

LOCATION MAP



THE GOLD STAR
MEMORIAL HIGHWAY

MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR
 MICHAEL J. CIANCHETTE, VICE CHAIR
 BETTYANN SHEATS, MEMBER
 ANDREW J. MCLEAN, MEMBER
 JANE L. LINCOLN, MEMBER
 THOMAS J. ZUKE, MEMBER
 BRUCE A. VAN NOTE, EX-OFFICIO MEMBER

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2023.08

BRIDGE REPAIRS SCARBOROUGH INTERCHANGE UNDERPASS (MM 42.50)

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9	General Plan
10	West Abutment Repairs
11	Concrete Repair Typical Details
12	Bridge Joint Modifications

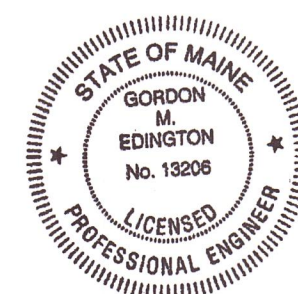
APPROVED:
 MAINE TURNPIKE AUTHORITY

Peter S. Merfeld
 PETER S. MERFELD, P.E. - CHIEF OPERATIONS OFFICER

06/20/23
 DATE

Stephen R. Taintre
 STEPHEN R. TAINTRE, P.E. - CHIEF ENGINEER &
 DIRECTOR OF ENGINEERING

6/20/23
 DATE



Gordon M. Edington, P.E.
 Consultant Project Manager

Gordon Edington

6/16/2023
 DATE

Contract 2023.08

Date: 6/16/2023

Filename: ... \BRIDGE\MSTA\002_notes_qty.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
202.202	Removing Pavement Surface	SY	130
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	TON	30
409.15	Bituminous Tack Coat RS-1 or RS1h - Applied	GAL	4
515.202	Clear Protective Coating for Concrete Surfaces	SY	225
518.10	Abutment Repairs	SF	10
518.95	Wingwall Repairs	CF	40
518.864	Elastomeric Concrete Header Repair	CF	25
526.301	Temporary Concrete Barrier, Type I	LS	1
527.341	Work Zone Crash Cushion - TL-3	UNIT	1
629.05	Hand Labor, Straight Time	HR	10
631.10	Air Compressor (including operator)	HR	10
631.11	Air Tool (including operator)	HR	10
631.12	All Purpose Excavator (including operator)	HR	10
631.171	Truck - small (including operator)	HR	10
631.36	Foreman	HR	10
652.30	Flashing Arrow	EA	1
652.312	Type III Barricade	EA	3
652.33	Drum	EA	75
652.34	Cone	EA	20
652.35	Construction Signs	SF	225
652.361	Maintenance of Traffic Control Devices	LS	1
652.41	Portable-Changeable Message Sign	EA	7
652.45	Truck Mounted Attenuator	CD	15
656.75	Temporary Soil Erosion and Water Pollution Control	LS	1
659.10	Mobilization	LS	1

SPECIFICATIONS

Design: AASHTO LRFD Bridge Design Specifications, 2020.
 Construction: State of Maine Department of Transportation Standard Specifications, 2014 Edition, with all revisions thereto.
 State of Maine Department of Transportation Standard Details for Highways and Bridges, 2020 Edition, with all revisions thereto.
 AASHTO LRFD Bridge Construction Specifications, Fourth Edition

NEW MATERIALS

Concrete (Unless noted otherwise) Class AAA - Modified
 Reinforcing Steel ASTM A615/A615M, Grade 60

BASIC DESIGN STRESSES (NEW MATERIALS)

Concrete $f'c = 4,500 \text{ psi}$
 Reinforcing Steel $f_y = 60,000 \text{ psi}$

TRAFFIC AND DESIGN LOADING DATA

SCARBOROUGH INTERCHANGE UNDERPASS

DESIGN LIVE LOAD (for existing components) HS 25
 Design Speed (MPH) (for existing) 30
 Functional Class Interstate

GENERAL CONSTRUCTION NOTES

- All details shall be in conformance with Maine Department of Transportation (MaineDOT) 2020 Standard Details for Highways and Bridges with all updates and MaineDOT Best Management Practices for Erosion and Sediment Control, latest revision unless otherwise noted in these plans.
- All work must be completed within the Right of Way.
- The Contractor shall submit proposed staging area(s) to the Resident for approval prior to starting work.
- Any portions of the existing bridges removed by the Contractor shall become the property of the Contractor. The steel portions of the existing bridges may be coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the work of this project.
- Copies of the As-Built plans are posted on the Maine Turnpike Authority website at www.maineturnpike.com/projects/construction-contracts. The completeness and accuracy of these plans is not guaranteed.
- Chamfer all exposed new concrete edges $\frac{3}{4}$ " unless otherwise noted.
- Clear protective coating for concrete surfaces shall be applied to the entire west abutment and all exposed areas of the wingwalls at the west abutment.
- The Contractor shall place approach pavement to achieve a smooth transition between existing and proposed pavement.
- Prior to the removal of any pavement, the Contractor shall document the location, type and color of all pavement striping and provide that information to the Resident. The Maine Turnpike Authority will place all new striping at no cost to the Contractor.

EROSION CONTROL NOTES

- All temporary and permanent erosion control devices shall be installed in accordance with the Maine Department of Transportation Best Management Practices.


UTILITIES NOTES

- Existing utilities were not located for these plans. No work shall be started until the owners of the various utilities are notified by the Contractor of the proposed construction. The Contractor is also required to call Dig Safe at 1-888-344-7233 at least 72 hours prior to the start of the work.
- The Contractor shall contact all non-members through www.OKtoDIG.com or as otherwise required by the Maine Public Utilities Commission. All proposed excavation locations shall be marked at the time of notification. No excavation shall be permitted until the authority has located and marked its underground utilities. The Resident Engineer shall be provided a digital copy of all Dig Safe tickets within 24 hours of their release for project notifications and 3rd party utility locator coordination.
- The Contractor shall notify the Resident 10 calendar days prior to submitting a utility locate request through Dig Safe so that the Resident can arrange for Maine Turnpike underground utility location. All proposed sign locations and excavation locations shall be marked at the notification time.
- Contractor shall protect all existing utilities from damage during the construction as approved by the utility owners.

Scale: AS NOTED

No.	Revision	By	Date
1			


Designed by:



CONSULTANT PROJECT MANAGER: G. Edington

	By	Date	By	Date	
Designed	MFS	6/1/23	Checked	GME	6/1/23
Drawn	BJM	6/1/23	In Charge of	TSB	6/1/23

VANASSE HANGEN BRUSTLIN, INC.
 500 Southborough Dr.
 Suite 105B
 South Portland, ME 04106
 TEL (207) 889-3150
 FAX (207) 253-5596



THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC


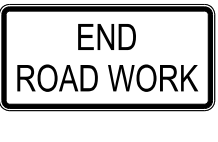






SCARBOROUGH INTERCHANGE UNDERPASS

GENERAL NOTES AND ESTIMATED QUANTITIES

VHB: 55702.00 SHEET NUMBER: 2
 CONTRACT: 2023.08 2 OF 12

MAINTENANCE OF TRAFFIC GENERAL NOTES


1. These traffic control details apply to the Exit 42 Overpass project. The Contractor is directed to use a typical layout from this project's Maintenance of Traffic Details or from the Maine Turnpike Authority Traffic Control Plans located on the MTA website at www.mainturnpike.com. See also the Special Provisions for more details on specific temporary traffic controls with time and date restrictions.
2. The shoulder closure along the Exit 42 southbound on-ramp is shown with temporary concrete barrier. The Contractor may use drums for the shoulder closure if no workers will be within four feet of the ramp's traveled way and no equipment will be left within the clear zone for the ramp or mainline during non-working hours.
3. All traffic control equipment and devices shall conform to the 2014 edition of the Maine Department of Transportation (MaineDOT) Standard Specifications, Maine Turnpike Authority (MTA) Supplemental Specifications, contract specifications and applicable traffic control standards and practices.
4. Any signs, equipment, or devices found to be damaged or unserviceable shall be replaced at the Contractor's expense.
5. Temporary lane closures will be required, with advanced approval, whenever work will occur within four feet of the I-95 traveled way. Temporary lane closures shall be removed if no work is occurring. See Special Provisions for more information including available lane closure times.
6. Lane closure requests shall be submitted by the Resident by Noon on the Thursday prior to the week of the proposed lane closures. The Contractor shall plan all lane closure requests accordingly.
7. Approach ends of temporary concrete barrier shall be placed outside of the highway clear zone (minimum 34 feet from the traveled way along I-95) or protected by temporary impact attenuators or with guardrail overlaps as approved by the Resident.
8. Maximum spacing for channelizing devices (drums) shall be:
 80' on center along tangents
 40' on center along tapers
9. Work zone speed limits shall only be permitted when temporary lane closures are in place.

CONSTRUCTION SIGN SUMMARY				
Sign	Text Dimensions (Inches)		Size	Quantity and Color
	Letter Height	Vertical Spacing		
E5-2a		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012	48"x36"	4 - Black on Orange
G20-2			48"x24"	1 - Black on Orange
CS-4			48"x48"	1 - Black on Orange
CS-11			48"x48"	1 - Black on Orange
W13-4p			36"x36"	1 - Black on Orange
W20-1 (AHEAD)			48"x48"	4 - Black on Orange
W21-5aR			48"x48"	2 - Black on Orange
W21-5bR			48"x48"	2 - Black on Orange

Date: 6/15/2023

Filename: ...MSTA\003_workzone_01.dgn

Scale:				
No.	Revision	By	Date	

Designed by:					
					
CONSULTANT PROJECT MANAGER: G. Edington					
	By	Date	Checked	By	Date
Designed	MLG	6/1/23	MDS		6/1/23
Drawn	JAR	6/1/23	In Charge of	TSB	6/1/23

VANASSE HANGEN BRUSTLIN, INC.
 500 Southborough Dr.
 Suite 105B
 South Portland, ME 04106
 TEL (207) 889-3150
 FAX (207) 253-5596



**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

SCARBOROUGH INTERCHANGE UNDERPASS
 MAINTENANCE OF TRAFFIC DETAILS
 (1 OF 4)

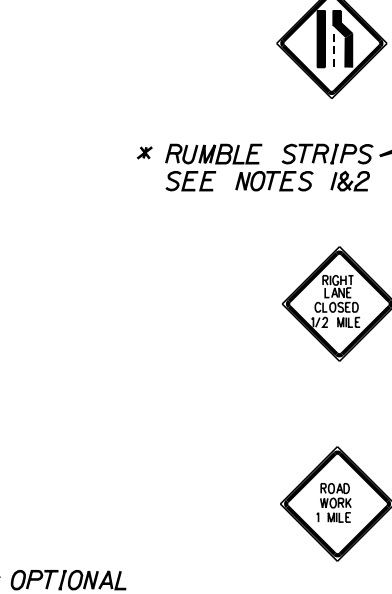
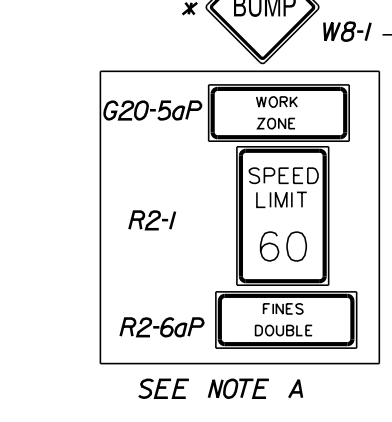
VHB: 55702.00 SHEET NUMBER: 3
 CONTRACT: 2023.08 3 OF 12

Date: 6/15/2023

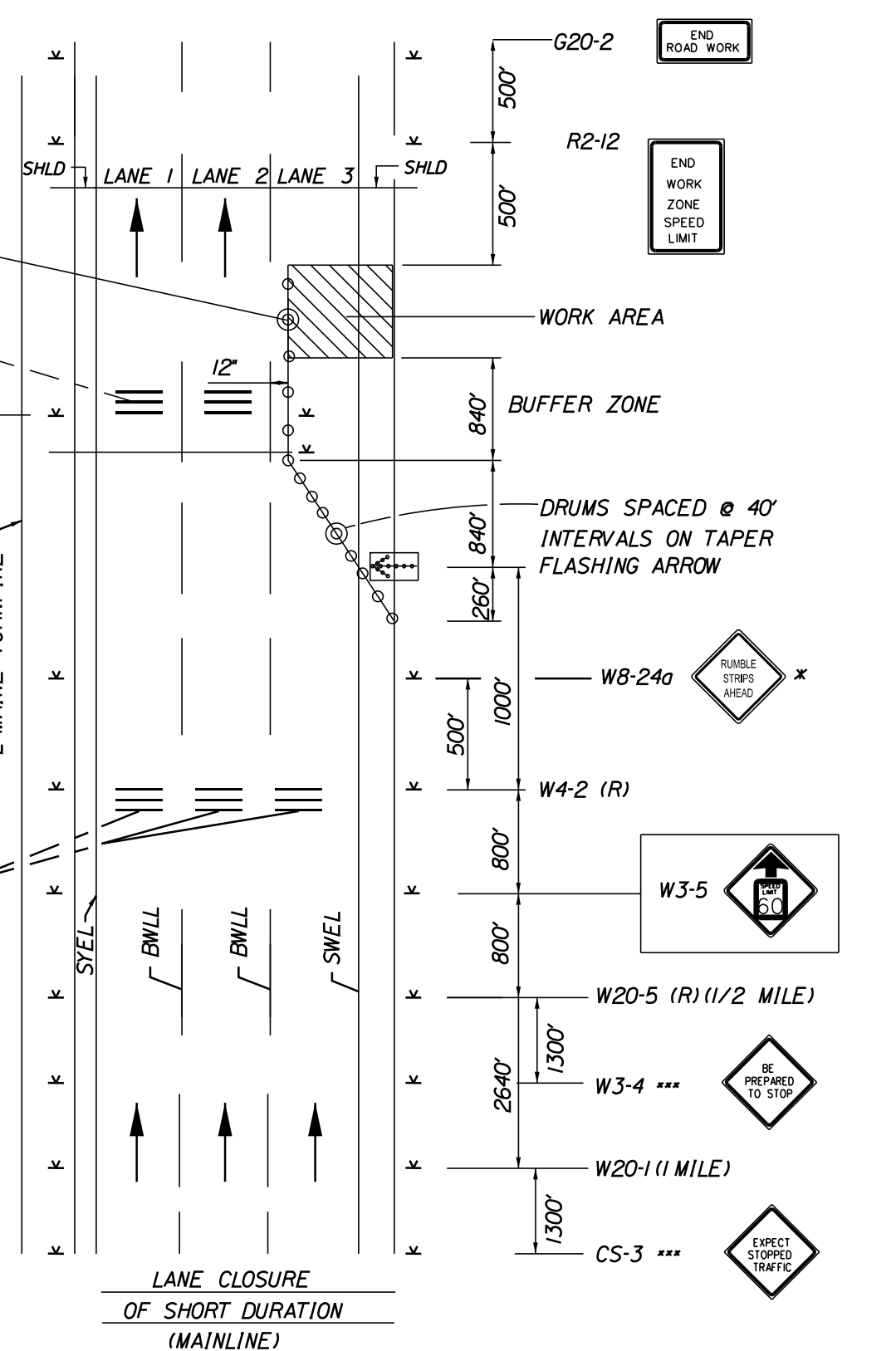
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NOTE A:
FOR EASEL SET UP ONLY, THIS SIGN IS NOT BRACKETED, ONE SIGN ASSEMBLY IS PLACED AT THE END OF THE TAPER.

DRUMS SPACED @ 80' INTERVALS ON TANGENT
* RUMBLE STRIPS SEE NOTE 1



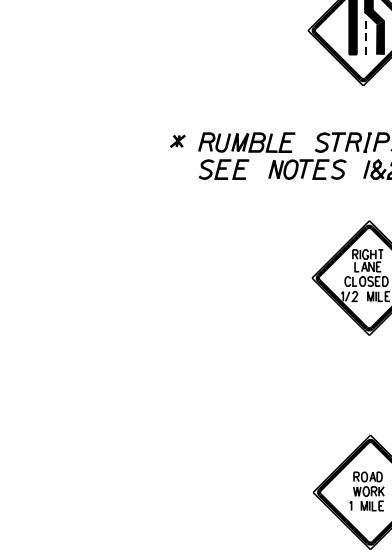
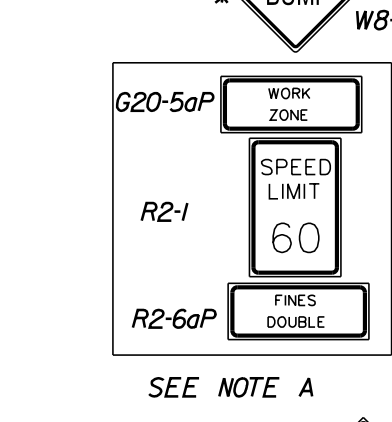
* OPTIONAL
*** TO BE USED DURING STOPPAGES OF TRAFFIC



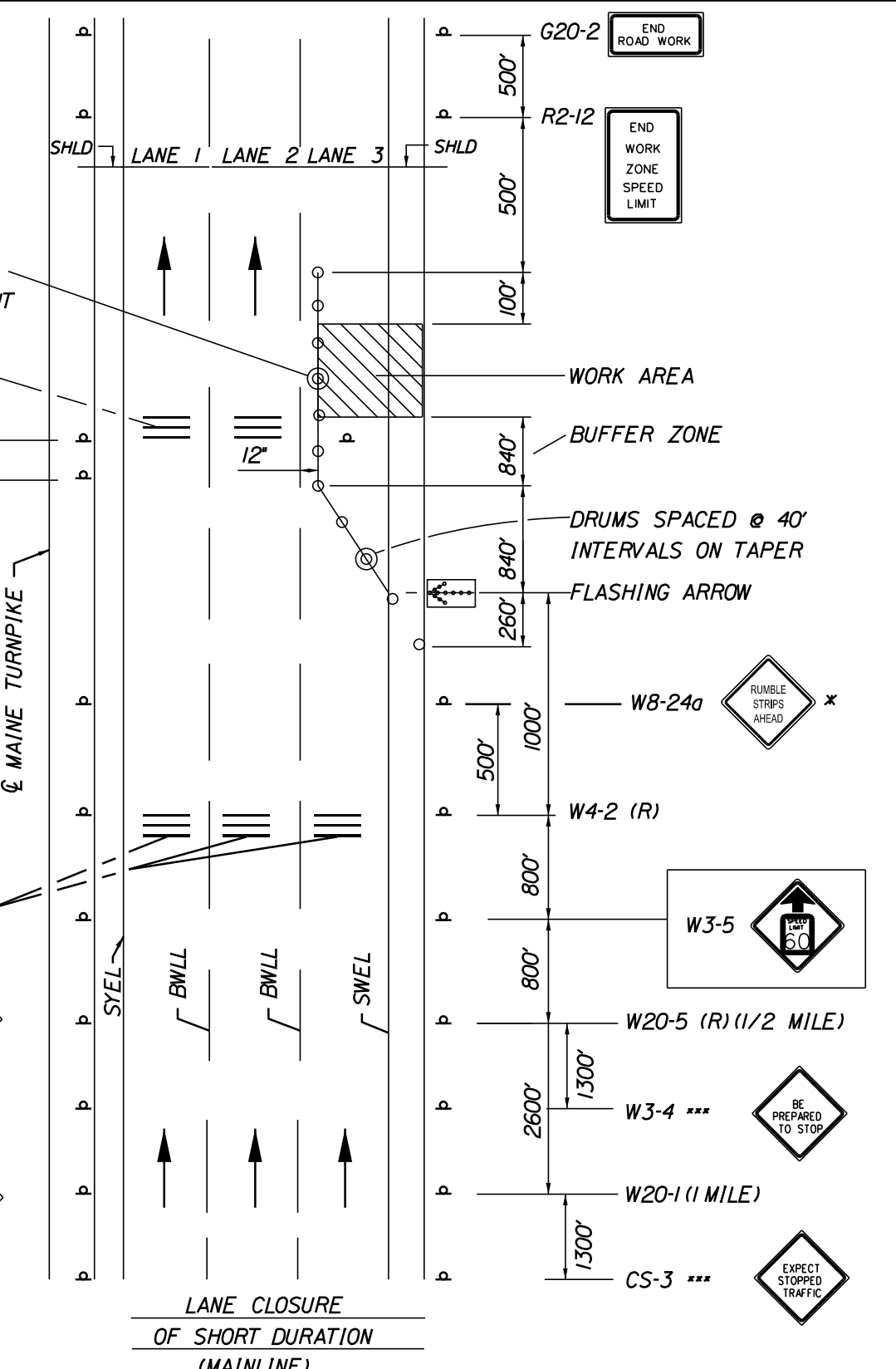
SINGLE LANE CLOSURE - SIGNS ON EASELS

NOTE A:
FOR POST MOUNTED SIGN SETUP UNCOVER SIGNS ADJACENT TO OPEN LANE FOR SHORT TERM LANE CLOSURE (LESS THAN 24 HOURS); UNCOVER BOTH SIGNS FOR PERMANENT LANE CLOSURE (GREATER THAN 24 HOURS).

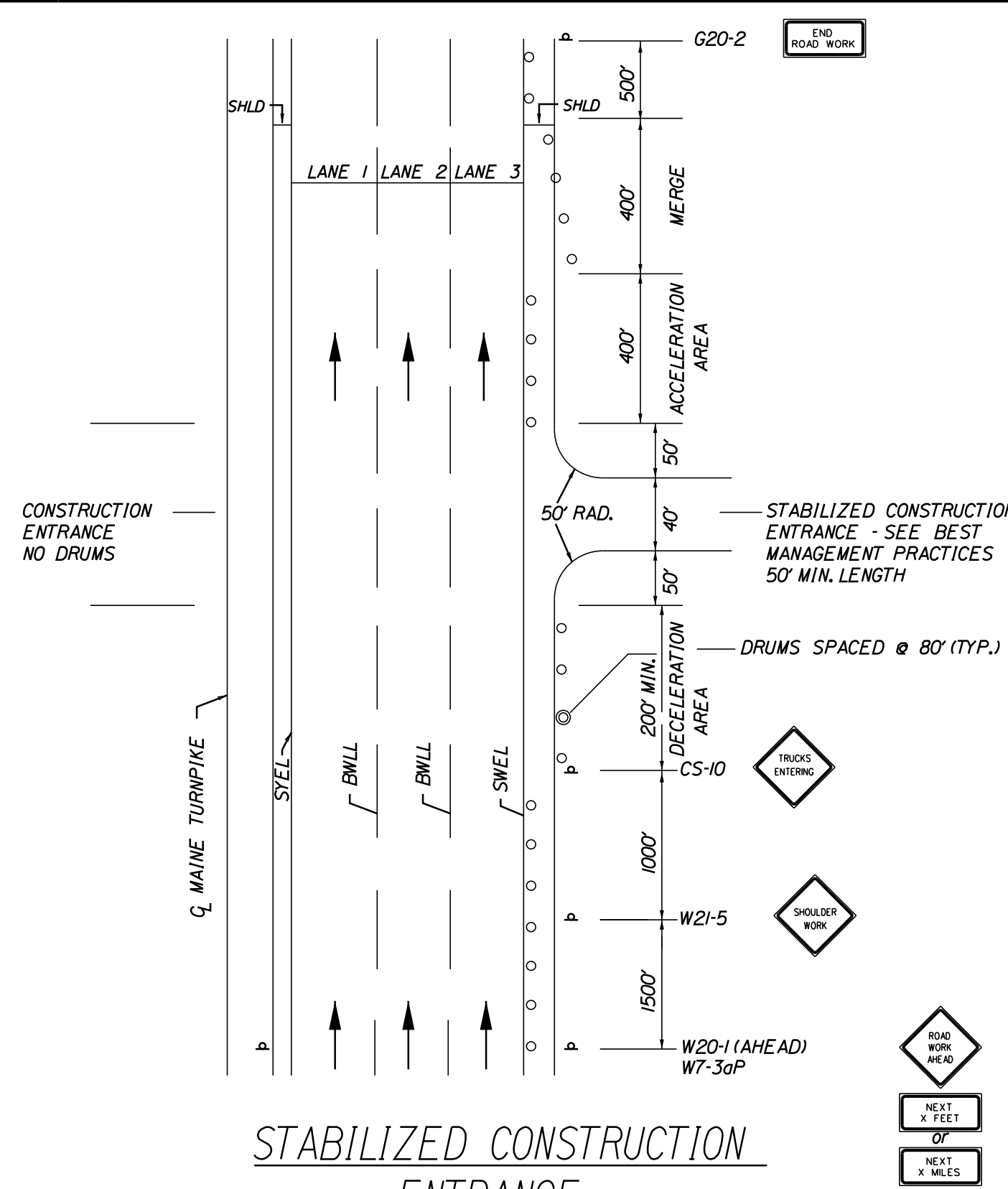
DRUMS SPACED @ 80' INTERVALS ON TANGENT
* RUMBLE STRIPS SEE NOTE 1



* OPTIONAL
*** TO BE USED DURING STOPPAGES OF TRAFFIC

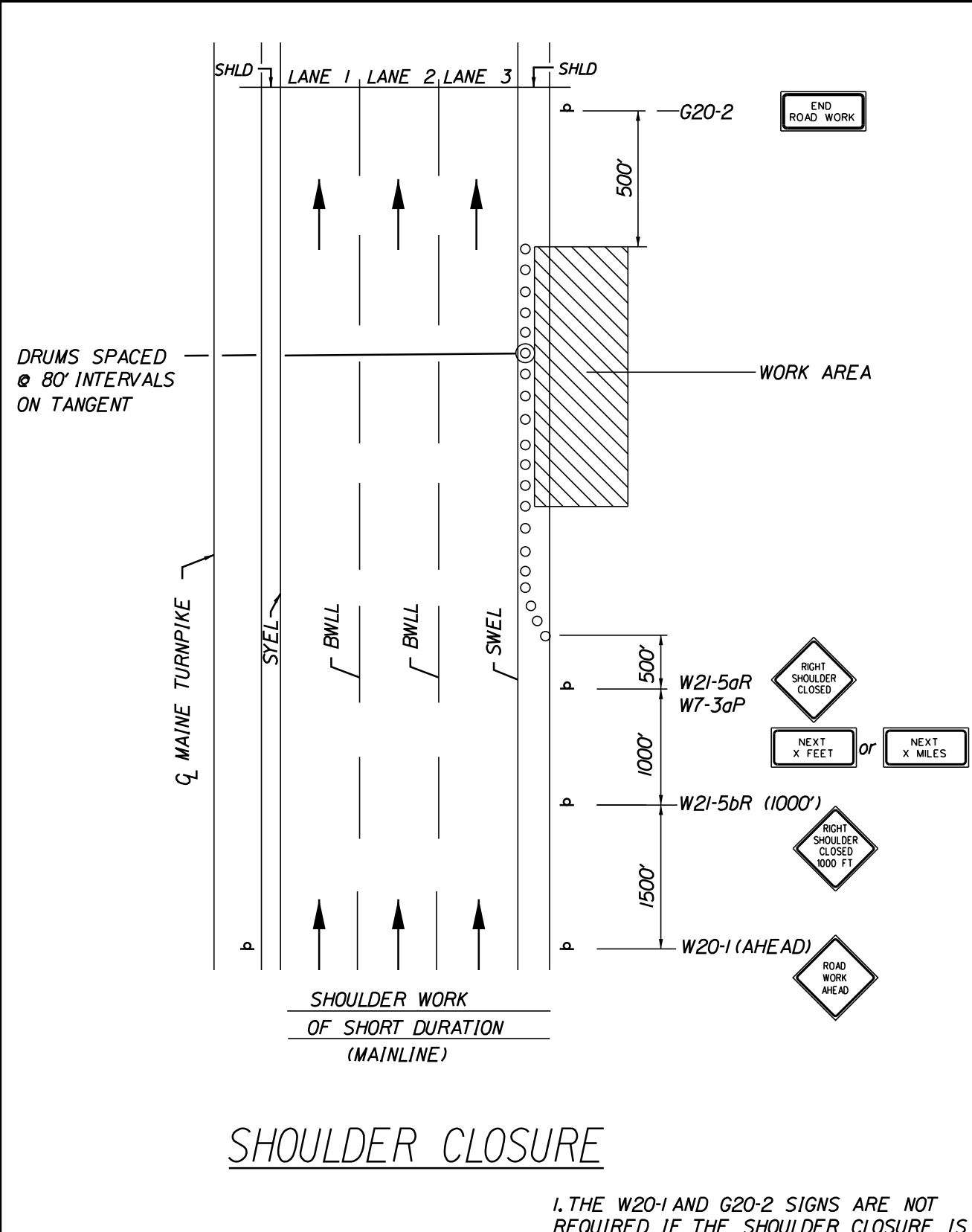


SINGLE LANE CLOSURE - POST MOUNTED SIGN SETUP



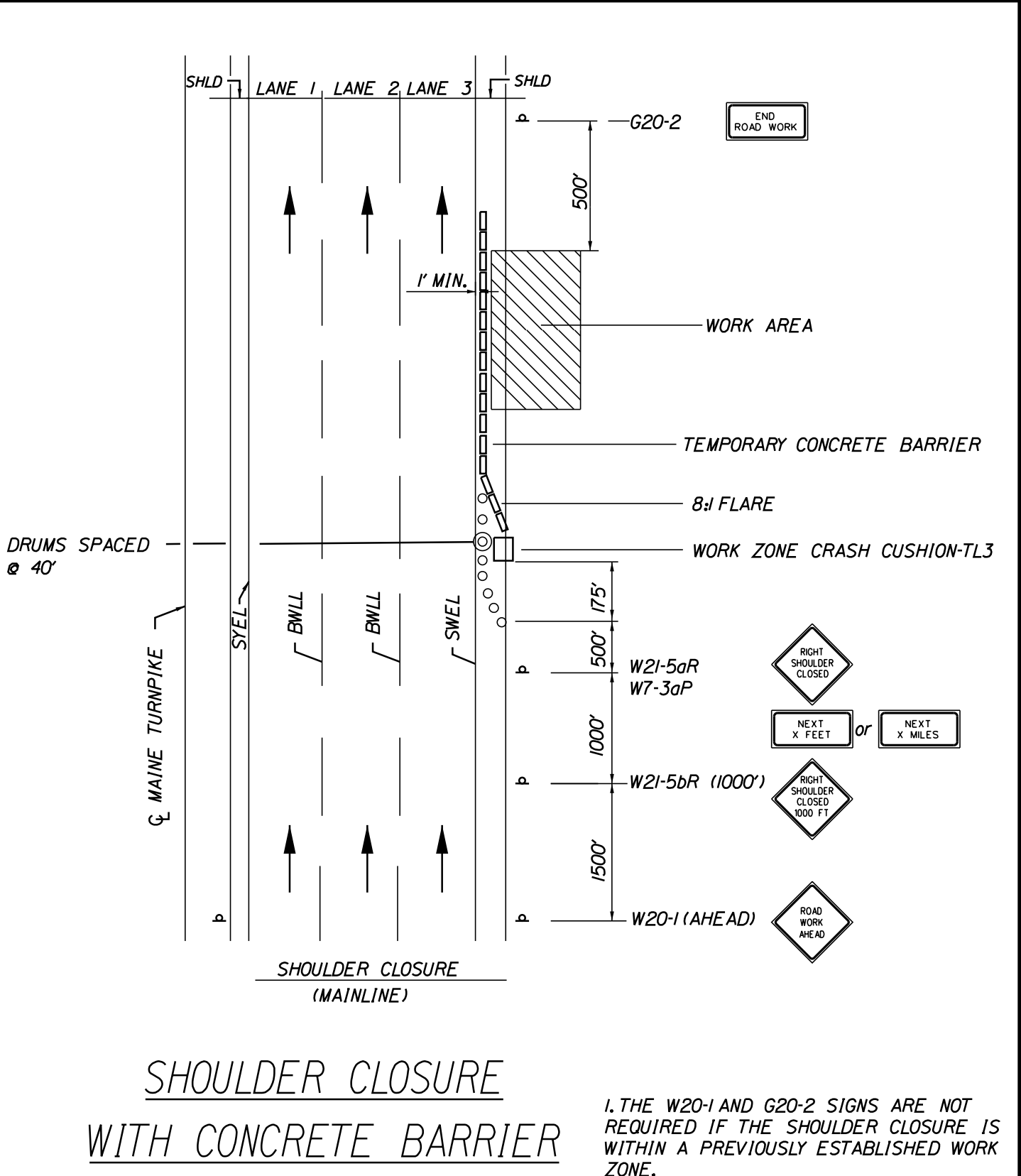
STABILIZED CONSTRUCTION ENTRANCE

1. SIGN G20-2 IS NOT REQUIRED IF ENTRANCE IS WITHIN THE WORK ZONE.



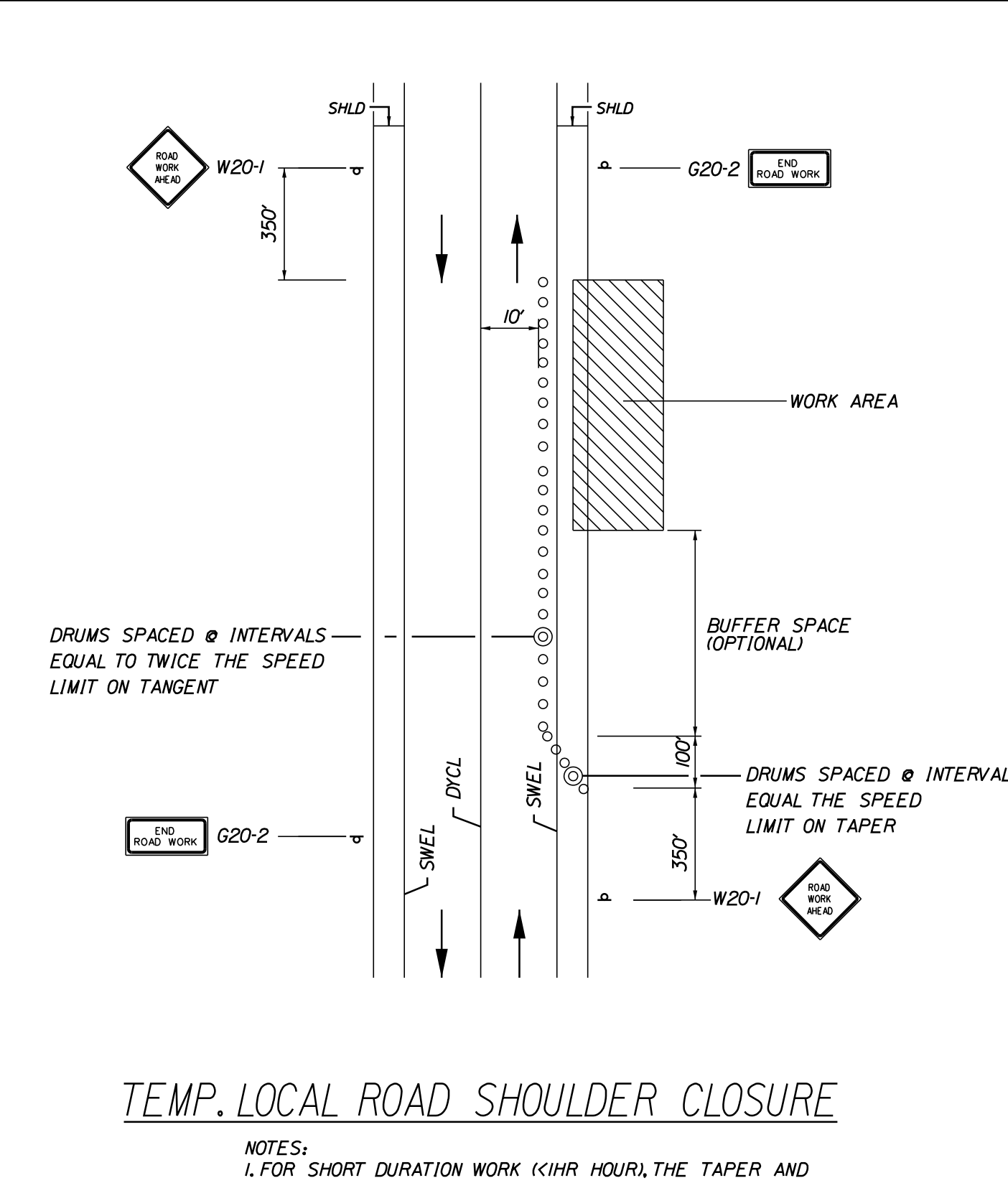
SHOULDER CLOSURE

1. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.



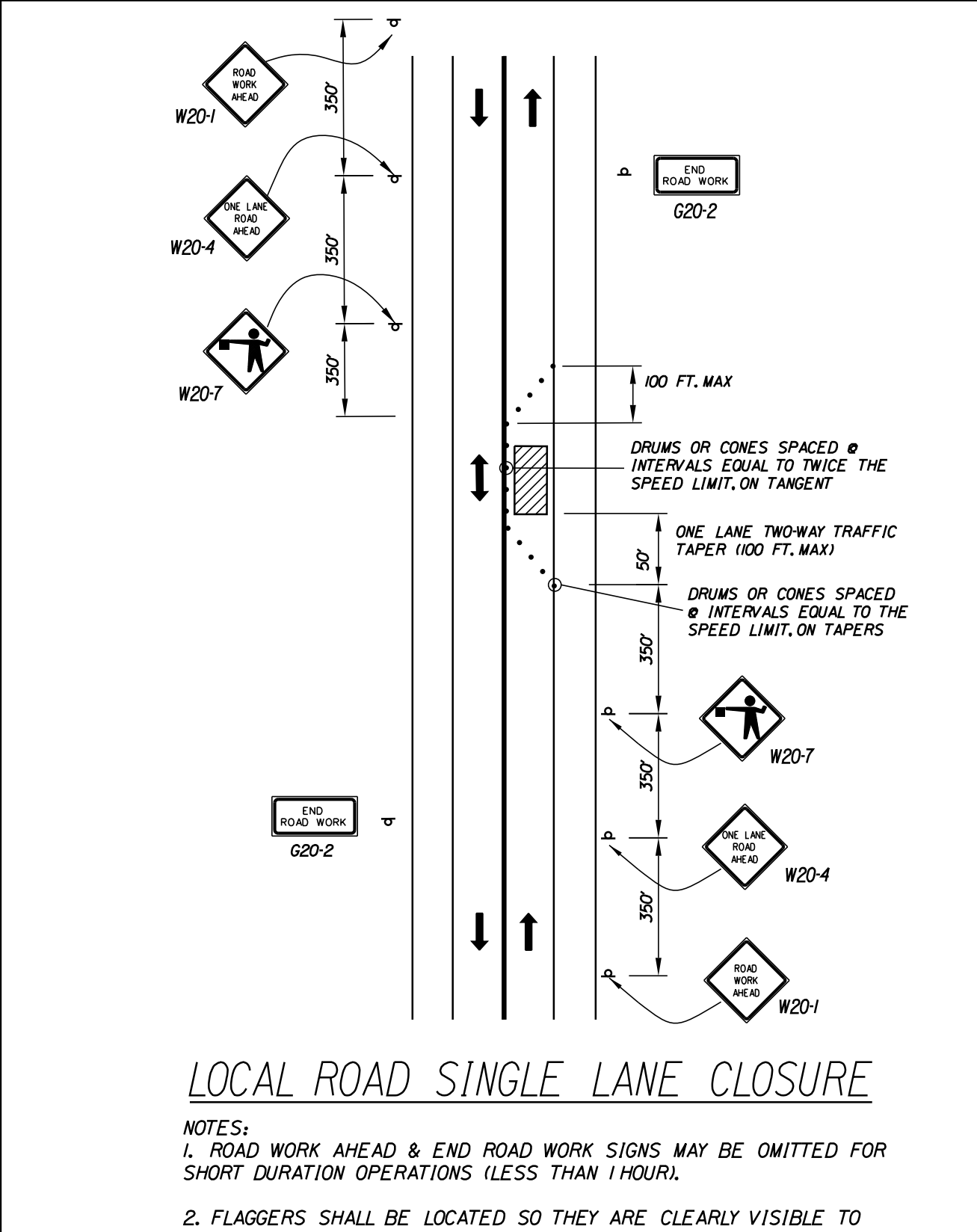
SHOULDER CLOSURE WITH CONCRETE BARRIER

1. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.
2. ONLY ONE SHOULDER CLOSURE PERMITTED PER BOUND AT ONE TIME.



TEMP. LOCAL ROAD SHOULDER CLOSURE

NOTES:
1. FOR SHORT DURATION WORK (<1HR), THE TAPER AND CHANNELIZATION DEVICES MAY BE OMITTED IF SHADOW VEHICLE IS PRESENT WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.



LOCAL ROAD SINGLE LANE CLOSURE

NOTES:
1. ROAD WORK AHEAD & END ROAD WORK SIGNS MAY BE OMITTED FOR SHORT DURATION OPERATIONS (LESS THAN 1 HOUR).
2. FLAGGERS SHALL BE LOCATED SO THEY ARE CLEARLY VISIBLE TO APPROACHING DRIVERS.
3. SIGN SPACING ASSUMES LOCAL ROAD SPEED IS 40 MPH OR LESS.

- WORK ZONE TRAFFIC CONTROL LAYOUT NOTES**
- ALL PAVEMENT STRIPING & SIGNING SHALL BE IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', U.S.D.O.T., F.H.W.A., LATEST EDITION.
 - THESE PLANS SHOW THE GENERAL CONDITION FOR TURNPIKE MAINLINE TRAFFIC CONTROL DURING CONSTRUCTION. SLIGHT MODIFICATIONS IN CONSTRUCTION PROCEDURE MAY OCCUR AND MAY REQUIRE SOME MINOR ADJUSTMENTS TO BE MADE IN THE FIELD. ALL PROCEDURES MUST BE APPROVED BY THE RESIDENT.
 - THE CONTRACTOR SHALL REMOVE OR MASK WITH BLACK TAPE (EXCEPT ALONG THE TURNPIKE MAINLINE) ALL PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH THE SPECIFICATIONS AND MUTCD.
 - EXPOSED BARRIER ENDS ON THE MAINE TURNPIKE SHALL BE PROTECTED BY A WORK ZONE CRASH CUSHION.
 - SPEED LIMIT, STOP, YIELD AND EXIT SIGNS SHALL BE A MINIMUM OF 5' ABOVE THE PAVEMENT.
 - WORK ZONE SPEED LIMIT ASSEMBLY MAY BE REPLACED WITH AN AUTOMATED WORK ZONE SPEED LIMIT SIGN.

- ABBREVIATIONS FOR ALL M.O.T. PLANS**
- BWLL = BROKEN WHITE LANE LINE
 - SWEL = SOLID WHITE LANE LINE
 - SYEL = SOLID YELLOW LANE LINE
 - TBWLL = TEMPORARY BROKEN WHITE LANE LINE
 - TDWEL = TEMPORARY DOTTED WHITE EDGE LINE
 - TSWEL = TEMPORARY SOLID WHITE EDGE LINE
 - TSWLL = TEMPORARY SOLID WHITE LANE LINE
 - TSYCL = TEMPORARY SOLID YELLOW CENTER LINE

- TEMPORARY RUMBLE STRIP NOTES**
- IF RUMBLE STRIPS ARE USED THEY SHALL BE PLACED IN ONE OF THE FOLLOWING CONFIGURATIONS:
 - ADJACENT TO THE WORK ZONE (2 UNITS)
 - UPSTREAM FROM THE TAPER FOR THE WORKZONE (3 UNITS)
 - BOTH ADJACENT TO THE WORKZONE AND PRIOR TO THE TAPER (5 UNITS)
 - RUMBLE STRIPS MAY BE PLACED UPSTREAM OF THE TAPER BETWEEN THE W3-5 SIGNS AND THE W4-2 SIGNS. IF RUMBLE STRIPS ARE INSTALLED PRIOR TO TAPER, W8-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST STRIP AND THE W8-24a SIGNS SHALL BE MOVED TO 400' AFTER THE W20-5 SIGNS.

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MLG	6/1/23	Checked	MDS	6/1/23
Drawn	JAR	6/1/23	In Charge of	TSB	6/1/23

VANASSE HANGEN BRUSTLIN, INC.
500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

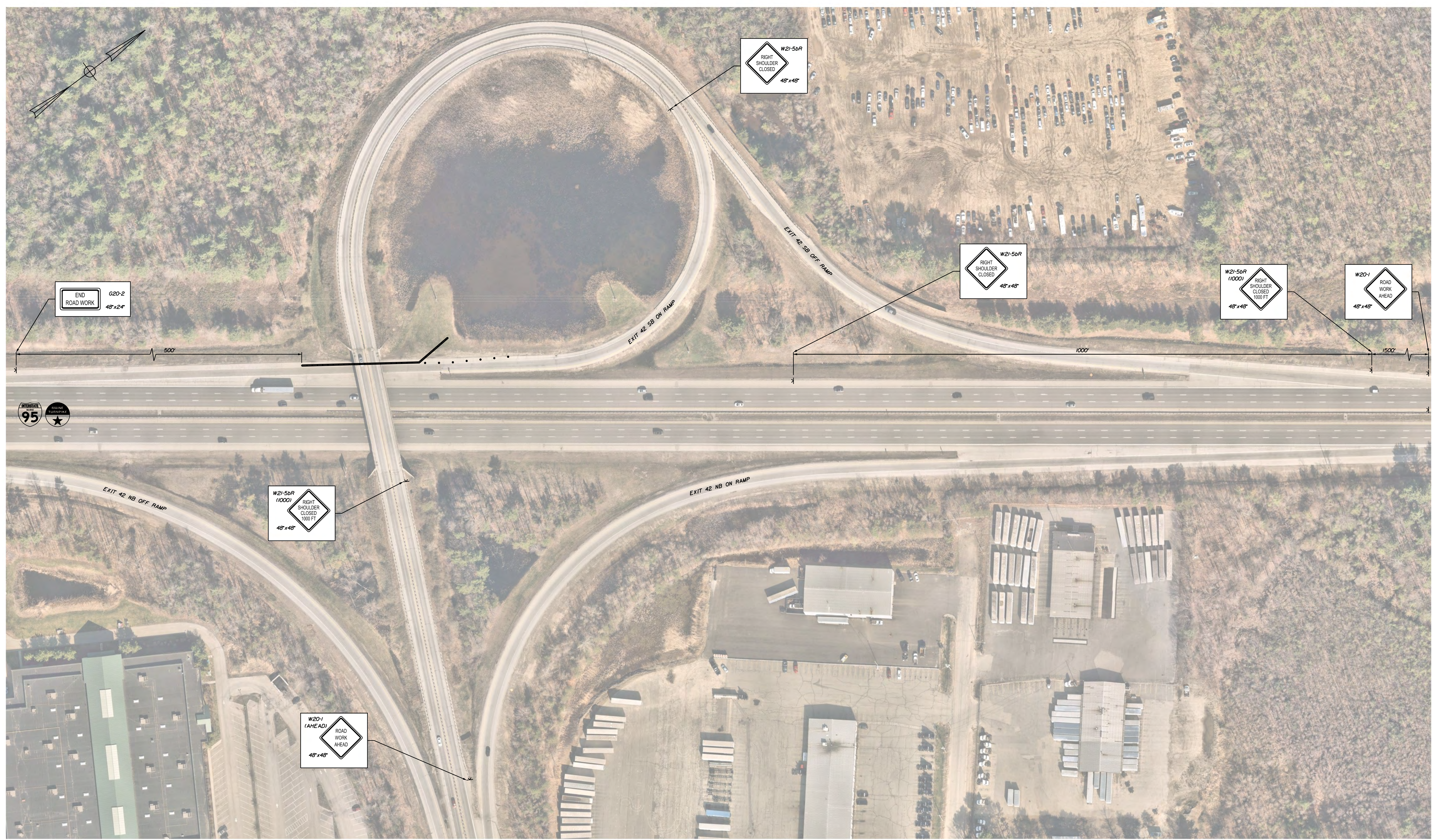
SCARBOROUGH INTERCHANGE UNDERPASS
MAINTENANCE OF TRAFFIC DETAILS
(2 OF 4)

VHB: 55702.00
CONTRACT: 2023.08

SHEET NUMBER: 4
4 OF 12

Date: 6/15/2023


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Scale: 80 0 80 160
1" = 80'-0"

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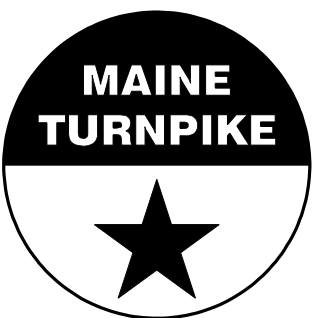
Designed by:



CONSULTANT PROJECT MANAGER: G. Edington

	By	Date	Checked	By	Date
Designed	MLG	6/1/23		MDS	6/1/23
Drawn	JAR	6/1/23	In Charge of	TSB	6/1/23

VANASSE HANGEN BRUSTLIN, INC.
500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



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MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

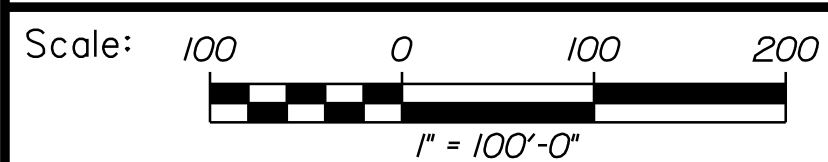
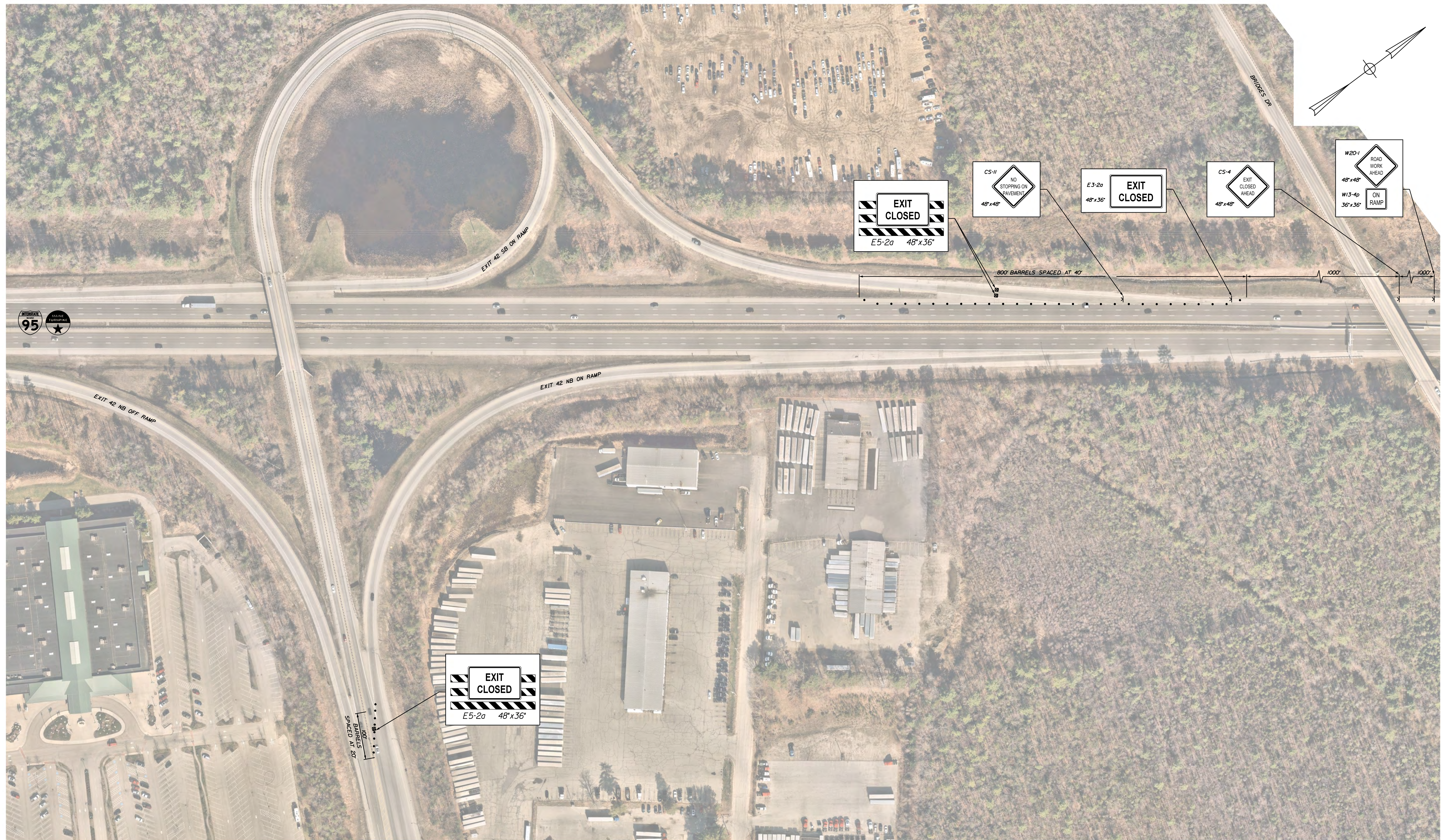
**SCARBOROUGH INTERCHANGE UNDERPASS
MAINTENANCE OF TRAFFIC DETAILS
(3 OF 4)**

VHB: 55702.00
CONTRACT: 2023.08

SHEET NUMBER: 5
5 OF 12

Date: 6/15/2023

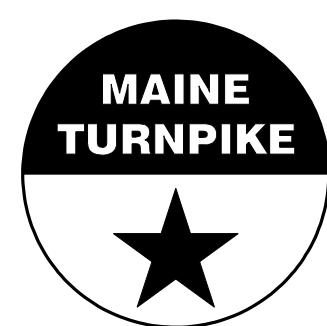
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Designed by:



VANASSE HANGEN BRUSTLIN, INC.
500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



THE GOLD STAR
MEMORIAL HIGHWAY

SCARBOROUGH INTERCHANGE UNDERPASS
MAINTENANCE OF TRAFFIC DETAILS
(4 OF 4)

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: G. Edington			
By	Date	By	Date
Designed MLG	6/1/23	Checked MDS	6/1/23
Drawn JAR	6/1/23	In Charge of TSB	6/1/23

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

VHB: 55702.00 SHEET NUMBER: 6
CONTRACT: 2023.08 6 OF 12

Date: 6/15/2023

Filename: ...MSTA\007_DetourPlan_01.dgn

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

ALL PCMS (1 WEEK PRIOR TO CLOSURE)

- EXIT 42 SB RAMP TO CLOSE SCREEN 1
- XX/XX TO XX/XX SCREEN 2
- 9PM TO 6AM SCREEN 3

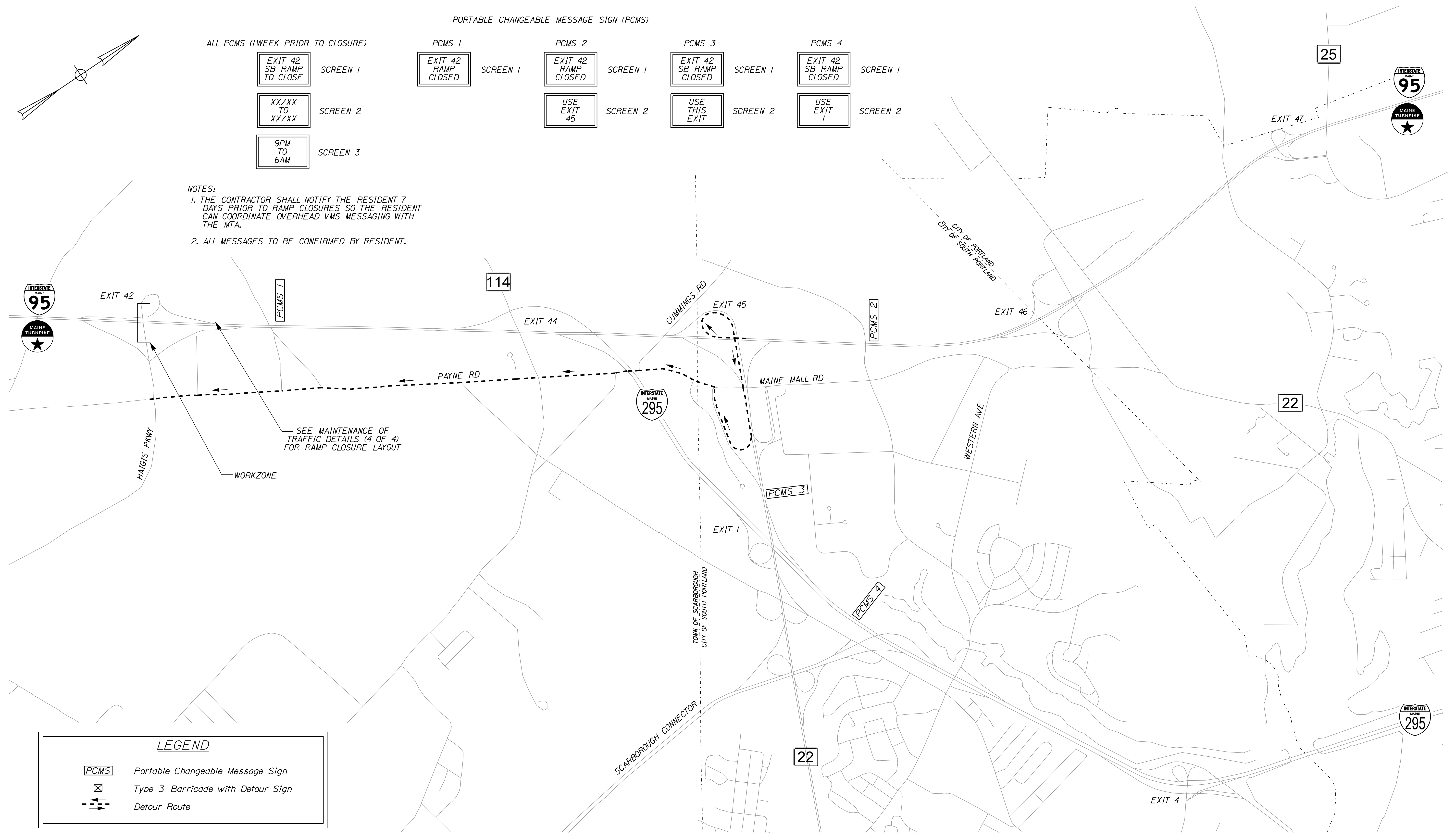
PCMS 1
EXIT 42 RAMP CLOSED SCREEN 1

PCMS 2
EXIT 42 RAMP CLOSED SCREEN 1
USE EXIT 45 SCREEN 2

PCMS 3
EXIT 42 SB RAMP CLOSED SCREEN 1
USE THIS EXIT SCREEN 2

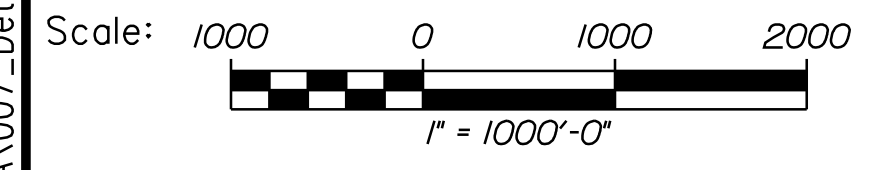
PCMS 4
EXIT 42 SB RAMP CLOSED SCREEN 1
USE EXIT 1 SCREEN 2

- NOTES:
- THE CONTRACTOR SHALL NOTIFY THE RESIDENT 7 DAYS PRIOR TO RAMP CLOSURES SO THE RESIDENT CAN COORDINATE OVERHEAD VMS MESSAGING WITH THE MTA.
 - ALL MESSAGES TO BE CONFIRMED BY RESIDENT.



LEGEND

- Portable Changeable Message Sign
- Type 3 Barricade with Detour Sign
- Detour Route



Designed by:



VANASSE HANGEN BRUSTLIN, INC.
500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



**THE GOLD STAR
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SCARBOROUGH INTERCHANGE UNDERPASS
DETOUR PLAN (1 OF 2)
OFF-RAMP CLOSURE

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: G. Edington					
	By	Date		By	Date
Designed	MLG	6/1/23	Checked	MDS	6/1/23
Drawn	JAR	6/1/23	In Charge of	TSB	6/1/23

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

VHB: 55702.00
CONTRACT: 2023.08

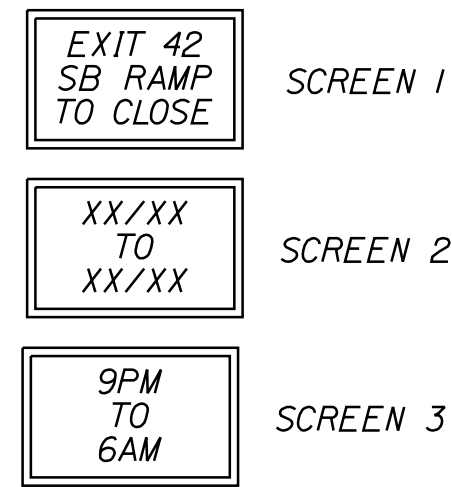
SHEET NUMBER: 7
7 OF 12

Date: 6/15/2023

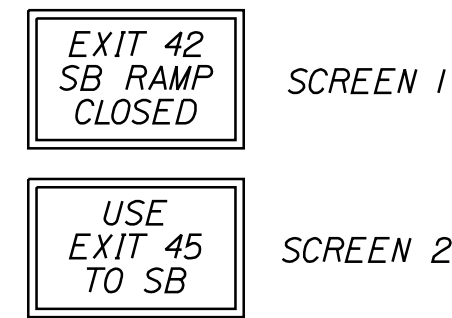
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PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

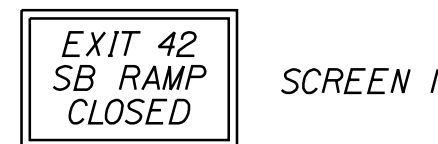
ALL PCMS (1 WEEK PRIOR TO CLOSURE)



PCMS 1 & 2

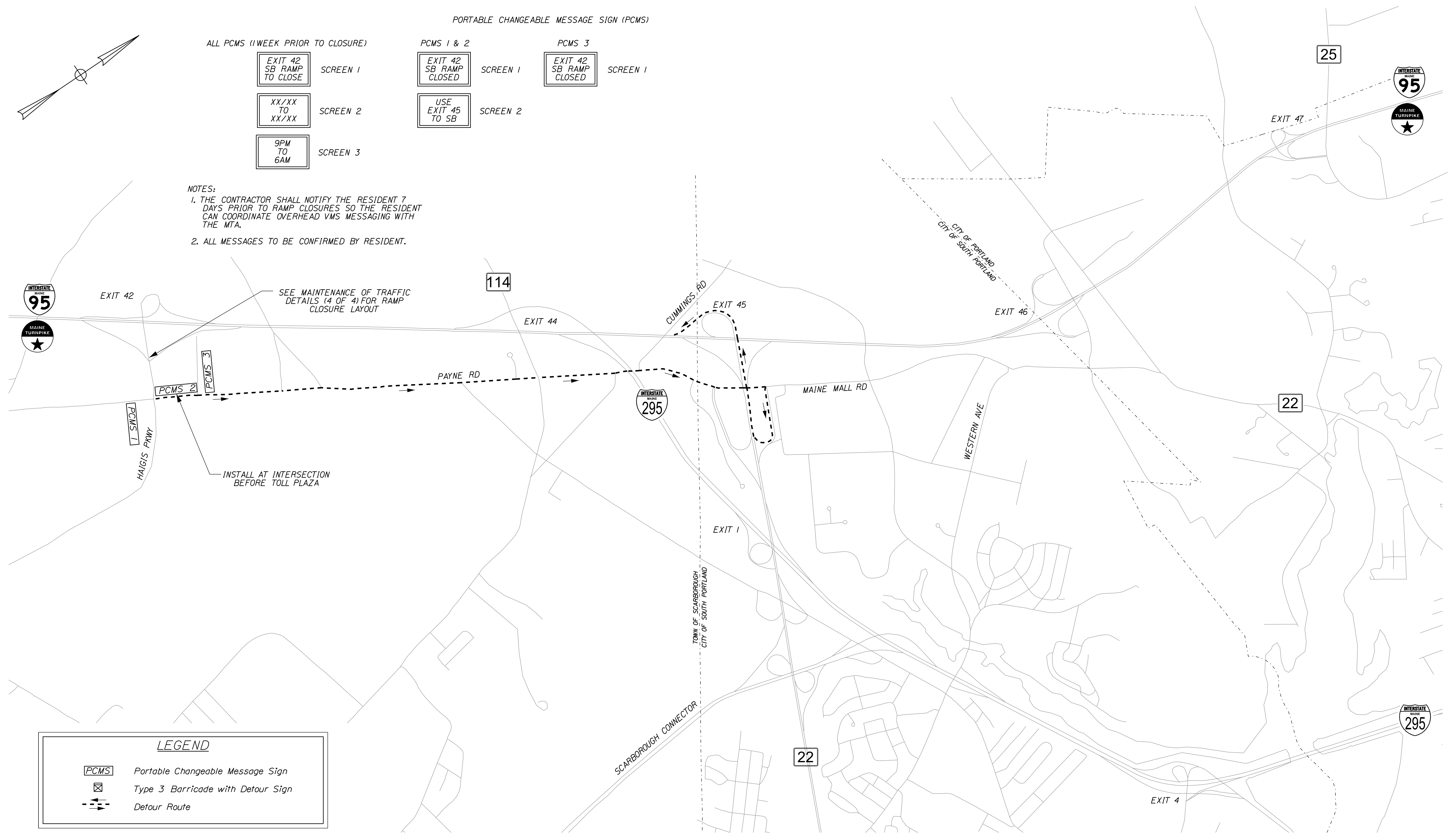


PCMS 3



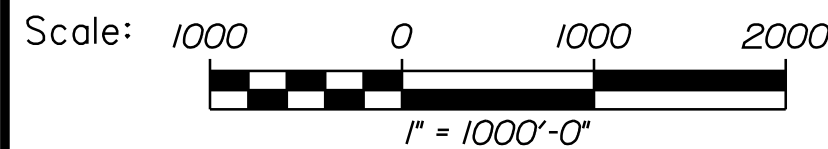
NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE RESIDENT 7 DAYS PRIOR TO RAMP CLOSURES SO THE RESIDENT CAN COORDINATE OVERHEAD VMS MESSAGING WITH THE MTA.
2. ALL MESSAGES TO BE CONFIRMED BY RESIDENT.



LEGEND

- Portable Changeable Message Sign
- Type 3 Barricade with Detour Sign
- Detour Route



No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date	Checked	By	Date
Designed	MLG	6/1/23		MDS	6/1/23
Drawn	JAR	6/1/23	In Charge of	TSB	6/1/23

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 Suite 105B
 South Portland, ME 04106
 TEL (207) 889-3150
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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

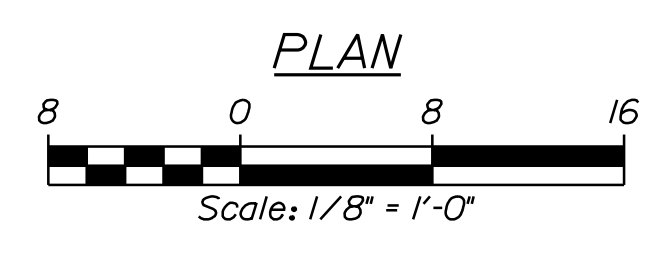
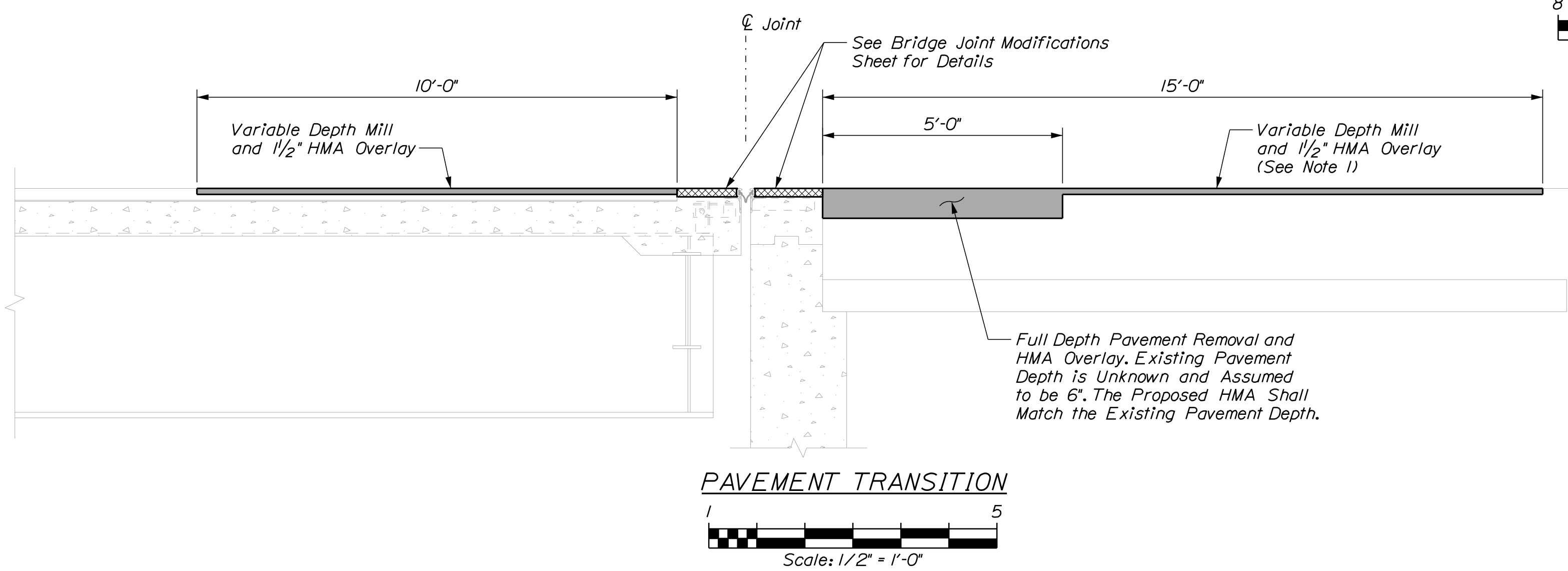
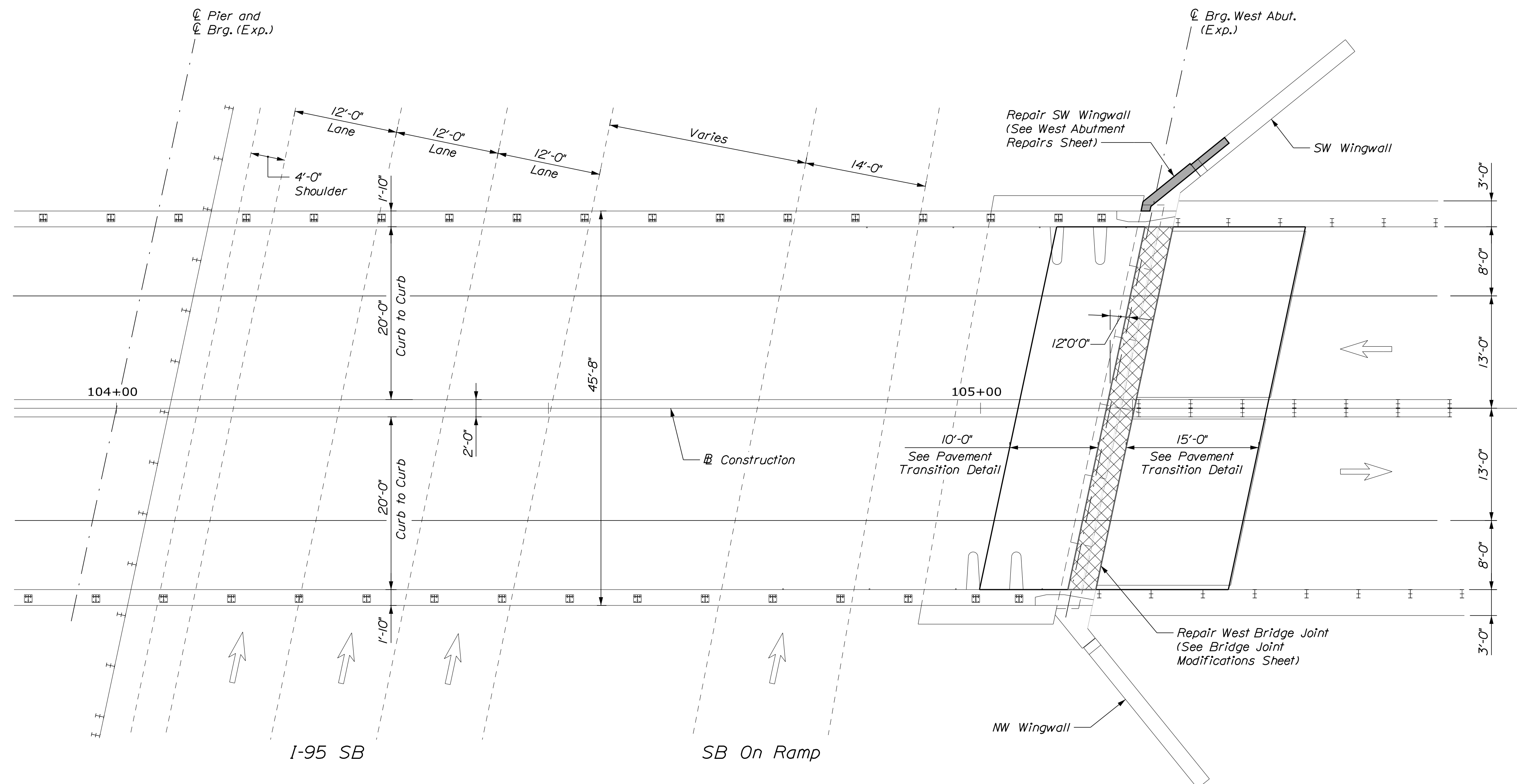
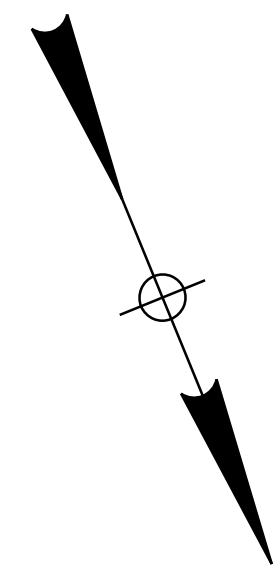
SCARBOROUGH INTERCHANGE UNDERPASS
 DETOUR PLAN (2 OF 2)
 ON-RAMP CLOSURE

VHB: 55702.00
 CONTRACT: 2023.08

SHEET NUMBER: 8
 8 OF 12

Date: 6/16/2023

Filename: ... \BRIDGE\MSTA\009_plan.dgn




NOTE
 1. Mill variable depth and pave 1.5" HMA. Depth of Mill shall be based on string-line measurements to achieve a smooth transition between existing and approach pavement.

Scale: As Noted

No.	Revision	By	Date

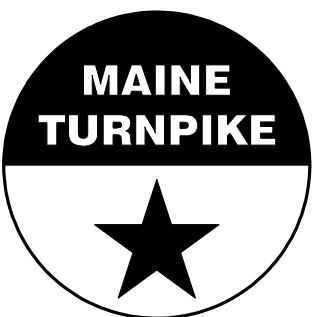
Designed by:



CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MFS	6/1/23	Checked	GME	6/1/23
Drawn	BJM	6/1/23	In Charge of	TSB	6/1/23

VANASSE HANGEN BRUSTLIN, INC.
 500 Southborough Dr.
 Suite 105B
 South Portland, ME 04106
 TEL (207) 889-3150
 FAX (207) 253-5596



**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

SCARBOROUGH INTERCHANGE UNDERPASS

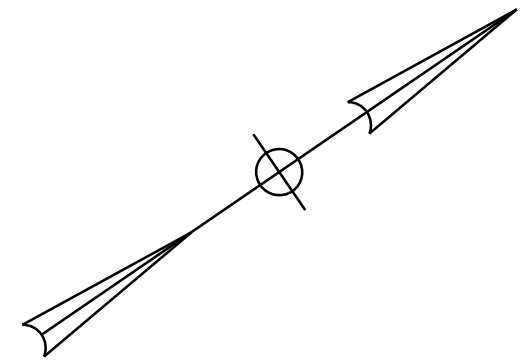
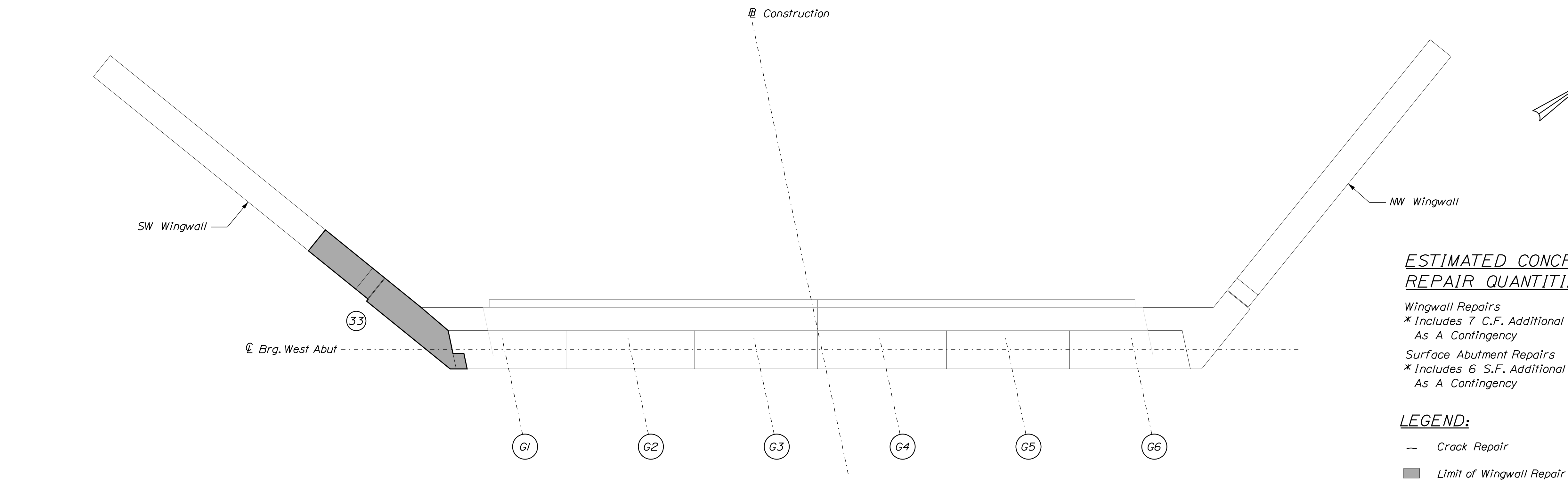
GENERAL PLAN

VHB: 55702.00
 CONTRACT: 2023.08

SHEET NUMBER: **9**
 9 OF 12

Date: 6/16/2023

Filename: ... \BRIDGE\MSTAV010_wabut.dgn



ESTIMATED CONCRETE REPAIR QUANTITIES (CF/SF)

Wingwall Repairs	40 *
* Includes 7 C.F. Additional Repair Quantity As A Contingency	
Surface Abutment Repairs	10 *
* Includes 6 S.F. Additional Repair Quantity As A Contingency	

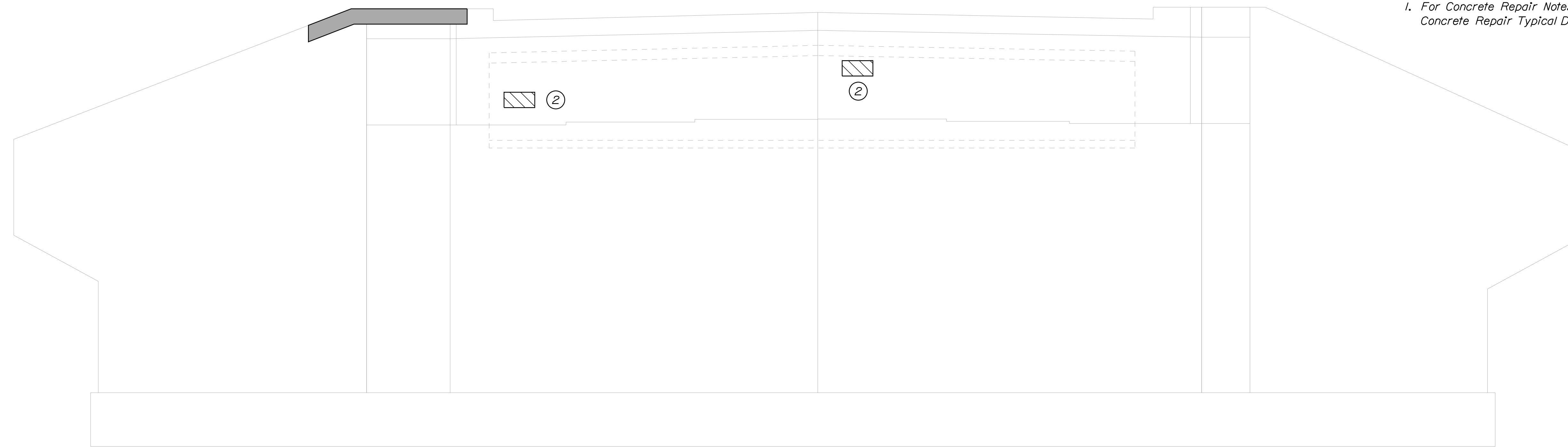
LEGEND:

- ~ Crack Repair
- Limit of Wingwall Repair
- ▨ Limit of Surface Patch Repair
- # Linear Feet of Crack Repair
- * Cubic/Square Footage of Repair

SHEET NOTE

1. For Concrete Repair Notes and Details see Concrete Repair Typical Details Sheet.

PLAN
Scale: 1/4" = 1'-0"




ELEVATION
Scale: 1/4" = 1'-0"

Scale: 1/4" = 1'-0"

No.	Revision	By	Date

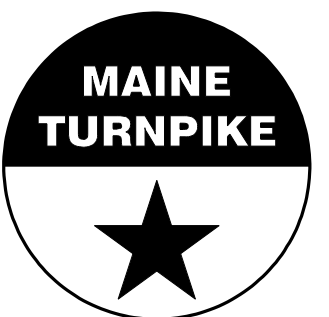
Designed by:



CONSULTANT PROJECT MANAGER: G. Edington

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South Portland, ME 04106
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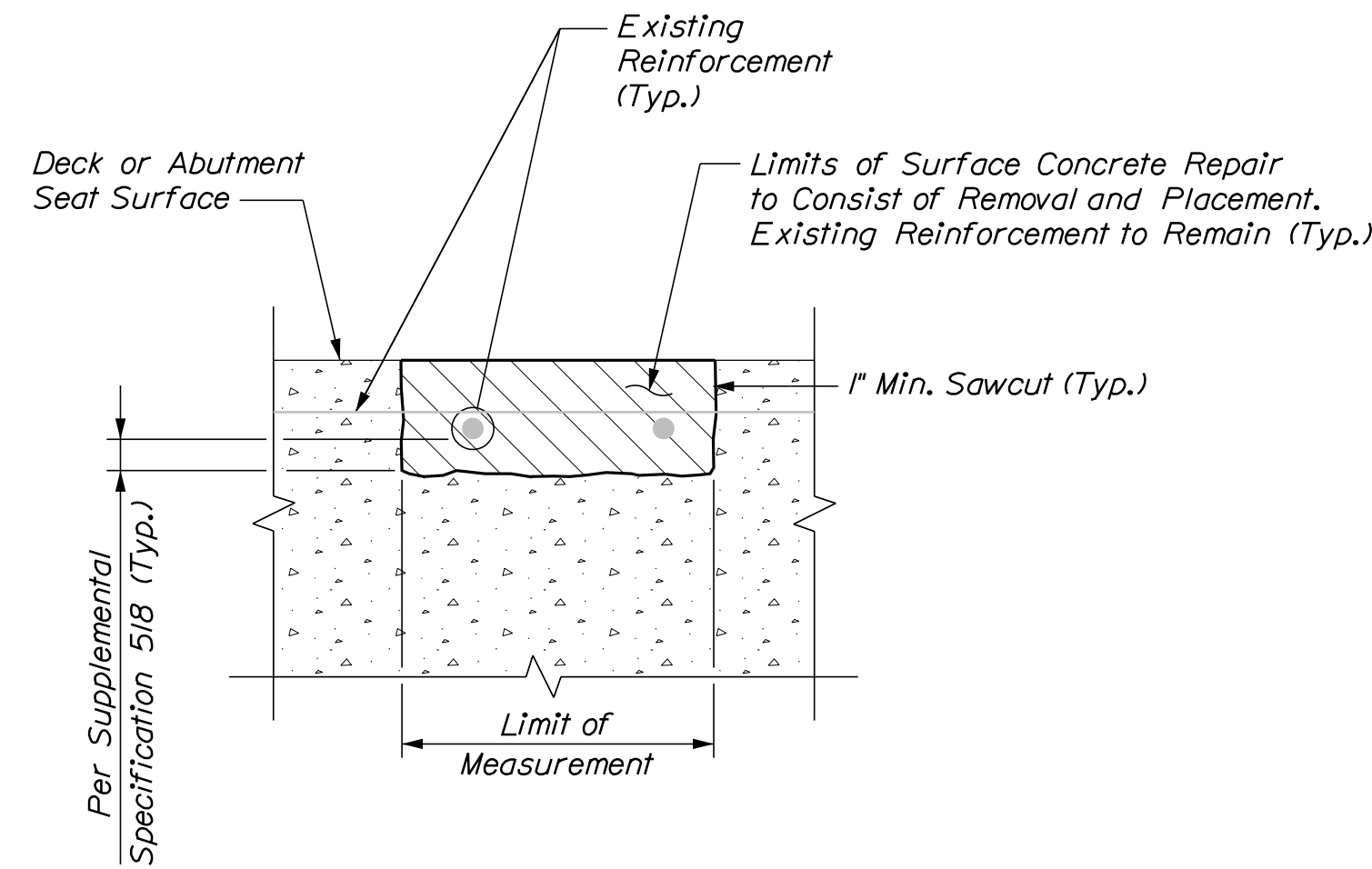
SCARBOROUGH INTERCHANGE UNDERPASS
WEST ABUTMENT REPAIRS

VHB: 55702.00
CONTRACT: 2023.08

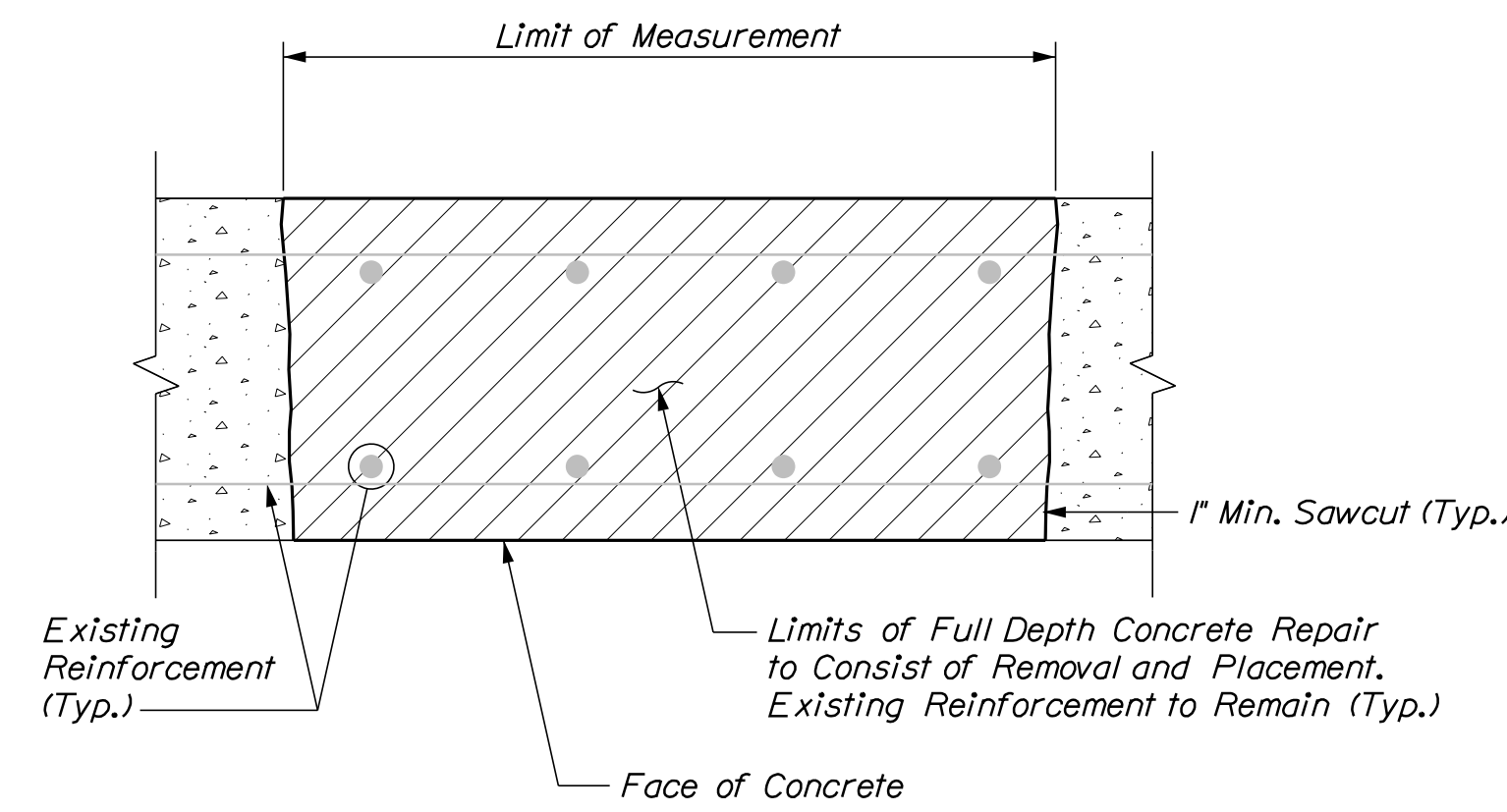
SHEET NUMBER: 10
10 OF 12

Date: 6/15/2023

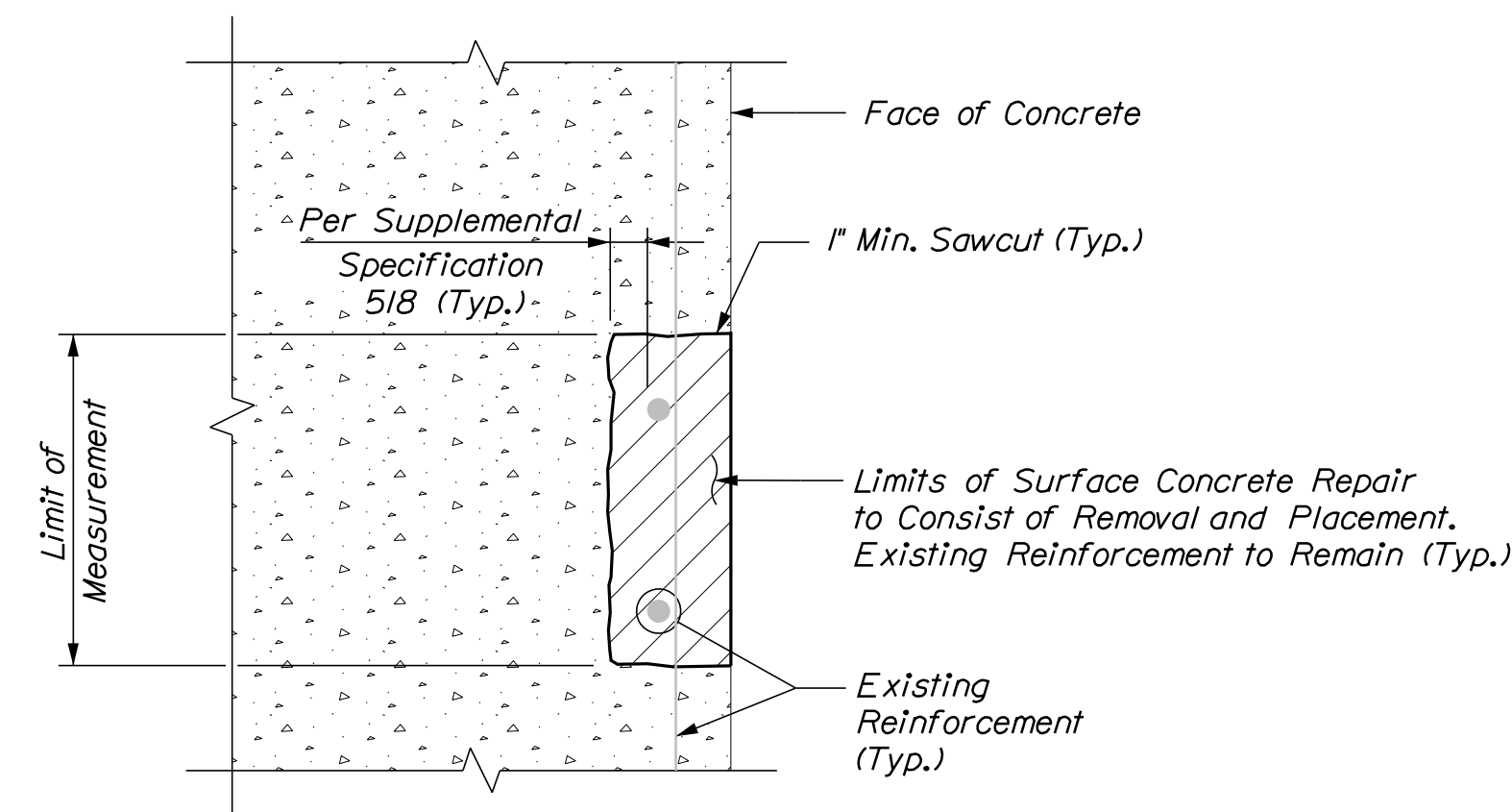
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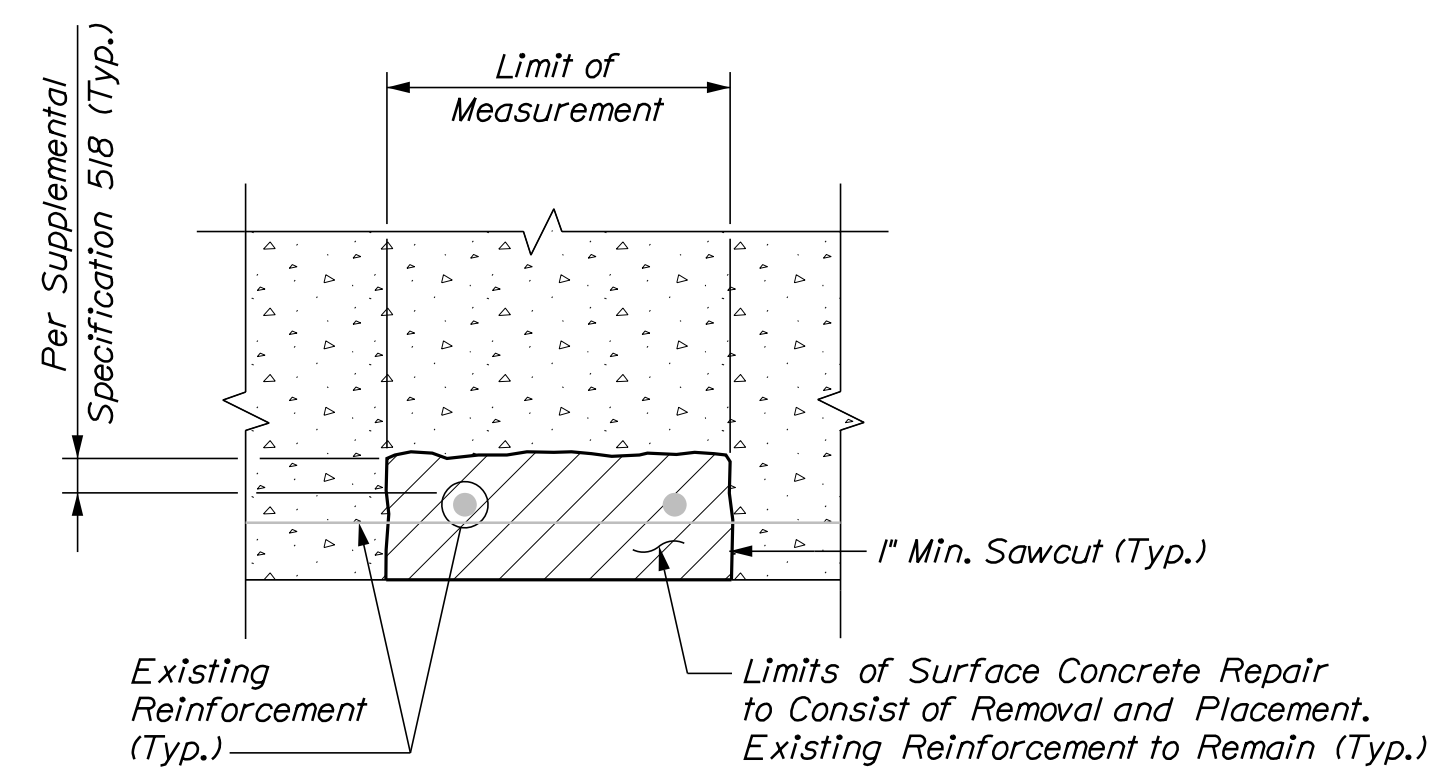
TYPICAL HORIZONTAL SURFACE CONCRETE REPAIR DETAILS



TYPICAL FULL DEPTH CONCRETE REPAIR DETAILS





TYPICAL VERTICAL SURFACE CONCRETE REPAIR DETAILS



TYPICAL OVERHEAD SURFACE CONCRETE REPAIR DETAILS

KEY

-  Existing Concrete
-  Proposed Concrete

CONCRETE REPAIR NOTES

1. Repair work shall include: surface concrete repairs, epoxy injection crack repair and providing access for inspection.
2. Where surface concrete repairs are specified the work shall include removal of unsound concrete and placement and curing of repair materials. Repairs shall be measured for payment under Item 518.10 Abutment Repairs.
3. Prior to the start of any concrete repairs the Resident and the Contractor shall sound all concrete surfaces and agree on the repair limits. Estimated repair quantities may increase at the Resident's discretion.
4. The estimated repair quantities are based on inspections completed in May 2023.

CONCRETE REPAIR PROCEDURE

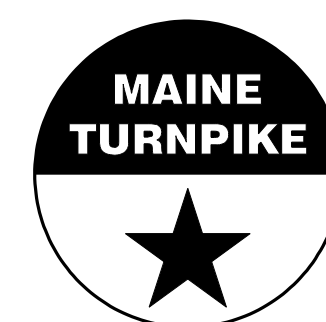
1. Perform 1" deep saw cuts along limits of removal.
2. Chip concrete to the depth specified in Supplemental Specification 518. If the removal limits change during the demolition process the Contractor shall notify the Resident. The Resident and Contractor shall agree on the revised pay limits prior to the Contractor continuing the removal.
3. Prepare and patch repair areas with Class AAA modified concrete or other materials selected from the applicable non-emergency list of materials in Supplemental Specification 518.
4. Perform general finishing.

Scale: NOT TO SCALE

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500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



THE GOLD STAR
MEMORIAL HIGHWAY

SCARBOROUGH INTERCHANGE UNDERPASS
CONCRETE REPAIR TYPICAL DETAILS

No.	Revision	By	Date

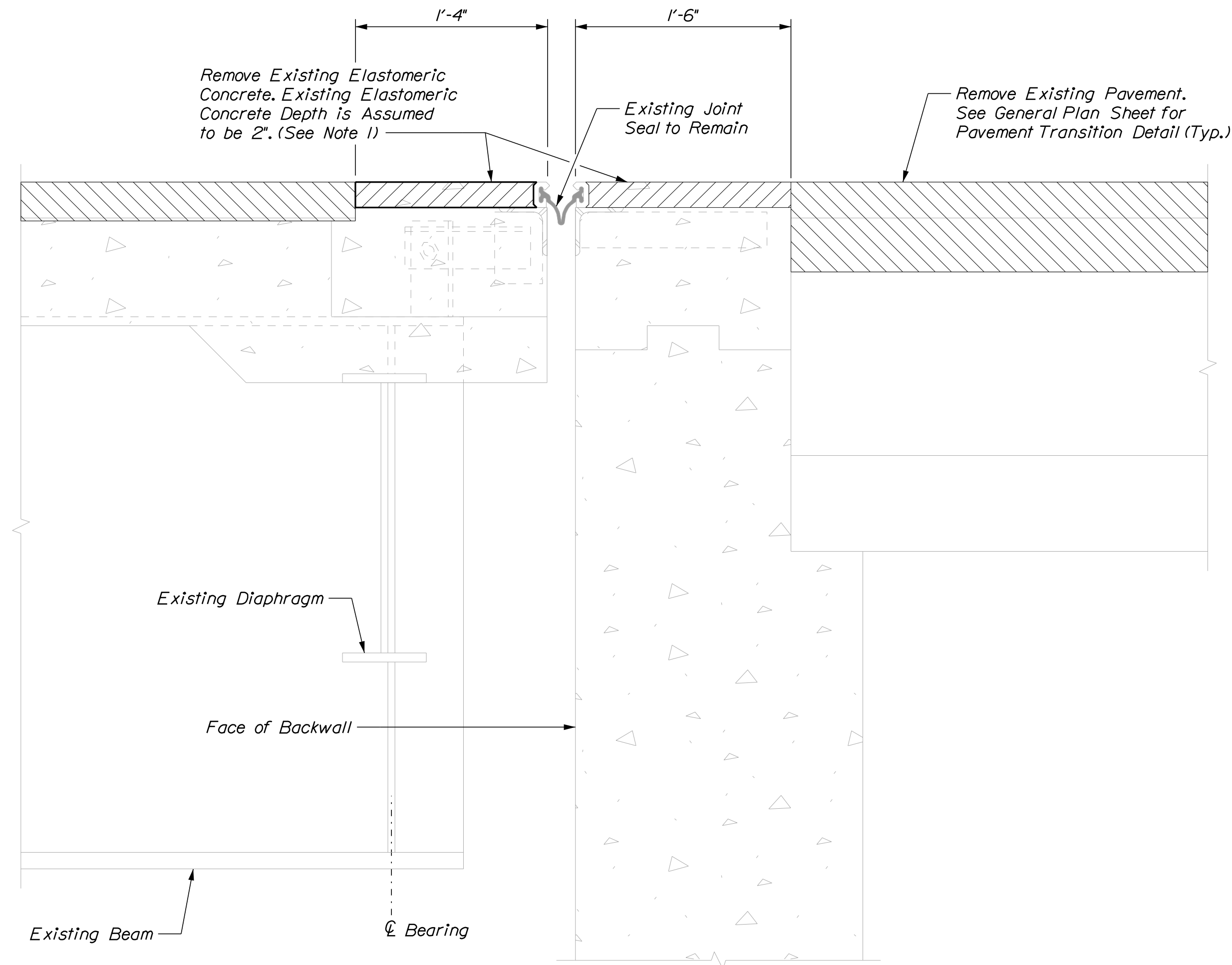
CONSULTANT PROJECT MANAGER: G. Edington					
	By	Date		By	Date
Designed	MFS	6/1/23	Checked	GME	6/1/23
Drawn	BJM	6/1/23	In Charge of	TSB	6/1/23

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

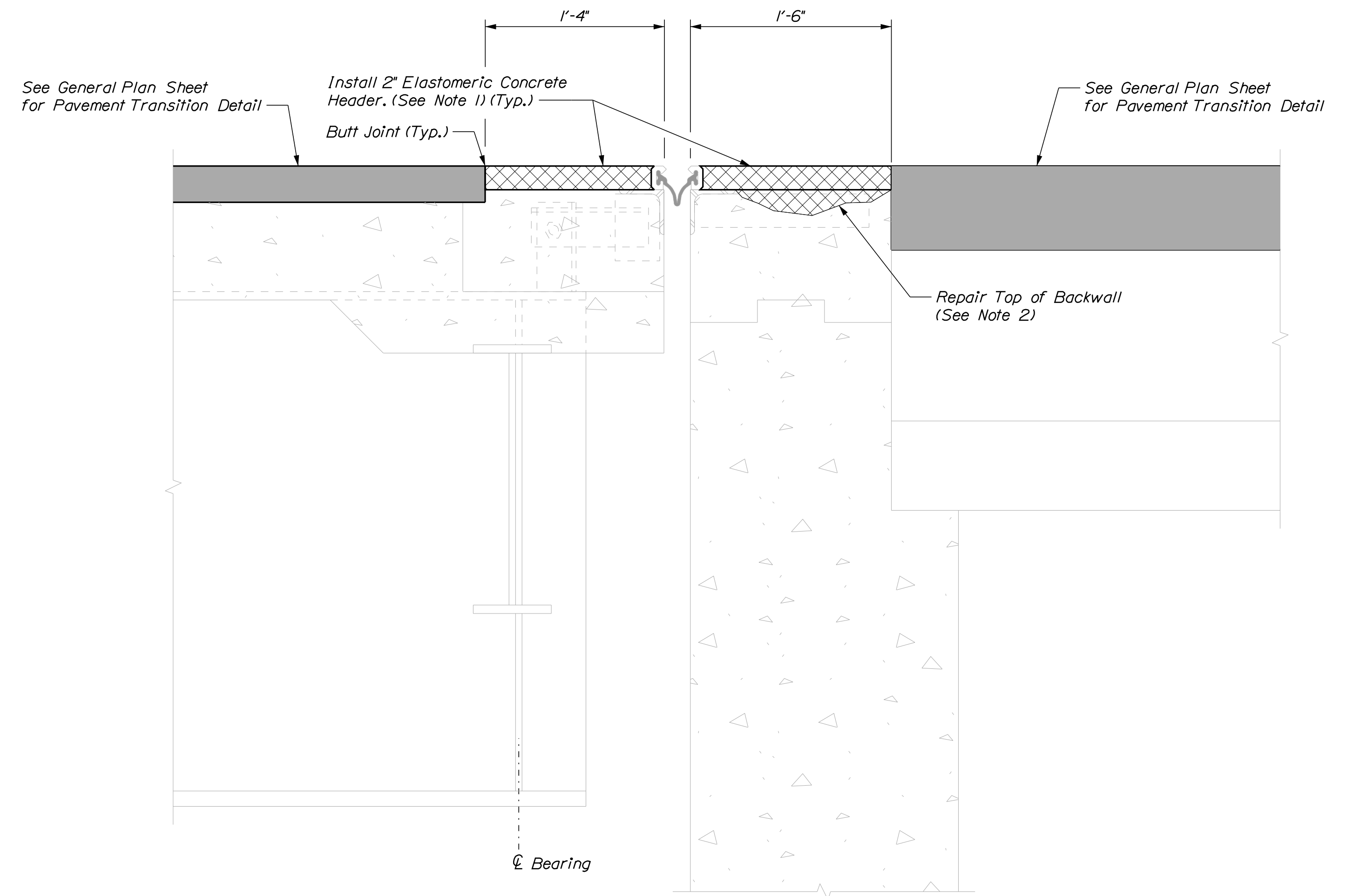
VHB: 55702.00
CONTRACT: 2023.08

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Date: 6/16/2023



EXISTING JOINT
Not to Scale



PROPOSED JOINT
Not to Scale

BRIDGE JOINT MODIFICATION
(West Abutment)

NOTES

1. Remove and place new elastomeric concrete header to the width and depth of the existing header. All labor, equipment, and materials necessary for removing the existing and installing the proposed elastomeric concrete shall be paid under Item 518.864, Elastomeric Concrete Header Repair.
2. Prior to placing the elastomeric concrete, the Contractor shall remove any areas of deteriorated concrete at the top of the backwall and prepare the concrete surface in accordance with Supplemental Specification Section 518 and as directed by the Resident. Once the area has been prepared, the Contractor shall place elastomeric concrete to fill the repair area. All costs for removing existing deteriorated concrete and preparing the concrete surface shall be incidental to Item 518.864, Elastomeric Concrete Header Repair.

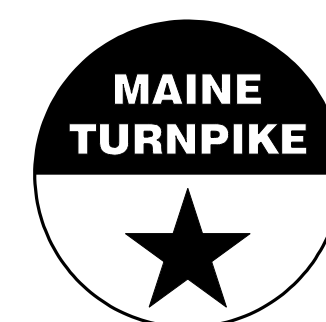
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Scale: NOT TO SCALE

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500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



**THE GOLD STAR
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SCARBOROUGH INTERCHANGE UNDERPASS
BRIDGE JOINT MODIFICATIONS

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: G. Edington					
	By	Date		By	Date
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Drawn	BJM	6/1/23	In Charge of	TSB	6/1/23

MTA PROJECT MANAGER: Ryan Barnes, P.E., CPESC

VHB: 55702.00
CONTRACT: 2023.08

SHEET NUMBER: 12
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