The Contractor shall replace all loose, broken, severely corroded or missing rivets with H.S. bolts. Cost included in Structural Steel Repair. The weight of each bolt, not detailed for replacement within the contract plans, shall be in addition to the quantities shown on plans.

Calculated weight of Structural Steel = 10,980 lbs. Estimated Structural Steel Removal is 2,295 lbs.

All structural steel shall be AASHTO M270 Grade 50.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirement, Zone 2.

Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.

Plan dimensions and details relative to the existing structure have been taken from existing plans are subject to nominal construction variations. The Contactor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing structure plans are available for review in the District office. Contact Anna Devine at (309) 671–3475.

Elements of this structure require removal and re-installation due to the proposed repairs. Such removal and re-installation shall not be paid separately and shall be included in the cost of Structural Steel Repair.

All removal work shall be performed with care so that materials which are to remain in place or to be reused will not be damaged. It will be the Contractor's responsibility to repair and replace any members damaged as a result of the removal operations at the Contractor's expense.

Flame cutting of existing structural steel members which are to remain in place is not allowed.

Gaps between the existing and new steel angles and/or plates to be covered by new steel plates and/or angles, shall be sealed with an approved polyurethane sealant. The sealant shall be compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use. All costs associated with the installation of the sealant shall be included with the cost for Structural Steel Repair.

Abandoned holes shall be reamed and filled with a similar diameter H.S. bolt. Cost associated with this work is incidental to the cost of Structural Steel Repair.

Depending on the condition of existing structural steel, steel reinforced epoxy putty shall be used to address variations in existing material thickness to promote a flush plating repair free of voids which could allow water infiltration. The filler material shall be submitted to the Engineer for approval prior to use. All costs associated with the installation of the filler material shall be included with the cost for Structural Steel Repair.

Members or pieces not specifically marked for removal or replacement are to remain in place.

The Contractor shall take all necessary measures to ensure that no debris falls in the Illinois River or endangers or interferes with river traffic beneath the bridge. The cost of this work shall be included under the relevant pay item. If any debris falls into the waterway, the Contractor shall remove it from the river to the Engineer's satisfaction and at no additional cost.

River traffic is to be maintained at all times.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to address the presence of lead on this project.

DESIGNED - JA

CHECKED - MAH/LDB

CHECKED - MAH/LDB

REVISED - 2 4/16/2025 JA

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REVISED

The Organic Zinc Rich Primer / Epoxy / Urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, shall all be touched up and finish coated in the field. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for GBSP-21 "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". All cost is included under "Structural Steel Repair" pay item.

Treat all structural steel repair areas as primary connections.

The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See special provisions.

A minimum of 4 air monitors will be required to monitor abrasive blasting operations at this site. See special provision for "Containment and Disposal of Lead Paint Cleaning Residues."

SSPC QP1 and QP2 Painting Contractor Certification are required for the cleaning and painting work.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	15		15
Protective Shield	Sq Yd	298		298
Concrete Superstructure	Cu Yd	15		15
Bridge Deck Grooving	Sq Yd	27		27
Protective Coat	Sq Ft	386		386
Reinforcement Bars, Epoxy Coated	Pound	2,369		2,369
Mechanical Splicers	Each	40		40
Finger Plate Expansion Joint, 5"	Foot	50		50
Fabric Reinforced Elastomeric Trough	Foot	53		53
Epoxy Crack Injection	Foot	350		350
Bridge Drainage System Repair	Each	5		5
Structural Steel Removal	Pound	2,295		2,295
Structural Steel Repair	Pound	10,980		10,980
Containment and Disposal of Lead Paint	L Sum	1		1
Cleaning Residues No. 1				
Structural Repair of Concrete (Depth	Sq Ft	145		145
Equal to or Less Than 5 inches)				
Deck Slab Repair (Partial)	Sq Yd	24		24
Cleaning Drainage System	L Sum	1		1

CONSTRUCTION REQUIREMENTS

The Contractor shall employ a State of Illinois Structural Engineer to ensure stability at all times and shall conform to special provision for "Structural Assessment Reports and Contractor's Means and Methods."

The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges (Complex), for preparation of the structural Assessment Report(s). Contractor's pre-approval shall not be applicable for this project.

Current Rating on File for Existing Structure Inventory: HS 11 Operating: HS 18.2 Live Load Restrictions: Legal Loads Only

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS Loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

The Contractor is advised that the existing structure contains members that are in deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete and partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

Truss member and gusset plate repairs are to be completed under reduced bridge live loads. Individual truss member and gusset plate repairs shall be completed when stage traffic is on the opposite side of the bridge with respect to the repair location.

The Contractor must not use the railroad right-of-way for storage of materials or equipment during construction. The railroad's right-of-way must remain clear at all times. The Contractor must plan and perform the work in a manner such that the railroad tracks at the project location remain fully capable of operating rail traffic thorugh the work period and rail traffic is not delayed or otherwise impacted due to the work being performed.

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ABBREVIATIONS

Abut.	Abutment	E.F.	Each Face	5.	South
@	At	Elev.	Elevation	SE	Southeast
B.F.	Back Face	Exist.	Existing	Shldr.	Shoulder
Bk.	Back	Ехр.	Expansion	Spa.	Spaces
Brg.	Bearing	F.F.	Front Face	Std.	Standard
Btw.	Between	Мах.	Maximum	Sta.	Standard
CL	Centerline	Min.	Minimum	Sta.	Station
Clr.	Clear	N.	North	SW	Southwest
Cts.	Centers	NE	Northeast	Тур.	Typical
Const.	Construction	No.	Number	U.N.O.	Unless Noted Otherwise
\pm	Diameter	NW	Northwest	Vert.	Vertical
E.	East	Pt.	Point	W.	West

COLLINS

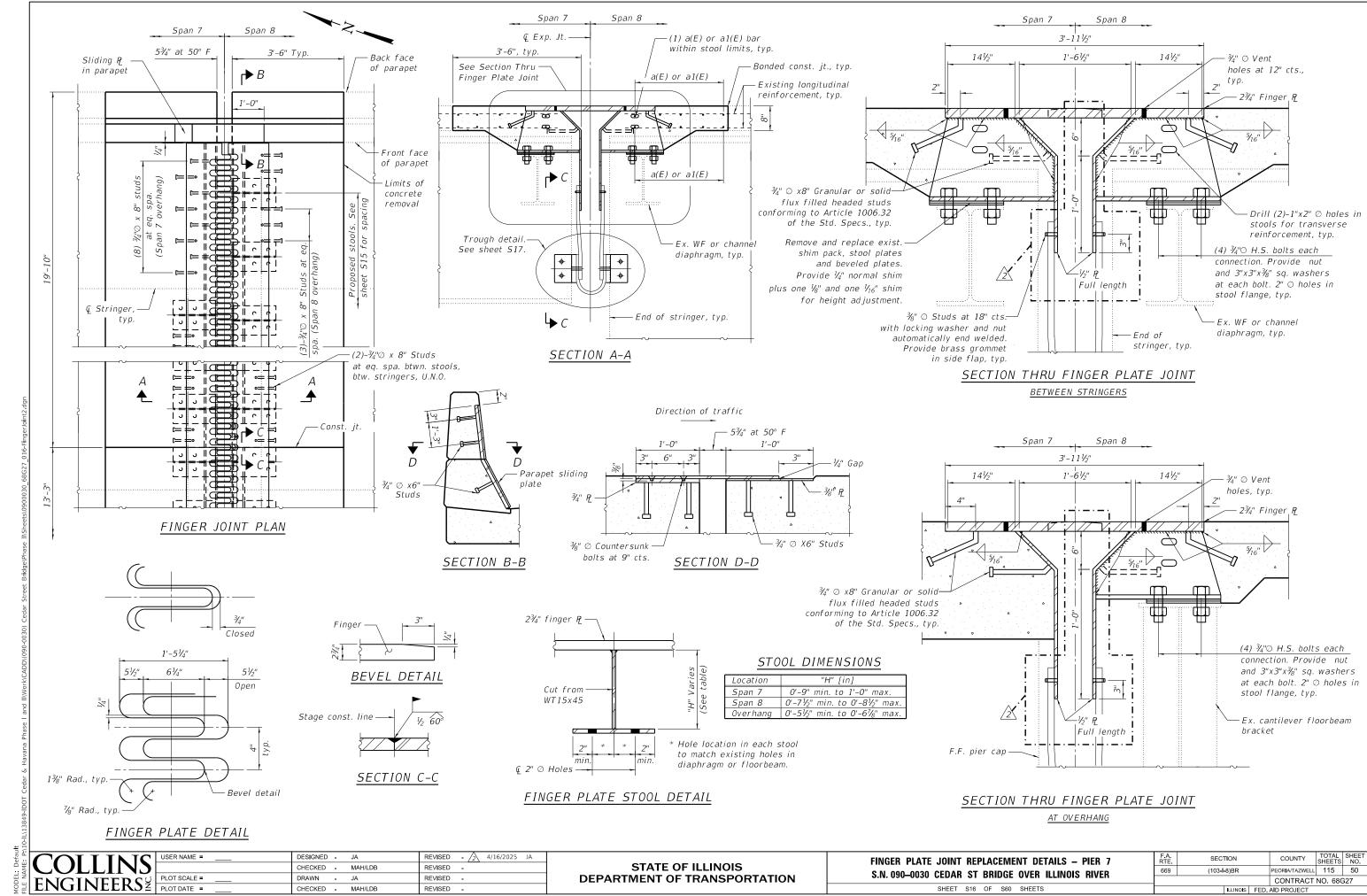
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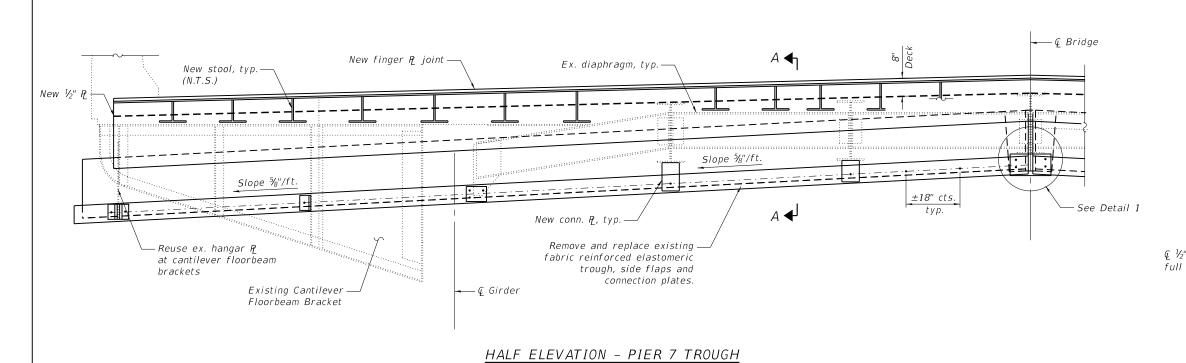
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PLOT DATE = ____
PLOT DATE = ____

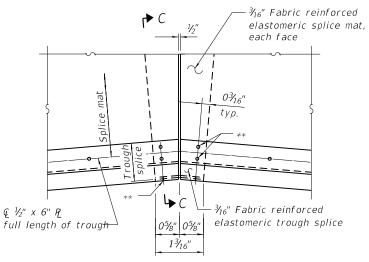
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, TOTAL BILL OF MATERIAL & GENERAL NOTES
S.N. 090–0030 CEDAR ST BRIDGE OVER ILLINOIS RIVER

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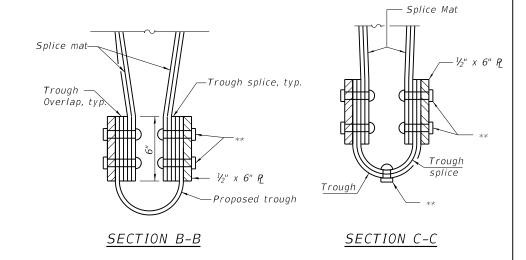






DETAIL 1

** ¾" \oslash Stainless Steel bolts with washers and nuts. Provide brass grommet in trough.

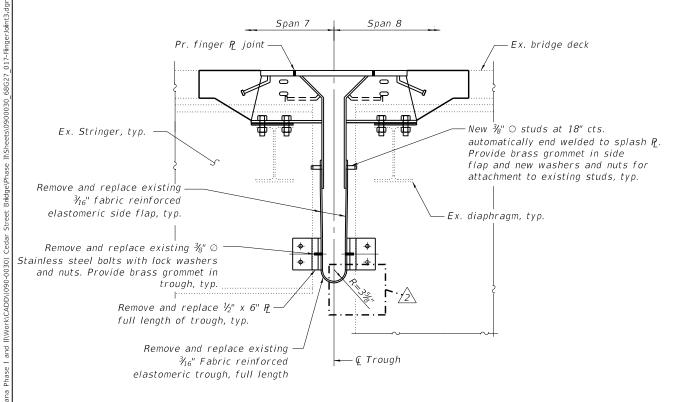


BILL OF MATERIAL

Item	Unit	Total
Fabric Reinforced Elastomeric Trough	Foot	53

NOTES

- 1. Fabric reinforced material for trough and side flap shall be in accordance with Section 520 of the Standard Specifications.
- All new steel shall be hot dipped galvanized in accordance with Section 520.04 of the Standard Specifications.
- Cost for fasteners and plates required to complete the work shall be included with the cost for Fabric Reinforced Elastomeric Trough.
- Cost to remove existing trough shall be included with the cost for Fabric Reinforced Elastomeric Trough.
- All the bolts required to connect the elastomeric trough to the existing floorsystem shall be located in existing holes.



SECTION A-A

COLLINS ENGINEERS

C	USER NAME =	DESIGNED -	JA	REVISED	- <u>/2</u> \	4/16/2025	JA
•		CHECKED -	MAH/LDB	REVISED	-		
ij	PLOT SCALE =	DRAWN -	DMR	REVISED	-		
Z	PLOT DATE =	CHECKED -	MAH/LDB	REVISED	-		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE JOINT REPLACEMENT DETAILS - PIER 7
S.N. 090-0030 CEDAR ST BRIDGE OVER ILLINOIS RIVER

SHEET S17 OF S60 SHEETS

F.A. RTE	SECTION		COUNTY	TOTAL SHEETS	SHE	
669	(103-I-8)BR		PEOR I A/TAZWELL	115	51	
			CONTRACT	NO. 680	327	
		ILLINOIS	FED.	AID PROJECT		