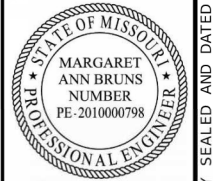


NOTE:
PAVEMENT MARKING REMOVAL METHOD SHALL BE LIMITED TO WATERBLASTING ONLY. GRINDING AND MARRING THE PAVEMENT/BRIDGE SURFACE SHALL NOT BE ALLOWED.

DISCLAIMER
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ROUTE 74 STATE MO
DISTRICT SE SHEET NO. 6

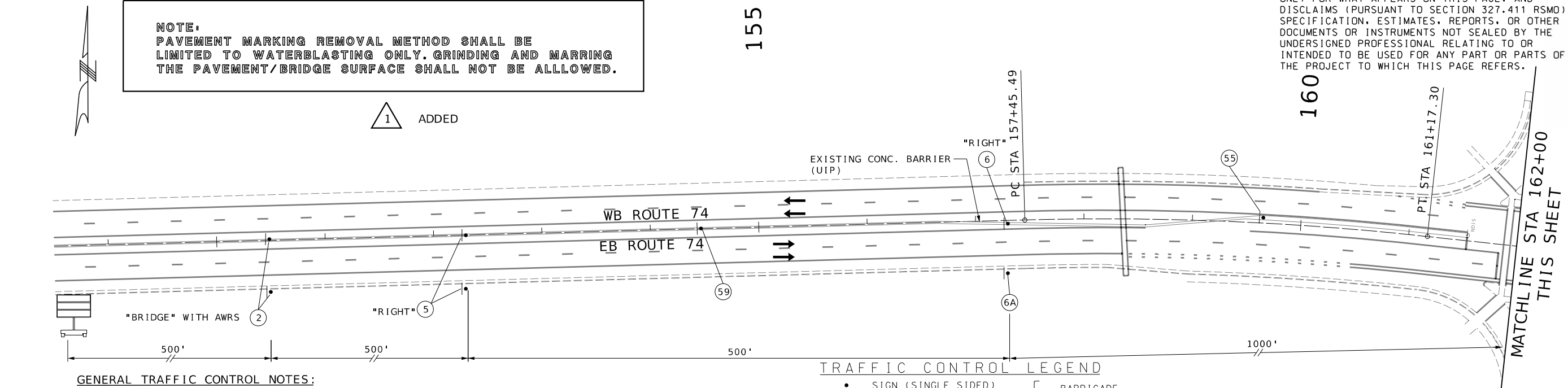
COUNTY
CAPE GIRARDEAU
JOB NO.
J9P3308
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION
1/2025	R001

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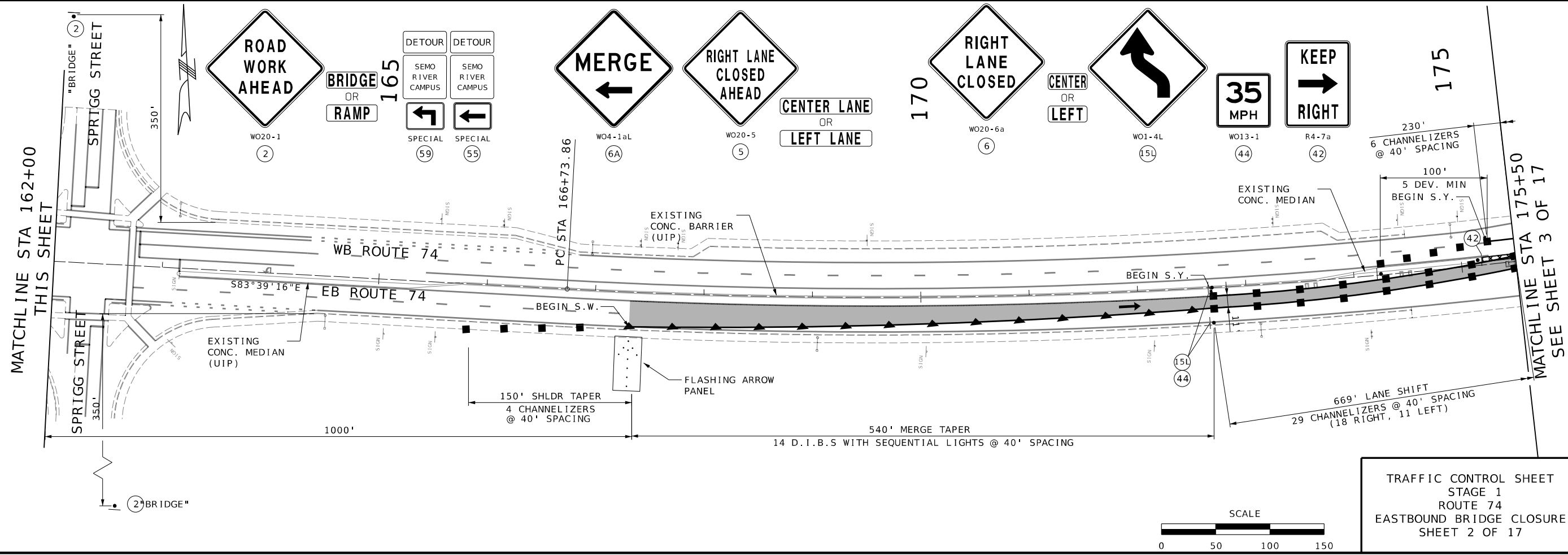


GENERAL TRAFFIC CONTROL NOTES:

ANY EXISTING SIGN THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
PLACEMENT OF TRAFFIC CONTROL SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
CMS MESSAGES AND LOCATIONS AS APPROVED BY ENGINEER.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- DIRECTIONAL INDICATOR BARRICADES (D.I.B.)
- TUBULAR MARKER
- CHANNELIZER
- BARRICADE
- WORK AREA
- REMOVED PRIOR TO STAGE WORK
- CHANGEABLE MESSAGE BOARD
- FLASHING ARROW PANEL
- ADVANCED WARNING RAIL SYSTEM
- LEFT SIDE OF ROAD
- RIGHT SIDE OF ROAD



TRAFFIC CONTROL SHEET
STAGE 1
ROUTE 74
EASTBOUND BRIDGE CLOSURE
SHEET 2 OF 17



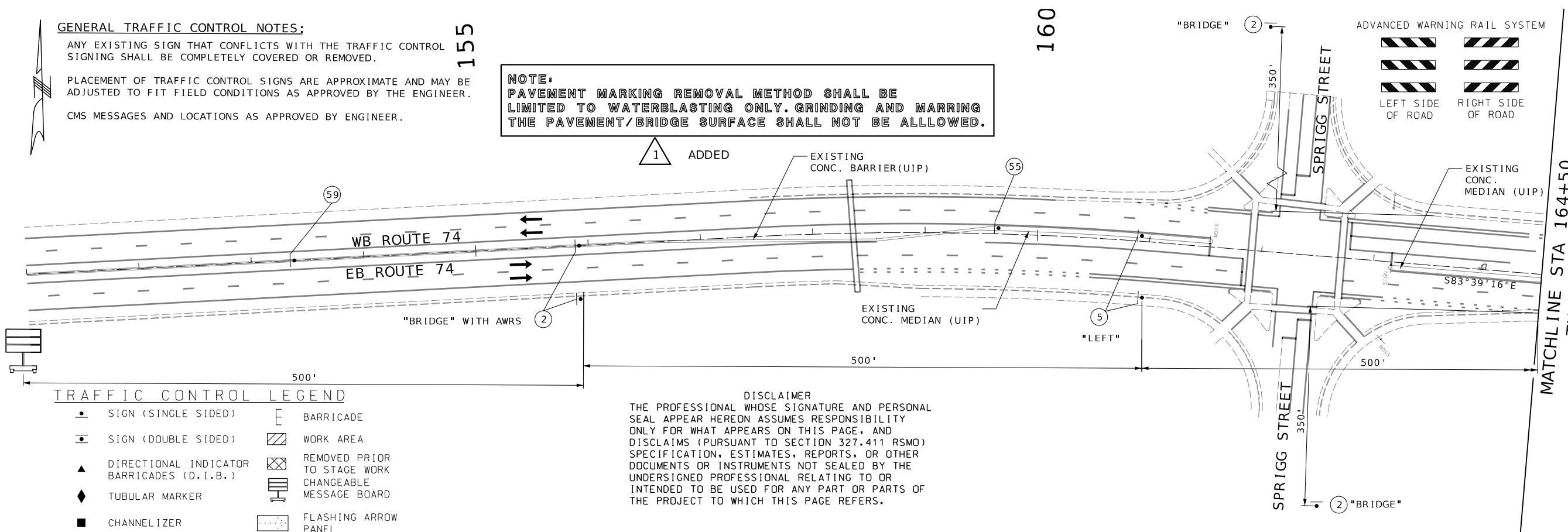
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TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- ◻ SIGN (DOUBLE SIDED)
- ▲ DIRECTIONAL INDICATOR BARRICADES (D.I.B.)
- ◆ TUBULAR MARKER
- CHANNELIZER
- ▭ BARRICADE
- ▨ WORK AREA
- ▩ REMOVED PRIOR TO STAGE WORK
- ▧ CHANGEABLE MESSAGE BOARD
- ▨ FLASHING ARROW PANEL

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ROUTE 74 MO
DISTRICT SE SHEET NO. 11

COUNTY
CAPE GIRARDEAU
JOB NO.
J9P3308
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION
1/2025	R001

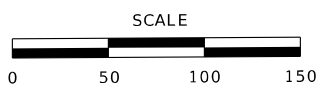
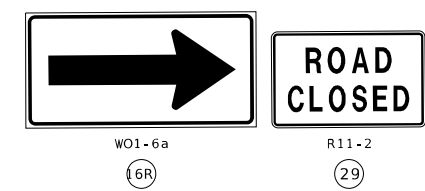
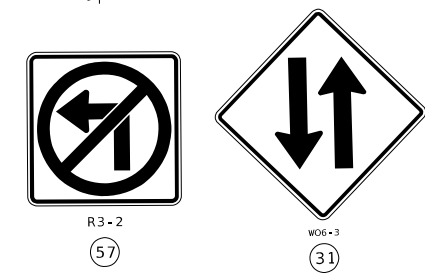
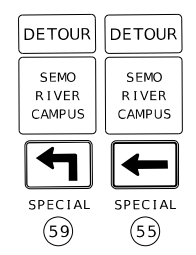
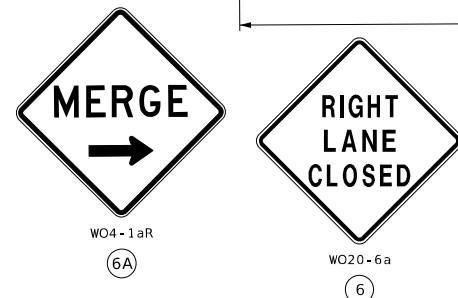
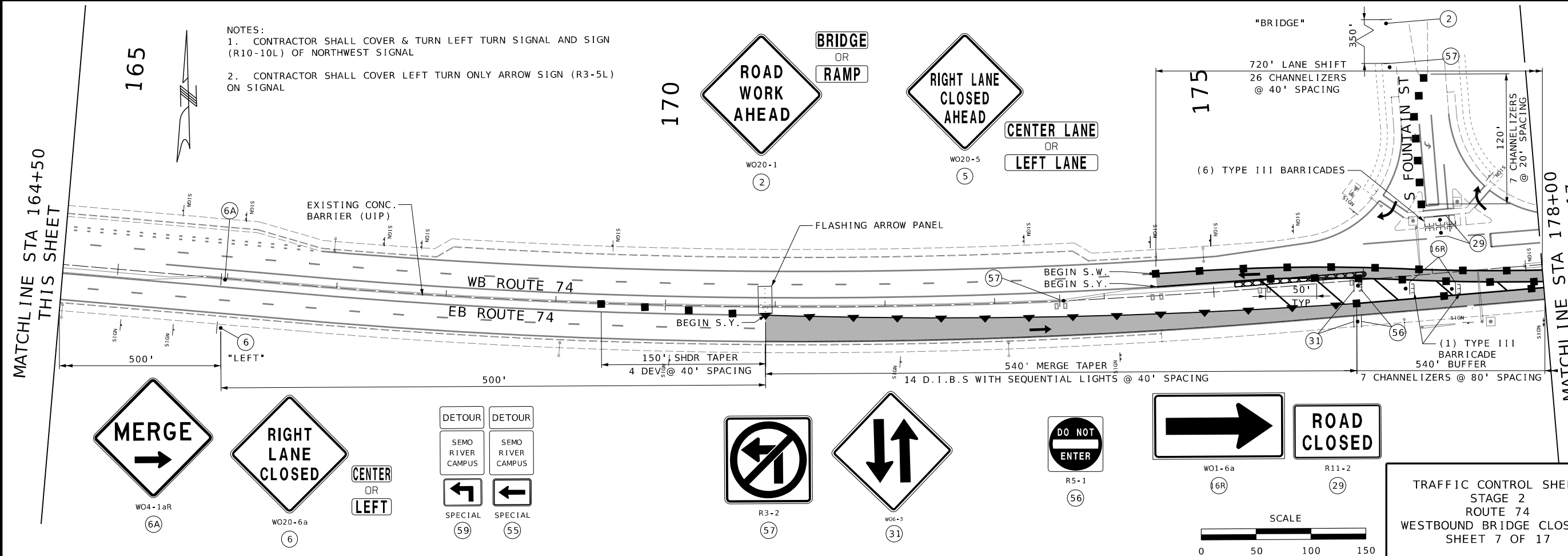
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NOTES:

- CONTRACTOR SHALL COVER & TURN LEFT TURN SIGNAL AND SIGN (R10-10L) OF NORTHWEST SIGNAL
- CONTRACTOR SHALL COVER LEFT TURN ONLY ARROW SIGN (R3-5L) ON SIGNAL



TRAFFIC CONTROL SHEET
STAGE 2
ROUTE 74
WESTBOUND BRIDGE CLOSURE
SHEET 7 OF 17

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
 Seismic Performance Category = C
 Acceleration Coefficient = 0.36g
 Bridge Deck Rating = 6

2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)

Design Loading:

HS20-44 Modified (1993)
 Military 24,000 lb Tandem Axle (1993)

Design Unit Stresses:

Class B-1 Concrete (Barrier) $f'_c = 4,000$ psi
 Reinforcing Steel (Grade 60) $f_y = 60,000$ psi
 Structural Steel (ASTM A709 Grade 50) $f_y = 50,000$ psi

Joint Filler:

All joint filler shall be in accordance with Sec. 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before finalizing the shop drawings.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations through the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Structural Steel Protective Coating:

Protective Coating: System G in accordance with Sec 1080.

Coating Limits: All existing structural steel 10 feet from end of girders at Bents No. 1, 4, 5, 9, 12, & 15 shall be recoated. Within these limits, items to be recoated shall include girders, floor beams, stiffeners and miscellaneous structural steel items. Additionally, all web extension and fin plate anchorages shall be recoated.

Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1080 and Sec 1081 for Recoating of Structural Steel (System G) with inorganic zinc primer. The cost of surface preparation will be considered completely covered by the contract unit price per sq. foot for Surface Preparation for Recoating Structural Steel.

Prime Coat: The cost of the prime coat will be considered completely covered by the contract unit price per sq. foot for Field Application of Inorganic Zinc Primer.

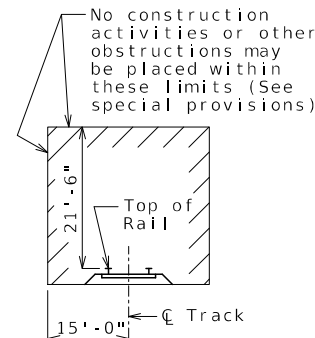
Field Coats: The color of the field coats near the bents shall be Brown (Federal Standard #30045) and the field coats of web extension and fin plate anchorages shall be Gray (Federal Standard #26373). The cost of the intermediate field coat will be considered completely covered by the contract unit price per sq. foot for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the contract unit price per sq. foot for Finish Field Coat (System G).

Concrete Protective Coating:

Protective coating for concrete bents and piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

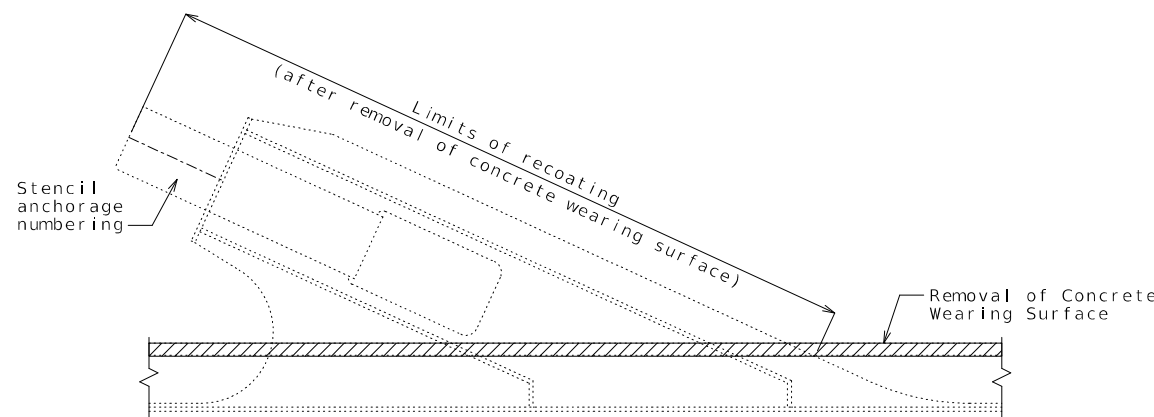
Estimated Quantities		187,045
Item		Total
Removal of Concrete Wearing Surface	sq. foot	193,303
Removal of Existing Expansion Joint & Adjacent Concrete	linear foot	83
Removal of Existing Bearings	each	4
Remove and Replace Barrier	linear foot	31
Furnish Polyester Polymer Concrete Wearing Surface	cu. yard	1,979
Place Polyester Polymer Concrete Wearing Surface	sq. yard	21,479
Penetrating Concrete Sealer	sq. yard	489
Sealer for PPC Wearing Surface	linear foot	12,682
Substructure Repair (Unformed)	sq. foot	800
Epoxy Pressure Injecting	linear foot	1,800
Replace Conduit and Junction Boxes	lump sum	1
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Surface Preparation for Recoating Structural Steel	sq. foot	24,400
Field Application of Inorganic Zinc Primer	sq. foot	24,400
Intermediate Field Coat (System G)	sq. foot	24,400
Finish Field Coat (System G)	sq. foot	24,400
Repair Restrainer Cable Sheath	lump sum	1
Reset Cable Ties	lump sum	1
Remove and Replace Modular Joint Hold Down Springs	each	11
Remove and Replace Modular Joint Control Springs	each	96
Remove and Replace Tower Inspection Hatch Door Hinges	each	2
Remove and Replace Shock Transmission Unit	each	1
Repair Cable Protective Sheathing	linear foot	20
HLMR Bearing	each	4
Modular Expansion Joint System	linear foot	83
Remove and Replace Modular Joint Seal	linear foot	80
Clean Expansion Joint	linear foot	329
Navigation Lighting System	lump sum	1
Bridge Lighting	lump sum	1
Aviation Lighting System	lump sum	1

Added



MINIMUM CONSTRUCTION CLEARANCES

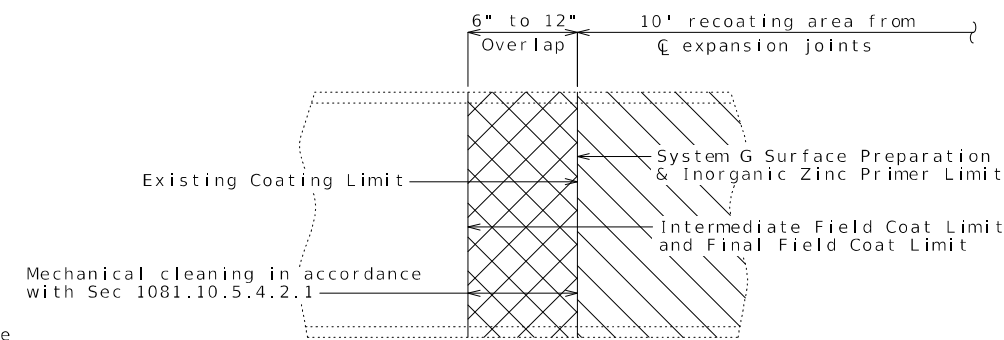
(Normal to railroad)
(Not to scale)



PART ELEVATION SHOWING LIMITS OF ANCHORAGE FIN RECOATING
(128 Locations)

Notes:
 Recoating to occur after existing concrete wearing surface is removed and prior to new PPC overlay installation.

Anchorage number to be stenciled onto roadway side of assembly with 10" high black lettering. See Sheet No. 5 for anchorage numbering.



PART ELEVATION SHOWING LIMITS OF PAINT OVERLAP
(Vertical or horizontal paint limit. Horizontal limit shown)

Limits of Paint Overlap: System G shall overlap the existing coating between 6 inches and 12 inches in order to achieve maximum coverage at the paint limit of each complete system near the expansion and contraction areas. The final field coating shall be masked to provide crisp, straight lines and to prevent overspray beyond the overlap required.

GENERAL NOTES AND QUANTITIES

Sheet No. 2 of 22

REVISED

Detailed Apr. 2024
 Checked Apr. 2024

Note: This drawing is not to scale. Follow dimensions.



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 01/09/2025 2:48:45 PM
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 MO PE-2018003121

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 1/9/2025

ROUTE 74 STATE MO

DISTRICT BR SHEET NO. 2

COUNTY
 CAPE GIRARDEAU

JOB NO.
 J9P3308

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
 A50763

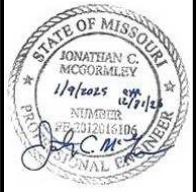
DATE	DESCRIPTION
01-13-25	REVISED ESTIMATED QUANTITIES

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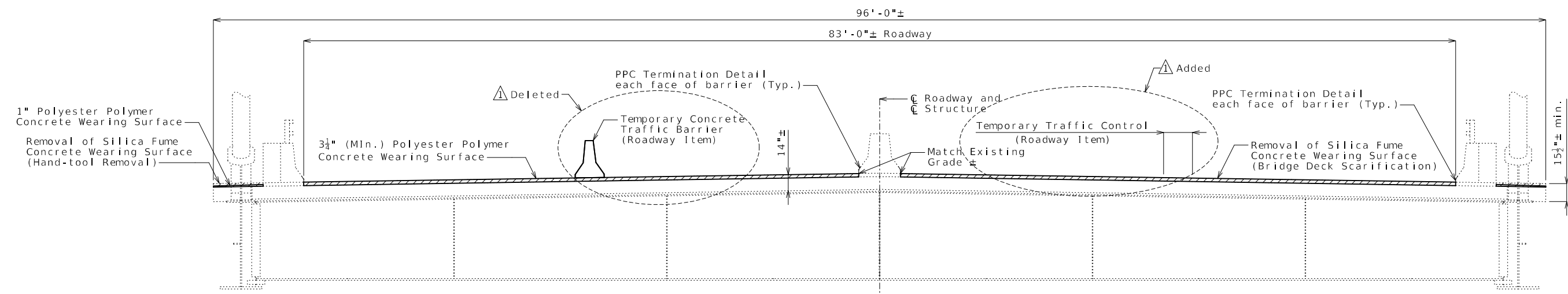
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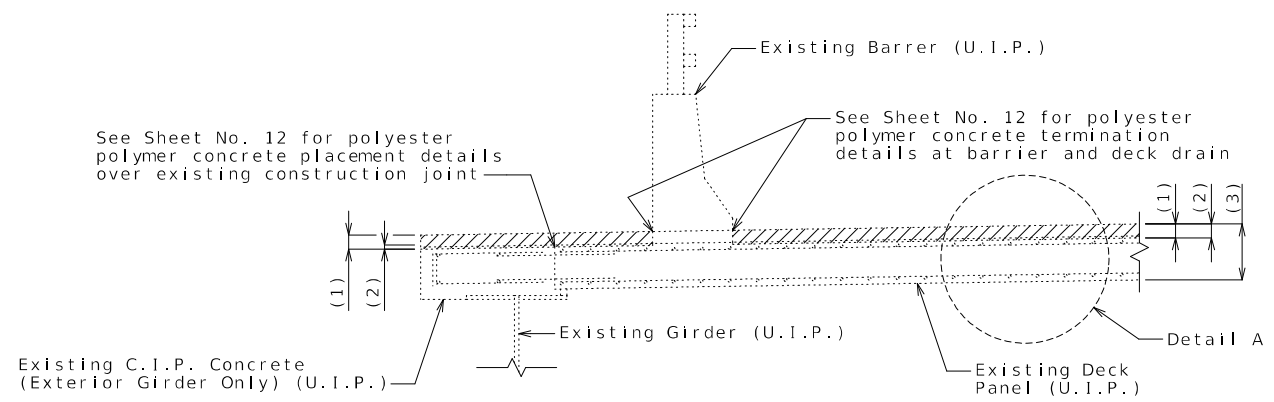
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DATE PREPARED 1/9/2025	
ROUTE 74	STATE MO
DISTRICT BR	SHEET NO. 11
COUNTY CAPE GIRARDEAU	
JOB NO. J9P3308	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A50763	



TYPICAL SECTION THRU EXISTING DECK
(UNIT 1)

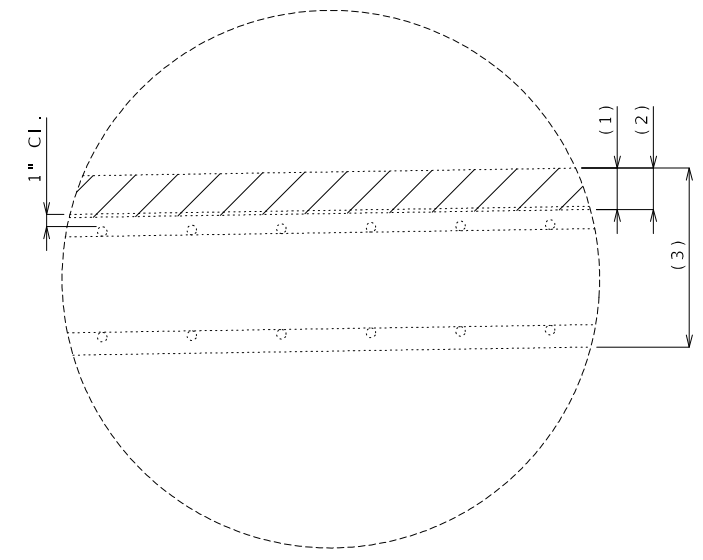


WEARING SURFACE REPLACEMENT

- (1) Removal of existing 3"± silica fume concrete wearing surface plus 1/4"± of existing deck. Contractor shall use caution to avoid damaging reinforcement bars in existing deck panels.
- (2) Polyester polymer concrete wearing surface:
1" minimum on overhang
3/4" minimum on roadway
- (3) Original depth of deck and wearing surface

Note: Maintain original grade with deck sloping towards drains and overhang sloping away from barrier.

Furnish PPC Material volumetric quantity is based on plan dimensions shown on this sheet. (See special provisions)



DETAIL A

Note:
Remove and reinstall railings near Int. Bents No. 2 & 3. This work shall include removing the railing, storing the railing when not in use, and reinstalling the railing as part of the overlay replacement. The railing shall be re-anchored and detailed with the new PPC overlay as directed by the engineer. This work, including all materials and equipment, shall be included in the contract unit price for Removal of Concrete Wearing Surface.

POLYESTER POLYMER CONCRETE WEARING SURFACE DETAILS

REVISED

Detailed Apr. 2024
Checked Apr. 2024

Note: This drawing is not to scale. Follow dimensions. Sheet No. 11 of 22

DATE	DESCRIPTION
01-13-25	REVISED TEMPORARY TRAFFIC BARRIER

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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ENGINEERS ARCHITECTS MATERIALS SCIENTISTS
WJE
Wiss, Janney, Elstner Associates, Inc.
330 Pflingstein Road
Northbrook, Illinois 60062
847.272.7400 tel | 847.291.9599 fax
www.wje.com

Certificate of Authority
No. 001448
Exp. 12/31/24



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 MO PE-2018003121

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ROUTE 74	STATE MO
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DISTRICT BR	SHEET NO. 13
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COUNTY
 CAPE GIRARDEAU

JOB NO.
 J9P3308


CONTRACT ID.

PROJECT NO.

BRIDGE NO.
 A50763

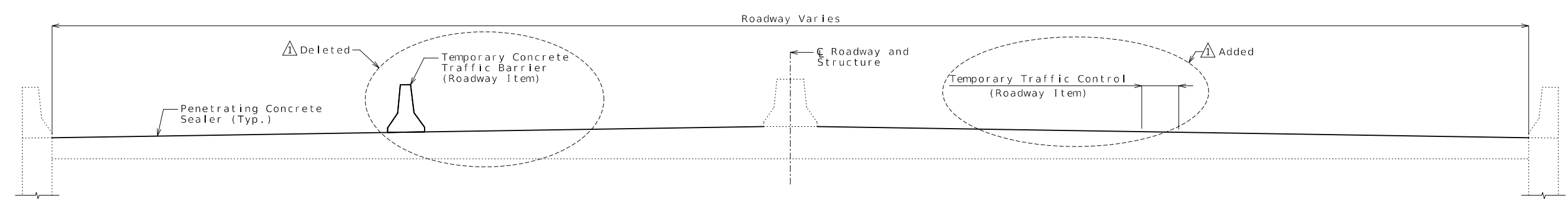
DATE	DESCRIPTION
01-13-25	REVISED TEMPORARY TRAFFIC BARRIER

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APPROACH SLAB CROSS SECTION

APPROACH SLAB REPAIR DETAILS

REVISED

Detailed Apr. 2024
 Checked Apr. 2024

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Sheet No. 13 of 22