STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

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

MATERIALS

Concrete (Unless noted otherwise)	Per Special Provisions
Reinforcing Steel	ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Reinforcing Steel	fy = 60,000 psi

TRAFFIC DATA

Current (2023) AADT	13910
Future (2043) AADT	16690
DHV - % of AADT	10
Design Hour Volume	1669
Heavy Trucks (% of AADT)	12
Heavy Trucks (% of DHV)	6
Directional Distribution (% of DHV)	100
18 kip Equivalent P 2.0	1707
18 kip Equivalent P 2.5	1626
Design Speed (mph)	60

BANGOR
PENOBSCOT COUNTY
I-395\MAIN ST. BRIDGE
OVER
MAIN STREET
INTERSTATE 395
FEDERAL AID PROJ. NO. 2506300
PROJECT LENGTH 0.030 mi.
BRIDGE NO. 5799

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities and General Construction Notes	2
General Plan	3
Sections and Details	4
Joint Header Repair Details	5
Traffic Control Plan Stage 1	6
Traffic Control Plan Stage 2	7
Traffic Control Plan Stage 3	8

UTILITIES

Consolidated Communications
Versant Power
Bangor Gas Company
Charter Communications, Inc.
Firstlight
Gonetspeed
City Of Bangor

MAINTENANCE OF TRAFFIC

Staged Construction

PROJECT LOCATION	I-395/ Main St. Bridge over Main Street Located 0.23 of a mile west of the Brewer town line. Lat./Long. 44°47'7.8" N 68°46'46.5" W
PROGRAM AREA	Bridge
OUTLINE OF WORK	Bridge Joint Rehabilitation

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE 7-14-23

COMMISSIONER: [signature]

CHIEF ENGINEER: [signature] — DATE 7-13-2023

STATE OF MAINE — MARK GRAY — No. 3997 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE [signature] — P.E. NUMBER ME 3997 — DATE 7-10-2023

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	MIKE WIGHT
DESIGNER	MARK GRAY
CONSULTANT	N/A
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

BANGOR
I-395\MAIN ST. BRIDGE

TITLE SHEET

WIN 25063.00

2506300

SHEET NUMBER 1 OF 8

Username: Richard.Mayer Date:7/7/2023
Division: BRIDGE
Filename:\00\BRIDGE\MSTA\001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.202	REMOVING PAVEMENT SURFACE	747	SY
403.2081	12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	121	T
409.15	BITUMINOUS TACK COAT - APPLIED	58	G
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (384 SY)	1	LS
520.2431	BRIDGE JOINT MODIFICATION TYPE 3A	2	EA
527.33	TRUCK MOUNTED ATTENUATOR	2	EA
629.05	HAND LABOR, STRAIGHT TIME	20	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	10	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	10	HR
631.112	WELDING MACHINE (INCLUDING OPERATOR)	10	HR
631.122	MINI ALL-PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.21	ROAD BROOM (INCLUDING OPERATORS AND HAULER)	10	HR
639.21	FIELD OFFICE TYPE D	1	EA
652.312	TYPE III BARRICADE	6	EA
652.33	DRUM	260	EA
652.34	CONE	100	EA
652.35	CONSTRUCTION SIGNS	500	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (14 CD)	1	LS
652.38	FLAGGER	150	HR
652.381	TRAFFIC OFFICER	16	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	2	EA
652.45	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	2	UN
652.46	SEQUENTIAL FLASHING WARNING LIGHTS	40	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

1. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

2. Protective Coating for Concrete Surfaces shall be applied to the following areas:

All exposed surfaces of concrete curbs.
Fascias down to the drip notch.
All exposed surfaces of Concrete Transition Barriers.
Split Concrete Median Barrier and Concrete Island.

3. Project information referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/contractors/

4. 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.

5. 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.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	M. WIGHT	
DESIGN-DETAILED	M. GRAY	JAN 2023
CHECKED-REVIEWED	R. MAYER	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

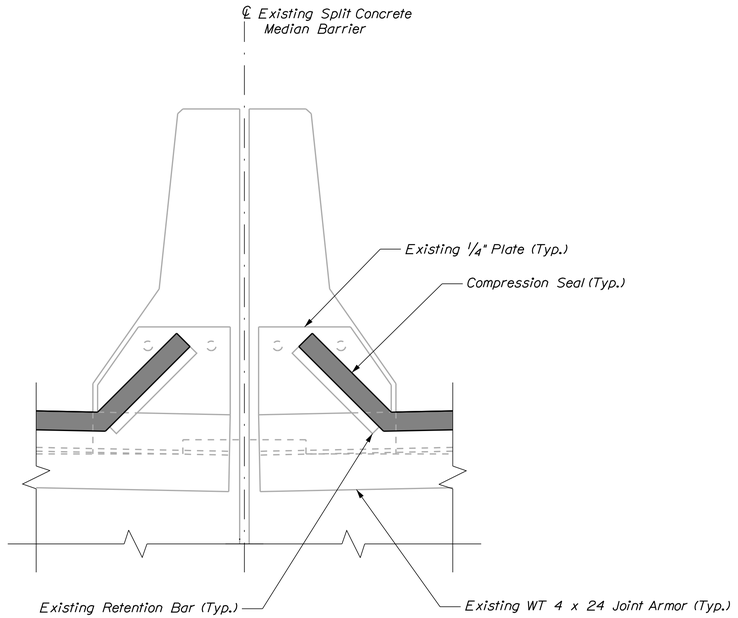
ESTIMATED QUANTITIES AND GENERAL CONSTRUCTION NOTES

SHEET NUMBER

2

OF 8

Filename: ...\BRIDGE\MSTA\002_Estimate.dgn Division: BRIDGE Username: Richard.Mayer Date:7/7/2023

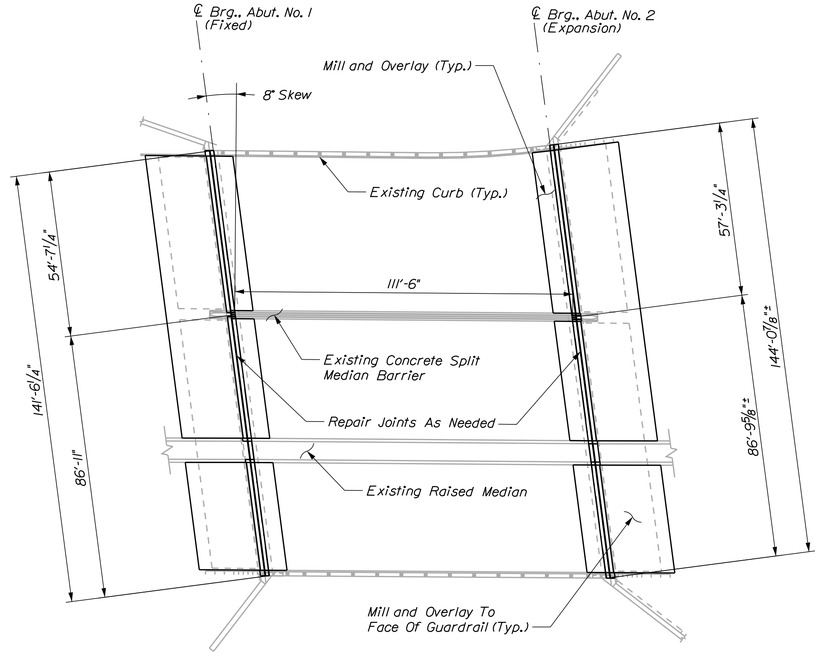


SEAL DETAIL AT CONCRETE MEDIAN BARRIER

NOTES

1. At the end of each night time work period, all disturbed areas shall be returned to a safe and traversable state to enable regular traffic flow on I395 and all associated ramps.

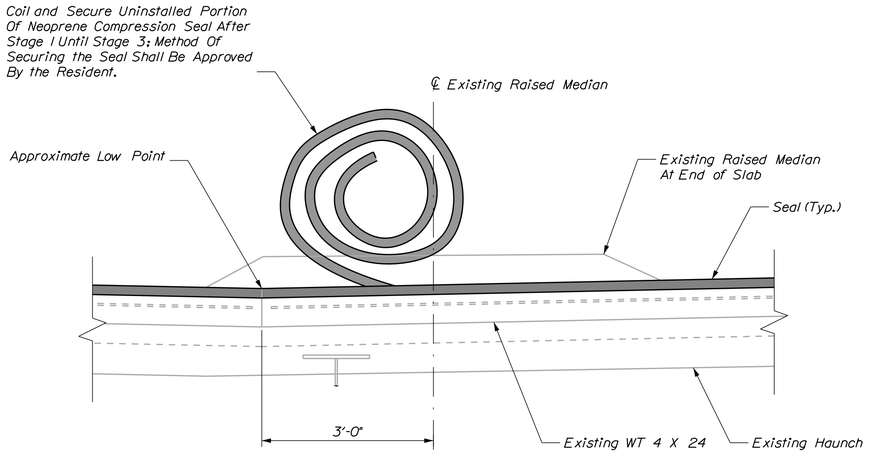
2. Contractor shall submit a detailed work plan to the Resident prior to the start of each work period to describe the anticipated work to be accomplished in that work period, and describing the condition in which the work area will be left at the end of that work period. This will be in addition to the overall work schedule described elsewhere.



PLAN

25 0 25 50

Scale of Feet



SEAL DETAIL AT RAISED MEDIAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	M. GRAY	R. MAYER	JAN 2023
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

I-395\MAIN ST. BRIDGE
MAIN STREET
PENOBSCOT COUNTY
BANGOR

GENERAL PLAN

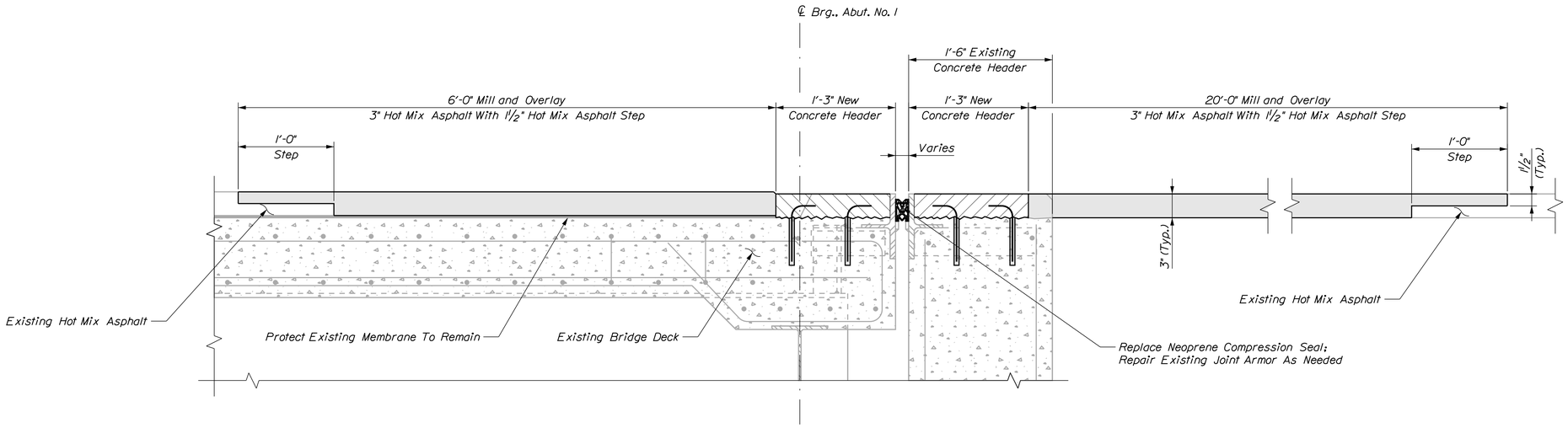
SHEET NUMBER

3

OF 8

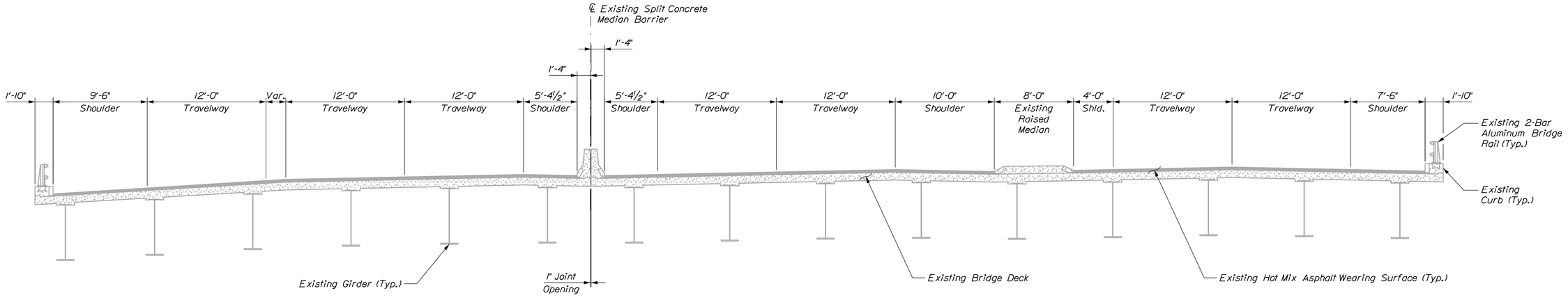
Username: Richard.Moyer Date:7/7/2023

Filename: ...\00\BRIDGE\MSTA\003_Plan.dgn Division: BRIDGE



BRIDGE JOINT REPAIR AND SEAL REPLACEMENT SECTION

(Abutment No. 1 Shown, Abutment No. 2 Similar)



TYPICAL EXISTING BRIDGE SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M. WIGHT	
DESIGN-DETAILED	M. GRAY	JAN 2023
CHECKED-REVIEWED	R. MAYER	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

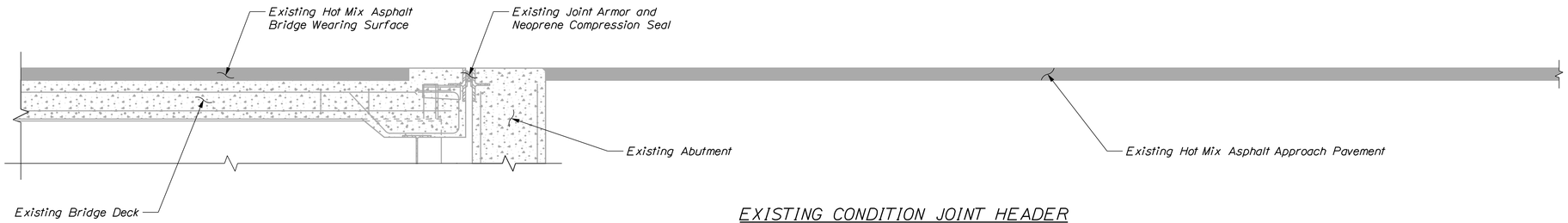
SECTIONS AND DETAILS

SHEET NUMBER

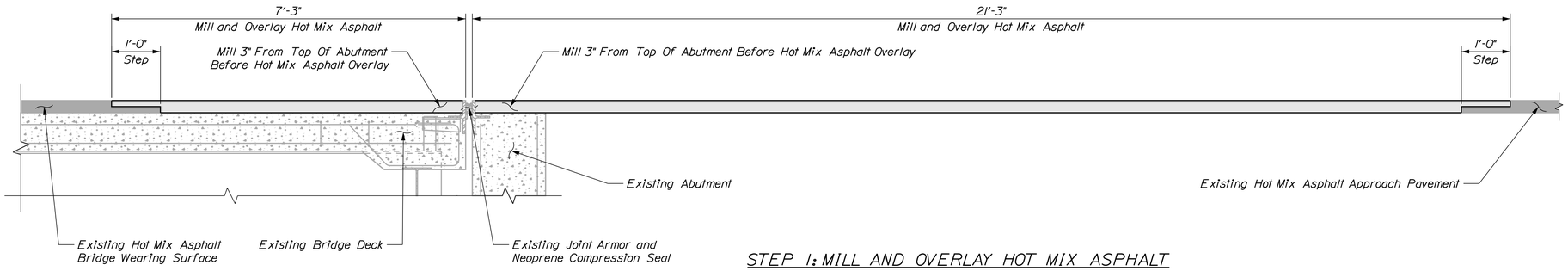
4

OF 8

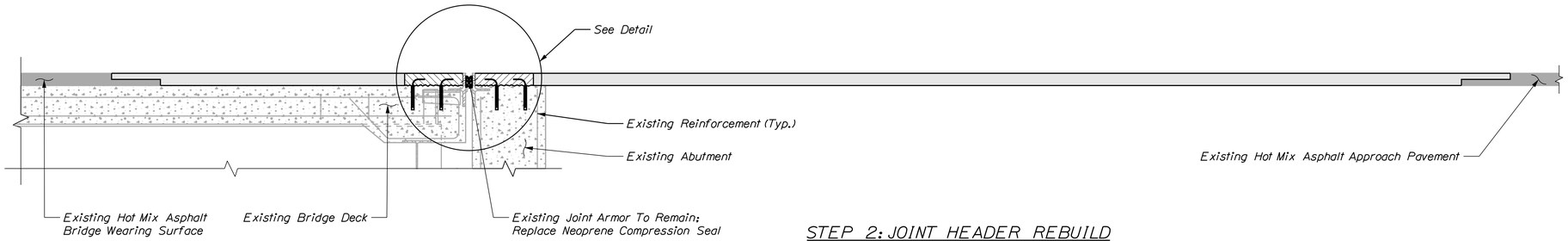
Filename: ...\004_SectionsAndDetails.dgn Division: BRIDGE Username: Richard.Mayer Date:7/7/2023



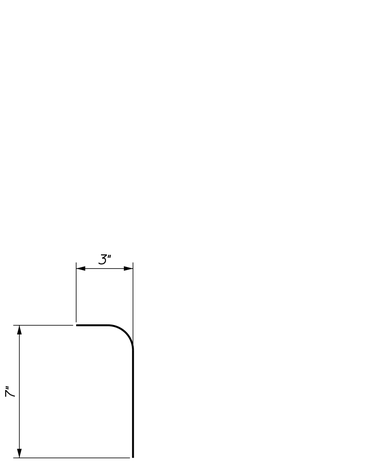
EXISTING CONDITION JOINT HEADER



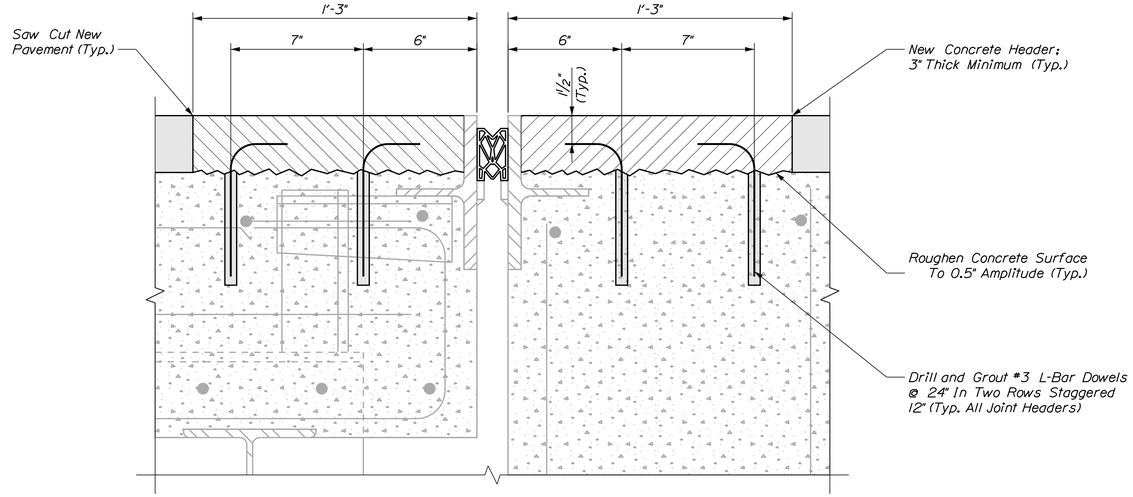
STEP 1: MILL AND OVERLAY HOT MIX ASPHALT



STEP 2: JOINT HEADER REBUILD



#3 L-BAR DOWEL DIMENSIONS



JOINT HEADER REBUILD AND REINFORCEMENT DETAIL

NOTES:

1. Anticipated work items include:

   a. Mill bituminous pavement and top 3" of concrete joint headers.

   b. Place Hot Mix Asphalt overlay.

   c. Saw cut and remove new Hot Mix Asphalt above joint headers per plans.

   d. Place elastomeric concrete joint headers.

   e. Replace neoprene compression seal.

2. The sequence of the work shown on this sheet is suggested and not prescriptive. The Contractor may propose a different construction sequence or approach to be approved by the Resident.

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BRIDGE PLANS

BRIDGE NO. 5799

PROJ. MANAGER	M. WIGHT	DATE
DESIGN-DETAILED	M. GRAY	BY
CHECKED-REVIEWED	R. MAYER	JAN 2023
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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FIELD CHANGES		

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I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

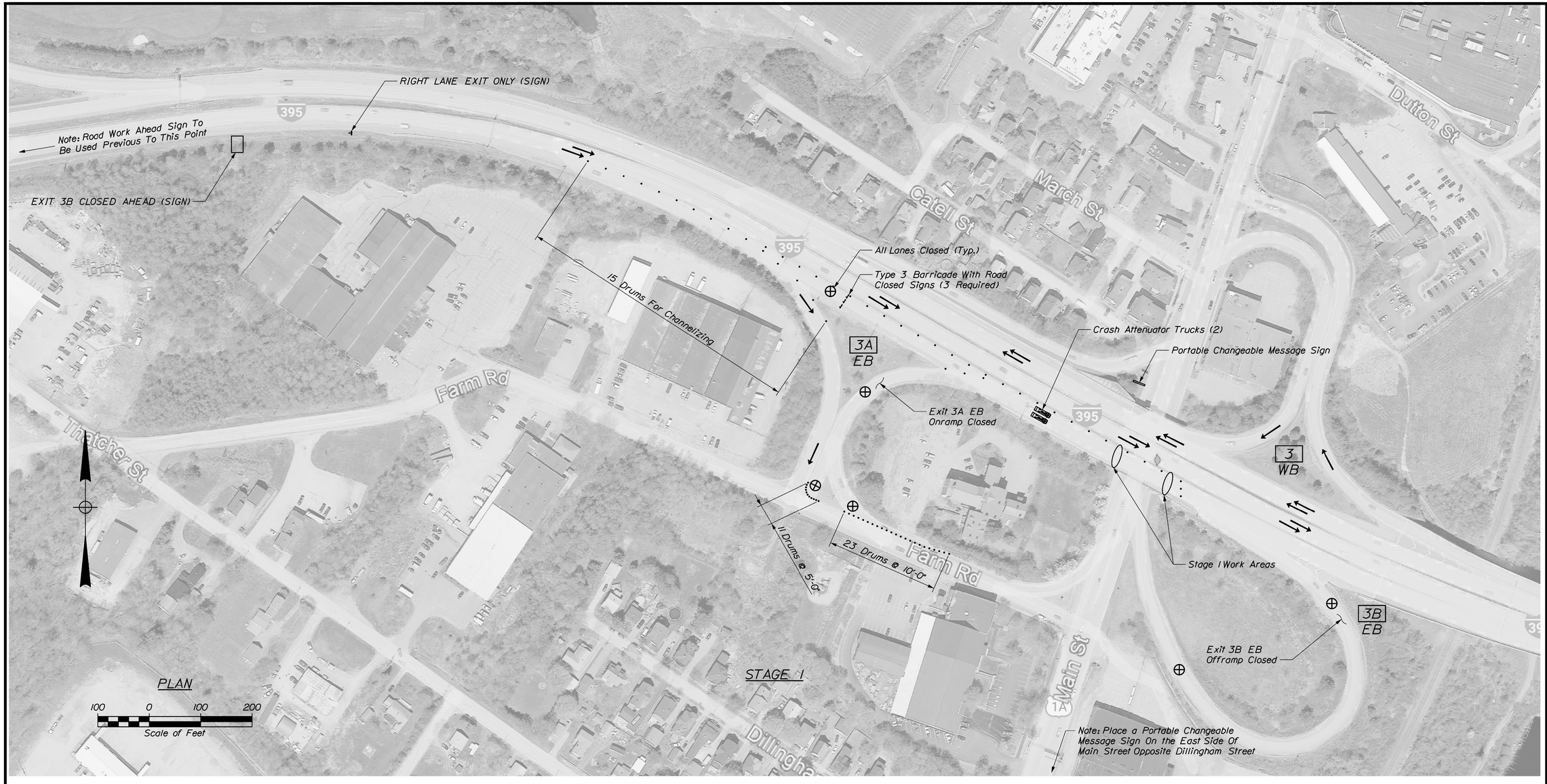
JOINT HEADER
REPAIR DETAILS

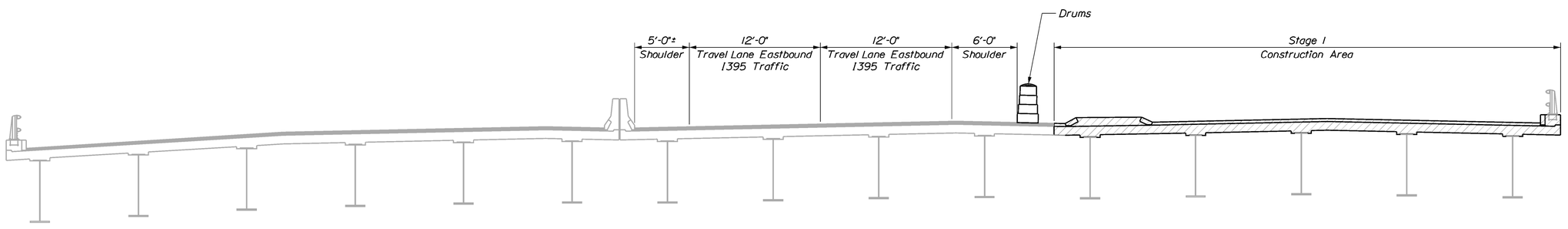
SHEET NUMBER

5

OF 8

Filename: ...\005_JointHeaderRepairDetails.dgn Division: BRIDGE Username: Richard.Mayer Date:7/7/2023





STAGE I
(Looking East)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	DATE
DESIGN-DETAILED	M. GRAY	BY
CHECKED-REVIEWED	R. MAYER	JAN 2023
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
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SIGNATURE

P.E. NUMBER

DATE

I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

TRAFFIC CONTROL PLAN STAGE 1

SHEET NUMBER

6

OF 8

Filename: ...\006_TrafficControlPlanStage1.dgn Division: BRIDGE Username: Richard.Moyer Date:7/7/2023

Filename: ...\007_TroficControlPlanStoge2.dgn Division: BRIDGE Username: Richard.Moyer Date:7/7/2023

600' Merging Taper (2 Thru-Lanes To One Thru-Lane)
16 Drums

640' Lane Shift Taper (Right Thru-Lane On EB Lanes To Ramp Thru-Lane)
17 Drums

Note: Road Work Ahead and Left Lane Closed
Ahead Signs To Be Used Previous To This Point

Existing EB Lanes Closed - Moved To Collector - Distributor

Type 3 Barricade With Road Closed Signs (3 Required)

Both EB Thru-Lanes Closed

3A EB

Stop Sign

Crash Attenuator Trucks (2)

Stop Ahead Sign

3 WB

Stage 2 Work Areas

3B EB

Dutton St

March St

Catell St

Farm Rd

Thatcher St

Main St

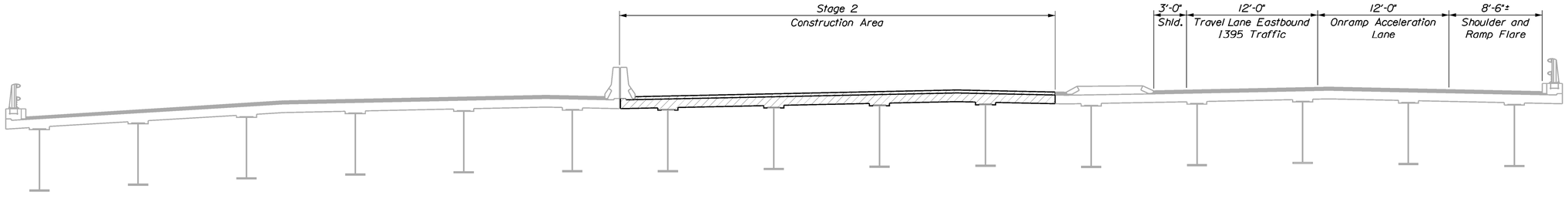
Dillingham

395

PLAN

100 0 100 200
Scale of Feet

STAGE 2



STAGE 2
(Looking East)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	M. GRAY	R. MAYER	JAN 2023
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REVISIONS 4			
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DATE

I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

TRAFFIC CONTROL PLAN STAGE 2

SHEET NUMBER

7

OF 8

STAGE 3
(Looking East)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2506300

WIN 25063.00

BRIDGE NO. 5799

BRIDGE PLANS

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SIGNATURE

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DATE

I-395\MAIN ST. BRIDGE
MAIN STREET
BANGOR PENOBSCOT COUNTY

TRAFFIC CONTROL PLAN
STAGE 3

SHEET NUMBER

8

OF 8

Username: Richard.Moyer Date:7/7/2023

Filename: ...\008_TrafficControlPlanStage3.dgn Division: BRIDGE