STATE OF MAINE DEPARTMENT OF TRANSPORTATION



MADISON - ANSON SOMERSET COUNTY BICENTENNIAL MEMORIAL BRIDGE

OVER

KENNEBEC RIVER

ROUTES 8,43,148 & 201A FEDERAL AID PROJECT NO. 2611300 PROJECT LENGTH 0.091 mi. BRIDGE NO. 2491

LIST OF DRAWINGS

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SHEET NUMBER

OF 10

UTILITIES

Anson-Madison Sanitary District
Bee Line TV, Inc.
Consolidated Communications Of Northern New England
FirstLight
Madison Electric Works
Somerset Telephone Company (TDS Of Maine)

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating traffic using temporary traffic signals.

PROJECT LOCATION	Bicentennial Memorial Bridge (#2491) over Kennebec River. Located on the Madison-Anson town line. Lat./Long. 44°47′56.1″ N 69°53′17.8″ W
PROGRAM AREA	Bridge Program
OUTLINE OF WORK	Bridge Deck Wearing Surface Replacement and General Repairs

SPECIFICATIONS Design: Load and Resistar

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

MATERIALS

Concrete (Unless Noted Otherwise)	Class "A"
Dainfanaina	
Reinforcing:	
Plain Reinforcing Steel	ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete	f'c = 4000ps
Reinforcing: Plain Reinforcing Steel	f y = 60,000 ps

TRAFFIC DATA

Current (2023) AADT	8160
Future (2043) AADT	
DHV - % of AADT	
Design Hour Volume	988
Heavy Trucks (% of AADT)	7
Heavy Trucks (% of DHV)	5
Directional Distribution (% of DHV)	
18 kip Equivalent P 2.0	539
18 kip Equivalent P 2.5	514
Design Speed (mph)	25

	ESTIMATED QUANTITIES		
TEM NO.	DESCRIPTION	QUANTITY	UNIT
1 II W 1 1 0 .	DESCRIPTION	QUANTITI	OWII
202,202	REMOVING PAVEMENT SURFACE	244	SY
202.30	REMOVING EXISTING CONCRETE WEARING SURFACE (2049 SY)		LS
202.30	REMOVING EXISTING CONCRETE WEARING SONTACE (2049 31)	· · · · · · · · · · · · · · · · · · ·	LS
407 2024	ISE NA LICUIX NOD ACDU DAVENENT (LIMAD)		T
403.2084	12.5 MM HIGHLY MOD ASPH PAVEMENT (HIMAP)	<u>253</u>	,
409.15	BITUMINOUS TACK COAT - APPLIED	74	G
500.14	WOULDEDEDDUANCE WATERDROOFING WEIGHDANE	,	, ,
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (2049 SY)	/	LS
515 . 21	PROTECTIVE COATING FOR CONCRETE SURFACES (65/ SY)	1	LS
518.391	REPAIRING GRANITE CURB JOINT AND BEDDING MORTAR	100	<u>LF</u>
<i>518.50</i>	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	1400	SF
518 . 51	REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL < 8 IN.	3250	SF
518 . 52	REPAIR OF UPWARD FACING SURFACES > = 8 IN.	5	CY
<i>520,242</i>	BRIDGE JOINT MODIFICATION TYPE 2		EA
609.384	RESETTING GRANITE BRIDGE CURB	100	LF
627 . 18	12" SOLID WHITE PAVEMENT MARKING	393	LF
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	<i>1518</i>	LF
627.77	REMOVING PAVEMENT MARKINGS	393	SF
627.78	TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	<i>545</i>	LF
629.05	HAND LABOR, STRAIGHT TIME	10	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	10	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
639.19	FIELD OFFICE TYPE B		EA
643.713	TEMPORARY EMERGENCY SYSTEM PREEMPTION MODIFICATION	1	LS
643.72	TEMPORARY TRAFFIC SIGNAL	 	LS
652.312	TYPE III BARRICADE	6	EA
652.35	CONSTRUCTION SIGNS	400	SF
652 . 361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER		HR
652 . 41	PORTABLE CHANGEABLE MESSAGE SIGN	<u> </u>	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	<u> </u>	LS
659.10	MOBILIZATION		LS
659.10	MOBILIZATION		LS
0/0 50	WODE ZONE CAFETY		10
910.50	WORK ZONE SAFETY		LS

GENERAL CONSTRUCTION NOTES

- I. For easements, construction limits, and right of way lines, refer to the Right of Way Map.
- 2. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- 3. Existing signs within the Project limits shall be removed and reset as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.
- 4. Protective Coating for Concrete Surfaces shall be applied to the following areas:
 - All exposed surfaces of concrete curbs and sidewalks, Fascias down to the drip notch,
 Top of abutment backwalls and wingwalls
- 5. Project information referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/contractors/
- 6. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- 7. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
 - a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.
- 8. Drill holes in the existing drains in accordance with Standard Details 502(16) through 502(21). This work will be considered incidental to related Contract Items. No separate payment will be made.
- 9. The Contractor shall install drains in accordance with Standard Details 502(04) and Standard Specifications Subsection 502.016. This work will be considered incidental to related Contract Items. No separate payment will be made.

DECK REPAIR NOTES

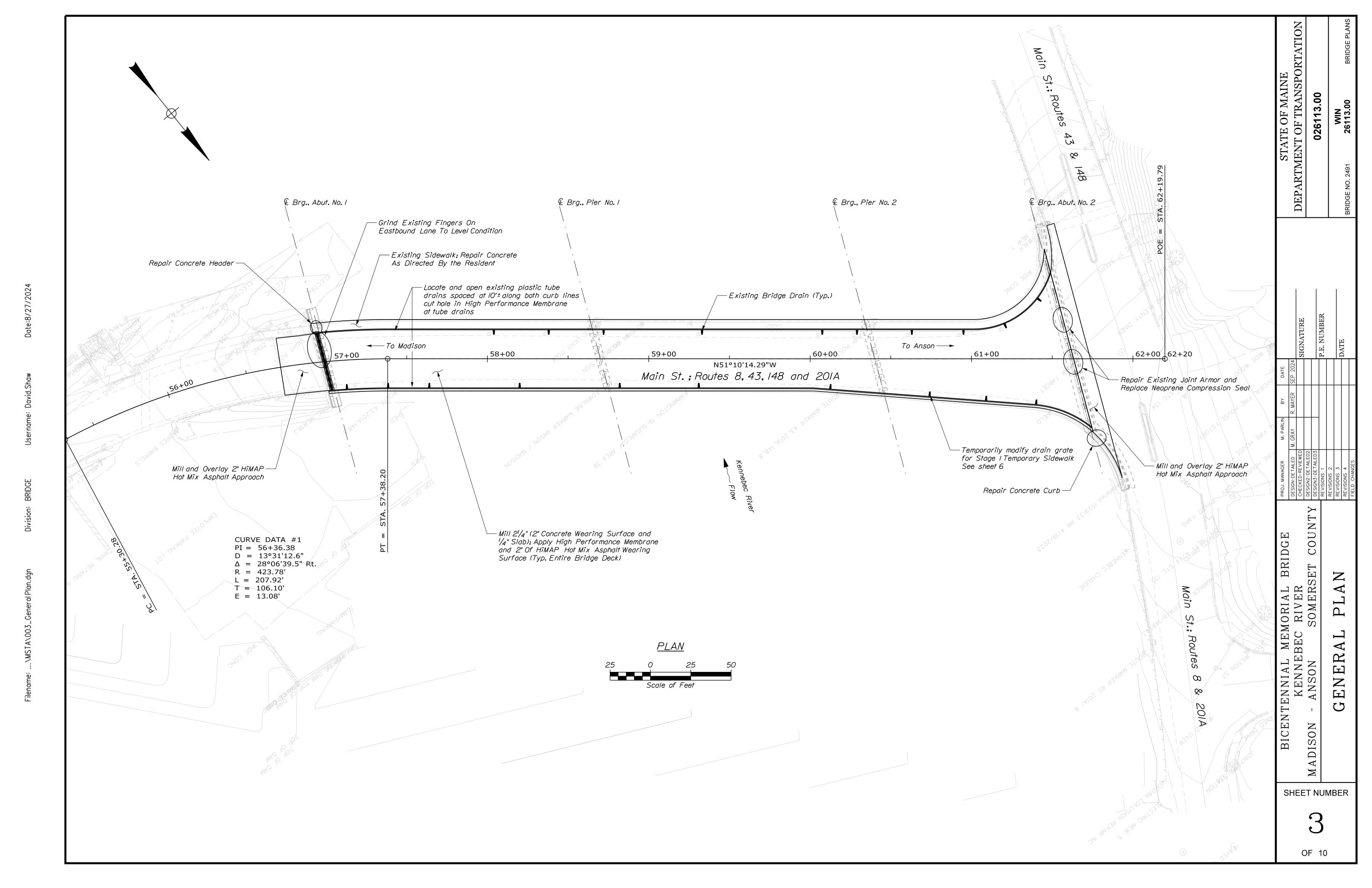
I. If the depth of deteriorated concrete extends to the reinforcing steel, remove concrete to a minimum of I" below the reinforcing steel.

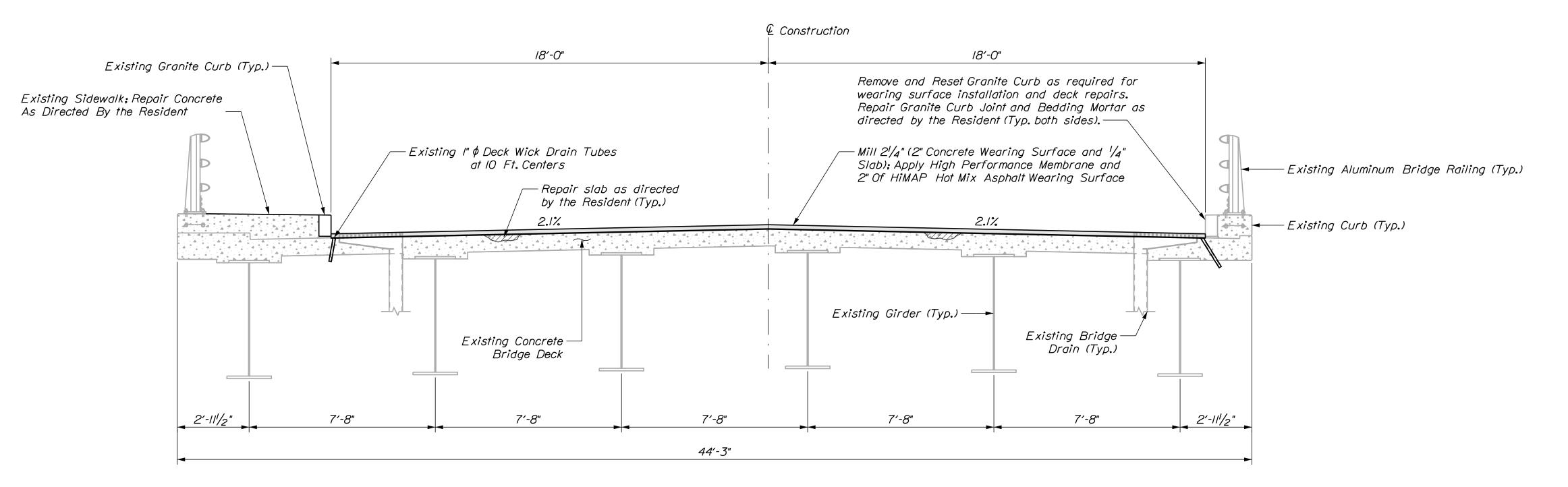
JOINT MODIFICATION NOTES

- I. Compression seals indicated to be replaced shall extend the full width of the bridge plus a distance of 6" beyond the outside face of the curb on each side of the bridge.
- 2. When a new joint is being installed, or an existing joint is being substantially modified and field conditions permit, the approach side of the joint shall be set 1/8" to 1/4" higher than the departure side of the joint. Under no circumstances shall the departing side of the joint be higher than the approach side of the joint.
- 3. The Contractor shall clean all bridge joints and deck drains as directed by the Resident. Cleaning joints and deck drains shall be considered incidental to the

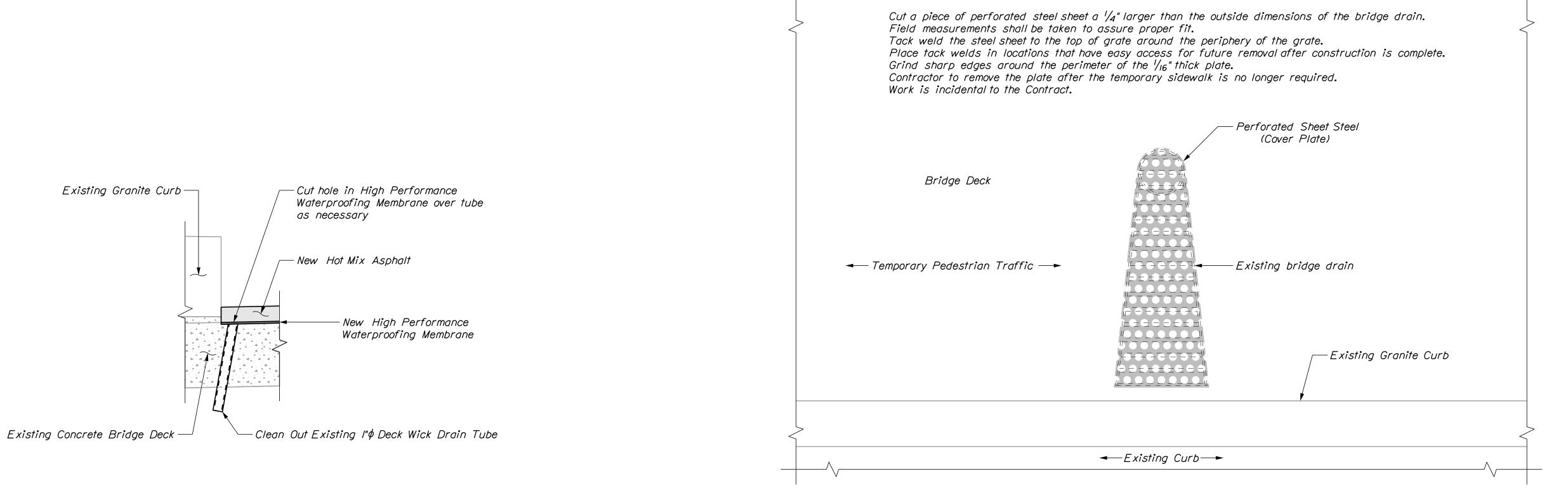
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OF 10





TYPICAL EXISTING BRIDGE SECTION



DECK WICK DRAIN SECTION

CONCEPTUAL BRIDGE DRAIN COVER PLATE DETAIL

Alternative methods of covering the drains with an ADA compliant cover may be approved at the discretion of the Resident.

SHEET NUMBER

ADISON

COUNTY

BRIDGE

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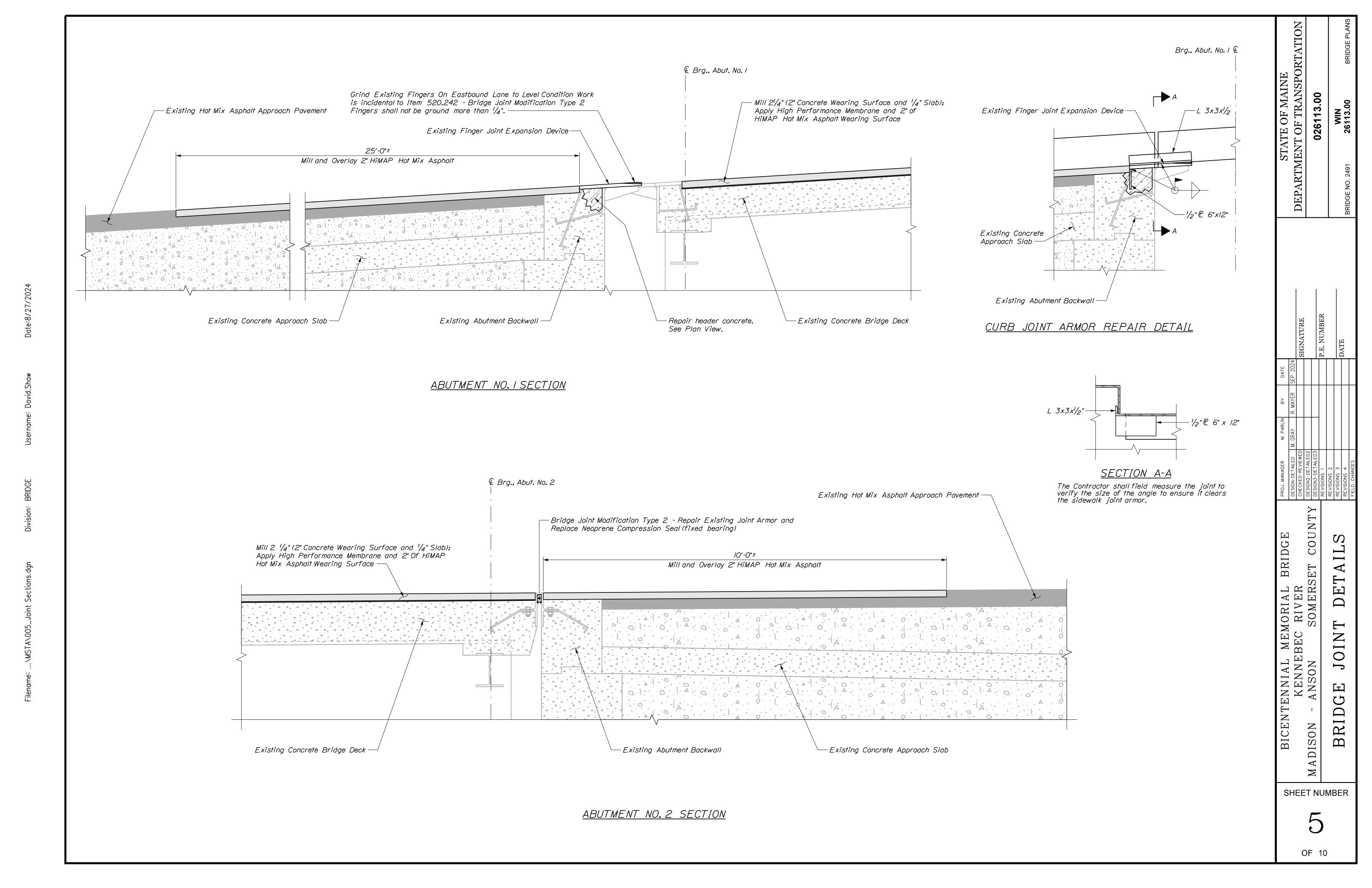
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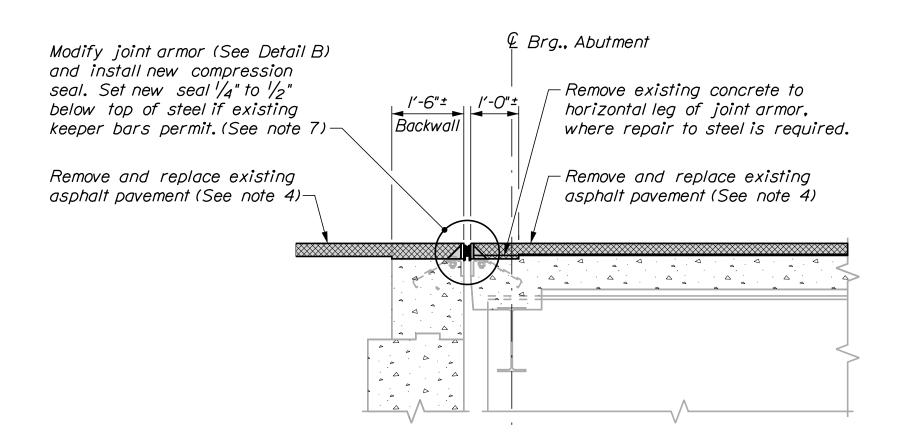
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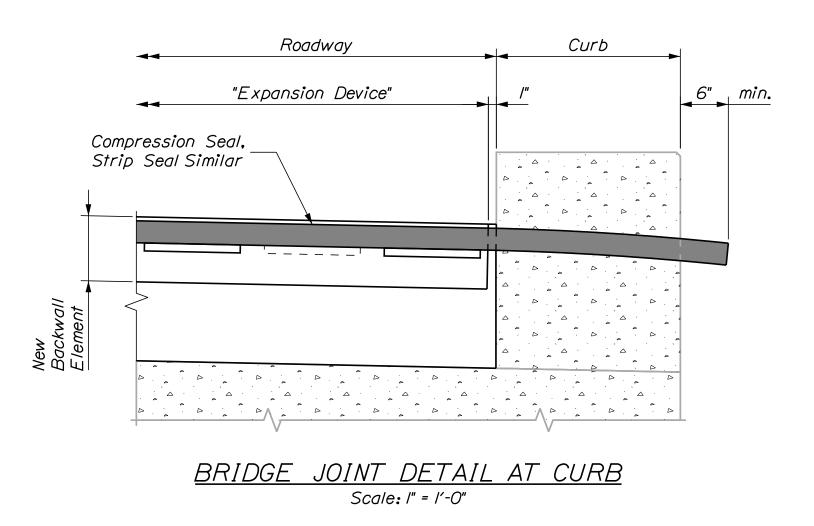


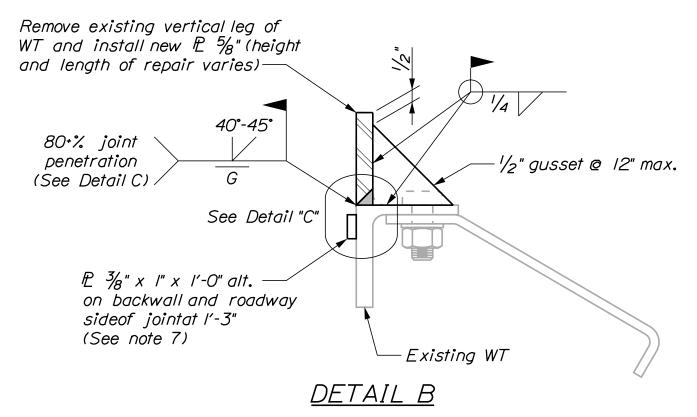


BRIDGE JOINT MODIFICATION TYPE 2

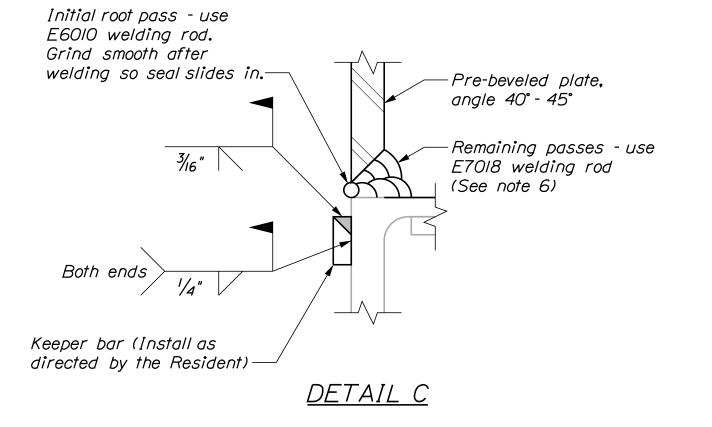
(See also "Compression Seal at Curb")

Limits of joint modification Compression seal - full deck width and completely through raised curbs plus six inch extensions per side; joint armor repair as directed by Resident.





One side of joint repair shown. Repair detail may be required at both sides of joint.

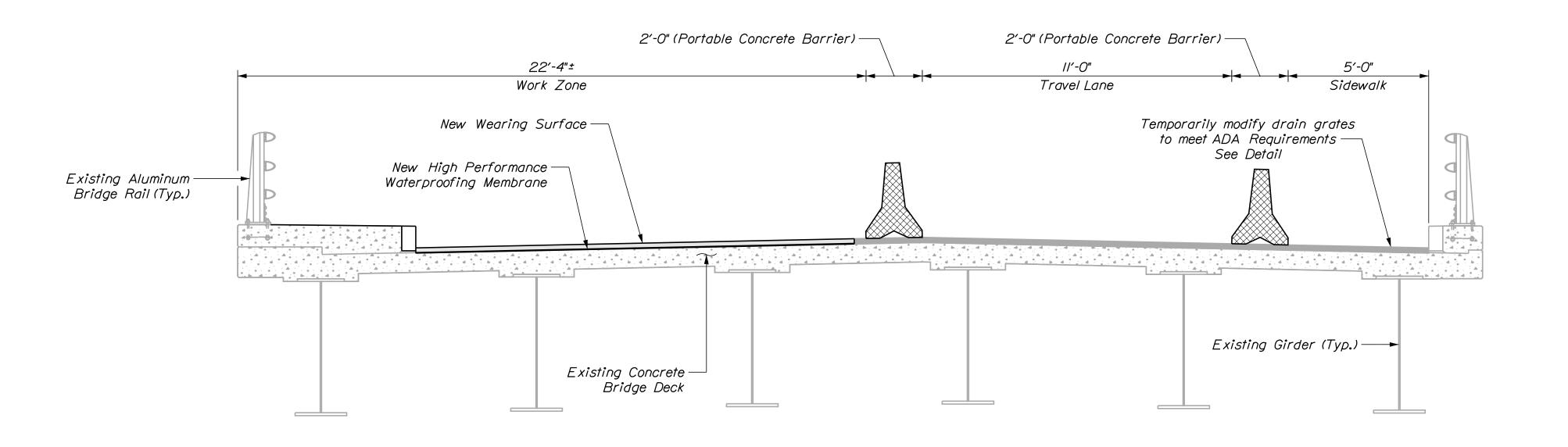


JOINT MODIFICATION TYPE 2 NOTES

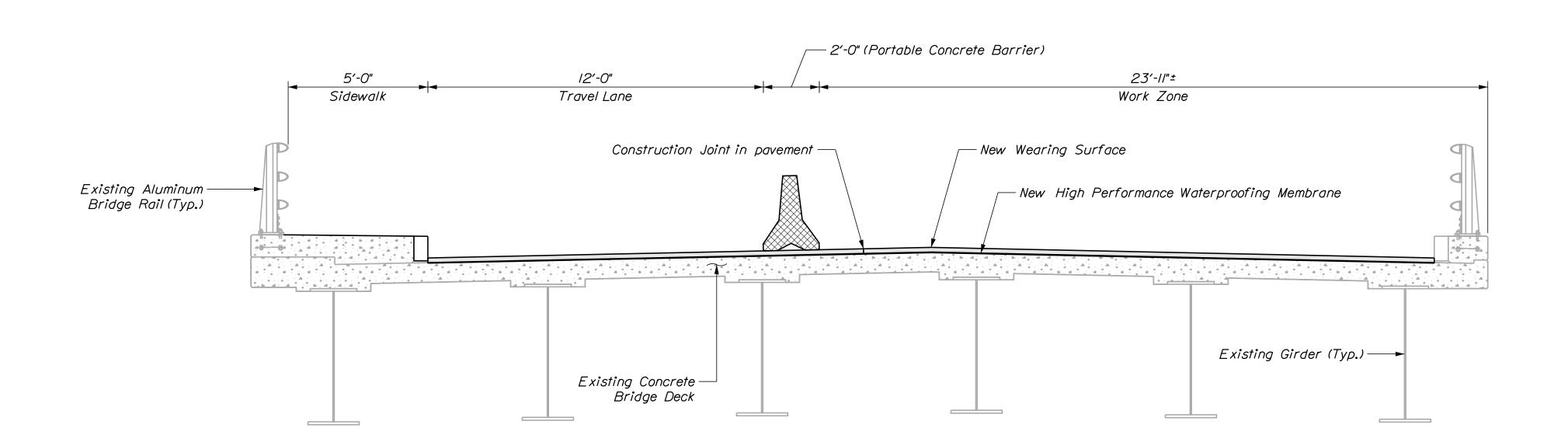
- I. Refer to Standard Details Section 520 for details and information not shown.
- 2. All new steel supplied for the bridge joint modification shall be uncoated.
- 3. The Contractor shall be fully responsible for selecting the appropriate seal based on the movement rating from the Qualified Products list.
- 4. The minimum movement rating for the compression seal shall be $\frac{1}{2}$ "
- 5. The Contractor shall field measure the existing deck and joint to verify the seal size.
- 6. Where applicable, removal and replacement of existing bituminous, elastomeric, or header concrete shall be completed along the full width of the roadway. Bridge joint armor and extrusion modifications shall extend to the limits described on the respective joint modification details.
- 7. Welding shall be completed as a series of skip welds to minimize welding distortion.
- 8. If the base metal temperature falls below 32 degrees Fahrenheit, the base metal shall be heated to a minimum of 80 degrees Fahrenheit before welding. If the base metal temperature falls below 50 degrees Fahrenheit, the base metal shall be heated to remove any moisture. A welding procedure and listing of proposed welding consumables shall be submitted to the Resident for approval.
- 9. Keeper bars shall be positioned to allow top of compression seal to sit $\frac{1}{4}$ " to 1/2" below top of armor. If existing keeper bar does not permit the seal to set at the specified depth, Contractor shall notify the Resident.

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STAGE NO. 1



STAGE NO.2

NOTES:

I. Portable concrete barrier is shown on these sections for conceptual purposes. The actual traffic control devices used for delineating the work areas shall be determined by the Contractor per Special Provision Section 910, Work Zone Safety System, except that portable concrete barrier shall be used to delineate the temporary sidewalk area in Stage No. I.

BICENTENNIAL MEMORIAL BRIDGE
KENNEBEC RIVER
MADISON - ANSON SOMERSET COUNTY
STAGED CONSTRUCTION SECTIONS

SHEET NUMBER

OF 10

