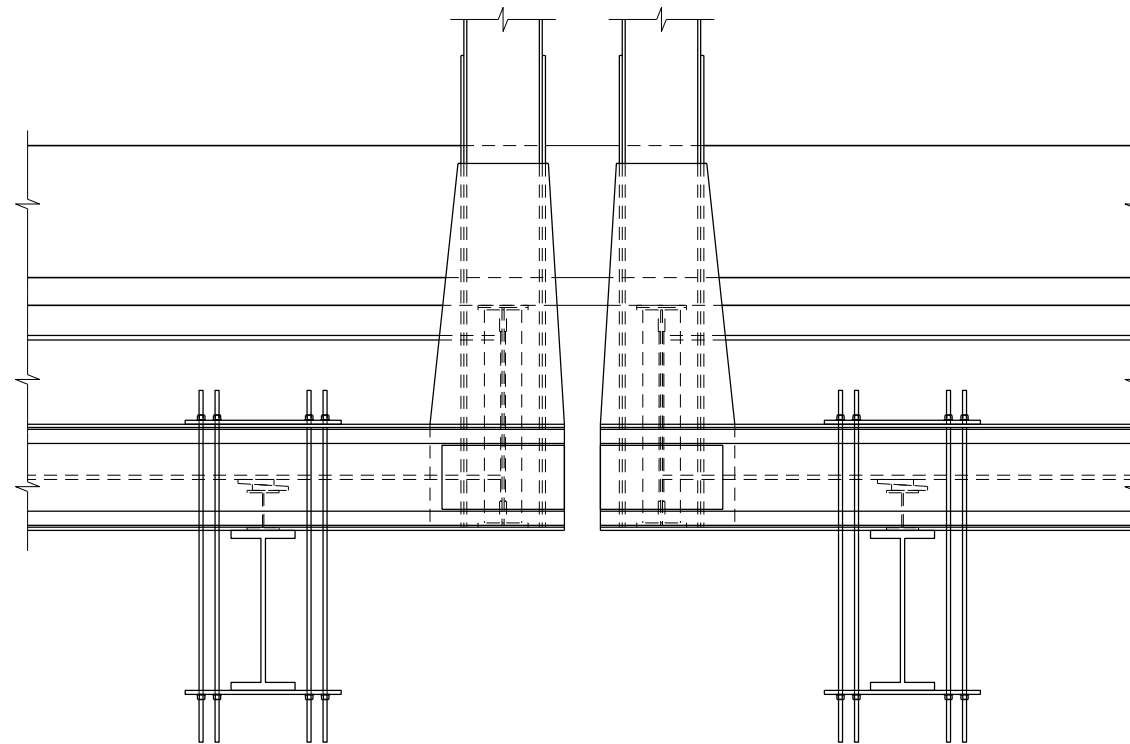
FLOOR BEAM REPLACEMENT: PP25, PP43, & PP59

4/4/2025 4:16:48 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\110812_FB4.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	24	37
02899 - FLOOR BEAM SHORING -						



ELEVATION VIEW



SECTION VIEW

Notes:
 Temporary Floor Beam Shoring details are applicable to the following repair locations and are required to be installed prior to any removal operations:
 1. Floor Beam Replacements at Panel Points 25, 43, and 59.
 2. Floor Beam Bottom Flange Repairs, see Dwg. No. XXXX for locaitons.

Details shown are for an expansion joint location. Shoring Details will be similar for Floor Beam Bottom Flange Repair Locations.

**FOR CONSTRUCTIBILITY
 REVIEW ONLY**

DETAILS OF FLOOR BEAM SHORING
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

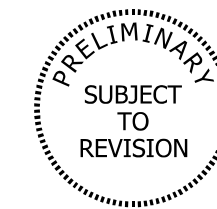
DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_FBS.DGN

CHECKED BY: XXX DATE: XX/2025 SCALE: 1/2" = 1'-0"

DESIGNED BY: XXX DATE: XX/2025

BRIDGE NO. 02899

DRAWING NO.

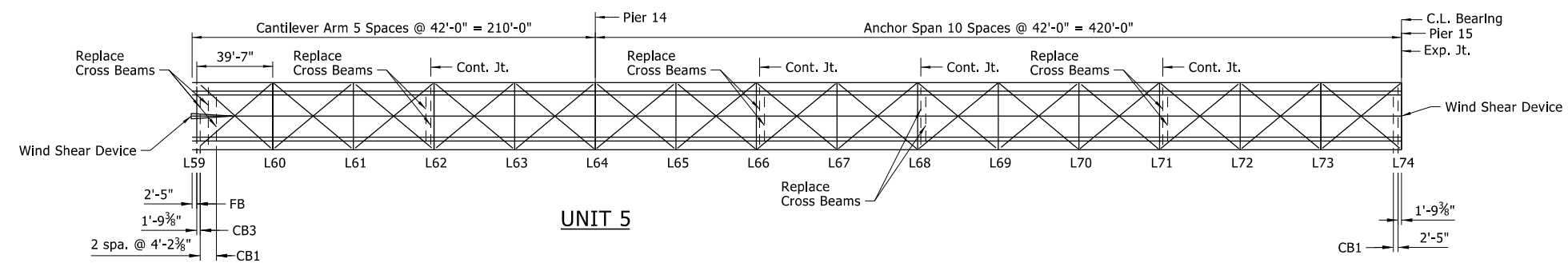
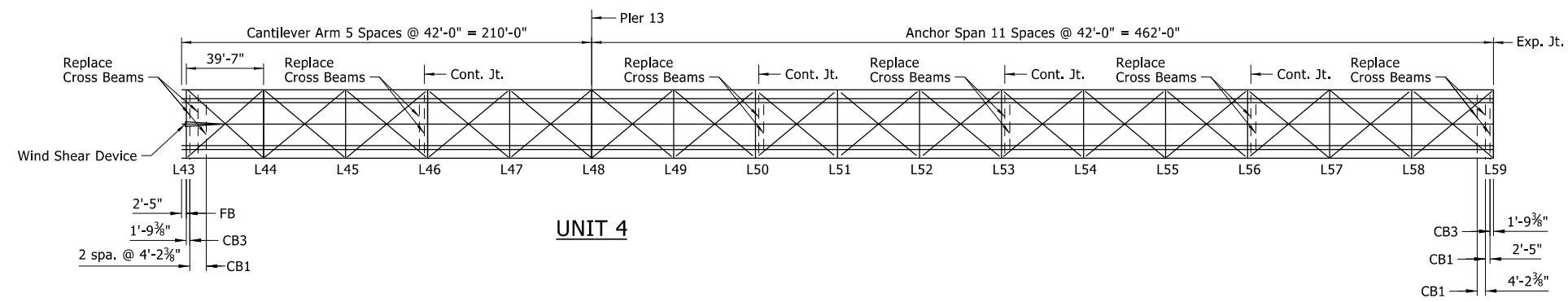
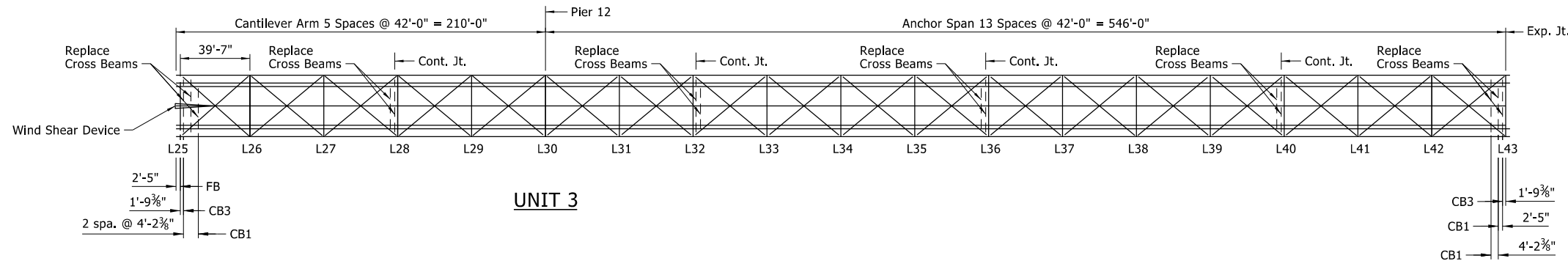
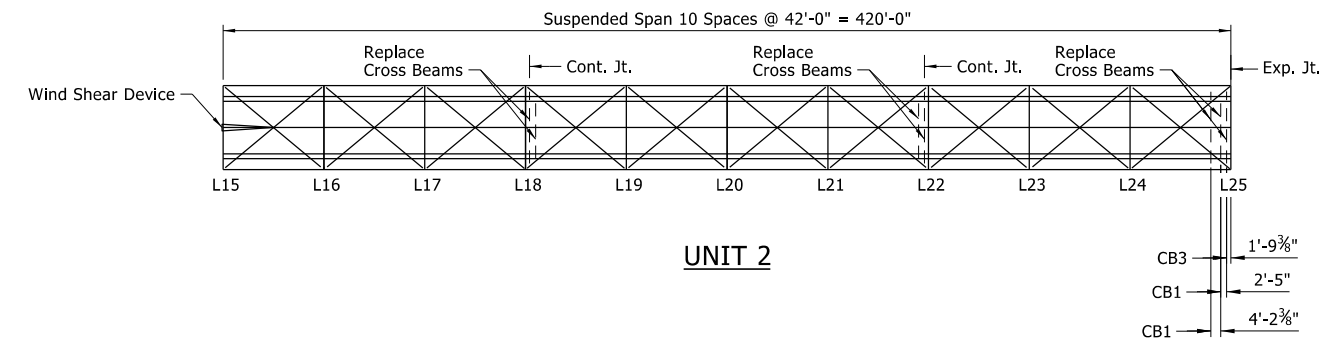
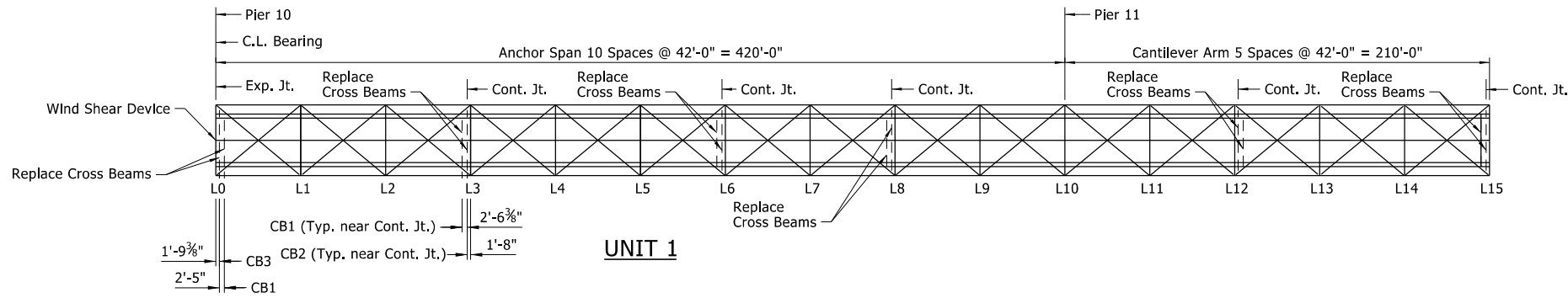


BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

Note to Reviewer:
 Temporary Shoring Details shown are conceptual and will be fully designed and detailed for final plans.

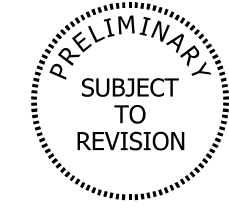
4/4/2025 4:16:49 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_FBS.dgn
 REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	25	37
02899 - CROSS BEAMS -						



Note:
 CB1 refers to S10x25.4 (formerly 10 I 25.4).
 CB2 refers to W10x39 (formerly 10 WF 39).
 CB3 refers to W8x35 (formerly 8 WF 35).

4/4/2025 4:16:49 PM
 WORKSPACE: unthred
 Y:\Projects\VAR001_166556_10812_Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_CB1.dgn
 REVISED DATE:



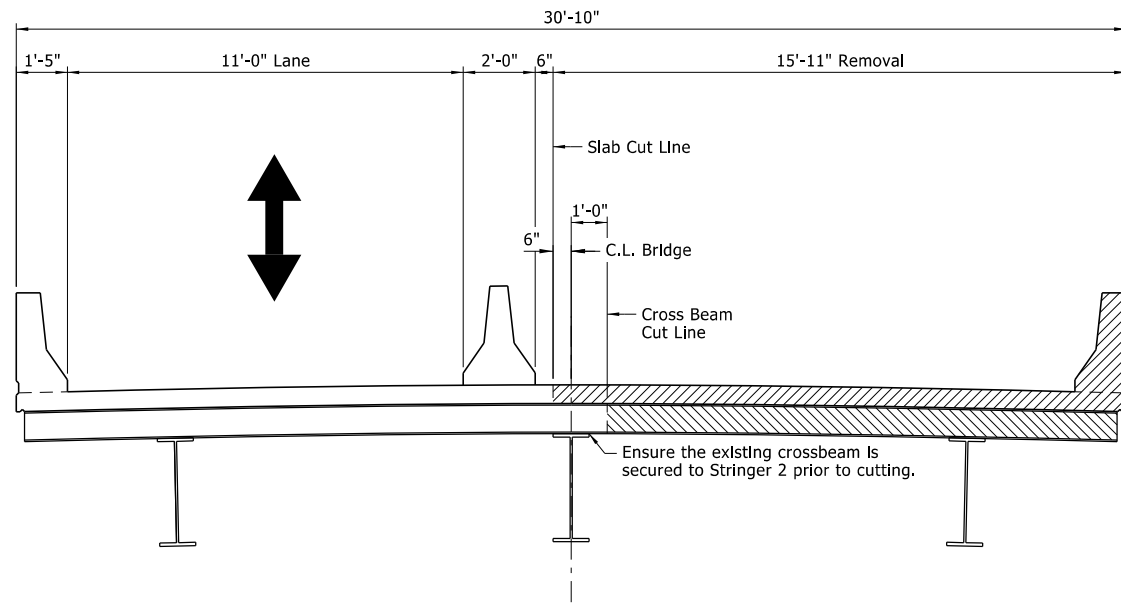
BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

FOR CONSTRUCTIBILITY REVIEW ONLY

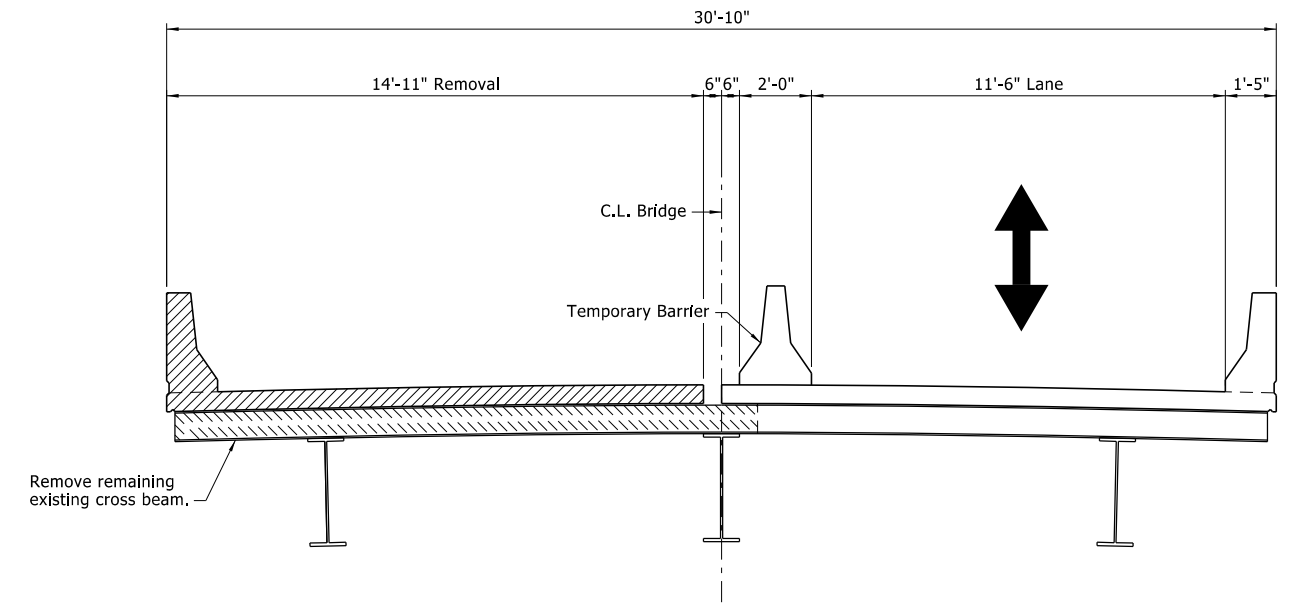
SHEET 1 OF 2
 DETAILS OF CROSS BEAM REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: SB/MKL DATE: 01/2025 FILENAME: B110812_CB1.DGN
 CHECKED BY: SFH DATE: 04/2025 SCALE: 1" = 40'
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

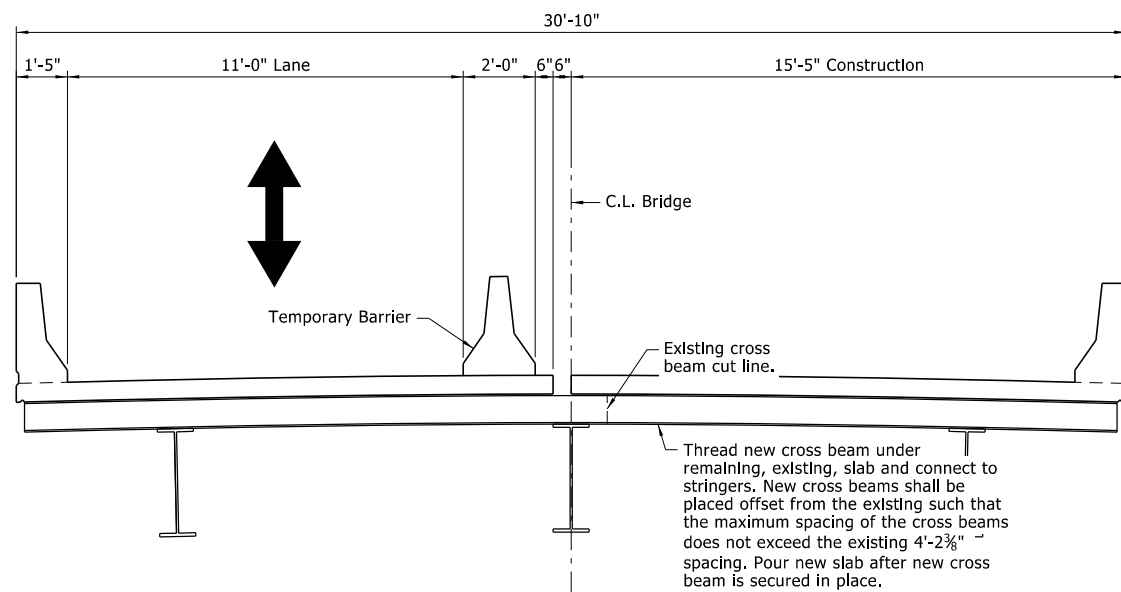
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	26	37
02899 - CROSS BEAMS -						



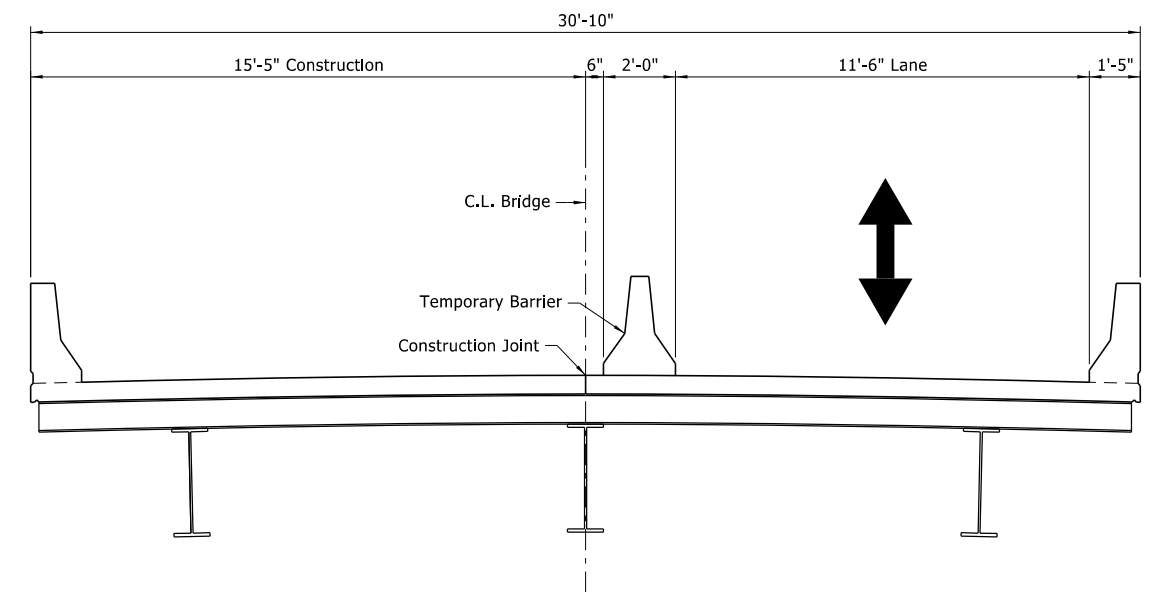
STAGE 1: DEMOLITION



STAGE 2: DEMOLITION

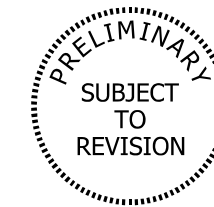


STAGE 1: CONSTRUCTION



STAGE 2: CONSTRUCTION

4/4/2025 4:16:49 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_CB2.dgn
 REVISION DATE:

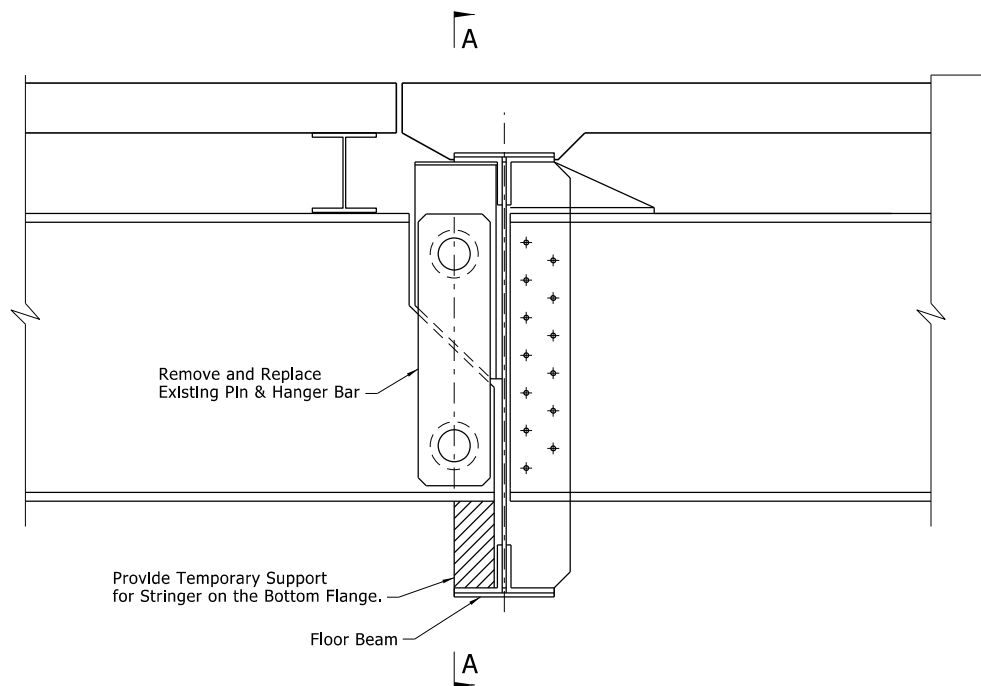


BRIDGE ENGINEER
PRINT DATE: 4/4/2025

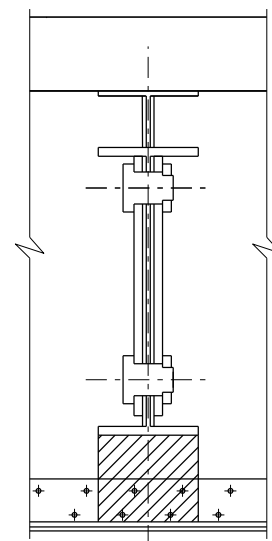
FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 2 OF 2

DETAILS OF CROSS BEAM REPLACEMENT
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 03/2025 FILENAME: B110812_CB2.DGN
 CHECKED BY: SFH DATE: 04/2025 SCALE: 3/8" = 1'-0"
 DESIGNED BY: MKL DATE: 03/2025
 BRIDGE NO. 02899 DRAWING NO.



STRINGER PIN AND HANGER REPAIR
1" = 1'-0"

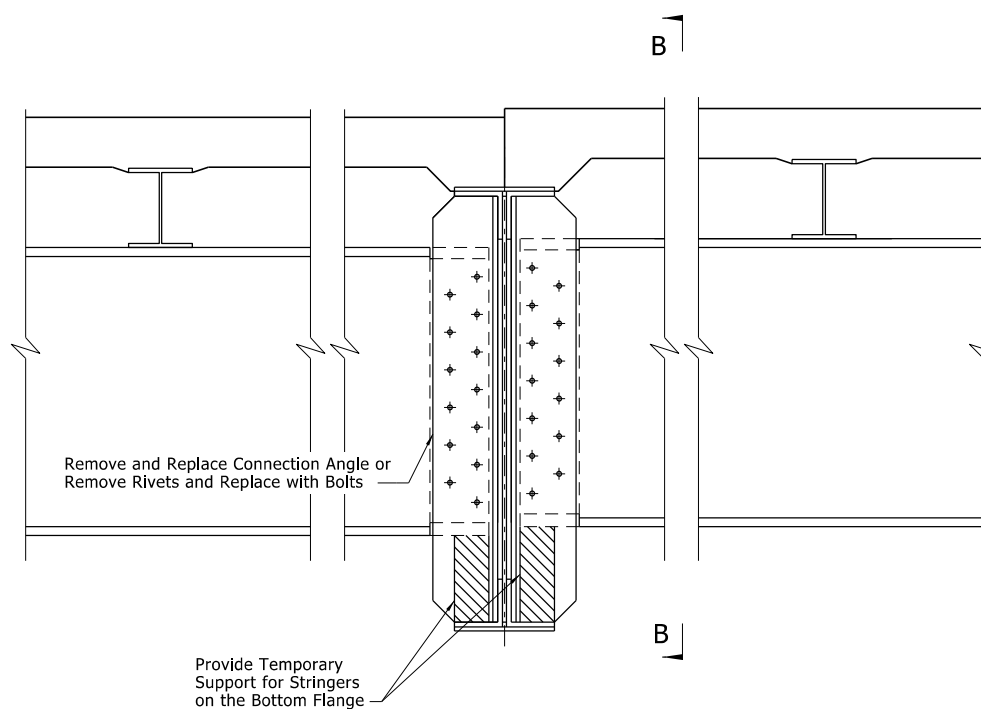


SECTION A-A
1" = 1'-0"

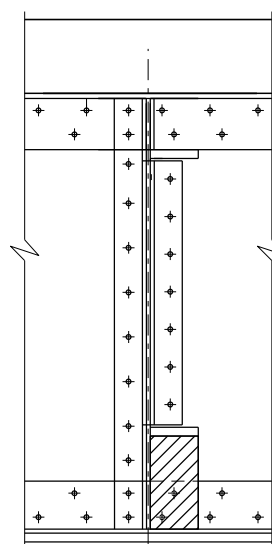
Pin and Hanger Repair Locations

Panel Point	Stringer
3	3
18	2
32	2
32	3
62	1
62	2
62	3
68	1
71	2

Note:
Refer to Dwg. No. ##### for Stringer Locations.



STRINGER CONNECTION TO FLOOR BEAMS
1" = 1'-0"



SECTION B-B
1" = 1'-0"

Stringer Connection Repair Locations and Actions

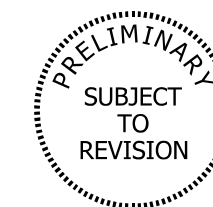
Panel Point	Stringer	Action
12	1	Replace Upstream Connection Angle at West Face of Floor Beam.
17	1	Remove Broken Rivets and Replace with Bolts at West Face of Floor Beam.
28	2	Replace Upstream Connection Angle and Remove and Replace with Bolts with Bolts on Downstream Angle both at East Face of Floor Beam.

Note:
Refer to Dwg. No. ##### for Stringer Locations.

**FOR CONSTRUCTIBILITY
REVIEW ONLY**

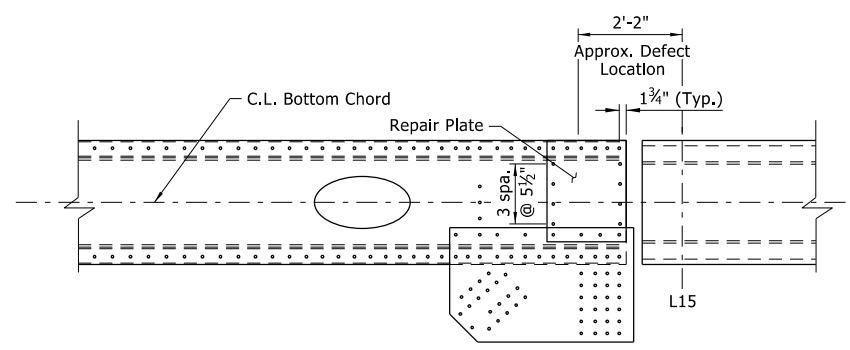
DETAILS OF PIN AND HANGER AND
STRINGER CONNECTION REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: SWB DATE: 01/2025 FILENAME: B110812_PH1.DGN
 CHECKED BY: HSS DATE: 04/2025 SCALE: 1" = 1'-0"
 DESIGNED BY: MKL DATE: 04/2025
 BRIDGE NO. 02899 DRAWING NO.

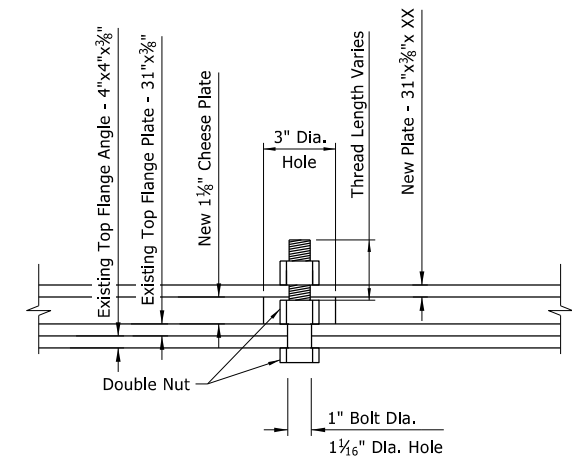


BRIDGE ENGINEER
PRINT DATE: 4/4/2025

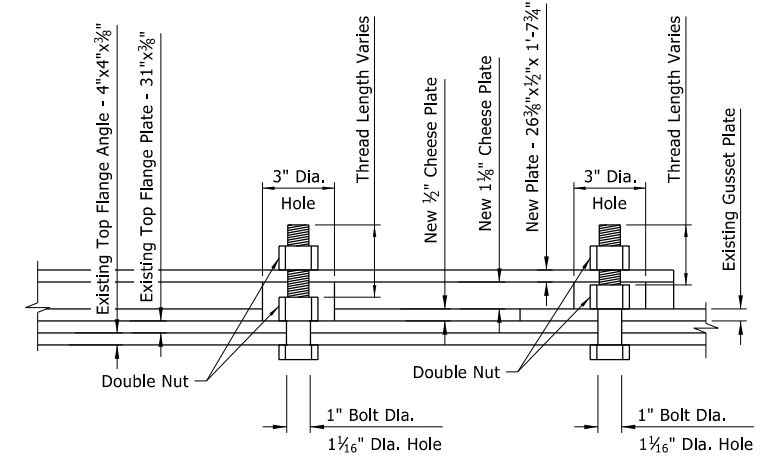
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	28	37
02899 - LOWER CHORD REPAIRS -						



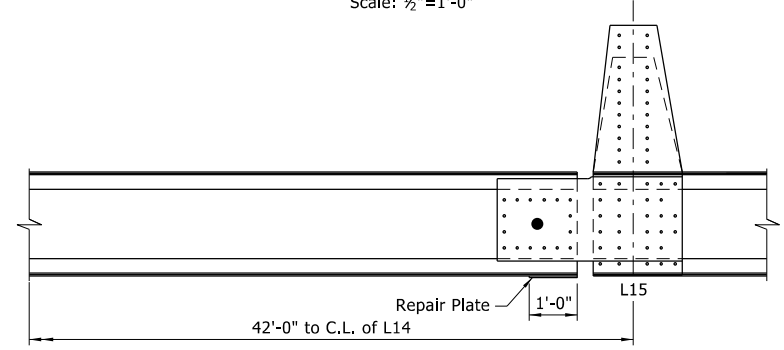
PLAN - L14-15 DOWNSTREAM
Looking From Bottom
Scale: 1/2"=1'-0"



CHEESE PLATE CONNECTION DETAIL - TOP FLANGE
No Scale



CHEESE PLATE CONNECTION DETAIL - BOTTOM FLANGE
No Scale



ELEVATION - L14-L15 DOWNSTREAM
Scale: 1/2"=1'-0"

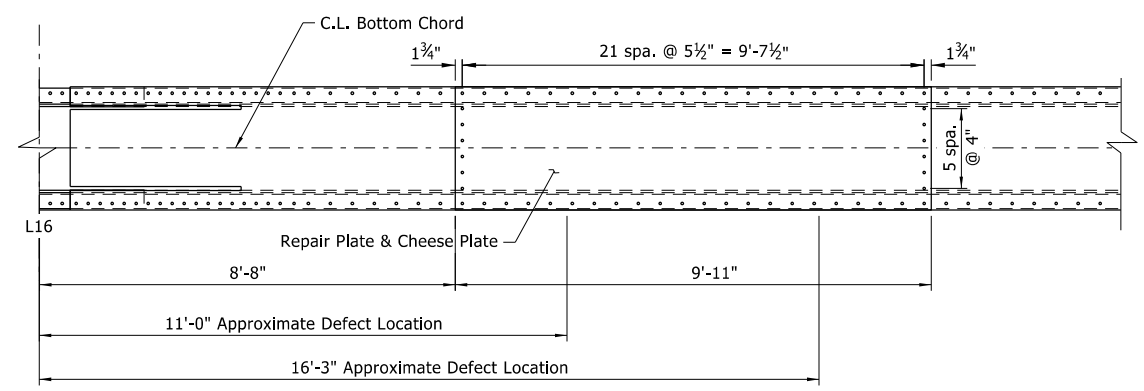
Note:
Remove existing rivets one at a time and replace with new high strength bolts and double nuts.

UPSTREAM

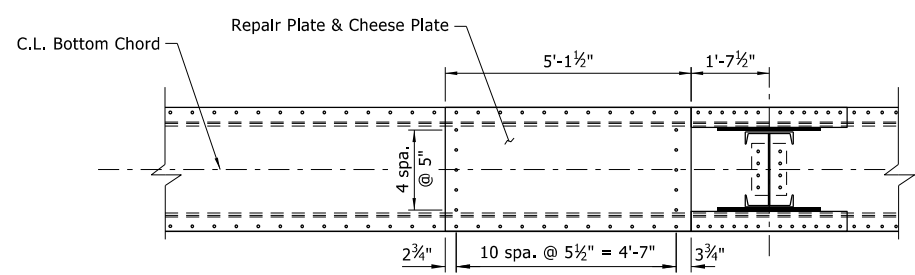
LOCATION	PLATE THK. X LENGTH (Inches)
L16-L17 TOP FLANGE	3/8" x 31" x 9'-11"

DOWNSTREAM

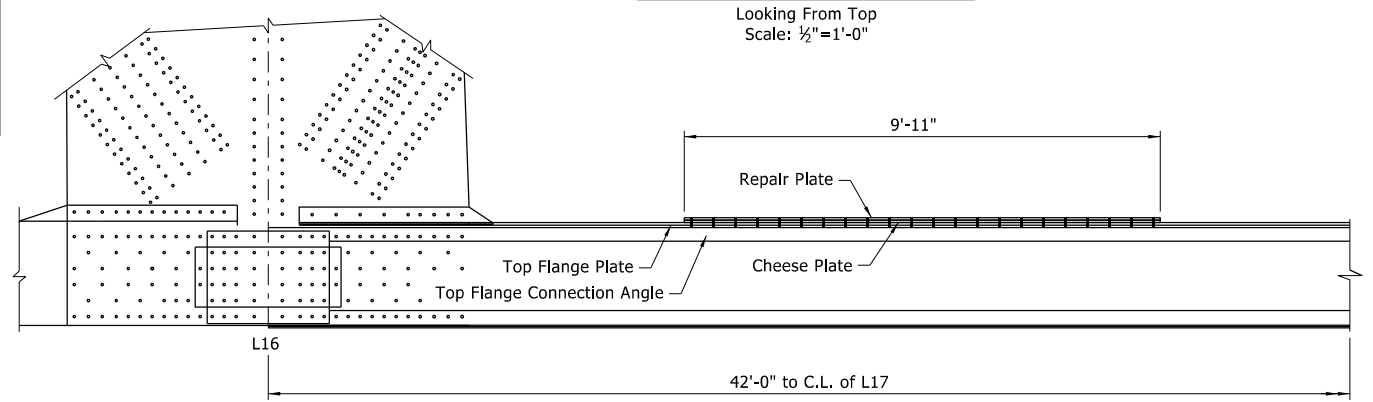
LOCATION	PLATE THK. X LENGTH (Inches)
L14-L15 BOTTOM FLANGE	1/2" x 26 3/8" x 1'-7 3/4"
L40-L41 TOP FLANGE	3/8" x 31" x 5'-1 1/2"



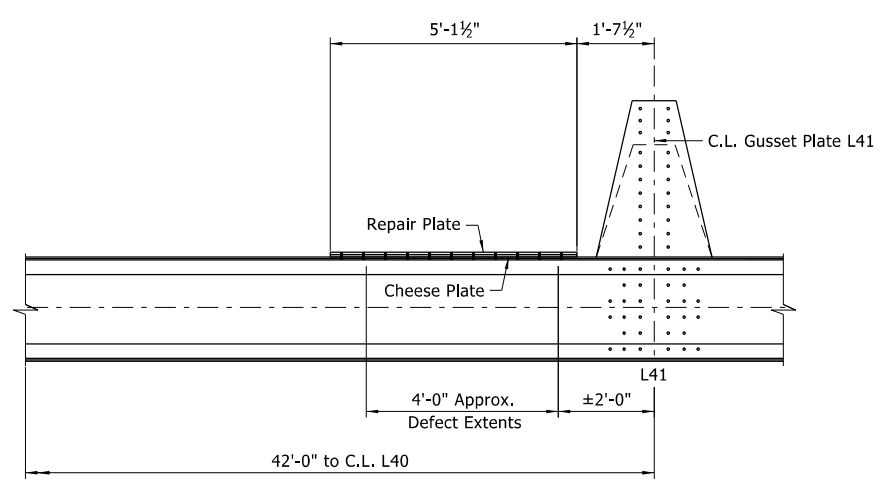
PLAN - L16-L17 UPSTREAM
Looking From Top
Scale: 1/2"=1'-0"



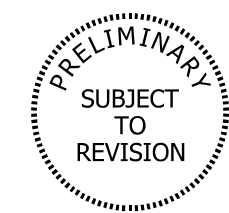
PLAN - L40-L41 DOWNSTREAM
Looking From Top
Scale: 1/2"=1'-0"



ELEVATION - L16-L17 UPSTREAM
Scale: 1/2"=1'-0"



ELEVATION - L40-L41 DOWNSTREAM
Scale: 1/2"=1'-0"

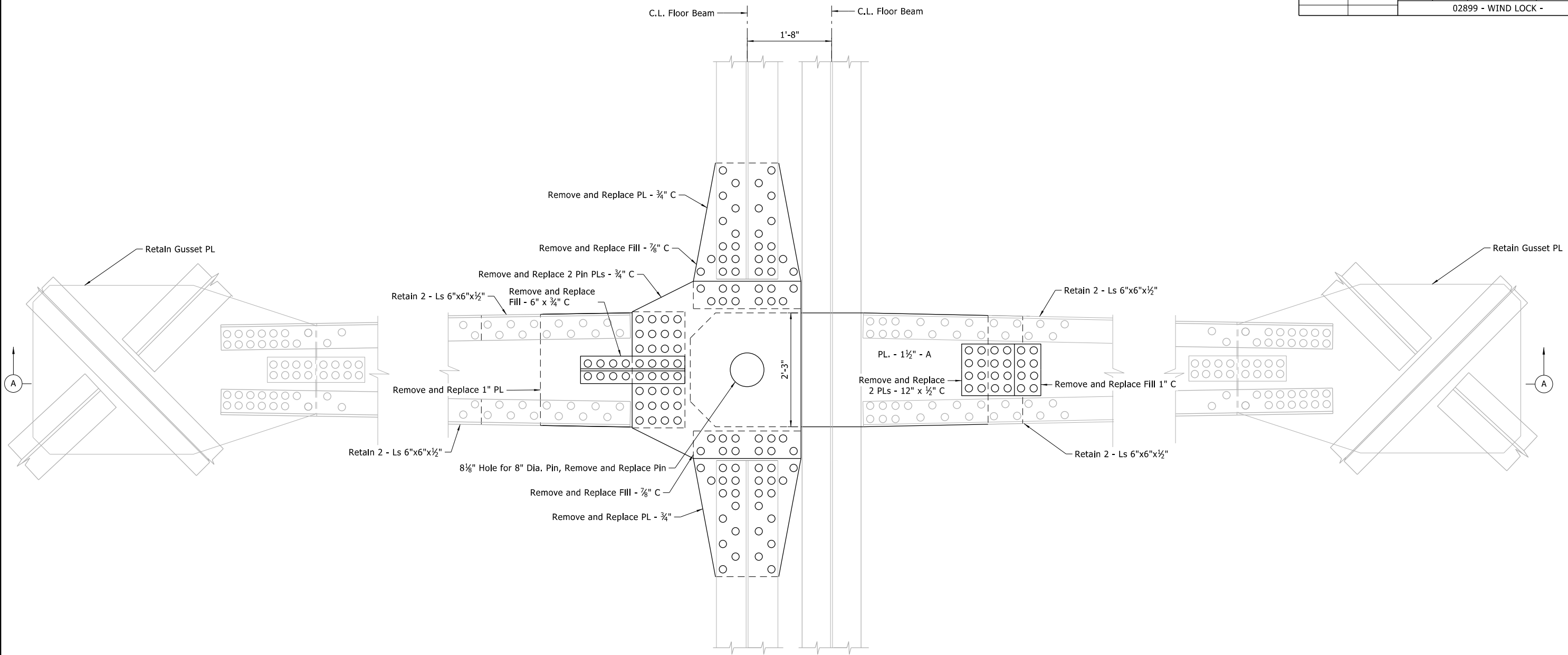


BRIDGE ENGINEER
PRINT DATE: 4/4/2025

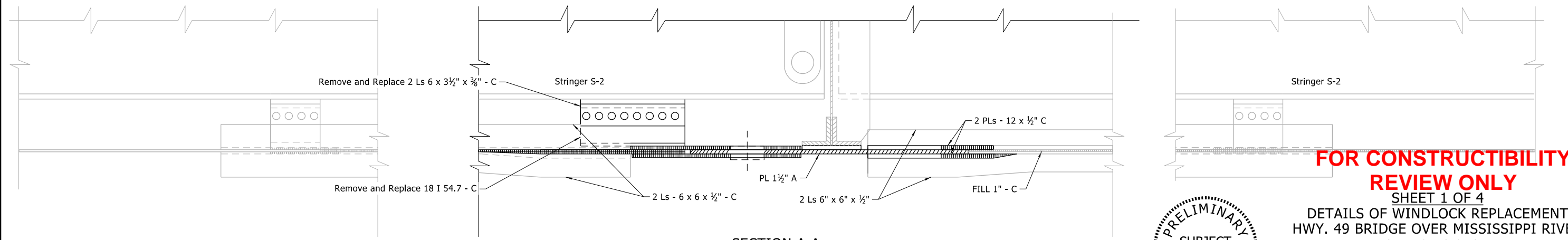
FOR CONSTRUCTIBILITY REVIEW ONLY
DETAILS OF LOWER CHORD REPAIRS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: MKL DATE: 03/2025 FILENAME: B110812_LC1.DGN
CHECKED BY: HSS DATE: 04/2025 SCALE: As Shown
DESIGNED BY: MKL DATE: 03/2025
BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:50 PM
WORKSPACE: untitled
Y:\Projects\VAR001_166556_0812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_LC1.dgn
REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	29	37
02899 - WIND LOCK -						

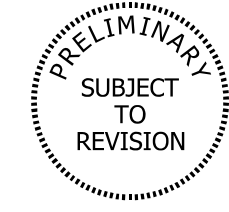


BOTTOM LATERAL WIND SHEAR CONNECTION AT L15



SECTION A-A

Legend:
 C - Carbon structural steel A.S.T.M. A7-55T
 A - Manganese steel modified A242

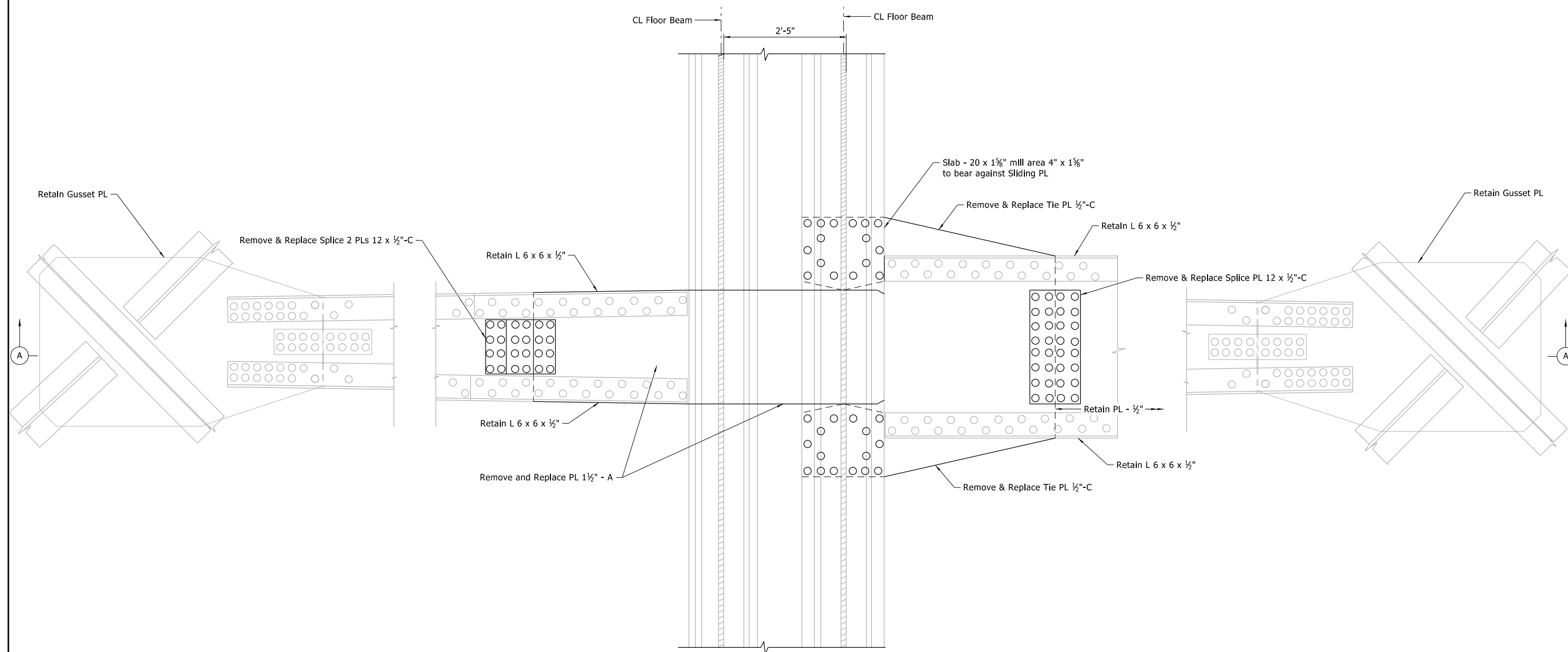


FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 1 OF 4
 DETAILS OF WINDLOCK REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: SB DATE: 03/2025 FILENAME: B110812_WL1.DGN
 CHECKED BY: MKL DATE: 03/2025 SCALE: 1" = 1'-0"
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

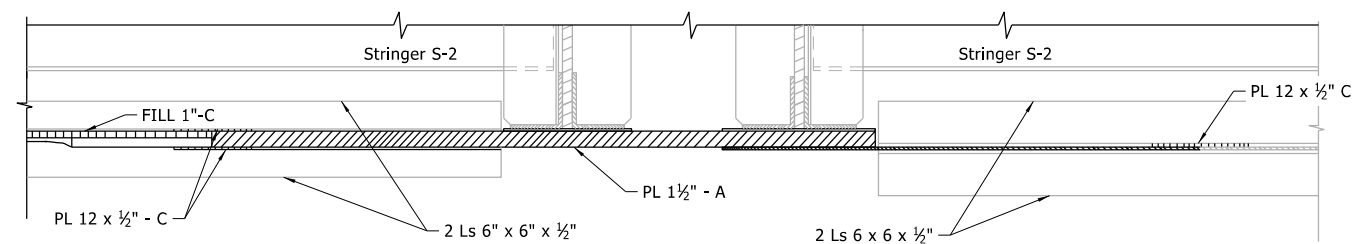
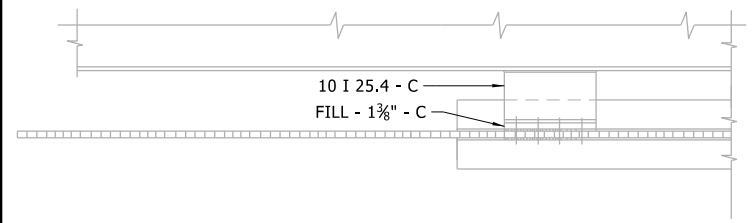
BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

4/4/2025 4:16:50 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_WL1.dgn
 REVISED DATE:

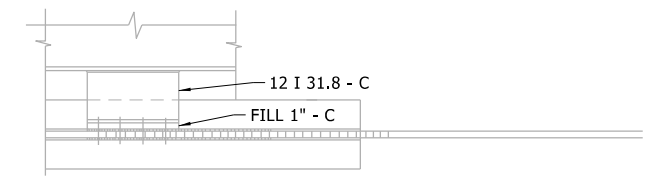
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	30	37
02899 - WIND LOCK -						



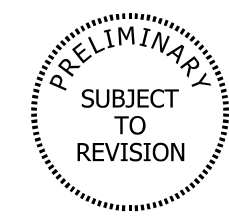
BOTTOM LATERAL WIND SHEAR CONNECTION AT L25, L43 AND L59



SECTION A-A



Legend:
 C - Carbon structural steel A,S,T,M, A7-55T
 A - Manganese steel modified A242

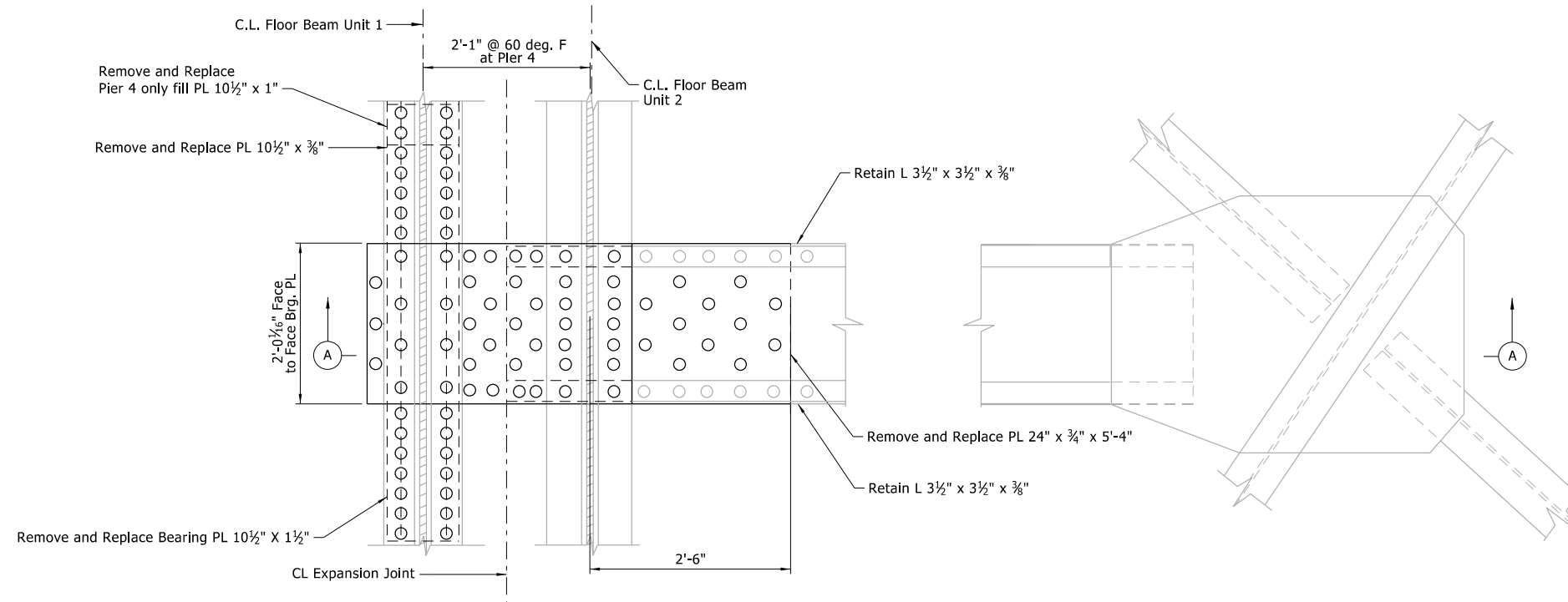


BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

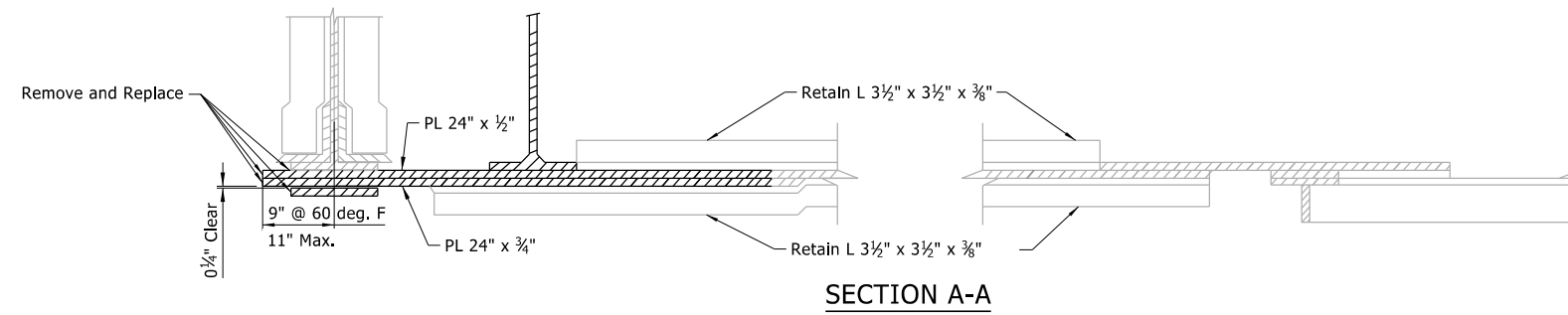
FOR CONSTRUCTIBILITY REVIEW ONLY
 SHEET 2 OF 4
 DETAILS OF WINDLOCK REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 DRAWN BY: SB DATE: 03/2025 FILENAME: B110812_WL1.DGN
 CHECKED BY: MKL DATE: 03/2025 SCALE: 1" = 1'-0"
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:51 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_WL2.dgn
 REVISED DATE:

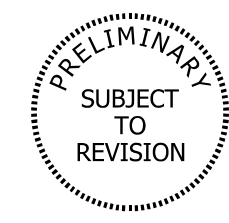
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	31	37
02899 - WIND LOCK -						



WIND SHEAR DEVICE NEAR PIER 4



SECTION A-A



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

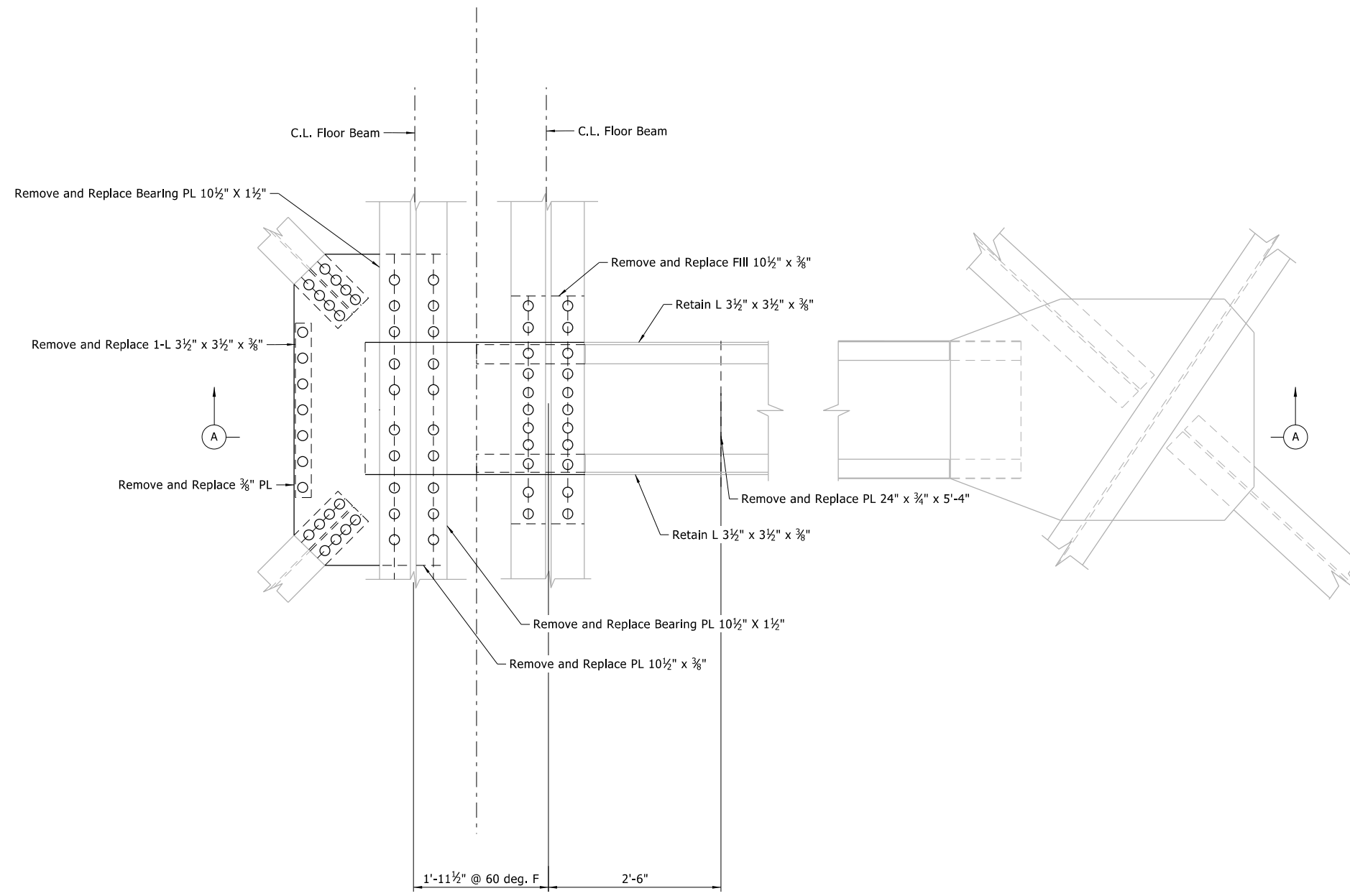
**FOR CONSTRUCTIBILITY
REVIEW ONLY**

SHEET 3 OF 4
DETAILS OF WINDLOCK REPLACEMENT
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

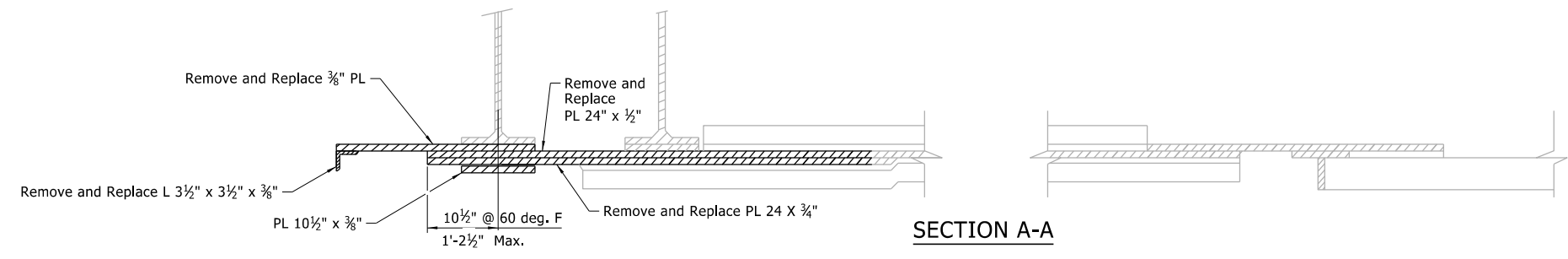
DRAWN BY: SB DATE: 03/2025 FILENAME: B110812_WL1.DGN
 CHECKED BY: MKL DATE: 03/2025 SCALE: 1" = 1'-0"
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:51 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_WL3.dgn
 REVISED DATE:

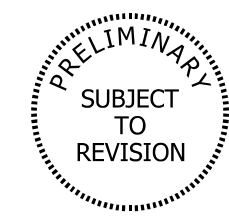
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	32	37
02899 - WIND LOCK -						



WIND SHEAR DEVICE NEAR PIERS 7 AND 18



SECTION A-A

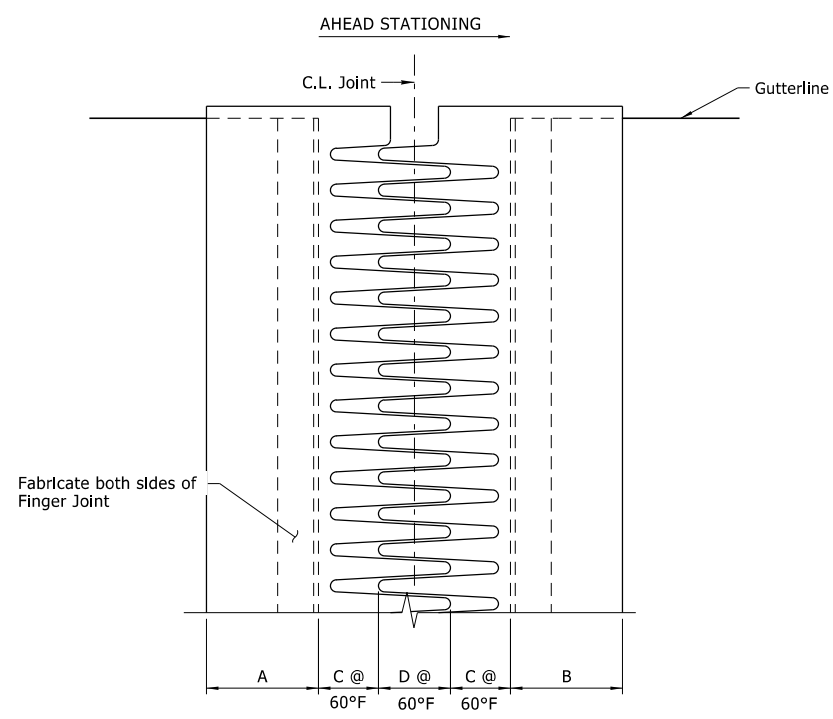


BRIDGE ENGINEER
PRINT DATE: 4/4/2025

**FOR CONSTRUCTIBILITY
REVIEW ONLY**
SHEET 4 OF 4
DETAILS OF WINDLOCK REPLACEMENT
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: SB DATE: 03/2025 FILENAME: B110812_WL1.DGN
CHECKED BY: MKL DATE: 03/2025 SCALE: 1" = 1'-0"
DESIGNED BY: XXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:51 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_WL4.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	33	37
02899 - EXP. JOINT -						



FINGER PLATE DETAILS
No Scale

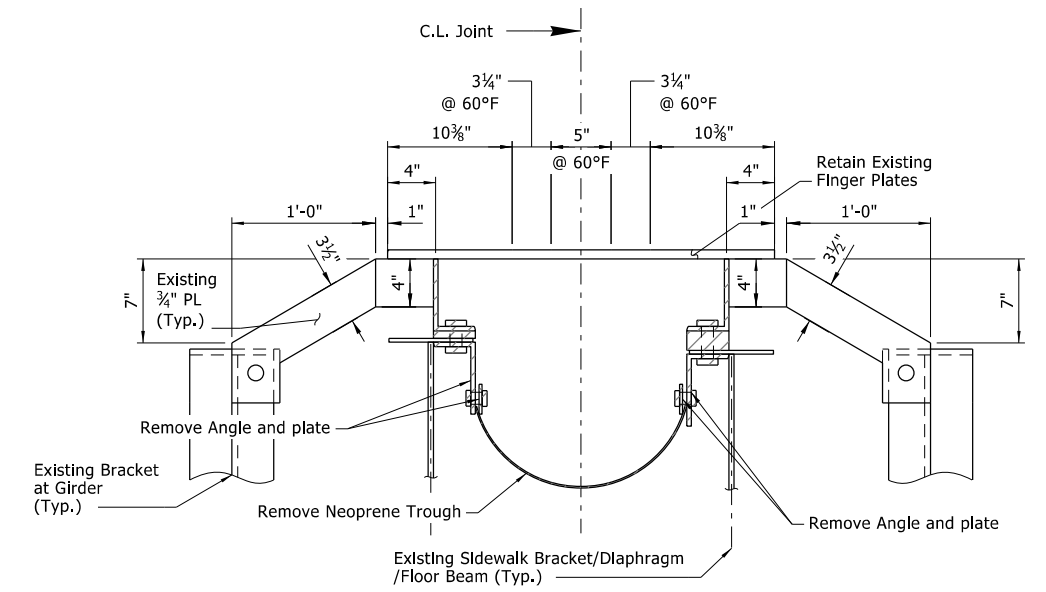
LOCATION	A	B	C	D	
W. & E. Abutment					①
Pier 4					①
Pier 7 & 18					①
Pier 10					②
Expansion Joints					②
Pier 15					①

Notes:
Top of Finger Joint shall conform to the profile grade of the roadway surfaces.

Dimensions are at 60°F.

- ① Retain Joint Armor
- ② Remove and Replace Joint Armor

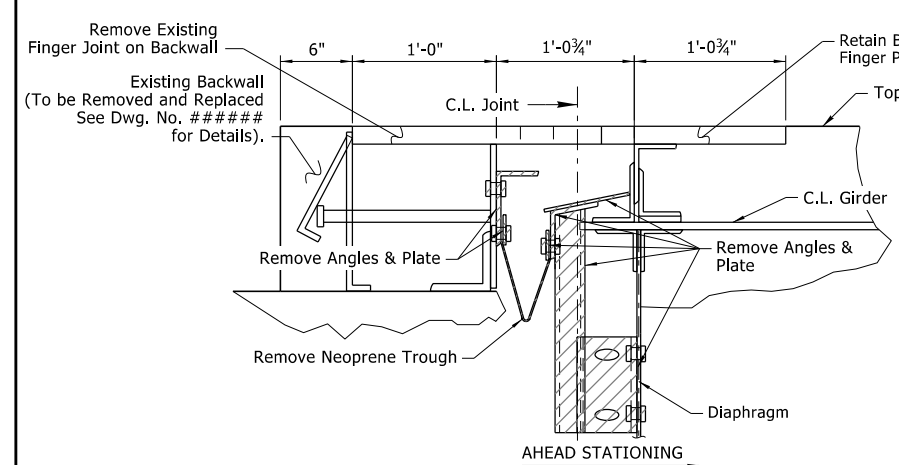
CONCEPTUAL PLANS, JOINT DIMENSIONS WILL BE FINALIZED LATER.



REMOVAL DETAILS OF JOINTS AT PIER 4 AHEAD STATIONING

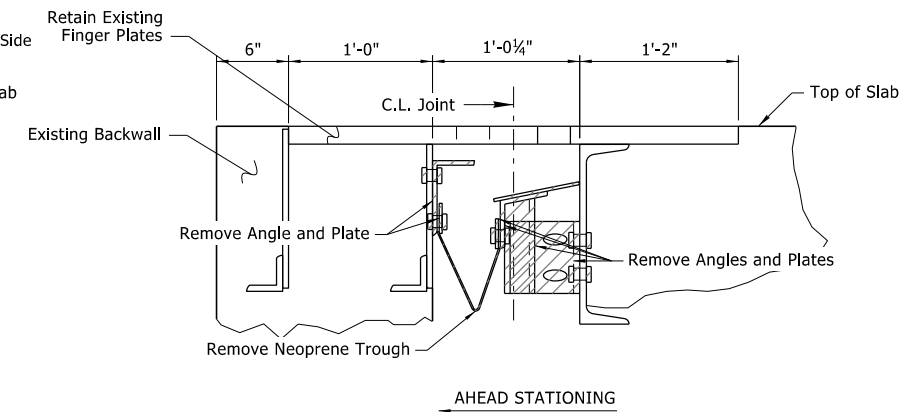
1 1/2" = 1'-0"

Note:
Troughs are to be installed at a cross slope for proper water drainage out of the bridge.



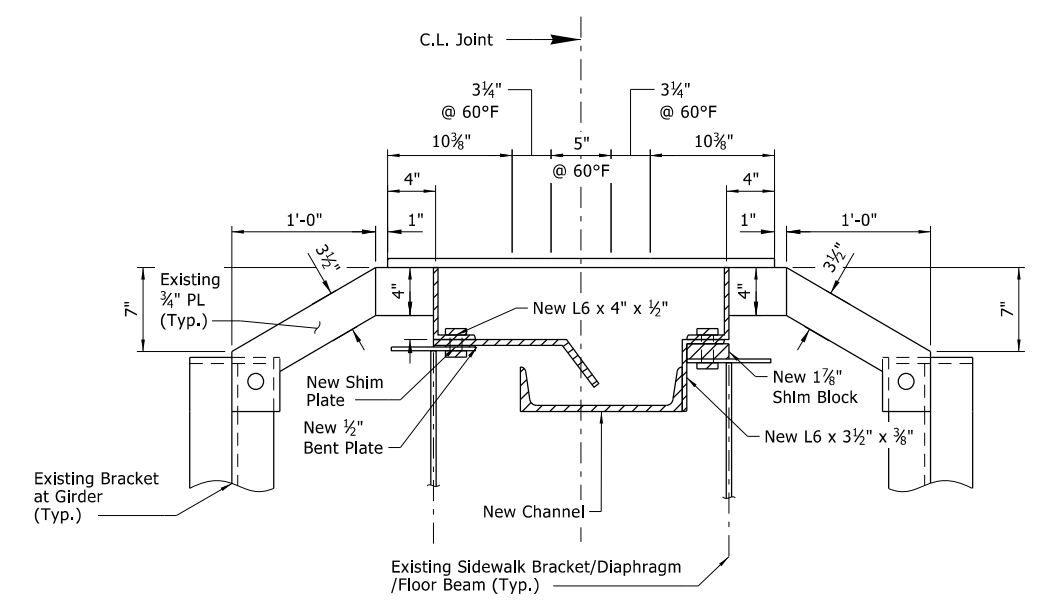
REMOVAL DETAILS OF JOINTS AT WEST ABUTMENT

1" = 1'-0"



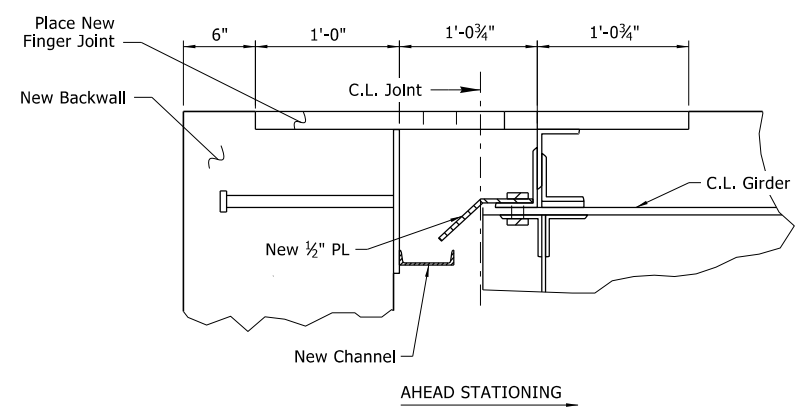
REMOVAL DETAILS OF JOINTS AT EAST ABUTMENTS

1" = 1'-0"



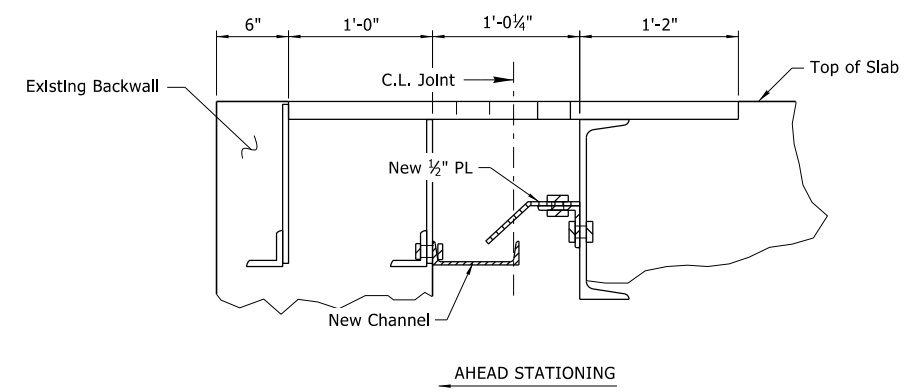
DETAILS OF JOINTS AT PIER 4 AHEAD STATIONING

1 1/2" = 1'-0"



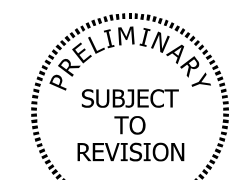
DETAILS OF JOINTS AT WEST ABUTMENT

1" = 1'-0"



DETAILS OF JOINTS AT EAST ABUTMENTS

1" = 1'-0"



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

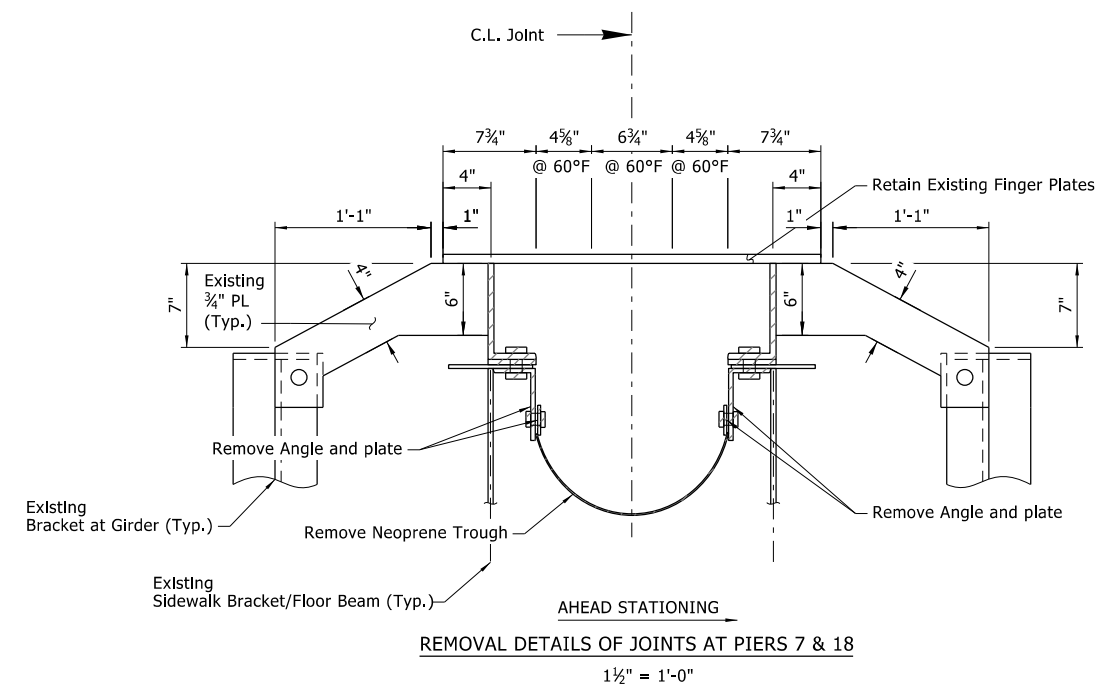
FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 1 OF 3

DETAILS OF EXPANSION JOINTS AND DRAINAGE SYSTEMS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

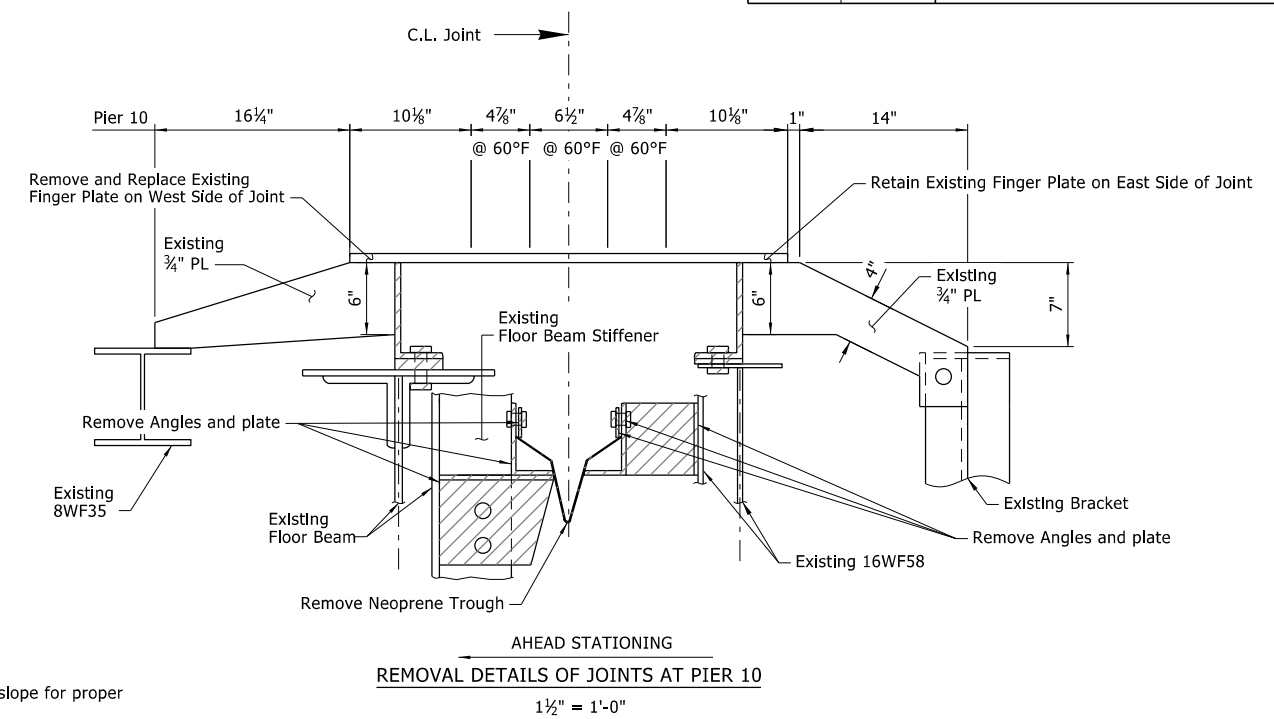
DRAWN BY: MHA DATE: 01/2025 FILENAME: B110812_JT.DGN
CHECKED BY: HSS DATE: 01/2025 SCALE: As Shown
DESIGNED BY: MHA DATE: 01/2025
BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:52 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_0812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_JT.dgn
 REVISED DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	34	37
02899 - EXP. JOINT -						

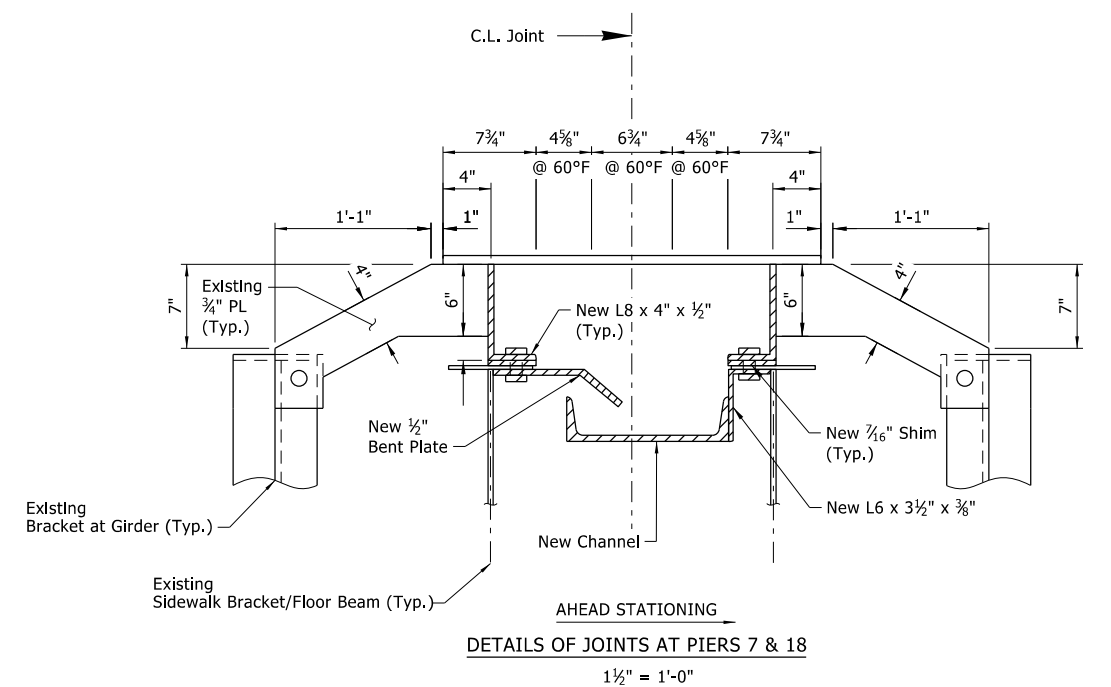


REMOVAL DETAILS OF JOINTS AT PIERS 7 & 18
1 1/2" = 1'-0"

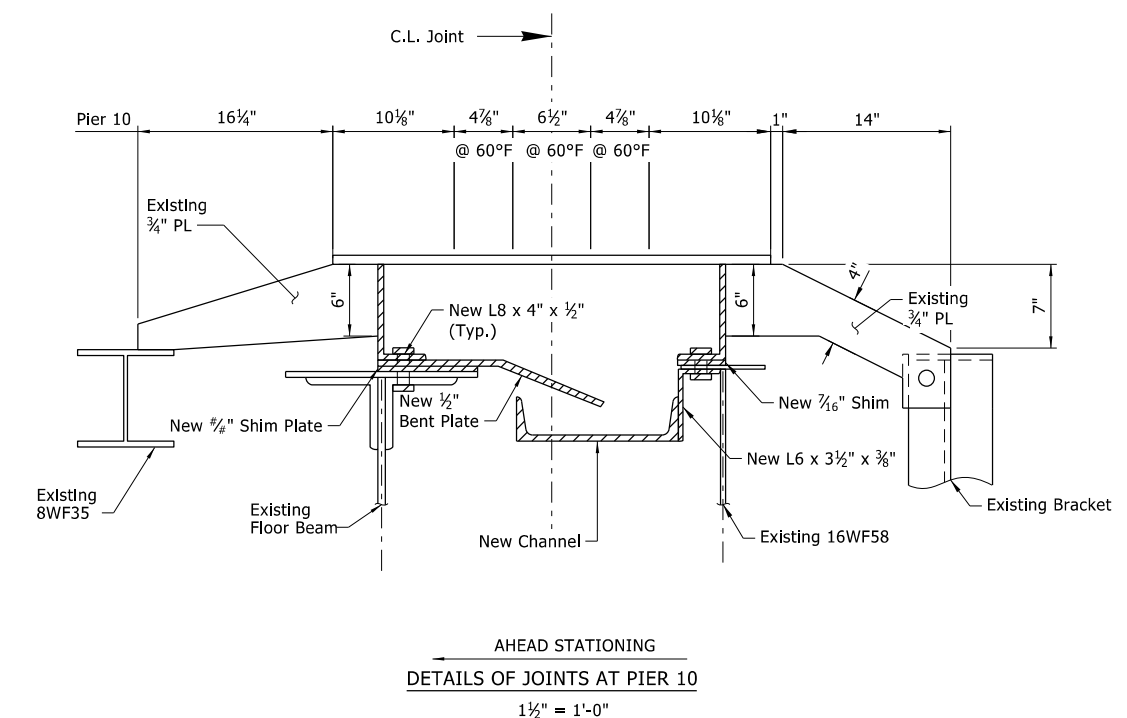


REMOVAL DETAILS OF JOINTS AT PIER 10
1 1/2" = 1'-0"

Note:
Troughs are to be installed at a cross slope for proper water drainage out of the bridge.



DETAILS OF JOINTS AT PIERS 7 & 18
1 1/2" = 1'-0"

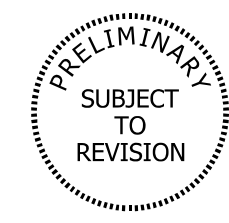


DETAILS OF JOINTS AT PIER 10
1 1/2" = 1'-0"

FOR CONSTRUCTIBILITY REVIEW ONLY
SHEET 2 OF 3

DETAILS OF EXPANSION JOINTS AND DRAINAGE SYSTEMS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

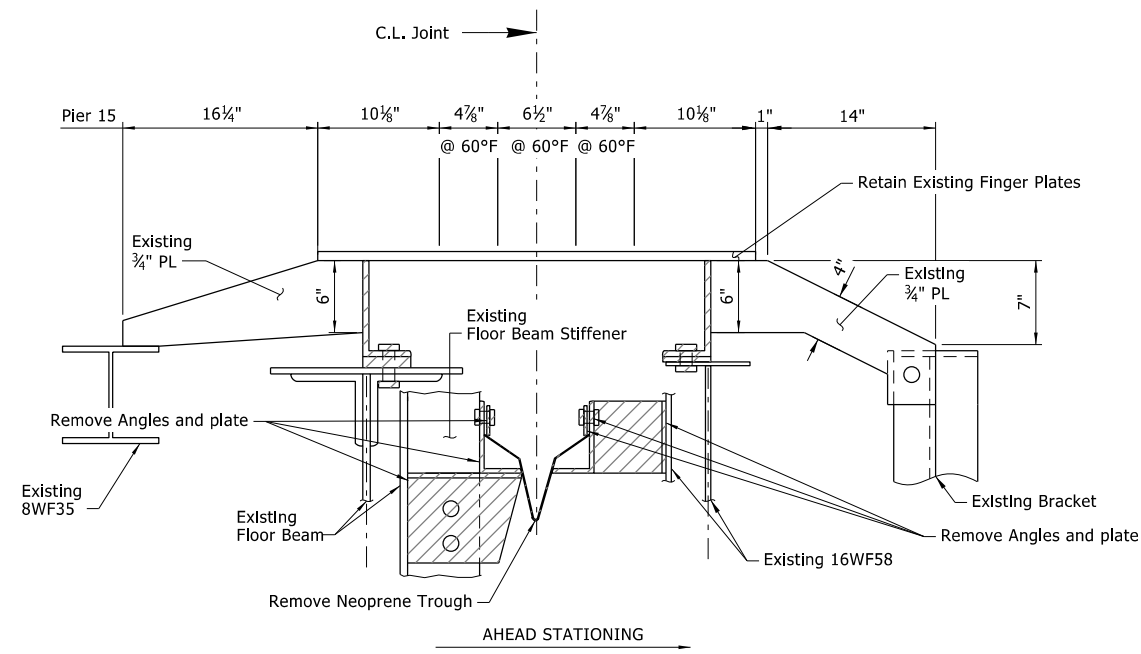
DRAWN BY: MHA DATE: 01/2025 FILENAME: B110812_JT.DGN
CHECKED BY: HSS DATE: 01/2025 SCALE: As Shown
DESIGNED BY: MHA DATE: 01/2025
BRIDGE NO. 02899 DRAWING NO.



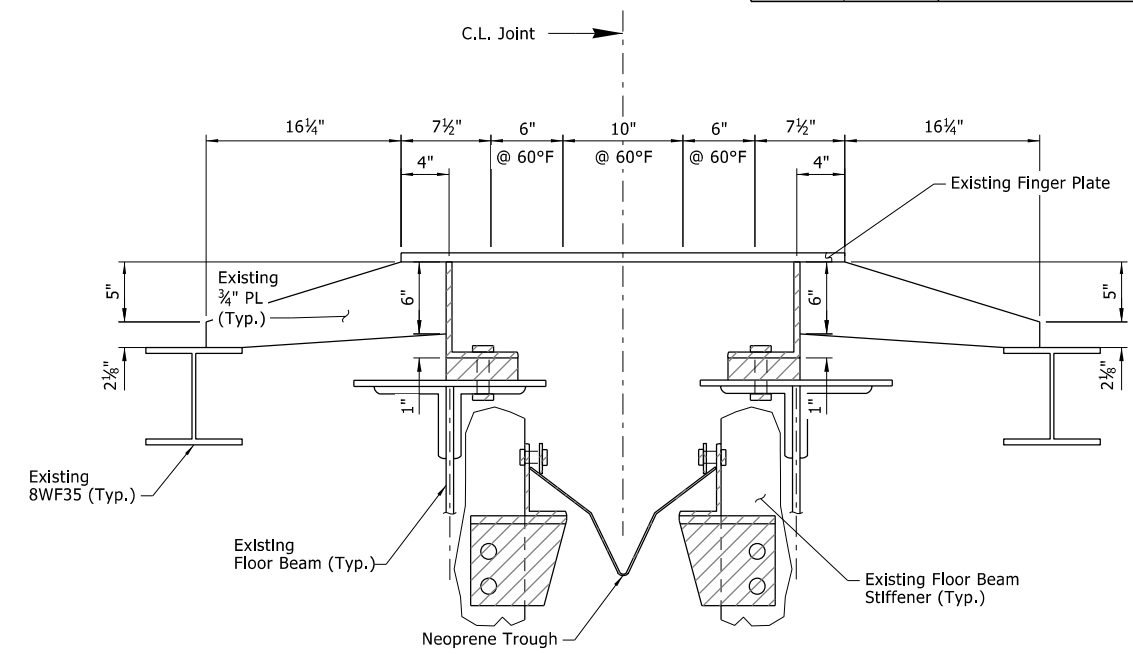
BRIDGE ENGINEER
PRINT DATE: 4/4/2025

4/4/2025 4:16:52 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B110812_JT.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	35	37
02899 - EXP. JOINT -						



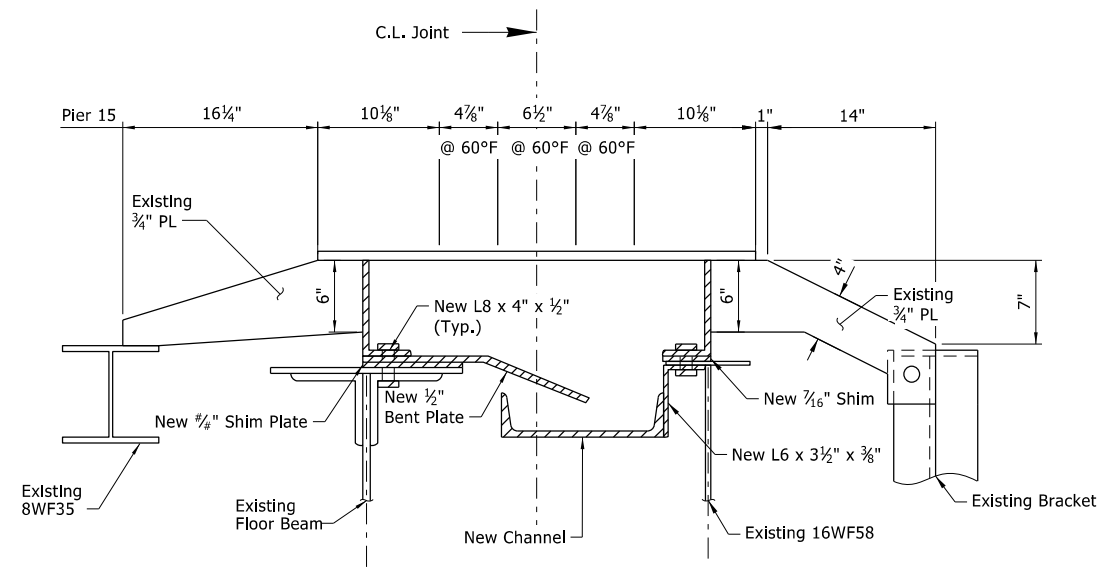
REMOVAL DETAILS OF JOINTS AT PIER 15
1 1/2" = 1'-0"



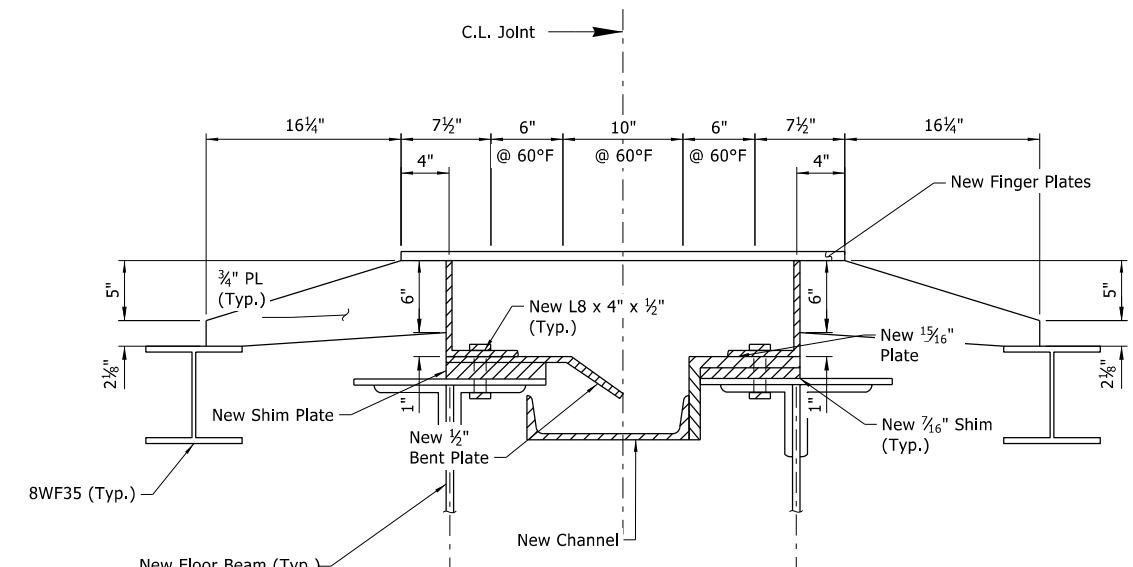
REMOVAL DETAILS OF INT. TRUSS JOINTS
(FLOOR BEAMS 25, 43, & 59)
1 1/2" = 1'-0"

Note:
Troughs are to be installed at a cross slope for proper water drainage out of the bridge.

① Entire Joint Assembly in addition to the Floor Beams as well as the Attached Cross Beams are to be Removed and Replaced



DETAILS OF JOINTS AT PIER 15
1 1/2" = 1'-0"



DETAILS OF INT. TRUSS JOINTS
(FLOOR BEAMS 25, 43, & 59)
1 1/2" = 1'-0"

**FOR CONSTRUCTIBILITY
REVIEW ONLY**
SHEET 3 OF 3

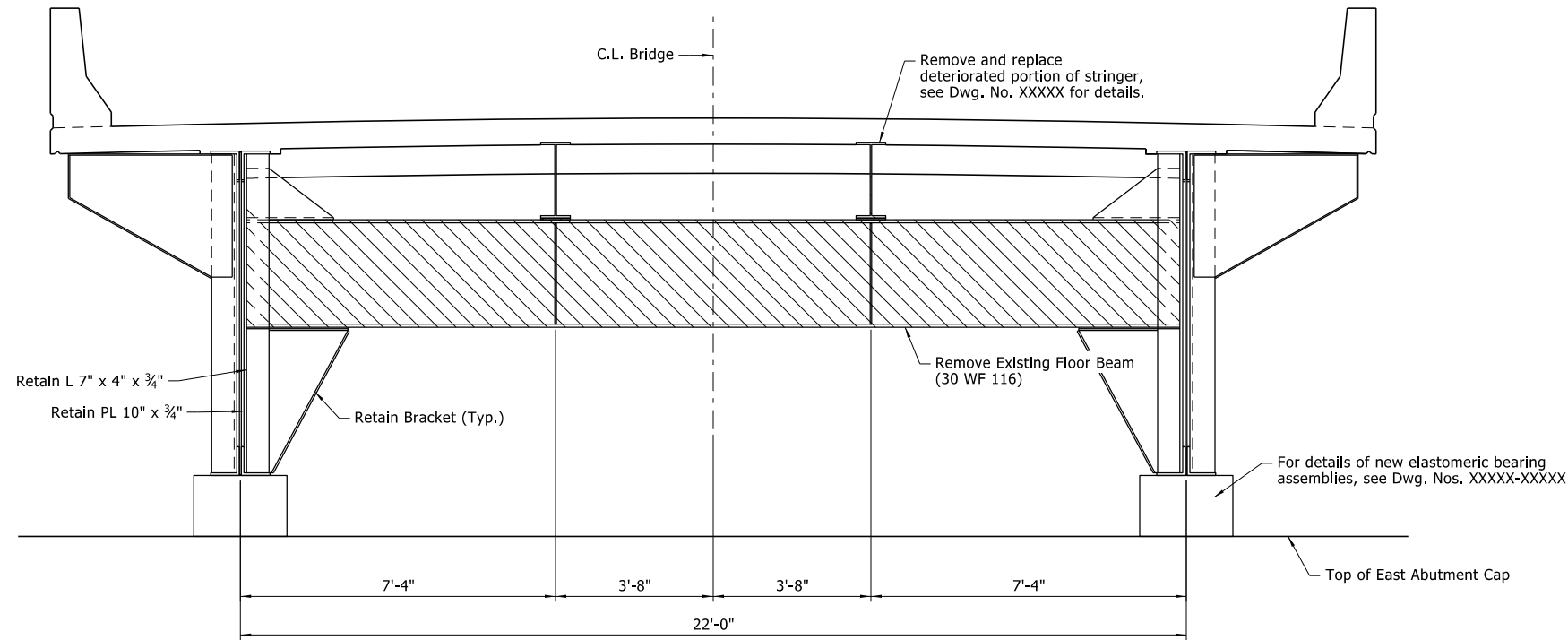
DETAILS OF EXPANSION JOINTS
AND DRAINAGE SYSTEMS
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MHA DATE: 01/2025 FILENAME: B110812_JT.DGN
CHECKED BY: HSS DATE: 01/2025 SCALE: 1" = 1'-0"
DESIGNED BY: MHA DATE: 01/2025
BRIDGE NO. 02899 DRAWING NO.

PRELIMINARY
SUBJECT
TO
REVISION
BRIDGE ENGINEER
PRINT DATE: 4/4/2025

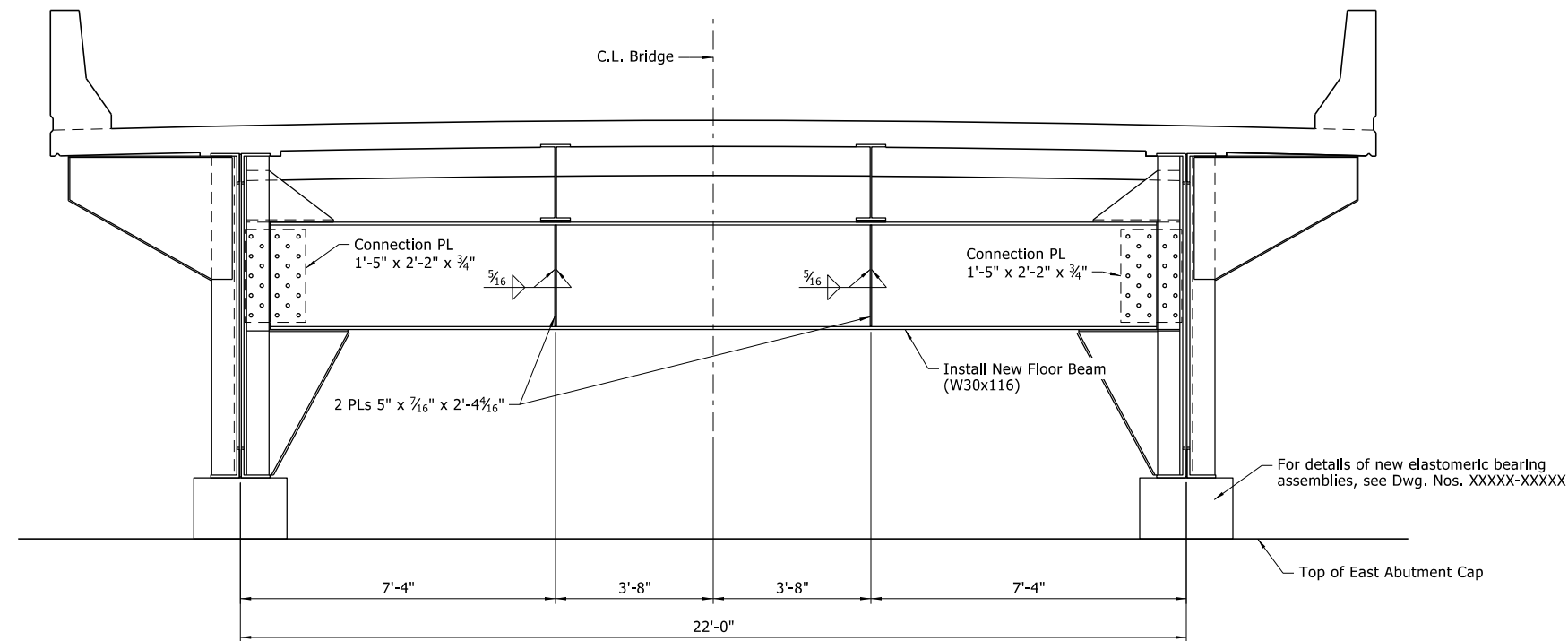
4/4/2025 4:16:52 PM
 WORKSPACE: untitle
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE Drawings\B10812_JT.dgn
 REVISION DATE:

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	36	37
02899 - E. ABUT. FLOOR BEAM -						



ELEVATION VIEW - REMOVAL

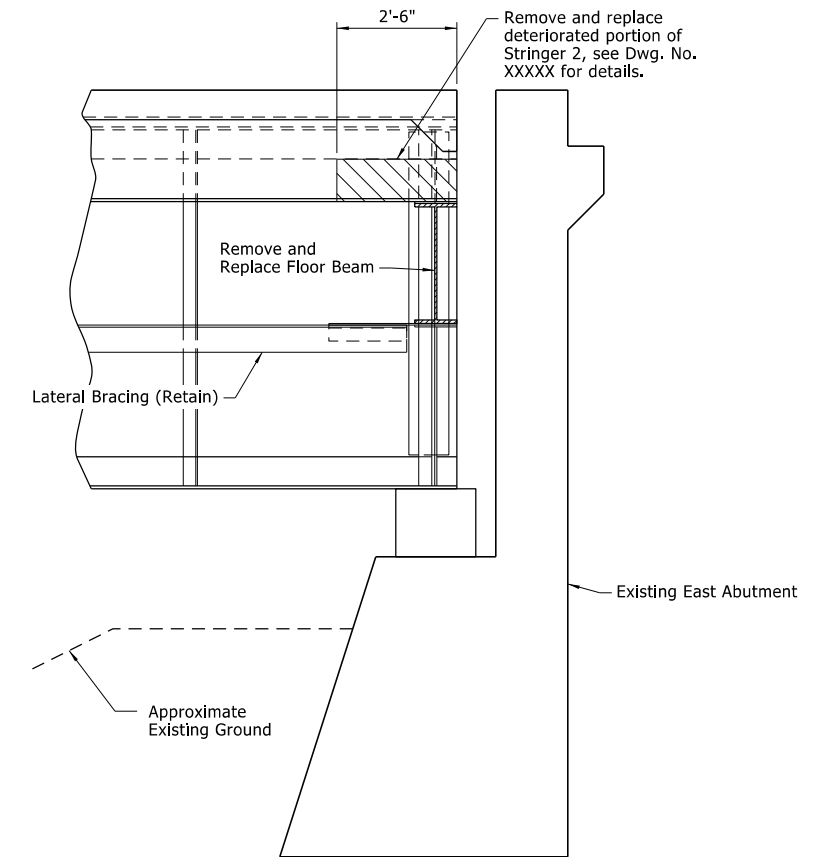
Looking Forward



ELEVATION VIEW - CONSTRUCTION

Looking Forward

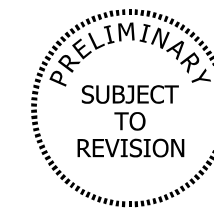
Note:
External shoring shall be provided prior to removing any portion of the existing floor beam or stringer.



SECTION VIEW

Ahead Stationing

FOR CONSTRUCTIBILITY REVIEW ONLY
 DETAILS OF EAST ABUTMENT FLOOR BEAM REPLACEMENT
 HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
 ROUTE 49 SECTION 11
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

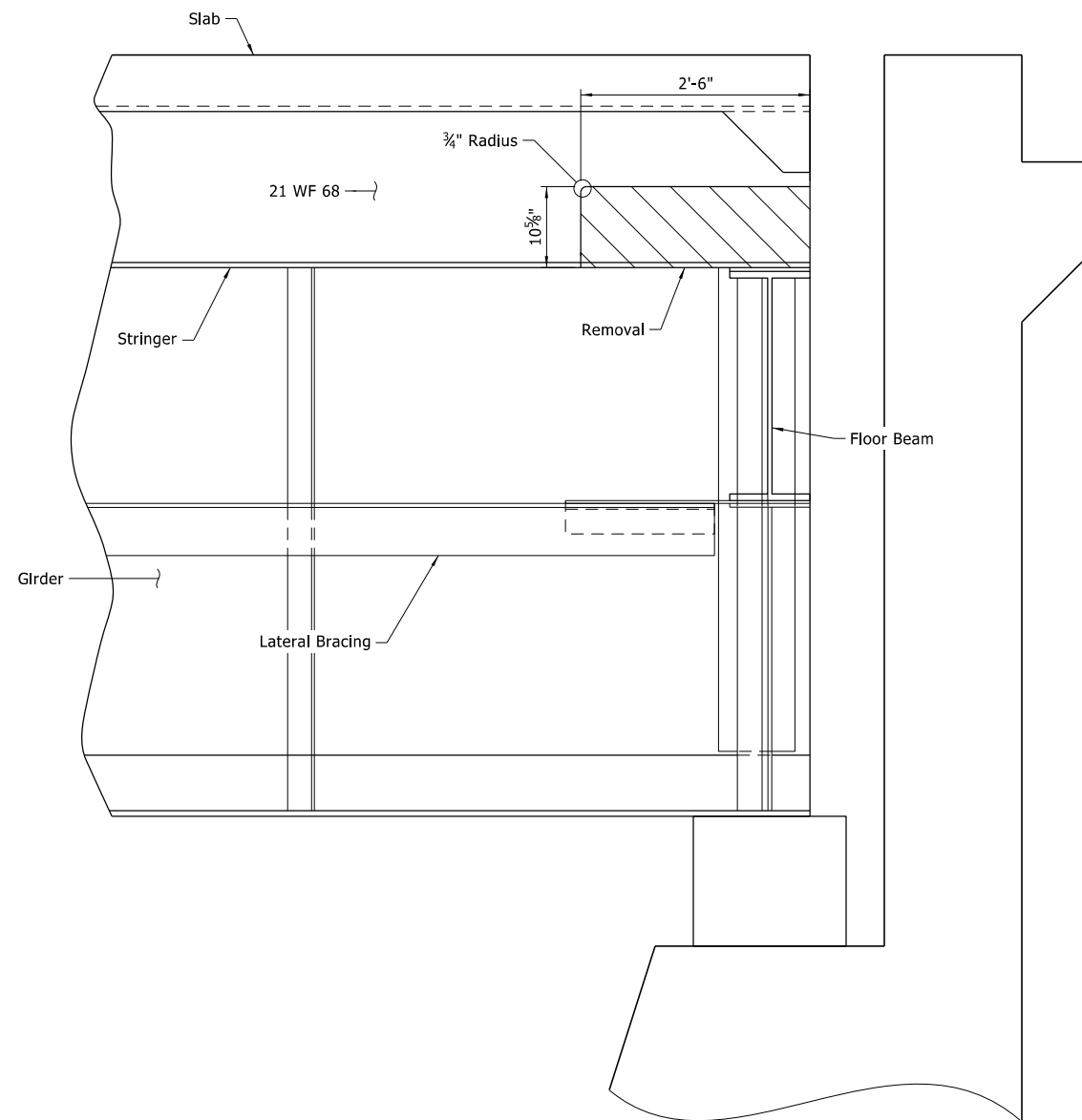


BRIDGE ENGINEER
 PRINT DATE: 4/4/2025

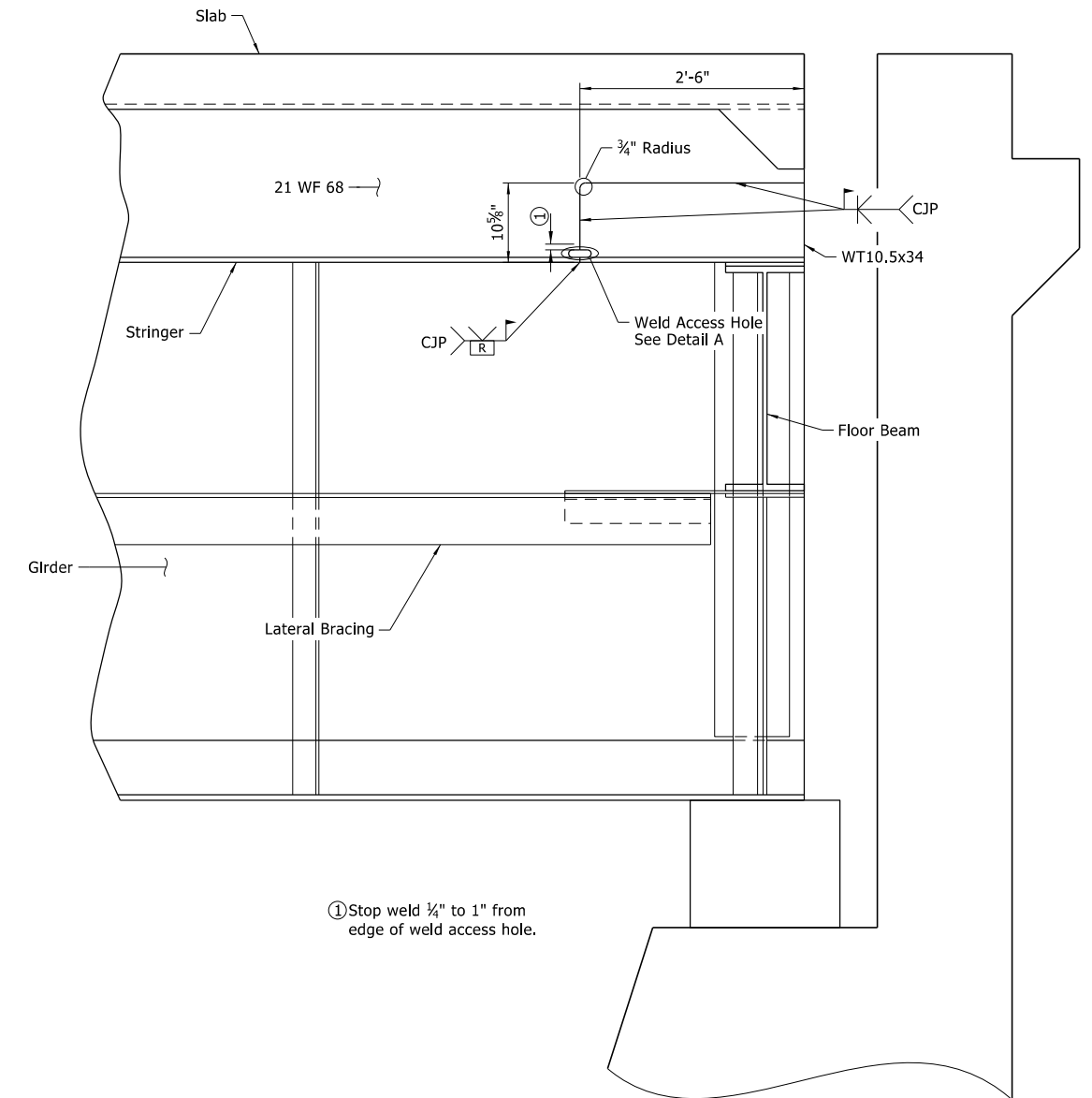
DRAWN BY: MKL DATE: 01/2025 FILENAME: B110812_AFB1.DGN
 CHECKED BY: XXX DATE: XX/2025 SCALE: 1/2" = 1'-0"
 DESIGNED BY: XXX DATE: XX/2025
 BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:53 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_186556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE\Drawings\B110812_AFB1.dgn
 REVISED DATE:

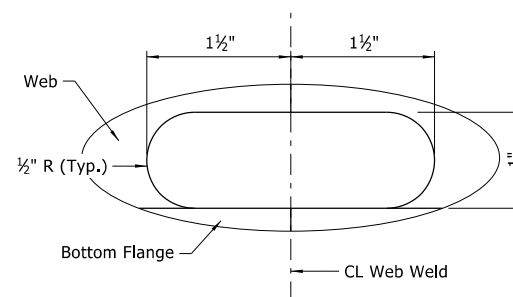
DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	110812	37	37
02899 - E. ABUT. STRINGER -						



REMOVAL

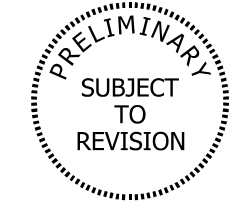


CONSTRUCTION



DETAIL A
NO SCALE

Note:
External shoring shall be provided prior to removing any portion of the existing stringer.



BRIDGE ENGINEER
PRINT DATE: 4/4/2025

FOR CONSTRUCTIBILITY REVIEW ONLY
DETAILS OF EAST ABUTMENT STRINGER 2 REPAIR
HWY. 49 BRIDGE OVER MISSISSIPPI RIVER
ROUTE 49 SECTION 11
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MKL DATE: 03/2025 FILENAME: B110812_AFB2.DGN
CHECKED BY: XXX DATE: XX/2025 SCALE: 1" = 1'-0"
DESIGNED BY: XXX DATE: XX/2025
BRIDGE NO. 02899 DRAWING NO.

4/4/2025 4:16:53 PM
 WORKSPACE: untitled
 Y:\Projects\VAR001_166556_10812.Hwy 49 Miss River Bridge Preservation\Design\BRIDGE\Drawings\B110812_AFB2.dgn
 REVISED DATE: