

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
BID ITEM	DELINEATOR 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 CUSION	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 REPAIR (SADDLE BEARING REPAIR)	STEEL REPAIR (SIDEWALK FLOORBEAM CONNECTION REPLACEMENT)	STEEL REPAIR (GIRDER INTERMEDIATE STIFFENER 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
BRIDGE TOTALS	241	1040	350	1	1	1	3	2	2	2	4820	38	16825	14744	13692	4	492	1	58	48

INDEX OF SHEETS	
Sheet No.	Description
M1	Title Sheet
M2	General Notes
M3	Layout
M4	Truss Panel Point Numbering
M5-M6	Repair Locations
M7	Girder Repair Elevation
M8-M9	Girder Repair Details
M10	Saddle Bearing Repairs
M11-M13	Sidewalk Floorbeam Connection Repairs
M14-M16	Sidewalk Removal/Replacement
M17-M18	Joint Replacement Details
M19-M20	Joint Seal Replacement Details
M21	Maintenance of Traffic Sections
M22-M25	Maintenance of Traffic Plans
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)	



US-31E OVER OHIO RIVER

PROPOSED WORK: US-31E
BRIDGE REPAIR PLANS

056B00136N CLARK
MEMORIAL BRIDGE

LOUISVILLE, KY



JEFFERSONVILLE, IN

OHIO RIVER

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.

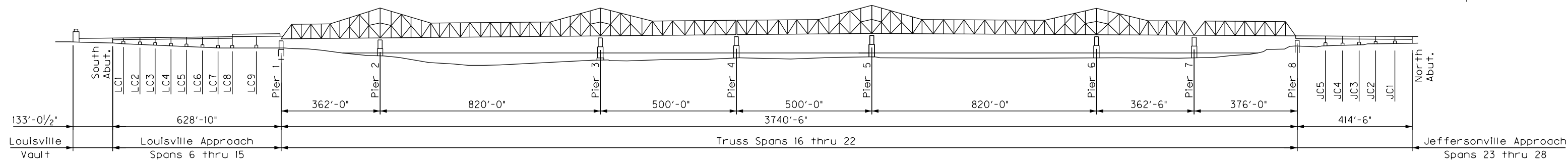
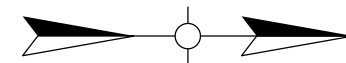
MILL TEST REPORTS: Notarized test reports shall be furnished in triplicate to the Department showing that all the materials used for their repairs conform to the requirements of the plans and specifications.

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

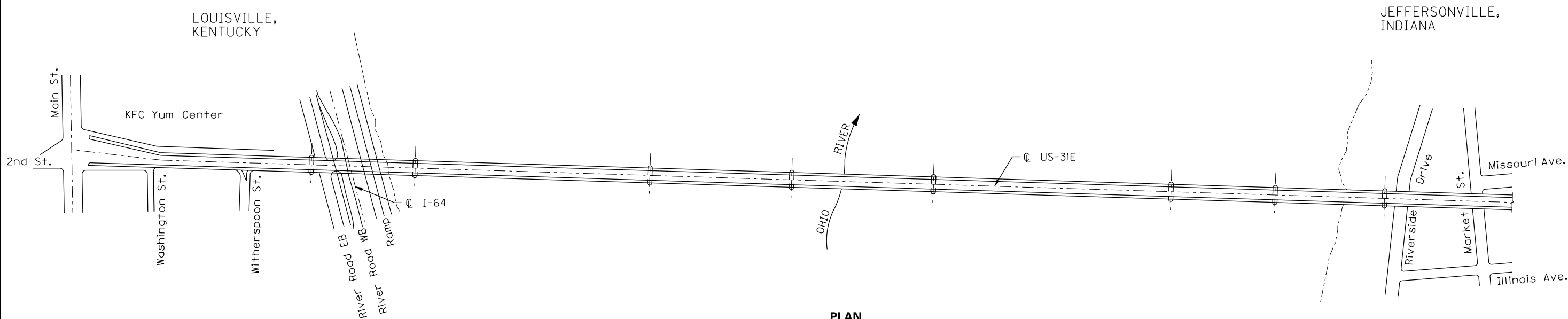
RESIDUAL LEAD: Residual lead paint may still be on the structure. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing all work specified in the contract. The Department will not consider any claims based on residual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

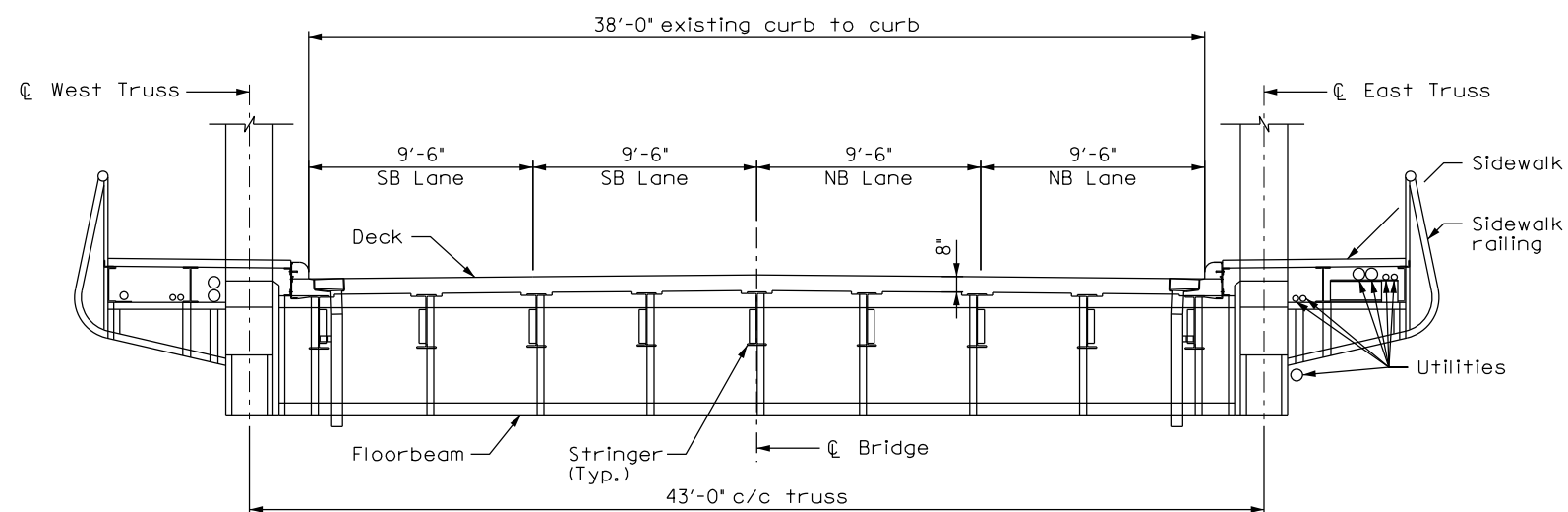
PAYMENT FOR STRUCTURAL STEEL REPAIRS: The unit price bid for all structural steel repair bid items listed in the estimate of quantities shall be full compensation for all access, removal, drilling, reaming, cutting, welding, removing deteriorated metal, and all new materials, labor, equipment, tools,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



ELEVATION



PLAN



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



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION	DATE

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

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

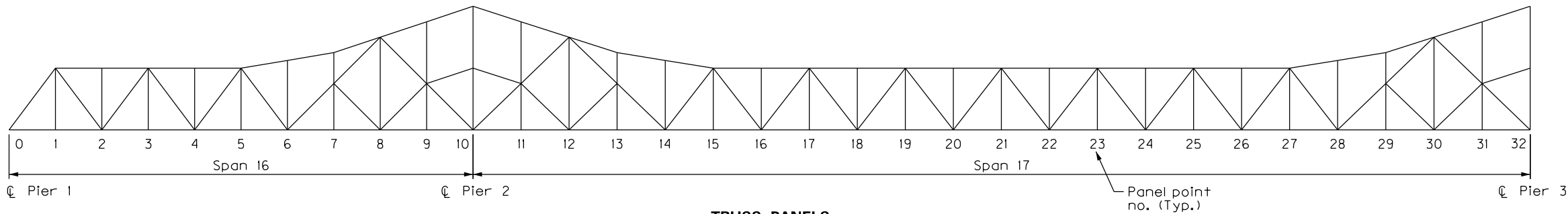
LAYOUT

CROSSING
Ohio River

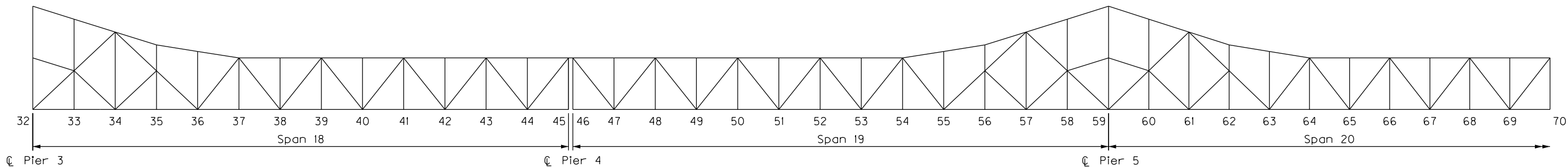
ROUTE
US-31E

ITEM NO.
5-10165
SHEET NO.
M3

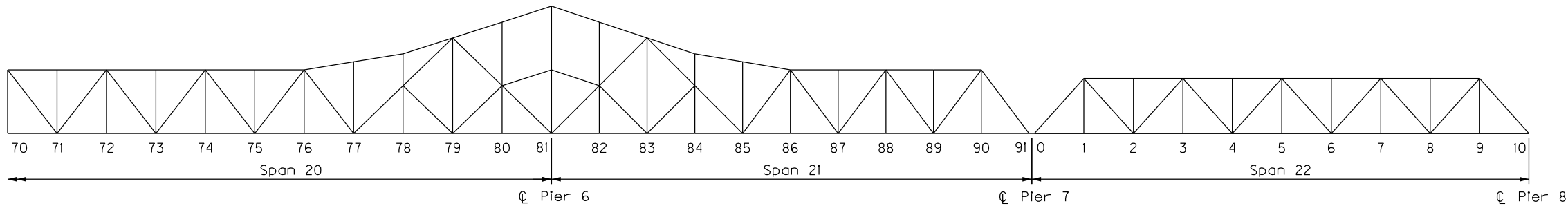
COUNTY OF
JEFFERSON
DRAWING NUMBER
29060



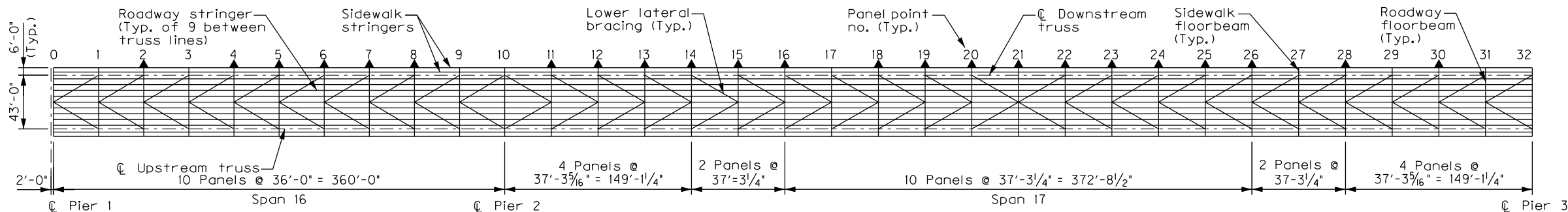
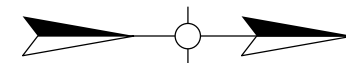
TRUSS PANELS



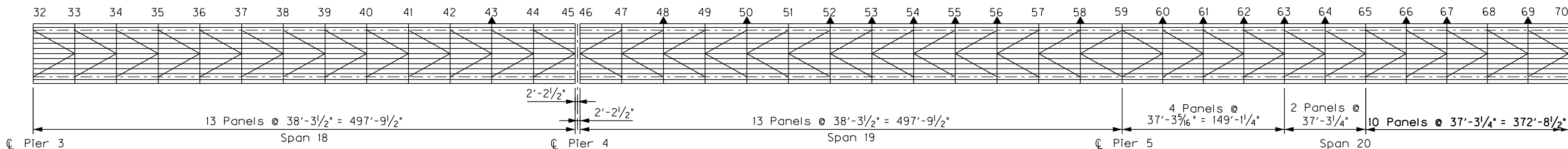
TRUSS PANELS



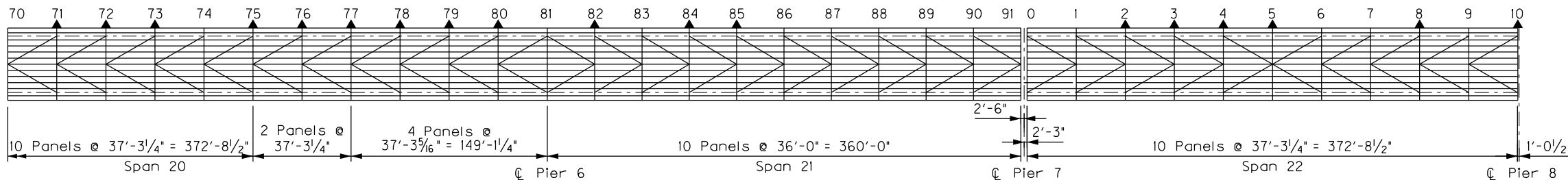
TRUSS PANELS



TRUSS SPANS



TRUSS SPANS



TRUSS SPANS

LEGEND:

▲ Sidewalk floorbeam strap connection replacement

NOTES:

- 1) See Sheets M11-M13 for sidewalk floorbeam strap connection replacement details
- 2) See Sheets M14-M16 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

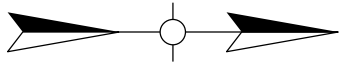
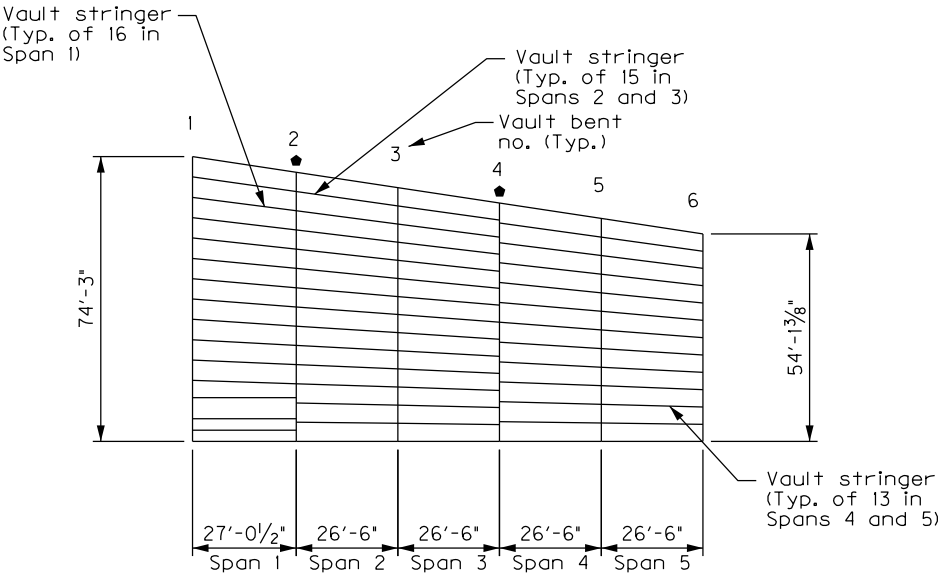
COUNTY OF
JEFFERSON
DRAWING NUMBER
29060

LEGEND:

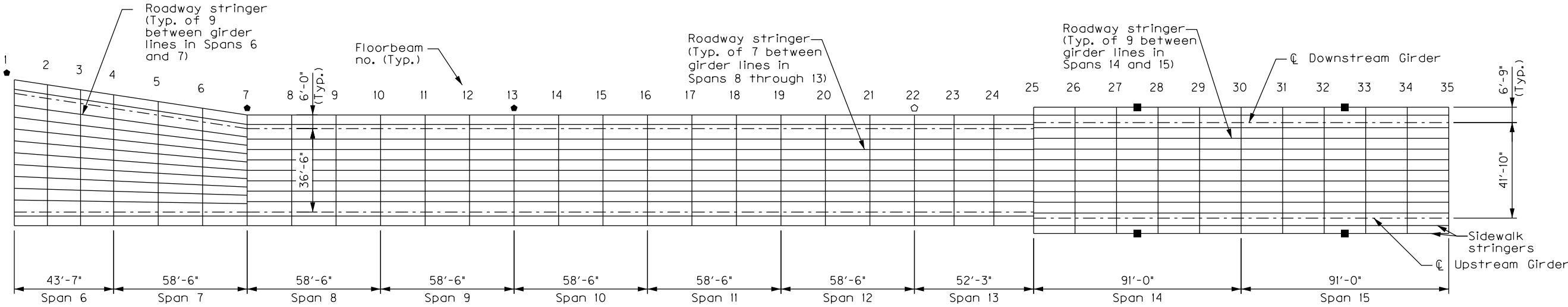
- Joint seal replacement
- Joint replacement
- Girder repairs
- △ Saddle bearing repairs

NOTES:

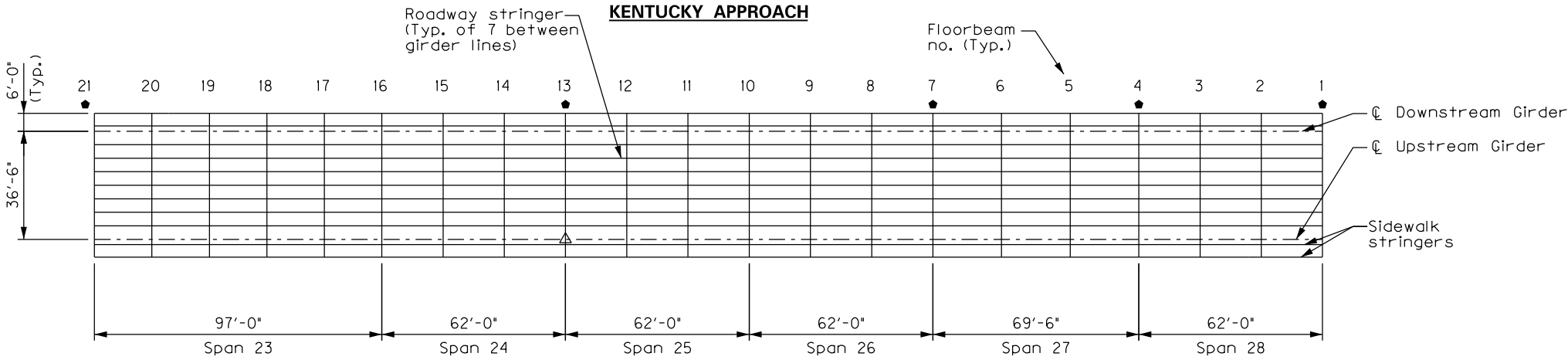
- 1) See Sheets M7-M9 for girder repair details
- 2) See Sheet M10 for saddle bearing repair details
- 3) See Sheets M17-M18 for joint replacement details
- 4) See Sheets M19-M20 for joint seal replacement details



KENTUCKY VAULT



KENTUCKY APPROACH



INDIANA APPROACH



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

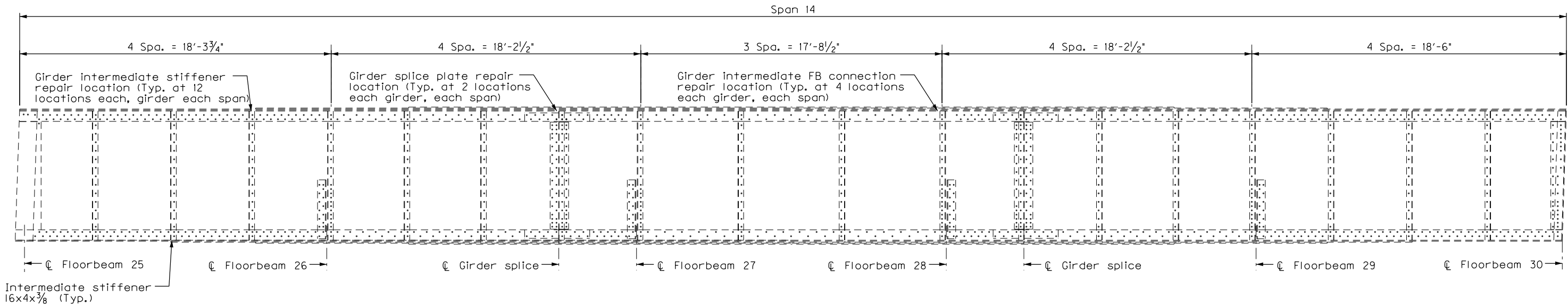
REPAIR LOCATIONS - APPROACHES

CROSSING
Ohio River

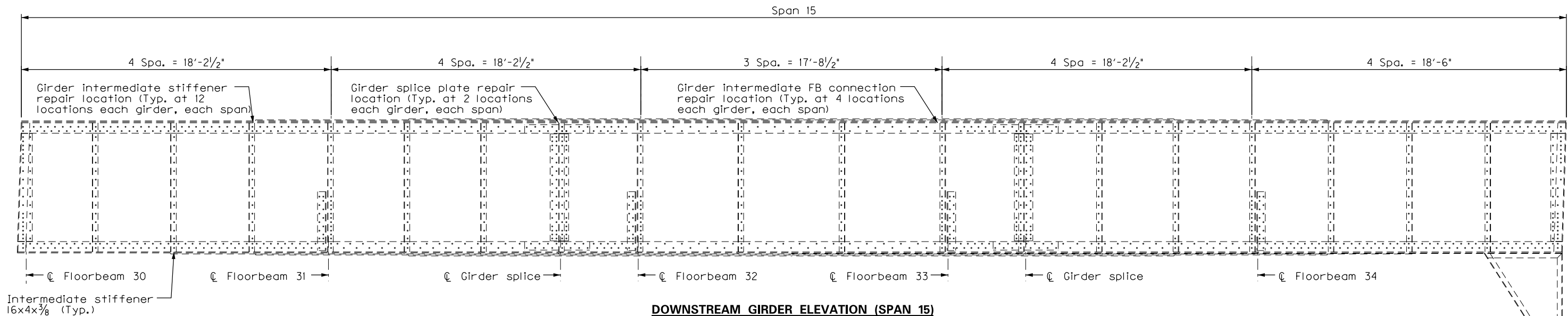
ROUTE
US-31E

ITEM NO.
5-10165
SHEET NO.
M6

COUNTY OF
JEFFERSON
DRAWING NUMBER
29060



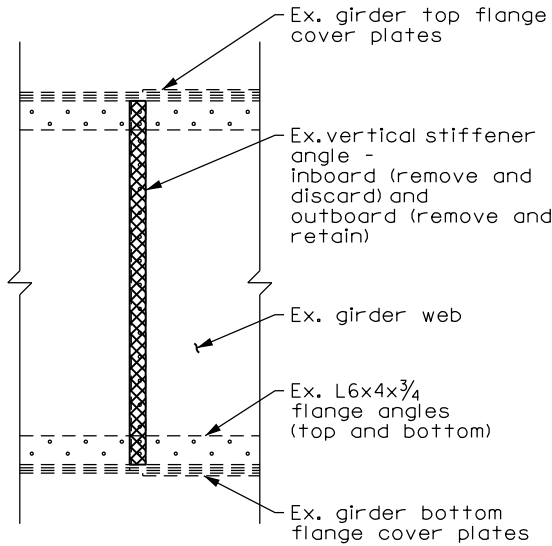
DOWNSTREAM GIRDER ELEVATION (SPAN 14)
(Upstream girder elevation similar)



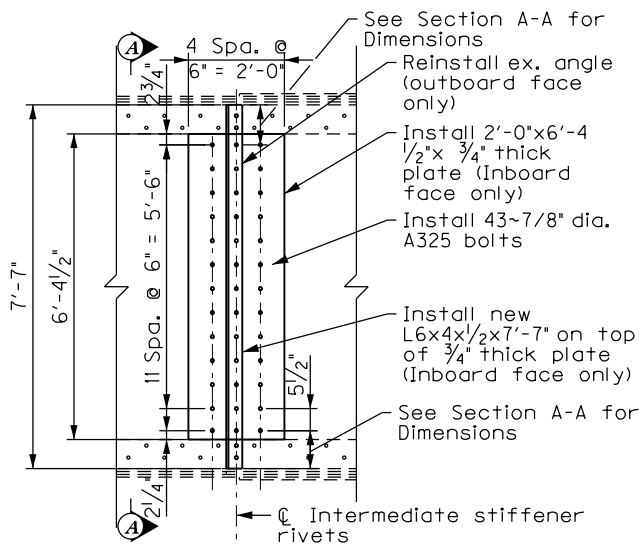
DOWNSTREAM GIRDER ELEVATION (SPAN 15)
(Upstream girder elevation similar)

NOTES:

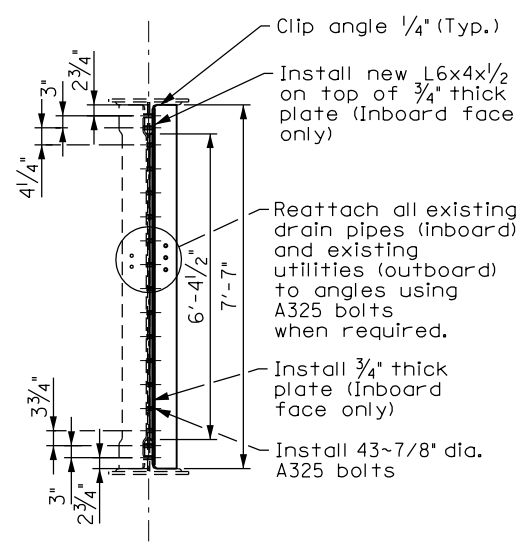
- 1) See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- 2) See Sheet M6 for the locations of the girder repairs.
- 3) The Contractor shall field verify all relevant existing dimensions.
- 4) If it is necessary to 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.



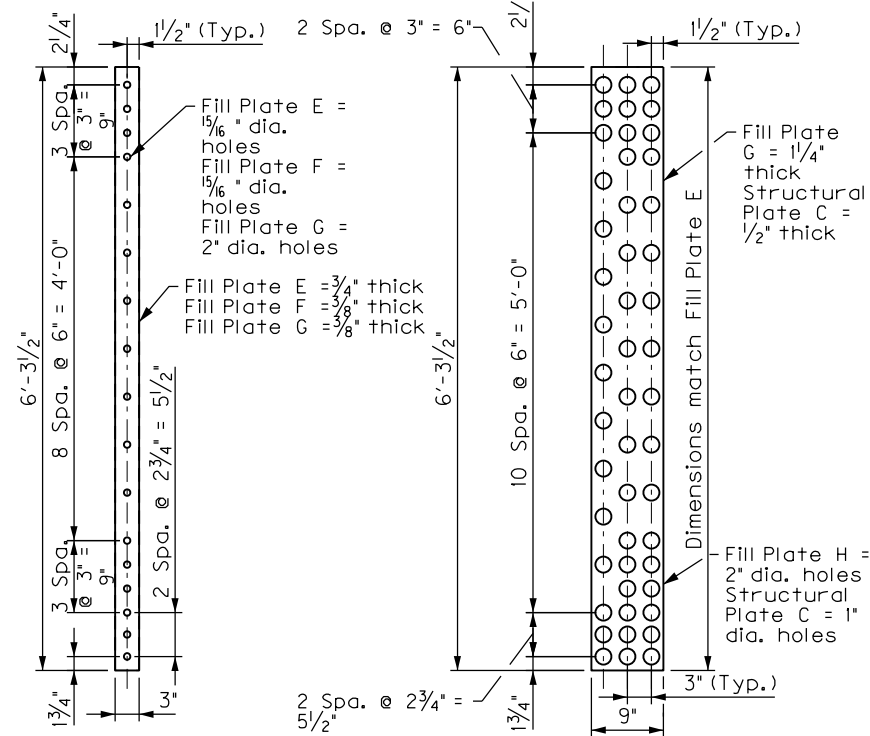
INTERMEDIATE STIFFENER REMOVAL
Existing condition



INTERMEDIATE STIFFENER REPAIR
Proposed condition

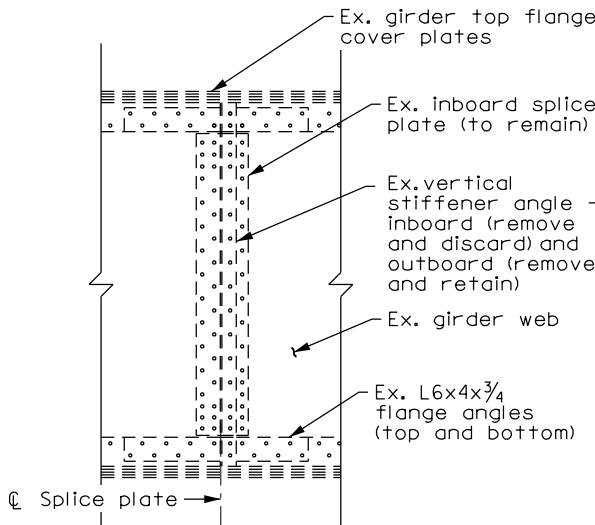


SECTION A-A
Proposed condition

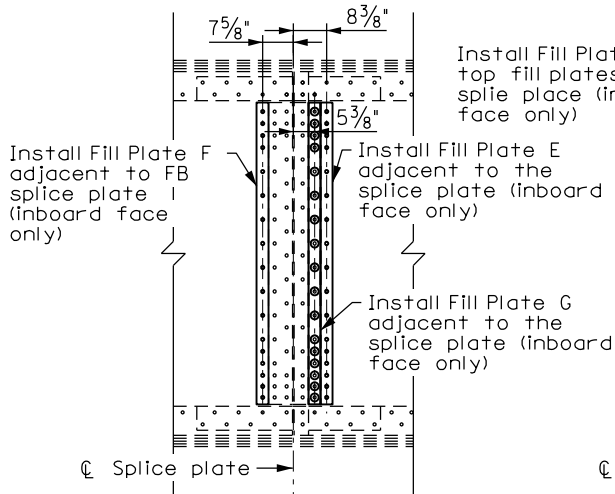


FILL PLATE E
FILL PLATE F
FILL PLATE G

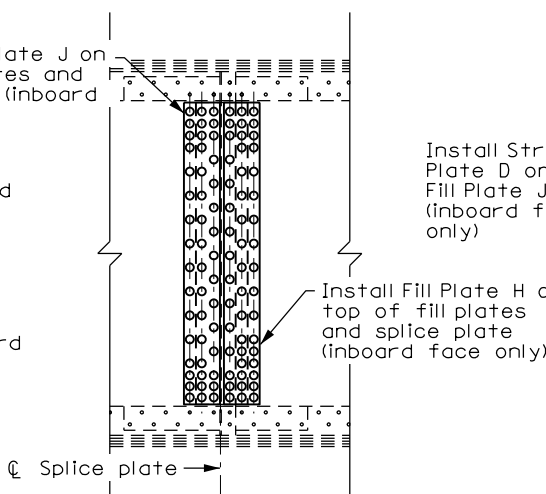
FILL PLATE H
STRUCTURAL PLATE C



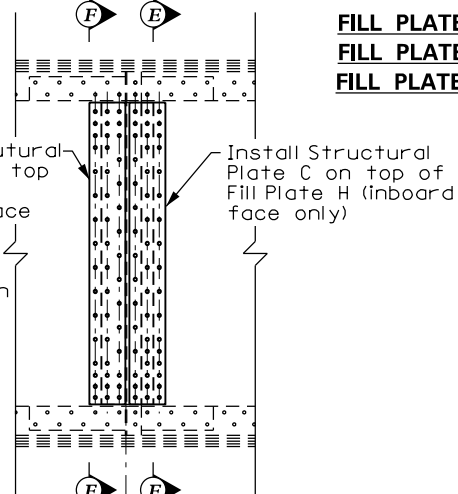
GIRDER AT SPLICE LOCATION
Existing condition



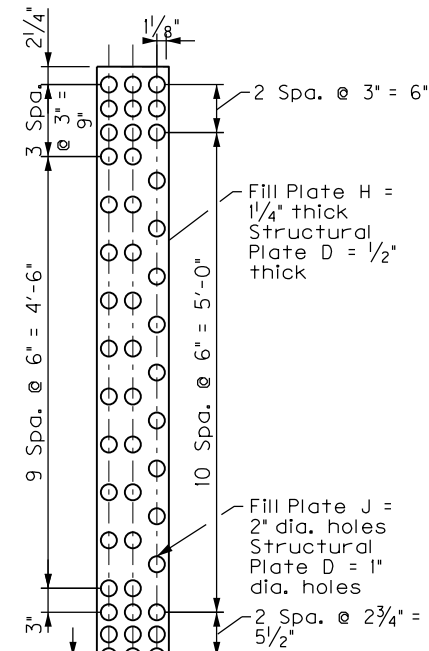
SPLICE PLATE REPAIR
Installation of fill plates
See Double Nut Connection Detail A on Sheet M9



SPLICE PLATE REPAIR
Installation of oversized fill plates
See Double Nut Connection Detail B on Sheet M9



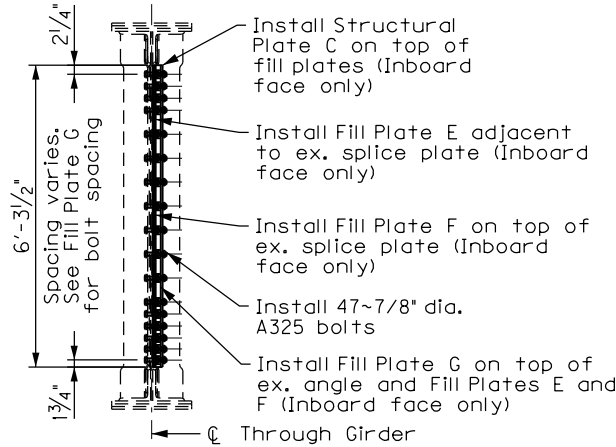
SPLICE PLATE REPAIR
Final proposed condition
See Double Nut Connection Detail C on Sheet M9



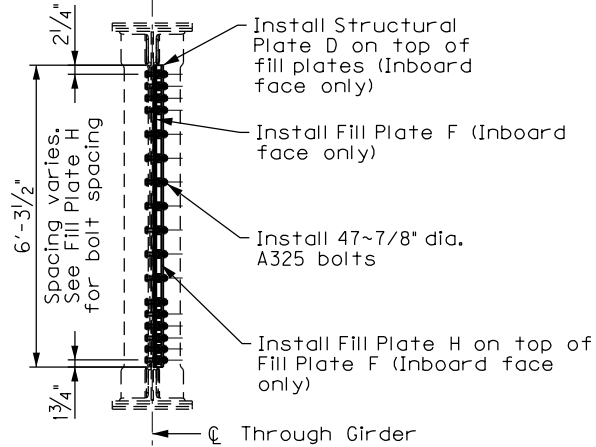
FILL PLATE J
STRUCTURAL PLATE D

NOTES:

- 1) See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- 2) See Sheets M6 and M7 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 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 1/4" to the edge of a plate. This measurement is from the center of bolt to the edge.
- 5) Hole diameter shall be 1/16" larger than the diameter of the bolt unless noted otherwise.



SECTION E-E
Proposed condition



SECTION F-F
Proposed condition



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: Richardson

REVISION

DATE

PREPARED BY

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025

DESIGNED BY: D. Richardson

DETAILED BY: D. Richardson

CHECKED BY

S. Ribble

S. Ribble

GIRDER REPAIR DETAILS - 1

CROSSING
Ohio River

ROUTE

US-31E

ITEM NO.

5-10165

SHEET NO.

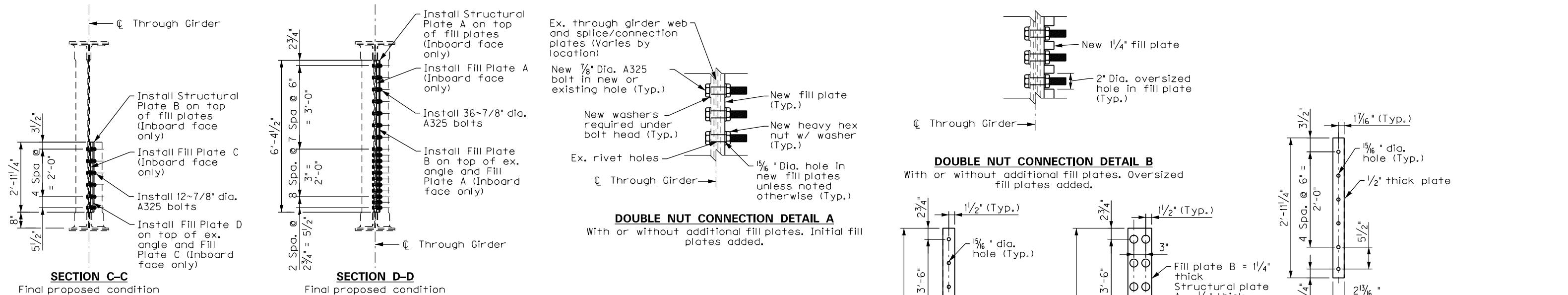
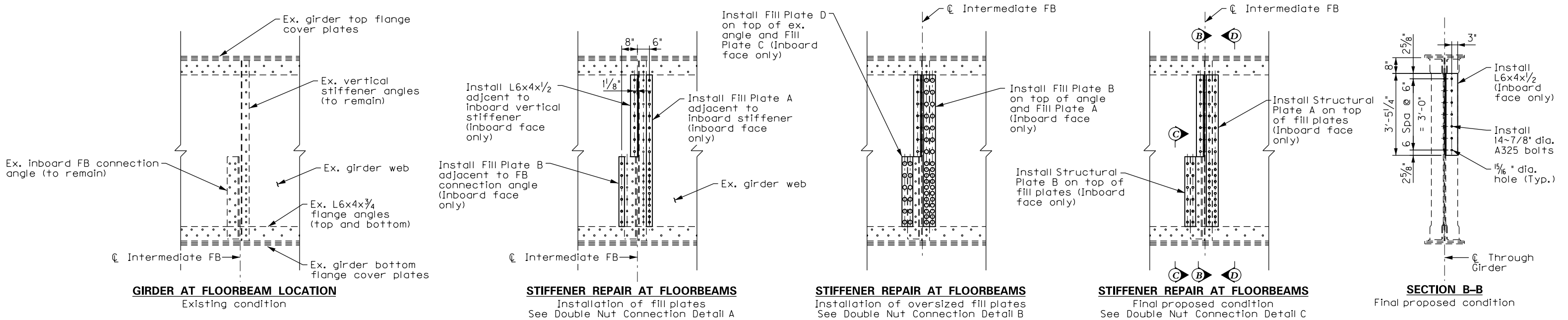
M8

COUNTY OF

JEFFERSON

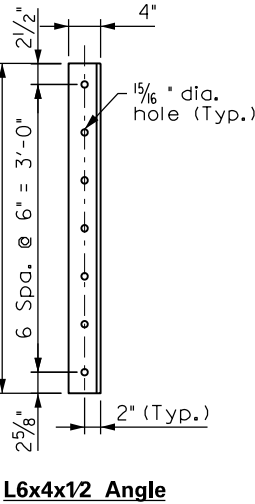
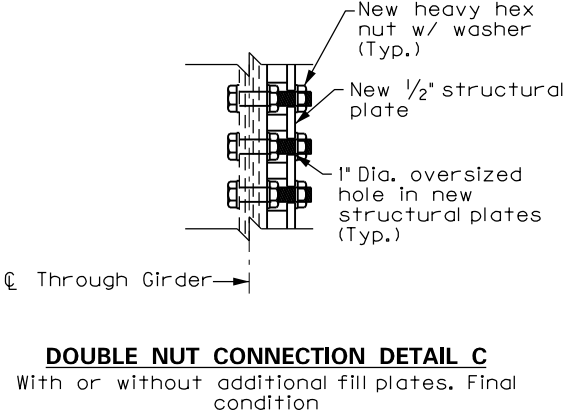
DRAWING NUMBER

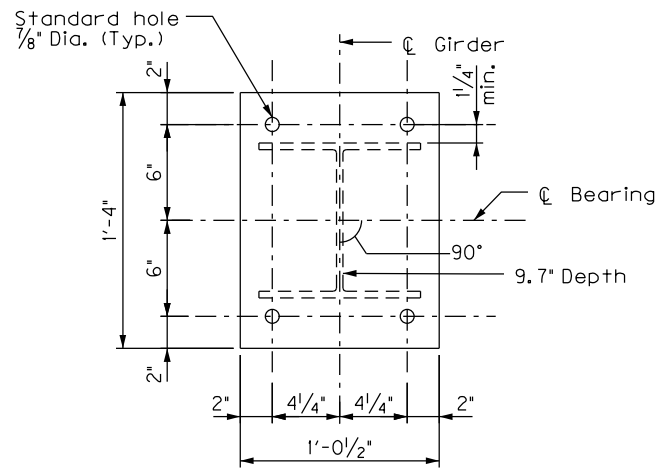
29060



NOTES:

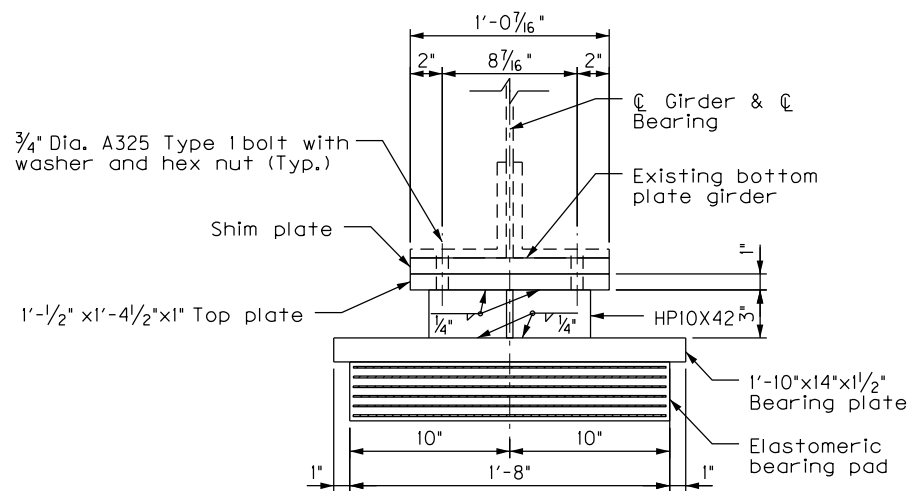
- See the general notes and Special Notes for additional material and construction specifications, construction procedures, and pay items.
- See Sheets M6 and M7 for the locations of the girder repairs.
- The Contractor shall field verify all relevant existing dimensions.
- If it is necessary to adjust the layout of bolts due to the geometry of members, the minimum spacing between bolts shall not be less than 2 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 1/4" to the edge of a plate. This measurement is from the center of bolt to the edge.
- Hole diameter shall be 1/16" larger than the diameter of the bolt unless noted otherwise.



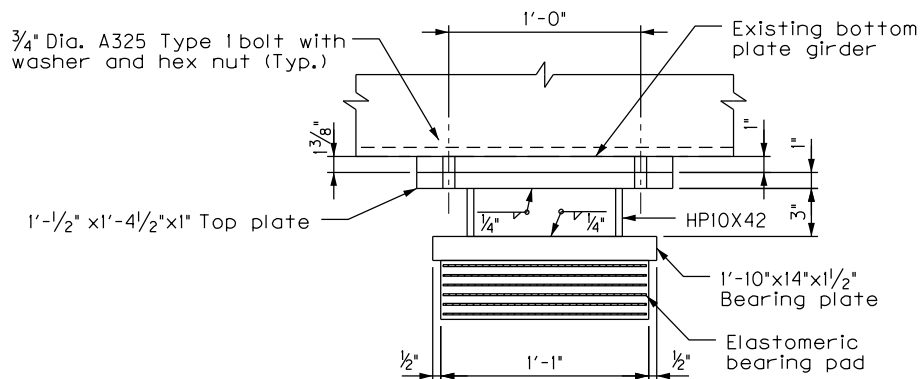


TOP PLATE PLAN

(Shim Plates Similar)

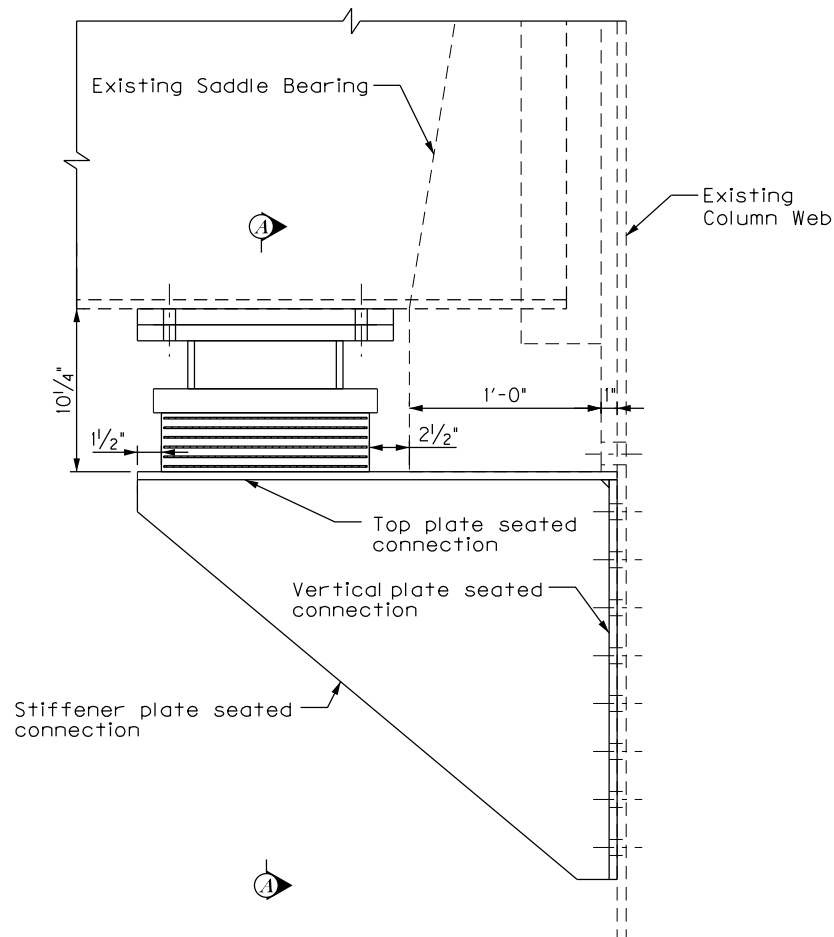


CROSS SECTION BEARING ASSEMBLY

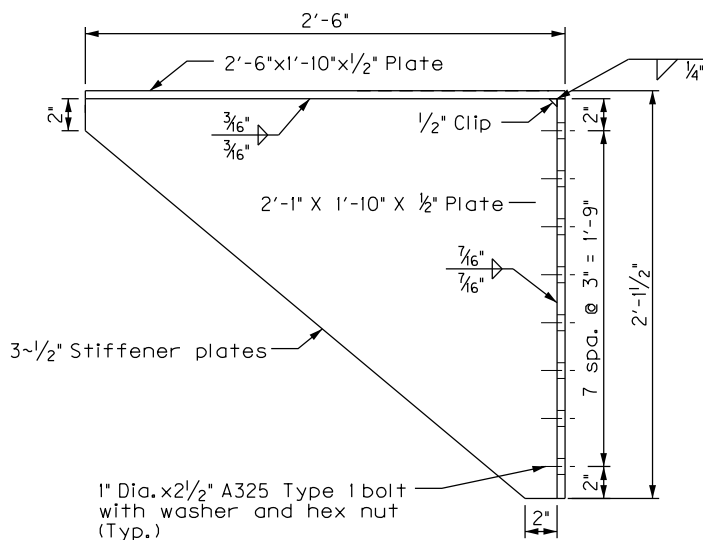


LONGITUDINAL VIEW BEARING ASSEMBLY

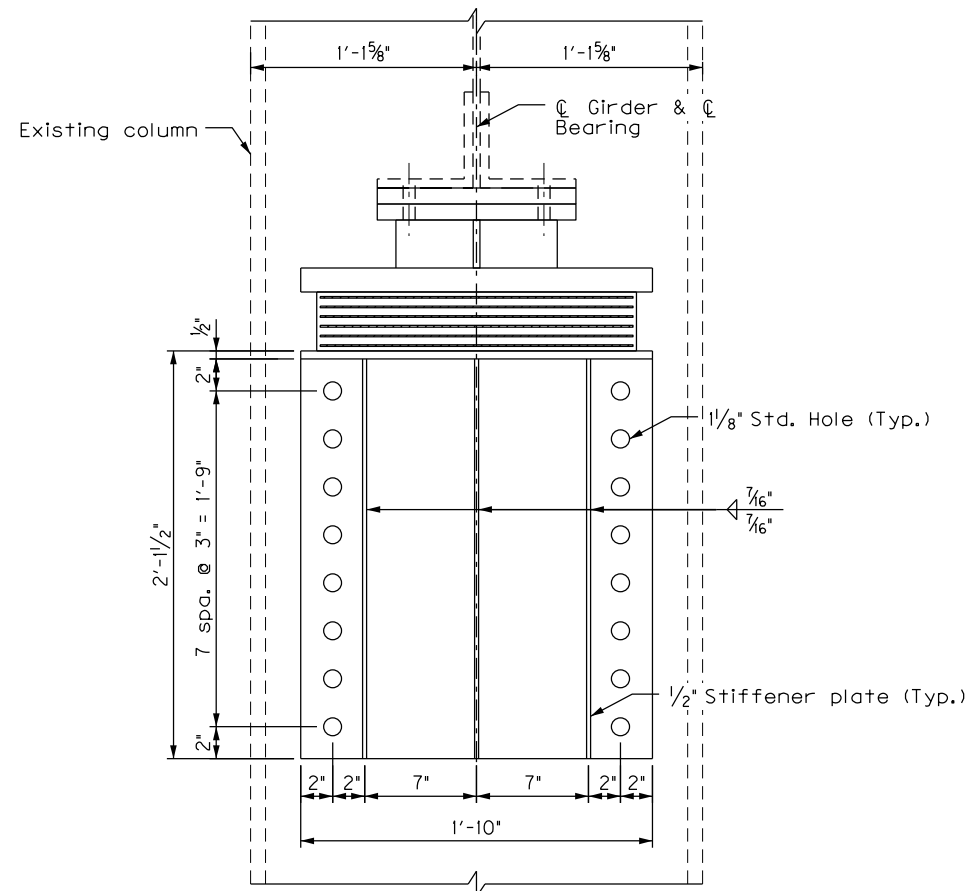
(* See Structural Steel Shim Plate Table for Dimensions)



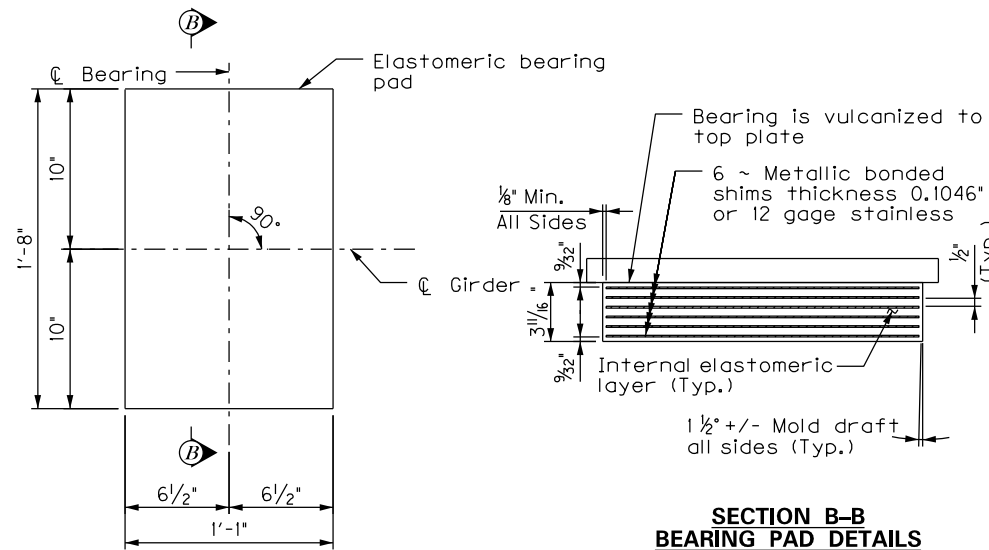
LONGITUDINAL SECTION



SEATED PLATE CONNECTION DETAIL



SECTION A-A



SECTION B-B BEARING PAD DETAILS

NOTES:

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



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: Richardson

REVISION

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.

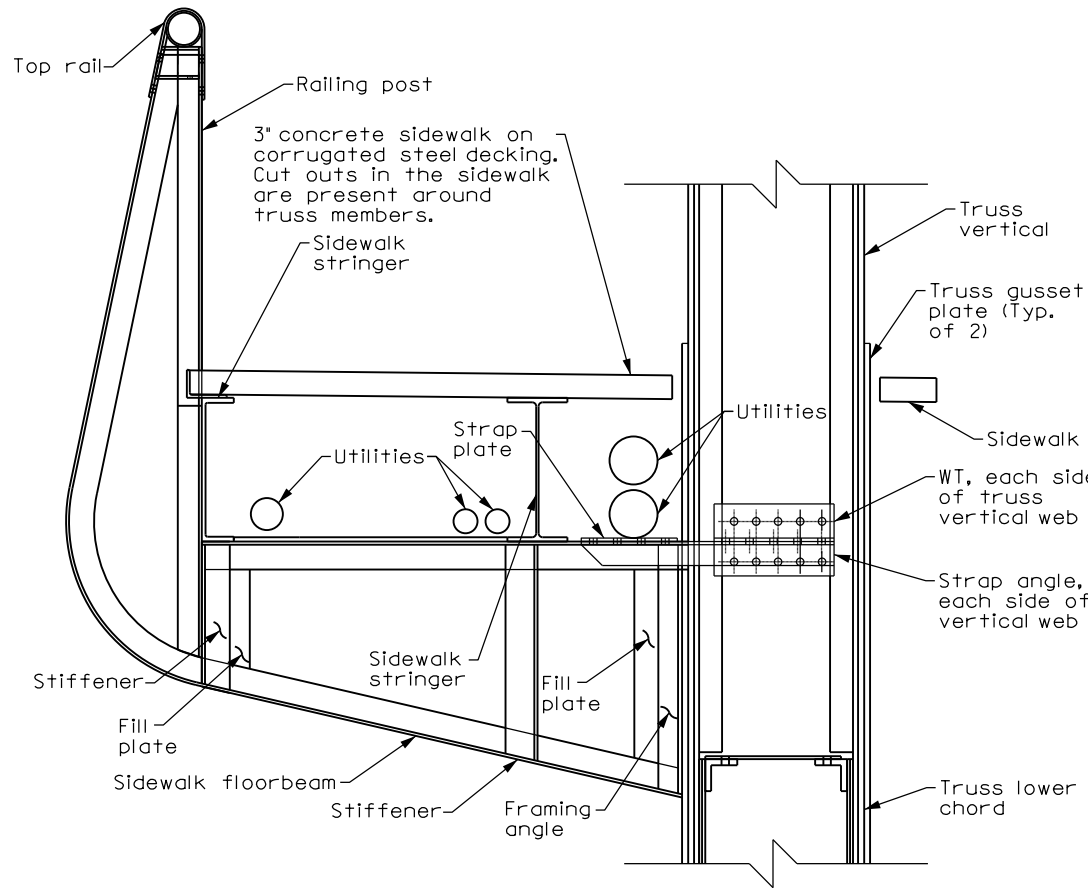
M10

COUNTY OF

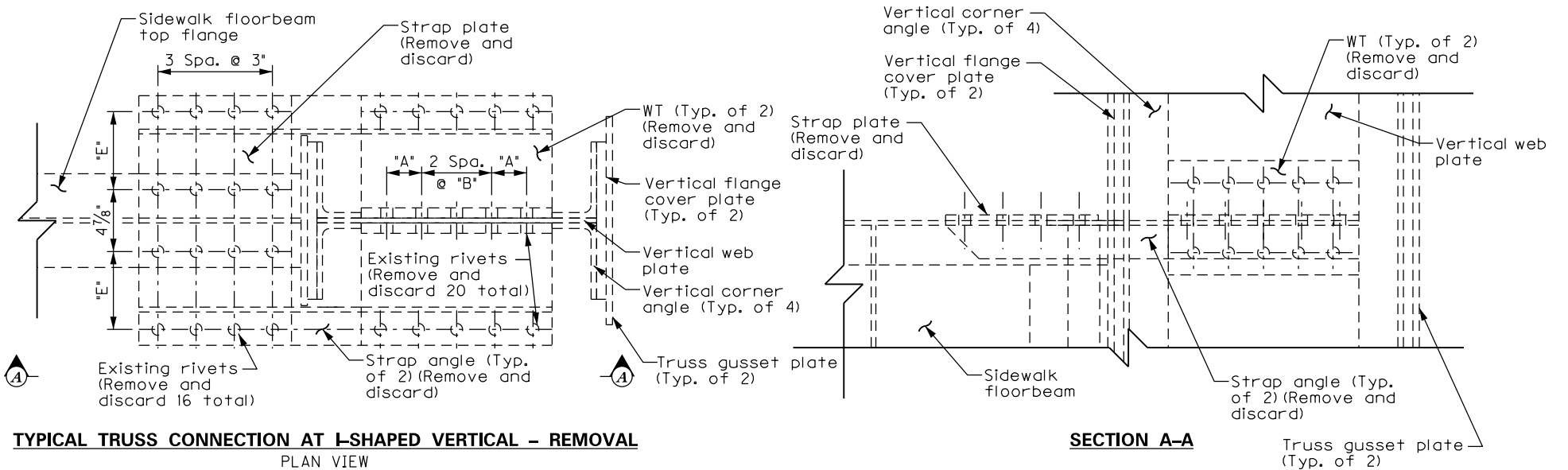
JEFFERSON

DRAWING NUMBER

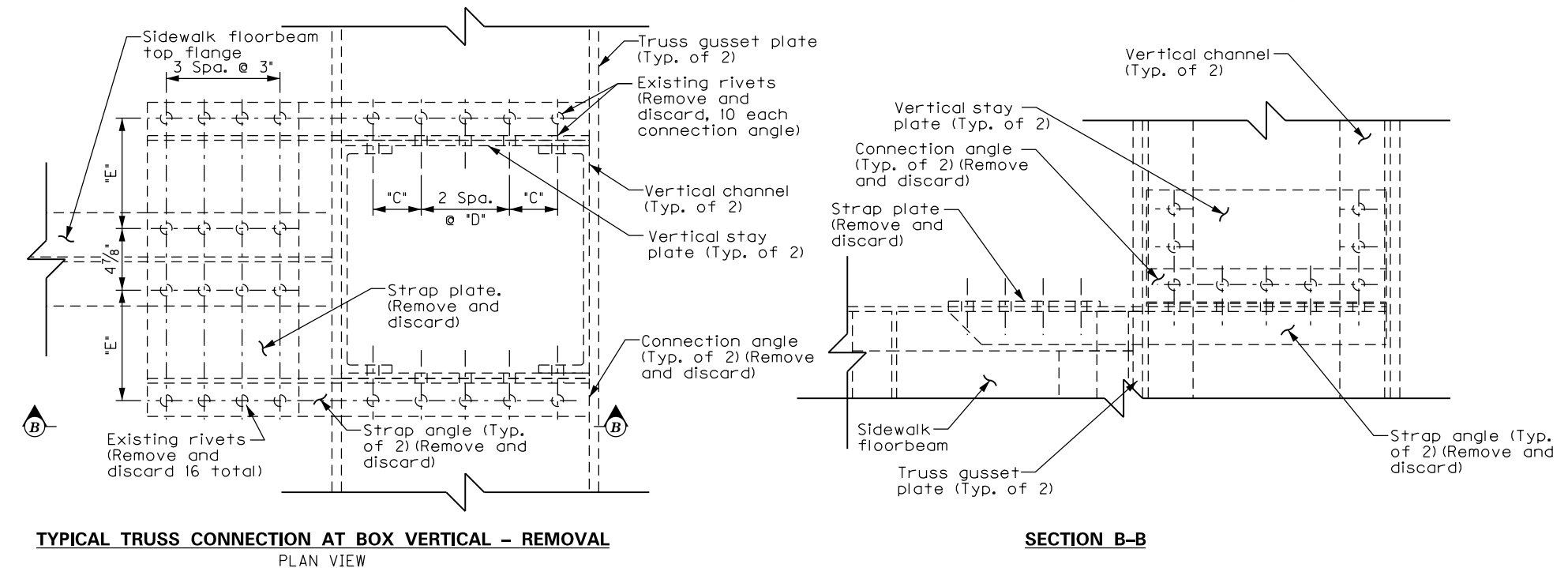
29060



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

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 21CB*80.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: Richardson

REVISION	DATE

DATE PLOTTED: December 18, 2025

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

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

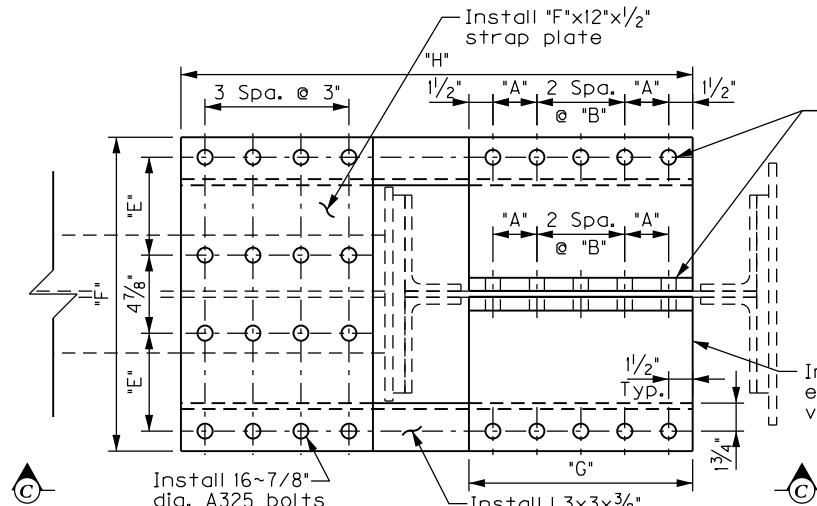
FILE NAME: P:\PR62090\06 CAD\SHEETS\SIDEWALK REPAIRS.DGN

SW FLOORBEAM CONN. - REMOVAL
CROSSING
Ohio River

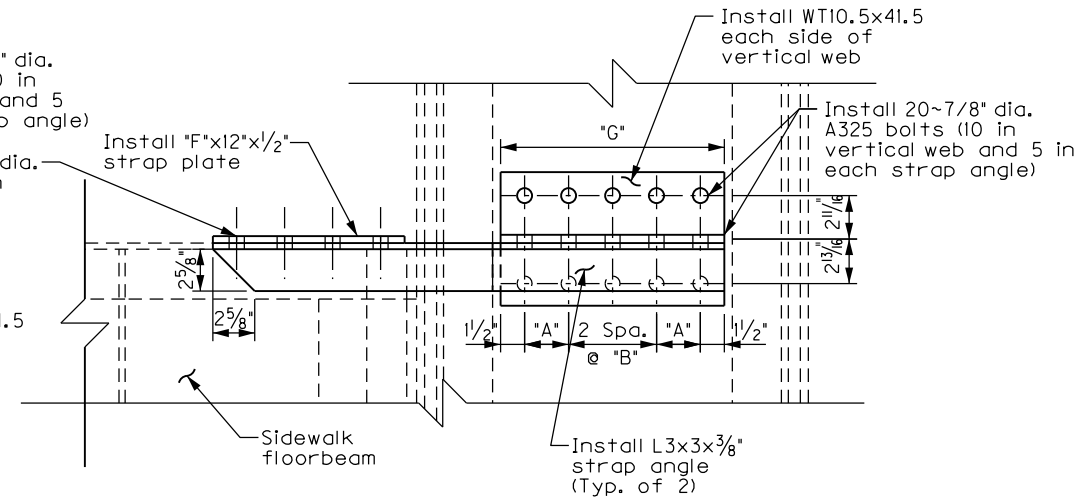
ROUTE
US-31E

ITEM NO.
5-10165
SHEET NO.
M11

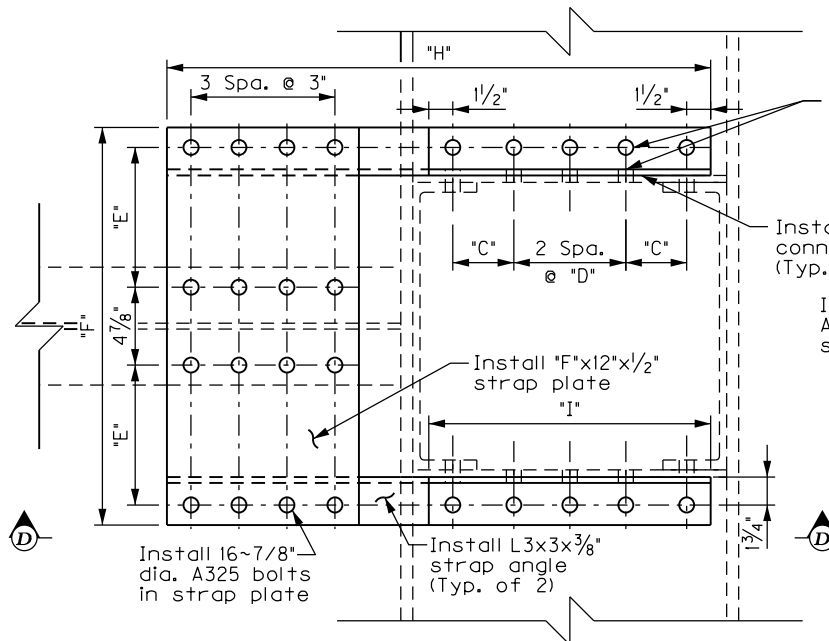
COUNTY OF
JEFFERSON
DRAWING NUMBER
29060



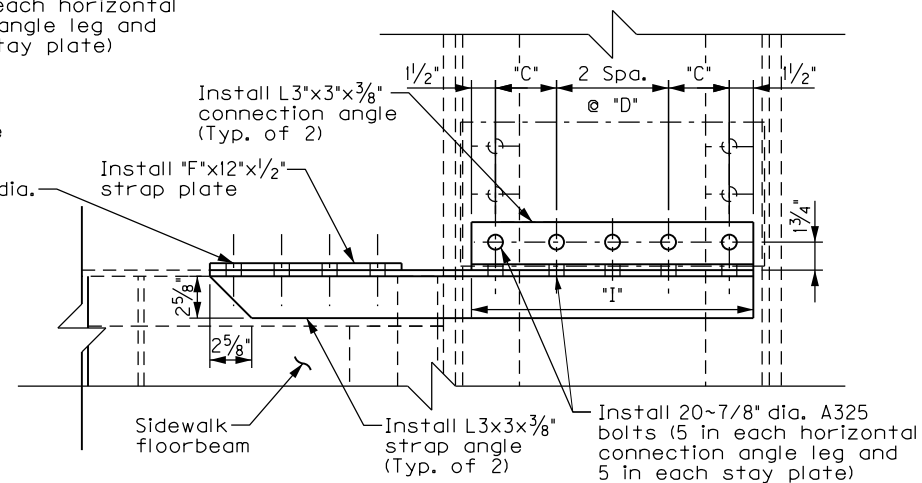
TYPICAL TRUSS CONNECTION AT I-SHAPED VERTICAL - REPAIR
PLAN VIEW



SECTION C-C



TYPICAL TRUSS CONNECTION AT BOX VERTICAL - REPAIR
PLAN VIEW



SECTION D-D

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 KENTUCKY
DEPARTMENT OF HIGHWAYS



MicroStation v24.00.02.62

USER: Richardson

DATE PLOTTED: December 18, 2025

PREPARED BY

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025

DESIGNED BY: S. Ribble

DETAILED BY: S. Ribble

CHECKED BY

D. Richardson

D. Richardson

SW FLOORBEAM CONN. - PROPOSED

CROSSING
Ohio River

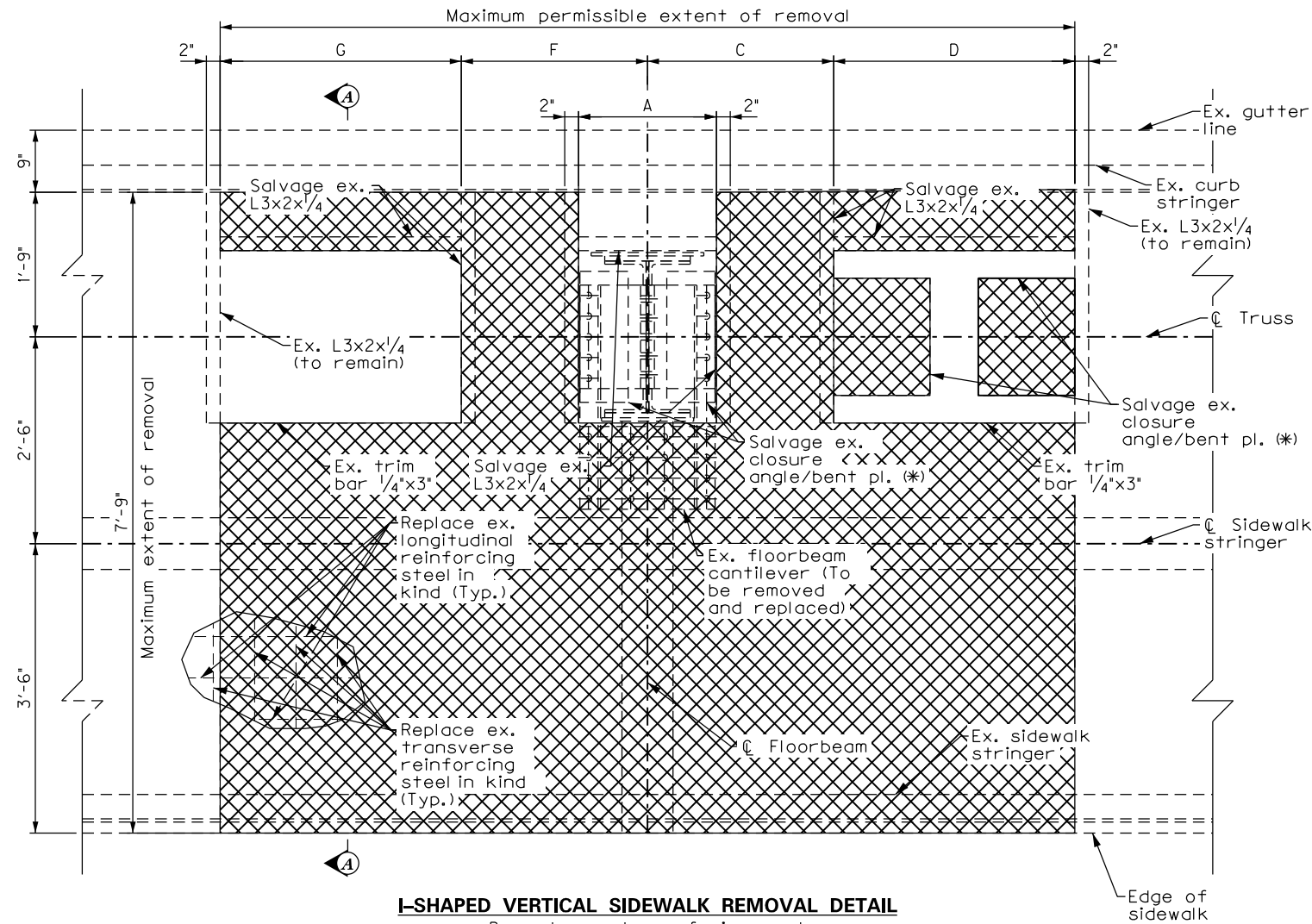
ROUTE
US-31E

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 ⁵ / ₁₆ "	18 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
1	16	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
2	16			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁹ / ₁₆ "	19 ⁷ / ₈ "	B
3	16	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
4	16			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁹ / ₁₆ "	19 ⁷ / ₈ "	B
5	16	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
6	16			3 ¹⁵ / ₁₆ "	4"	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		34 ⁷ / ₁₆ "	18 ⁷ / ₈ "	B
7	16	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
8	16	3 ¹ / ₂ "	3 ¹⁵ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	17 ⁷ / ₈ "	33 ¹⁵ / ₁₆ "		I
9	16	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
11	17	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
12	17	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
13	17	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
14	17			3 ¹⁵ / ₁₆ "	3 ¹ / ₂ "	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		33 ⁹ / ₁₆ "	17 ⁵ / ₈ "	B
15	17	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
16	17			3 ¹³ / ₁₆ "	4"	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ⁵ / ₁₆ "	18 ⁵ / ₈ "	B
17	17	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁹ / ₁₆ "		I
18	17			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
19	17	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁹ / ₁₆ "		I
20	17			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁹ / ₁₆ "	19 ⁷ / ₈ "	B
21	17	3 ³ / ₈ "	4 ¹ / ₂ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₄ "	34 ³ / ₈ "		I
22	17			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁹ / ₁₆ "	19 ⁷ / ₈ "	B
23	17	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
24	17			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁹ / ₁₆ "	19 ⁷ / ₈ "	B
25	17	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁹ / ₁₆ "		I
26	17			3 ¹³ / ₁₆ "	4"	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ⁵ / ₁₆ "	18 ⁷ / ₈ "	B
27	17	3 ³ / ₁₆ "	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15 ³ / ₈ "	32 ¹¹ / ₁₆ "		I
28	17			3 ¹³ / ₁₆ "	3 ¹ / ₂ "	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		33 ¹³ / ₁₆ "	17 ⁵ / ₈ "	N
29	17	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
30	17	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
31	17	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
33	18	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
34	18	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
35	18	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
36	18			3 ¹⁵ / ₁₆ "	4"	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		34 ⁷ / ₁₆ "	18 ⁷ / ₈ "	B
37	18	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
38	18			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
39	18	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
40	18			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
41	18	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
42	18			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
43	18	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
44	18			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
47	19			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
48	19	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
49	19			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
50	19	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
51	19			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	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 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
53	19			4 ¹¹ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		35 ¹¹ / ₁₆ "	21 ³ / ₈ "	B
54	19	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
55	19			3 ¹⁵ / ₁₆ "	4"	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		34 ⁷ / ₁₆ "	18 ⁷ / ₈ "	B
56	19	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
57	19	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
58	19	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
60	20	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
61	20	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
62	20	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
63	20			3 ¹³ / ₁₆ "	3 ¹ / ₂ "	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		33 ¹³ / ₁₆ "	17 ⁵ / ₈ "	B
64	20	3 ³ / ₁₆ "	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15 ³ / ₈ "	32 ¹¹ / ₁₆ "		I
65	20			3 ¹³ / ₁₆ "	4"	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ⁵ / ₁₆ "	18 ⁵ / ₈ "	B
66	20	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
67	20			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
68	20	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
69	20			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
70	20	3 ³ / ₈ "	4 ¹ / ₂ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₄ "	34 ³ / ₈ "		I
71	20			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
72	20	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
73	20			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
74	20	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
75	20			3 ¹³ / ₁₆ "	4"	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ⁵ / ₁₆ "	18 ⁵ / ₈ "	B
76	20	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
77	20			3 ¹³ / ₁₆ "	3 ¹ / ₂ "	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		33 ¹³ / ₁₆ "	17 ⁵ / ₈ "	B
78	20	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
79	20	3 ¹ / ₂ "	4 ³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₈ "	34 ³ / ₁₆ "		I
80	20	3"	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
82	21	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
83	21	3 ¹ / ₂ "	3 ¹⁵ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	17 ⁷ / ₈ "	33 ¹⁵ / ₁₆ "		I
84	21	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
85	21			3 ¹⁵ / ₁₆ "	4"	8 ¹³ / ₁₆ "	25 ¹ / ₂ "		34 ⁷ / ₁₆ "	18 ⁷ / ₈ "	B
86	21	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
87	21			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
88	21	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
89	21			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
90	21	2 ³ / ₄ "	2 ³ / ₄ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	14"	32"		I
91	21	3"	3"			5 ⁵ / ₁₆ "	18 ¹ / ₂ "	15"	32 ¹ / ₂ "		I
0	22	4 ⁷ / ₈ "	3"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₄ "	34 ³ / ₈ "		I
1	22	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
2	22			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
3	22	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
4	22			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
5	22	3 ³ / ₈ "	4 ¹ / ₂ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	18 ³ / ₄ "	34 ³ / ₈ "		I
6	22			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
7	22	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
8	22			3 ¹⁵ / ₁₆ "	4 ¹ / ₂ "	7 ⁵ / ₁₆ "	22 ¹ / ₂ "		34 ¹⁵ / ₁₆ "	19 ⁷ / ₈ "	B
9	22	3 ⁷ / ₁₆ "	5"			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	19 ⁷ / ₈ "	34 ¹⁵ / ₁₆ "		I
10	22	3 ⁷ / ₁₆ "	3 ¹³ / ₁₆ "			6 ¹³ / ₁₆ "	21 ¹ / ₂ "	17 ¹ / ₂ "	33 ³ / ₄ "		I



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

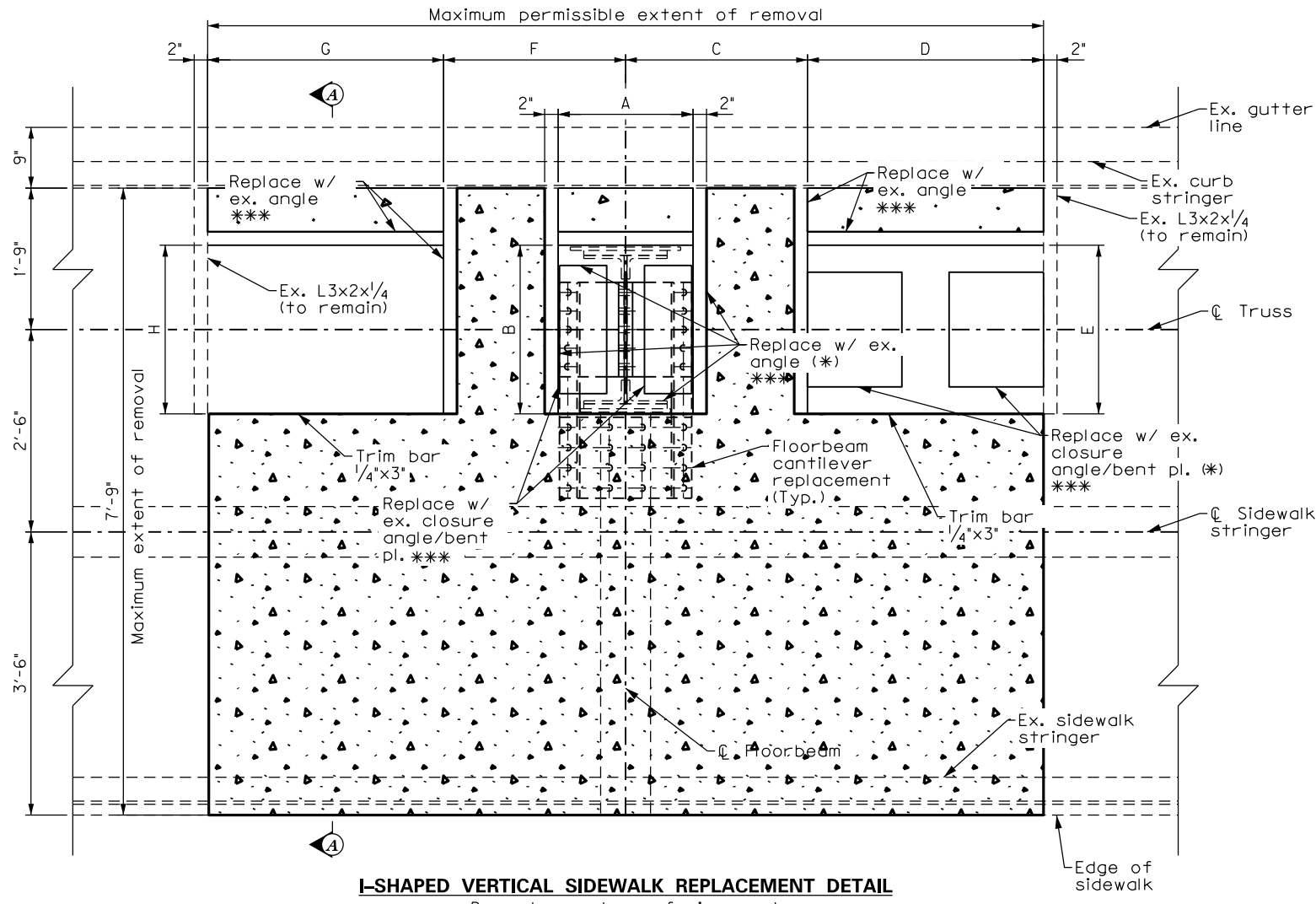
LEGEND:

- = 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.

NOTES:

- See the general notes and the Special Note for Sidewalk Floorbeam Connection Replacement for additional material and construction specifications, construction procedures, and pay items.
- The Contractor shall field verify all relevant existing dimensions and number sizes.
- 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.



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

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

PANEL POINT		SIDEWALK REMOVAL/REPLACEMENT DIMENSIONS									
SPAN 16	SPAN 21	A	B	C	D	E	F	G	H	Closure Angle/Bent Plate	Length
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"	Bent Pl. 5/16 x 33	11"
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"	L7x4x3/8	1'-7"
14	77	1'-11"	2'-0"	4'-0"	2'-3"	2'-10"	1'-10"	3'-11"	2'-2"	Bent Pl. 5/16 x 33	11"
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"	Bent Pl. 5/16 x 16	1'-7"
20	71	1'-8"	2'-1"	2'-9"	2'-3"	2'-1"	2'-5"	3'-0"	2'-2"	Bent Pl. 5/16 x 13	1'-7"
22	69	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-8"	2'-3"	2'-1"	Bent Pl. 5/16 x 13	1'-7"
24	67	1'-8"	2'-1"	2'-5"	3'-0"	2'-2"	2'-6"	2'-10"	2'-2"	Bent Pl. 5/16 x 16	1'-7"
26		See Suspended Span Hanger Detail									
28	63	1'-11"	2'-0"	1'-10"	3'-11"	2'-10"	4'-0"	4'-0"	2'-10"	Bent Pl. 5/16 x 33	11"
30	61	1'-8"	2'-1"	3'-7"	2'-11"	2'-1"	3'-8"	3'-8"	2'-2"	L7x4x3/8	1'-7"
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	11"
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



REVISION	DATE

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

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

SIDEWALK REMOVAL/REPLACEMENT

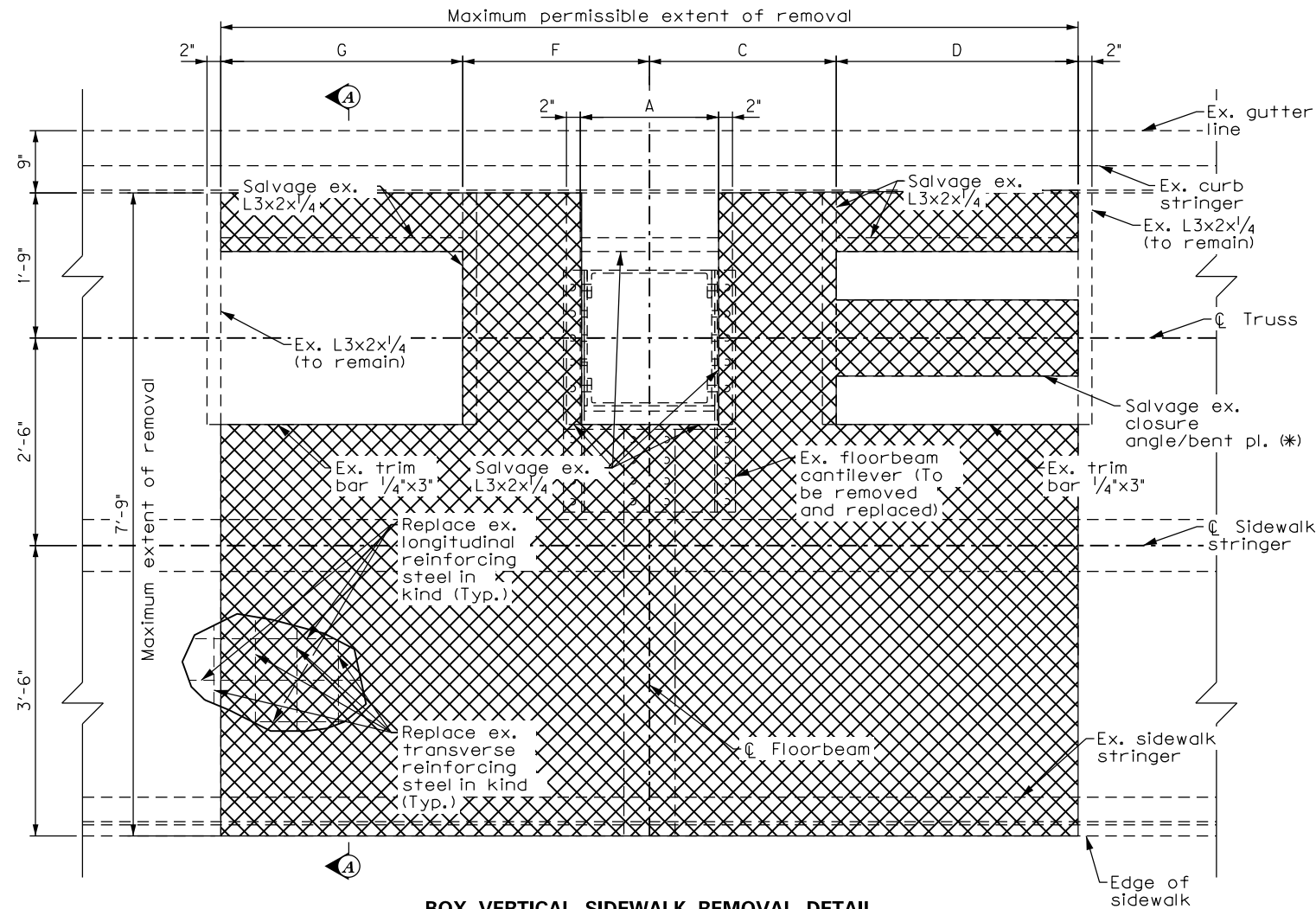
CROSSING
Ohio River

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:

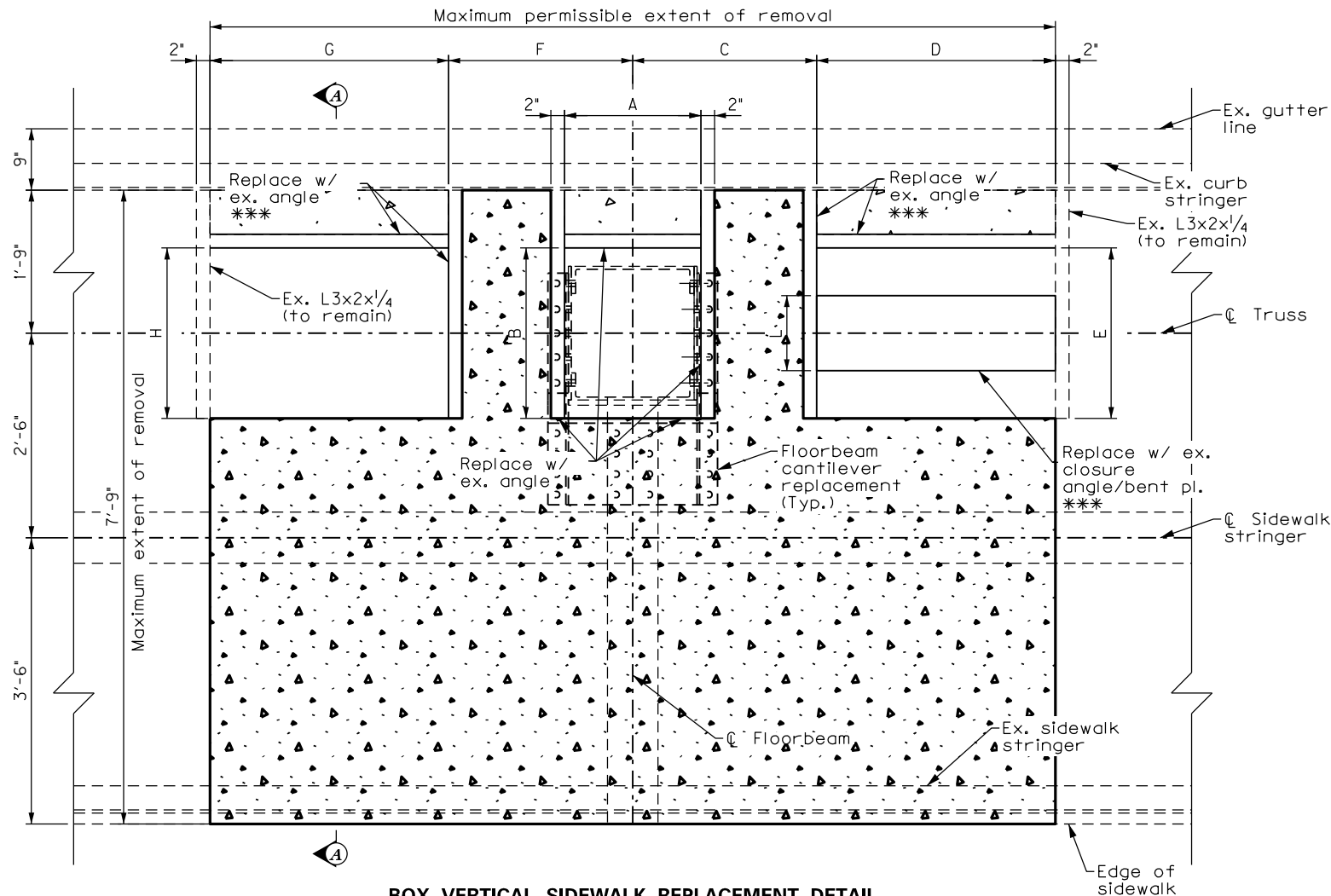
 = Limits of removal

 = 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.

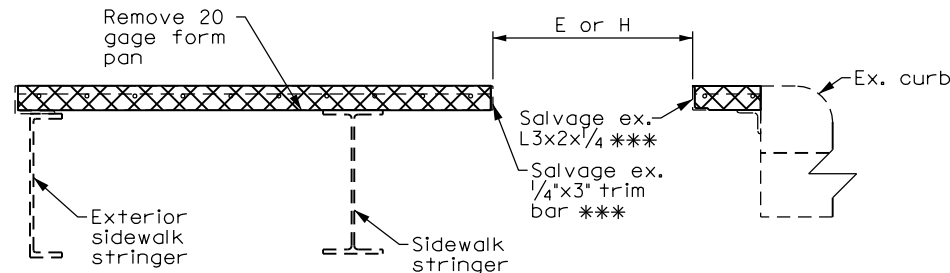
NOTES:

- 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 M14 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.

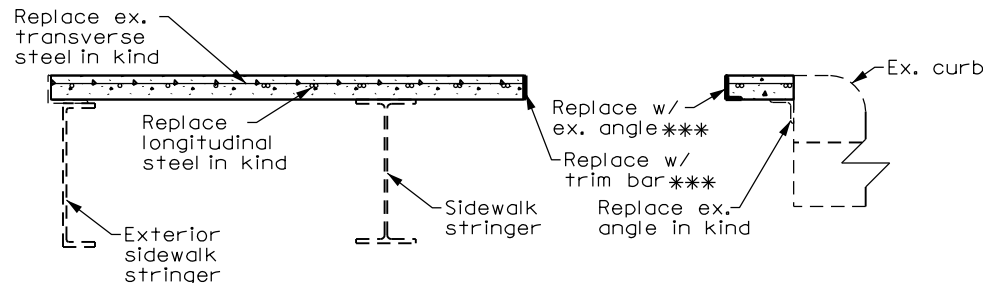


BOX VERTICAL SIDEWALK REPLACEMENT DETAIL

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



SECTION A-A EXISTING



SECTION A-A PROPOSED

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



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION

DATE

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

DATE: December 18th, 2025

DESIGNED BY: L. Bridwell

DETAILED BY: L. Bridwell

CHECKED BY

D. Richardson

S. Ribble

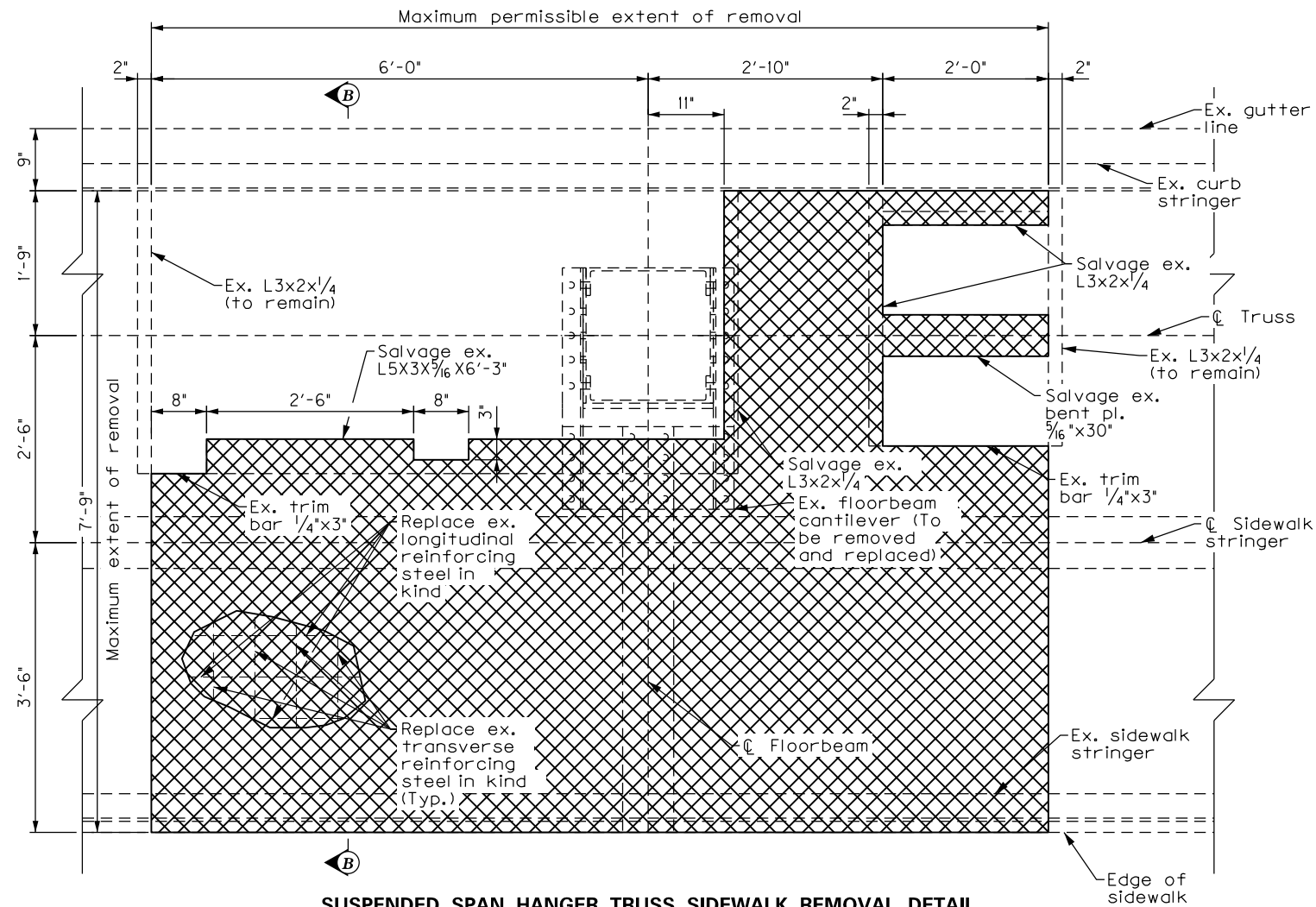
SIDEWALK REMOVAL/REPLACEMENT

CROSSING
Ohio River

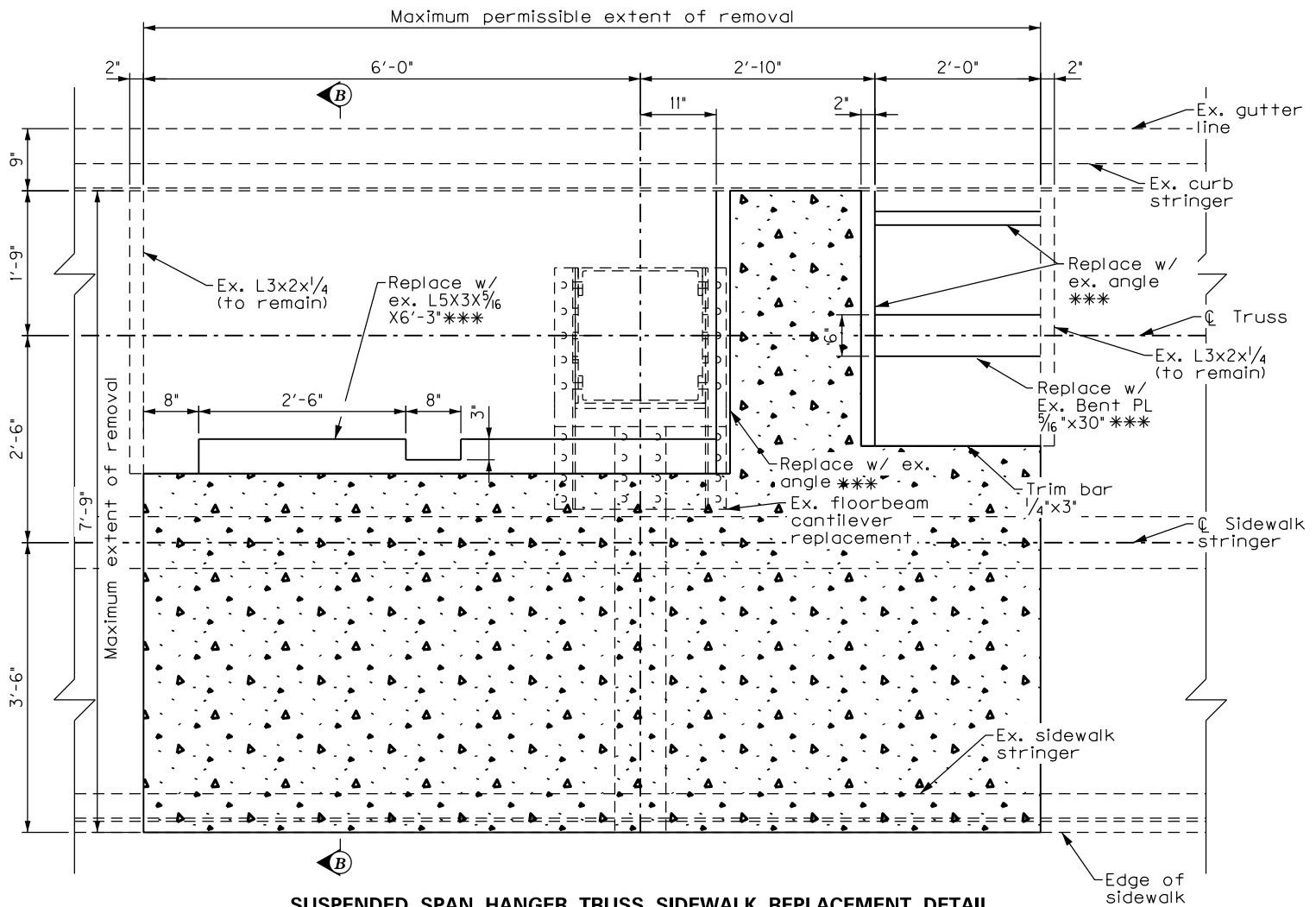
ROUTE
US-31E

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



SUSPENDED SPAN HANGER TRUSS SIDEWALK REPLACEMENT DETAIL
 Downstream truss facing east
 FB 16 & 65 shown
 FB 26 & 75 opposite hand

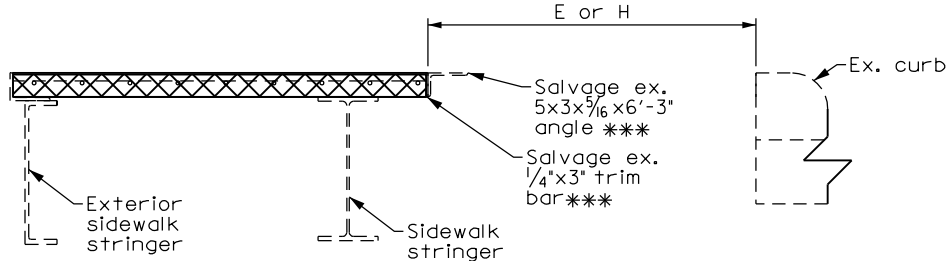
LEGEND:

- = Limits of removal
- = New concrete

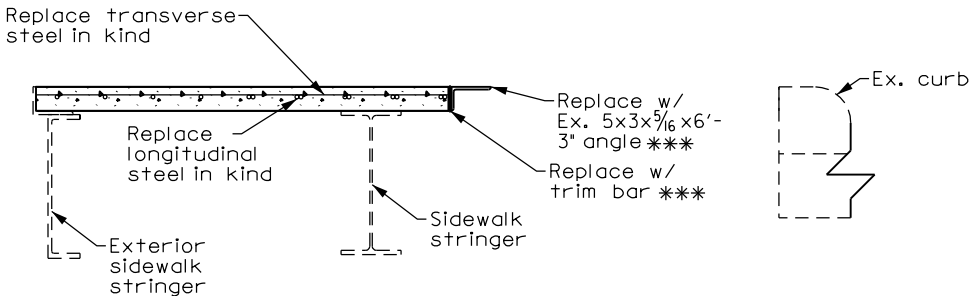
*** = With the permission of the Engineer, rather than salvaging the existing closure angles, trim bars, and bent plates in the sidewalk, the Contractor has the option to replace these angles, trim bars, and bent plates with new angles, trim bars, and bent plates at the same size and locations as the 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.

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 M14 for lettered dimensions.
- 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.



SECTION B-B EXISTING



SECTION B-B PROPOSED

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



COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS



REVISION	DATE

PREPARED BY
BURGESS & NIPLE
 Engineers ■ Architects ■ Planners

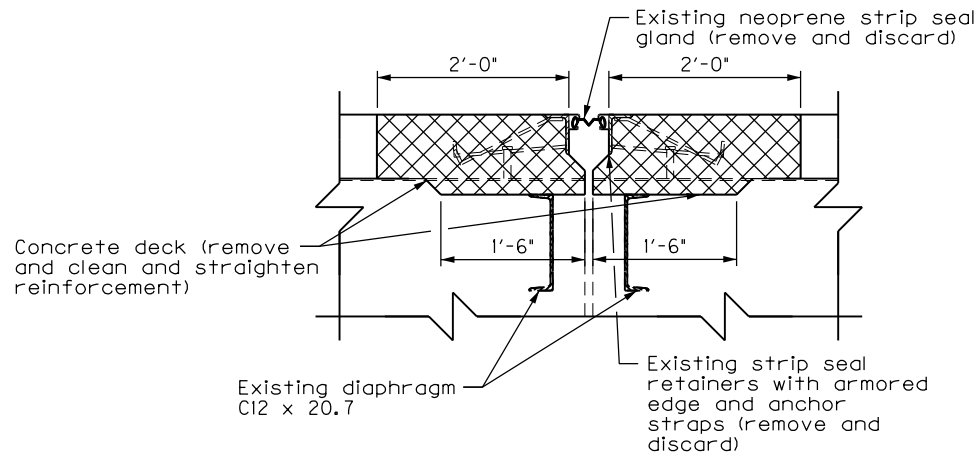
DATE: December 18th, 2025	CHECKED BY:
DESIGNED BY: L. Bridwell	D. Richardson
DETAILED BY: L. Bridwell	S. Ribble

SIDEWALK REMOVAL/REPLACEMENT
 CROSSING
 Ohio River

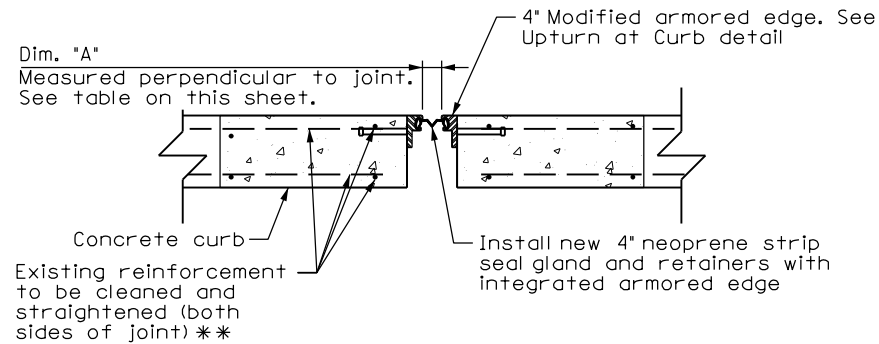
ROUTE
 US-31E

ITEM NO.
 5-10165
 SHEET NO.
 M16

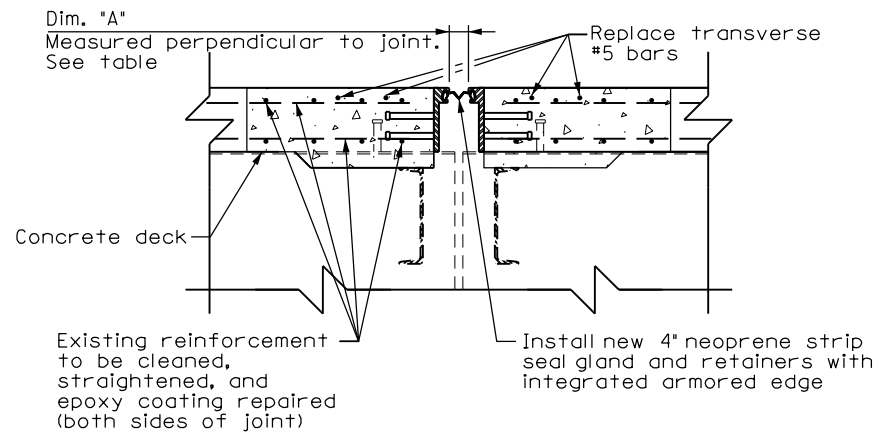
COUNTY OF
 JEFFERSON
 DRAWING NUMBER
 29060



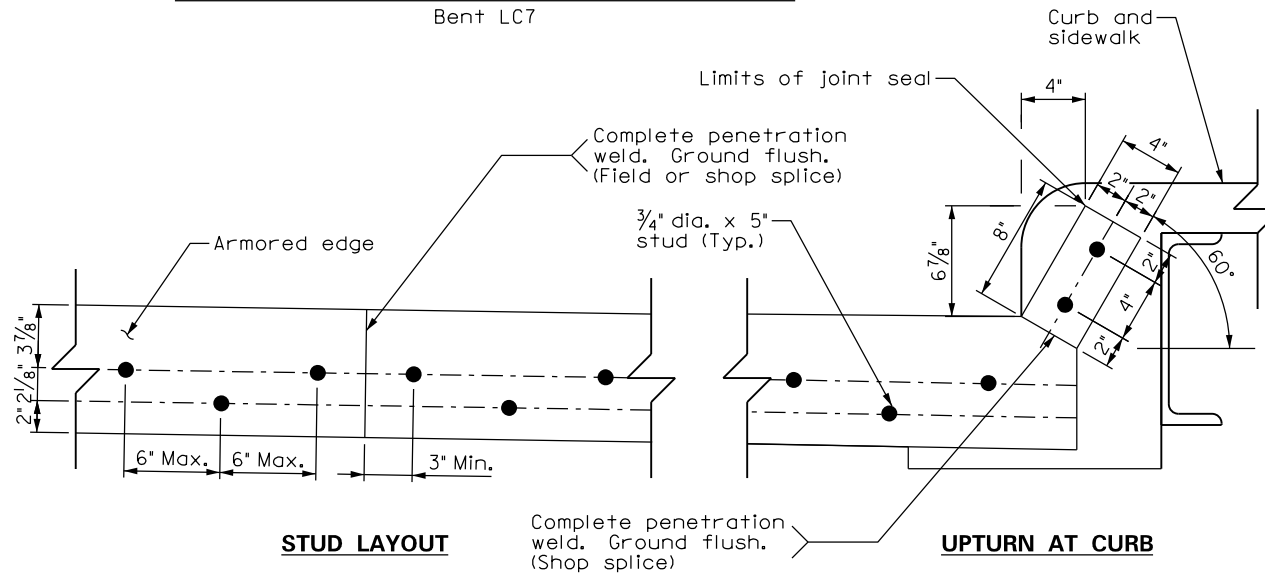
EXISTING STRIP SEAL JOINT SECTION
Bent LC7



STRIP SEAL JOINT REPLACEMENT SECTION IN CURB
Bent LC7

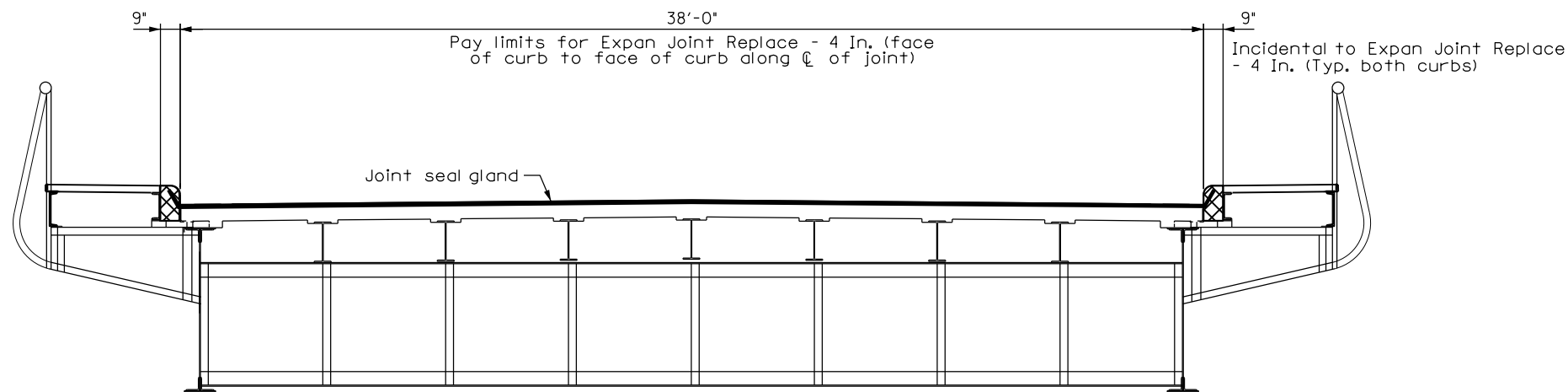


STRIP SEAL JOINT REPLACEMENT SECTION
Bent LC7



STUD LAYOUT

UPTURN AT CURB



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

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.
- 4) 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

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



REVISION	DATE

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

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

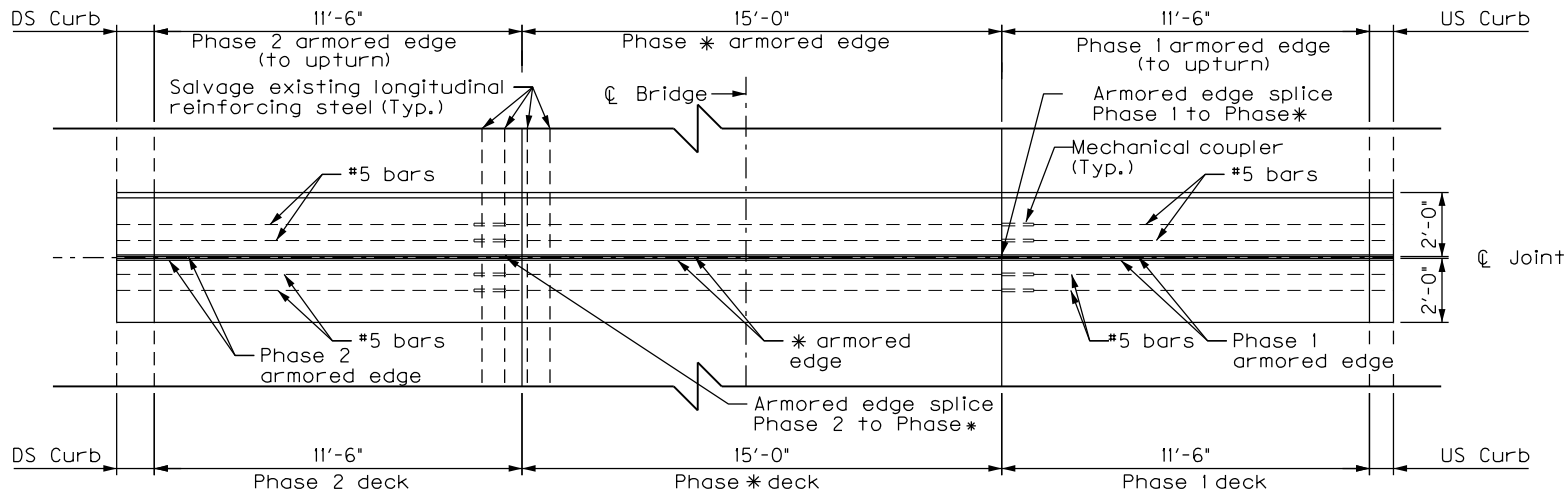
JOINT REPLACEMENT DETAILS

CROSSING
Ohio River

ROUTE
US-31E

ITEM NO.
5-10165
SHEET NO.
M17

COUNTY OF
JEFFERSON
DRAWING NUMBER
29060





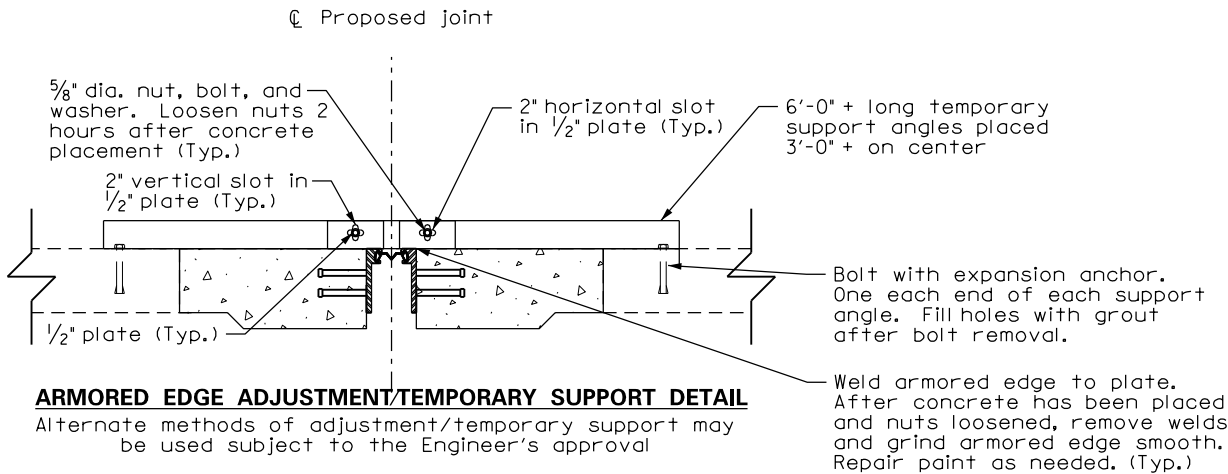
PLAN – STRIP SEAL JOINT AT LC7 – PROPOSED

NOTES:

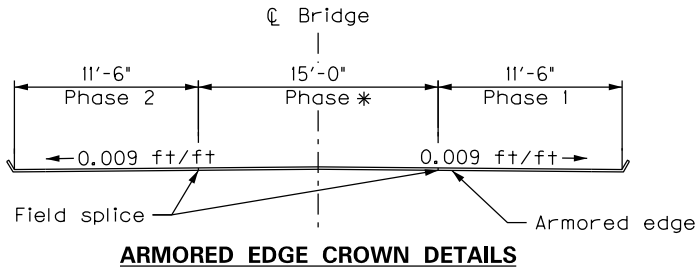
- 1) See the general notes and the Special Note for Bridge Joint Replacement for additional material and construction specifications, construction procedures, and pay items.
- 2) The Contractor shall field verify all relevant existing dimensions and member sizes.
- 3) See Sheet M6 for the location of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

LEGEND:

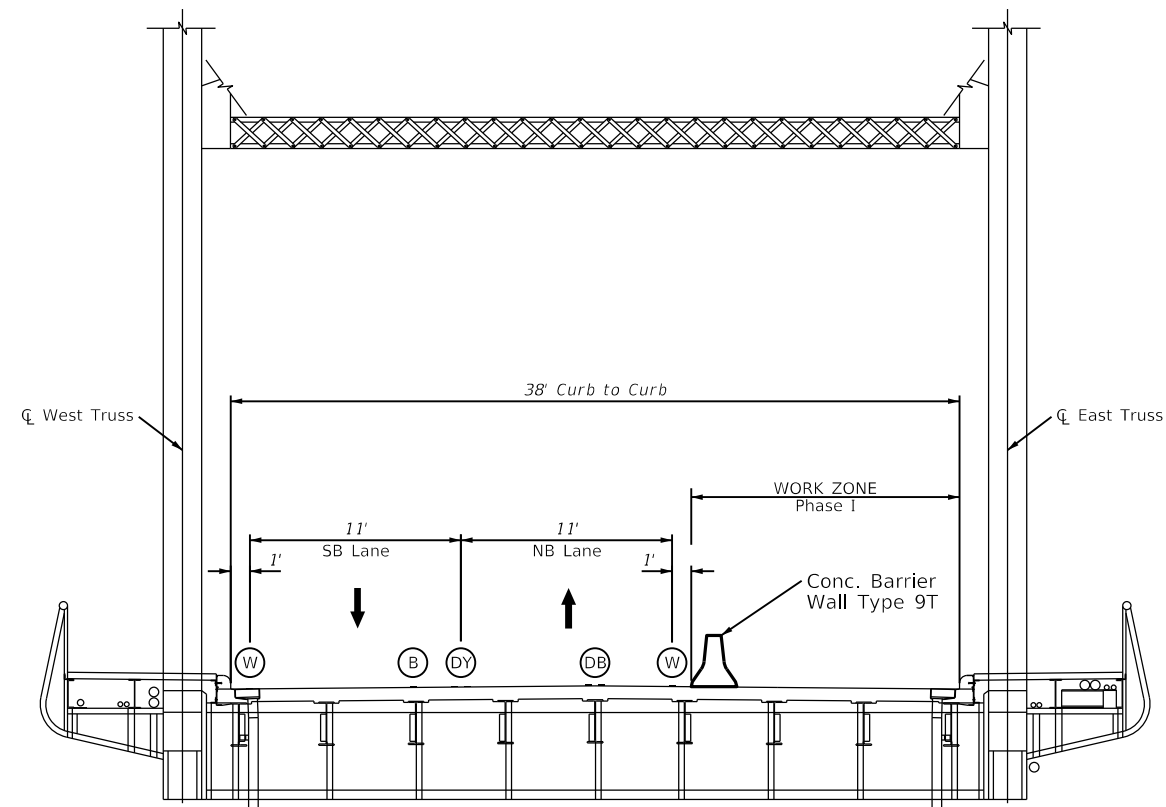
-  = Joint seal gland
-  = New concrete
- * = Phasing that will occur during Thunder over Louisville weekend. See Special Note for Expansion Joint Replacement - 4 In.



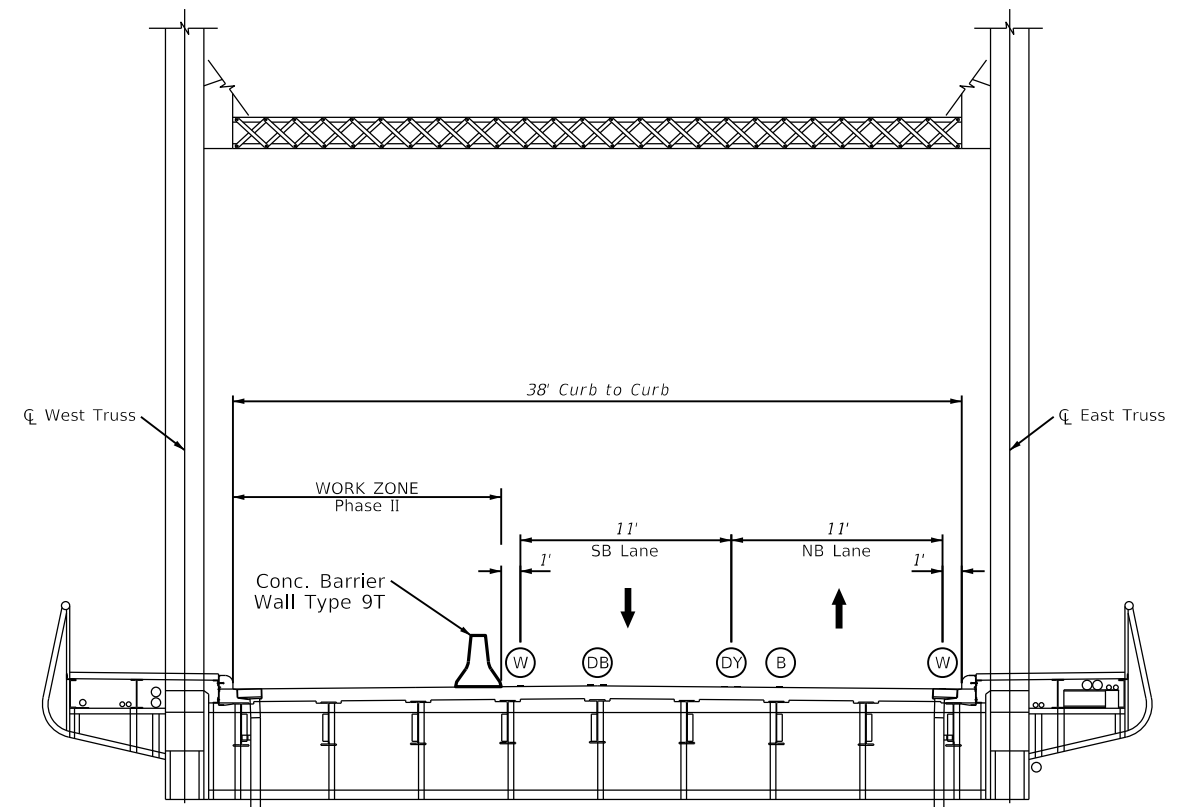
ARMORED EDGE ADJUSTMENT/TEMPORARY SUPPORT DETAIL
Alternate methods of adjustment/temporary support may be used subject to the Engineer's approval



ARMORED EDGE CROWN DETAILS



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



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



REVISION	DATE

PREPARED BY
BURGESS & NIPLE
Engineers ■ Architects ■ Planners

DATE: December 18, 2025	CHECKED BY:
DESIGNED BY: C. Villier	S. Ribble
DETAILED BY: C. Villier	S. Ribble

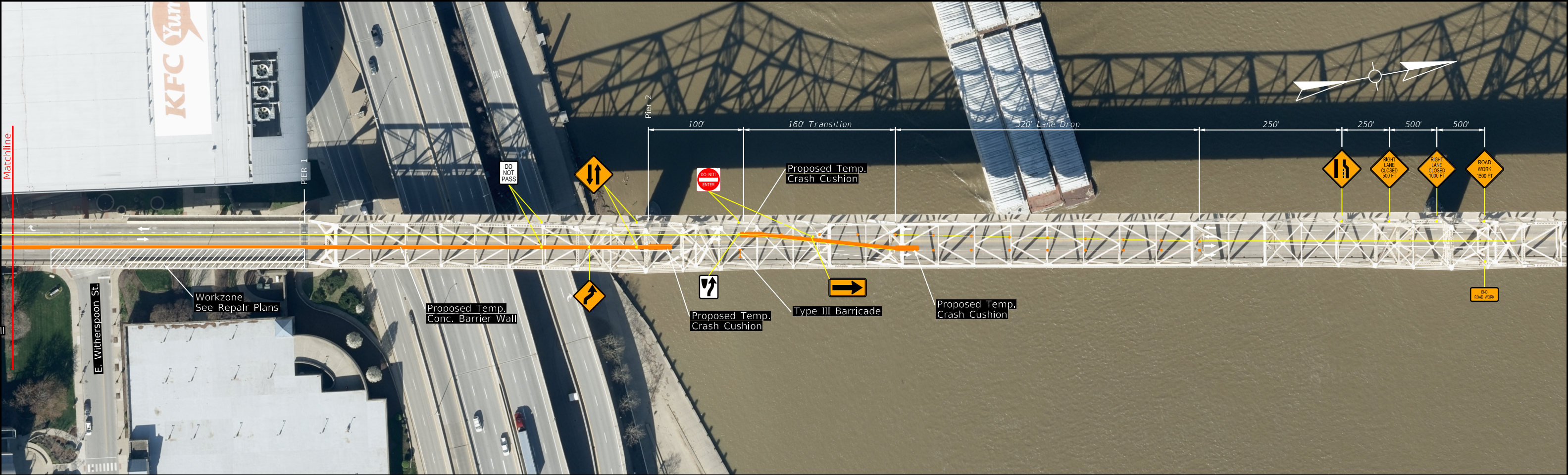
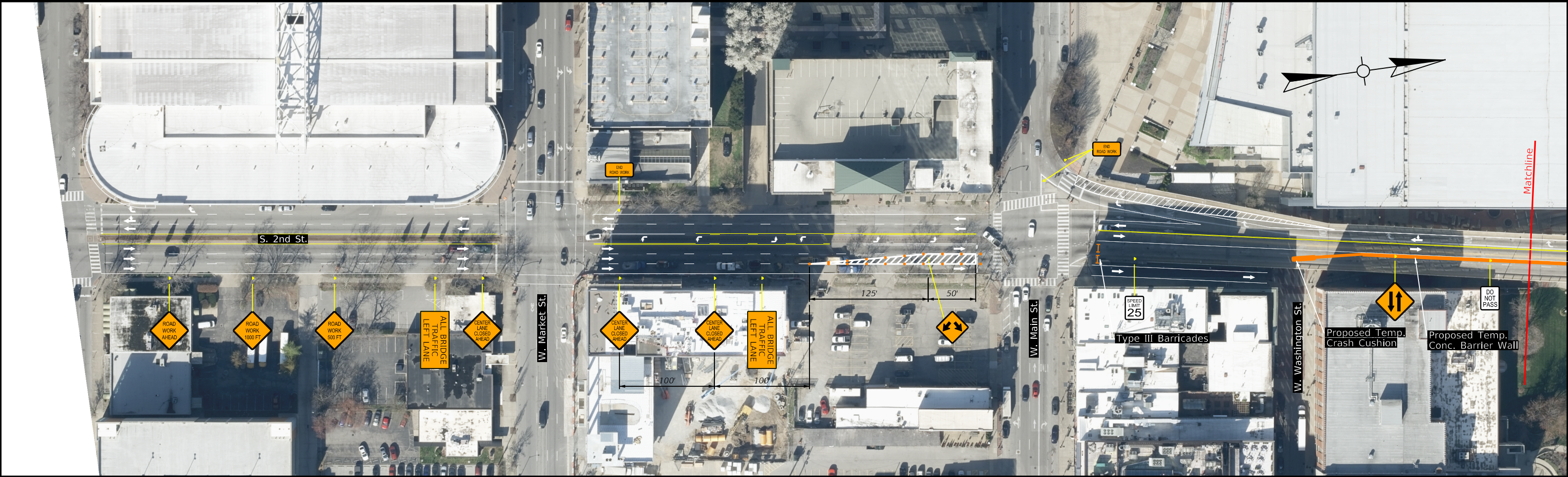
MAINTENANCE OF TRAFFIC - DETAIL

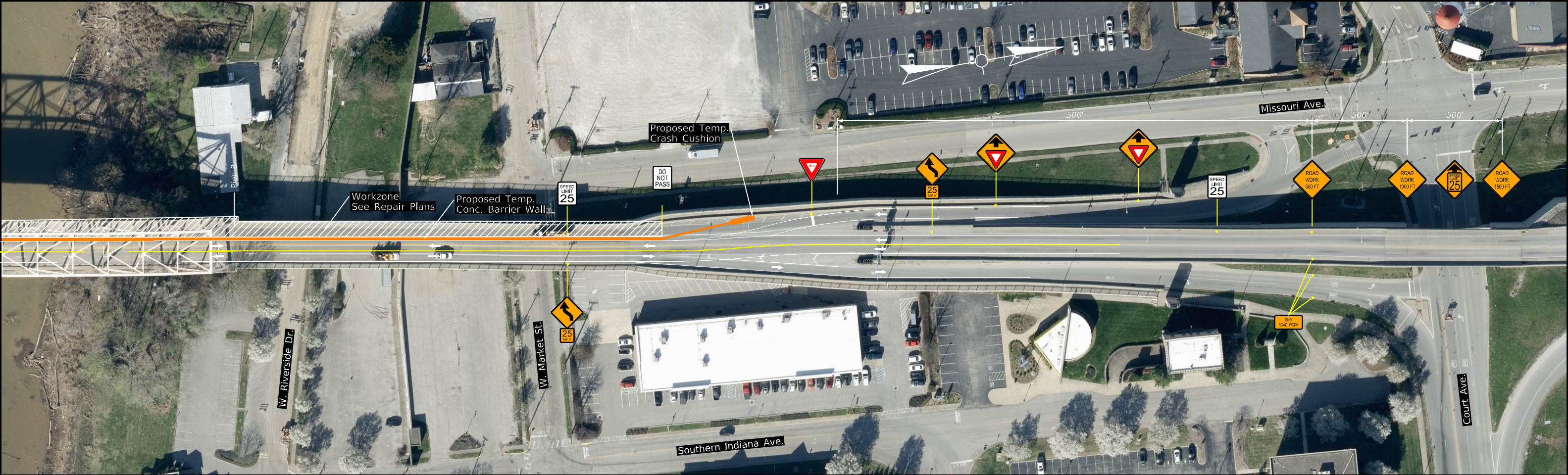
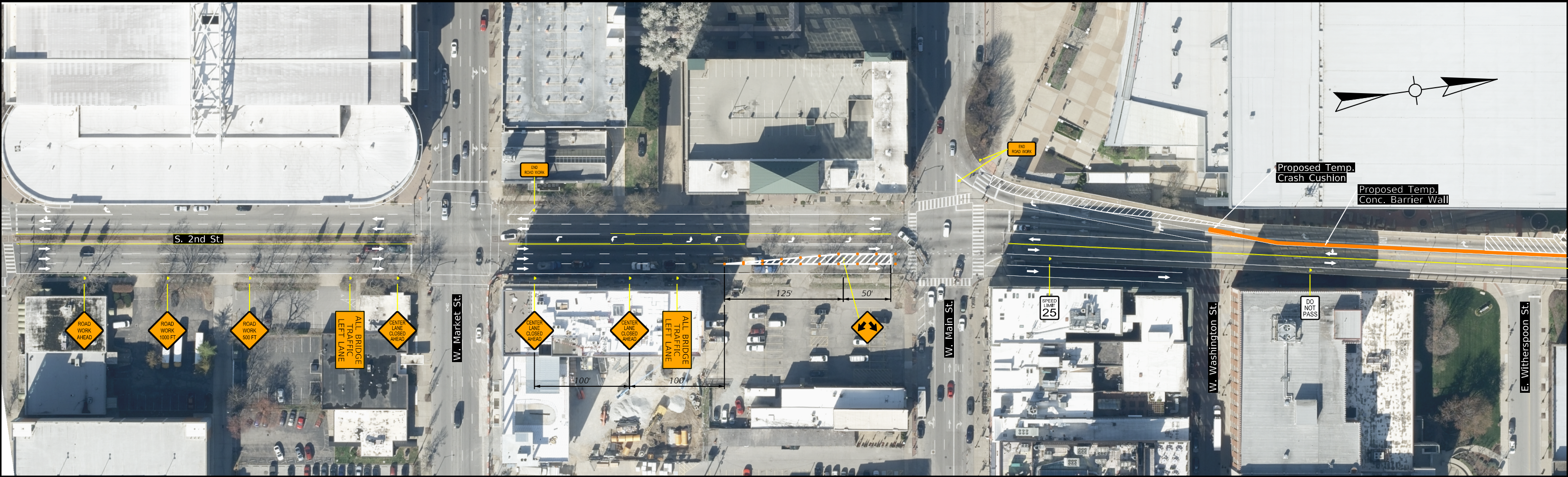
CROSSING
Ohio River



ROUTE
US-31E

ITEM NO. 5-10165
SHEET NO. M21

COUNTY OF JEFFERSON
DRAWING NUMBER 29060







 <div>COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS</div>	 <div>KENTUCKY TRANSPORTATION CABINET</div>	REVISION	DATE	PREPARED BY BURGESS & NIPLE Engineers ■ Architects ■ Planners	DATE: December 18, 2025	CHECKED BY S. Ribble	MAINTENANCE OF TRAFFIC - PHASE II CROSSING Ohio River	ROUTE US-31E	ITEM NO. 5-10165	COUNTY OF JEFFERSON
					DESIGNED BY: C. Villier	S. Ribble			SHEET NO. M23	DRAWING NUMBER 29060
					DETAILED BY: C. Villier	S. Ribble				



Note: Cover all temporary signage which does not apply during closure.



 <div>COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS</div> 	REVISION	DATE	PREPARED BY BURGESS & NIPLE Engineers ■ Architects ■ Planners	DATE: December 18, 2025	CHECKED BY	MOT – INDIANA APPROACH CLOSURE <small>CROSSING</small> Ohio River	ROUTE	ITEM NO.	COUNTY OF
				DESIGNED BY: C. Villier	S. Ribble		US-31E	5-10165	JEFFERSON
				DETAILED BY: C. Villier	S. Ribble			SHEET NO. M25	DRAWING NUMBER 29060