

LETTING DATE

CONSTRUCTION PROJECT NO.

ESTIMATE OF QUANTITIES																								
BID ITEM CODE	03300	08151	08106	23331EC	08549	23580EC	20377EC	23580EC	20377EC	23386EC	03294	22146EN	23744EC	26141EC	26232EC	02726	25108ED	25110ED	24085EC	23298EC	02650	02671	02568	02569
BID ITEM	Eliminate Transverse Joint	Steel Reinforcement, Epoxy Coated	Concrete Class "M1"	Epoxy Urethane Waterproofing Overlay	Blast Cleaning	Handrail Connection Repair - Collar	Bridge Handrail Repair - Bottom Horizontal	Handrail Connection Repair - Picket Repair	Bridge Handrail Repair - Panel Replacement	Joint Seal Replacement	Expansion Joint Replace - 1 1/2"	Concrete Patching Repair	Epoxy Injection Crack Repair	Galvanic Anode	Concrete Coating	Staking	Suspender Collar Repair - Suspender Rope Replacement	Hand Rail Splice Replacement - Hand Rope and Stanchion Replacement	Bolt Repair - Cable Band Bolt Replacement	Steel - Anchorage Door Installation	Maintain and Control Traffic	Portable Changeable Message Sign	Mobilization	Demobilization
UNIT	L.F.	LBS.	C.Y.	S.F.	S.Y.	EA.	L.F.	EA.	L.F.	L.F.	L.F.	S.F.	L.F.	EA.	S.F.	L.S.	EA.	L.S.	EA.	L.S.	L.S.	E.A.	L.S.	L.S.
Repair 1: Suspender Replacement																	136							
Repair 2: Handrope and Stanchion Replacement																		1						
Repair 3: Eliminate Transverse Joint	58	400																						
Repair 4: Anchorage Waterproofing Epoxy Urethane Overlay		1800	3.5	4108	457																			
Repair 5: Cable Band Bolt Replacement																			880					
Repair 6: Bridge Handrail Repair						3	118	30	178															
Repair 7: Joint Seal Replacement										60														
Repair 8: Replace Compression Seal Joint		300									40													
Repair 9: Concrete Patching and Coating - Substructure												640	800	737	13300									
Repair 10: Concrete Repairs - Superstructure												30												
Repair 11: Patch Spalled Sidewalk Concrete			0.5																					
Repair 12: Anchorage Access Door																				1				
BRIDGE TOTALS	58	2500	4	4108	457	3	118	30	178	60	40	670	800	737	13300	1	136	1	880	1	1	14	1	1

[illegible]

Traffic Control on Bridge Repair Contracts
3-8 Epoxy-Urethane Waterproofing Overlay
Eliminate Joints
Bridge Joint Seal Replacement
Embedded Galvanic Anodes
Epoxy Crack Injection
Concrete Patching Repair
Concrete Coating
Structural Adhesives with Extended Contact Time
Painting Structural Steel Repairs
Cable Band Bolt Replacement
Suspender Rope Replacement
Hand Rope Replacement
Anchorage Door Installation
Contract Completion Date and Penalties on Bridge Repair Contracts
Pre-Bid Conference

[illegible]

2019 Standard Specifications for Road and Bridge Construction.
2020 AASHTO LRFD Bridge Design Specifications



PREPARED BY
AECOM
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

RED BY
 AECOM
 500 West Jefferson Street
 Suite 1600
 Louisville, KY 40202-4251
 www.aecom.com
 FILE NAME: ACM-G-FS

DESIGNED BY: D. Liem

DETAILED BY: D. Liem

J. Whelan

J. Whelan

STEEL STEEL

OHIO RIVER

LIC 6216

03 02A

9-10091.00

S01

MASON

28962

FILE NAME: ACM-G-FS ISO ANSI D LAND 05-06-25

SPECIFICATIONS: All references to the Standard Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO specifications are to the AASHTO LRFD Bridge Design Specifications, 9th Edition.

MATERIALS DESIGN SPECIFICATIONS:

Class "M" Reinforced Concrete	f'c	=	4,000 psi
For Steel Reinforcement	fy	=	60,000 psi
Structural Steel	fy	=	50,000 psi

CONCRETE: Class "M" Concrete is to be used for the expansion joint replacement.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2" unless otherwise noted. All reinforcing bars shall be epoxy coated in accordance with Section 811.10 of the Standard Specifications. Use stirrup bend diameters for bars designated by suffix (s) in a Bill of Reinforcement.

EXISTING STEEL REINFORCEMENT: The cost of cutting, bending, and cleaning existing steel reinforcement shall be incidental to the retrofit item being completed.

BEVELED EDGES: Bevel all exposed edges ¾", unless otherwise noted.

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 structure 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 cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phased construction, incidental materials, labor or anything else required to complete the structure. After completion of all operations, the structure and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.

SHOP DRAWINGS: When any changes in the design plans are proposed by the Fabricator or Supplier, the Shop Drawings reflecting these changes shall be submitted to the Consultant. When any changes in the design plans are proposed by the Fabricator or Supplier, submit those changes to the Consultant. The consultant shall provide one approved copy of the shop drawings to the Division of Structural Design. Submit final approved shop drawings to the Engineer. Shop drawings shall be required for the following repairs:

- Repair 1: Suspender Replacement
- Repair 2: Handrope and Stanchion Replacement

PLANS OF EXISTING STRUCTURE: Plans of the existing structure and shop drawings are available as an aid to the Contractor and shall be used to supplement details not shown on the Plans. The completeness of these drawings is not guaranteed and no responsibility is assumed by KYTC for their accuracy.

EXISTING STRUCTURE VERIFICATION: The Contractor is not to order any materials, produce any shop drawings, or begin any construction activities until after verifying dimensions and conditions in the field. Dimensions and details shown on these Plans in relation to the existing structure shall be considered approximate. Existing plans, if available, shall not be considered accurate. It shall be the Contractor's responsibility to verify such dimensions and details in the field and to notify the Project Engineer and the Designer of any differences. Failure to notify either may delay drawing and other approvals. Thereafter make the necessary approved adjustments prior to construction or ordering materials. All Specification requirements shall remain in effect. Any variations shall not be cause for additional compensation for a change in the scope of work; however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied. The cost of all labor, equipment, surveying, and materials necessary to verify field dimensions shall be included in the lump sum price for "Staking".

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.

DIMENSIONS: Dimensions shown on these plans are taken from the original construction contract plans and available repair plans and do not necessarily reflect revisions made during construction. The Contractor shall verify elevations and dimensions, including thickness or parts, with field measurements prior to ordering materials or fabricating steelwork. All plan dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal dimensions.

MAINTENANCE OF TRAFFIC: This bridge repairs are to be constructed in accordance with the Special Note for Traffic Control on Bridge Repair Contracts.

DAMAGE TO THE STRUCTURE: The Contractor shall bear full responsibility and expense for repair of any and all damage to the structure, should such damage result from the Contractor's actions. The Contractor is completely responsible for the stability of the structure from the time of mobilization until after the bridge has been reopened to normal traffic following completion of all work required in the Contract. After completion of all operations, the structure and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.

BEFORE YOU DIG: The Contractor shall be responsible for all requirements and conformation with the Underground Facility Damage Prevention Act of 1994. The Contractor will be responsible for locating any utilities on this project. All underground utilities shall be located prior to construction. Any utilities disturbed or damaged as a result of the Contractor's operations will be repaired to the satisfaction of the utility owner at the Contractor's expense. The Contractor is advised to call (800) 752-6007 a minimum of two working days prior to excavation for information on the location of some, but not necessarily all underground utilities.

STANDARD DRAWINGS: A Standard Drawing book may be obtained from the KYTC Policy Support Branch of the Department of Administrative Services in Frankfort, KY at (502) 564-3670. See other appropriate KYTC Standard Drawings where applicable.

RIVER NAVIGATION: Continuous maintenance and safety of river navigation throughout the term of the project shall be a prime consideration. All work involving the removal of the existing bridge deck or installation or removal of the structural elements beneath the bridge deck shall cease when there is approaching river traffic. This work shall not resume until the river traffic is clear of the bridge area. At least 30 days in advance of beginning construction, the successful Contractor shall submit to the Department (for submittal to the Coast Guard) a work plan for performing work over the Ohio River. This work plan shall include but is not limited to methods for containing debris, debris removal from stream, and maintenance of existing navigational traffic during construction. The Contractor must advise the Coast Guard of the Contractor's proposed schedule of work at least 10 days prior to the commencement of any field operations. The notification shall be addressed to:

Western Rivers Bridge Branch
Eighth Coast Guard District
1222 Spruce Street, Room 2.102D
St. Louis, Missouri 63103
Phone: 571-607-2270
Email: Eric.Washburn@uscg.mil

FALL PROTECTION: Provide flooring for workers in situations where the danger from a fall is compounded by traffic and for protection to river traffic below. If temporary flooring is necessary, the flooring is to be designed using the sum of dead load and live vertical loads. Include 50 psf on horizontal surfaces and the weight of any material or equipment that is placed or allowed to fall during construction or demolition in the live load computation. Submit the flooring design along with the falsework design to the Engineer for approval. Consider all phases of furnishing and removing the flooring as incidental to the contract. This item may be considered in addition to any requirement set forth in subsection 107.01.01 of the specifications.

SAFETY BOAT: A safety boat in the water is required anytime the Contractor is working over the navigable channel without proper railing. Cost shall be incidental to the Project.

COOPERATION BY CONTRACTOR: The Contractor is advised that additional contracts may be let within the project limits prior to the completion of this project. Contractors working on the same project or adjacent projects shall cooperate with each other.

CONSTRUCTION LOAD: The Contractor shall not utilize equipment weighing more than the posted limits (15 tons) on the bridge at any time. Storage of material on the bridge is prohibited.

SAWCUTTING EXISTING CONCRETE OR MASONRY: Prior to the removal of the existing concrete or masonry, cut the surface with a concrete saw to a depth of one inch to facilitate a neat line. The cost of cutting concrete or masonry shall be incidental to the contract.

Concrete Bonding Agents: An epoxy bond coat conforming to Sections 511 and 826 of the Specifications or a structural adhesive conforming to the Special Note for Structural Adhesives with Extended Contact Time shall be used on the surface of any concrete joint specified as "bonded" in these plans. The cost of this work, including all labor, tools, and materials, is to be incidental to the unit bid price for the class of concrete being bonded.

UTILITIES: The Contractor shall be responsible for locating any and all existing utilities prior to construction activities that may involve utilities (overhead or underground). The Contractor shall protect all utilities, lighting, and signage attached to the structure during construction. All cost for protection shall be incidental to this contract. Any damage caused by the Contractor shall be repaired at no additional cost to the Department.

PROHIBITED FIELD WELDING: No welding of any nature, other than indicated on the Plans, is to be performed without the written consent of the Designer, and then only in the manner and at the locations designated in the authorization. Field welding if allowed, shall be performed by a certified field welder.

WELDING SPECIFICATIONS: All welding and welding materials shall conform to "Joint Specification ANSI/AASHTO/AWS D1.5-2020 Bridge Welding Code".

WELDING PROCEDURE: Qualification tests of all welding procedures, when required by AWS, shall be completed by the Contractor and approved by the Engineer prior to the final approval of the shop drawings and welding procedure and start of fabrication.

HIGH STRENGTH BOLT CONNECTIONS : Unless otherwise specified in the Plans, all bolted connections to be ASTM F3125 Grade A325 high strength bolts, nuts and washers. Open holes shall be 1/16" larger than the diameter of the bolts. Furnish Type 1 galvanized bolts as described in AASHTO M164. All high strength bolted connections are to be installed using "Direct Tension Indicators" (DTI's) in accordance with the Standard Specifications and ASTM F959. All DTI's shall be suitable for use with galvanized steel bolts. Installation details of the DTI's shall be shown on the shop Plans.

Any holes in steel members that are not specified to receive any other connected part shall be filled with a high strength bolt that is tensioned per the Specifications.

Bolt threads shall be excluded from the shear plane in all bolted connections, unless otherwise noted.

SLIP CRITICAL CONNECTIONS: Slip critical connections have been designed for Class A Surface conditions in accordance with AASHTO Specifications.

CHARPY V-NOTCH: All steel shall meet the longitudinal Charpy V-notch toughness test for fracture critical components Zone 2 in accordance with the following:
M270 Gr 50W (Up to 2" thickness) of 25 ft-lbs at 40 deg F.
M270 Gr 50W (2" to 4" thickness) of 30 ft-lbs at 40 deg F.

Sampling and testing procedures shall be in accordance with AASHTO T243 current edition, utilizing (H) frequency testing. When plate thickness exceeds 1½", frequency of testing shall be (P).

MILL TEST REPORTS: Notarized mill test reports shall be furnished in triplicate to the Department showing that all structural steel conforms to the requirements of the Specifications.

IDENTIFICATION MARKING OF STEEL MEMBERS: Steel mill and fabricator identification markings for steel plates, shapes, or fabricated members shall be by metal tags, soapstone, or some other readily removable material, or shall be marked in an area of the completed member which will be encased or covered with concrete. Marking methods and locations are subject to approval of the Engineer. Paint or wax based crayons shall not be used for marking.

HANDLING AND STORING OF STEEL MEMBERS: Steel members must not be gouged, dented, or allowed to rub against other members which would result in damage to the blast cleaned profile of the steel. Members shall be handled using softeners and slings instead of chokers and chains. Members shall be stored in the fabrication shop or on the project site in such a manner as to be kept free and clean of all foreign substances such as grease, oil, mortar, concrete, chalk, crayon, paint, and dirt. All storage must be above ground and sloped to allow free drainage of melted snow, rainwater, and dew.If stored for periods longer than three months, the members must be placed on metal supports. For periods of storage up to three months, members may be placed on clean, untreated, wood timbers,Plate girders shall be stored with the web in the upright position. Treated lumber or timber shall not be allowed to come in contact with the steel members.

LEAD PAINT: Residual lead paint may be present on the bridge, even after previous sandblastings and painting of the bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when removing, cutting, grinding, cleaning, or performing any other actions. The Department will not consider any claims based on residual lead paint. The Contractor shall remove any existing lead waste stored on the bridge and dispose at no additional cost to the Department.

DISPOSAL OF MATERIALS: All materials and debris removed from or beneath the bridge shall become the property of the Contractor and shall be removed from the right-of-way.


CLEANING AND PAINTING: New structural steel is to be painted in accordance with Section 607.03.23 of the Specifications. All structural steel is to receive the first coat of paint (Prime Coat) in the shop prior to shipping. The Contractor is responsible for maintaining the first coat of paint throughout erections to prevent staining of the substructure. The Contractor will be responsible for removing any rust staining on the substructure due to failure to maintain the first coat. For maintenance cleaning and painting of existing bridges, Contractors are hereby reminded that in accordance with Section 614.03.09, all steel surfaces to be painted, including exposed surfaces of connection plates, nuts, bolts, and washers, shall be blast cleaned to a near white condition in accordance with SSPC-SP10 immediately prior to primer application.

PAINTING DAMAGED AREAS: All areas of new or existing structural steel on which the paint has been damaged by the Contractor shall be cleaned and spot painted to the satisfaction of the Engineer and in accordance with the Special Note for painting structural steel repairs. The cost of this touch-up is to be incidental to the Contract.


Concrete Coating: Apply concrete coating in accordance with the Special Note for Concrete Coating.

JOINT AND DRAIN CLEANING: Joints and deck drains shall be cleaned of debris during preparation for 3/8"Epoxy-Urethane Waterproofing Overlay and after overlay is fully cured. Care shall be taken to avoid damage to joint seals. Any damage caused by the Contractor shall be repaired at no additional cost to the Department. The cost of joint and drain cleaning is to be incidental to 3/8" Epoxy-Urethane Waterproofing Overlay.

DURABLE PAVEMENT STRIPING: Durable pavement striping shall be installed according to Section 714 identical to existing markings after overlay is fully cured and cleaned. Care shall be taken to avoid damage to joint seals. Any damage caused by the Contractor shall be repaired at no additional cost to the Department. The cost of durable pavement striping will be in accordance with Section 714.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



Seal of the Commonwealth of Kentucky

USER: LliemD

DATE PLOTTED: 05/06/2025

REVISION	DATE

PREPARED BY

AECOM

500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025

DESIGNED BY: D. Liem

DETAILED BY: D. Liem

CHECKED BY

J. Whelan

J. Whelan

GENERAL NOTES

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

S02

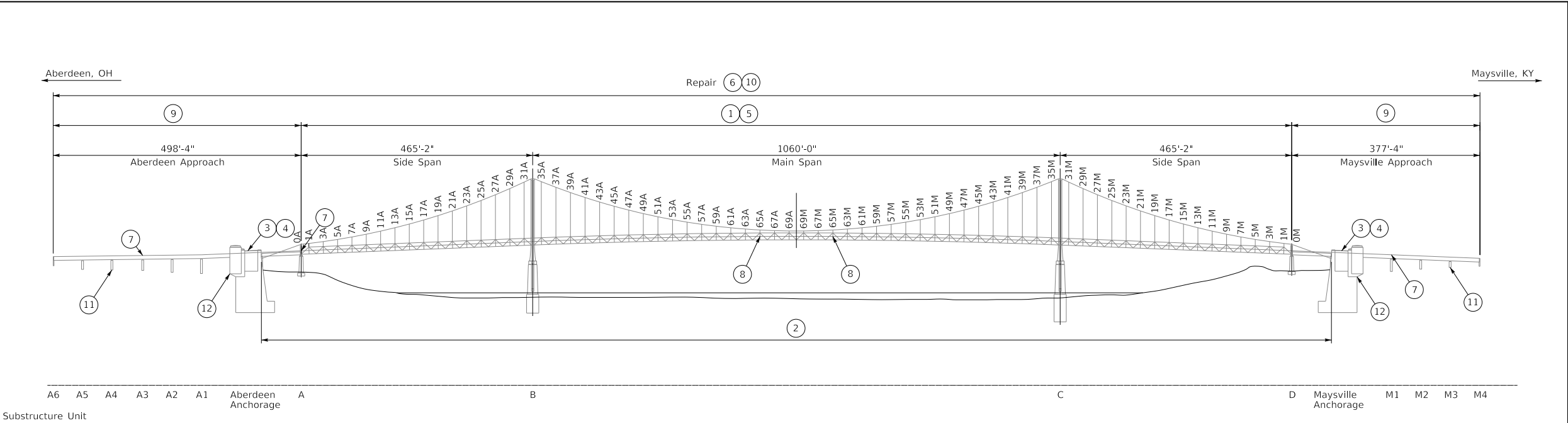
COUNTY OF

MASON

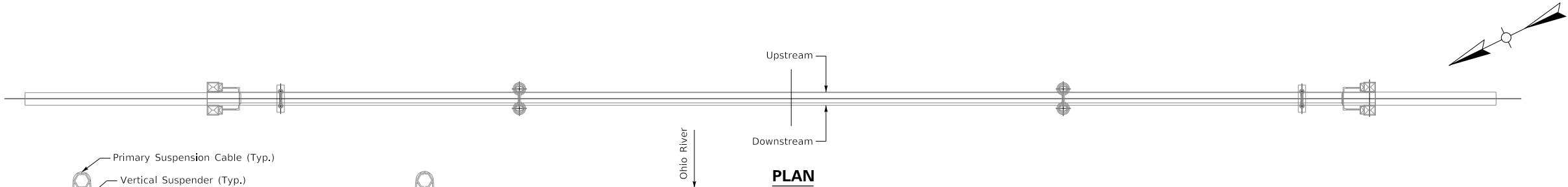
DRAWING NUMBER

28962

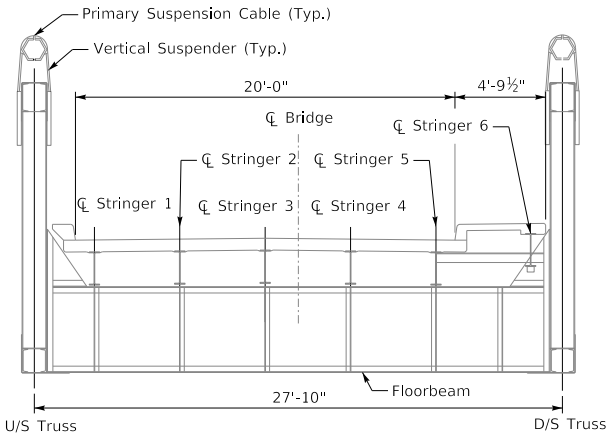
FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25



ELEVATION



PLAN



TYPICAL SECTION - MAIN SPANS LOOKING SOUTH

- Repair 1: Suspender Replacement (S4-S10)
Repair 2: Handrope and Stanchion Replacement (S11-S14)
Repair 3: Eliminate Transverse Joint (S15)
Repair 4: Anchorage Waterproofing Epoxy Urethane Overlay (S16)
Repair 5: Cable Band Bolt Replacement (S17)
Repair 6: Bridge Handrail Repair (S18-S22)
Repair 7: Joint Seal Replacement (S23)
Repair 8: Replace Compression Seal Joint (S24)
Repair 9: Concrete Patching and Coating - Substructure (S25-S32)
Repair 10: Concrete Patching - Superstructure (S33)
Repair 11: Patch Spalled Sidewalk Concrete (S34)
Repair 12: Anchorage Access Door (S35)



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

DATE PLOTTED: 05/06/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025

DESIGNED BY: D. Liem

DETAILED BY: D. Liem

CHECKED BY

J. Whelan

J. Whelan

LAYOUT

CROSSING

OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

S03

COUNTY OF

MASON

DRAWING NUMBER

28962

SUSPENDER ROPE REPLACEMENT GENERAL NOTES:

1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures, including survey of all suspender rope lengths to an accuracy of $\frac{1}{4}$ " , to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
2. New suspender ropes shall conform to the specifications set forth in the special note for suspender replacement.
3. Suspender rope replacement sequence shall prioritize the locations with existing temporary supports, a proposed repair sequence for the existing temporary supports is shown below. The contractor may submit an alternate repair sequence for approval. Refer to the special note for suspender rope replacement for requirements.

TABLE 1 SUSPENDER REPLACEMENT SEQUENCE
FOR TEMPORARY REPAIR LOCATIONS

PHASE	PANEL POINT	CABLE
1	M5	DS
	M35	DS
	M11	US
2	A37	DS
	M3	US
	M41	US
3	A35	DS
	M29	US
	M51	US
4	A67	DS
	M43	US
5	M37	DS
	A57	US
6	A65	US
7	A67	US

4. After locations with existing temporary supports have been replaced, a normal replacement sequence can be performed as long as the following conditions are met:
- 4.a. The contractor shall only replace one suspender rope on each side span, on each cable, at any one time. Main spans shall be split in half to allow work on each half of the main span, on each cable, at any one time however if work is occurring on each half near the midspan, work locations shall be at least 3 panel points away.
- 4.b. If suspender ropes are being removed from each upstream and downstream cable on the same span, there shall be 3 panel points of spacing between work locations.
- 4.c. All replacement locations must be supported with temporary supports until replacement work is complete, at no time shall any work location be unsupported.
5. After the bridge is closed to traffic, the contractor shall conduct a survey of the existing bridge prior to any replacement activities, to collect profile grade elevations at the centerline of the bridge and along the stiffening truss top chord. The contractor is required to verify existing elevations are within $\frac{1}{4}$ " of the existing profile grade after completion of each individual suspender replacement. The contractor is required to submit a completed profile grade upon completion of all suspender replacement work.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

REVISION	DATE

DATE PLOTTED: 02/05/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025	CHECKED BY
DESIGNED BY: N.KIRN	J.PUDLEINER
DETAILED BY: M.BULMER	N.KIRN

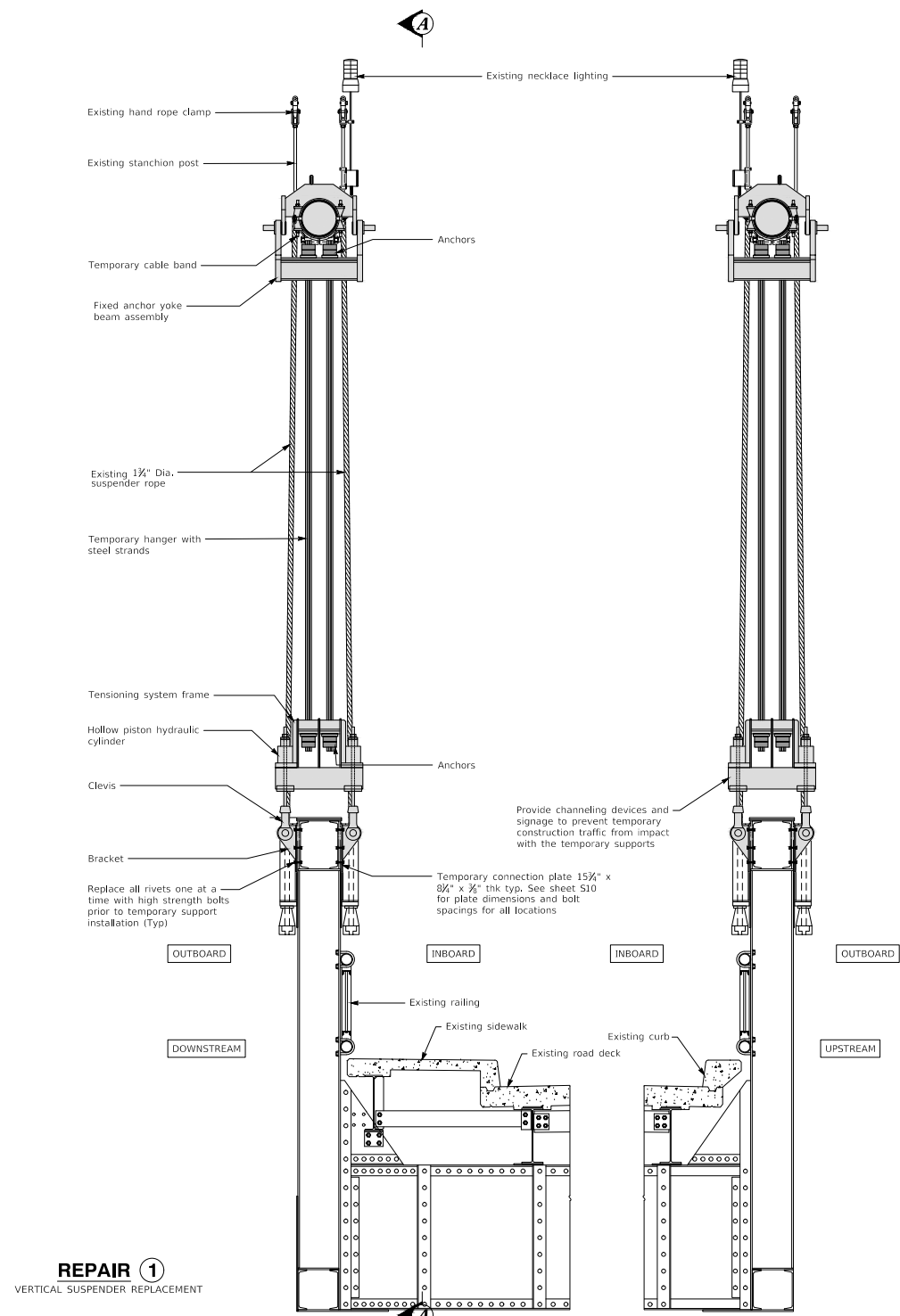
MISC DETAILS

CROSSING
OHIO RIVER



ROUTE
US 62X

ITEM NO. 9-10091.00
SHEET NO. S04

COUNTY OF MASON
DRAWING NUMBER 28962

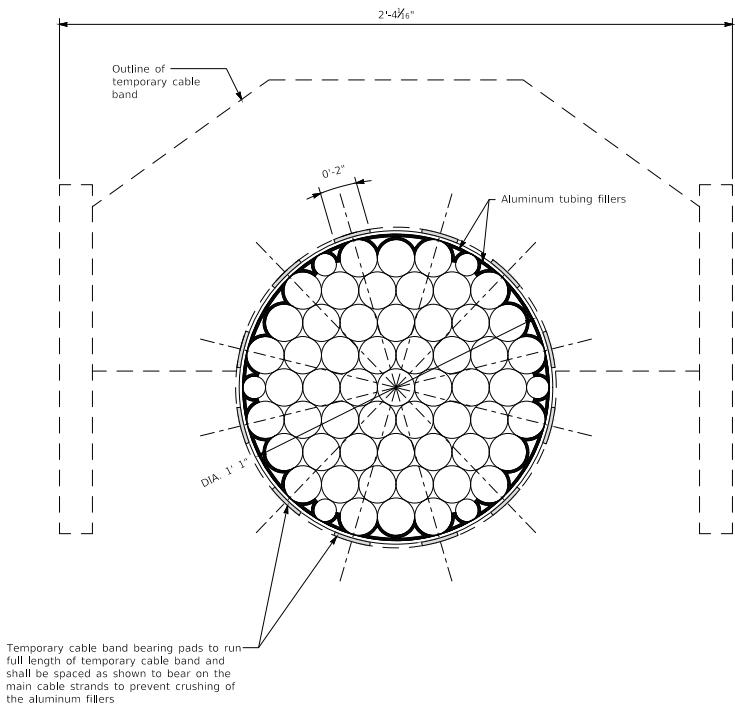


SECTION 'B' - TYPICAL VIEW SHOWN ON M57

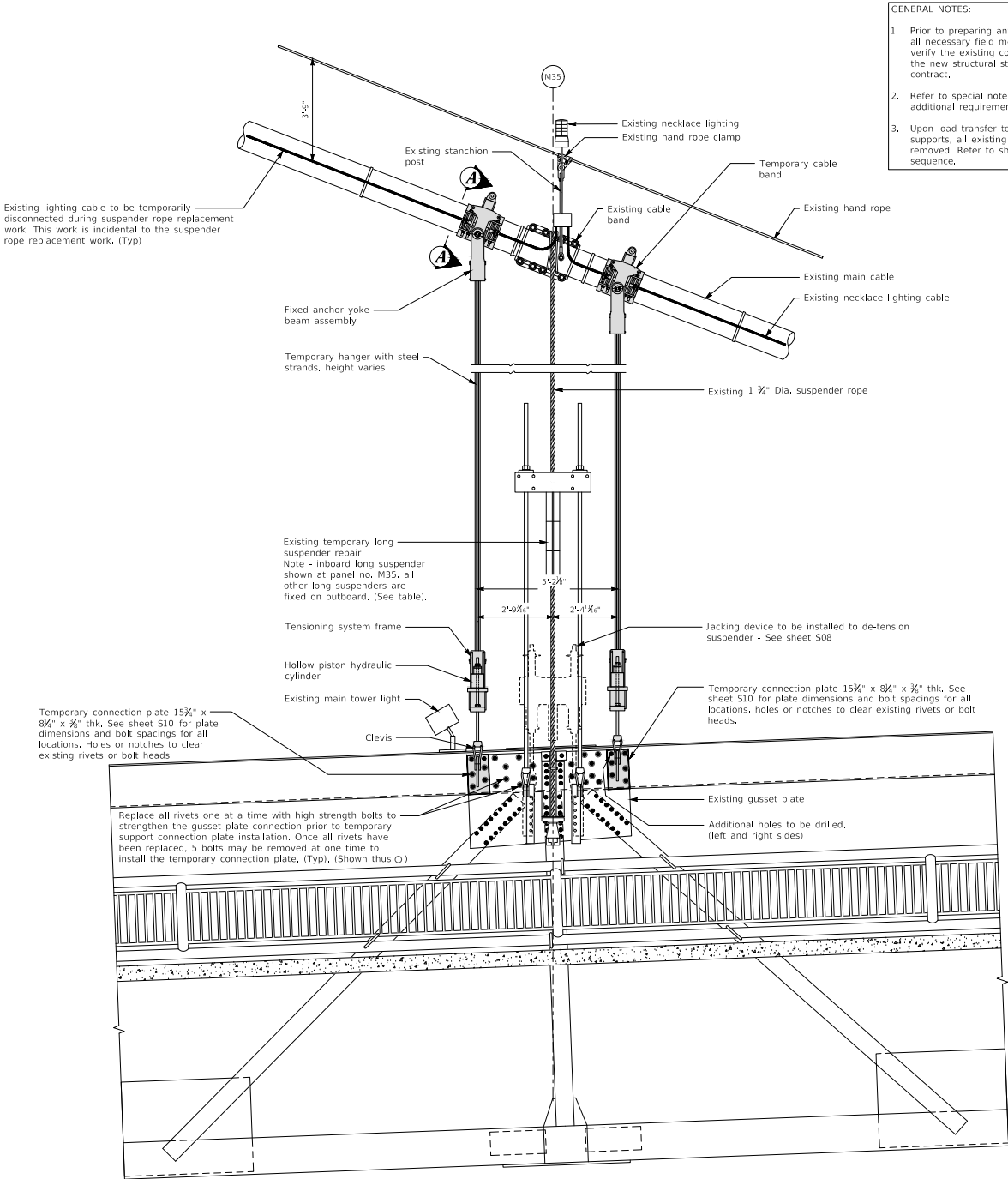
 COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	 KENTUCKY TRANSPORTATION CABINET	REVISION	DATE	PREPARED BY AECOM 500 West Jefferson Street Suite 1800 Louisville, KY 40202-4251 www.aecom.com	DATE: 05/06/2025	CHECKED BY	TEMPORARY SUPPORT - LONG BRACKET DETAILS CROSSING OHIO RIVER	ROUTE US 62X	ITEM NO. 9-10091.00	COUNTY OF MASON
					DESIGNED BY: N.KIRN	J.PUDLEINER			SHEET NO. S05	DRAWING NUMBER 28962
					DETAILED BY: M.BULMER	N.KIRN				
USER: barbermj		DATE PLOTTED: 02/05/2025		FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP						

TEMPORARY LONG SUSPENDER REPAIR LOCATIONS

PANEL No.	EAST / WEST CABLE	INBOARD / OUTBARD
M11	EAST	OUTBOARD
M29	EAST	OUTBOARD
M35	WEST	INBOARD
M37	WEST	OUTBOARD
M41	EAST	OUTBOARD
M43	EAST	OUTBOARD
M51	EAST	OUTBOARD
A43	EAST	OUTBOARD
A37	WEST	OUTBOARD



SECTION 'A' - MAIN CABLE AND TEMPORARY CABLE BAND SHOWING BEARING PAD LOCATIONS



- GENERAL NOTES:
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for suspender rope replacement for additional requirements.
 3. Upon load transfer to new temporary suspender replacement supports, all existing temporary support elements shall be removed. Refer to sheet S04 general notes for proposed repair sequence.

TYPICAL ELEVATION AT TEMPORARY LONG REPAIR SUSPENDER
(TYPICAL VIEW SHOWN ON M35)

REPAIR 1
VERTICAL SUSPENDER REPLACEMENT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

DATE PLOTTED: 02/05/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025

DESIGNED BY: N.KIRN

DETAILED BY: M.BULMER

CHECKED BY

J.PUDLEINER

N.KIRN

LONG BRACKET DETAILS AT TEMP REPAIR

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

S06

COUNTY OF

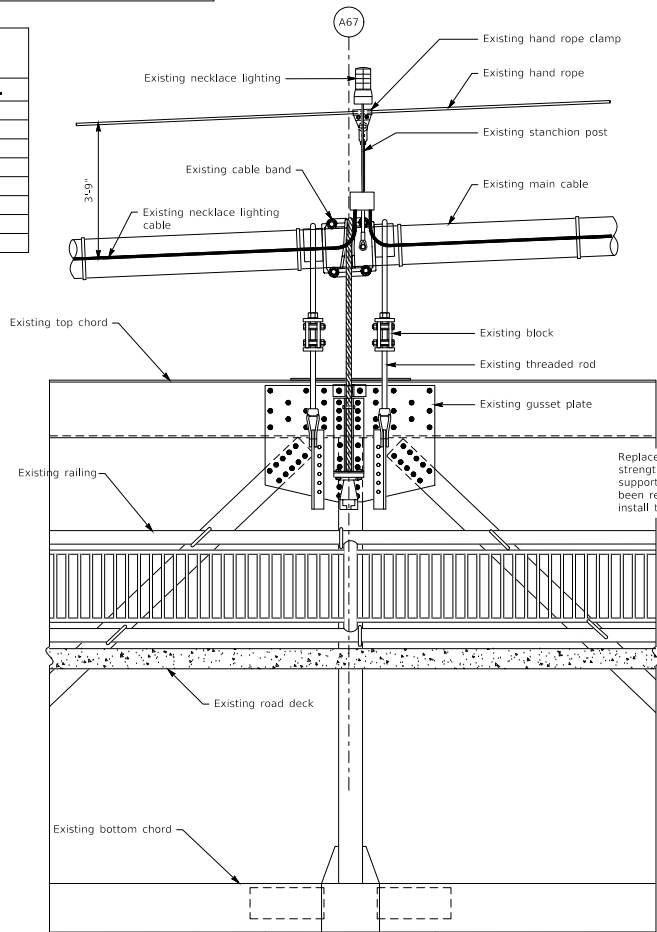
MASON

DRAWING NUMBER

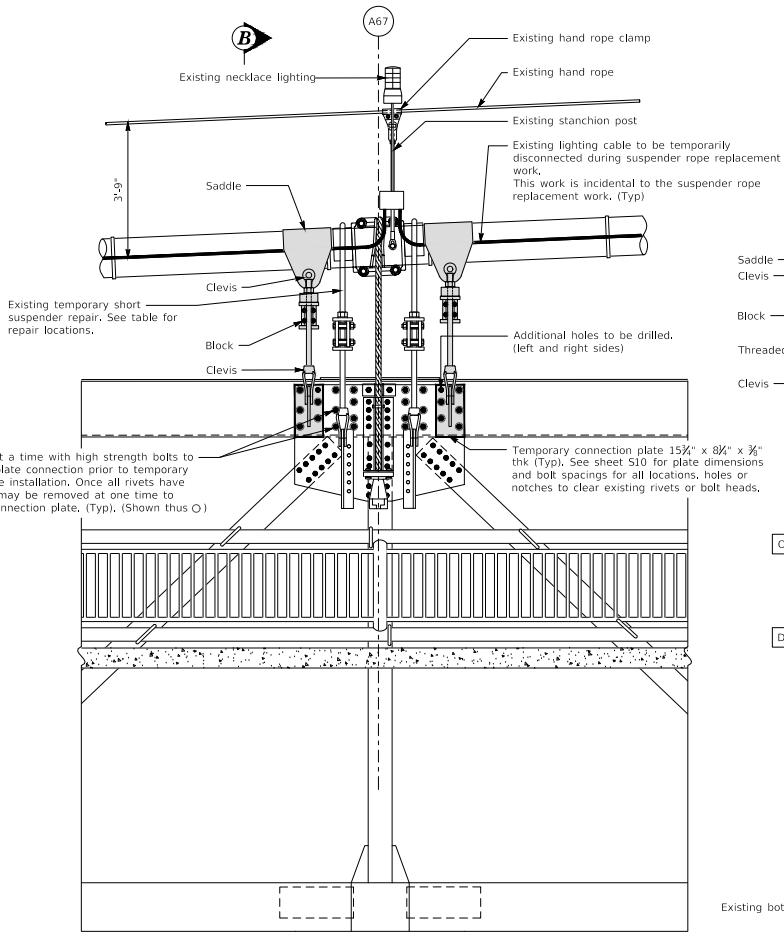
28962

TEMPORARY SHORT SUSPENDER LOCATIONS	
PANEL No.	EAST / WEST CABLE
M3	EAST
M5	WEST
A67	EAST
A67	WEST
A65	EAST
A57	EAST
A55	WEST

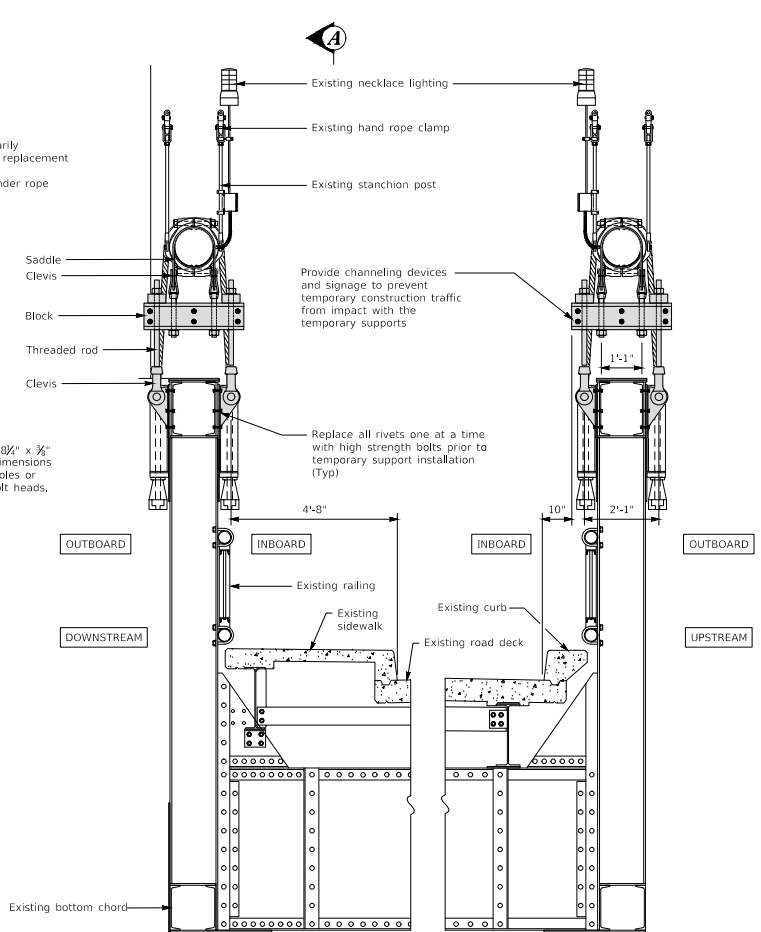
SHORT CABLE LOCATIONS	
PANEL No.	PANEL No.
M1	A1
M3	A3
M5	A5
M61	A61
M63	A63
M65	A65
M67	A67
M69	A69



SECTION 'A' - EXISTING TYPICAL ELEVATION
AT SHORT SUSPENDER
(TYPICAL VIEW SHOWN ON A67 - TEMPORARY REPAIR)



SECTION 'A' - PROPOSED TYPICAL ELEVATION
AT SHORT SUSPENDER
(TYPICAL VIEW SHOWN ON A67 - TEMPORARY REPAIR)



SECTION 'B'
TYPICAL BRIDGE SECTION

- GENERAL NOTES:
- Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 - Refer to special note for suspender rope replacement for additional requirements.
 - Upon load transfer to new temporary suspender replacement supports, all existing temporary support elements shall be removed, refer to sheet S04 general notes for proposed repair sequence.

REPAIR ①

VERTICAL SUSPENDER REPLACEMENT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: BimsonE

DATE PLOTTED: 02/05/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025

DESIGNED BY: N.KIRN

DETAILED BY: M.BULMER

CHECKED BY

J.PUDLEINER

N.KIRN

TEMPORARY SUPPORT - SHORT CABLE

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

507

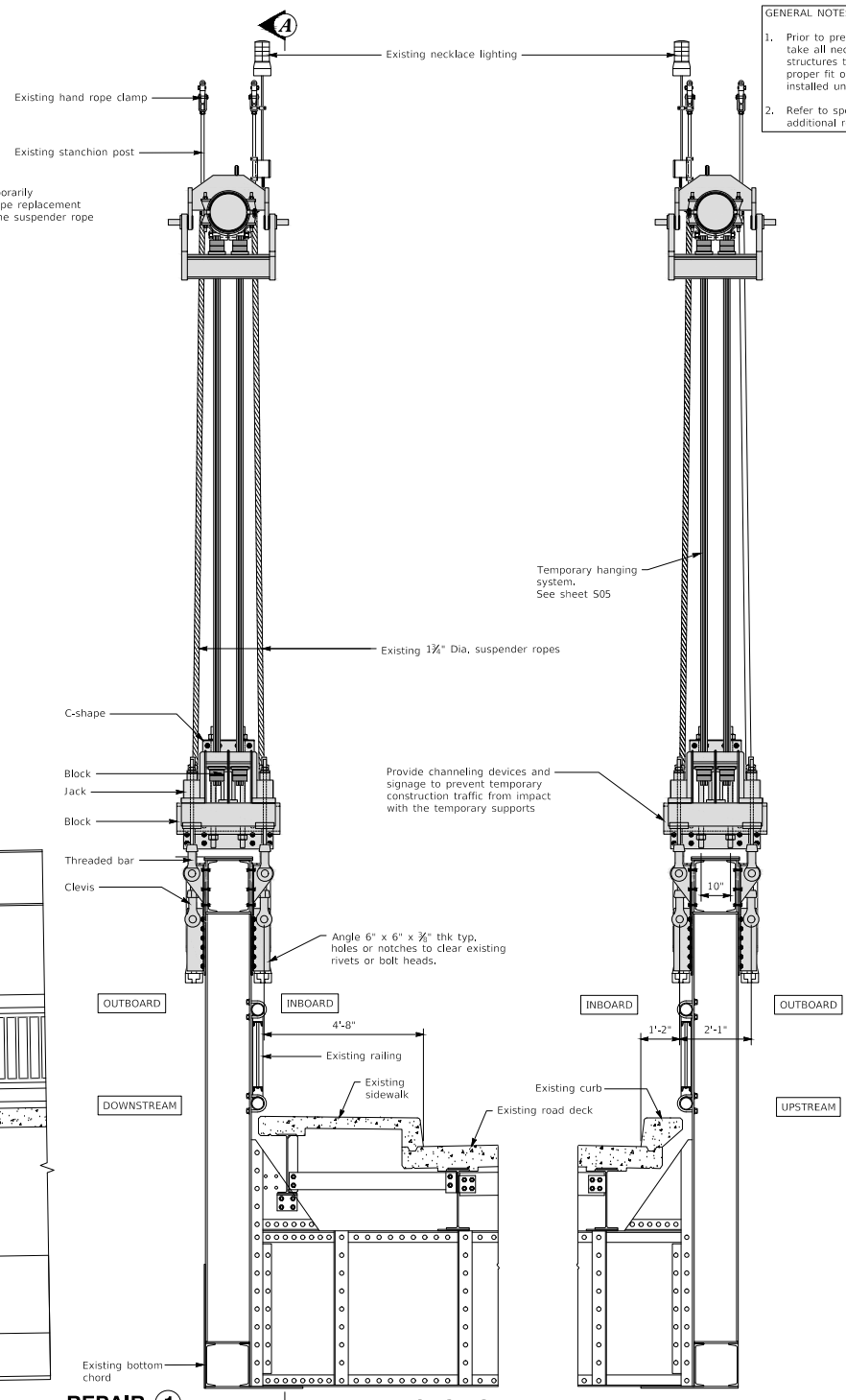
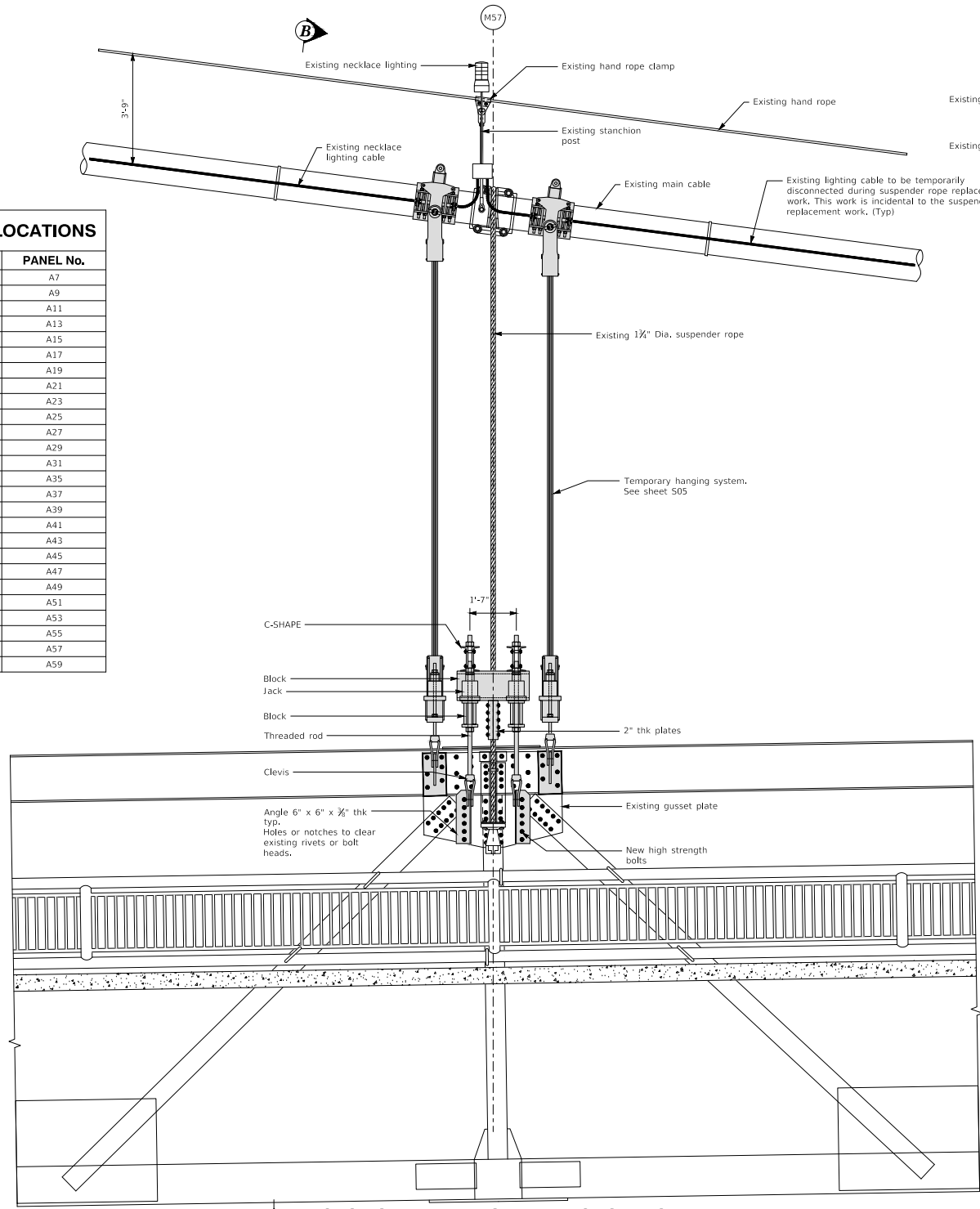
COUNTY OF

MASON

DRAWING NUMBER

28962

JACKING LOCATIONS	
PANEL No.	PANEL No.
M7	A7
M9	A9
M11	A11
M13	A13
M15	A15
M17	A17
M19	A19
M21	A21
M23	A23
M25	A25
M27	A27
M29	A29
M31	A31
M35	A35
M37	A37
M39	A39
M41	A41
M43	A43
M45	A45
M47	A47
M49	A49
M51	A51
M53	A53
M55	A55
M57	A57
M59	A59



- GENERAL NOTES:
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for suspender rope replacement for additional requirements.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

REVISION	DATE

DATE PLOTTED: 02/05/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025	CHECKED BY
DESIGNED BY: N.KIRN	J.PUDLEINER
DETAILED BY: M.BULMER	N.KIRN

REPAIR 1
VERTICAL SUSPENDER REPLACEMENT

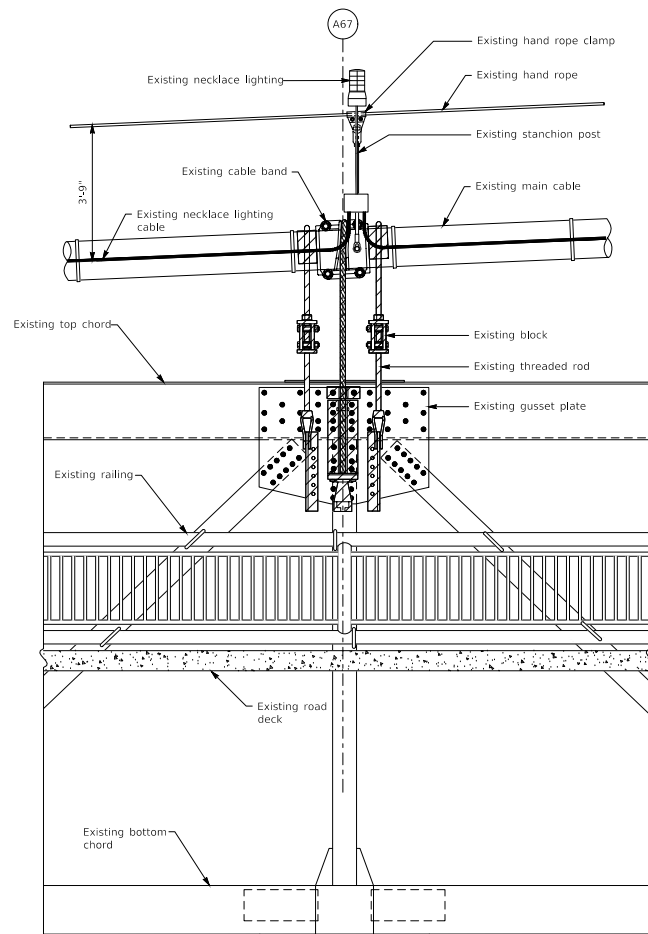
SECTION 'B'

JACKING DEVICE
CROSSING
OHIO RIVER

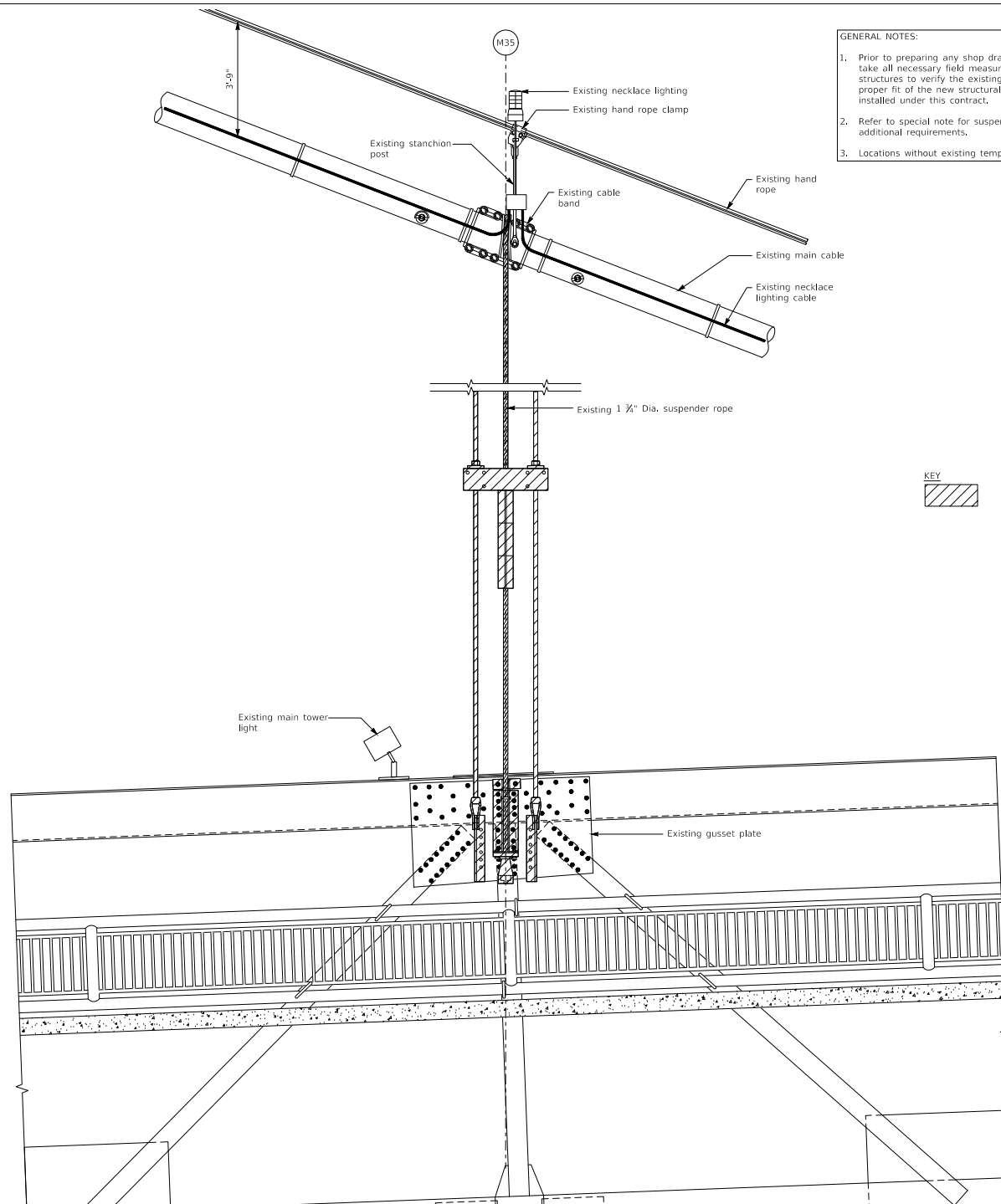
ROUTE
US 62X

ITEM NO. 9-10091.00
SHEET NO. 508

COUNTY OF MASON
DRAWING NUMBER 28962



**EXISTING SHORT SUSPENDER REMOVAL LIMITS WITH
EXISTING TEMPORARY SUPPORTS**



**EXISTING LONG SUSPENDER REMOVAL LIMITS WITH
EXISTING TEMPORARY SUPPORTS**

- GENERAL NOTES:**
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for suspender rope replacement for additional requirements.
 3. Locations without existing temporary supports similar

KEY

 ELEMENTS TO BE REMOVED

REPAIR ①
VERTICAL SUSPENDER REPLACEMENT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

REVISION	DATE

DATE PLOTTED: 02/05/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

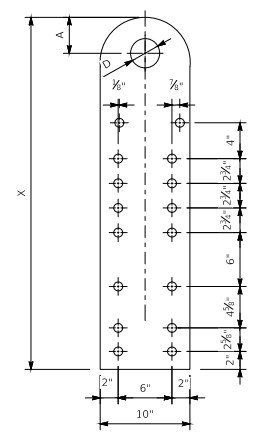
DATE: 05/06/2025	CHECKED BY:
DESIGNED BY: N.KIRN	J.PUDLEINER
DETAILED BY: M.BULMER	N.KIRN

SUSPENDER ROPE REMOVAL DETAILS
CROSSING OHIO RIVER

ROUTE US 62X

ITEM NO. 9-10091.00
SHEET NO. 509

COUNTY OF MASON
DRAWING NUMBER 28962



CONNECTION PLATE TYPE 2 LOCATIONS	
PANEL No.	PANEL No.
M1	A1
M3	A3
M5	A5
M7	A7
M25	A25
M27	A27
M29	A29
M31	A31
M35	A35
M37	A37
M39	A39
M41	A41
M43	A43
M45	A45
M47	A47
M49	A49
M51	A51
M53	A53
M55	A55
M57	A57
M59	A59
M61	A61
M63	A63
M65	A65
M67	A67

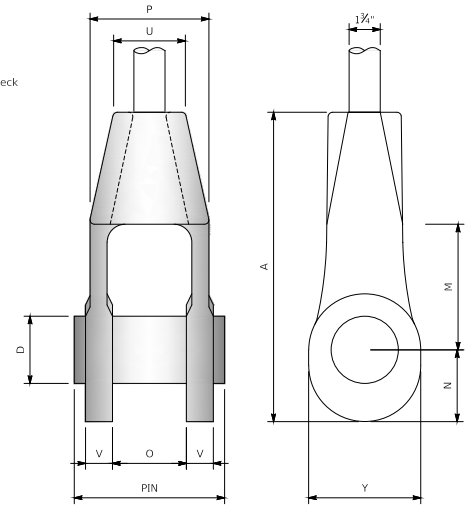
CONNECTION PLATE TYPE 3 LOCATIONS	
PANEL No.	PANEL No.
M69	A69

GENERAL NOTES:	
1.	Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
2.	Refer to special note for suspender rope replacement for additional requirements.

NOTES:

S1 Socket for all locations other than A69 and M69

S2 Socket for A69 and M69

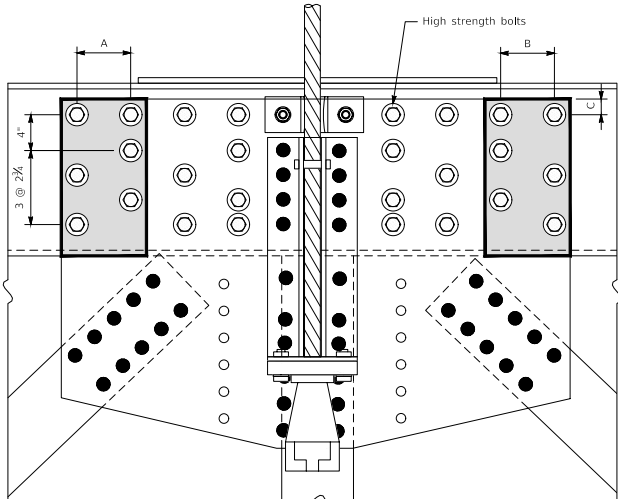


SECTION 'B'
TYPICAL BRIDGE SECTION

COUNTY OF
MASON
DRAWING NUMBER
28962

- GENERAL NOTES:
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for suspender rope replacement for additional requirements.

		LEFT SIDE		RIGHT SIDE		
PANEL No.	PANEL No.	A (in)	MIN. REQ'D WIDTH (in)	B (in)	MIN. REQ'D WIDTH (in)	C (in)
M1	A1	6	8½	5½	8	1½
M3	A3	5½	8	4½	8	1½
M5	A5	4½	8	3½	8	1½
M7	A7	4	8	5½	8	1½
M9	A9	5	8	5	8	2½
M11	A11	5	8	6	8½	2½
M13	A13	6	8½	4	8	2½
M15	A15	3½	8	4	8	2½
M17	A17	3½	8	4	8	2½
M19	A19	3½	8	6	8½	2½
M21	A21	6	8½	5	8	2½
M23	A23	5	8	5	8	2½
M25	A25	5	8	4½	8	1½
M27	A27	3½	8	4½	8	1½
M29	A29	4½	8	5½	8	1½
M31	A31	5½	8	5½	8	1½
M35	A35	4½	8	6	8½	1½
M37	A37	4½	8	4½	8	1½
M39	A39	8¼	10½	8¼	10½	1½
M41	A41	8¼	10½	6	8½	1½
M43	A43	6	8½	6	8½	1½
M45	A45	6	8½	6	8½	1½
M47	A47	6	8½	4	8	1½
M49	A49	3½	8	3½	8	1½
M51	A51	3½	8	3½	8	1½
M53	A53	3½	8	3½	8	1½
M55	A55	3½	8	6	8½	1½
M57	A57	6	8½	6	8½	1½
M59	A59	6	8½	6	8½	1½
M61	A61	6	8½	6	8½	1½
M63	A63	6	8½	6	8½	1½
M65	A65	6	8½	6	8½	1½
M67	A67	6	8½	6	8½	1½
M69	A69	6	8½	6	8½	1½



NOTE:
Gusset plate profile varies
Clevis and bracket to temporary
plate omitted for clarity

TYPICAL TEMPORARY SUPPORT CONNECTION
DETAILS BY PANEL POINT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

REVISION	DATE

DATE PLOTTED: 02/05/2025

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025
DESIGNED BY: N.KIRN
DETAILED BY: M.BULMER

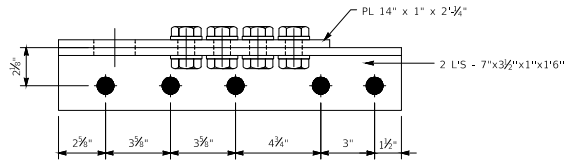
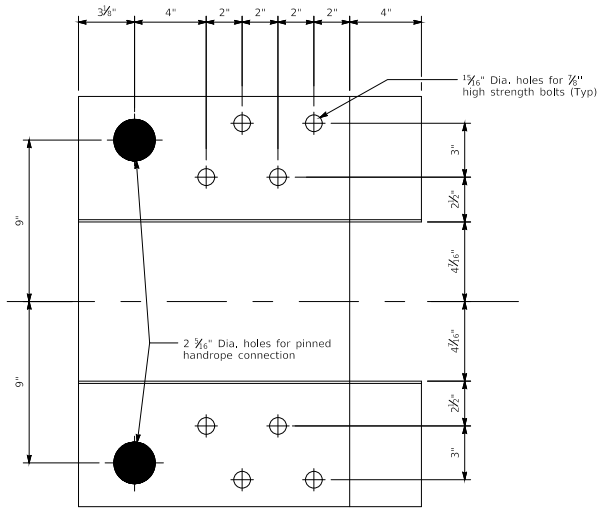
CHECKED BY
J.PUDLEINER
N.KIRN

TEMPORARY SUPPORT BRACKET DETAILS
CROSSING
OHIO RIVER

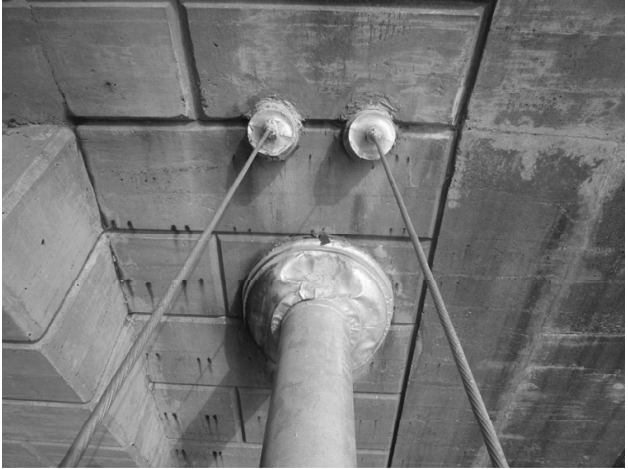
ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S11

COUNTY OF
MASON
DRAWING NUMBER
28962

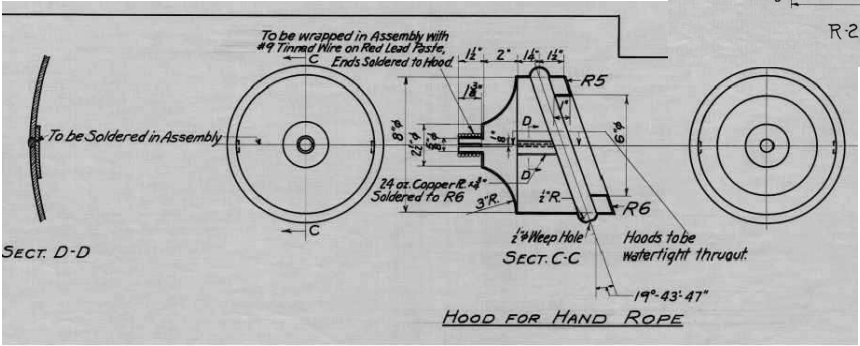
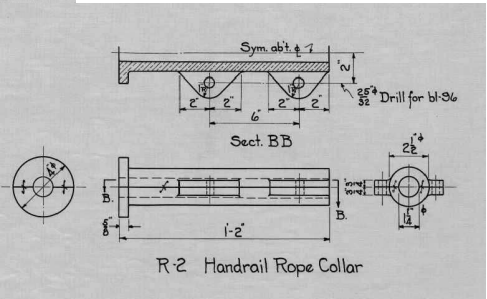
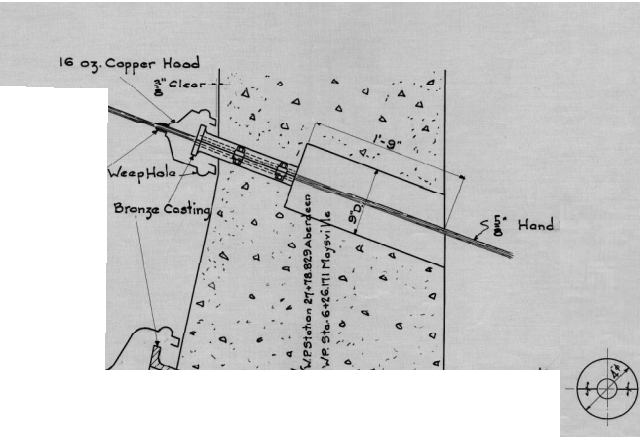


PROPOSED HAND ROPE ANCHORAGE CONNECTION DETAIL



HANDROPE ANCHORAGE HOOD EXISTING CONDITION

- GENERAL NOTES:
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for hand rope replacement for additional requirements.



NOTE
Hand rope hood at face of anchorage to be replaced with a galvanized steel cover. Replacement hood to be sealed so as to be water and air tight. Bronze handrope collar (R-2) to be reused.

REPAIR ②
HANDROPE AND STANCHION REPLACEMENT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: barbermj

DATE PLOTTED: 02/05/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025

DESIGNED BY: N.KIRN

DETAILED BY: M.BULMER

CHECKED BY

J.PUDLEINER

N.KIRN

HANDROPE AND STANCHION REPLACEMENT

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

513

COUNTY OF

MASON

DRAWING NUMBER

28962

TURNBUCKLE CONNECTION



TOWER TOP HAND ROPE CONNECTION



GENERAL NOTES:	<ol style="list-style-type: none"> 1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract. 2. Refer to special note for hand rope replacement for additional requirements. 3. Turnbuckle connections at closed end of hand rope sockets to be 3/4" nominal diameter astm F1145 class G forged type 1 grade 1.
----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SADDLE BENT HAND ROPE CONNECTION DETAILS



Saddles to be replaced as shown this sheet

Built up stanchion posts to remain

SADDLE BENT HAND ROPE CONNECTION

REPAIR ②

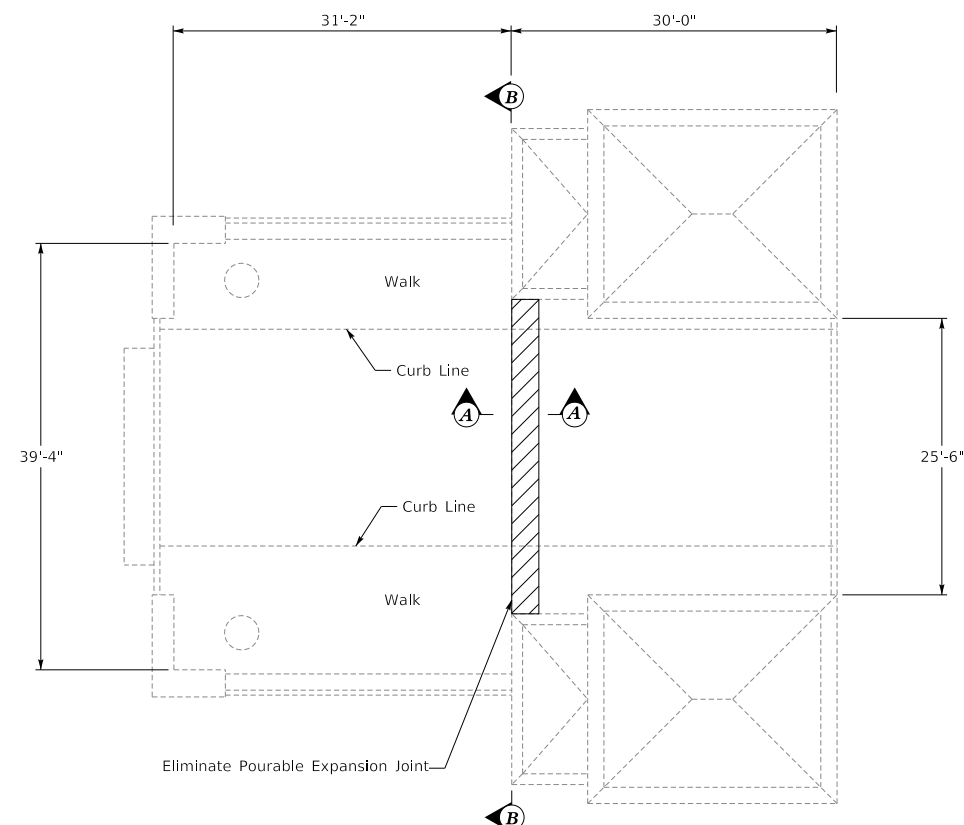
HANDROPE AND STANCHION REPLACEMENT

 COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	 KENTUCKY TRANSPORTATION CABINET	REVISION	DATE	PREPARED BY AECOM 500 West Jefferson Street Suite 1600 Louisville, KY 40202-4251 www.aecom.com	DATE: 05/06/2025	CHECKED BY	HANDROPE AND STANCHION REPLACEMENT CROSSING OHIO RIVER	ROUTE	ITEM NO.	COUNTY OF
					DESIGNED BY: N.KIRN	J.PUDLEINER		US 62X	9-10091.00	MASON
					DETAILED BY: M.BULMER	N.KIRN			SHEET NO. 514	DRAWING NUMBER 28962

USER: barbermj

DATE PLOTTED: 02/05/2025

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP



PLAN

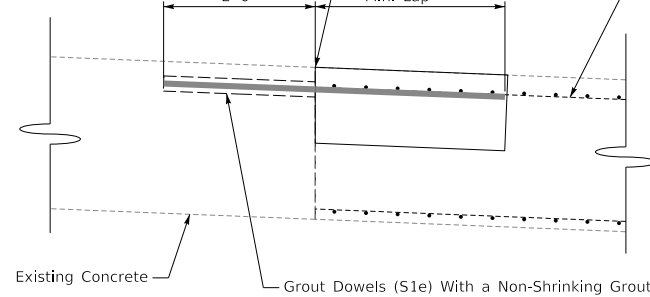
= Removal Limits

Maysville Anchorage Shown
Aberdeen Anchorage Similar

Apply Epoxy Bonding Material
Before Placing New Concrete

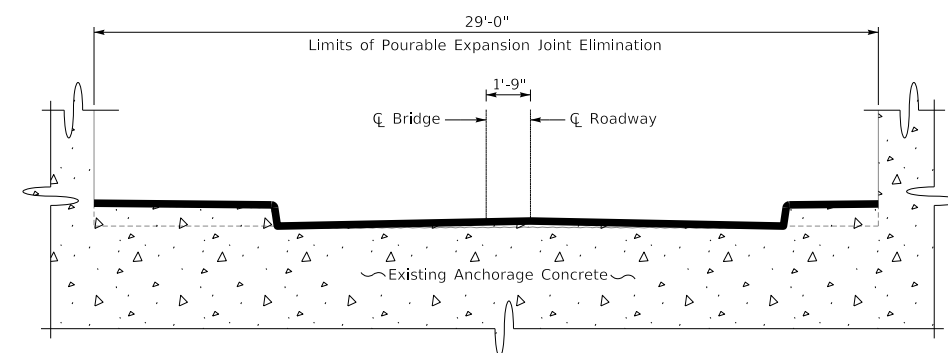
2'-6" Min. Lap

Existing Reinforcement



DOWEL DETAIL

- The cost of drilling holes, grouting, and epoxy bond material shall be considered incidental to the unit price bid for Eliminate Transverse Joint.

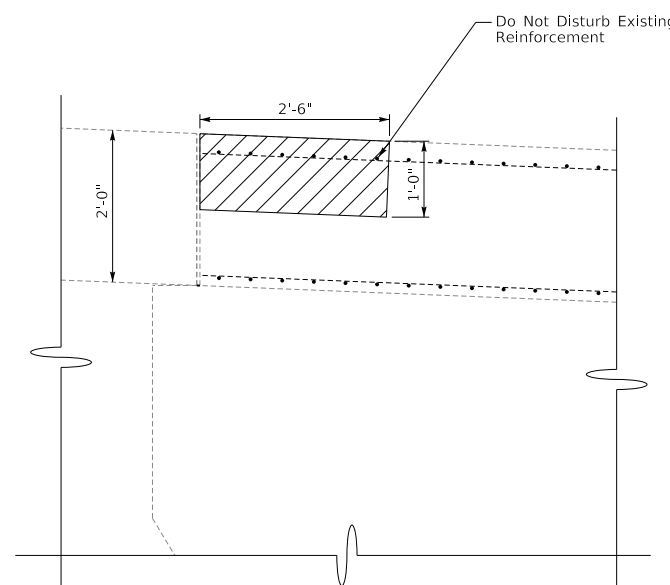


SECTION B-B

REPAIR 3
ELIMINATE TRANSVERSE JOINT

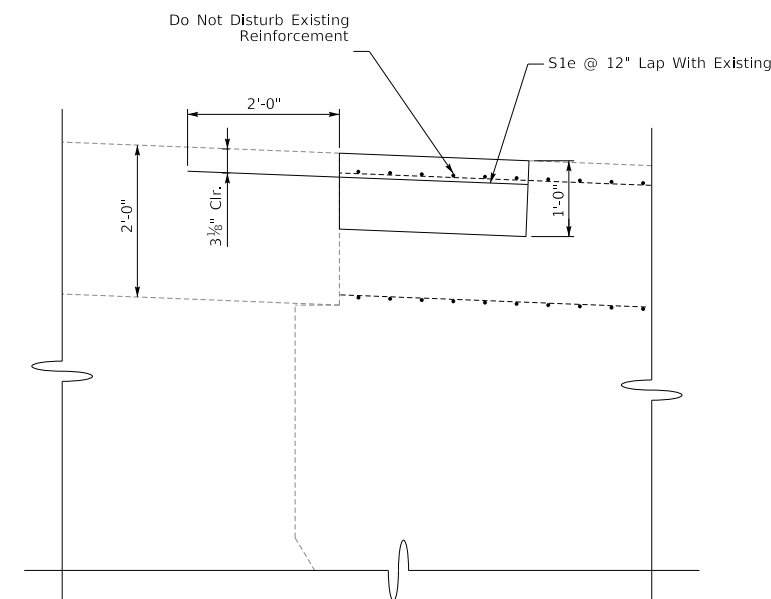
Repair 3 - Eliminate Transverse Joint

1. Eliminate transverse pourable expansion joints above the Maysville and Aberdeen anchorages by removing the existing joint and constructing a continuous slab.
2. See the Special Note for Eliminate Joints.



= Removal Limits

SECTION A-A EXISTING



SECTION A-A PROPOSED



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

DATE: 05/06/2025	CHECKED BY:
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

ELIMINATE TRANSVERSE JOINT
CROSSING
OHIO RIVER

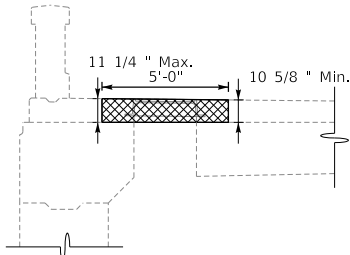
ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S15

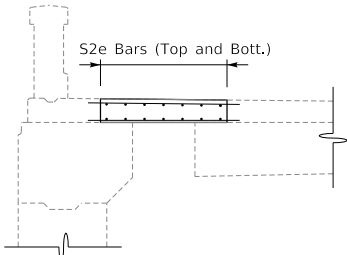
COUNTY OF
MASON
DRAWING NUMBER
28962



Epoxy Overlay top of slab and sidewalk



SECTION C-C



SECTION D-D

= Limits of Removal

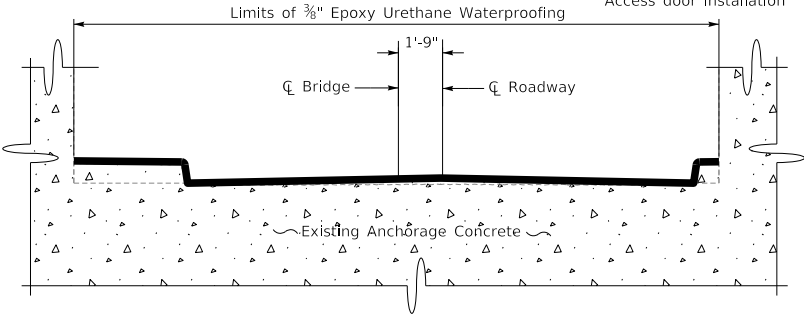
REPAIR 4
ANCHORAGE WATERPROOFING
EPOXY URETHANE OVERLAY

Repair 4 - Anchorage Waterproofing

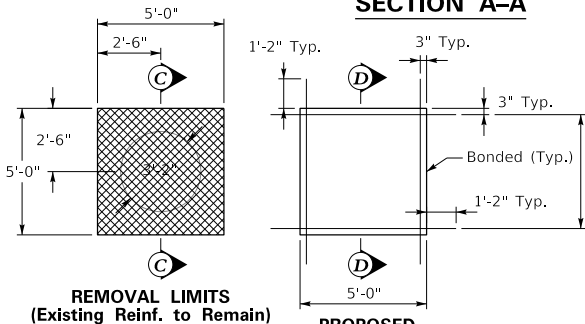
1. Eliminate manhole covers in sidewalks of Maysville and Aberdeen Anchorages.
2. Place $\frac{3}{8}$ " Epoxy-Urethane Waterproofing Overlay on Maysville and Aberdeen Anchorages.

NOTES

1. Grout S1e bars into existing concrete with Hilti Hit-re 500 V3, or approved equal epoxy mortar in accordance with the manufacturer's specifications. Include the cost of furnishing and placing the epoxy mortar in the price of the reinforcement.
2. See the Special Note for $\frac{3}{8}$ " Epoxy-Urethane Waterproofing Overlay for Bridge Decks.
3. The cost of drilling holes, grouting, and epoxy bond material shall be considered incidental to the unit price bid for Concrete Class M1.
4. The unit price bid for Concrete Class M1 and Steel Reinforcement Epoxy Coated shall be considered full compensation for all labor, drilling, materials, equipment, tools and incidentals necessary to complete the manhole elimination work as shown.
5. Manhole elimination work shall not be completed until after completion of Repair 12 - Anchorage Access door installation



SECTION A-A

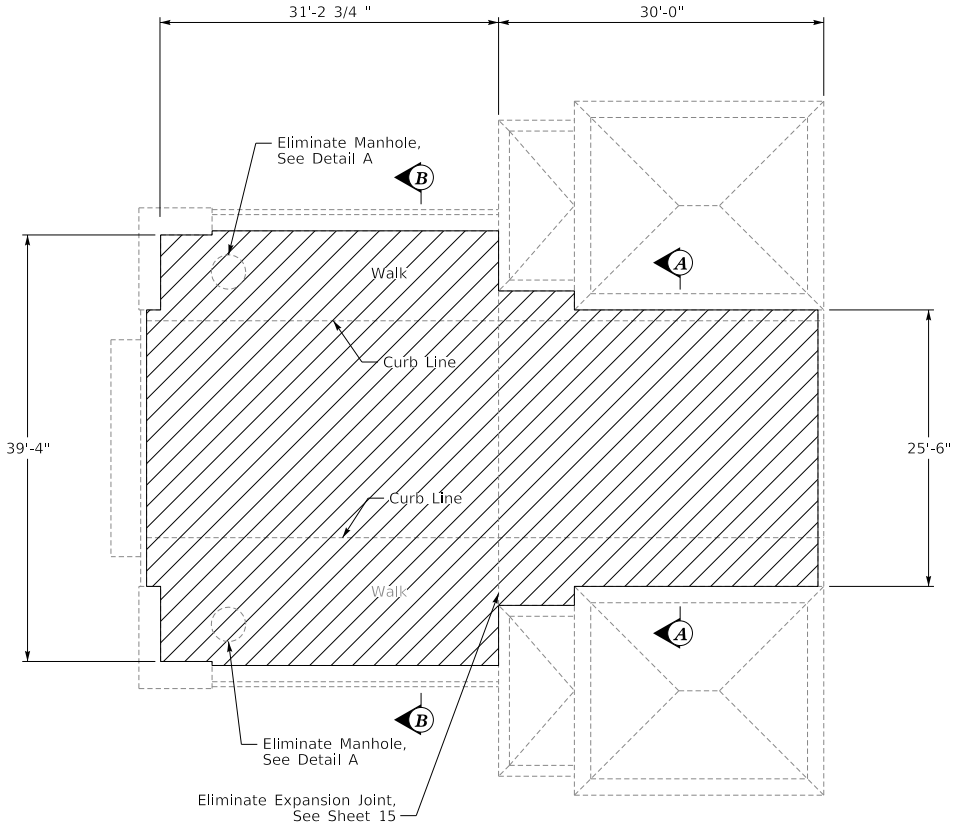


REMOVAL LIMITS
(Existing Reinf. to Remain)

PROPOSED
DETAIL A

S2e @ 6" (Top and Bott.)
(Both Directions)

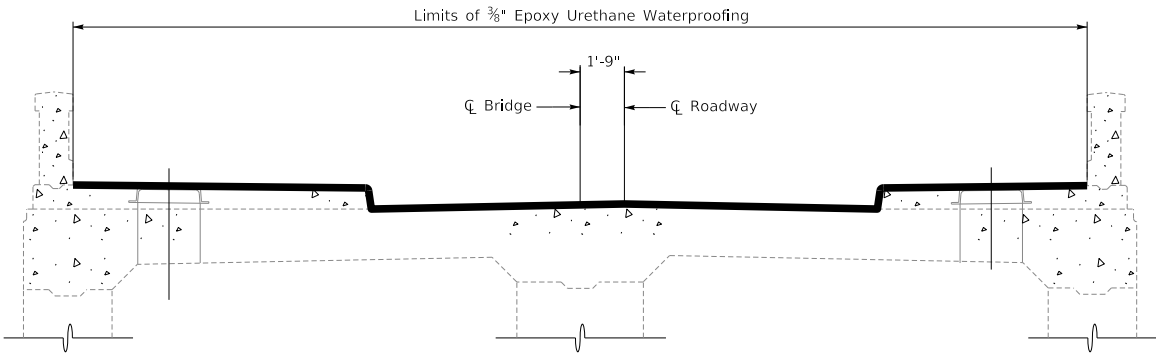
BILL OF REINFORCEMENT						
MARK	TYPE	NO.	SIZE	LENGTH		LOCATION
				FT.	IN.	
S1e	Str.	64	5	4	6	Slab
S2e	Str.	160	6	7	4	Sidewalk



PLAN

Maysville Anchorage Shown
Aberdeen Anchorage Similar

= Limits of Waterproofing



SECTION B-B



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

DATE: 05/06/2025
DESIGNED BY: J. Whelan
DETAILED BY: D. Liem

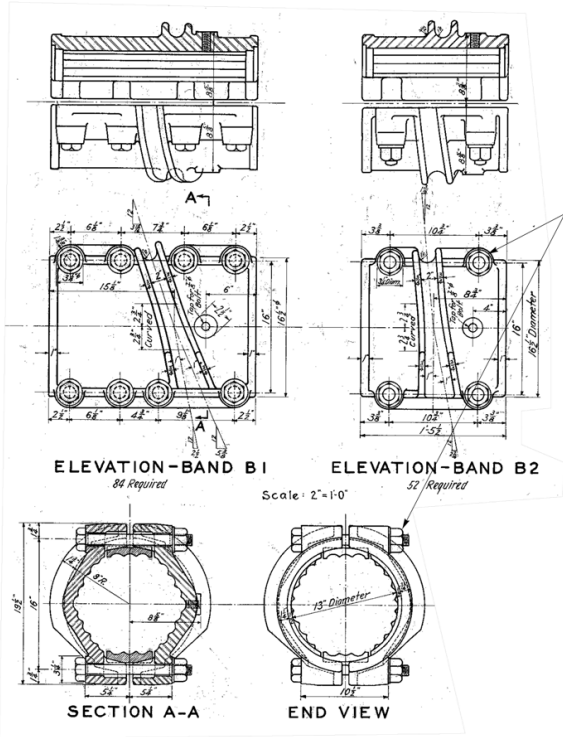
CHECKED BY
D. Liem
J. Whelan

ANCHORAGE WATERPROOFING
CROSSING
OHIO RIVER

ROUTE
US 62X

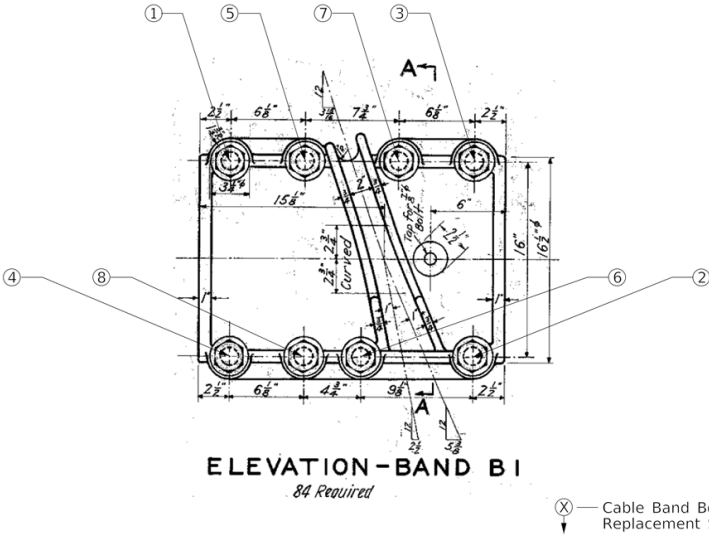
ITEM NO.
9-10091.00
SHEET NO.
S16

COUNTY OF
MASON
DRAWING NUMBER
28962

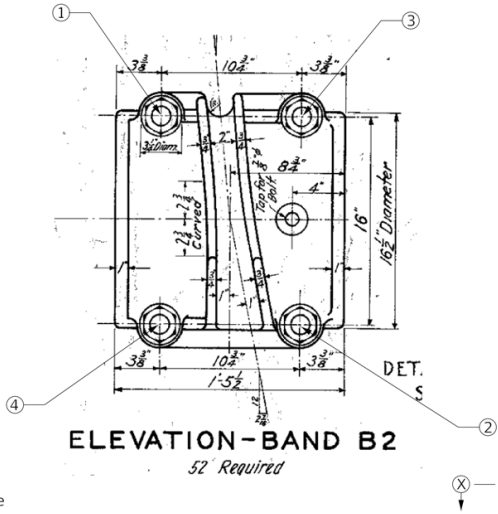


REPAIR 5
CABLE BAND BOLT REPLACEMENT

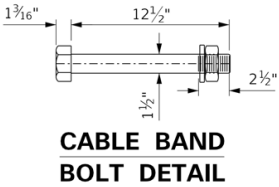
Repair 5 - Cable Band Bolt Replacement
1. See the Special Note for Cable Band Bolt Replacement.



CABLE BAND B1 DETAIL



CABLE BAND B2 DETAIL

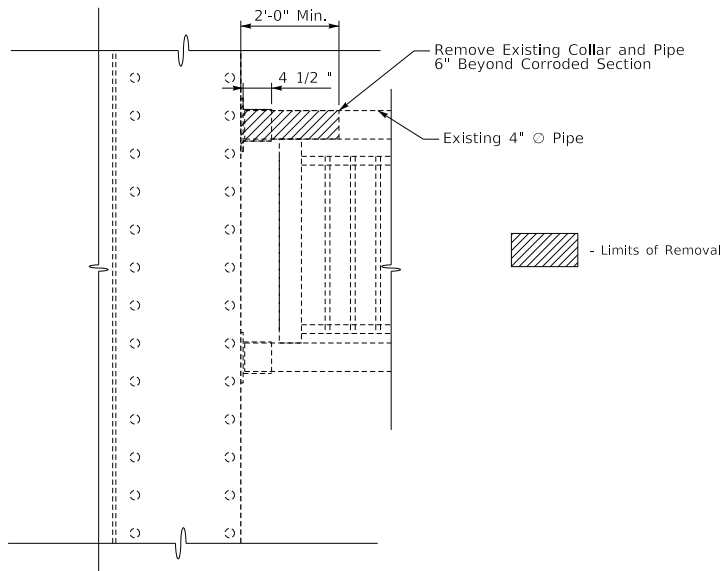


	COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS		REVISION	DATE	PREPARED BY AECOM 500 West Jefferson Street Suite 1600 Louisville, KY 40202-4251 www.aecom.com	DATE: 05/06/2025 DESIGNED BY: N. Kirn DETAILED BY: D. Liem	CHECKED BY J. Pudleiner J. Whelan	CABLE BAND BOLT REPLACEMENT CROSSING OHIO RIVER	ROUTE US 62X	ITEM NO. 9-10091.00 SHEET NO. S17	COUNTY OF MASON DRAWING NUMBER 28962

USER: LiemD

DATE PLOTTED: 05/06/2025

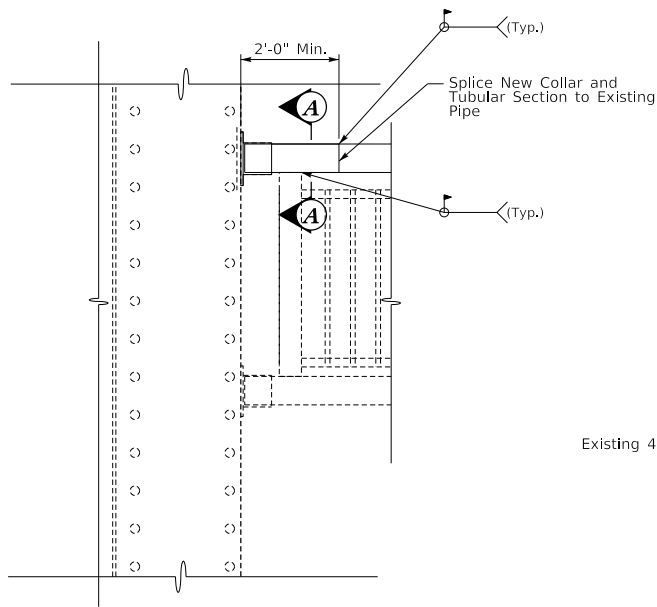
FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25



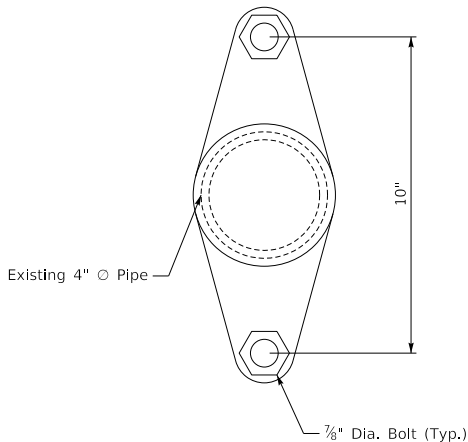
EXISTING ELEVATION

REPAIR 6

BRIDGE HANDRAIL REPAIR - CONNECTION COLLAR



PROPOSED ELEVATION



SECTION A-A



ELEVATION VIEW LOOKING FROM BRIDGE DECK

Elbow Connection Repair Locations	
Upstream	0A-1A
Upstream	0M (top and bottom)

Repair 6 - Bridge Handrail Repair - Collar

1. This item of work consists of removing the deteriorated rail connection collars and associated horizontal tubing, and replacing it in kind in accordance with these plans.
2. The unit price bid for this item of work (Handrail Connection Repair - Collar) shall include the cost of all materials, labor, and incidentals necessary to complete the work. The measurement for this repair shall be considered as each collar repaired.
3. All steel pipe to be ASTM A53 or ASTM A500 Grade C.
4. All material to be zinc primed.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

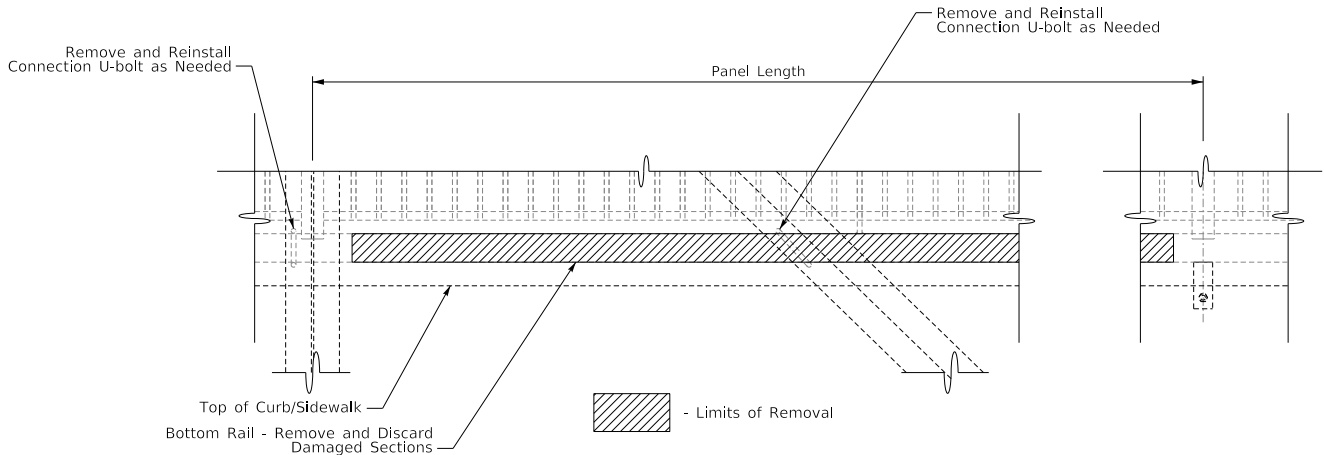
DATE: 05/06/2025	CHECKED BY
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

HANDRAIL REPAIR - COLLAR
CROSSING
OHIO RIVER

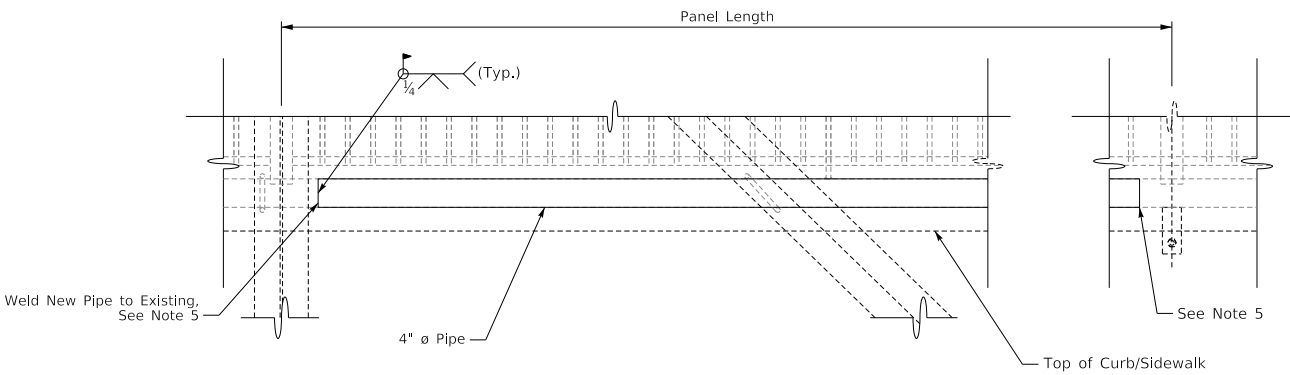
ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S18

COUNTY OF
MASON
DRAWING NUMBER
28962



BOTTOM HORIZONTAL REMOVAL – MAIN SPANS



BOTTOM HORIZONTAL REPAIR – MAIN SPANS

Repair 6 - Bridge Handrail Repair - Bottom Horizontal

1. This item of work consists of removing the deteriorated lower 4" diameter pipe and replacing it in kind in accordance with these plans.
2. The unit price bid for this item of work (Bridge Handrail Repair - Bottom Horizontal) shall include the cost of all materials, labor, and incidentals necessary to complete the work. The measurement for this repair shall be considered per linear foot of bottom horizontal replaced.
3. All steel pipe to be ASTM A53 or ASTM A500 Grade C.
4. All material to be zinc primed.
5. All splice locations shall be a minimum of 6" clear of existing truss members.

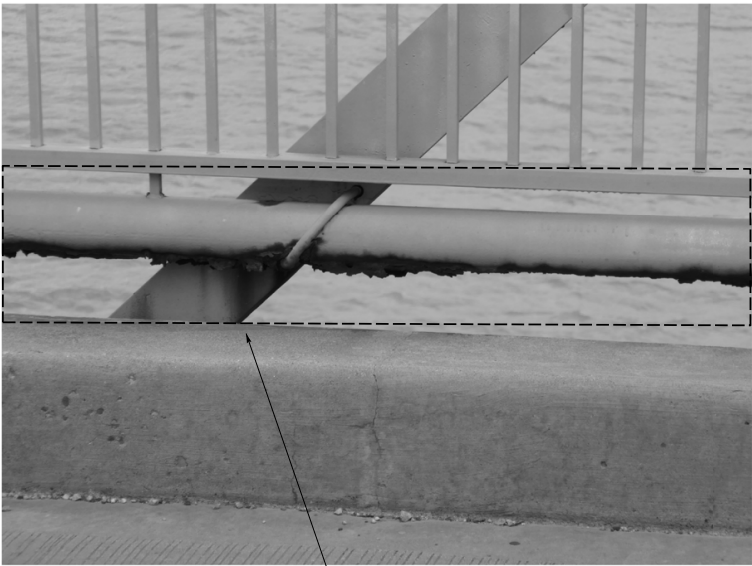
Bottom Horizontal Repair Locations	
Upstream	69M-67M
Upstream	65A-69M

REPAIR 6
BRIDGE HANDRAIL REPAIR - BOTTOM HORIZONTAL



Replace Deteriorated Rail Elements

VIEW LOOKING FROM UNDERNEATH AT RAILING BOTTOM MEMBER



Replace Deteriorated Rail Elements

VIEW LOOKING AT RAILING BOTTOM MEMBER



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025

AECOM
PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS-ISO_ANSI_D_LAND 05-06-25

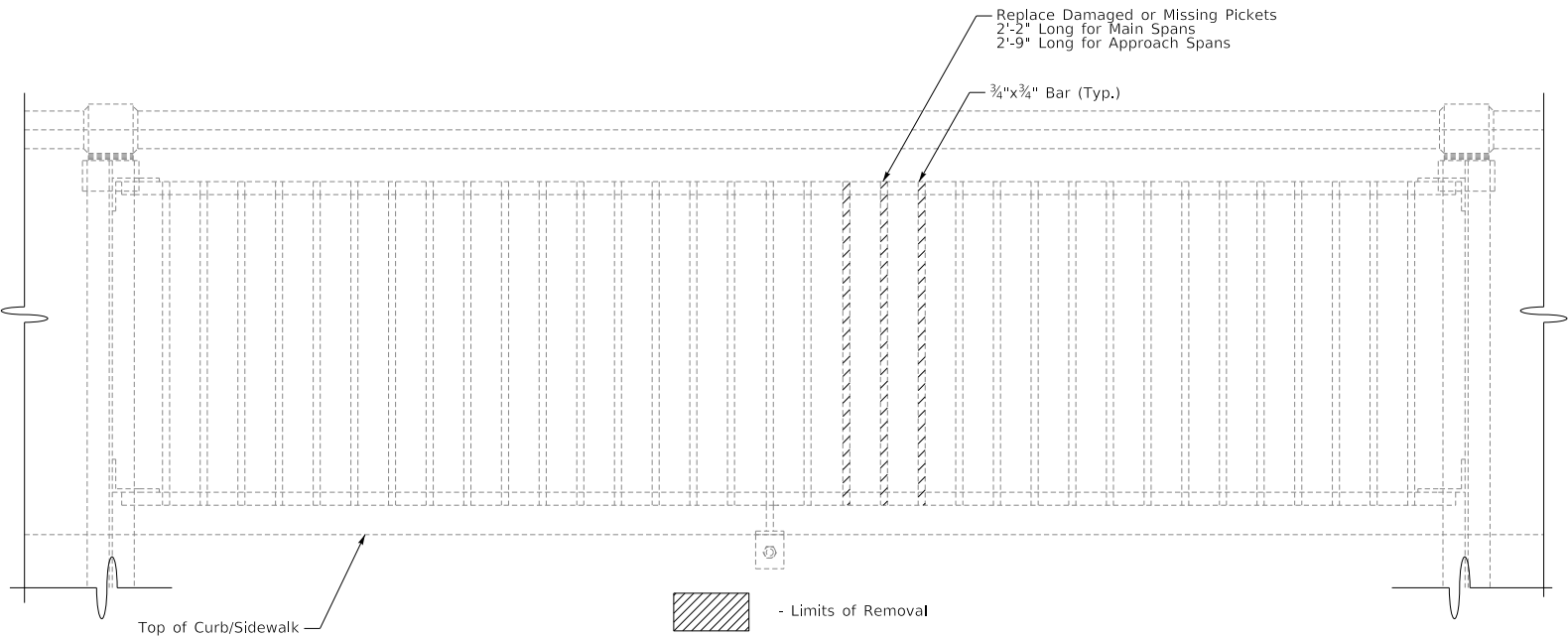
DATE: 05/06/2025	CHECKED BY:
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

HANDRAIL REPAIR - BOT. HORIZ.
CROSSING
OHIO RIVER

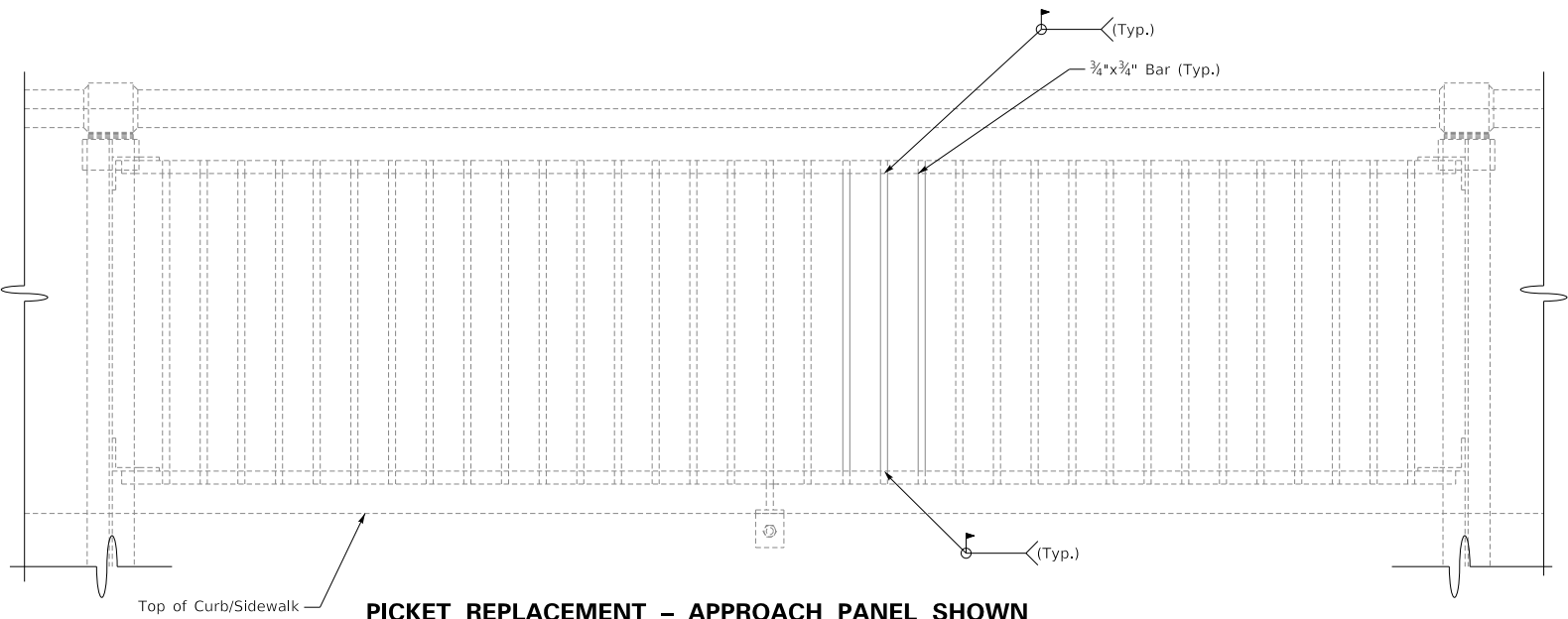
ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S19

COUNTY OF
MASON
DRAWING NUMBER
28962



PICKET REMOVAL – APPROACH PANEL SHOWN



PICKET REPLACEMENT – APPROACH PANEL SHOWN

Picket Repair Locations		
Upstream/Downstream	Location	# of Pickets
Upstream	11A-13A	4
Downstream	21A-23A	4
Upstream	21M-19M	8
Upstream	15M-13M	2
Downstream	11M-9M	3
Downstream	Span M0	2
Downstream	Span M1	7

REPAIR 6
BRIDGE HANDRAIL REPAIR - PICKET REPLACEMENT

Repair 6 - Bridge Handrail Repair - Pickets

- Repair isolated sections of bridge rail pickets in kind.
- The unit price bid for this item of work (Handrail Connection Repair - Picket Repair) shall include the cost of all materials, labor, and incidentals necessary to complete the work. The measurement for this repair shall be considered as each picket replaced.
- Material furnished shall be AASHTO M270 Grade 36 (ASTM A709).



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

DATE: 05/06/2025

DESIGNED BY: D. Liem

DETAILED BY: D. Liem

CHECKED BY

J. Whelan

J. Whelan

HANDRAIL REPAIR - PICKETS

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

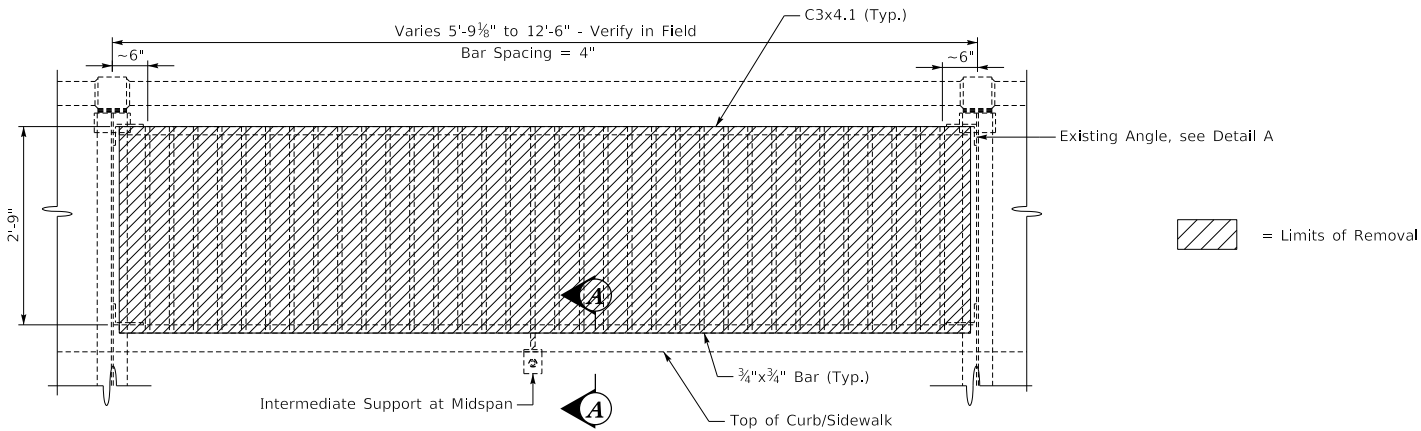
S20

COUNTY OF

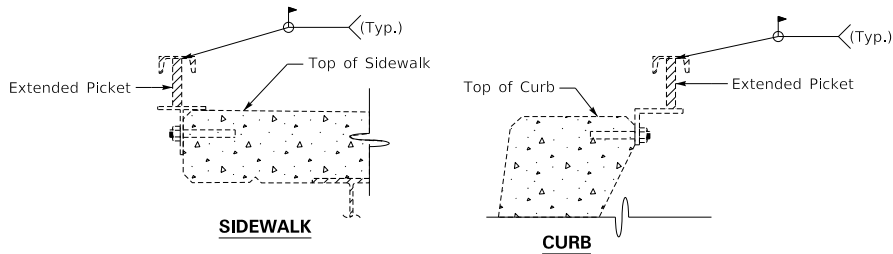
MASON

DRAWING NUMBER

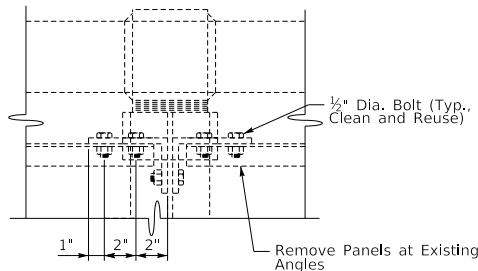
28962



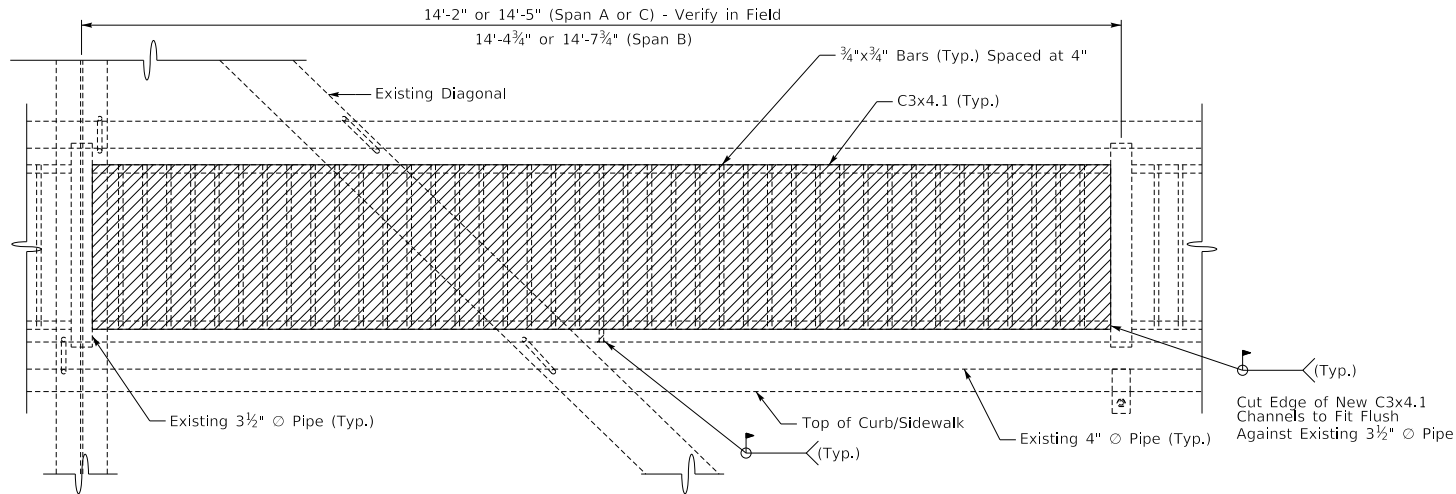
TYPICAL HANDRAIL PANEL – APPROACH SPANS



SECTION A-A



DETAIL A



TYPICAL HANDRAIL PANEL – MAIN SPANS



Replace Deteriorated Rail Elements

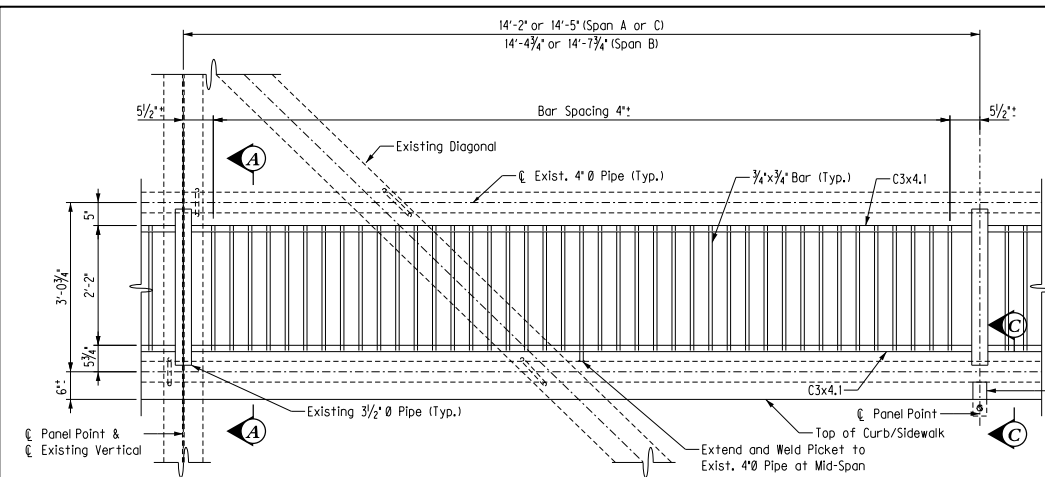
VIEW LOOKING AT RAILING PICKET MEMBERS

Picket Panel Replacement		
Upstream/Downstream	Location	# of Panels
Upstream	Span A1	1
Upstream	Span A0	3
Upstream	35A-37A	1
Upstream	Span M0	3
Upstream	Span M1	3
Upstream	Span M4	3

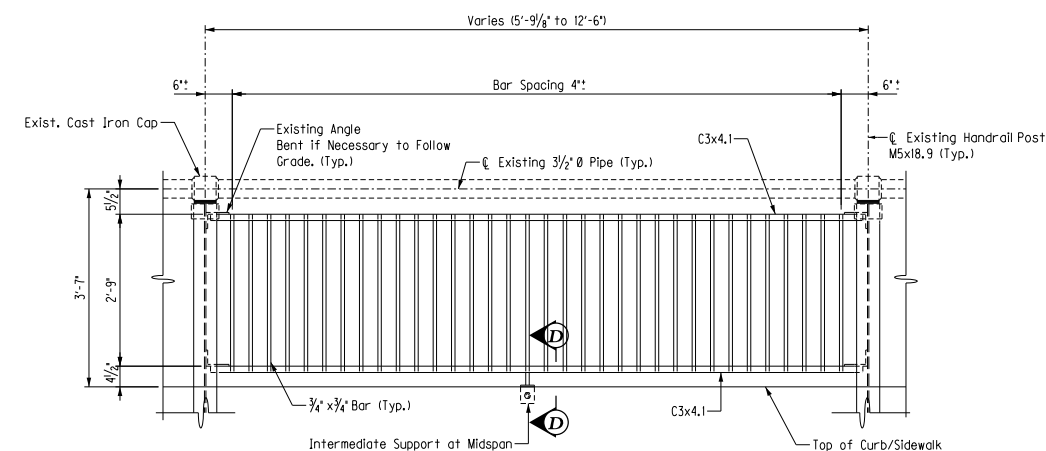
REPAIR 6

BRIDGE HANDRAIL REPAIR - PICKET PANEL

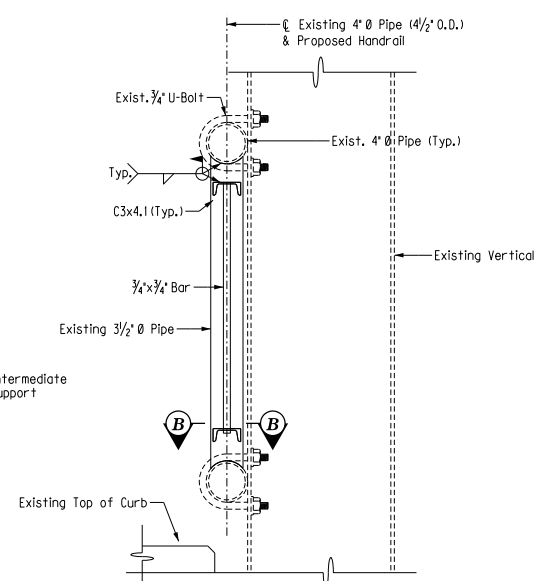
- Repair 6 - Bridge Handrail Repair - Panel
- Repair isolated sections of bridge railing in kind.
 - The unit price bid for this item of work (Bridge Handrail Repair - Panel Replacement) shall include the cost of all materials, labor, and incidentals necessary to complete the work. The measurement for this repair shall be considered per linear foot of panel replaced.
 - Material furnished shall be AASHTO M270 Grade 36 (ASTM A709).



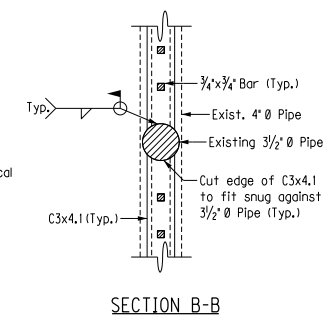
TYPICAL HANDRAIL PANEL - MAIN SPANS



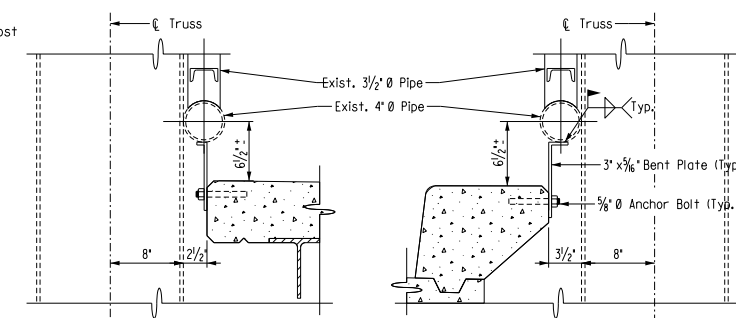
TYPICAL HANDRAIL PANEL - APPROACH SPANS



SECTION A-A
Curb Side Shown



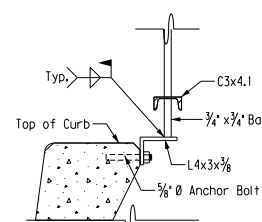
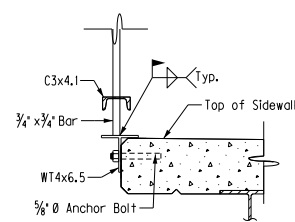
SECTION B-B



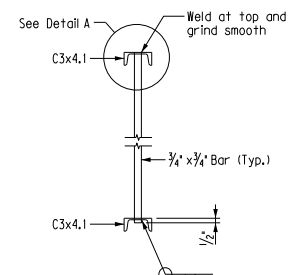
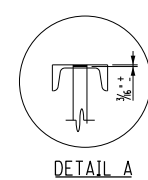
SIDEWALK

SECTION C-C

CURB



SECTION D-D



BAR CONNECTION DETAIL

FOR INFORMATION

REPAIR 6

BRIDGE HANDRAIL REPAIR - PICKET PANEL

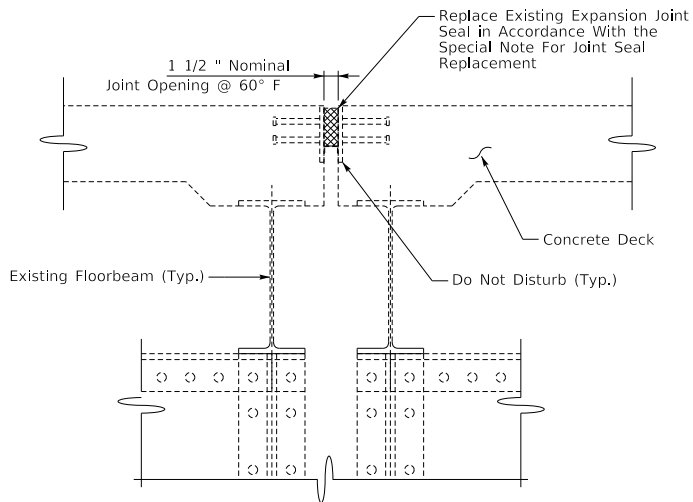
Repair 6 - Bridge Handrail Repair - Panel

- Repair isolated sections of bridge railing in kind.
- The unit price bid for this item of work (Bridge Handrail Repair - Panel Replacement) shall include the cost of all materials, labor, and incidentals necessary to complete the work. The measurement for this repair shall be considered per linear foot of panel replaced.
- Material furnished shall be AASHTO M270 Grade 36 (ASTM A709).

Picket Panel Replacement		
Upstream/Downstream	Location	# of Panels
Upstream	Span A1	1
Upstream	Span A0	3
Upstream	35A-37A	1
Upstream	Span M0	3
Upstream	Span M1	3
Upstream	Span M4	3

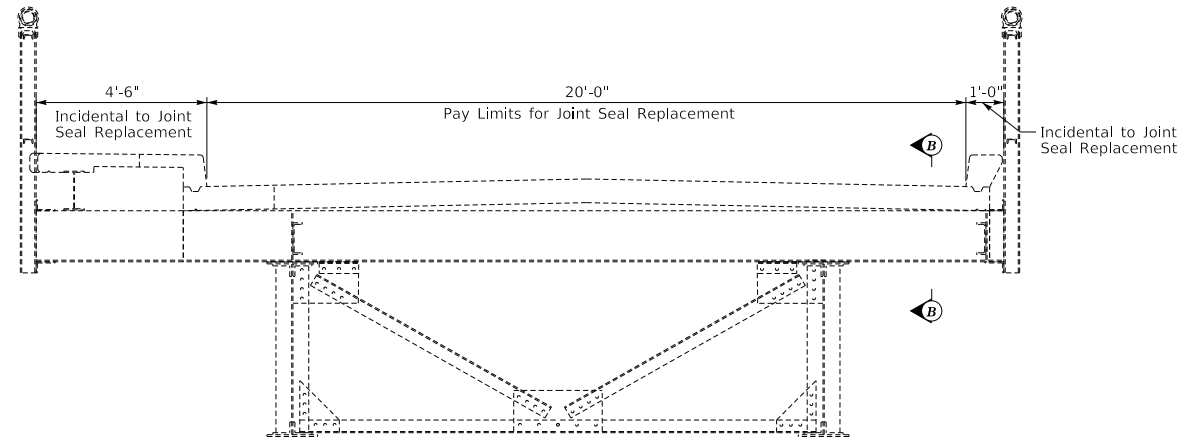


REPAIR 7
JOINT SEAL REPLACEMENT



SECTION B-B - REMOVAL

Replace Joint Seal With Precompressed Foam Expansion Seal

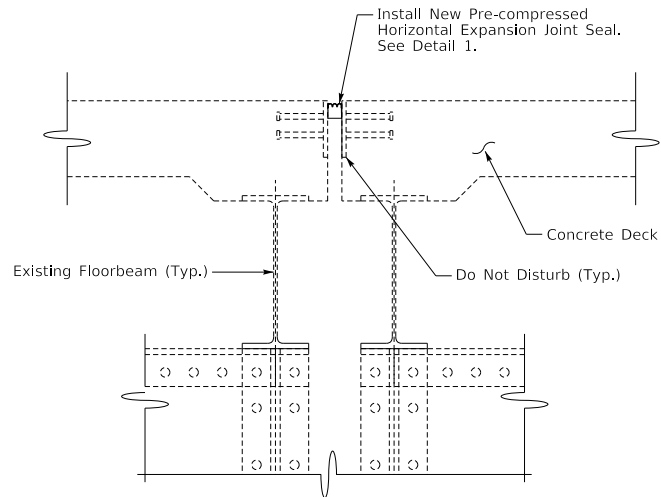


SECTION A-A

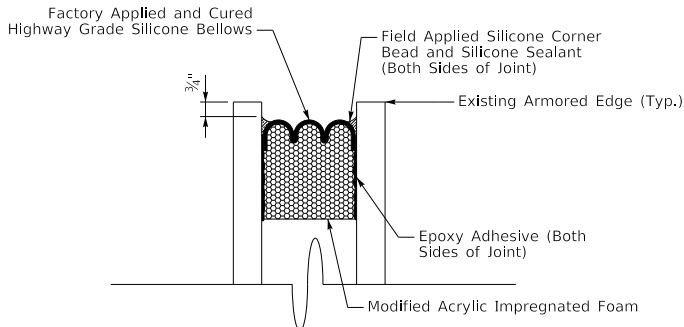
Repair 7 - Joint Seal Replacement

1. Replace expansion joint seals with pre-compressed foam expansion joint seal.
2. See the Special Note for Bridge Joint Seal Replacement.
3. See Standard Drawings BJE-001, BJE-003, and BJE-005 for additional details.

Location	Action
Approach Pier A3	Joint Seal Replacement
0A	Joint Seal Replacement
Approach Pier M1	Joint Seal Replacement



SECTION B-B - REPLACEMENT



DETAIL 1



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

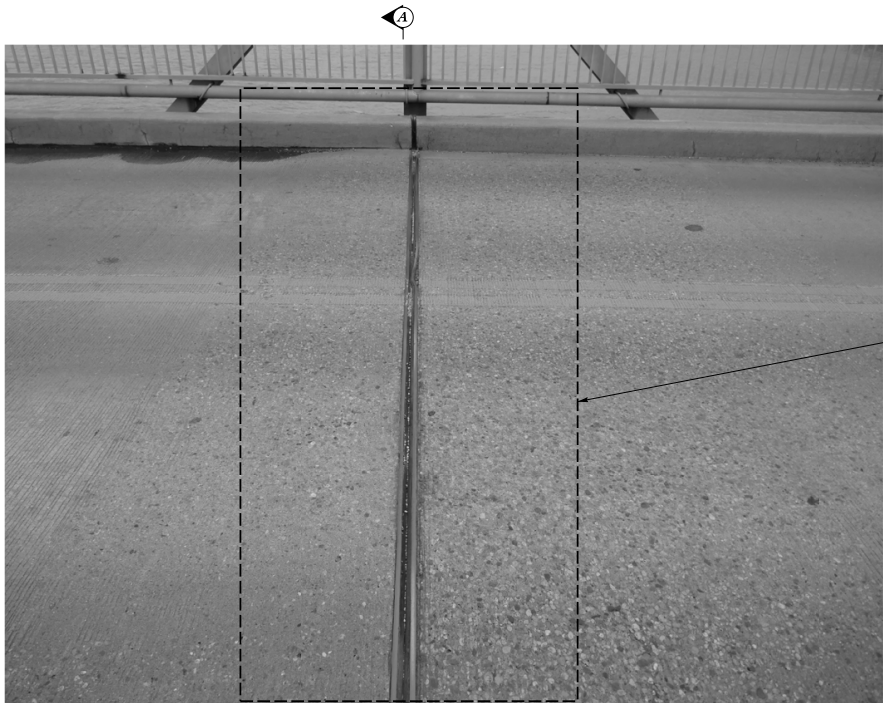
DATE: 05/06/2025	CHECKED BY
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

JOINT SEAL REPLACEMENT
CROSSING
OHIO RIVER

ROUTE
US 62X

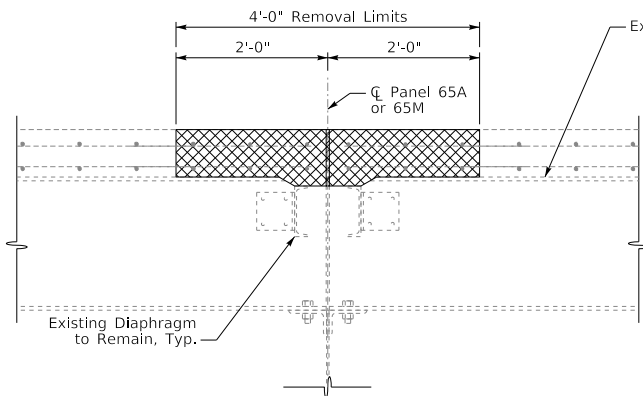
ITEM NO.
9-10091.00
SHEET NO.
S23

COUNTY OF
MASON
DRAWING NUMBER
28962

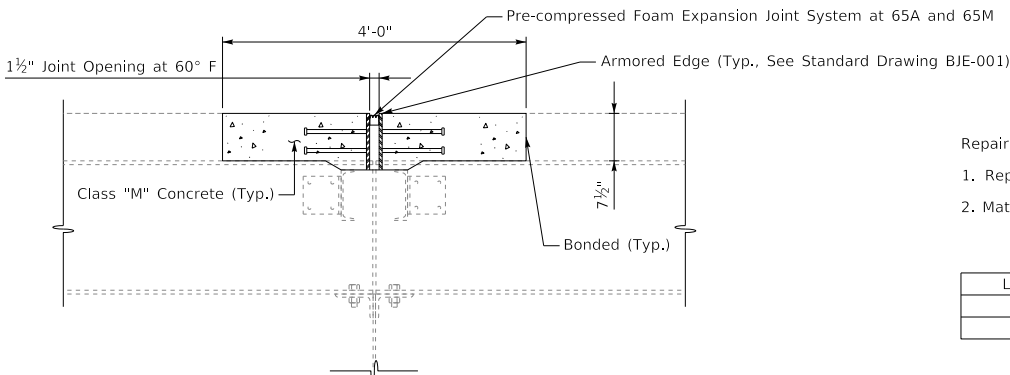


REPAIR 8
REPLACE COMPRESSION SEAL JOINT

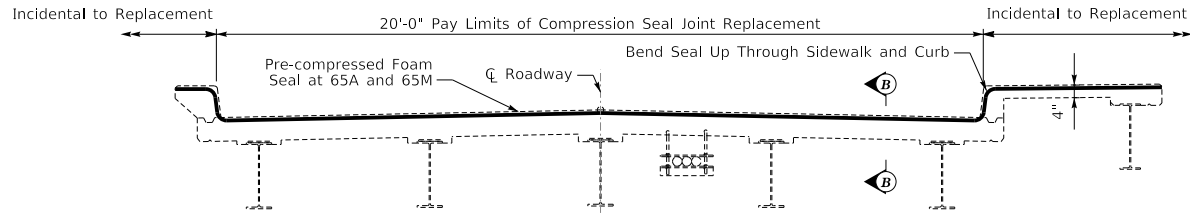
Replace transverse joint



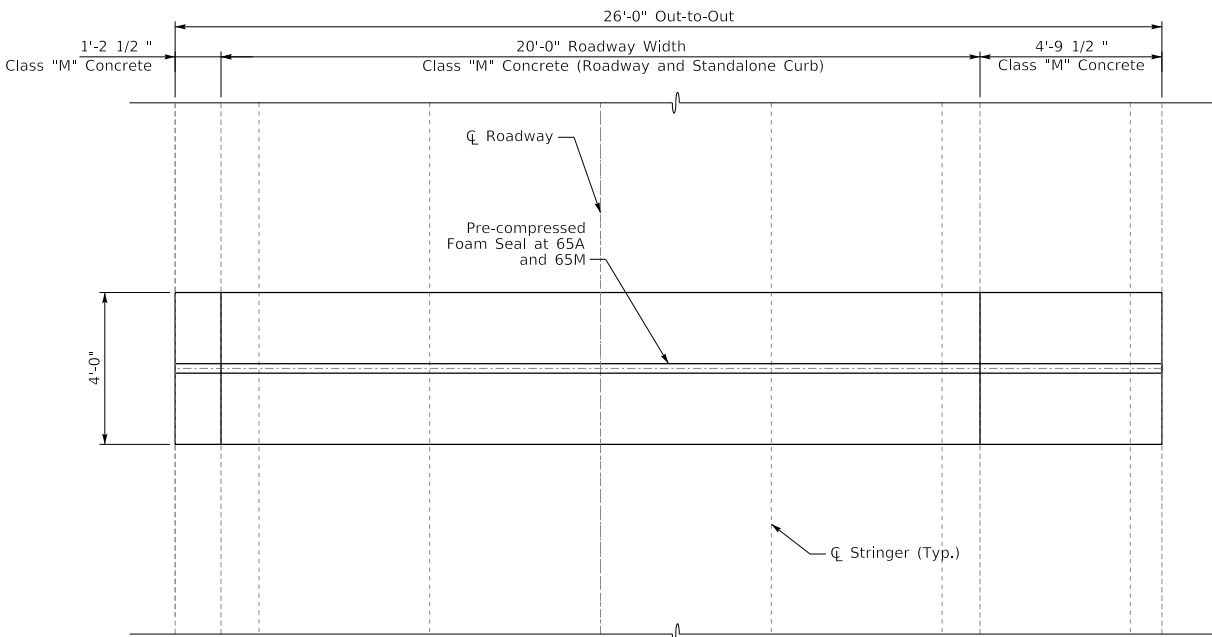
SECTION B-B REMOVAL



SECTION B-B PROPOSED



SECTION A-A



PROPOSED JOINT REPLACEMENT PLAN

- Repair 8 - Replace Compression Joint Seal
1. Replace compression joint assembly at the locations below:
 2. Match existing roadway grade and profile.

Location	Action
65A	Joint Replacement
65M	Joint Replacement



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025

DESIGNED BY: D. Liem

DETAILED BY: D. Liem

CHECKED BY

J. Whelan

J. Whelan

REPLACE COMPRESSION SEAL JOINT

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.

S24

COUNTY OF

MASON

DRAWING NUMBER

28962





Concrete Patching and Coating of Substructure Units

REPAIR 9
CONCRETE PATCHING AND COATING - SUBSTRUCTURE

Repair 9 - Concrete Patching and Coating - Substructure

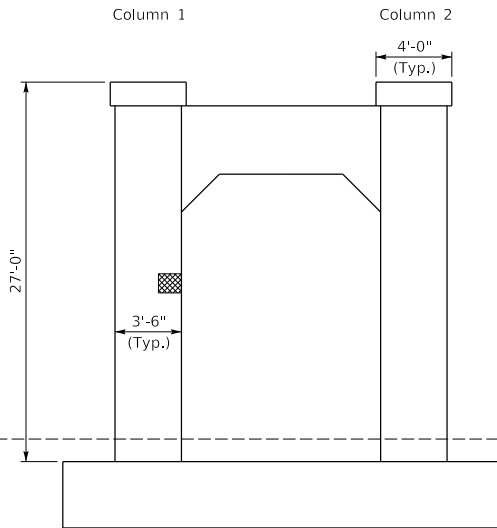
1. The total anticipated quantity for Pier A1 patching is 5 square feet, including a 10% contingency.
2. See Special Note for Epoxy Crack Injection.
3. See Special Note for Concrete Patching Repair.
4. Install galvanic anodes in accordance with the Special Note for Embedded Galvanic Anodes.
5. Apply Concrete Coating in accordance with the Special Note for Concrete Coating.

LEGEND

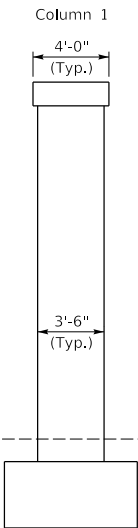
-  - Existing Patch
-  - Proposed Concrete Patching



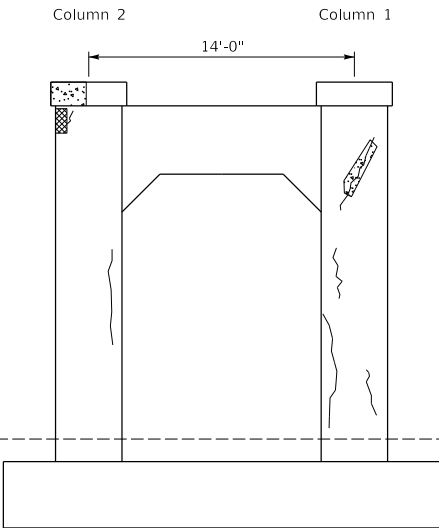
PLAN OF CAP



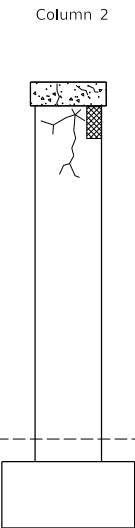
SOUTH ELEVATION



WEST ELEVATION

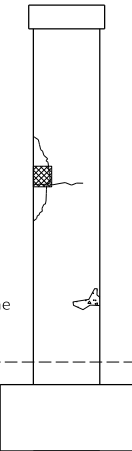


NORTH ELEVATION

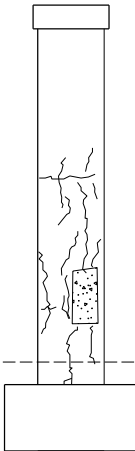


EAST ELEVATION

Approximate Ground Line



EAST FACE OF COLUMN 1



WEST FACE OF COLUMN 2

PIER A1



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025

DESIGNED BY: D. Liem
DETAILED BY: D. Liem

CHECKED BY

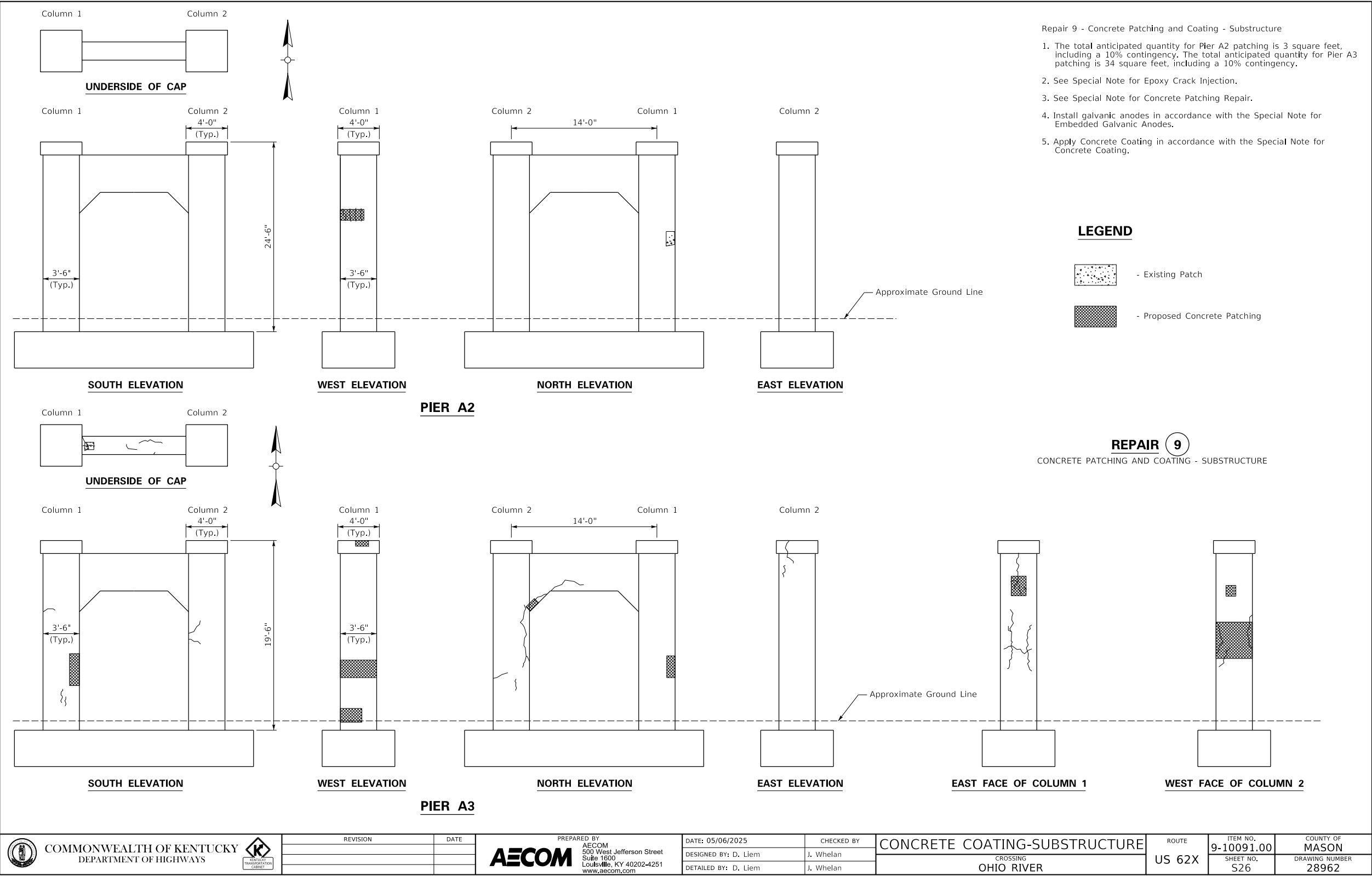
J. Whelan
J. Whelan

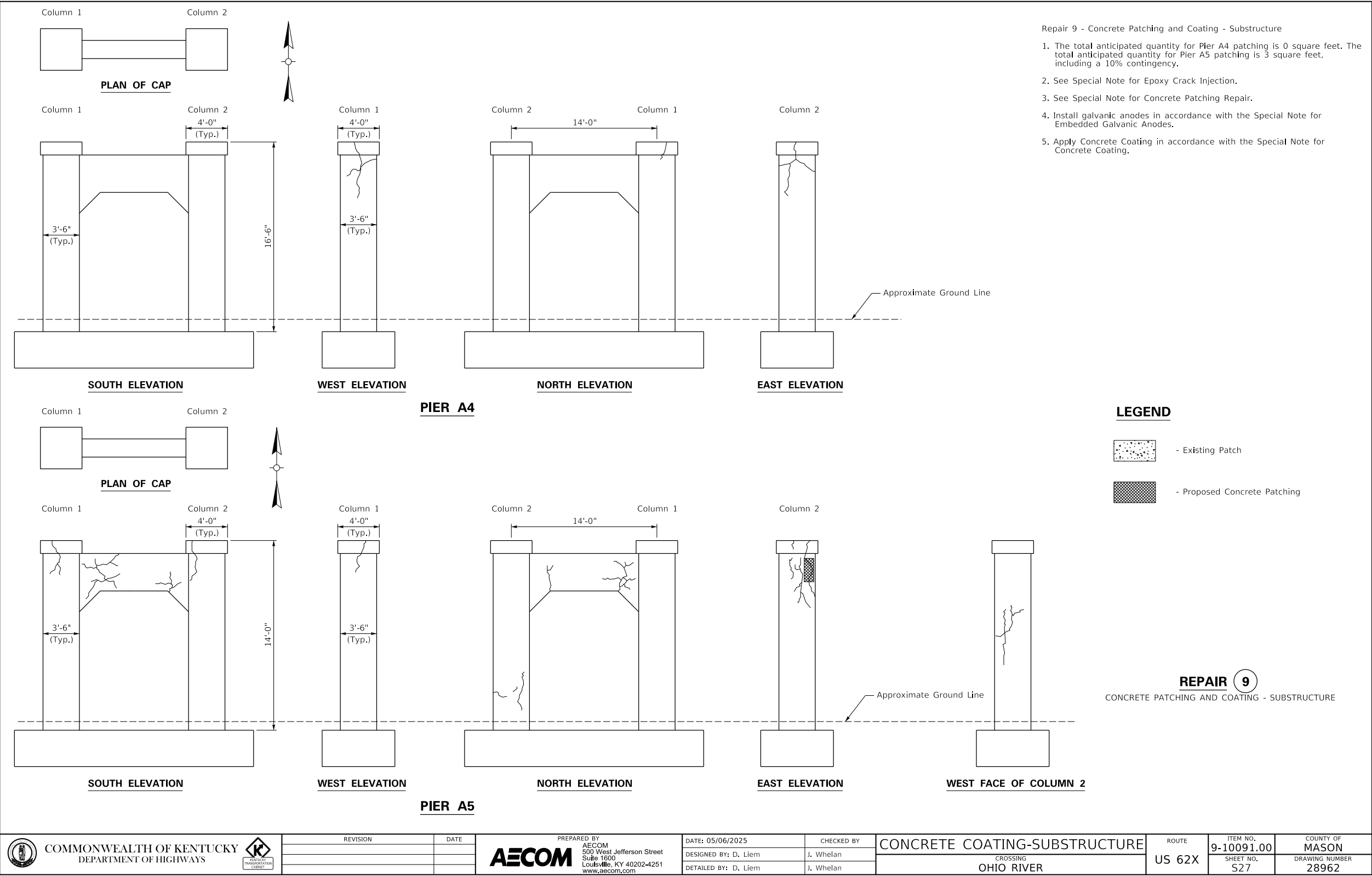
CONCRETE COATING-SUBSTRUCTURE
CROSSING
OHIO RIVER

ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S25

COUNTY OF
MASON
DRAWING NUMBER
28962





LEGEND

- Existing Patch

- Proposed Concrete Patching

REPAIR 9

CONCRETE PATCHING AND COATING - SUBSTRUCTURE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

DATE: 05/06/2025	CHECKED BY J. Whelan
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

CONCRETE COATING-SUBSTRUCTURE

CROSSING
OHIO RIVER

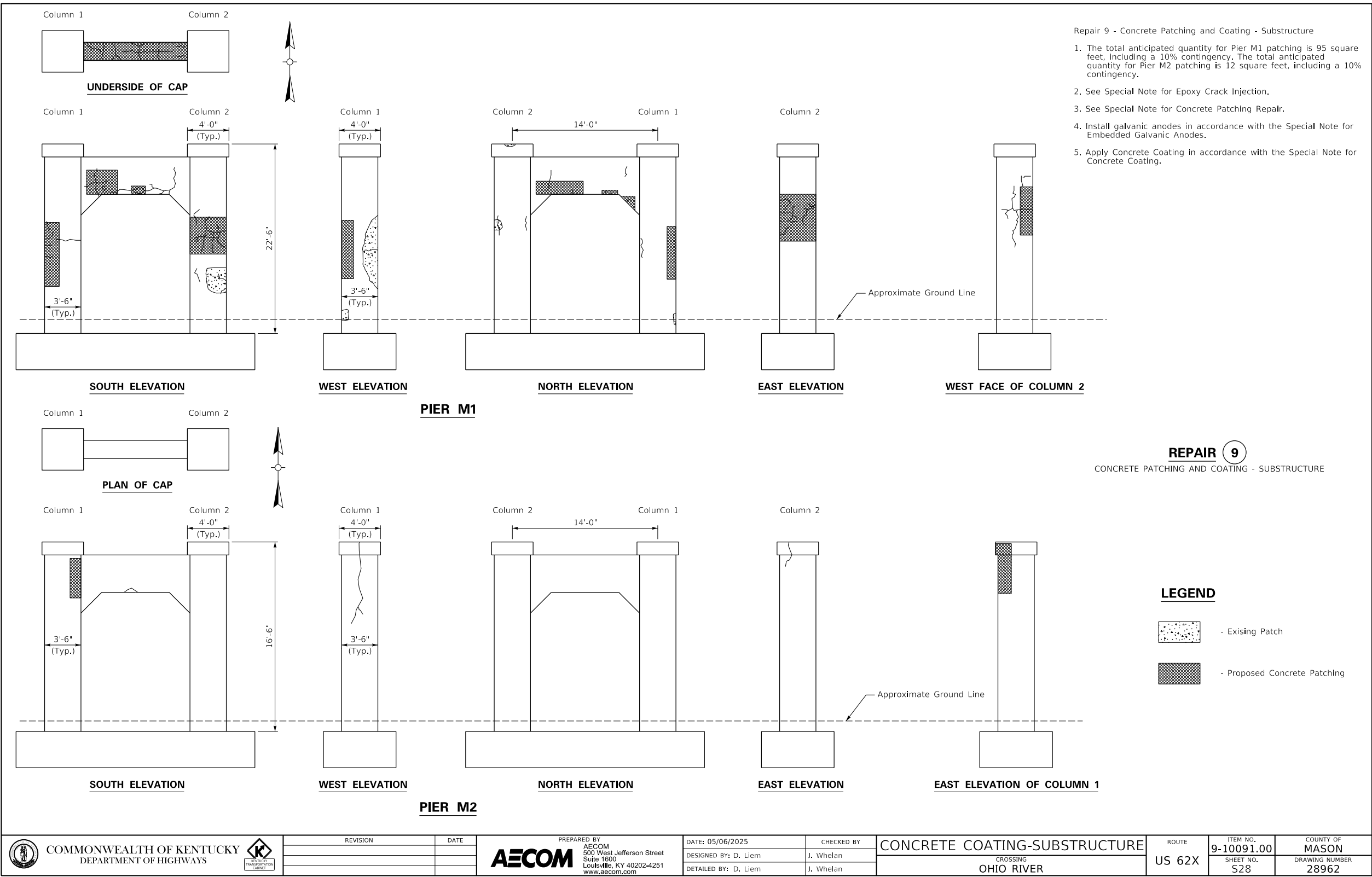
ROUTE
US 62X

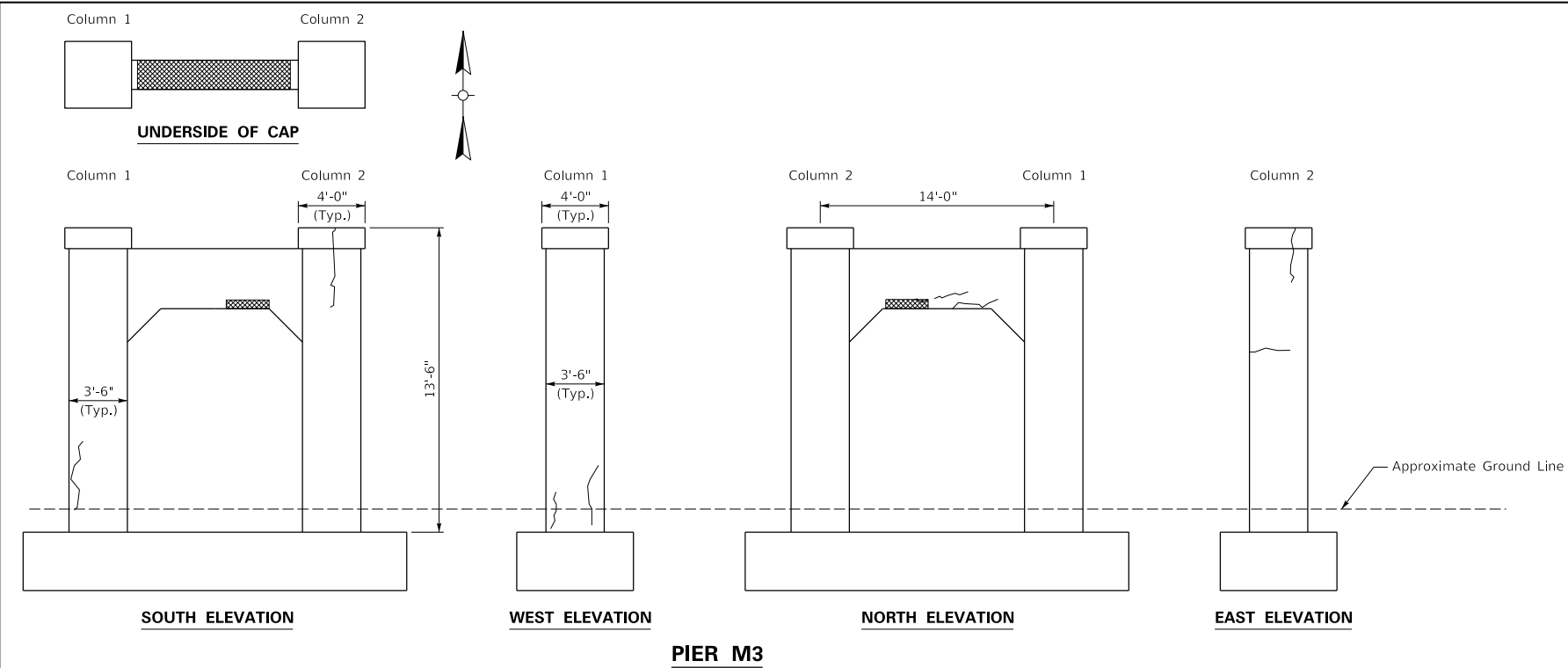
ITEM NO.
9-10091.00

SHEET NO.
S27

COUNTY OF
MASON

DRAWING NUMBER
28962







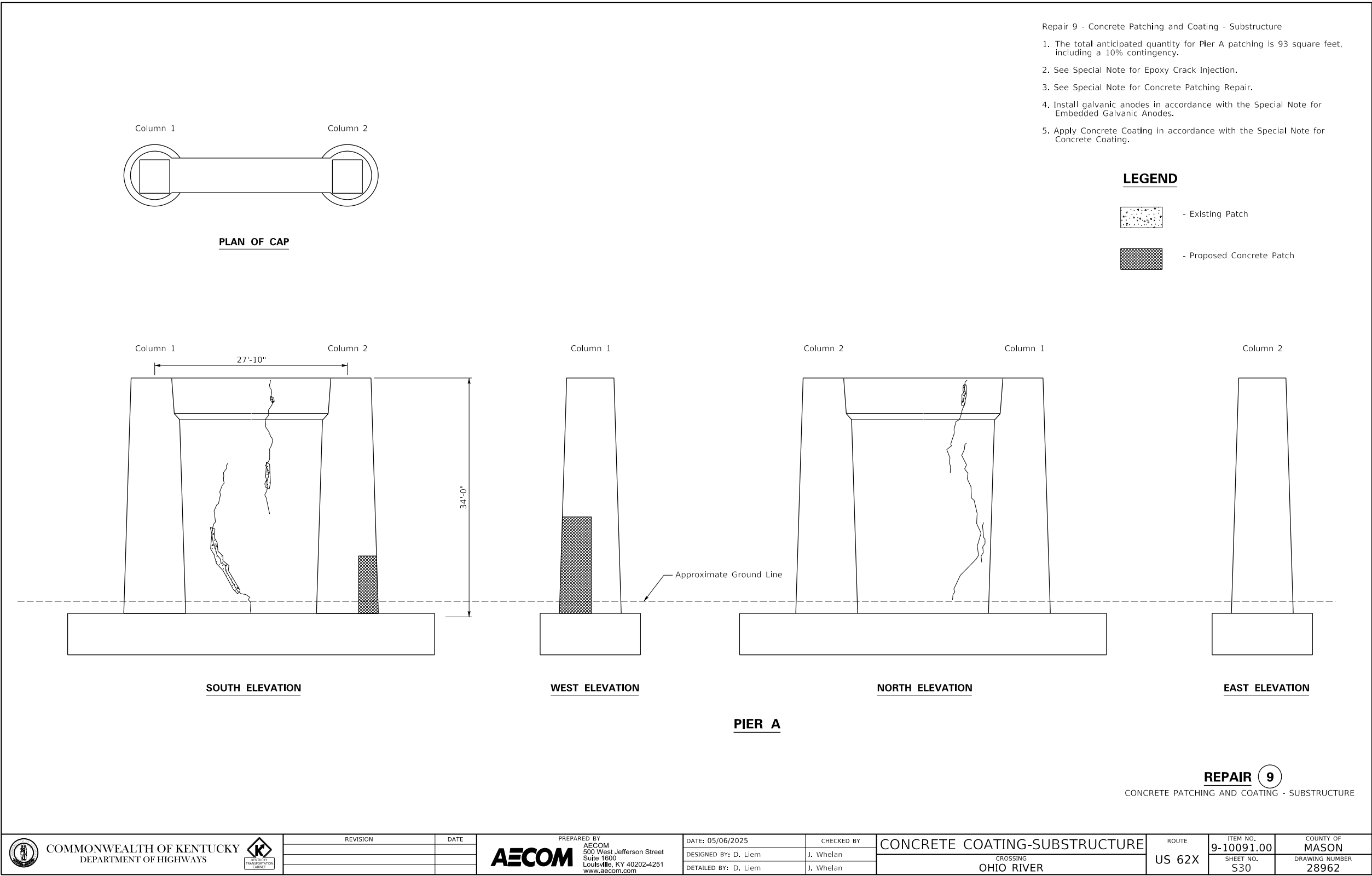
- Repair 9 - Concrete Patching and Coating - Substructure
1. The total anticipated quantity for Pier M3 patching is 21 square feet, including a 10% contingency.
 2. See Special Note for Epoxy Crack Injection.
 3. See Special Note for Concrete Patching Repair.
 4. Install galvanic anodes in accordance with the Special Note for Embedded Galvanic Anodes.
 5. Apply Concrete Coating in accordance with the Special Note for Concrete Coating.

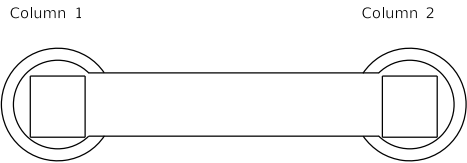
LEGEND

- Existing Patch
- Proposed Concrete Patch

REPAIR 9
CONCRETE PATCHING AND COATING - SUBSTRUCTURE

	COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS		USER: LiemD	DATE PLOTTED: 05/06/2025	PREPARED BY AECOM 500 West Jefferson Street Suite 1600 Louisville, KY 40202-4251 www.aecom.com	DATE: 05/06/2025	CHECKED BY	CONCRETE COATING-SUBSTRUCTURE	ROUTE US 62X	ITEM NO. 9-10091.00	COUNTY OF MASON	
						DESIGNED BY: D. Liem	J. Whelan			CROSSING OHIO RIVER	SHEET NO. S29	DRAWING NUMBER 28962
						DETAILED BY: D. Liem	J. Whelan					





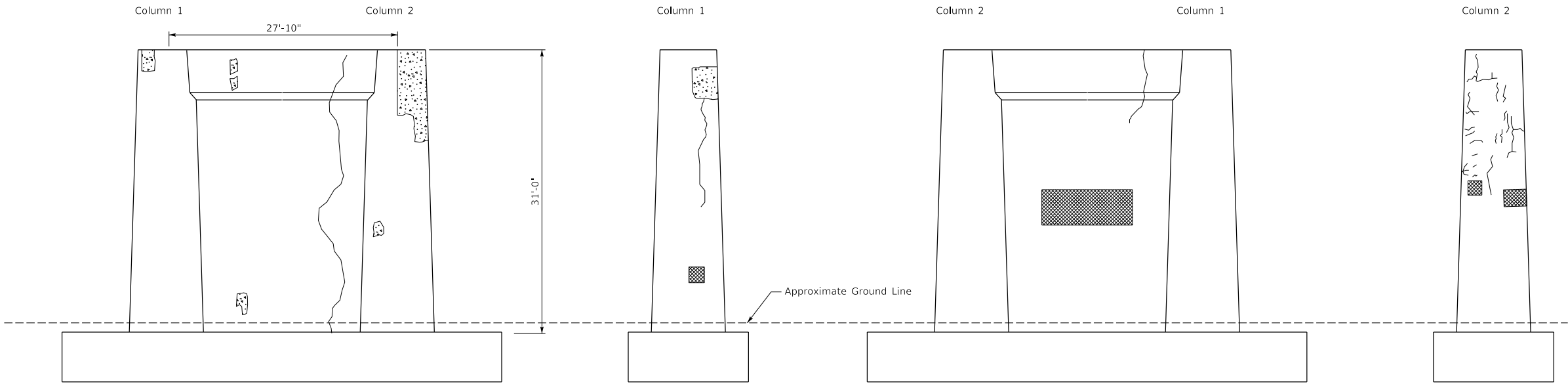
PLAN OF CAP

Repair 9 - Concrete Patching and Coating - Substructure

1. The total anticipated quantity for Pier D patching is 54 square feet, including a 10% contingency.
2. See Special Note for Epoxy Crack Injection.
3. See Special Note for Concrete Patching Repair.
4. Install galvanic anodes in accordance with the Special Note for Embedded Galvanic Anodes.
5. Apply Concrete Coating in accordance with the Special Note for Concrete Coating.

LEGEND

- Existing Patch
- Proposed Concrete Patching



SOUTH ELEVATION

WEST ELEVATION

NORTH ELEVATION

EAST ELEVATION

PIER D

REPAIR 9

CONCRETE PATCHING AND COATING - SUBSTRUCTURE



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025	CHECKED BY
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

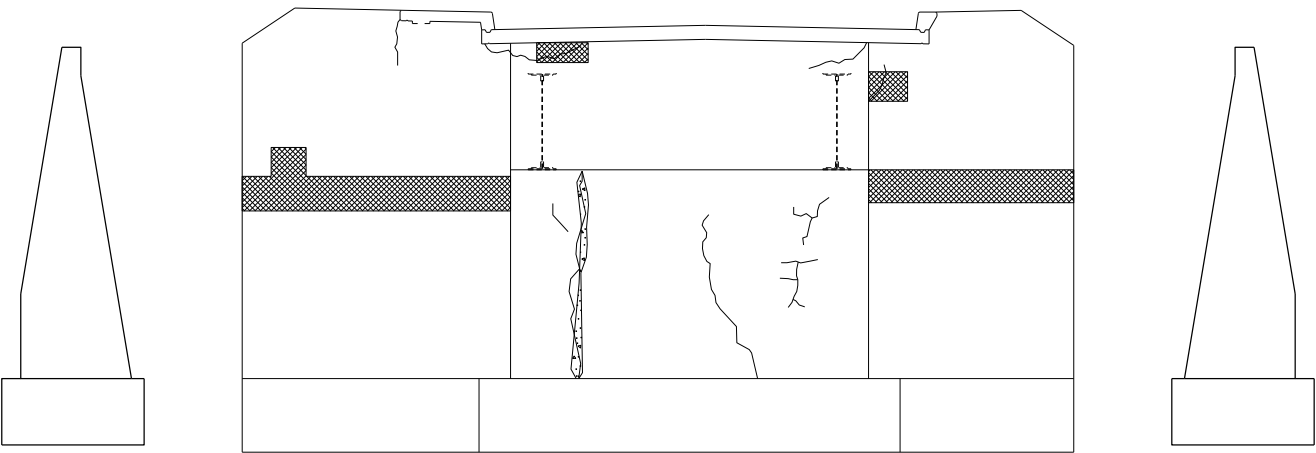
CONCRETE COATING-SUBSTRUCTURE
CROSSING OHIO RIVER

ROUTE
US 62X

ITEM NO. 9-10091.00
SHEET NO. S31

COUNTY OF MASON
DRAWING NUMBER 28962

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25



ABUTMENT A6 – WEST ELEVATION



ABUTMENT A6 – SOUTH ELEVATION

ABUTMENT A6 – EAST ELEVATION

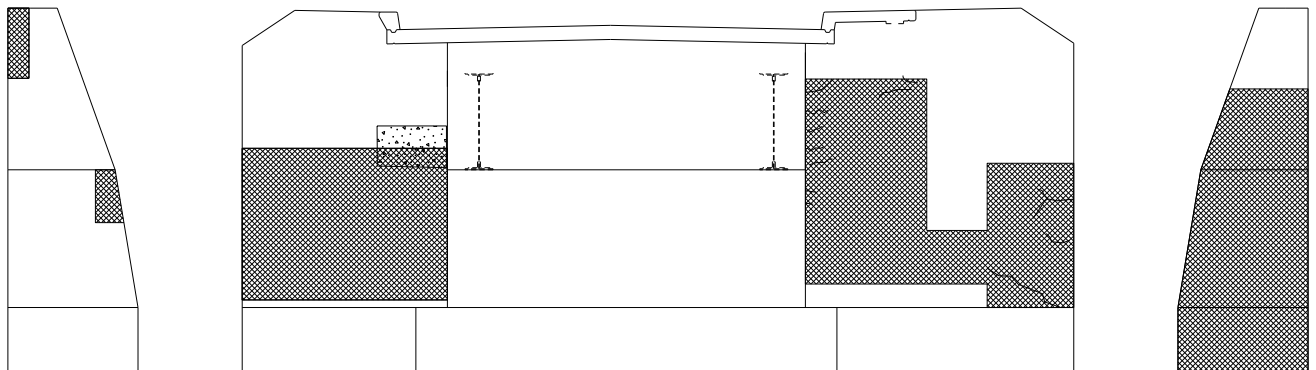
Repair 9 - Concrete Patching and Coating - Substructure

1. The total anticipated quantity for Abutment M4 patching is 263 square feet, including a 10% contingency. The total anticipated quantity for Abutment A6 patching is 48 square feet, including a 10% contingency.
2. See Special Note for Epoxy Crack Injection.
3. See Special Note for Concrete Patching Repair.
4. Install galvanic anodes in accordance with the Special Note for Embedded Galvanic Anodes.
5. Apply Concrete Coating in accordance with the Special Note for Concrete Coating.

LEGEND

-  - Existing Patch
-  - Proposed Concrete Patching

REPAIR 9
CONCRETE PATCHING AND COATING - SUBSTRUCTURE



ABUTMENT M4 – EAST ELEVATION

ABUTMENT M4 – NORTH ELEVATION

ABUTMENT M4 – WEST ELEVATION



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

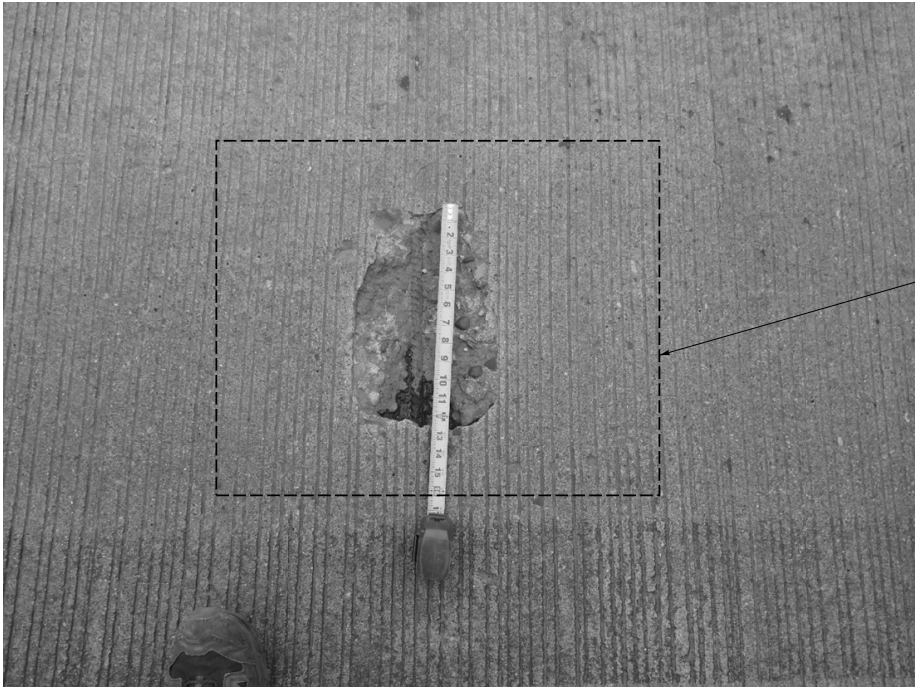
DATE: 05/06/2025	CHECKED BY
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

CONCRETE COATING-SUBSTRUCTURE
CROSSING OHIO RIVER

ROUTE
US 62X

ITEM NO. 9-10091.00
SHEET NO. S32

COUNTY OF MASON
DRAWING NUMBER 28962



Patch Spalled Areas of Superstructure

Location	SF
M7-M5 Underside	2
Contingency	28
Total	30

REPAIR 10
CONCRETE REPAIRS - SUPERSTRUCTURE

- Repair 10 - Concrete Patching Repairs
1. Patch isolated concrete spalls in the deck.
 2. Refer to Special Note for Concrete Patching



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025	CHECKED BY
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

CONCRETE PATCHING REPAIR-SUPER
CROSSING OHIO RIVER

ROUTE
US 62X

ITEM NO. 9-10091.00
SHEET NO. S33

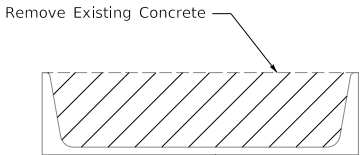
COUNTY OF MASON
DRAWING NUMBER 28962

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25



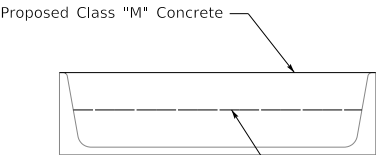
Repair Deteriorated Concrete Stair Treads

- Repair 11 - Sidewalk Concrete Patching
- 1. Replace sidewalk step concrete for 10 steps on the Aberdeen side and 3 steps on the Maysville side.
 - 2. Class "M" concrete is to be used for sidewalk step repairs.
 - 3. Concrete removal and welded wire reinforcement shall be considered incidental to the Unit Price bid for Concrete Class M1.



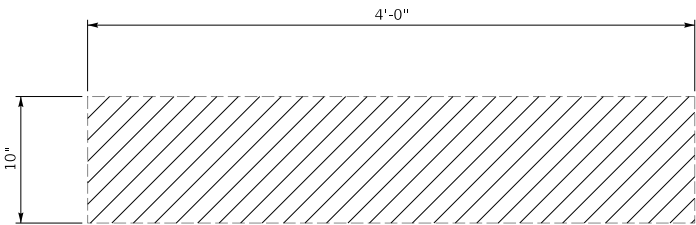
Existing C10x15.3 (Clean and Reuse)

EXISTING SECTION



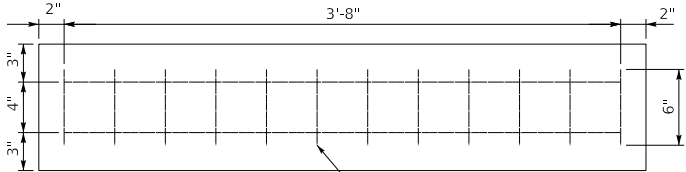
4X4 Welded Wire Fabric (WWF) Centered in New Concrete

PROPOSED SECTION



— Removal Limits

EXISTING PLAN



4X4 WWF Centered in New Concrete

PROPOSED PLAN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION	DATE

DATE PLOTTED: 05/06/2025



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25

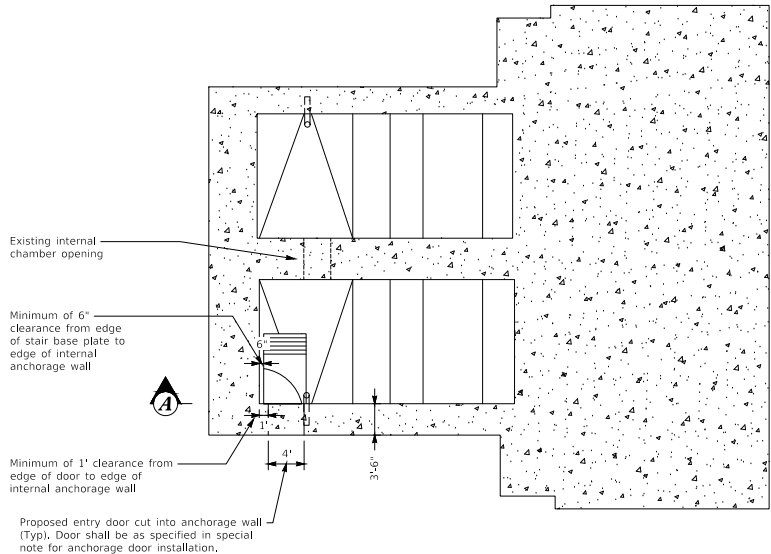
DATE: 05/06/2025	CHECKED BY:
DESIGNED BY: D. Liem	J. Whelan
DETAILED BY: D. Liem	J. Whelan

SIDEWALK CONCRETE PATCHING
CROSSING OHIO RIVER

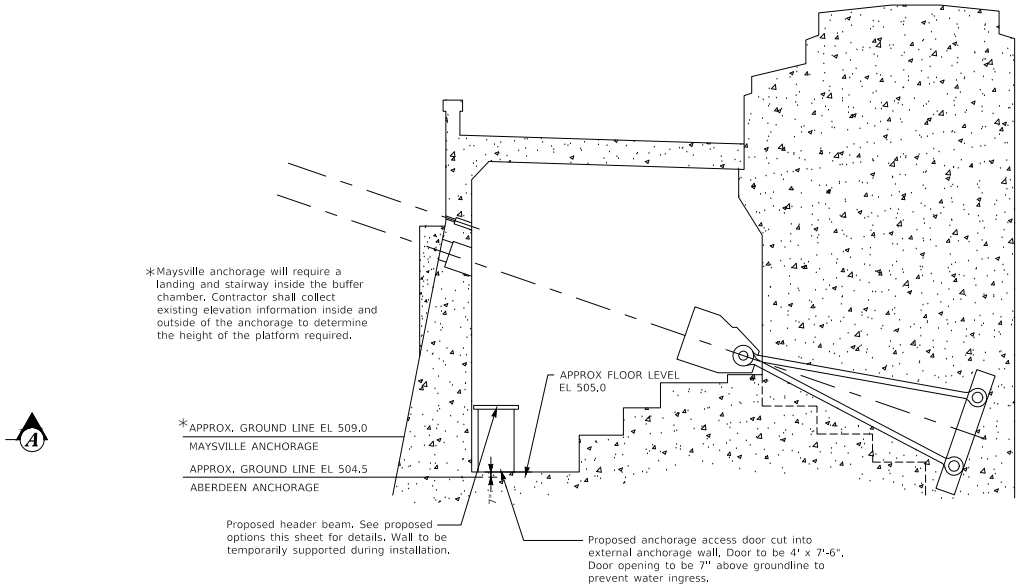
ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S34

COUNTY OF
MASON
DRAWING NUMBER
28962

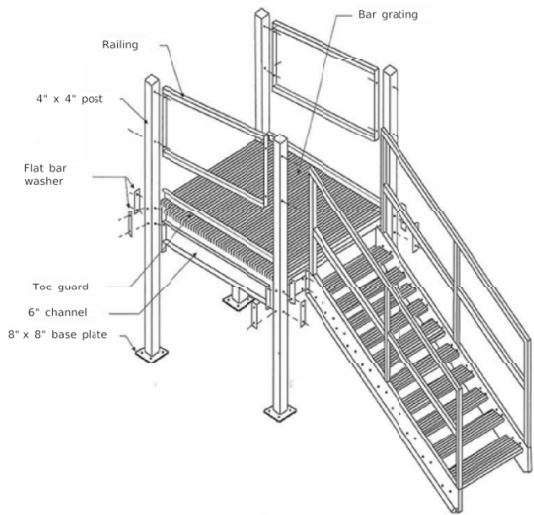


TYPICAL ANCHORAGE PLAN



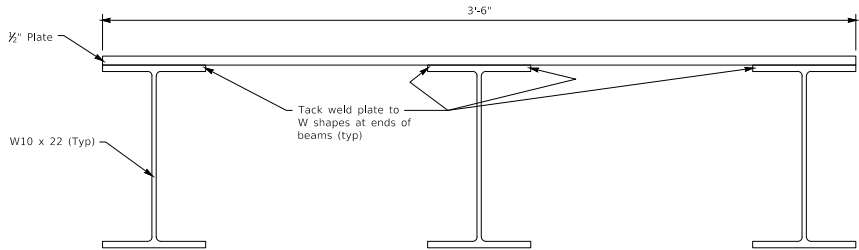
SECTION A-A

- GENERAL NOTES:
1. Prior to preparing any shop drawings, the contractor shall take all necessary field measurements of the existing structures to verify the existing conditions and to ensure the proper fit of the new structural steel components to be installed under this contract.
 2. Refer to special note for anchorage door installation for additional requirements.

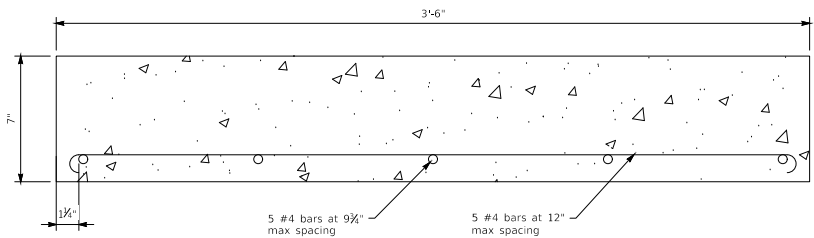


MAYSVILLE ANCHORAGE PROPOSED PREFABRICATED LANDING AND STAIRWAY

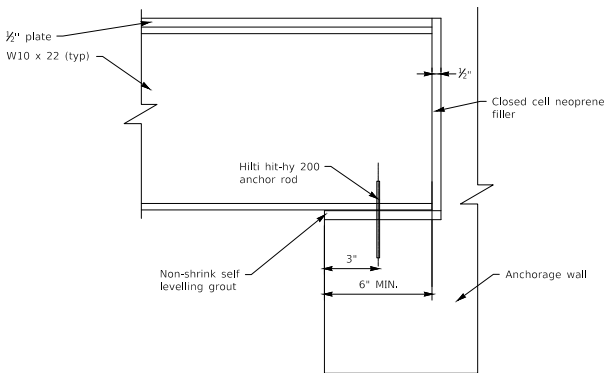
NOTE:
Non-shrink grout to be used under base plates to provide level anchoring surface



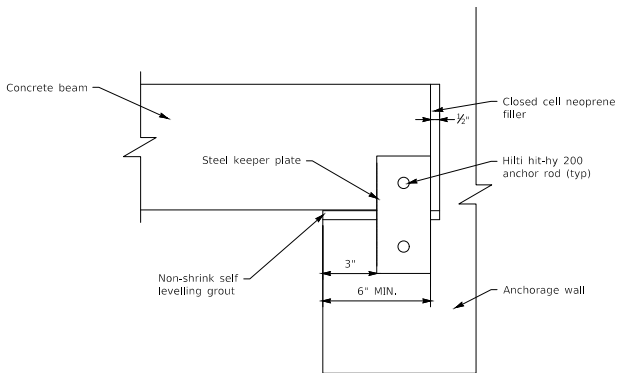
OPTION 1: 3 W10 x 22 HEADER BEAMS FOR ANCHORAGE DOORS



OPTION 2: PRECAST CONCRETE HEADER BEAM FOR ANCHORAGE DOORS



OPTION 1 END DETAIL AT ANCHORAGE WALL



OPTION 2 END DETAIL AT ANCHORAGE WALL



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: BimsonE

DATE PLOTTED: 02/05/2025

AECOM

PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

FILE NAME: KYTC-SIMON-KENTON-BRIDGE_WIP

DATE: 05/06/2025
DESIGNED BY: N.KIRN
DETAILED BY: M.BULMER

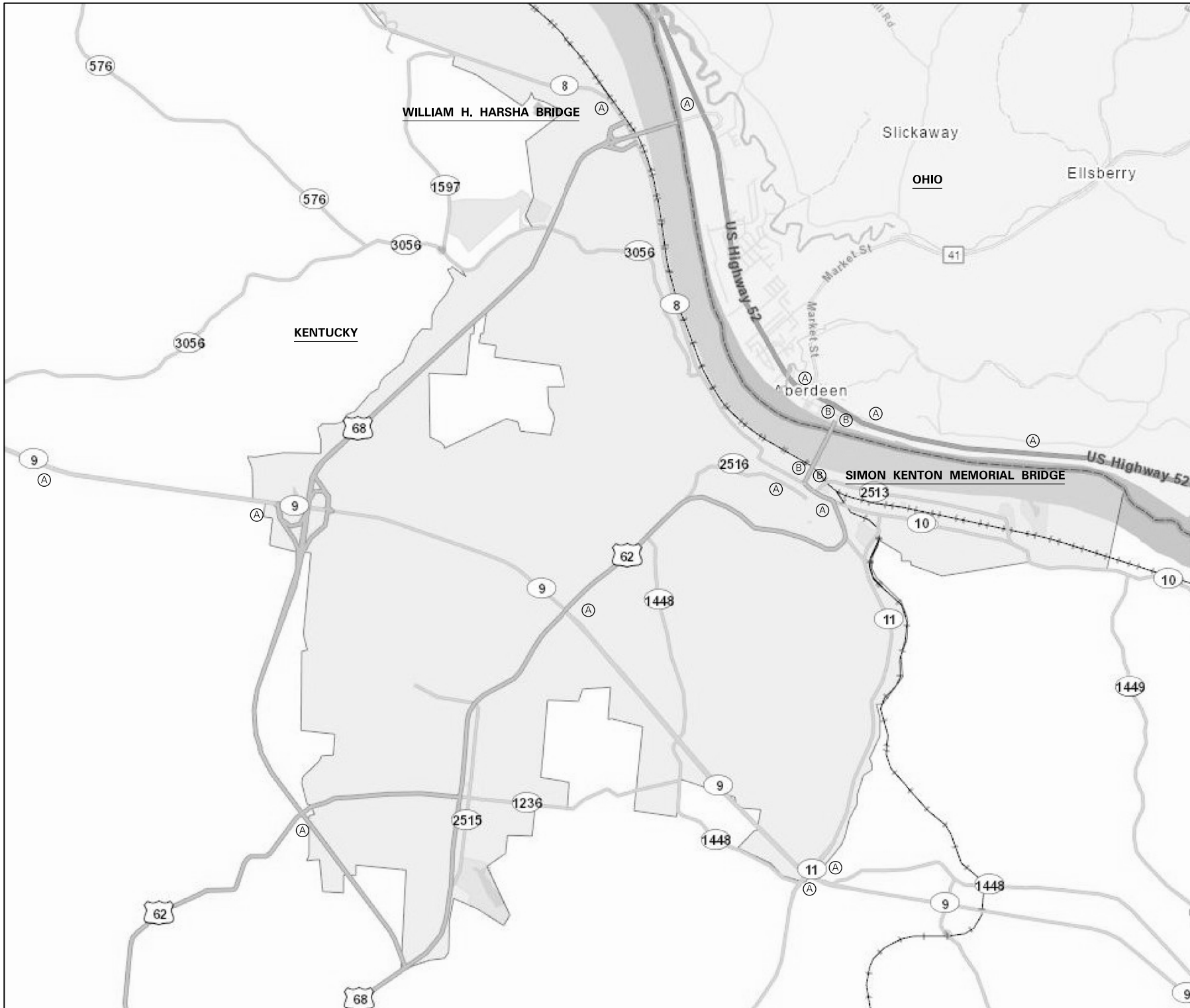
CHECKED BY
J.PUDLEINER
N.KIRN

ANCHORAGE DOOR INSTALLATION
CROSSING
OHIO RIVER

ROUTE
US 62X

ITEM NO.
9-10091.00
SHEET NO.
S35

COUNTY OF
MASON
DRAWING NUMBER
28962

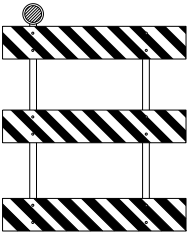


Portable Changeable Message Sign

(A)



R11-2
(48" x 30")



Type III Barricade
(Two Sets of Two Barricades at Each Location)

(B)



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



USER: LiemD

REVISION

DATE



PREPARED BY
AECOM
500 West Jefferson Street
Suite 1600
Louisville, KY 40202-4251
www.aecom.com

DATE: 05/06/2025

DESIGNED BY: D. Liem
DETAILED BY: D. Liem

CHECKED BY

J. Whelan
J. Whelan

SIMON KENTON DETOUR MAP

CROSSING
OHIO RIVER

ROUTE

US 62X

ITEM NO.

9-10091.00

SHEET NO.
S36

COUNTY OF

MASON

DRAWING NUMBER
28962

DATE PLOTTED: 05/06/2025

FILE NAME: _ACM-G-FS_ISO_ANSI_D_LAND 05-06-25