

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## BRIDGE REPAIR PLANS FOR:

### JEFFERSON COUNTY 056B00136N - CLARK MEMORIAL BRIDGE US-31E OVER RIVER ROAD, I-64, OHIO RIVER

ESTIMATE OF QUANTITIES																								
BID ITEM CODE	01984	02003	02562	02568	02569	02650	02653	02671	02775	02898	03171	03298	06549	06550	06551	20738NS112	23386EC	24879EC	24879EC	24879EC	24879EC			
BID ITEM	DELINERATOR FOR BARRIER - WHITE	RELOCATE TEMP CONC BARRIER	TEMPORARY SIGNS	MOBILIZATION	DEMobilization	Maintain AND CONTROL TRAFFIC	LANE CLOSURE	PORTABLE CHANGEABLE MESSAGE SIGN	ARROW PANEL	RELOCATE CRASH CUSHION	CONCRETE BARRIER WALL TYPE 9T	EXPAN JOINT REPLACE - 4 IN	PAVE STRIPING - TEMP REM TAPE - B	PAVE STRIPING - TEMP REM TAPE - W	PAVE STRIPING - TEMP REM TAPE - Y	TEMP CRASH CUSHION	JOINT SEAL REPLACEMENT	STEEL BEARING (SADDLE BEARING REPAIR)	STEEL REPAIR (SIDEWALK FLOORBEAM CONNECTION REPLACEMENT)	STEEL REPAIR (GIRDERR INTERMEDIATE STIFFENER REPAIR)	STEEL REPAIR (GIRDERR FLOORBEAM CONNECTION REPAIR)	STEEL REPAIR (GIRDERR SPLICE PLATE REPAIR)		
UNIT	EACH	L.F.	S.F.	L.S.	L.S.	L.S.	EACH	EACH	EACH	EACH	L.F.	L.F.	L.F.	L.F.	L.F.	EACH	L.F.	EACH	EACH	EACH	EACH	EACH	EACH	
BRIDGE TOTALS	241	1040	350	1	1	1	3	2	2	2	4820	38	16825	14744	13692	4	492	1	58	48	16	8		

US-31E OVER OHIO RIVER

PROPOSED WORK: US-31E  
BRIDGE REPAIR PLANS

056B00136N CLARK  
MEMORIAL BRIDGE

LOUISVILLE, KY



JEFFERSONVILLE, IN

OHIO RIVER

#### INDEX OF SHEETS

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#### SPECIAL NOTES

Special Note for Contract Completion Date and Liquidated Damages on Bridge Repair Contracts
Special Note for Girder Repair
Special Note for Saddle Bearing Repair
Special Note for SW Floorbeam Connection Repair
Special Note for Painting Structural Steel Repairs
Special Note for Bridge Joint Replacement
Special Note for Bridge Joint Seal Replacement
Special Note for Traffic Control
Special Note for Expediting Project Work Order

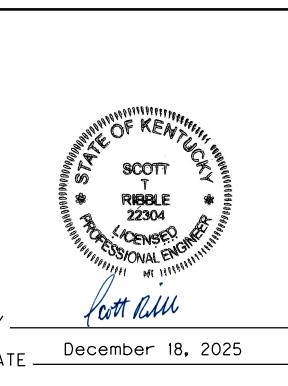
#### SPECIAL PROVISIONS

#### STANDARD DRAWINGS

RBM-020-09	Delineators for Concrete Barriers
RBM-115-10	Concrete Barrier Wall Type 9T (Temporary)
TTC-115-04	Lane Closure Multi-Lane Highway Case I
TTC-160-02	Temporary Pavement Marker Arrangements for Lane Closures

#### SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction
9th Edition AASHTO LRFD Bridge Design Specifications (2020)



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



KENTUCKY  
TRANSPORTATION  
CABINET



BURGESS & NIPLE

Engineers ■ Architects ■ Planners

REVISION DATE PREPARED BY

DATE: December 18th, 2025  
DESIGNED BY: D. Richardson  
DETAILED BY: D. Richardson

CHECKED BY  
L. Bridwell  
S. Ribble

**TITLE SHEET**

CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M1  
COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060

## SPECIFICATION NOTES

SPECIFICATIONS: References to the specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, including any current supplemental specifications. All references to the AASHTO Specifications are to the 9th Edition-2020 of the AASHTO LRFD Bridge Design Specifications.

## MATERIAL SPECIFICATION NOTES

MATERIALS: ASTM or AASHTO Specifications, current edition, as designated in the Special Notes and plan notes shall govern the materials furnished.

BONDING TO EXISTING CONCRETE USING STRUCTURAL ADHESIVES: Bond proposed plastic concrete to existing hardened concrete in all locations using a Type V Epoxy Resin or other approved Structural Adhesive as prescribed in Section 826 of the Specifications. Follow the manufacturer's recommended application instructions. This work and material is incidental to the unit price bid for the most applicable bid item.

REINFORCEMENT: Dimensions shown from the face of the concrete to bars are clear distances unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to the face of concrete is 2", unless otherwise noted. Bars designated with the suffix (E) shall be epoxy coated in accordance with Section 811.10 of the Standard Specifications. The cost for furnishing and installing reinforcement shall be incidental to the unit price bid for the most applicable bid item.

## ABBREVIATIONS

The following abbreviations have been used in the preparation of these plans:

Abut.	= Abutment
Ave.	= Avenue
c/c	= Center to center
Conn.	= Connection
Dia.	= Diameter
Diaph.	= Diaphragm
DS	= Downstream
EB	= Eastbound
Ex.	= Existing
FB	= Floorbeam
L.F.	= Linear feet
L.S.	= Lump sum
Min.	= Minimum
Max.	= Maximum
NB	= Northbound
no.	= Number
Pl.	= Plate
St.	= Street
S.F.	= Square feet
SB	= Southbound
Spa.	= Spaces
Std.	= Standard
SW	= Sidewalk
Typ.	= Typical
US	= Upstream
WB	= Westbound

## GENERAL SPECIFICATION NOTES

ON SITE INSPECTION: Each contractor submitting a bid for this work shall make a thorough inspection of the bridge and the work site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that work can be expeditiously performed after a contract is awarded. A suitable method of performing the work described herein should be investigated. Submission of a bid will be considered evidence of this inspection having been made. Any claims from site conditions will not be honored by the Department of Highways.

INCIDENTAL ITEMS: The Contractor is required to complete the structure in accordance with the plans and specifications. Material or labor not otherwise specified are to be considered incidental to the contract.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the construction in accordance with the plans and specifications. Material, labor, or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include but not be limited to incidental materials, disposal of waste off the right-of-way, incidental labor, or anything else that may be required to complete the construction.

BRIDGE PLANS: A copy of the available existing bridge plans (Drawing Numbers 9041, 13222, 17000, 21922, 22689, 23147, 25560, 26596, and 26865), will be made available to the successful bidder upon his written request to the Division of Structural Design. The completeness of these drawings is not guaranteed, and no responsibility is assumed by the Department of Highways for their accuracy.

FIELD VERIFICATION: The Contractor shall verify elevations and dimensions, including thickness of components, cross slopes, and crown details with field measurement prior to ordering materials or fabricating steelwork. Any discrepancies shall be brought to the attention of the Engineer. New material that is unsuitable because of variations in the existing structure shall be replaced at the Contractor's expense.

DAMAGE TO THE STRUCTURE: The Contractor is responsible for any and all damage to the existing structure during the construction should damage result from the Contractor's actions. After the completion of construction, the structure and site shall receive a final cleaning up. The Contractor shall clear the right-of-way and all ground the Contractor occupies in connection with the work of all rubbish, equipment, and excess materials. Place rubbish and all waste of whatever nature, other than hazardous materials, on either public or private property in a location out of the view from the roadway and in a manner to the Department that does not present an unsightly appearance. Restore in an acceptable manner all property, both public and private, that was damaged in the prosecution of the work.

DIMENSIONS: Dimensions shown on these plans are taken from the drawings listed under "Bridge Plans" above and do not necessarily reflect revisions made during construction. All plan dimensions are for a normal temperature of 60°F. Layout dimensions are horizontal dimensions. Deck width is measured at the top of the concrete deck.

SHOP DRAWINGS: The Contractor is to submit detailed shop drawings and material specifications for any details or materials that vary from these plans to the Department for approval in accordance with Section 607.03.01 of the Standard Specifications. When any changes are proposed by the fabricator or supplier, the shop drawings reflecting these changes shall be submitted to the Department through the Contractor.

MAINTAINING TRAFFIC: Traffic shall be maintained at all times in accordance with the Special Note for Traffic Control, these drawings, and the Standard Drawings.

UTILITY AND SIGNAGE PROTECTION: Any traffic and decorative lighting, signage, and active utility ducts and electrical conduit shall be adequately protected. Any damage to signage and utilities caused by the Contractor shall be repaired at the Contractor's expense.

REMOVED MATERIALS: All existing steel that is to be removed shall not be reused on the structure unless otherwise noted in the plans. The Contractor is to ensure that the remaining steel is not damaged during removal. All material removed shall become the property of the Contractor and shall be removed from the bridge site.

CONSTRUCTION SEQUENCE: The Contractor shall follow the construction and phasing sequences detailed in the plans and Special Notes. The Contractor may propose alternate construction sequences to the Engineer for approval no later than three working days prior to the start of work on a given work item.

## SUPERSTRUCTURE NOTES

REMOVAL OF EXISTING CONCRETE: This work shall include removal of the reinforced concrete deck and curb adjacent to the joint being replaced or as directed by the Engineer and disposal of this material away from the bridge site. Any damage to the remaining existing structure resulting from the Contractor's operation shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Department. Existing concrete shall be removed to the limits shown by drilling, chipping, or other methods approved by the Engineer. The concrete shall be removed without allowing broken concrete to drop into the river or on to unprotected areas below the structure. The Contractor shall be responsible for any damage caused by falling concrete. The perimeter of portions of the structure to be removed that will be adjacent to new concrete shall be saw cut to a depth as shown on the plans before removal begins. The surfaces presented as a result of this removal shall be reasonably true and even with sharp, straight corners that will permit constructing a neat and workmanlike joint with the new construction. Where existing bars are to extend from the remaining concrete into new concrete, the concrete shall be removed so as to leave the projecting bars clean and undamaged. Where projecting bars are not to extend into new concrete, they shall be cut off flush with the surface to which concrete has been removed. The cost of this work shall be incidental to the unit price bid for Expan Joint Replace - 4 In. or Steel Repair (Sidewalk Floorbeam Connection Replacement), as applicable.

CLEANING EXISTING STEEL: All areas of existing steel that are to be in contact with new steel shall be cleaned of all dirt, rust, paint, and other foreign matter before installing the new steel. The cost of this cleaning is to be incidental to the unit price bid for the most appropriate bid item.

PROHIBITED FIELD WELDING: Except as noted in these plans and in the Special Notes, no welding of any nature shall be performed on the load carrying members of the bridge without the written consent of the Director, Division of Structural Design, and then only in the manner and at the locations designated in the authorization.

WELDING: No welding shall be permitted without written permission of the Engineer. All welding shall conform to Section 607.03.07 of the current Standard Specifications for Road and Bridge Construction. Modifications and additions as stated in the plans and Special Notes shall supersede the AASHTO/AWS Specifications. Welding procedures shall be submitted to the Engineer and approved prior to the start of fabrication and repairs. Work shall be completed by an AWS certified welder. The cost of the welding and welding materials is to be incidental to the unit price bid for the most appropriate bid items.

MILL TEST REPORTS: Notarized test reports shall be furnished in triplicate to the Department showing that all the materials used for their repairs conform to the requirements of the plans and specifications.

PAINT: See the Special Note for Painting Structural Steel Repairs.

RESIDUAL LEAD: Residual lead paint may still be on the structure. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing all work specified in the contract. The Department will not consider any claims based on residual lead paint.

TOUCH-UP PAINTING: All areas of new or existing structural steel on which the paint has been damaged by the Contractor with weld burns or by other means during construction shall be touched up per the procedures listed for painting in the Special Notes. The cost for this work shall be incidental to the unit price bid for the most applicable bid items.

PAYMENT FOR STRUCTURAL STEEL REPAIRS: The unit price bid for all structural steel repair bid items listed in the estimate of quantities shall be full compensation for all access, removal, drilling, reaming, cutting, welding, removing deteriorated metal, and all new materials, labor, equipment, tools, and incidentals necessary to complete each item of work.



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



KENTUCKY  
TRANSPORTATION  
CABINET

MicroStation v24.00.02.62

USER: Bridwell

DATE PLOTTED: December 17, 2025

PREPARED BY  
**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

REVISION DATE

DATE: December 18th, 2025

DESIGNED BY: D. Richardson

DETAILED BY: D. Richardson

CHECKED BY

S. Ribble

S. Ribble

**GENERAL NOTES**

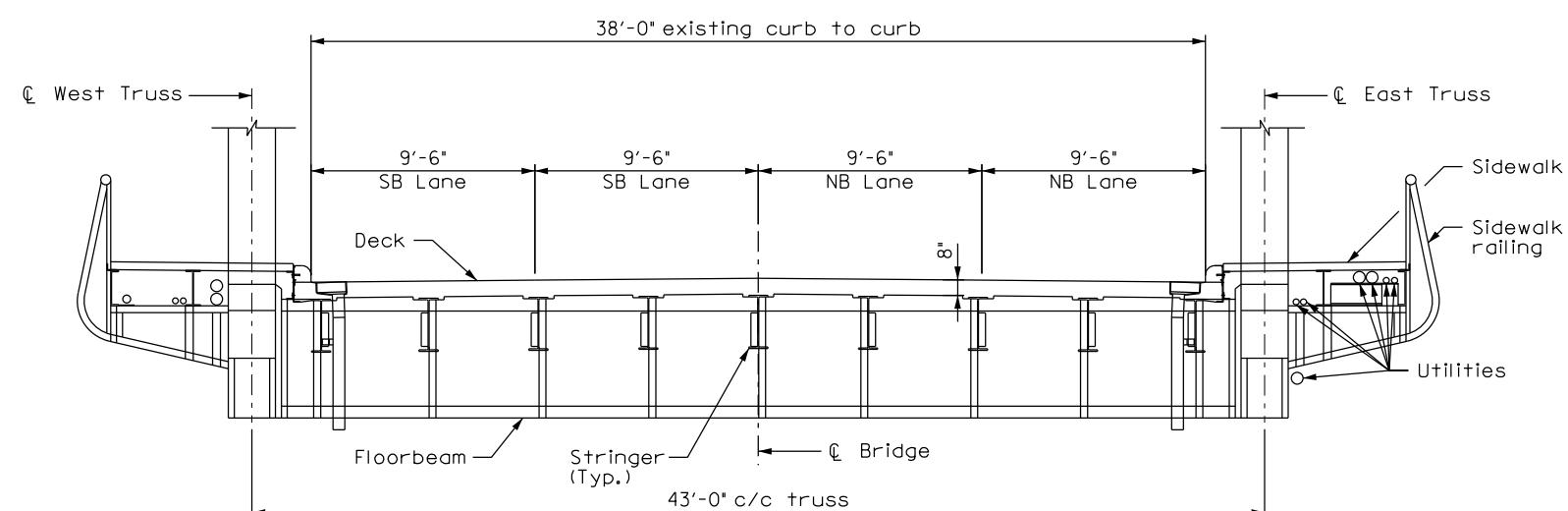
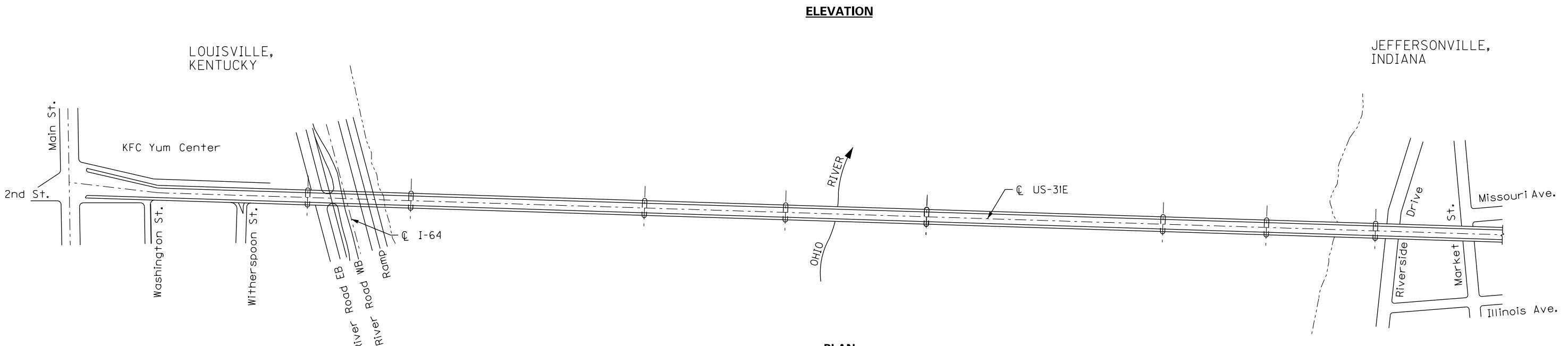
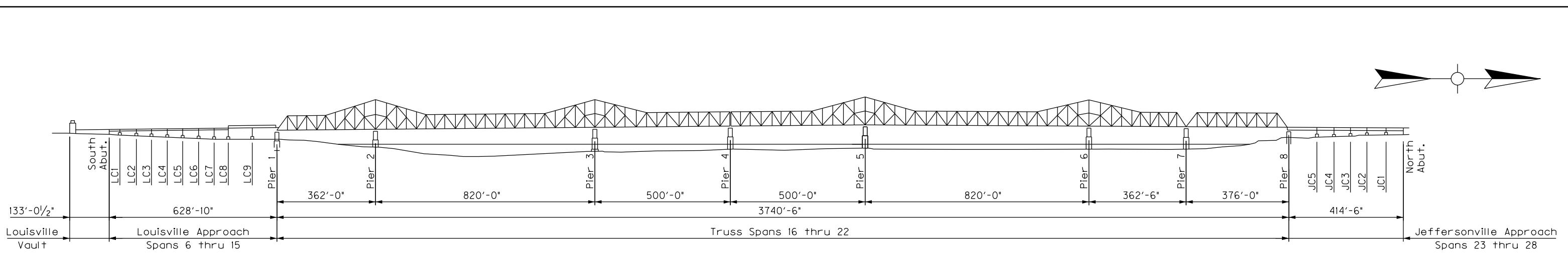
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Ohio River

ROUTE  
US-31E

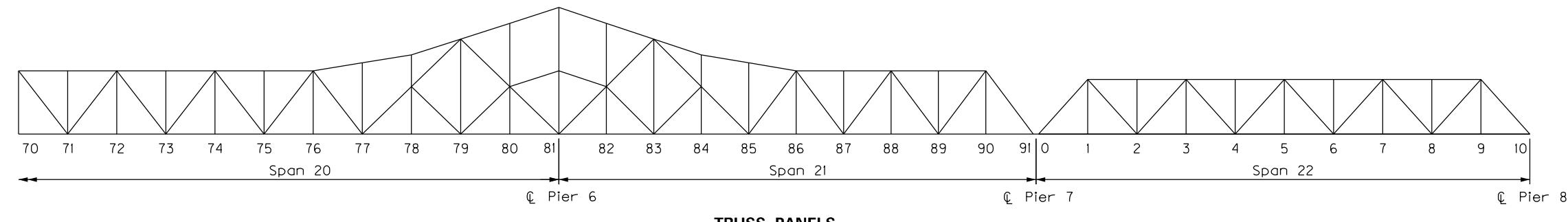
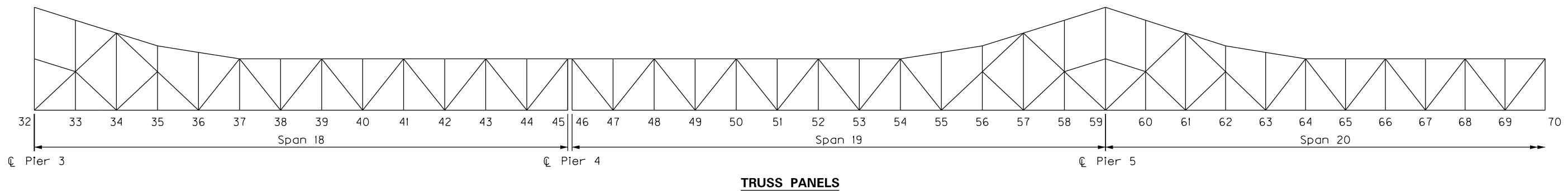
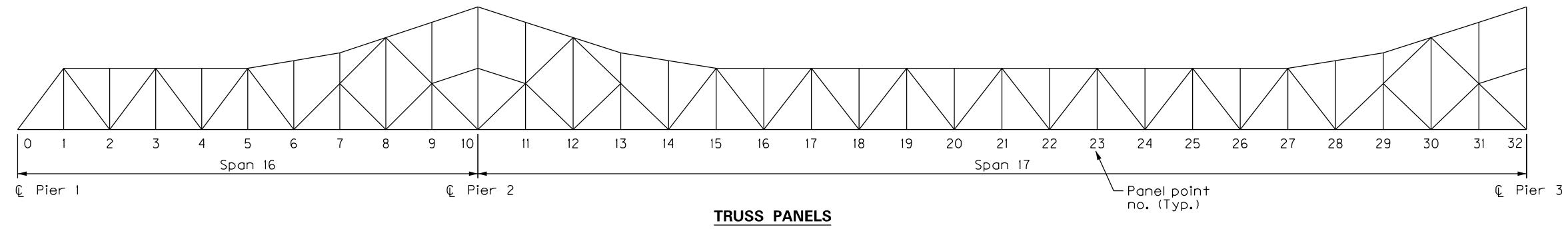
ITEM NO.  
5-10165  
SHEET NO.  
M2

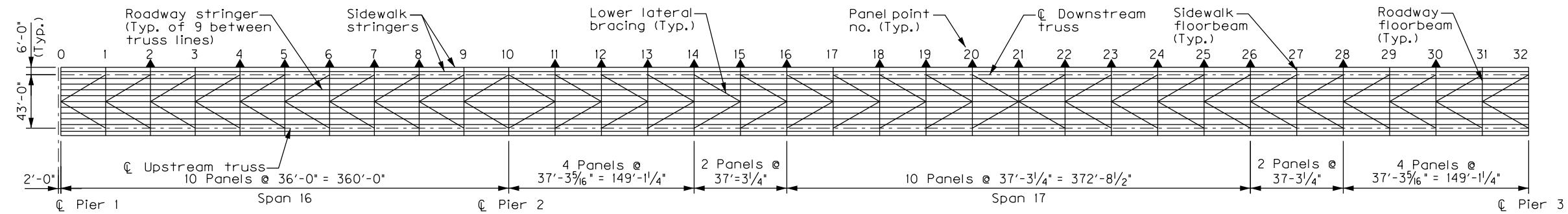
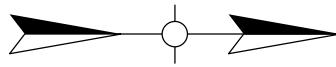
COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060

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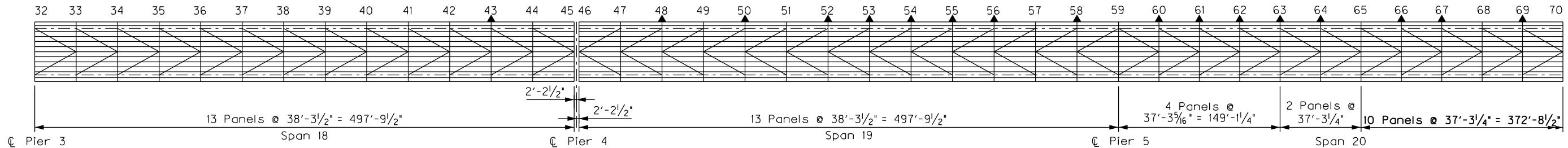


**TYPICAL SECTION (TRUSS SPANS SHOWN)**  
(Shear connectors not shown for clarity)

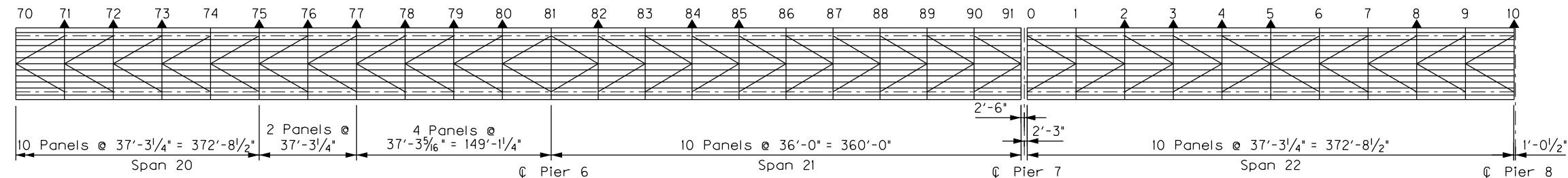




**TRUSS SPANS**



**TRUSS SPANS**



**TRUSS SPANS**

**LEGEND:**

- ▲ Sidewalk floorbeam strap connection replacement

**NOTES:**

- 1) See Sheets MI1-MI3 for sidewalk floorbeam strap connection replacement details
- 2) See Sheets MI4-MI6 for sidewalk removal/replacement details



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



REVISION

DATE

PREPARED BY  
**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025

CHECKED BY

DESIGNED BY: D. Richardson

S. Ribble

DETAILED BY: D. Richardson

S. Ribble

**REPAIR LOCATIONS - TRUSS SPANS**

CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M5  
DRAWING NUMBER  
29060

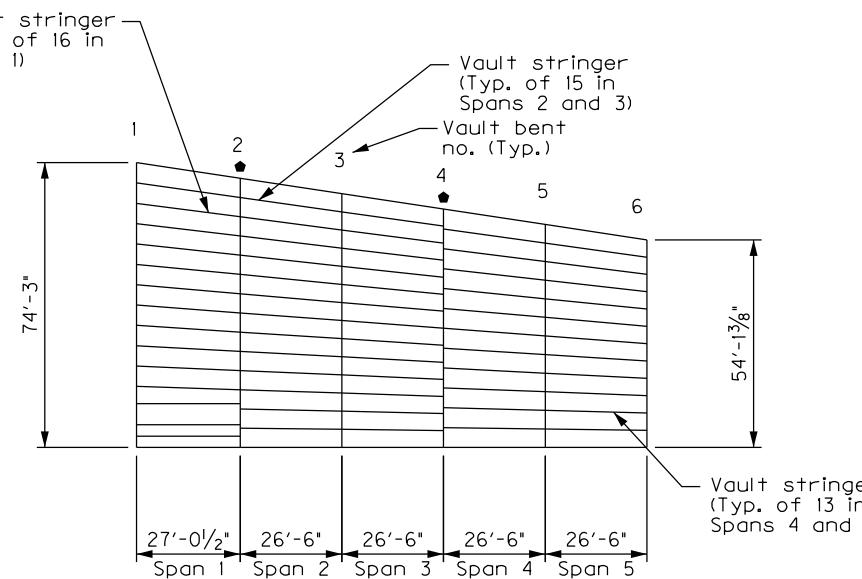
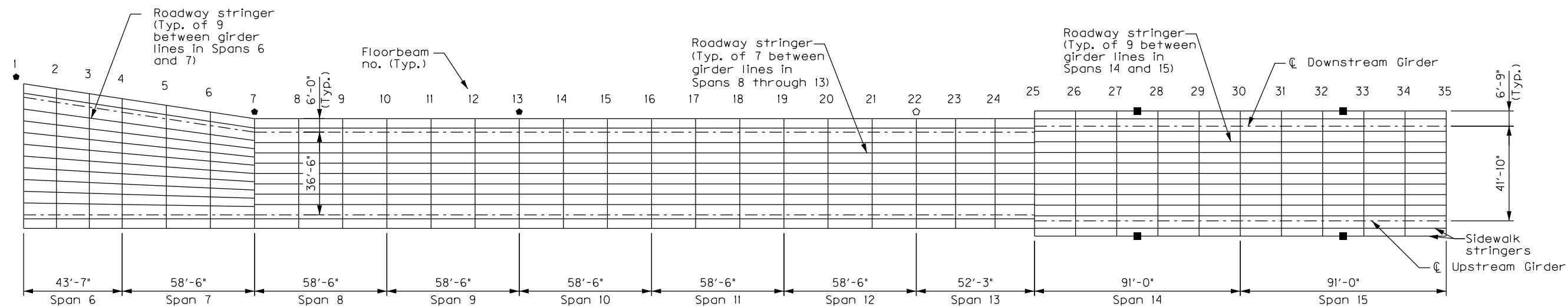
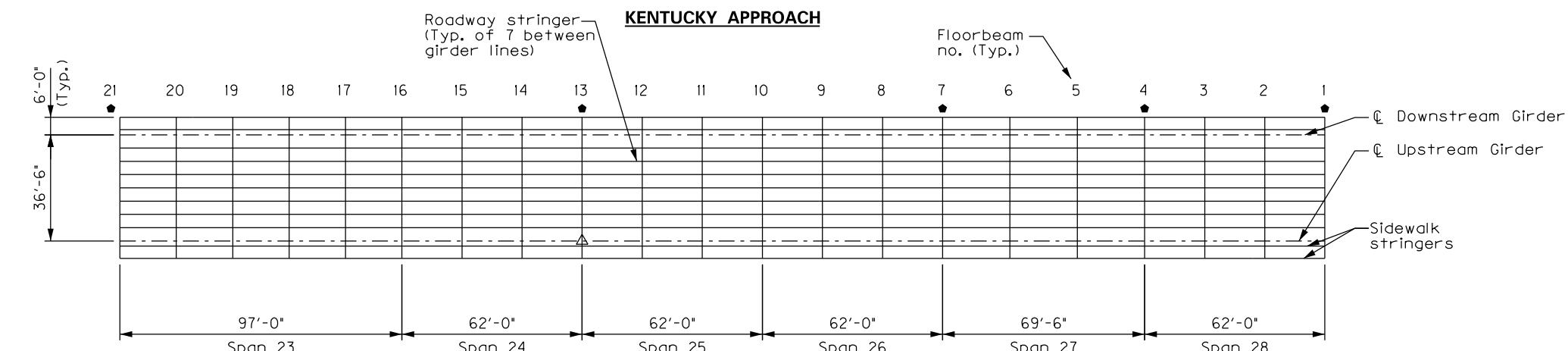
COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060

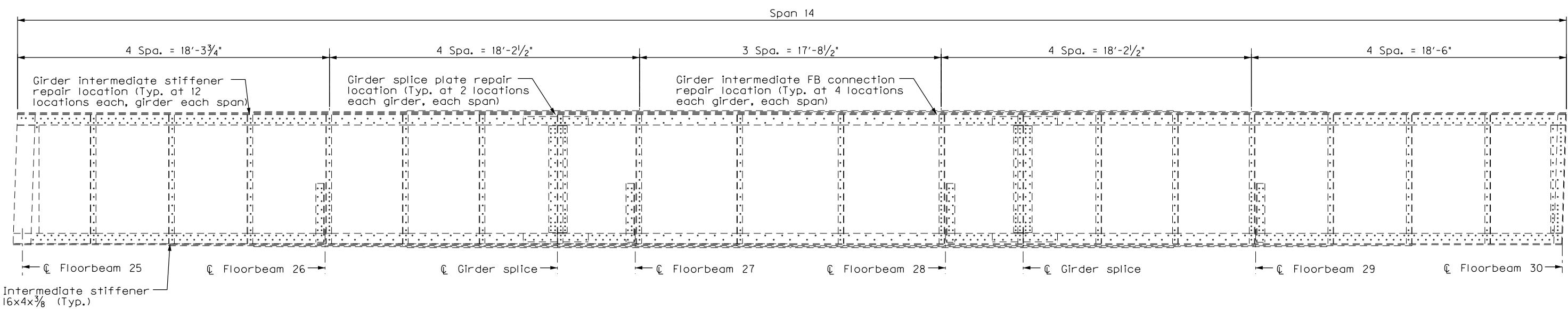
**LEGEND:**

- Joint seal replacement
- Joint replacement
- Girder repairs
- △ Saddle bearing repairs

**NOTES:**

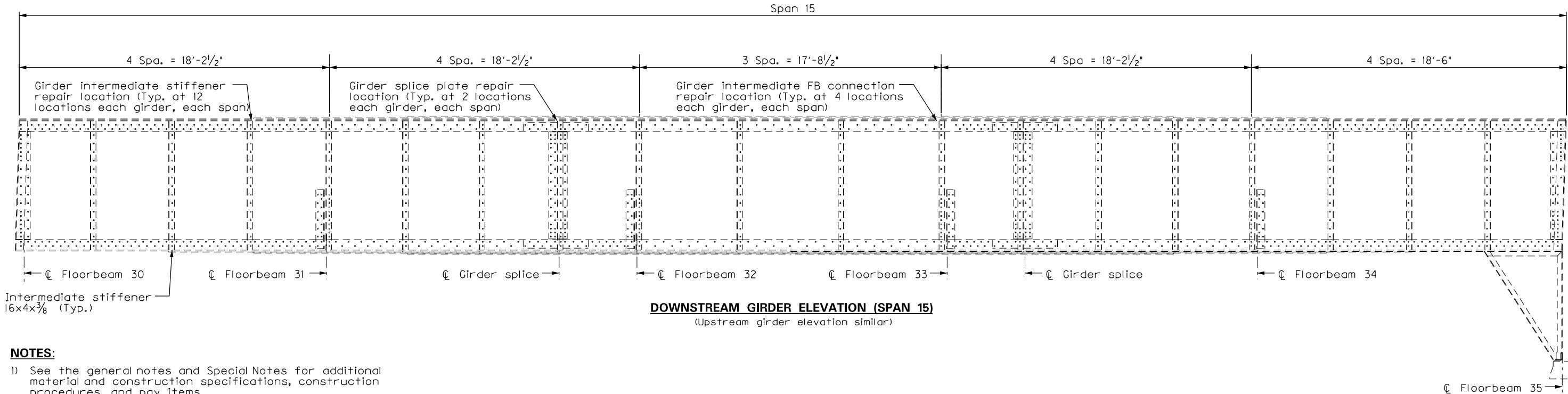
- 1) See Sheets M7-M9 for girder repair details
- 2) See Sheet M10 for saddle bearing repair details
- 3) See Sheets M17-M18 for joint replacement details
- 4) See Sheets M19-M20 for joint seal replacement details

**KENTUCKY VAULT****KENTUCKY APPROACH****INDIANA APPROACH**



#### DOWNSTREAM GIRDER ELEVATION (SPAN 14)

(Upstream girder elevation similar)



#### DOWNSTREAM GIRDER ELEVATION (SPAN 15)

(Upstream girder elevation similar)

#### NOTES:

- 1) See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- 2) See Sheet M6 for the locations of the girder repairs.
- 3) The Contractor shall field verify all relevant existing dimensions.
- 4) If it is necessary to adjust the layout of bolts due to the geometry of members, the minimum spacing between bolts shall not be less than  $2\frac{3}{4}$ ", and the maximum spacing between bolts shall not be greater than 6". Spacing is measured center to center of bolts. No bolt shall be placed closer than  $1\frac{1}{4}$ " to the edge of a plate. This measurement is from the center of bolt to the edge.
- 5) Hole diameter shall be  $\frac{1}{16}$ " larger than the diameter of the bolt unless noted otherwise.



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



REVISION

DATE

PREPARED BY  
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Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
DESIGNED BY: D. Richardson  
DETAILED BY: D. Richardson

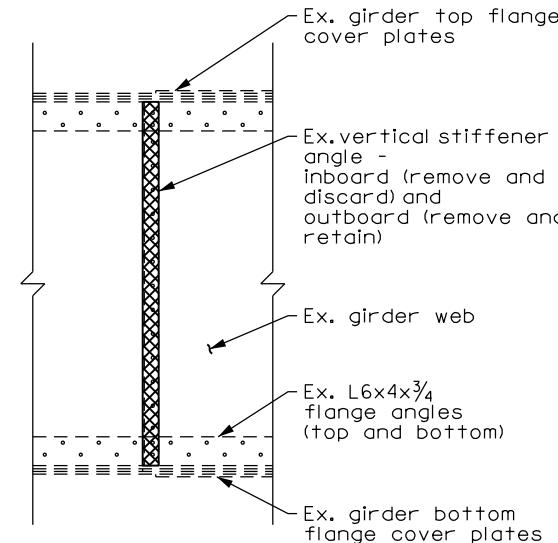
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S. Ribble  
S. Ribble

**GIRDER REPAIR LOCATIONS**  
CROSSING  
Ohio River

ROUTE  
US-31E

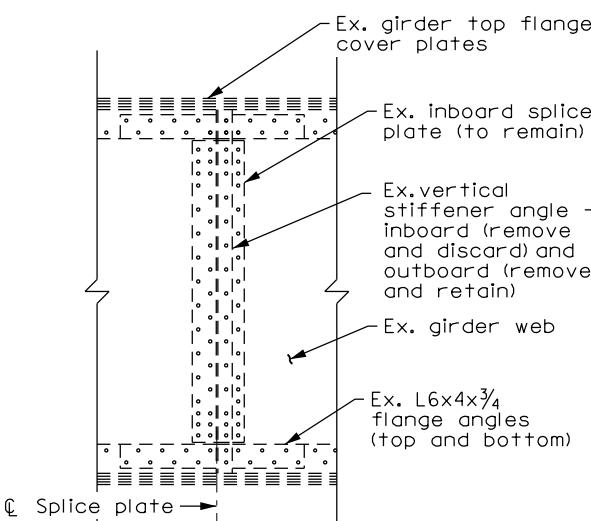
ITEM NO.  
5-10165  
SHEET NO.  
M7

COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060



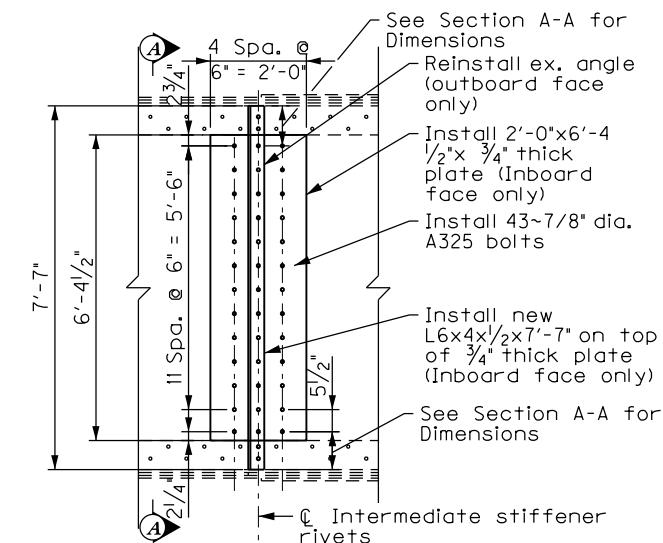
### INTERMEDIATE STIFFENER REMOVAL

Existing condition



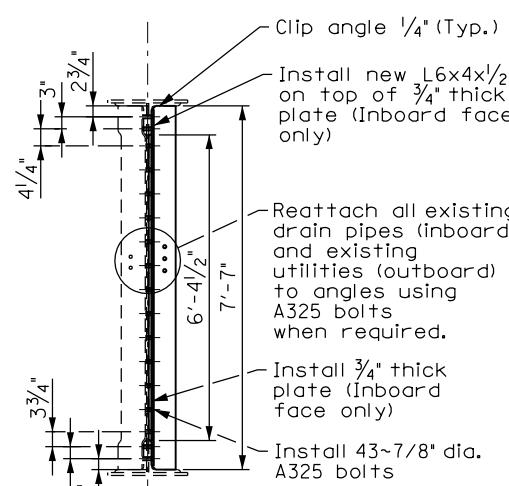
### GIRDER AT SPlice LOCATION

Existing condition



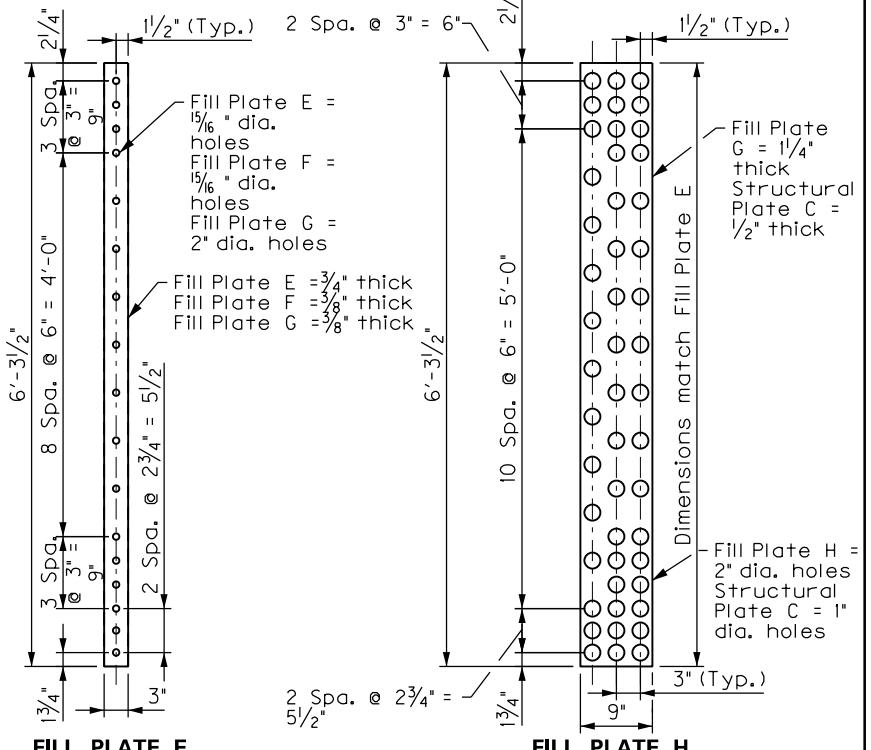
### INTERMEDIATE STIFFENER REPAIR

Proposed condition



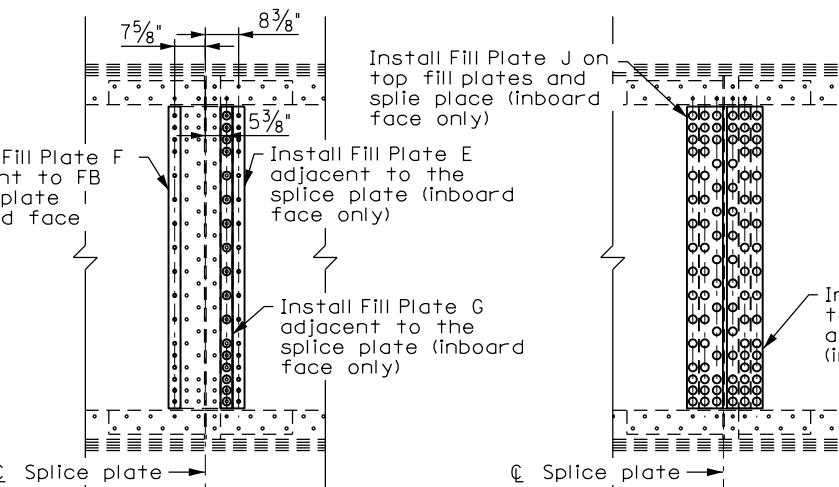
### SECTION A-A

Proposed condition



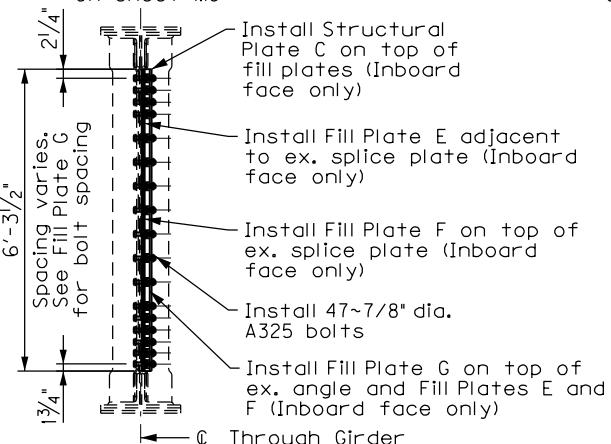
### FILL PLATE E FILL PLATE F FILL PLATE G

### FILL PLATE H STRUCTURAL PLATE C



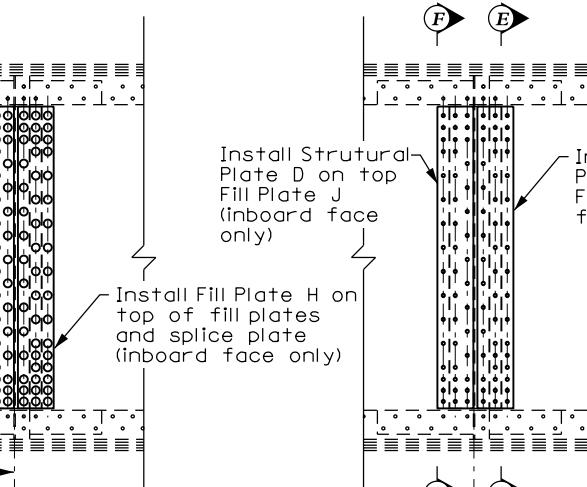
### SPLICE PLATE REPAIR

Installation of fill plates  
See Double Nut Connection Detail A  
on Sheet M9



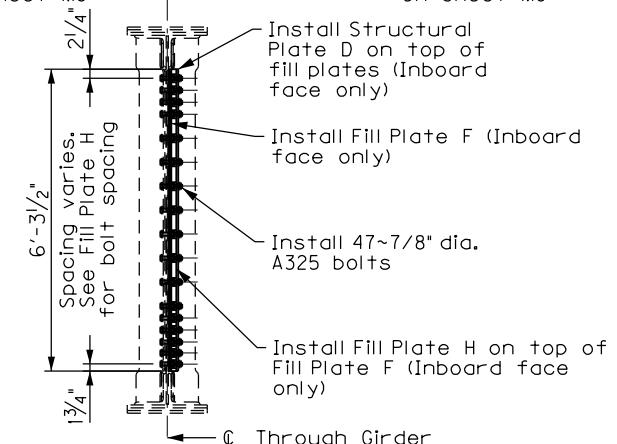
### SECTION E-E

Proposed condition



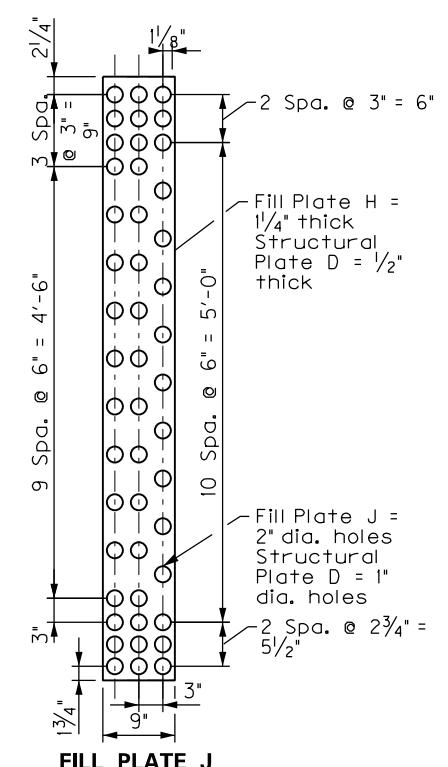
### SPLICE PLATE REPAIR

Final proposed condition  
See Double Nut Connection Detail C  
on Sheet M9



### SECTION F-F

Proposed condition



### FILL PLATE J STRUCTURAL PLATE D

### NOTES:

- See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- See Sheets M6 and M7 for the locations of the girder repairs.
- The Contractor shall field verify all relevant existing dimensions.
- If it is necessary to adjust the layout of bolts due to the geometry of members, the minimum spacing between bolts shall not be less than  $2\frac{3}{4}$ ", and the maximum spacing between bolts shall not be greater than 6". Spacing is measured center to center of bolts. No bolt shall be placed closer than  $1\frac{1}{4}$ " to the edge of a plate. This measurement is from the center of bolt to the edge.
- Hole diameter shall be  $\frac{1}{16}$ " larger than the diameter of the bolt unless noted otherwise.



COMMONWEALTH OF KENTUCKY  
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KENTUCKY  
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Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
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S. Ribble  
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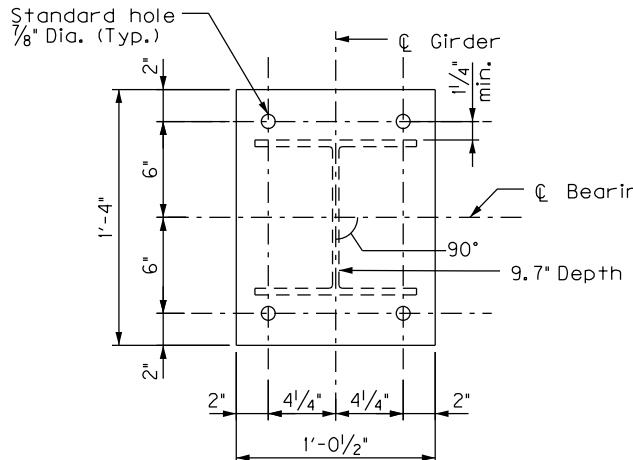
**GIRDER REPAIR DETAILS - 1**  
CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M8

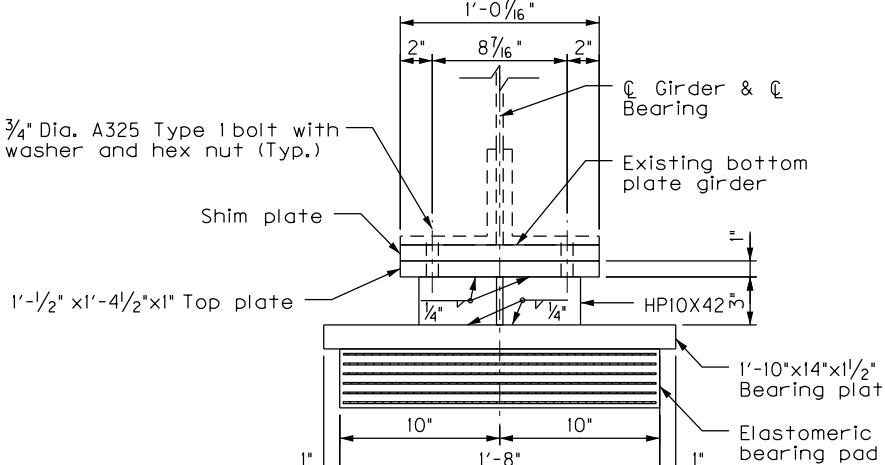
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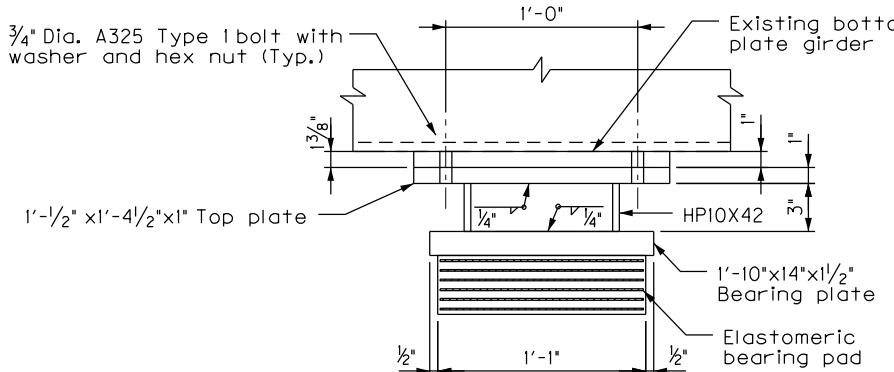


**TOP PLATE PLAN**

(Shim Plates Similar)

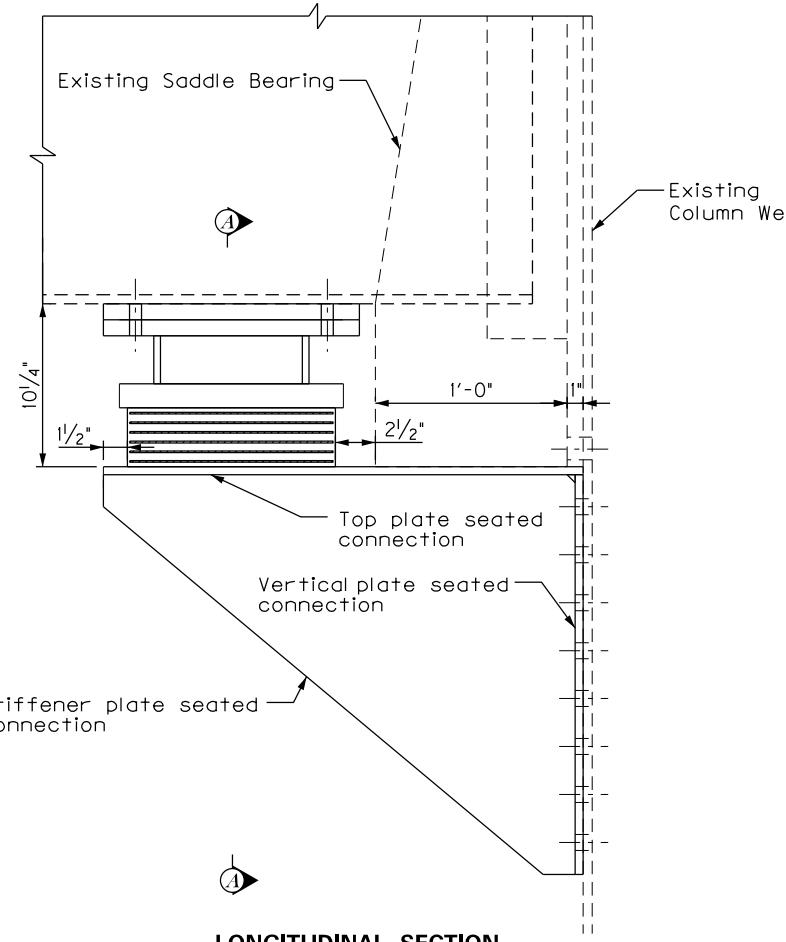


**CROSS SECTION BEARING ASSEMBLY**

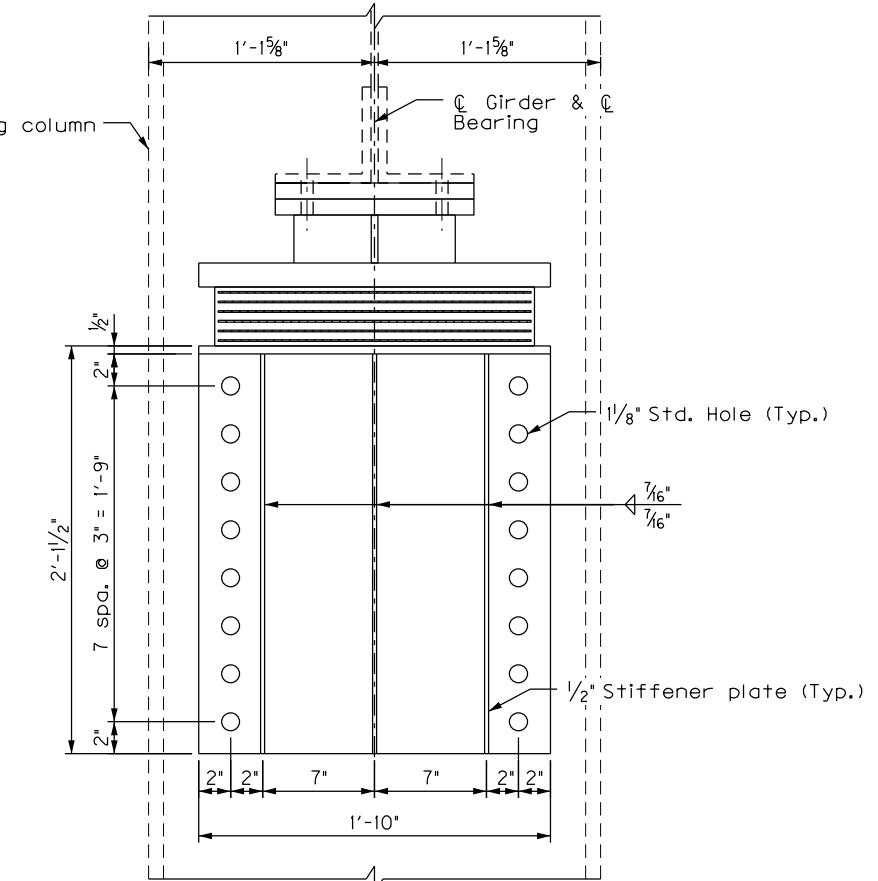


**LONGITUDINAL VIEW  
BEARING ASSEMBLY**

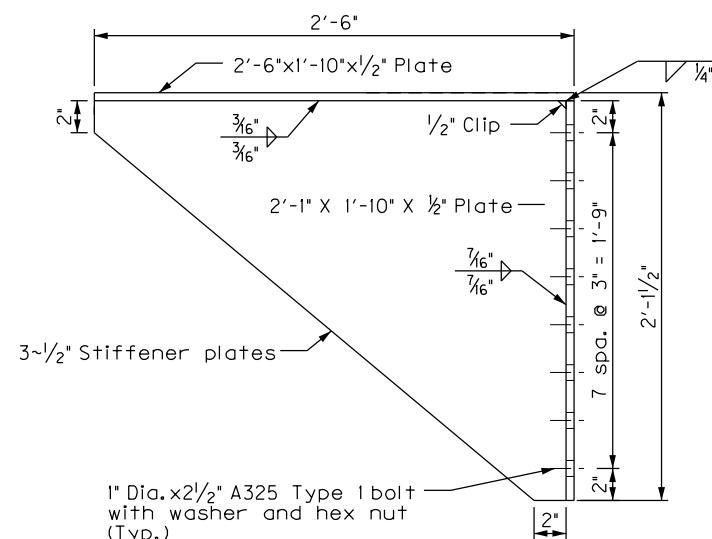
(\* See Structural Steel Shim Plate Table for Dimensions)



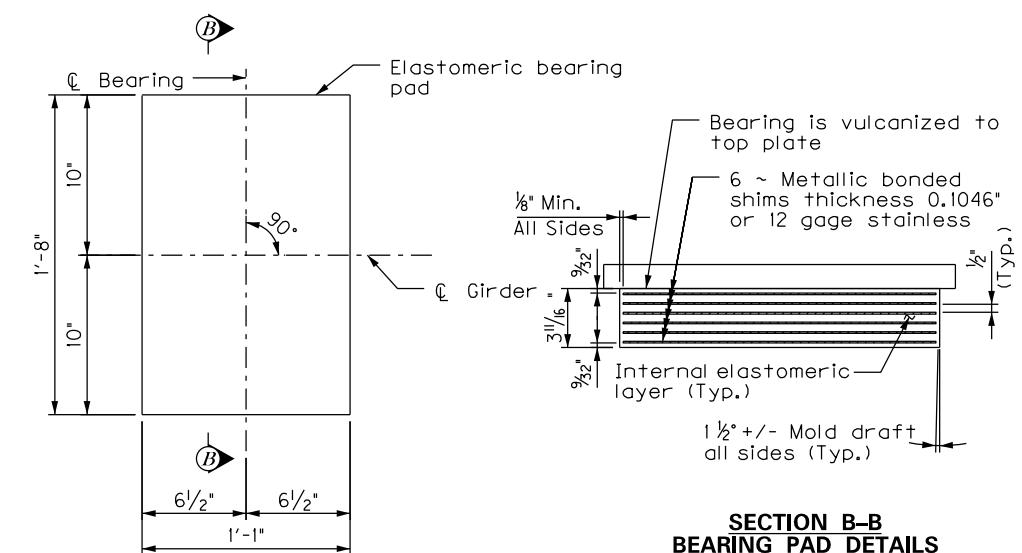
**LONGITUDINAL SECTION**



**SECTION A-A**



**SEATED PLATE  
CONNECTION DETAIL**



**SECTION B-B  
BEARING PAD DETAILS**

**NOTES:**

- 1) See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- 2) The Contractor shall field verify all relevant existing dimensions.
- 3) All structural steel to be A992 (Fy = 50 ksi).
- 4) All welds to be E70 fillet welds (70 ksi).



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



KENTUCKY  
TRANSPORTATION  
CABINET

REV. 10/2020

DATE

PREPARED BY  
**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
DESIGNED BY: K.Sharma  
DETAILED BY: K.Sharma

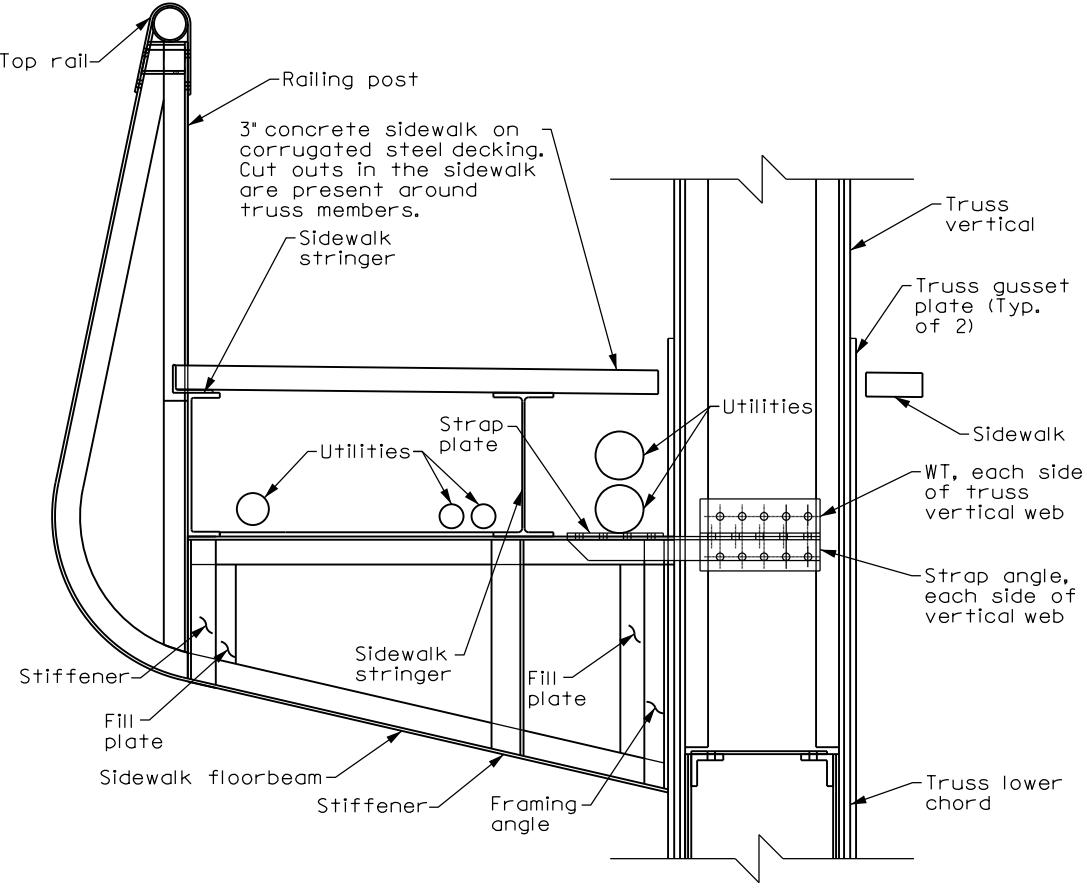
CHECKED BY  
E.Spahr  
E.Spahr

**SADDLE BEARING REPAIRS**  
CROSSING  
Ohio River

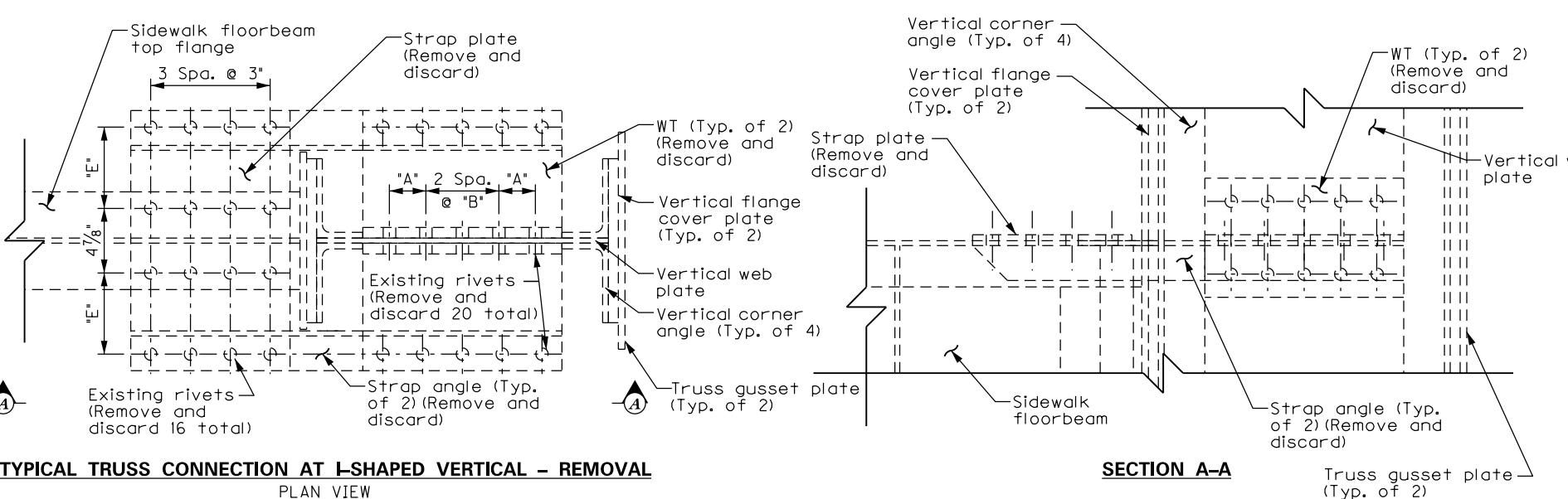
ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M10

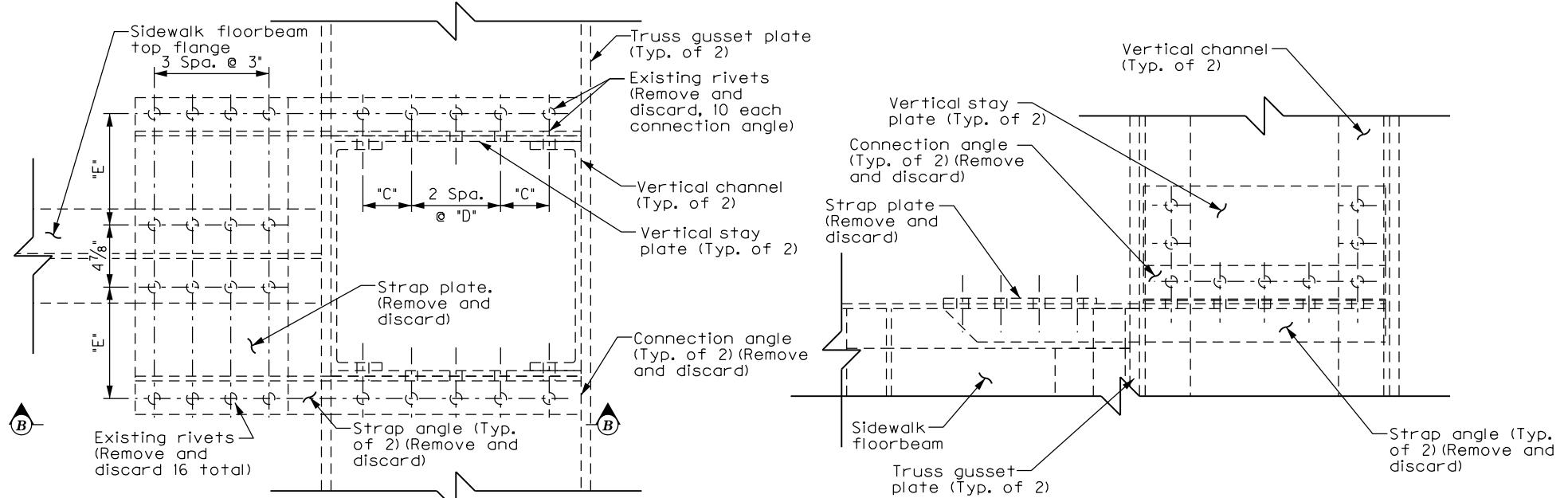
COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060



**TYPICAL I-SHAPED TRUSS VERTICAL SIDEWALK FLOORBEAM CONNECTION**  
DOWNSTREAM TRUSS FACING NORTH



**TYPICAL TRUSS CONNECTION AT I-SHAPED VERTICAL - REMOVAL**  
PLAN VIEW



**TYPICAL TRUSS CONNECTION AT BOX VERTICAL - REMOVAL**  
PLAN VIEW

**SECTION A-A**

Truss gusset plate (Typ. of 2)

**SECTION B-B**

Truss gusset plate (Typ. of 2)

**NOTES:**

- 1) See the general notes and the Special Note for Sidewalk Floorbeam Connection Replacement for additional material and construction specifications, construction procedures, and pay items.
- 2) Repair locations are identified on Sheet M5.
- 3) See Sheet M13 for lettered dimensions.
- 4) Number and placement of utilities varies over the length of the structure. The Contractor is responsible for locating, protecting, and temporarily support utilities, as necessary, and shall coordinate work with the owner of any affected utilities.
- 5) Truss panel points with built up box vertical have a similar connection to the sidewalk floorbeam top flange. The connection to the truss vertical utilizes angles rather than WTs.
- 6) WTs were cut from 2ICB#80.



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



REVISION	DATE

PREPARED BY  
**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
DESIGNED BY: S. Ribble  
DETAILED BY: S. Ribble

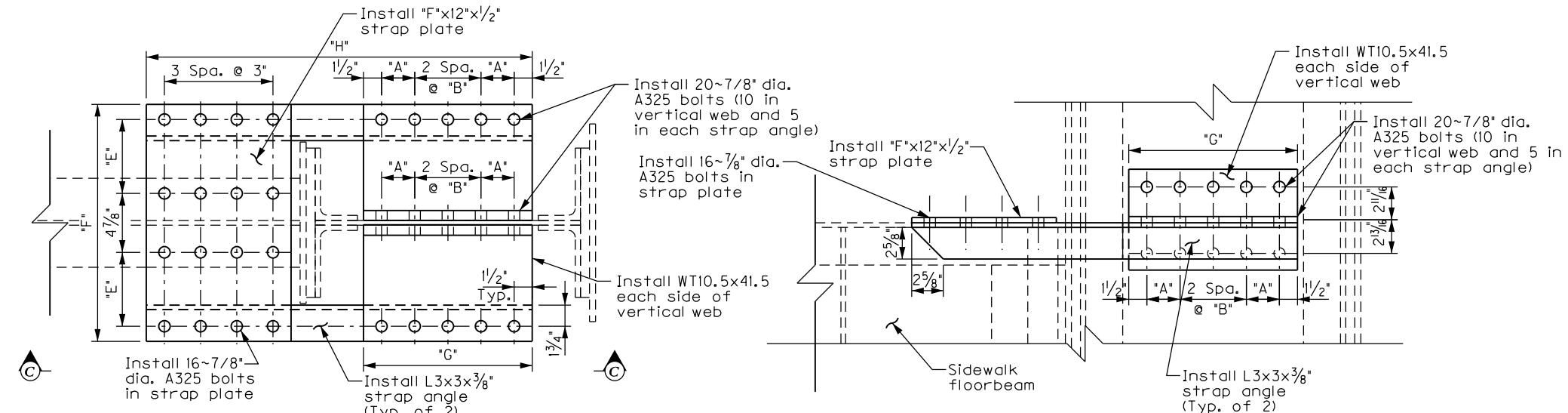
CHECKED BY  
L. Bridwell  
D. Richardson

**SW FLOORBEAM CONN. - REMOVAL**  
CROSSING  
Ohio River

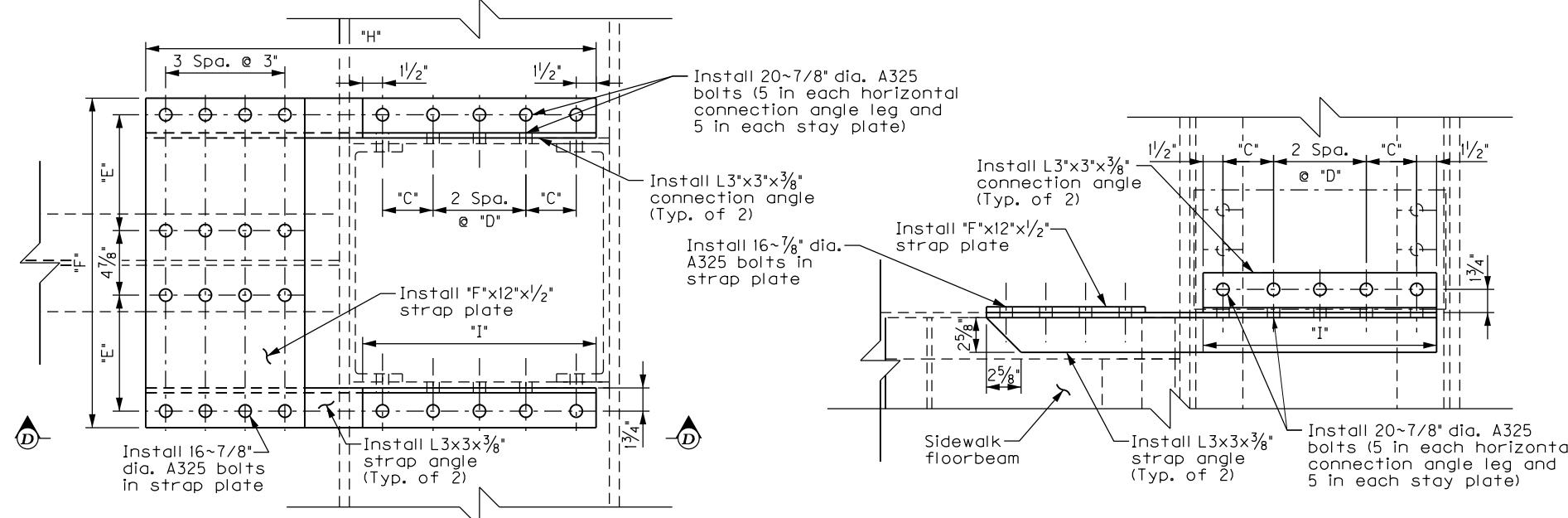
ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M11

COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060



## **TYPICAL TRUSS CONNECTION AT I-SHAPED VERTICAL - REPAIR PLAN VIEW**



**TYPICAL TRUSS CONNECTION AT BOX VERTICAL – REPAIR**  
PLAN VIEW

## **NOTES:**

- 1) See the general notes and the Special Note for Sidewalk/Floorbeam Connection Replacement for additional material and construction specifications, construction procedures, and pay items.
  - 2) Repair locations are identified on Sheet M5.
  - 3) See Sheet M13 for lettered dimensions.



COMMONWEALTH OF KENT  
DEPARTMENT OF HIGHWAYS



10

ON

PREPARED BY  
**BURGESS & NIPLI**  
Engineers ■ Architects ■ Planners

	DATE: December 18th, 2023
	DESIGNED BY: S. Ribble
	DETAILED BY: S. Ribble

**SW FLOORBEAM CONN. - PROPOSED**

CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
**5-10165**  
SHEET NO.  
**M12**

COUNTY OF  
**JEFFERSON**  
DRAWING NUMBER  
**29060**

# SIDEWALK FLOORBEAM CONNECTION REPAIR DIMENSIONS

PANEL POINT	SPAN	A	B	C	D	E	F	G	H	I	CONN. TYPE *
0	16	3"	3"			5 <sup>5</sup> / <sub>6</sub> "	18 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
1	16	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
2	16			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
3	16	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
4	16			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
5	16	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
6	16			3 <sup>15</sup> / <sub>16</sub> "	4"	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		34 <sup>1</sup> / <sub>16</sub> "	18 <sup>7</sup> / <sub>8</sub> "	B
7	16	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
8	16	3 <sup>1</sup> / <sub>2</sub> "	3 <sup>15</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	17 <sup>7</sup> / <sub>8</sub> "	33 <sup>15</sup> / <sub>16</sub> "		I
9	16	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
11	17	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
12	17	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
13	17	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
14	17			3 <sup>13</sup> / <sub>16</sub> "	3 <sup>1</sup> / <sub>2</sub> "	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		33 <sup>13</sup> / <sub>16</sub> "	17 <sup>5</sup> / <sub>8</sub> "	B
15	17	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
16	17			3 <sup>13</sup> / <sub>16</sub> "	4"	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>5</sup> / <sub>16</sub> "	18 <sup>5</sup> / <sub>8</sub> "	B
17	17	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
18	17			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
19	17	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
20	17			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
21	17	3 <sup>3</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "		I
22	17			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
23	17	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
24	17			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
25	17	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
26	17			3 <sup>13</sup> / <sub>16</sub> "	4"	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>5</sup> / <sub>16</sub> "	18 <sup>7</sup> / <sub>8</sub> "	B
27	17	3 <sup>3</sup> / <sub>16</sub> "	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15 <sup>3</sup> / <sub>8</sub> "	32 <sup>1</sup> / <sub>16</sub> "		I
28	17			3 <sup>13</sup> / <sub>16</sub> "	3 <sup>1</sup> / <sub>2</sub> "	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		33 <sup>13</sup> / <sub>16</sub> "	17 <sup>5</sup> / <sub>8</sub> "	N
29	17	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
30	17	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
31	17	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
33	18	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
34	18	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
35	18	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
36	18			3 <sup>15</sup> / <sub>16</sub> "	4"	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		34 <sup>7</sup> / <sub>16</sub> "	18 <sup>7</sup> / <sub>8</sub> "	B
37	18	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
38	18			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
39	18	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
40	18			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
41	18	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
42	18			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
43	18	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
44	18			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
47	19			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
48	19	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
49	19			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
50	19	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
51	19			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>6</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B

SIDEWALK FLOORBEAM CONNECTION REPAIR DIMENSIONS											
PANEL POINT	SPAN	A	B	C	D	E	F	G	H	I	CONN. TYPE *
52	19	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
53	19			4 <sup>11</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		35 <sup>11</sup> / <sub>16</sub> "	21 <sup>3</sup> / <sub>8</sub> "	B
54	19	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
55	19			3 <sup>15</sup> / <sub>16</sub> "	4"	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		34 <sup>7</sup> / <sub>16</sub> "	18 <sup>7</sup> / <sub>8</sub> "	B
56	19	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
57	19	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
58	19	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
60	20	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
61	20	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
62	20	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
63	20			3 <sup>15</sup> / <sub>16</sub> "	3 <sup>1</sup> / <sub>2</sub> "	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		33 <sup>13</sup> / <sub>16</sub> "	17 <sup>5</sup> / <sub>8</sub> "	B
64	20	3 <sup>3</sup> / <sub>16</sub> "	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15 <sup>3</sup> / <sub>8</sub> "	32 <sup>11</sup> / <sub>16</sub> "		I
65	20			3 <sup>15</sup> / <sub>16</sub> "	4"	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>5</sup> / <sub>16</sub> "	18 <sup>5</sup> / <sub>8</sub> "	B
66	20	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
67	20			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
68	20	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
69	20			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
70	20	3 <sup>3</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "		I
71	20			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
72	20	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
73	20			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
74	20	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
75	20			3 <sup>13</sup> / <sub>16</sub> "	4"	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>5</sup> / <sub>16</sub> "	18 <sup>5</sup> / <sub>8</sub> "	B
76	20	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
77	20			3 <sup>13</sup> / <sub>16</sub> "	3 <sup>1</sup> / <sub>2</sub> "	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		33 <sup>13</sup> / <sub>16</sub> "	17 <sup>5</sup> / <sub>8</sub> "	B
78	20	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
79	20	3 <sup>1</sup> / <sub>2</sub> "	4 <sup>3</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>8</sub> "	34 <sup>3</sup> / <sub>16</sub> "		I
80	20	3"	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
82	21	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
83	21	3 <sup>1</sup> / <sub>2</sub> "	3 <sup>15</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	17 <sup>7</sup> / <sub>8</sub> "	33 <sup>15</sup> / <sub>16</sub> "		I
84	21	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
85	21			3 <sup>15</sup> / <sub>16</sub> "	4"	8 <sup>13</sup> / <sub>16</sub> "	25 <sup>1</sup> / <sub>2</sub> "		34 <sup>7</sup> / <sub>16</sub> "	18 <sup>7</sup> / <sub>8</sub> "	B
86	21	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
87	21			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
88	21	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
89	21			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
90	21	2 <sup>3</sup> / <sub>4</sub> "	2 <sup>3</sup> / <sub>4</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	14"	32"		I
91	21	3"	3"			5 <sup>5</sup> / <sub>16</sub> "	18 <sup>1</sup> / <sub>2</sub> "	15"	32 <sup>1</sup> / <sub>2</sub> "		I
0	22	4 <sup>7</sup> / <sub>8</sub> "	3"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "		I
1	22	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
2	22			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
3	22	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
4	22			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
5	22	3 <sup>3</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	18 <sup>3</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>8</sub> "		I
6	22			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
7	22	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
8	22			3 <sup>15</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>2</sub> "	7 <sup>5</sup> / <sub>16</sub> "	22 <sup>1</sup> / <sub>2</sub> "		34 <sup>15</sup> / <sub>16</sub> "	19 <sup>7</sup> / <sub>8</sub> "	B
9	22	3 <sup>7</sup> / <sub>16</sub> "	5"			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	19 <sup>7</sup> / <sub>8</sub> "	34 <sup>15</sup> / <sub>16</sub> "		I
10	22	3 <sup>7</sup> / <sub>16</sub> "	3 <sup>13</sup> / <sub>16</sub> "			6 <sup>13</sup> / <sub>16</sub> "	21 <sup>1</sup> / <sub>2</sub> "	17 <sup>1</sup> / <sub>2</sub> "	33 <sup>3</sup> / <sub>4</sub> "		I

## NOTES

- I) Dimensions are provided for all locations, regardless of if that location is identified for repairs. Additional repair locations may be identified by the Engineer.

- \* B = Connection to built up box vertical
- I = Connection to I-shaped vertical



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



10

REVISION	D

PREPARED BY  
**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
DESIGNED BY: S. Ribble

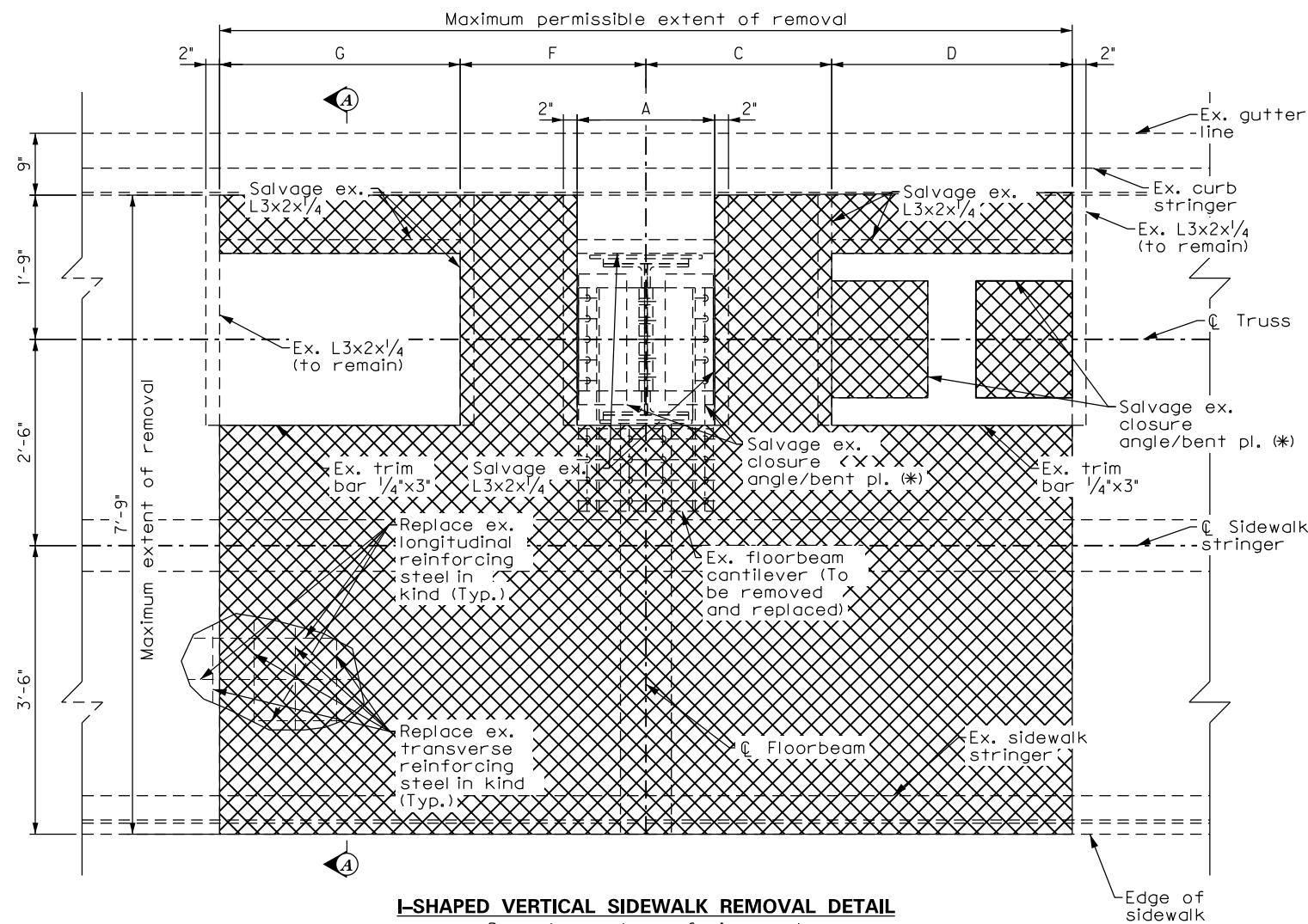
	CHECKED BY
	L. Bridwell

## ***SW FLOORBEAM CONN. - DIMS***

ROUTE  
US-31E

ITEM NO.  
**5-10165**  
SHEET NO.

COUNTY OF  
**JEFFERSON**  
DRAWING NUMBER



**I-SHAPED VERTICAL SIDEWALK REMOVAL DETAIL**  
 Downstream truss facing east  
 Dimensions as shown: Spans 16-18 & 22  
 Dimensions opposite hand: Spans 19-21  
 (\*) = Closure Bent Pl. @ FB 18, 20, 67, 69 shown  
 FB 22, 24, 71, 73 opposite hand

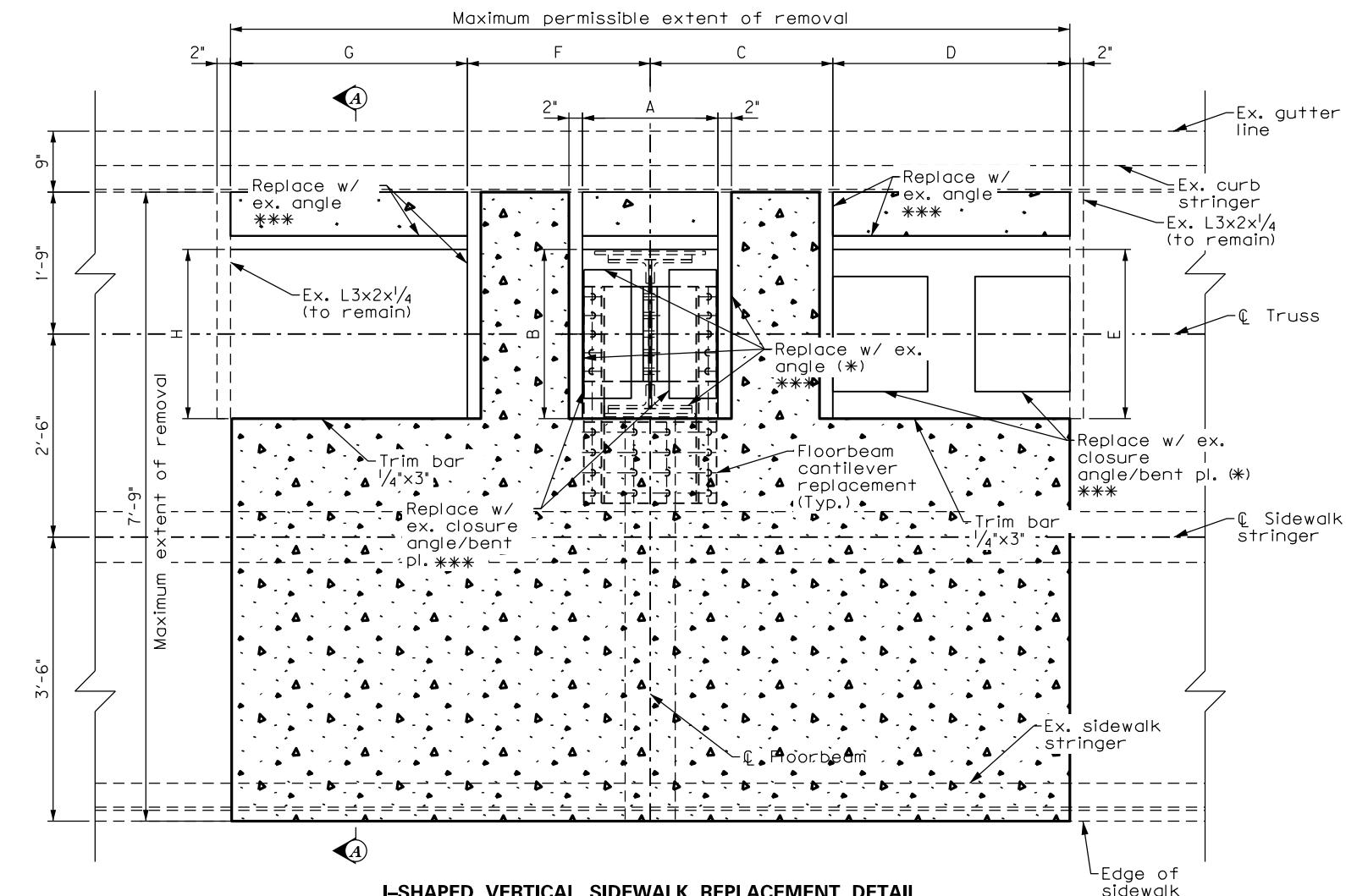
**LEGEND:**

= Limits of removal

= New concrete

\*\*\* = With the permission of the Engineer, rather than salvaging the existing closure angles, trim bars, and bent plates in the sidewalk, the Contractor has the option to replace these angles, trim bars, and bent plates with new angles, trim bars, and bent plates at the same size and locations as the existing angles and plates. If the Contractor chooses this option and permission is granted by the Engineer, the cost of providing and installing new reinforcing steel will be at the Contractor's expense.

BAR SIZE	
Dia.	Lap
1/2"	2'-5"
5/8"	3'-6"



**I-SHAPED VERTICAL SIDEWALK REPLACEMENT DETAIL**  
 Downstream truss facing east  
 Dimensions as shown: Spans 16-18 & 22  
 Dimensions opposite hand: Spans 19-21  
 (\*) = Closure Bent Pl. @ FB 18, 20, 67, 69 shown  
 FB 22, 24, 71, 73 opposite hand

**NOTES:**

- 1) See the general notes and the Special Note for Sidewalk Floorbeam Connection Replacement for additional material and construction specifications, construction procedures, and pay items.
- 2) The Contractor shall field verify all relevant existing dimensions and number sizes.
- 3) The details on this sheet are provided to the Contractor for use if an alternative method of accessing the floorbeam cantilever repair locations is determined to be necessary. The Contractor shall coordinate with the Engineer on proposed locations.

		SIDEWALK REMOVAL/REPLACEMENT DIMENSIONS									
		PANEL POINT									
SPAN	POINT	A	B	C	D	E	F	G	H	Closure Angle/Bent Plate	Length
SPAN 16	SPAN 21	2	1'-8"	2'-2"	2'-1"	3'-3"	2'-3"	2'-1"	3'-3"	2'-3"	
		4	1'-8"	2'-2"	2'-1"	3'-3"	2'-3"	2'-1"	3'-3"	2'-5"	
		6	85	1'-11"	2'-1"	2'-1"	3'-3"	2'-3"	3'-10"	2'-3"	2'-10"
		8	2'-2"	2'-3"	3'-6"	2'-11"	2'-1"	3'-6"	2'-11"	2'-1"	
SPAN 17	SPAN 20	A	B	C	D	E	F	G	H		
		12	79	1'-8"	2'-1"	3'-8"	2'-11"	2'-2"	3'-7"	2'-11"	2'-1"
		14	77	1'-11"	2'-0"	4'-0"	2'-3"	2'-10"	1'-10"	3'-11"	2'-2"
		16	75	See Suspended Span Hanger Detail							
		18	73	1'-8"	2'-1"	2'-6"	2'-10"	2'-2"	2'-5"	3'-0"	2'-2"
		20	71	1'-8"	2'-1"	2'-9"	2'-3"	2'-1"	2'-5"	3'-0"	2'-2"
		22	69	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-8"	2'-3"	2'-1"
		24	67	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-6"	2'-10"	2'-2"
		26		See Suspended Span Hanger Detail							
		28	63	1'-11"	2'-0"	1'-10"	3'-11"	2'-10"	4'-0"	4'-0"	2'-10"
		30	61	1'-8"	2'-1"	3'-7"	2'-11"	2'-1"	3'-8"	3'-8"	2'-2"
SPAN 19		A	B	C	D	E	F	G	H		
		53	1'-11"	2'-1"	4'-1"	2'-3"	2'-10"	2'-3"	3'-4"	2'-2"	Bent Pl. 5/16 x 33
		55	1'-8"	2'-2"	2'-3"	3'-4"	2'-5"	2'-3"	3'-4"	2'-2"	
SPAN 22		A	B	C	D	E	F	G	H		
		2	1'-8"	2'-1"	2'-6"	2'-10"	2'-2"	2'-5"	3'-0"	2'-2"	
		4	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-5"	3'-0"	2'-2"	
		8	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-6"	2'-10"	2'-2"	



COMMONWEALTH OF KENTUCKY  
 DEPARTMENT OF HIGHWAYS



KENTUCKY  
 TRANSPORTATION  
 CABINET

REVISION	DATE

PREPARED BY  
**BURGESS & NIPLE**  
 Engineers ■ Architects ■ Planners

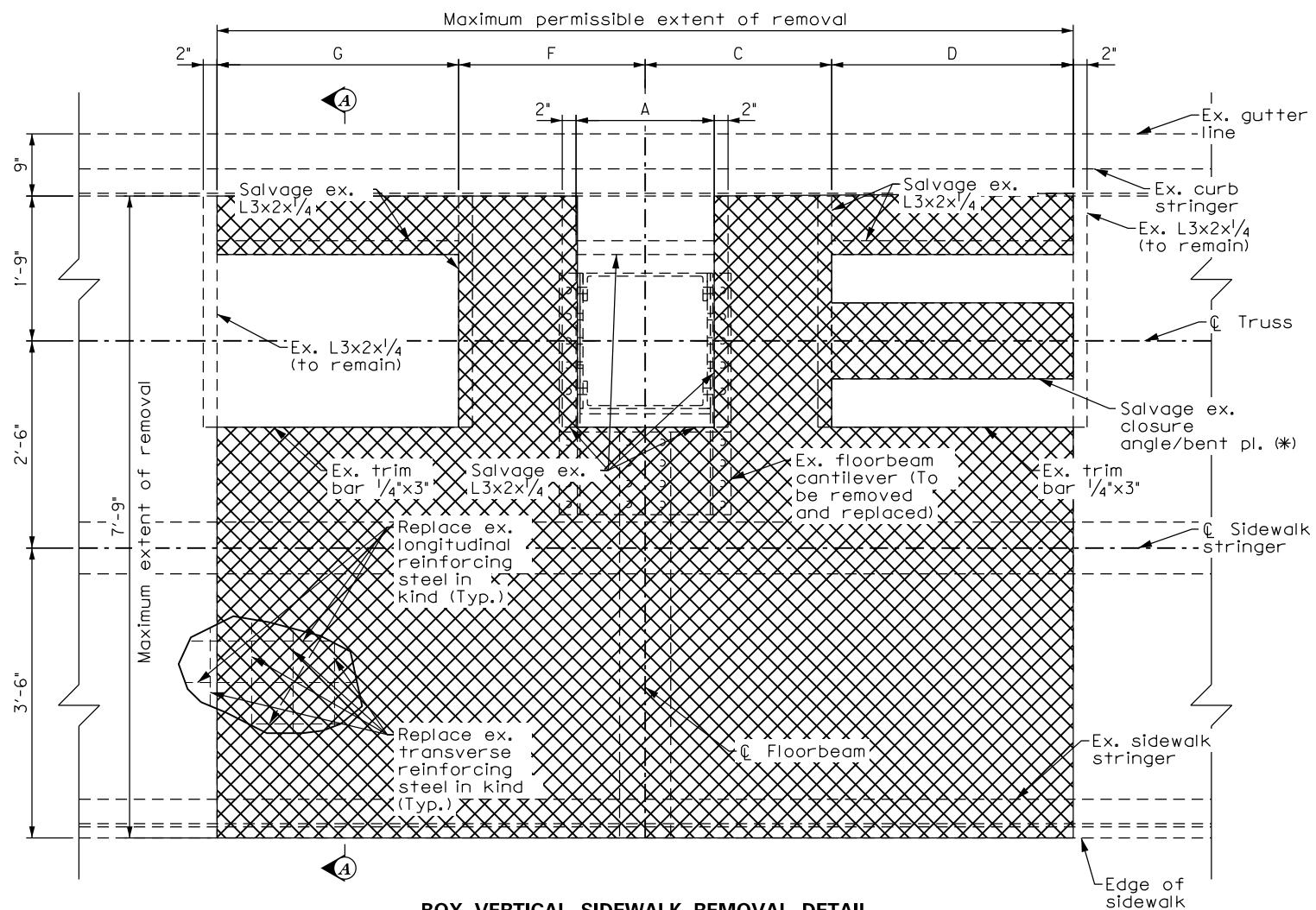
DATE: December 18th, 2025  
 DESIGNED BY: L. Bridwell  
 D. Richardson  
 DETAILED BY: L. Bridwell  
 S. Ribble

CHECKED BY  
**SIDEWALK REMOVAL/REPLACEMENT**  
 CROSSING  
 Ohio River

ROUTE  
 US-31E

ITEM NO.  
 5-10165  
 SHEET NO.  
 M14

COUNTY OF  
 JEFFERSON  
 DRAWING NUMBER  
 29060



#### BOX VERTICAL SIDEWALK REMOVAL DETAIL

Downstream truss facing east  
 Dimensions as shown @ FB 6, 14, 28  
 Dimensions opposite hand @ FB 55, 63, 77, 85  
 (\*) = Closure Bent Pl. @ FB 14, 36, 63, 85 shown  
 FB 6, 28, 55, 77 opposite hand

#### LEGEND:

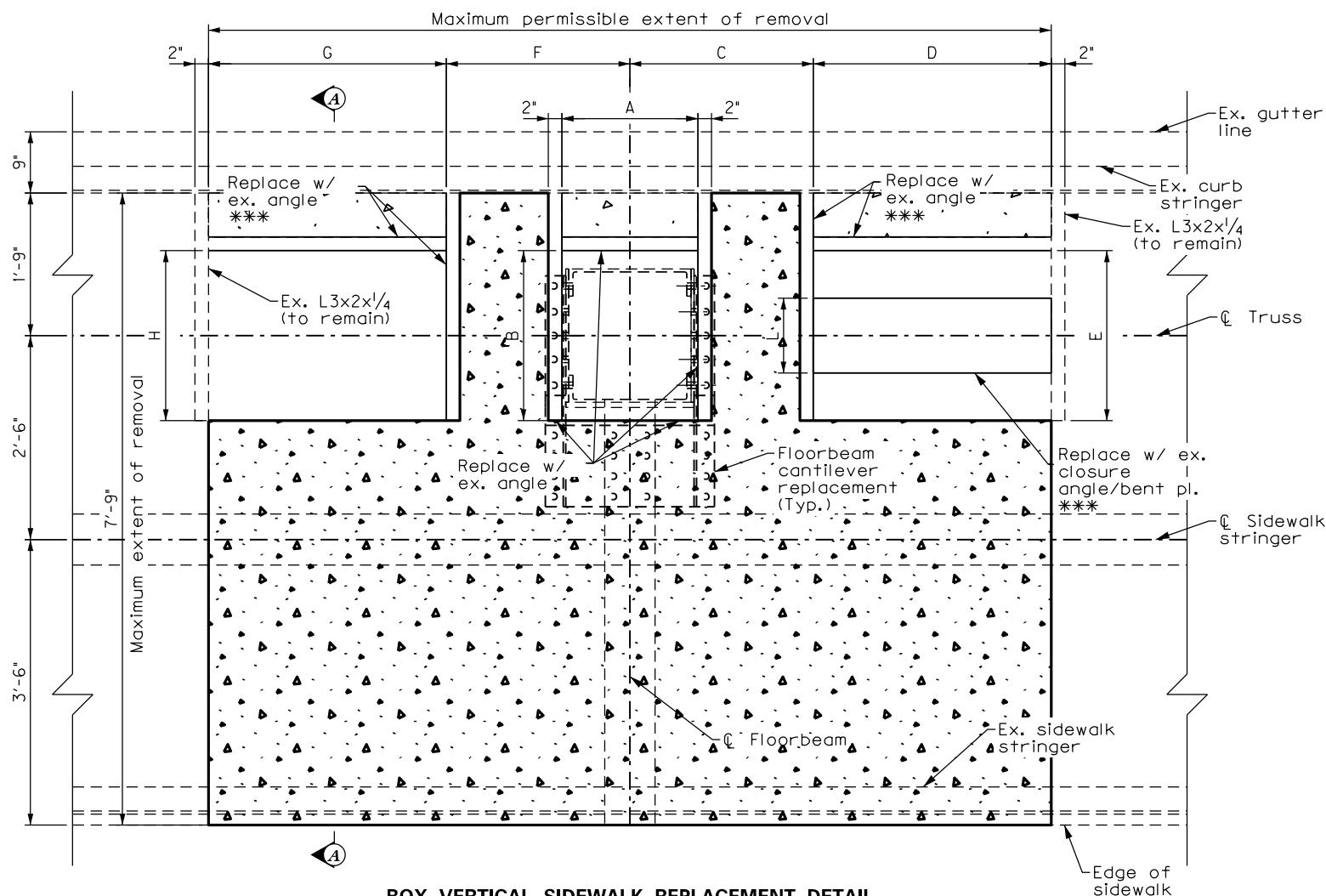
= Limits of removal

= New concrete

\*\*\* = With the permission of the Engineer, rather than salvaging the existing closure angles, trim bars, and bent plates in the sidewalk, the Contractor has the option to replace these angles, trim bars, and bent plates with new angles, trim bars, and bent plates at the same size and locations as the existing angles and plates. If the Contractor chooses this option and permission is granted by the Engineer, the cost of providing and installing new reinforcing steel will be at the Contractor's expense.

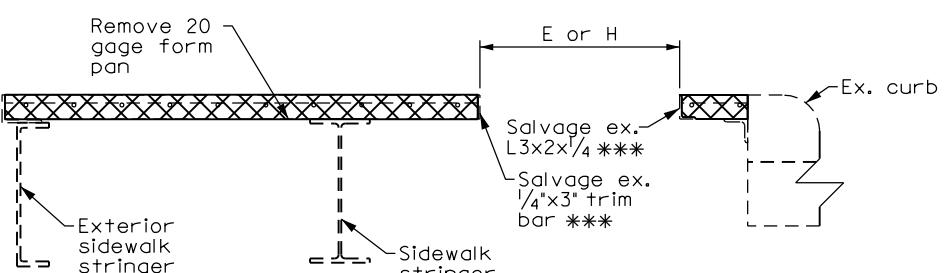
#### NOTES:

- 1) See the general notes and the Special Note for Sidewalk Floorbeam Connection Replacement for additional material and construction specifications, construction procedures, and pay items.
- 2) The Contractor shall field verify all relevant existing dimensions and number sizes.
- 3) See Sheet MI4 for lettered dimensions.
- 4) The details on this sheet are provided to the Contractor for use if an alternative method of accessing the floorbeam cantilever repair locations is determined to be necessary. The Contractor shall coordinate with the Engineer on proposed locations.



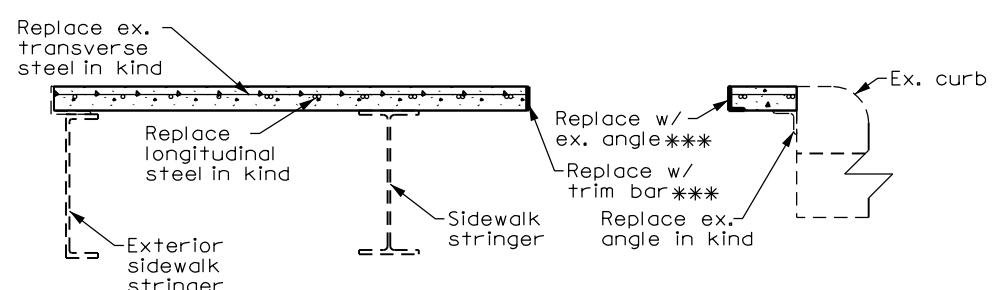
#### BOX VERTICAL SIDEWALK REPLACEMENT DETAIL

Downstream truss facing east  
 Dimensions as shown: Spans 16-18 & 22  
 Dimensions opposite hand: Spans 19-21



BAR SIZE	
Dia.	Lap
1/2"	2'-5"
5/8"	3'-6"

#### SECTION A-A EXISTING



#### SECTION A-A PROPOSED



COMMONWEALTH OF KENTUCKY  
 DEPARTMENT OF HIGHWAYS



KENTUCKY  
 TRANSPORTATION  
 CABINET

REVISION	DATE

PREPARED BY  
**BURGESS & NIPLE**  
 Engineers ■ Architects ■ Planners

DATE: December 18th, 2025  
 DESIGNED BY: L. Bridwell  
 D. Richardson  
 DETAILED BY: L. Bridwell  
 S. Ribble

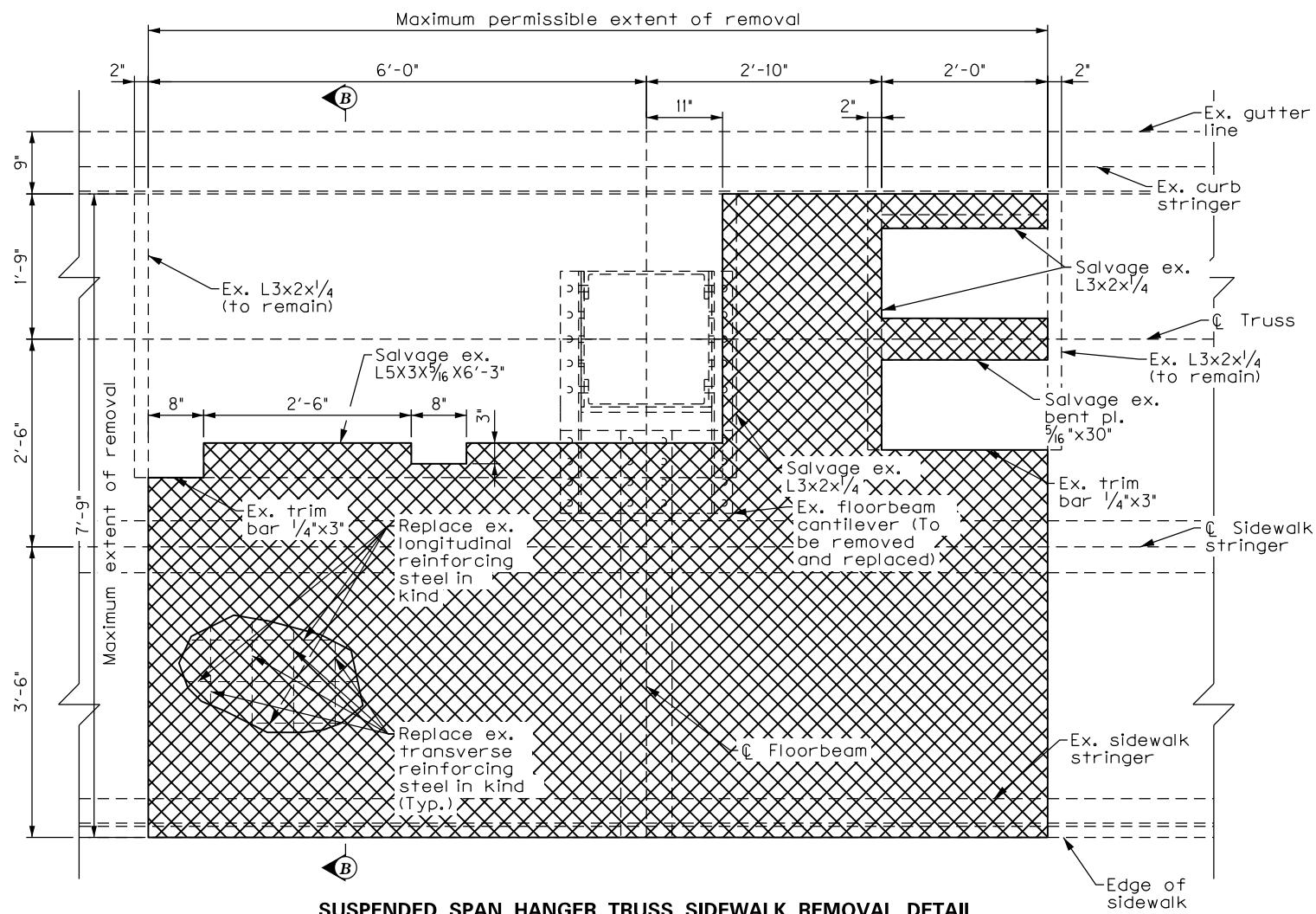
CHECKED BY  
 D. Richardson  
 S. Ribble

**SIDEWALK REMOVAL/REPLACEMENT**  
 CROSSING  
 Ohio River

ROUTE  
 US-31E

ITEM NO.  
 5-10165  
 SHEET NO.  
 M15

COUNTY OF  
 JEFFERSON  
 DRAWING NUMBER  
 29060



**SUSPENDED SPAN HANGER TRUSS SIDEWALK REMOVAL DETAIL**

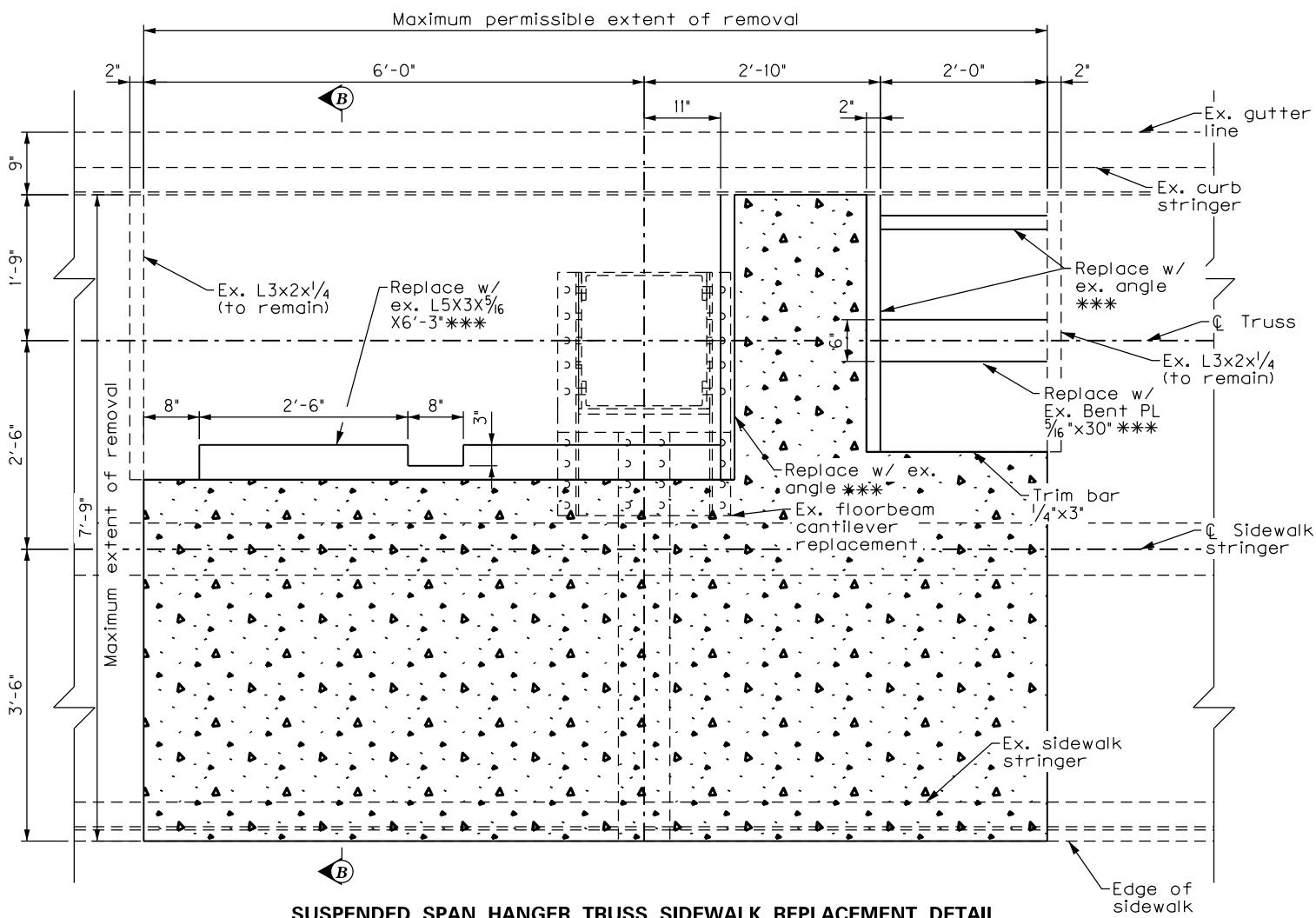
Downstream truss facing east  
FB 16 & 65 shown  
FB 26 & 75 opposite hand

**LEGEND:**

= Limits of removal

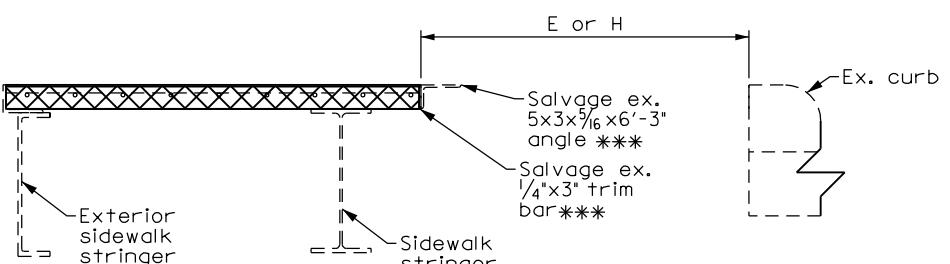
= New concrete

\*\*\* = With the permission of the Engineer, rather than salvaging the existing closure angles, trim bars, and bent plates in the sidewalk, the Contractor has the option to replace these angles, trim bars, and bent plates with new angles, trim bars, and bent plates at the same size and locations as the existing angles and plates. If the Contractor chooses this option and permission is granted by the Engineer, the cost of providing and installing new reinforcing steel will be at the Contractor's expense.



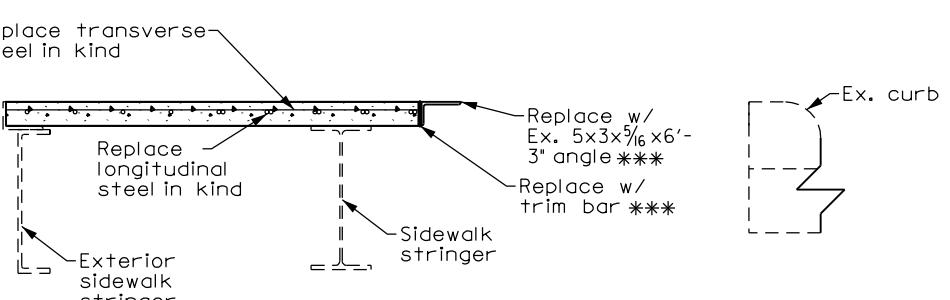
**SUSPENDED SPAN HANGER TRUSS SIDEWALK REPLACEMENT DETAIL**

Downstream truss facing east  
FB 16 & 65 shown  
FB 26 & 75 opposite hand



BAR SIZE	
Dia.	Lap
1/2"	2'-5"
5/8"	3'-6"

**SECTION B-B EXISTING**



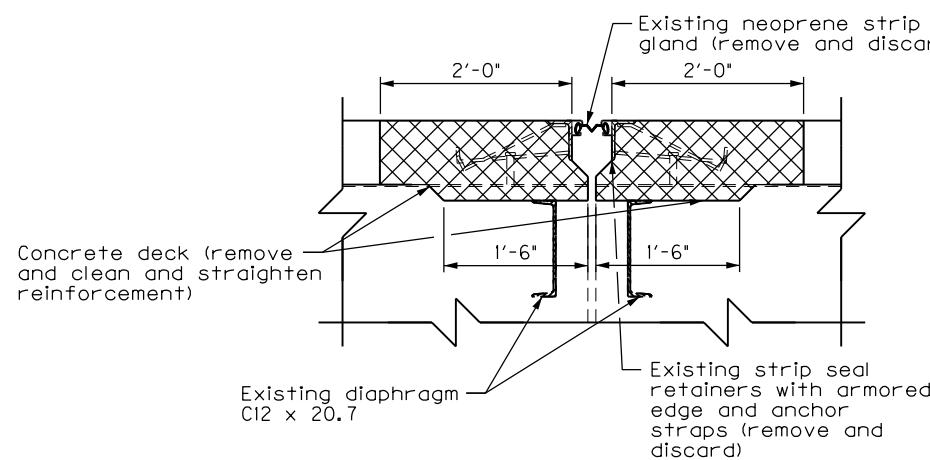
**SECTION B-B PROPOSED**



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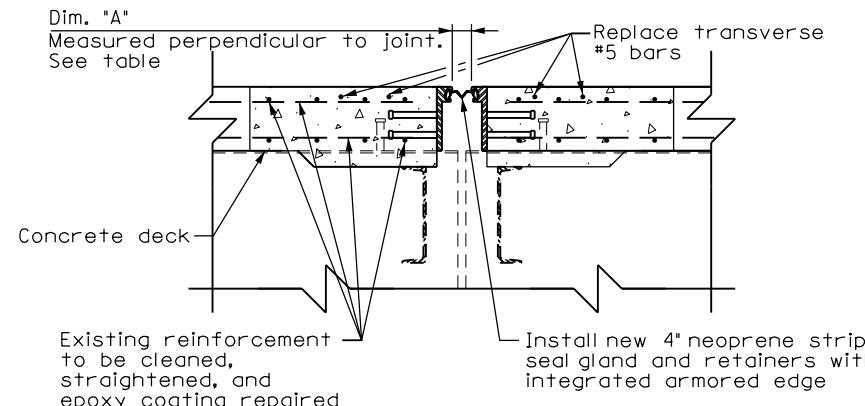


KENTUCKY  
TRANSPORTATION  
CABINET



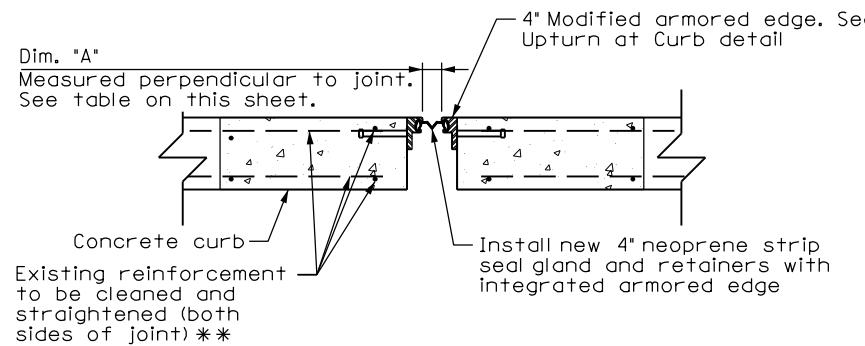
**EXISTING STRIP SEAL JOINT SECTION**

Bent LC7



**STRIP SEAL JOINT REPLACEMENT SECTION**

Bent LC7



**STRIP SEAL JOINT REPLACEMENT SECTION IN CURB**

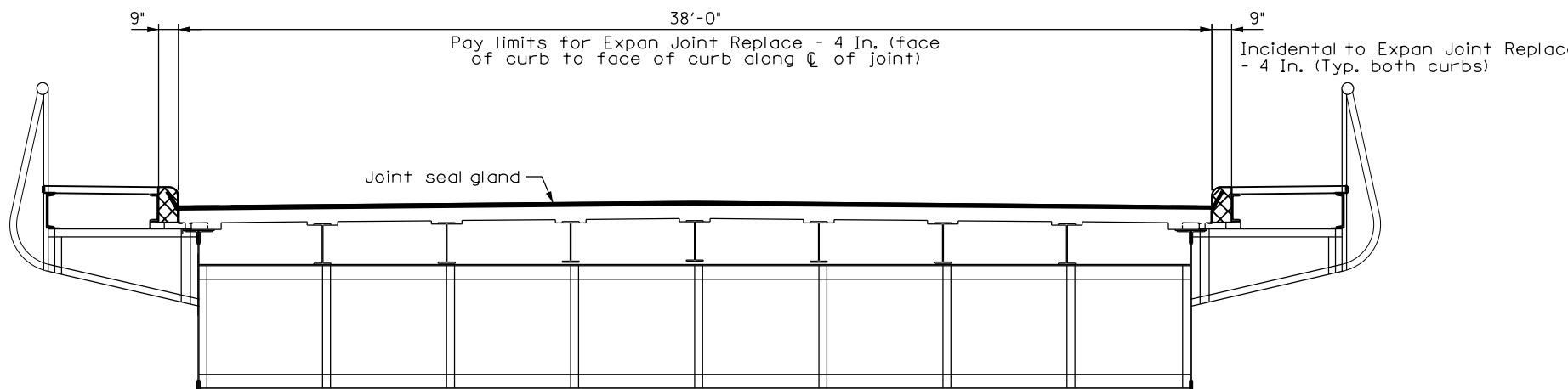
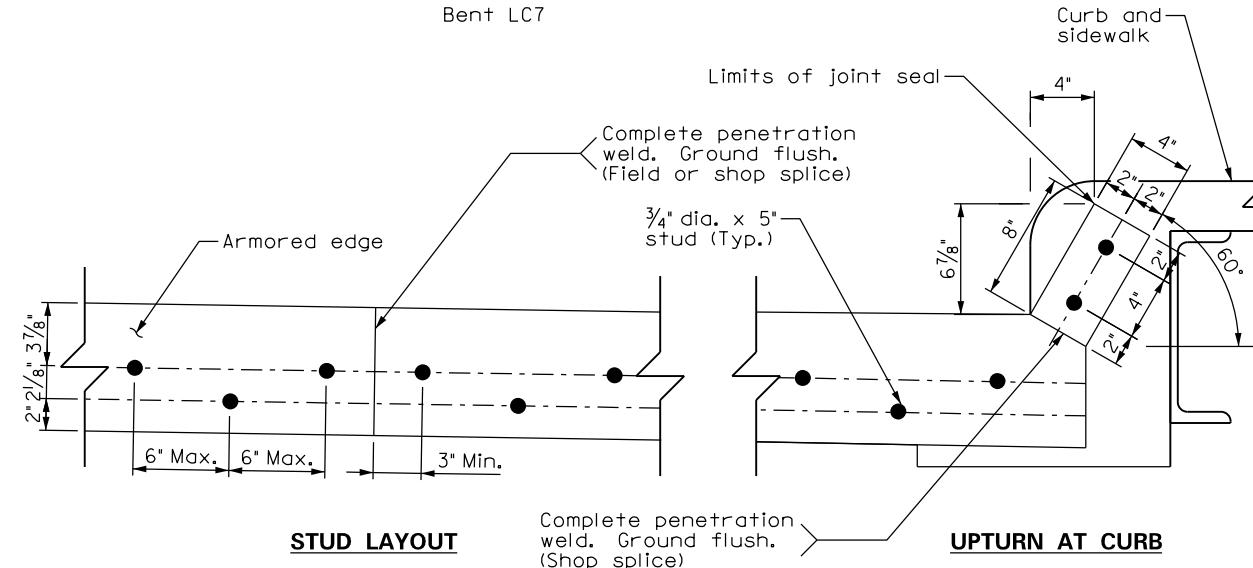
Bent LC7

**NOTES:**

- See the general notes and the Special Note for Bridge Joint Replacement for additional material and construction specifications, construction procedures, and pay items.
- The Contractor shall field verify all relevant existing dimensions and member sizes.
- See Sheet M6 for the location of the strip seal joint replacement.
- The Contractor shall place the strip seal gland in one continuous piece after completion of the armor installation.

**LEGEND:**

	= Joint seal gland
	= Limits of removal
	= New concrete



**TYPICAL SECTION (APPROACH SPANS SHOWN)**

(Shear connectors not shown for clarity)

**TEMPERATURE ADJUSTMENT (LC7)**

TEMP (Deg. F)	Dim A (in.)
30	2 5/16
40	2 1/4
50	2 1/8
60	2
70	1 7/8
80	1 3/4
90	1 11/16
100	1 9/16



**STRIP SEAL JOINT AT BENT LC7**



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



KENTUCKY  
TRANSPORTATION  
CABINET



BURGESS & NIPLE

Engineers ■ Architects ■ Planners



REVISION

DATE

PREPARED BY

BURGESS & NIPLE

Engineers ■ Architects ■ Planners

DATE: December 18th, 2025

DESIGNED BY: D. Richardson

DETAILED BY: D. Richardson

CHECKED BY

L. Bridwell

L. Bridwell

JOINT REPLACEMENT DETAILS

CROSSING

Ohio River

ROUTE

US-31E

ITEM NO.

5-10165

COUNTY OF

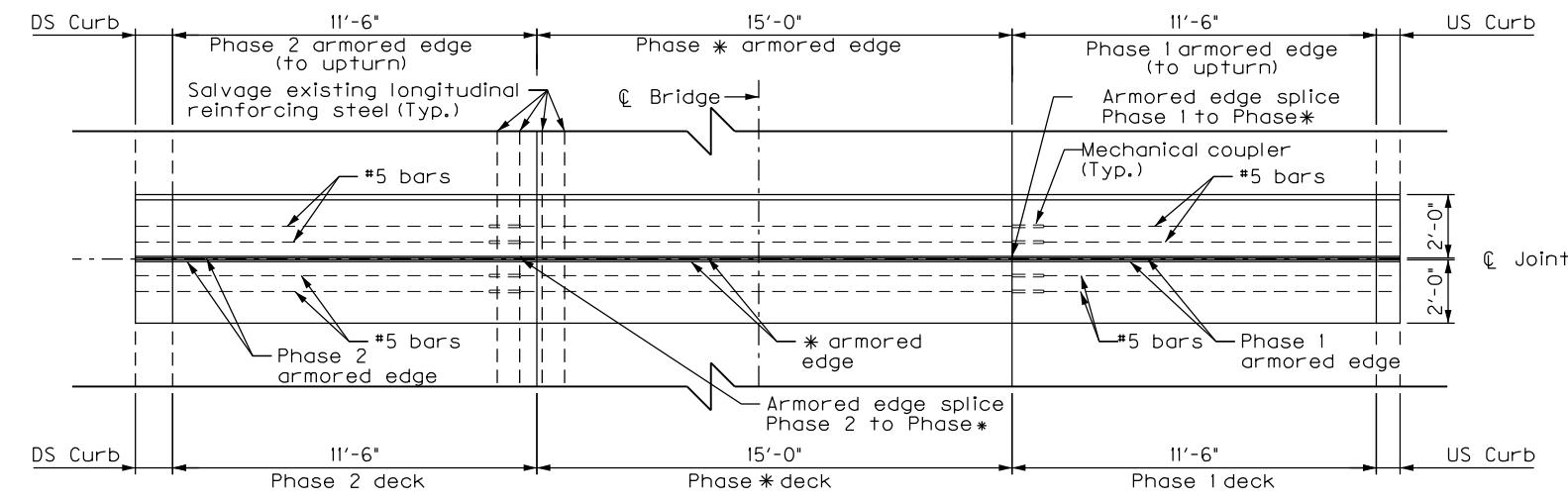
JEFFERSON

SHEET NO.

M17

DRAWING NUMBER

29060



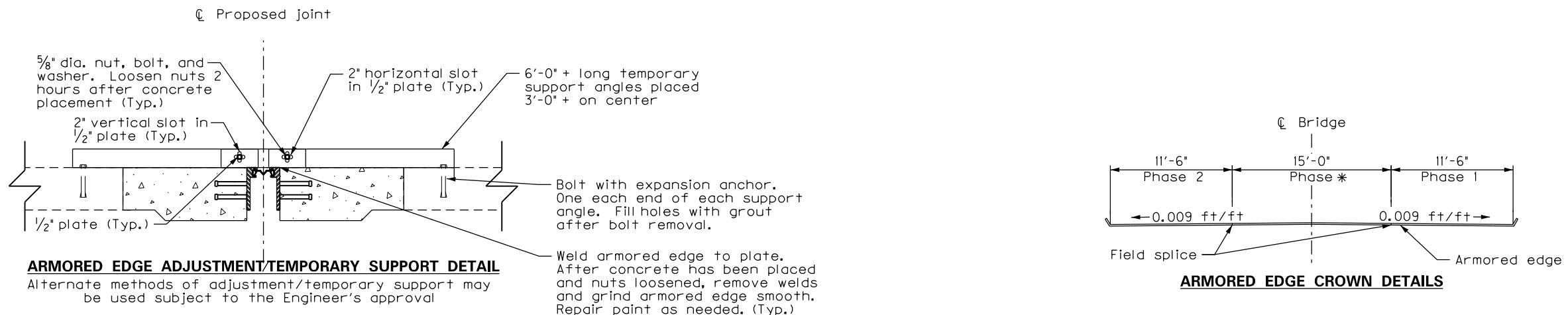
**PLAN – STRIP SEAL JOINT AT LC7 – PROPOSED**

**NOTES:**

- 1) See the general notes and the Special Note for Bridge Joint Replacement for additional material and construction specifications, construction procedures, and pay items.
- 2) The Contractor shall field verify all relevant existing dimensions and member sizes.
- 3) See Sheet M6 for the location of the strip seal joint replacement.

**LEGEND:**

- = Joint seal gland
- = New concrete
- \* = Phasing that will occur during Thunder over Louisville weekend. See Special Note for Expansion Joint Replacement - 4 In.



**ARMORED EDGE ADJUSTMENT/TEMPORARY SUPPORT DETAIL**

Alternate methods of adjustment/temporary support may be used subject to the Engineer's approval



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DATE: December 18th, 2025  
DESIGNED BY: D. Richardson L. Bridwell  
DETAILED BY: D. Richardson L. Bridwell

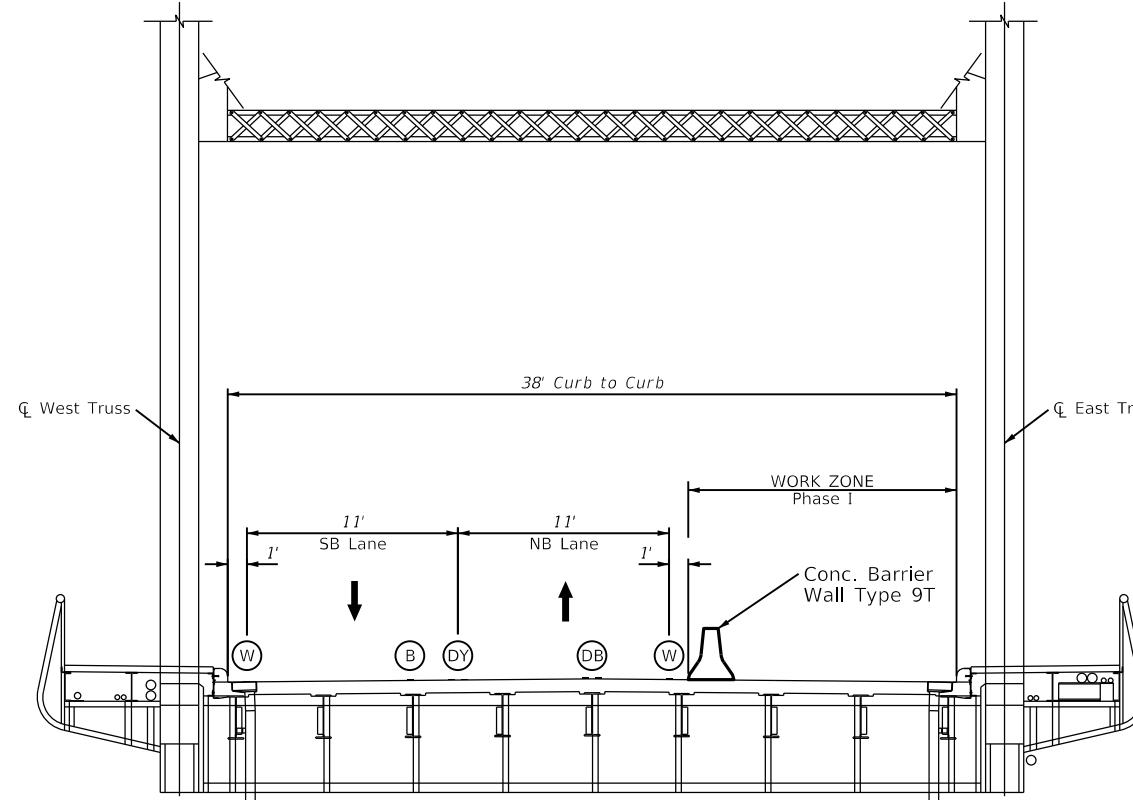
**JOINT REPLACEMENT DETAILS**

CROSSING  
Ohio River

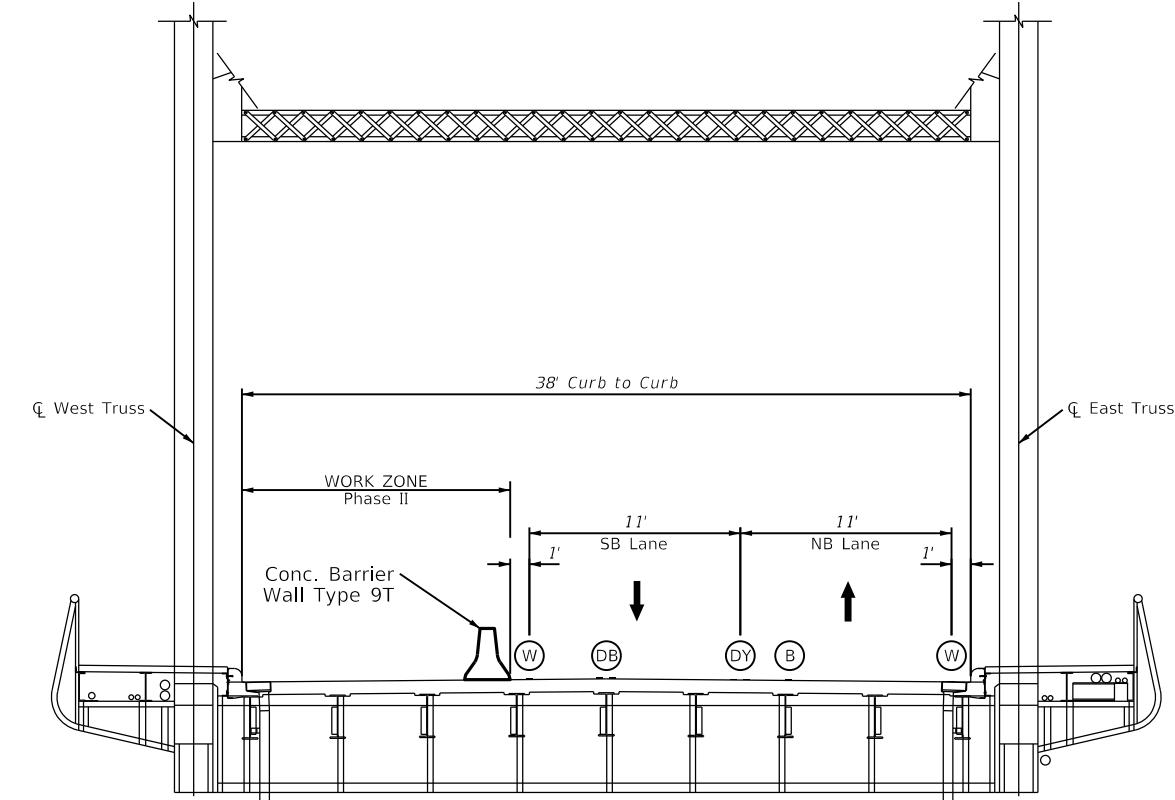
ROUTE  
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ITEM NO.  
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M18

COUNTY OF  
JEFFERSON  
DRAWING NUMBER  
29060



MAINTENANCE OF TRAFFIC PHASE I



MAINTENANCE OF TRAFFIC PHASE II

- DY Double Solid Yellow Temporary Removable Pavement Tape
- W Solid White Temporary Removable Pavement Tape
- B Black Temporary Removable Pavement Tape
- DB Double Black Temporary Removable Pavement Tape



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DESIGNED BY: C. Villier  
DETAILED BY: C. Villier

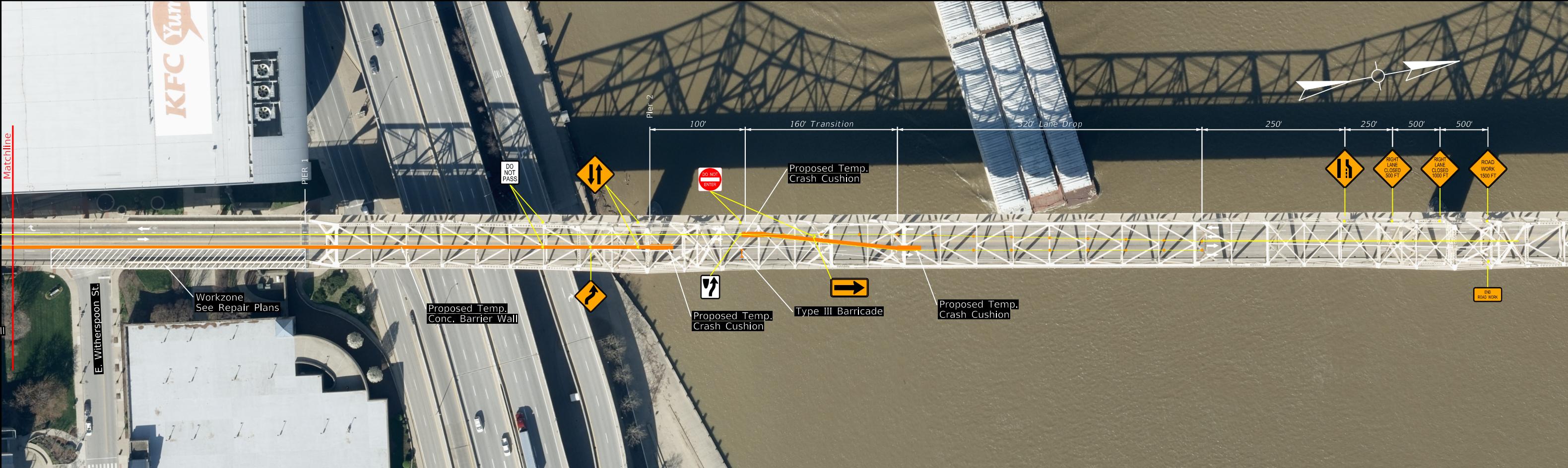
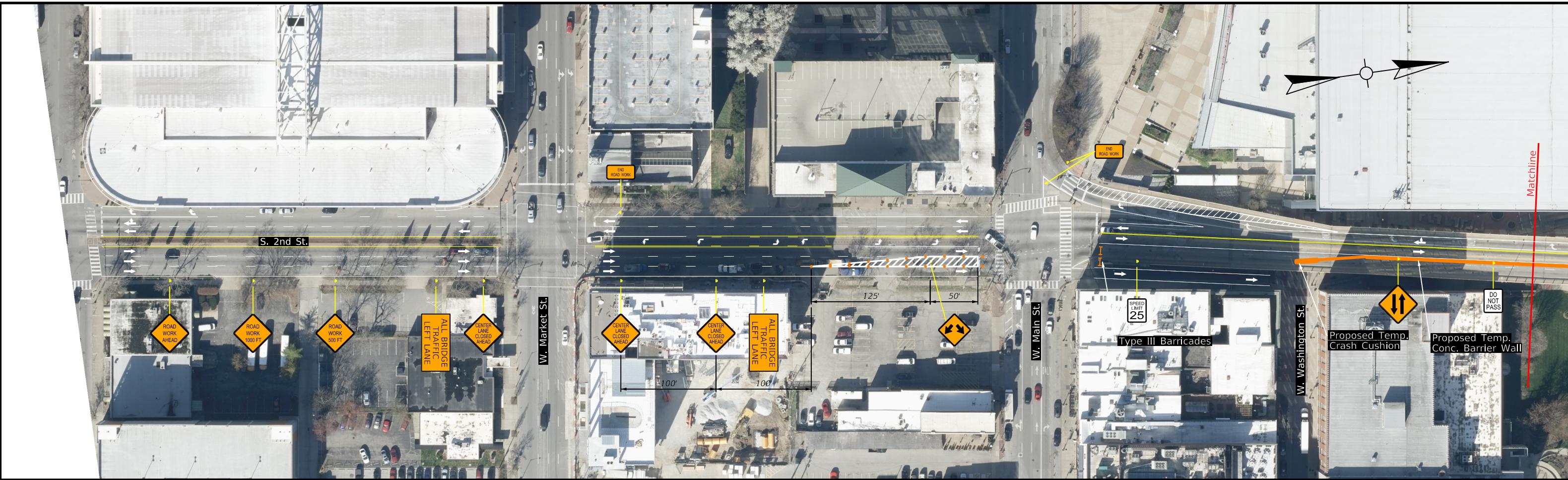
CHECKED BY  
S. Ribble  
S. Ribble

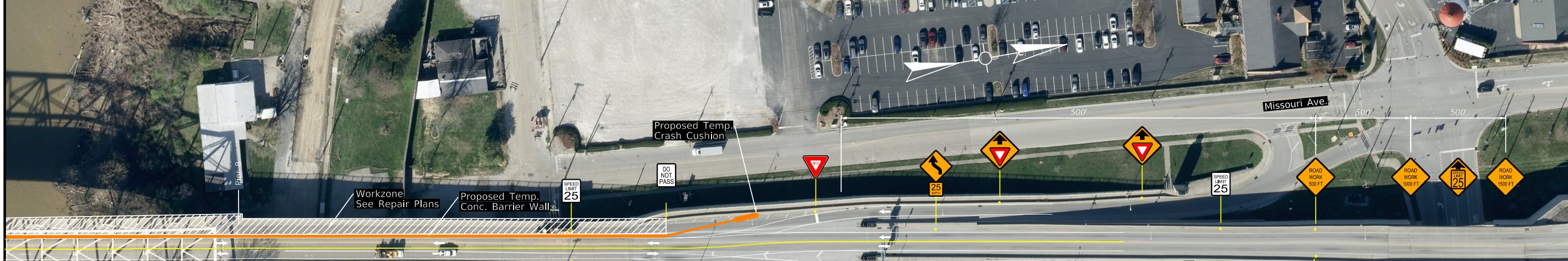
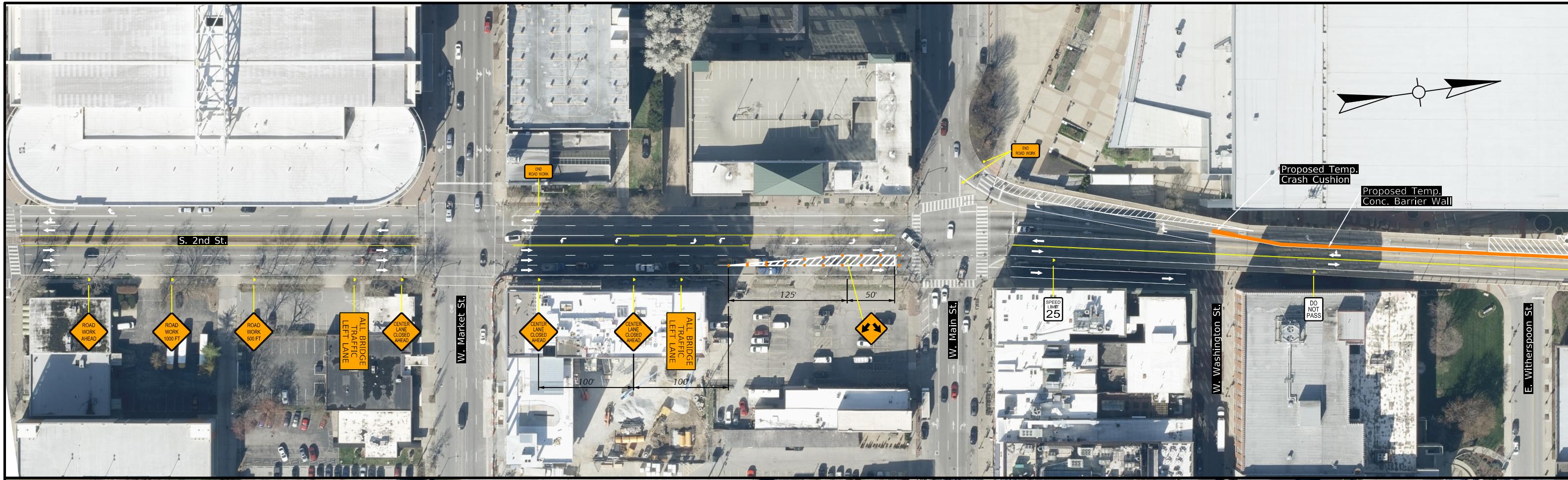
**MAINTENANCE OF TRAFFIC - DETAIL**  
CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
5-10165  
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M21

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CHECKED BY

DESIGNED BY: C. Villier

S. Ribble

DETAILED BY: C. Villier

S. Ribble

### MOT - KY APPROACH CLOSURE

CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
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DESIGNED BY: C. Villier

S. Ribble

DETAILED BY: C. Villier

S. Ribble

### MOT - INDIANA APPROACH CLOSURE

CROSSING  
Ohio River

ROUTE  
US-31E

ITEM NO.  
5-10165  
SHEET NO.  
M25

COUNTY OF  
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