



THE GOLD STAR
MEMORIAL HIGHWAY

MAINE TURNPIKE AUTHORITY

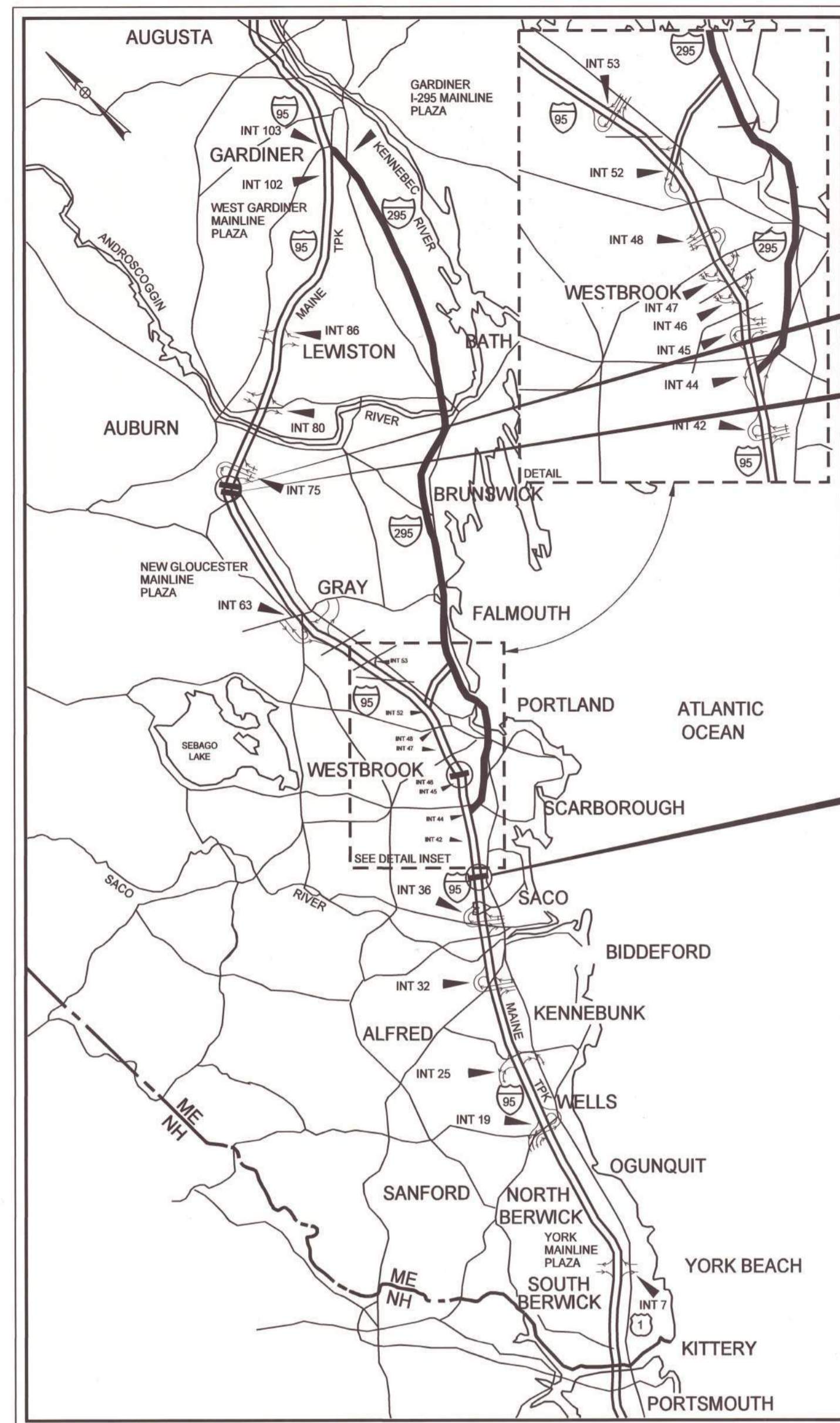
MICHAEL J. CIANCHETTE, CHAIR
JANE L. LINCOLN, VICE-CHAIR
ANDREW MCLEAN, MEMBER
NINA FISHER, MEMBER
THOMAS J. ZUKE, MEMBER
BRUCE A. VAN NOTE, EX-OFFICIO MEMBER
PETER S. MERFELD, INTERIM EXECUTIVE DIRECTOR

CONTRACT 2025.07

CULVERT REPAIRS DUNSTAN RIVER CULVERT (MM 40.30) UNNAMED STREAM CULVERT (MM 72.00) CULVERT (MM 72.20)

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LOCATION MAP

Date: 3/14/2025

Filename: ...General Sheets\001_title.dgn

APPROVED:

MAINE TURNPIKE AUTHORITY

STEPHEN R. TARTRE, P.E., DIRECTOR OF ENGINEERING

DATE

3/19/25



Mackenzie E. Bowe, P.E.
Consultant Project Manager

3/20/2025

DATE



Contract 2025.07

Date: 3/19/2025

ESTIMATED QUANTITIES						
ITEM NO.	DESCRIPTION	UNIT	Dunstan River Culvert (MM 40.30)	Unnamed Stream Culvert (MM 72.00)	Culvert (MM 72.20)	Quantity Total
509.2021	CULVERT LINING (DUNSTAN RIVER CULVERT MM 40.30)	LS	/			/
509.2022	CULVERT LINING (UNNAMED STREAM CULVERT MM 72.00)	LS		/		/
509.2023	CULVERT LINING (CULVERT MM 72.20)	LS			/	/
510.131	SPECIAL DETOUR, CONSTRUCTION ACCESS WAYS (DUNSTAN RIVER CULVERT MM 40.30)	LS	/			/
510.132	SPECIAL DETOUR, CONSTRUCTION ACCESS WAYS (UNNAMED STREAM CULVERT MM 72.00)	LS		/		/
652.3611	MAINTENANCE OF TRAFFIC CONTROL DEVICES (DUNSTAN RIVER CULVERT MM 40.30)	LS	/			/
652.3612	MAINTENANCE OF TRAFFIC CONTROL DEVICES (UNNAMED STREAM CULVERT MM 72.00)	LS		/		/
652.3613	MAINTENANCE OF TRAFFIC CONTROL DEVICES (CULVERT MM 72.20)	LS			/	/
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LS		/		/
659.10	MOBILIZATION	LS		/		/

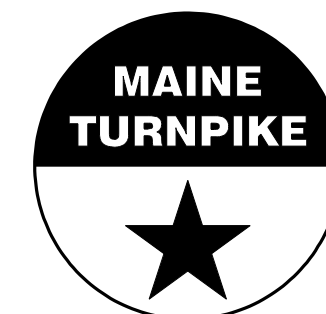
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Scale: AS NOTED

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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 ESTIMATED QUANTITIES

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	ECF	MEB	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:

SPECIFICATIONS

CONSTRUCTION:

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS, 2014 EDITION, WITH ALL REVISIONS
THERE TO.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
STANDARD DETAILS FOR HIGHWAYS AND BRIDGES, 2020
EDITION, WITH ALL REVISIONS THERE TO.

MAINE TURNPIKE AUTHORITY 2016 SUPPLEMENTAL SPECIFICATIONS, OR
LATEST REVISION.

NEW MATERIALS

CONCRETE REPAIR (UNLESS NOTED OTHERWISE) CLASS AAA - MODIFIED
ALL PRECAST ELEMENTS CLASS "P"
REINFORCING STEEL ASTM A615/A615M, GRADE 60

BASIC DESIGN STRESSES (NEW MATERIALS)

CONCRETE $f'c = 4,500 \text{ psi}$
REINFORCING STEEL $fy = 60,000 \text{ psi}$

TRAFFIC AND DESIGN LOADING DATA

DUNSTAN RIVER CULVERT (MM 40.30)

DESIGN LIVE LOAD (FOR EXISTING COMPONENTS) UNKNOWN
AADT 81,600
DESIGN SPEED (MPH) (FOR EXISTING) 70
FUNCTIONAL CLASS PRINCIPAL ARTERIAL INTERSTATE

UNNAMED STREAM CULVERT (MM 72.00)

DESIGN LIVE LOAD (FOR EXISTING COMPONENTS) UNKNOWN
AADT 24,000
DESIGN SPEED (MPH) (FOR EXISTING) 70
FUNCTIONAL CLASS PRINCIPAL ARTERIAL INTERSTATE

CULVERT (MM 72.20)

DESIGN LIVE LOAD (FOR EXISTING COMPONENTS) UNKNOWN
AADT 24,000
DESIGN SPEED (MPH) (FOR EXISTING) 70
FUNCTIONAL CLASS PRINCIPAL ARTERIAL INTERSTATE

HYDROLOGICAL DATA

	DUNSTAN RIVER (MM 40.30)	UNNAMED STREAM (MM 72.00)
DRAINAGE AREA	0.71	0.6
DESIGN DISCHARGE (Q2)	37.9	48.2
DESIGN DISCHARGE (Q50)	145	182
CHECK DISCHARGE (Q100)	173	217
HEADWATER ELEVATION (Q2)	20.9	214.5
HEADWATER ELEVATION (Q50)	24.0	219.3
HEADWATER ELEVATION (Q100)	25.3	221.3
DISCHARGE VELOCITY (Q2)	6.2	22.0
DISCHARGE VELOCITY (Q50)	9.6	28.0
DISCHARGE VELOCITY (Q100)	10.3	28.9

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE 2014 MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR HIGHWAYS AND BRIDGES, EXCEPT AS MODIFIED BY THE MAINE TURNPIKE AUTHORITY'S SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISION.
- ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MAINE DOT) 2020 STANDARD DETAILS FOR HIGHWAYS AND BRIDGES WITH ALL UPDATES AND MAINE DOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL, LATEST REVISION UNLESS OTHERWISE NOTED IN THESE PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ANY REQUIRED ACCESS WAYS. ALL ACCESS WAYS SHALL BE CONSTRUCTED WITHIN THE LIMITS OF INSTREAM IMPACTS AND WETLAND IMPACTS SHOWN. CLEARING AND LIMITS OF DISTURBANCE ARE LIMITED TO NO MORE THAN THE TOTAL AREA SHOWN, WITHIN THE GENERAL LIMITS OF THE SITE.
- COPIES OF THE AS-BUILT PLANS ARE POSTED ON THE MAINE TURNPIKE AUTHORITY WEB SITE AT WWW.MAINETURNPIKE.COM/PROJECTS/CONSTRUCTION-CONTRACTS. THE COMPLETENESS AND ACCURACY OF THESE PLANS IS NOT GUARANTEED. ELECTRONIC EXISTING TOPOGRAPHIC INFORMATION IS AVAILABLE UPON REQUEST.
- CHAMFER ALL EXPOSED NEW CONCRETE EDGES $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASH WORTHY END TREATMENT ON ALL GUARDRAILS ENDS IN ALL WOK AREAS AT THE END OF EACH DAY. THE CONTRACTOR SHALL ENSURE THAT ENOUGH TIME EXISTING IN THE WORK DAY TO COMPLETE ALL MODIFICATION AND/OR INSTALLATIONS TO END TERMINALS. THE CONTRACTOR SHALL ENSURE THAT ALL PARTS AND MANPOWER ARE ON-SITE PRIOR TO UNDERTAKING ANY GUARDRAIL MODIFICATION.
- ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES.
- EXISTING IN SLOPES STEEPER THAN 2:1 IN PROPOSED FILL AREAS SHALL BE BENCHED AS DIRECTED BY THE RESIDENT.
- CLEARING LINES SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND SHALL BE APPROVED BY THE RESIDENT PRIOR TO ANY CLEARING TAKING PLACE.
- EXCAVATION ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARDS FOR EXCAVATIONS).
- DO NOT EXCAVATE FOR AGGREGATE SUBBASE COURSE WHERE EXISTING MATERIAL IS SUITABLE AS DETERMINED BY THE RESIDENT.
- TEMPORARY STONE CHECK DAMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES. STONE CHECK DAMS SHALL BE SPACED APPROXIMATELY 100 FEET FOR DITCH GRADES LESS THAN 3% AND SPACED APPROXIMATELY 50 FEET FOR DITCH GRADES STEEPER THAN 5%. SEE MAINE DOT BEST MANAGEMENT PRACTICES FOR FURTHER DETAILS.

EROSION CONTROL NOTES


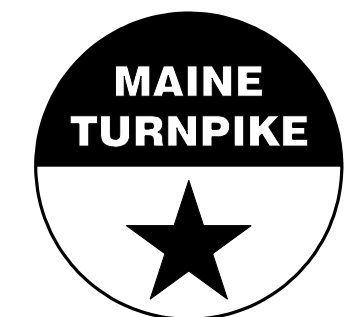
- ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES.
- EROSION CONTROL BLANKET, SHALL BE INSTALLED ON PERMANENT 2:1 SLOPES FROM THE TOP TO TOE OF SLOPE. LOAM AND SEED SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET. LIMITS OF THE EROSION CONTROL BLANKET IN DITCHES SHALL BE 4' WIDE OR AS DESIGNATED BY THE RESIDENT.

UTILITIES NOTES

- EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM EXISTING PLANS AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. 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 AN ELECTRONIC COPY OF ALL DIG SAFE TICKETS WITHIN 24 HOURS OF THEIR RELEASE FOR PROJECT NOTIFICATIONS AND 3RD PARTY UTILITY LOCATER 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 NEW AND EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION AS APPROVED BY THE UTILITY OWNERS.
- FOLLOWING THE COMPLETION OF THE INITIAL UTILITY LOCATE THE CONTRACTOR SHALL GPS LOCATE ALL UTILITIES WITHIN THE PROJECT LIMITS AND PROVIDE A COPY OF THE DIG SAFE RECORDS TO THE AUTHORITY. THE CONTRACTOR, ACTING AS THE AUTHORITY'S THIRD PARTY LOCATOR SHALL BE RESPONSIBLE FOR REMARKING ALL MAINE TURNPIKE FACILITIES WHEN A DIG SAFE UTILITY LOCATE IS CALL FOR IN THE PROJECT. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

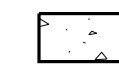
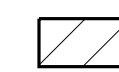
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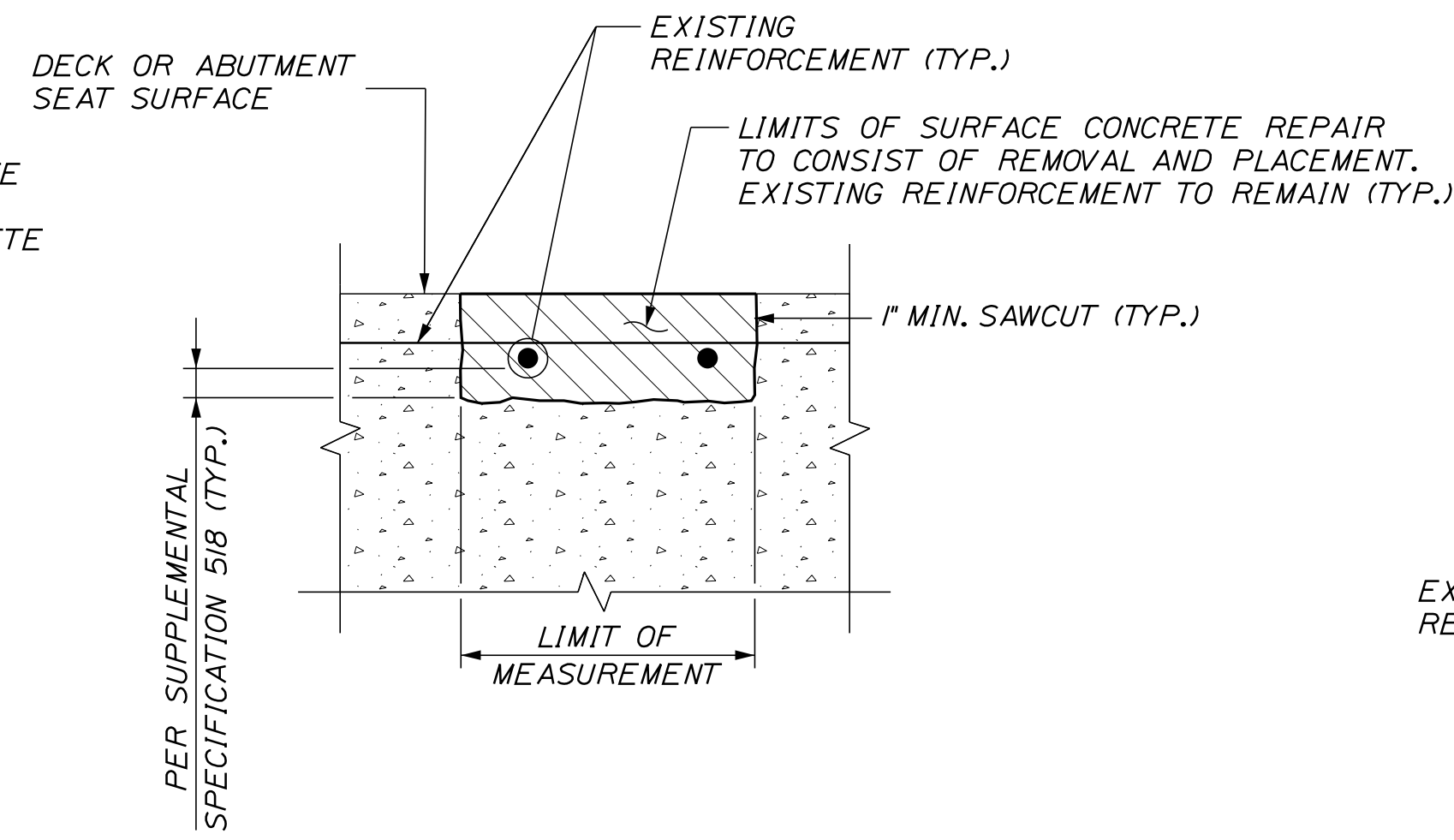
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Scale: AS NOTED		Designed by:				VANASSE HANGEN BRUSTLIN, INC. 500 Southborough Dr. Suite 105B South Portland, ME 04106 TEL (207) 889-3150 FAX (207) 253-5596				THE GOLD STAR MEMORIAL HIGHWAY		MTA PROJECT NO. 2025.07 CULVERT REPAIRS GENERAL NOTES																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		No.	Revision	By	Date													CONSULTANT PROJECT MANAGER: M. Bowe		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>By</th> <th>Date</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Designed</td> <td>SRP 3/20/25</td> <td>Checked</td> <td>ECF 3/20/25</td> </tr> <tr> <td>Drawn</td> <td>BRT 3/20/25</td> <td>In Charge of</td> <td>MEB 3/20/25</td> </tr> </tbody> </table>		By	Date	By	Date	Designed	SRP 3/20/25	Checked	ECF 3/20/25	Drawn	BRT 3/20/25	In Charge of	MEB 3/20/25	MTA PROJECT MANAGER: Kristi Van Ooyen, PE		VHB: 55813.00 CONTRACT: 2025.07		SHEET NUMBER: 3 OF 23	
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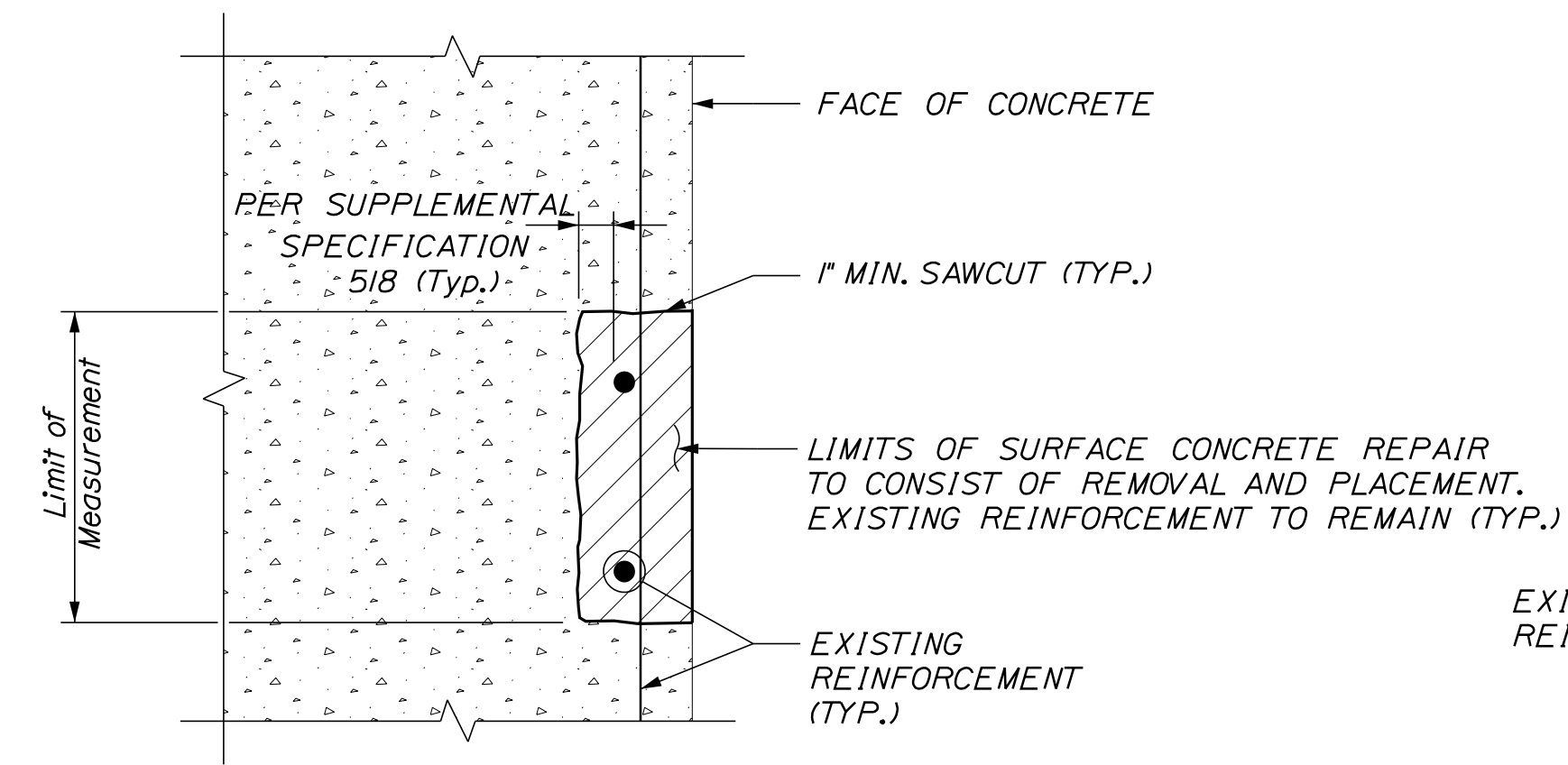
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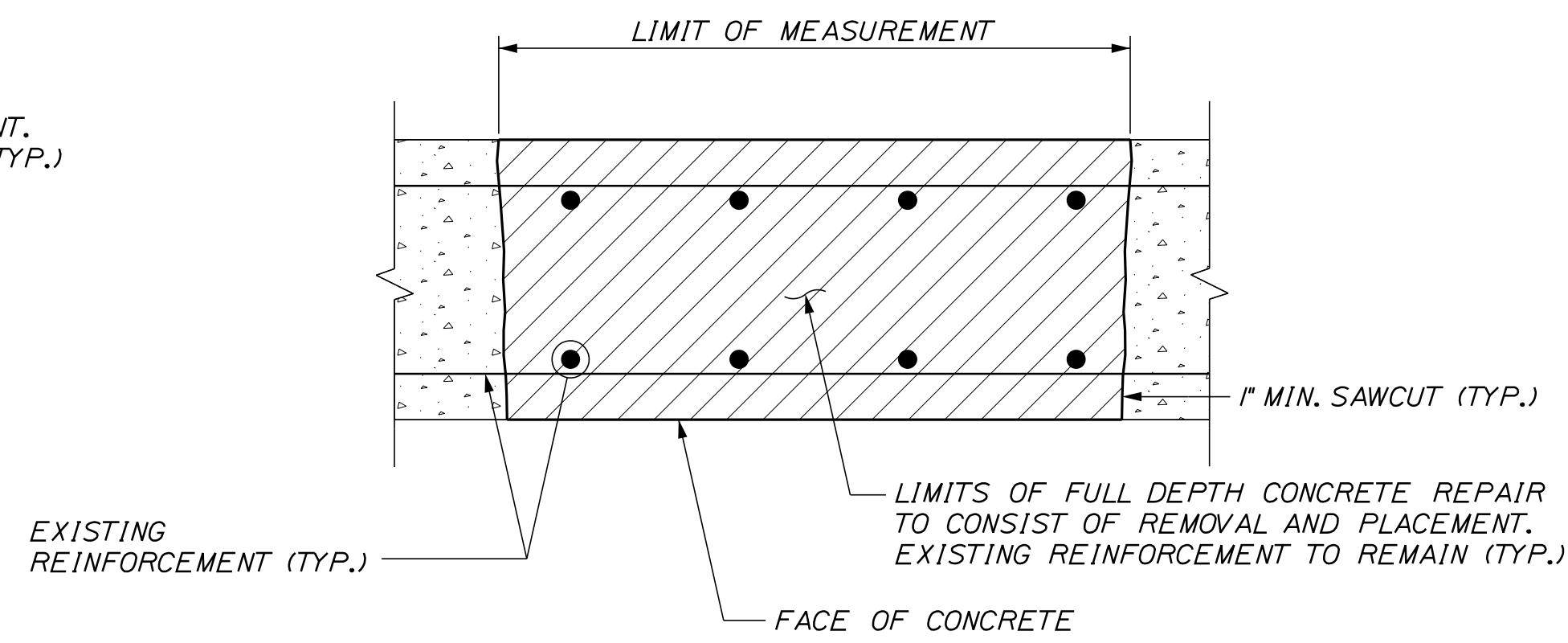
-  EXISTING CONCRETE
-  PROPOSED CONCRETE



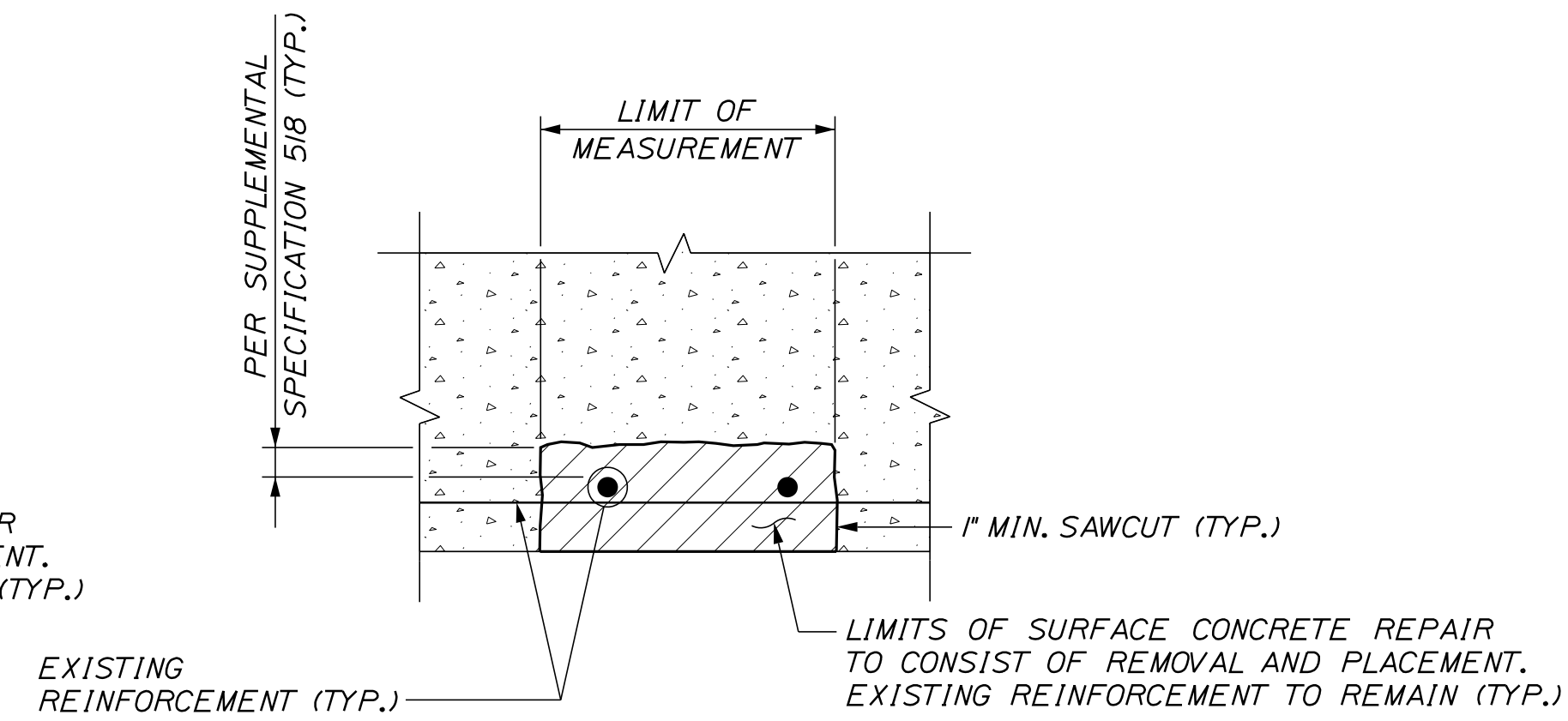
TYPICAL HORIZONTAL SURFACE CONCRETE REPAIR DETAILS



TYPICAL VERTICAL SURFACE CONCRETE REPAIR DETAILS



TYPICAL FULL DEPTH CONCRETE REPAIR DETAILS



TYPICAL OVERHEAD SURFACE CONCRETE REPAIR DETAILS

CONCRETE REPAIR NOTES

1. REPAIR WORK SHALL INCLUDE: SURFACE CONCRETE REPAIRS 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 INCIDENTAL TO 509.2022, CULVERT LINING (UNNAMED STREAM MM 72.00).
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 OR DECREASE AT THE RESIDENT'S DISCRETION.

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.

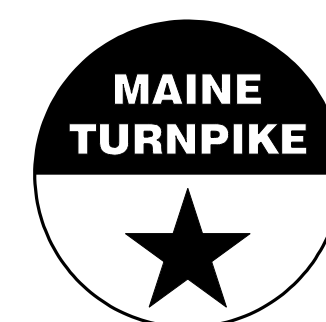
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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
CONCRETE REPAIR DETAILS
UNNAMED STREAM CULVERT (72.00)

No.	Revision	By	Date

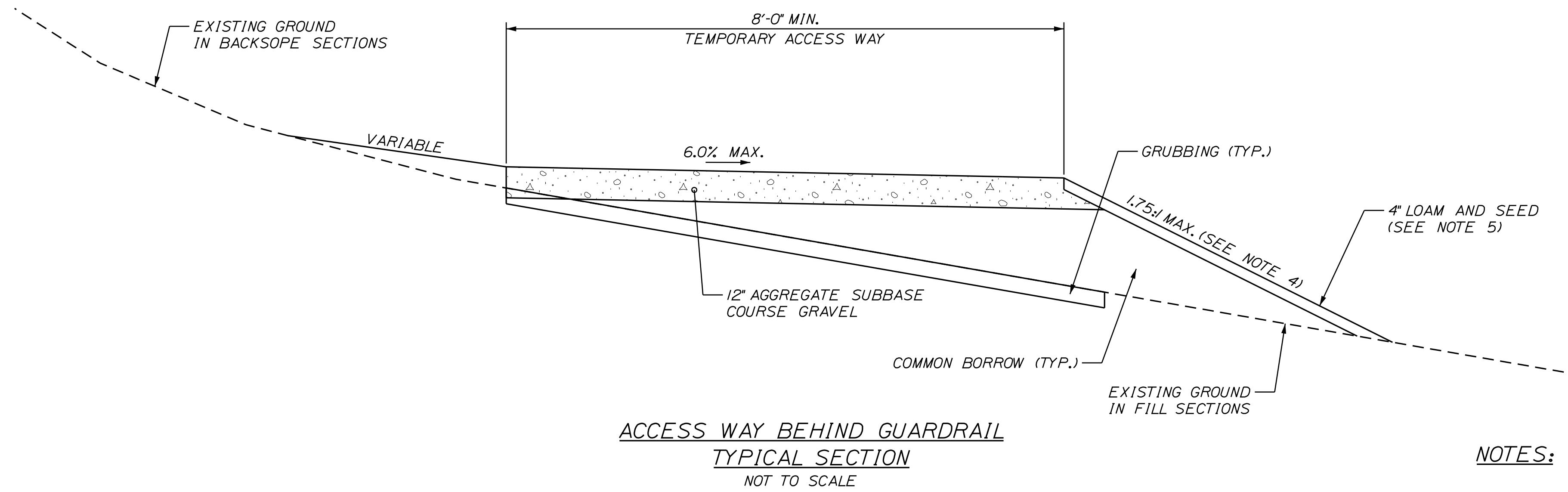
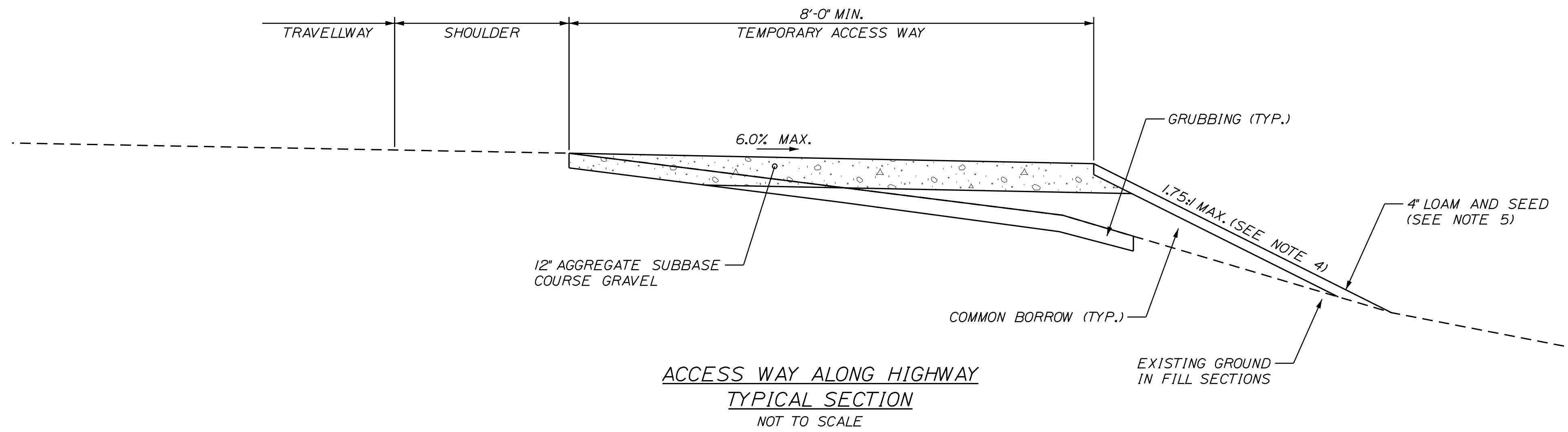
CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date		By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

VHB: 55813.00
CONTRACT: 2025.07

SHEET NUMBER:

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

Date: 3/19/2025




NOTES:

1. WHEN ADJACENT TO EXISTING PAVEMENT, ONLY REMOVE ORGANIC MATERIAL. DO NOT EXCAVATE.
2. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESTORE ALL ACCESS AREAS TO THEIR ORIGINAL CONDITION, UNLESS AUTHORIZED OTHERWISE.
3. WHEN AUTHORIZED TO REMAIN, ACCESS WAY SHALL MEET THE REQUIREMENTS SPECIFIED IN SPECIAL PROVISION 510 SPECIAL DETOURS.
4. ON ALL SLOPES STEEPER THAN 2:1 THE CONTRACTOR SHALL PLACE 24\"/>

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CONSULTANT PROJECT MANAGER: M. Bowe

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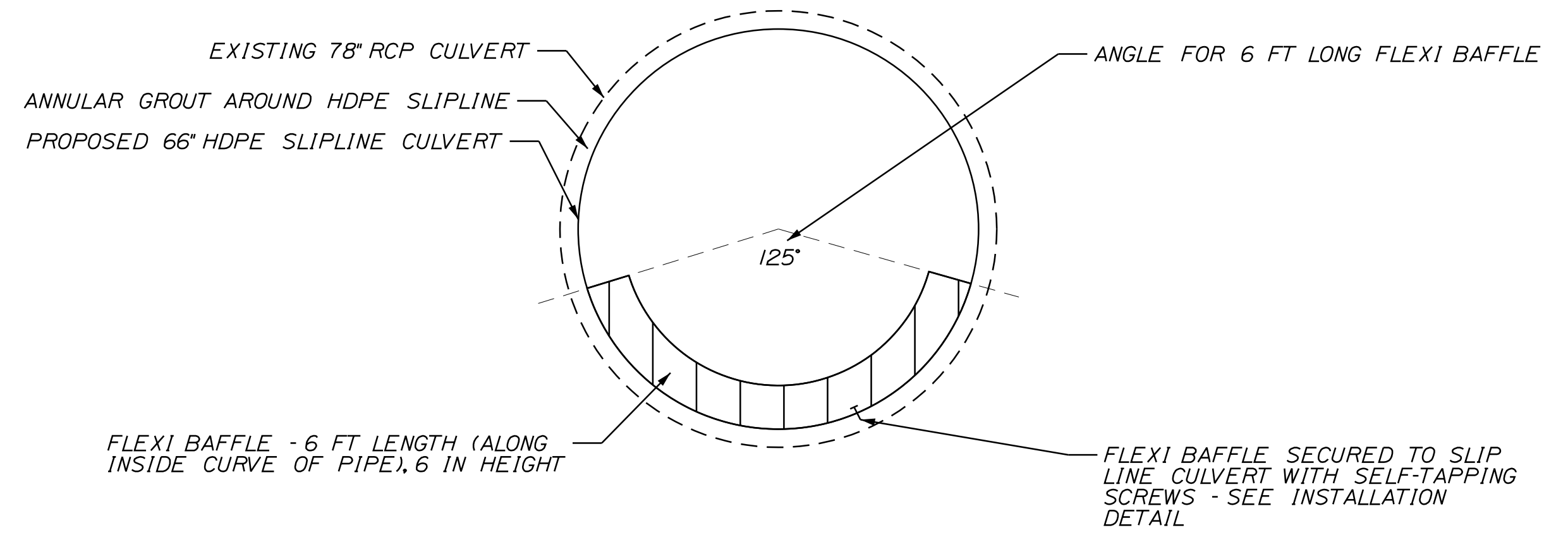
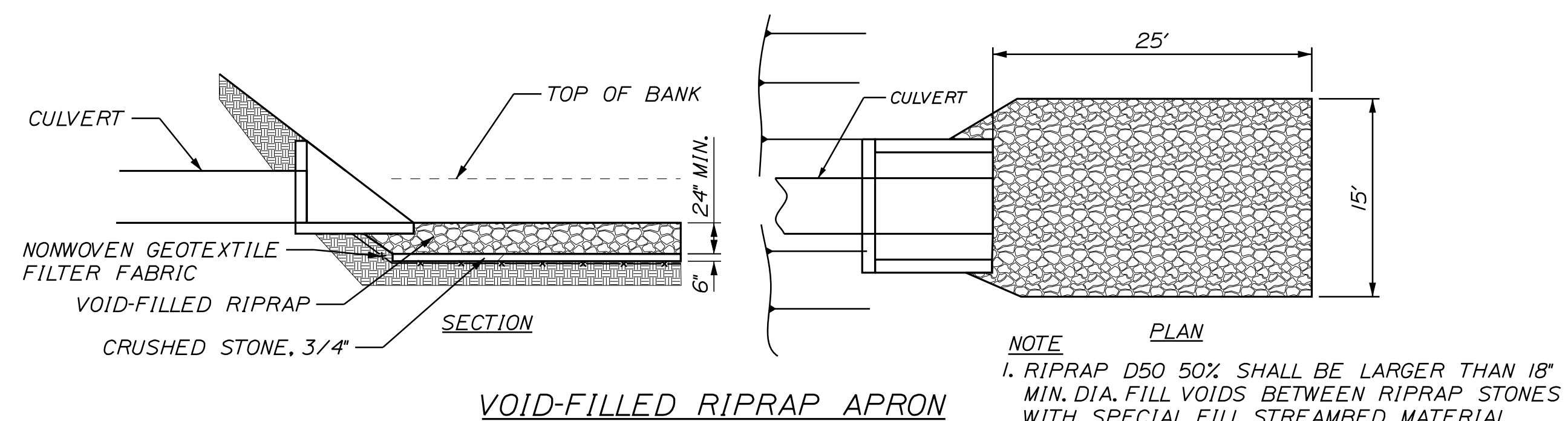
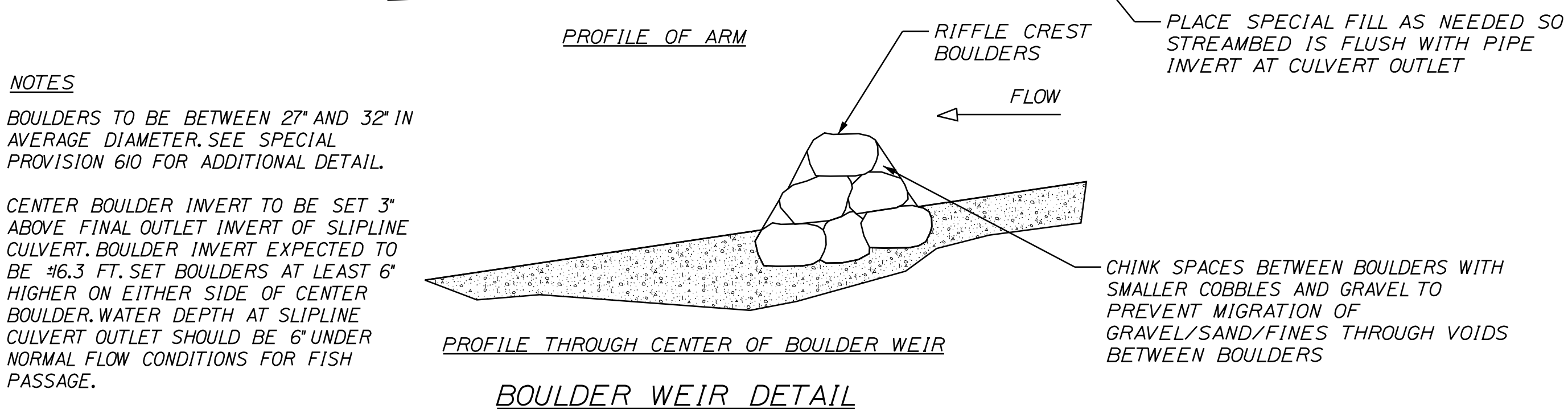
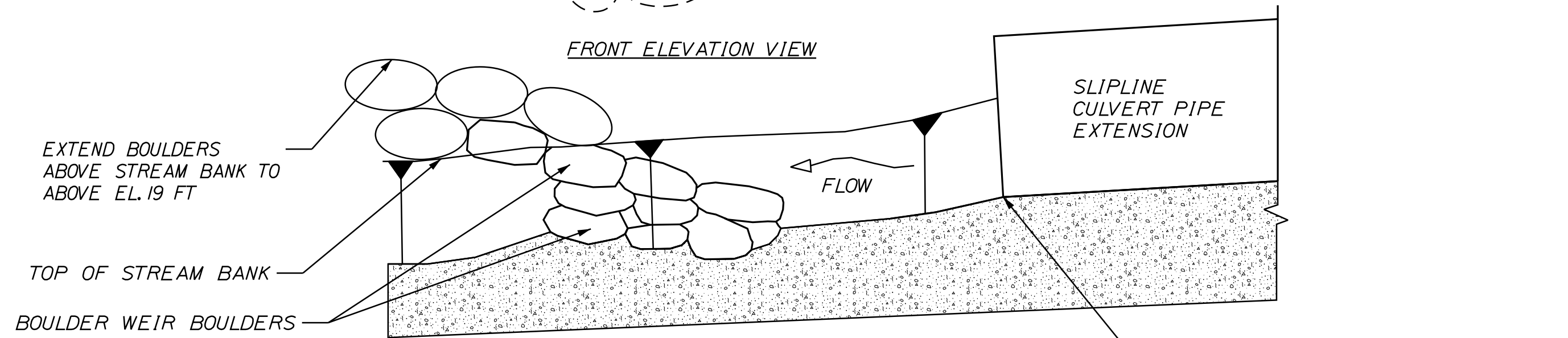
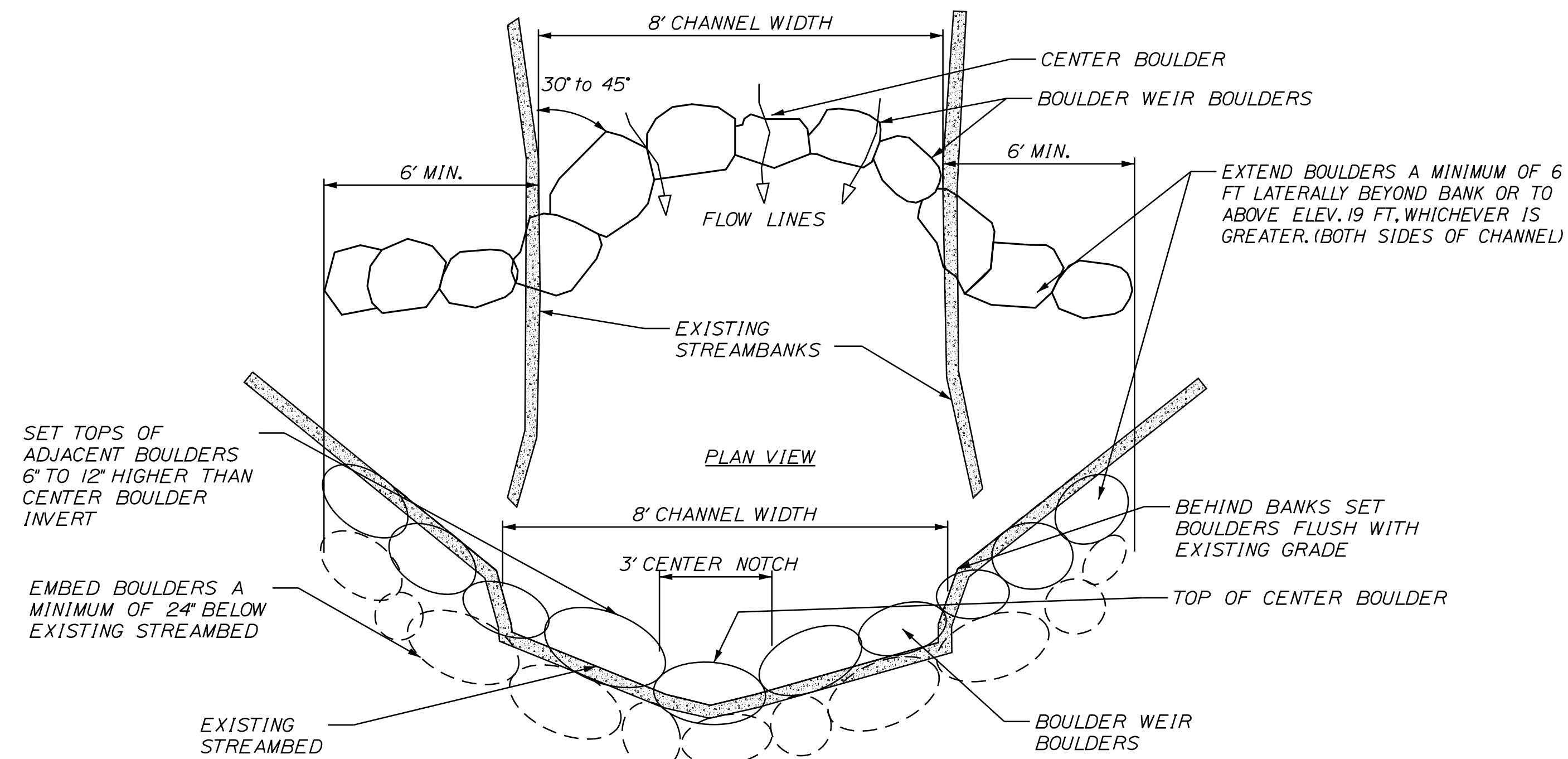
MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 ACCESS WAY TYPICAL SECTIONS

VHB: 55813.00
 CONTRACT: 2025.07

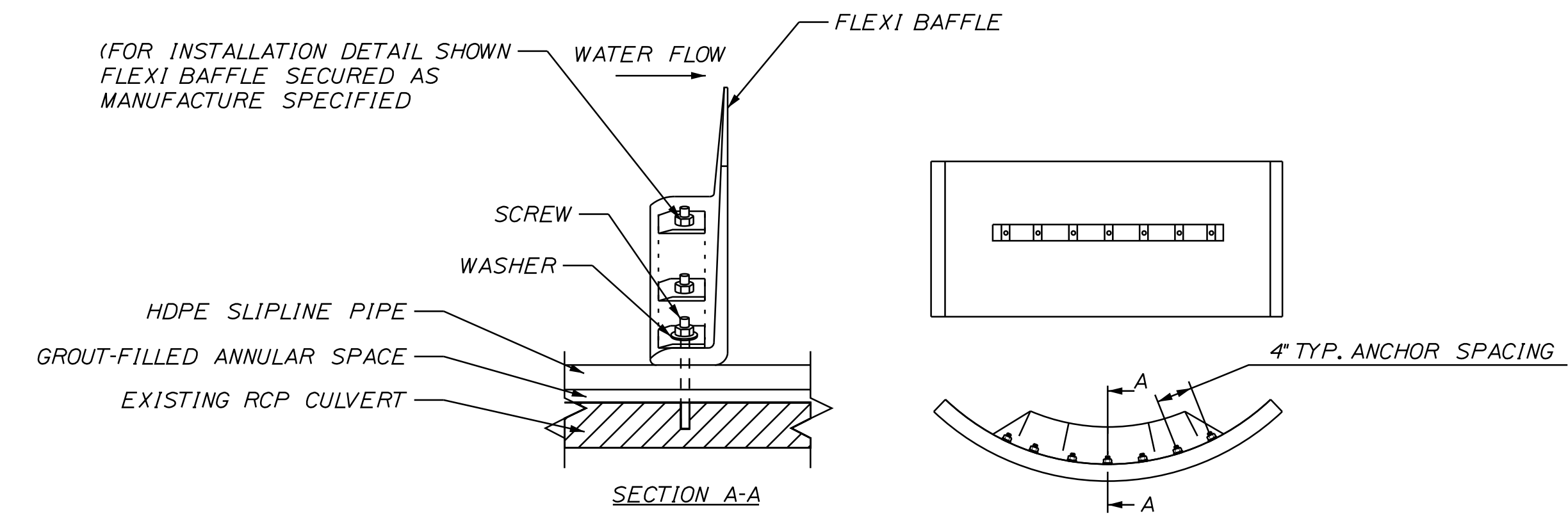
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 5 OF 23

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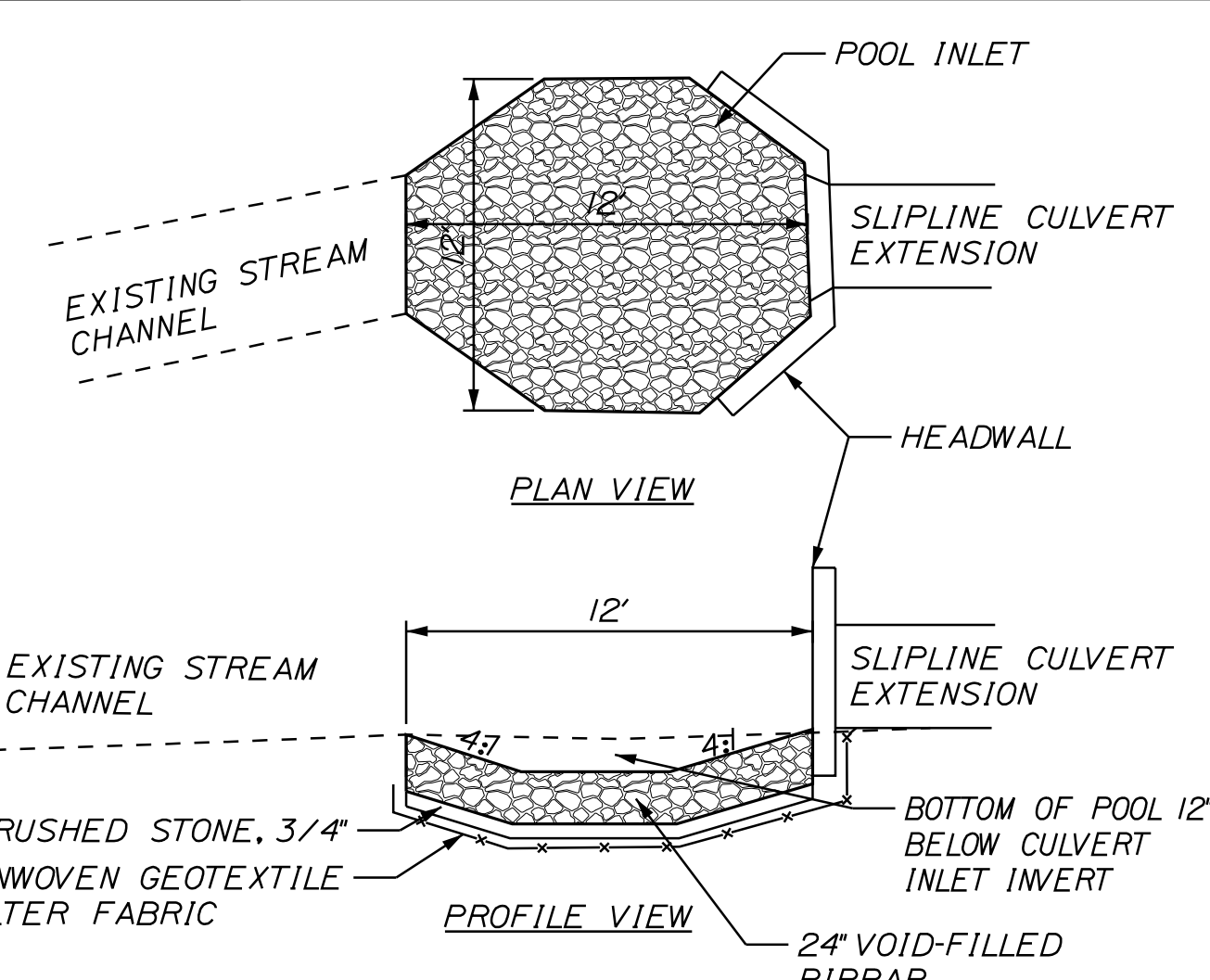
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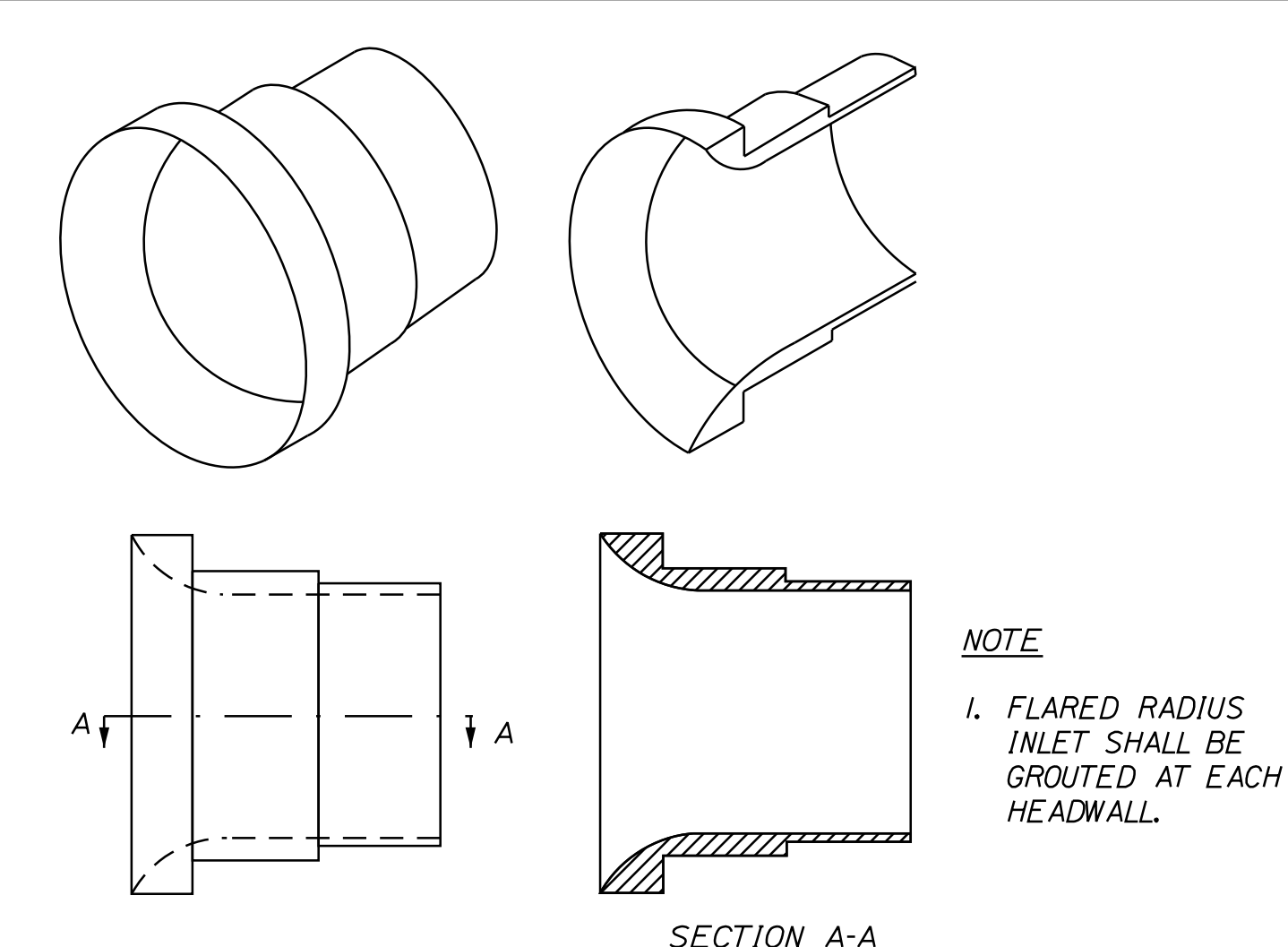
FLEXI BAFFLE CROSS-SECTION VIEW OF CULVERT DETAIL (DUNSTAN RIVER CULVERT MM 40.30)



FLEXI BAFFLE INSTALLATION DETAIL (DUNSTAN RIVER CULVERT MM 40.30)



CULVERT INLET POOL DETAIL



FLARED RADIUS INLET DETAIL

Scale: NOT TO SCALE

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Designed by:

CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date		By	Date
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Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
STREAM DETAILS

VHB: 55813.00
CONTRACT: 2025.07
SHEET NUMBER: 6 OF 23

Filename: ...General Sheets\006_Details.dgn

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. ALL PAVEMENT STRIPING & SIGNING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), U.S.D.O.T., F.H.W.A., LATEST EDITION. NOTE THERE IS A 2023 EDITION OF MUTCD.
2. THESE PLANS SHOWN 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.
3. ANY SIGNS, EQUIPMENT, OR DEVICES FOUND TO BE DAMAGED OR UNSERVICEABLE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
4. TEMPORARY LANE CLOSURES WILL BE REQUIRED, WITH ADVANCED APPROVAL, WHENEVER WORK WILL OCCUR WITHIN FOUR FEET OF THE TRAVELED WAY. TEMPORARY LANE CLOSURES SHALL BE REMOVED IF NO WORK IS OCCURRING. SEE SPECIAL PROVISIONS FOR MORE INFORMATION INCLUDING AVAILABLE LANE CLOSURE TIMES.
5. 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.
6. APPROACH ENDS OF TEMPORARY CONCRETE BARRIER SHALL BE PLACED OUTSIDE OF THE HIGHWAY CLEAR ZONE (MINIMUM 34 FEET FROM THE TRAVELED WAY) OR PROTECTED BY TEMPORARY IMPACT ATTENUATORS OR WITH GUARDRAIL OVERLAPS AS APPROVED BY THE RESIDENT.
7. MAXIMUM SPACING FOR CHANNELIZING DEVICES (DRUMS) SHALL BE:
80' ON CENTER ALONG TANGENTS
40' ON CENTER ALONG TAPERS
8. WORK ZONE SPEED LIMITS SHALL ONLY BE PERMITTED WHEN TEMPORARY MAINLINE LANE CLOSURES ARE IN PLACE.
9. ANY CONFLICTING SIGNS SHALL BE COVERED.

DUNSTAN RIVER CULVERT (MM 40.30) NOTES

1. DUNSTAN RIVER CULVERT (MM 40.30) WILL BE COMPLETED UNDER RIGHT SHOULDER CLOSURES WITH TEMPORARY BARRIER. SEE EXISTING CONDITIONS & MOT PLAN - NB AND EXISTING CONDITIONS & MOT PLAN SB FOR BARRIER LAYOUT. TRAFFIC CONTROL SHALL FOLLOW MTA STANDARD DETAILS FOR SHOULDER CLOSURES. ANY ALTERNATIVE MAINTENANCE OF TRAFFIC LAYOUTS SHALL BE APPROVED BY THE RESIDENT.
2. TEMPORARY RIGHT LANE CLOSURES WILL BE REQUIRED TO SET UP THE TEMPORARY BARRIER AND SHALL FOLLOW MTA STANDARD DETAIL FOR SINGLE LANE CLOSURES.






UNNAMED STREAM CULVERT (MM 72.00) NEW GLOUCESTER NOTES

1. UNNAMED STREAM CULVERT (MM 72.00) NEW GLOUCESTER WILL BE COMPLETED UNDER RIGHT SHOULDER CLOSURES WITH TEMPORARY BARRIER. SEE EXISTING CONDITIONS & MOT PLAN - NB AND EXISTING CONDITIONS & MOT PLAN SB FOR BARRIER LAYOUT. TRAFFIC CONTROL SHALL FOLLOW MTA STANDARD DETAILS FOR SHOULDER CLOSURES. ANY ALTERNATIVE MAINTENANCE OF TRAFFIC LAYOUTS SHALL BE APPROVED BY THE RESIDENT.
2. TEMPORARY RIGHT LANE CLOSURES WILL BE REQUIRED TO SET UP THE TEMPORARY BARRIER AND SHALL FOLLOW MTA STANDARD DETAIL FOR SINGLE LANE CLOSURES.

CULVERT (MM 72.20) NEW GLOUCESTER NOTES



1. CULVERT MM 72.2 NEW GLOUCESTER WILL BE COMPLETED UNDER RIGHT LANE CLOSURES IN THE NORTHBOUND DIRECTION. TRAFFIC CONTROL SHALL FOLLOW MTA STANDARD DETAIL FOR SINGLE LANE CLOSURES. WORK REQUIRING ACCESS FROM THE SOUTHBOUND DIRECTION SHALL BE COMPLETED UNDER LONG TERM SHOULDER CLOSURES. SEE GENERAL PLAN FOR DRUM LAYOUT. TRAFFIC CONTROL SIGNING SHALL FOLLOW MTA STANDARD DETAILS FOR SHOULDER CLOSURES. ANY ALTERNATIVE MAINTENANCE OF TRAFFIC LAYOUTS SHALL BE APPROVED BY THE RESIDENT.
2. WHEN NORTHBOUND LANE CLOSURES ARE NOT ALLOWED PER SPECIAL PROVISION 652, A NORTHBOUND SHOULDER CLOSURE SHALL BE IN PLACE. SEE GENERAL PLAN FOR DRUM LAYOUT. TRAFFIC CONTROL SIGNING SHALL FOLLOW MTA STANDARD DETAILS FOR SHOULDER CLOSURES.

SHOULDER CLOSURE

CONSTRUCTION SIGN SUMMARY				
SIGN	TEXT DIMENSIONS (INCHES)		SIZE	QUANTITY AND COLOR
	LETTER HEIGHT	VERTICAL SPACING		
G20-2 	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2012		48"x24"	4 - BLACK ON ORANGE
W20-1 (AHEAD) 			48"x48"	8 - BLACK ON ORANGE
W21-5aR 			48"x48"	4 - BLACK ON ORANGE
W21-5bR (1000') 			48"x48"	4 - BLACK ON ORANGE
W7-3aP 			36"x30"	4 - BLACK ON ORANGE

Date: 3/19/2025

Filename: ... \007 - Workzone_01.dgn

Scale:	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	MTA PROJECT NO. 2025.07 CULVERT REPAIRS MAINTENANCE OF TRAFFIC DETAILS (01 OF 04)																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	No.	Revision	By	Date													CONSULTANT PROJECT MANAGER: M. Bowe <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>By</th> <th>Date</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Designed</td> <td>MLG 3/20/25</td> <td>Checked</td> <td>MDS 3/20/25</td> </tr> <tr> <td>Drawn</td> <td>JAR 3/20/25</td> <td>In Charge of</td> <td>MEB 3/20/25</td> </tr> </tbody> </table>	By	Date	By	Date	Designed	MLG 3/20/25	Checked	MDS 3/20/25	Drawn	JAR 3/20/25	In Charge of	MEB 3/20/25	VHB: 55813.00 CONTRACT: 2025.07	SHEET NUMBER: 7 OF 23	MTA PROJECT MANAGER: Kristi Van Ooyen, PE	
No.	Revision	By	Date																														
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Designed	MLG 3/20/25	Checked	MDS 3/20/25																														
Drawn	JAR 3/20/25	In Charge of	MEB 3/20/25																														

TEMPORARY SINGLE LANE CLOSURES

CONSTRUCTION SIGN SUMMARY				
SIGN	TEXT DIMENSIONS (INCHES)		SIZE	QUANTITY AND COLOR
	LETTER HEIGHT	VERTICAL SPACING		
G20-2		TEXT DIMENSIONS SHALL CONFORM TO 'STANDARD HIGHWAY SIGNS' - 2012	48"x24"	4 - BLACK ON ORANGE
G20-5aP			36"x24"	2 - BLACK ON ORANGE
R1-2			48"x48"x48"	2 - WHITE ON RED
R2-1(60)			48"x60"	2 - BLACK ON WHITE
R2-6aP			36"x24"	2 - BLACK ON WHITE
R2-12			36"x54"	4 - BLACK ON WHITE
W3-2			48"x48"	2 - BLACK ON ORANGE
W3-4			48"x48"	4 - BLACK ON ORANGE

TEMPORARY SINGLE LANE CLOSURES


CONSTRUCTION SIGN SUMMARY					
SIGN	TEXT DIMENSIONS (INCHES)		SIZE	QUANTITY AND COLOR	
	LETTER HEIGHT	VERTICAL SPACING			
W4-1		TEXT DIMENSIONS SHALL CONFORM TO 'STANDARD HIGHWAY SIGNS' - 2012	48"x48"	2 - BLACK ON ORANGE	
W4-2R			48"x48"	4 - BLACK ON ORANGE	
W4-5aP			24"x30"	2 - BLACK ON ORANGE	
W20-1			48"x48"	4 - BLACK ON ORANGE	
W20-1 (AHEAD)			48"x48"	6 - BLACK ON ORANGE	
W20-5R			48"x48"	4 - BLACK ON ORANGE	
CS-3		7" 7" 7"	4" 4"	48"x48"	4 - BLACK ON ORANGE
E5-2			48"x36"	1 - BLACK ON ORANGE	

Date: 3/19/2025

Filename: ...008_Workzone_02.dgn

Scale:			
No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: M. Bowe

By	Date	By	Date
Designed MLG	3/20/25	Checked MDS	3/20/25
Drawn JAR	3/20/25	In Charge of MEB	3/20/25

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**THE GOLD STAR
MEMORIAL HIGHWAY**

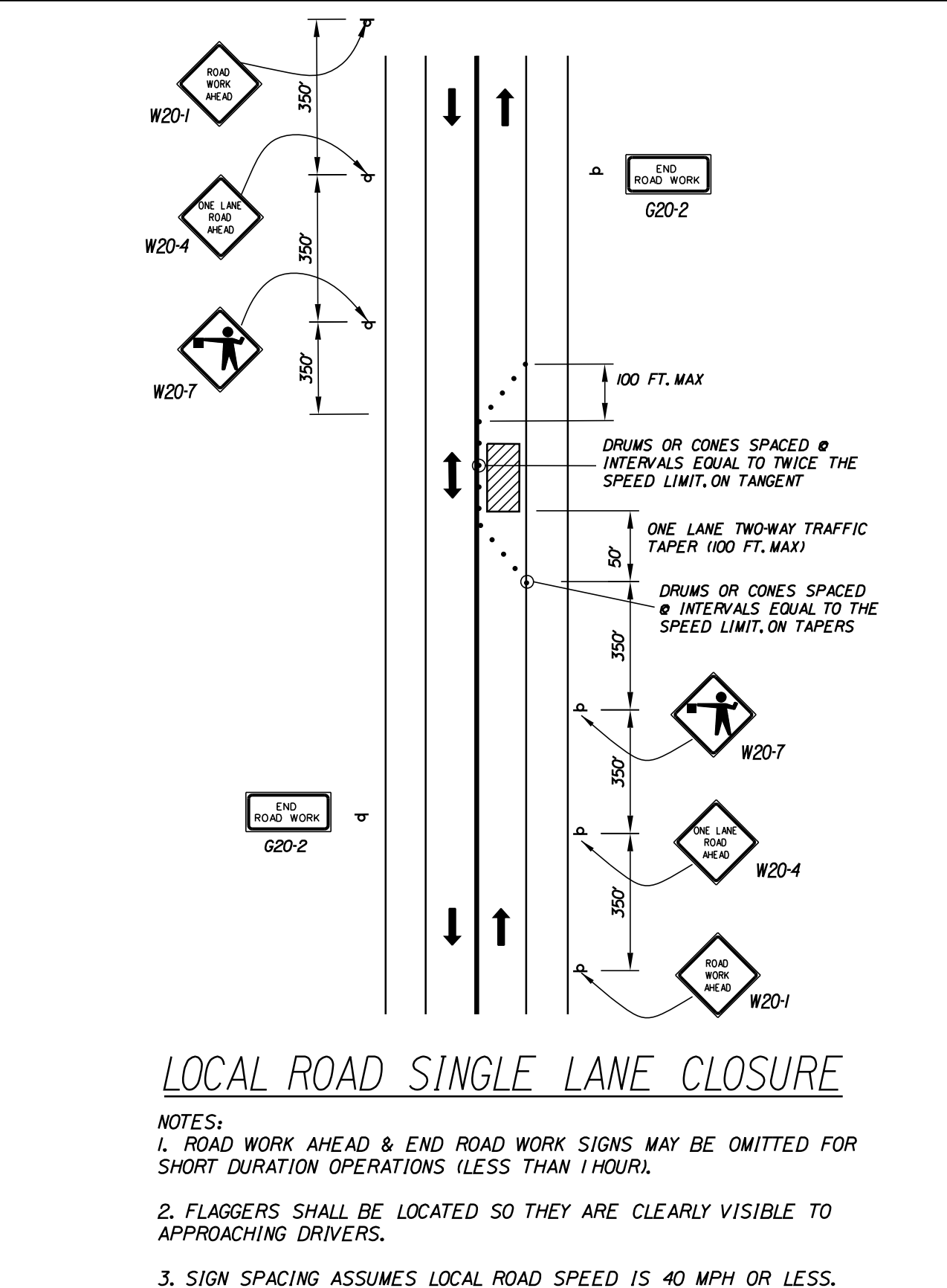
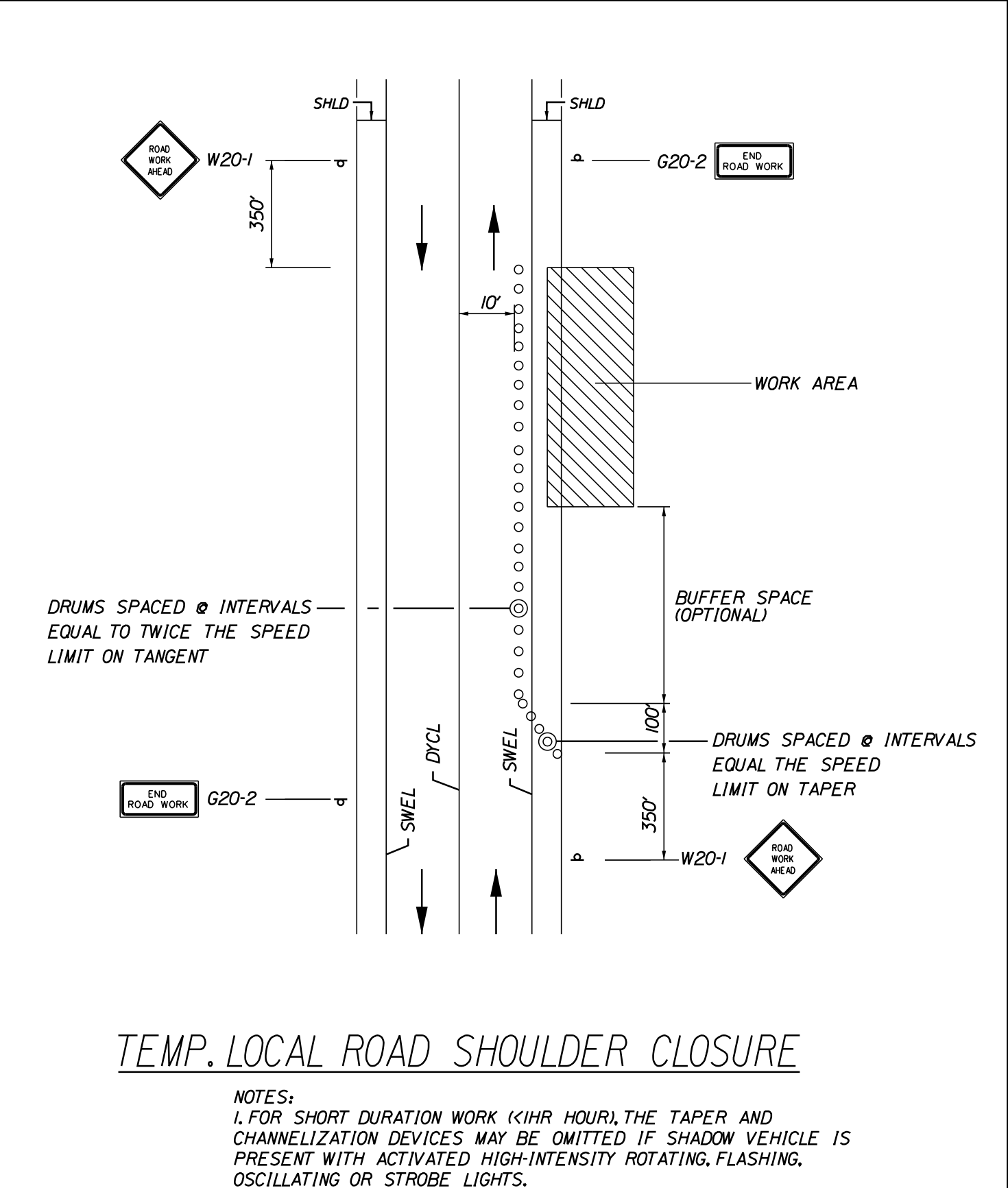
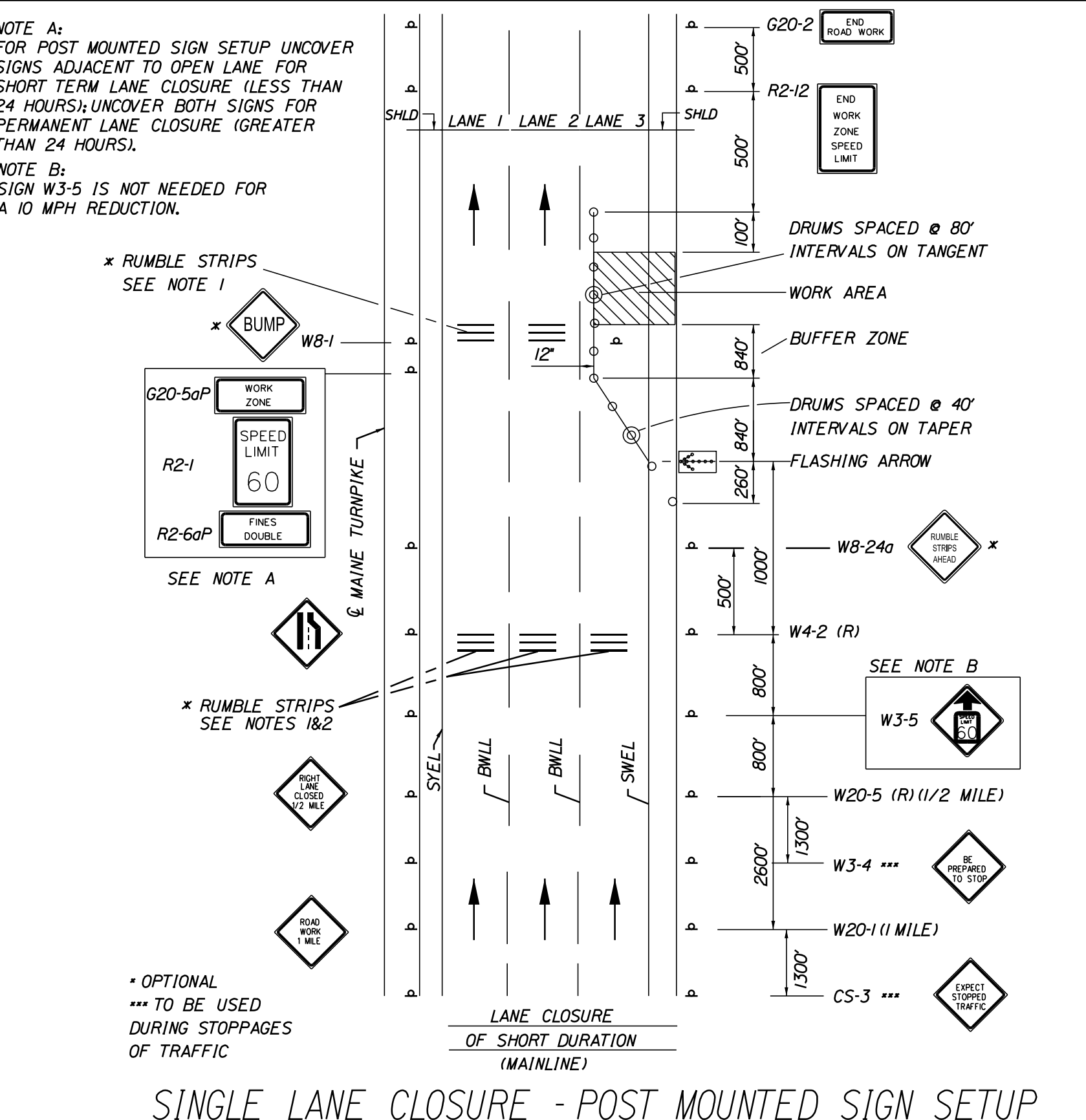
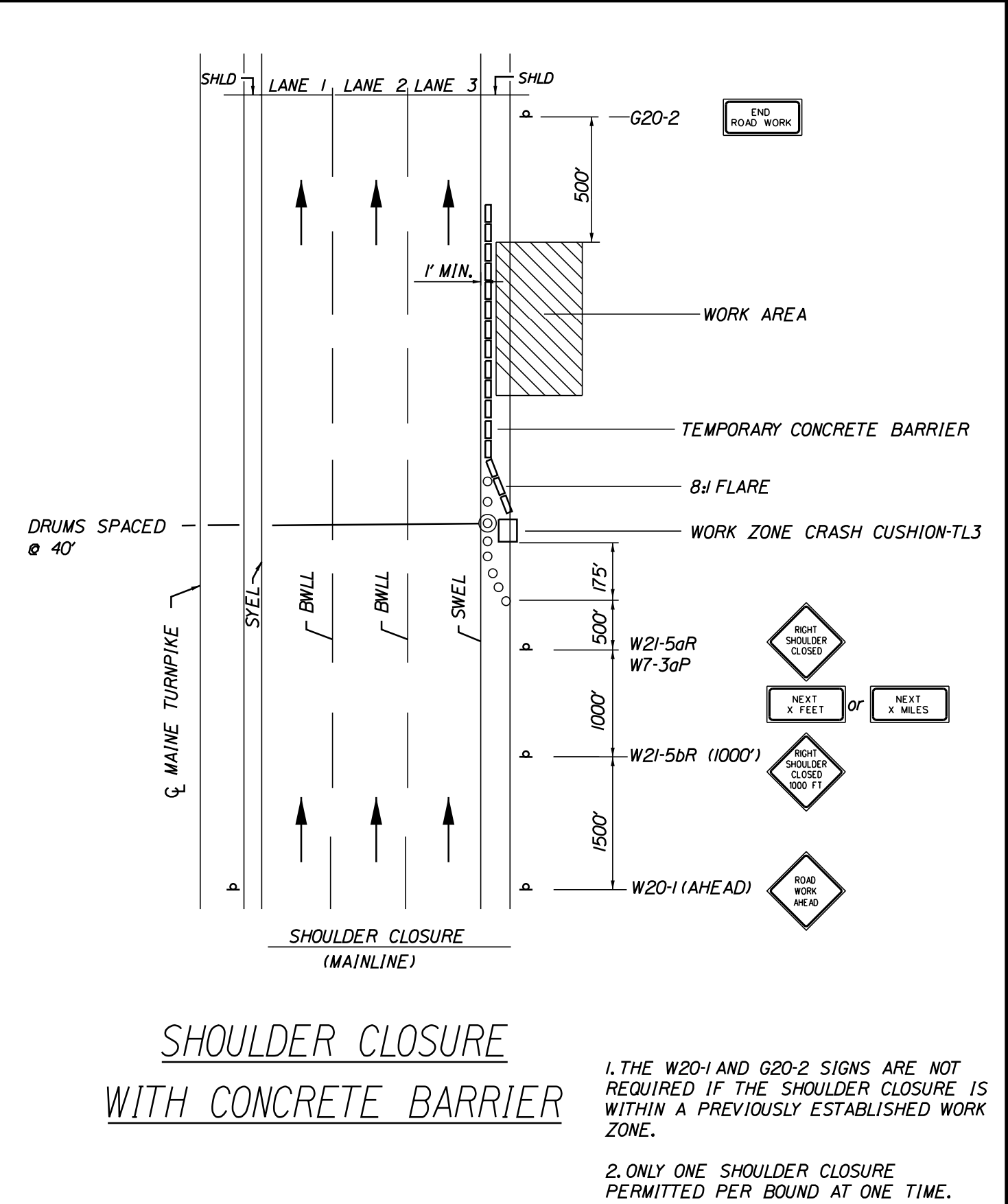
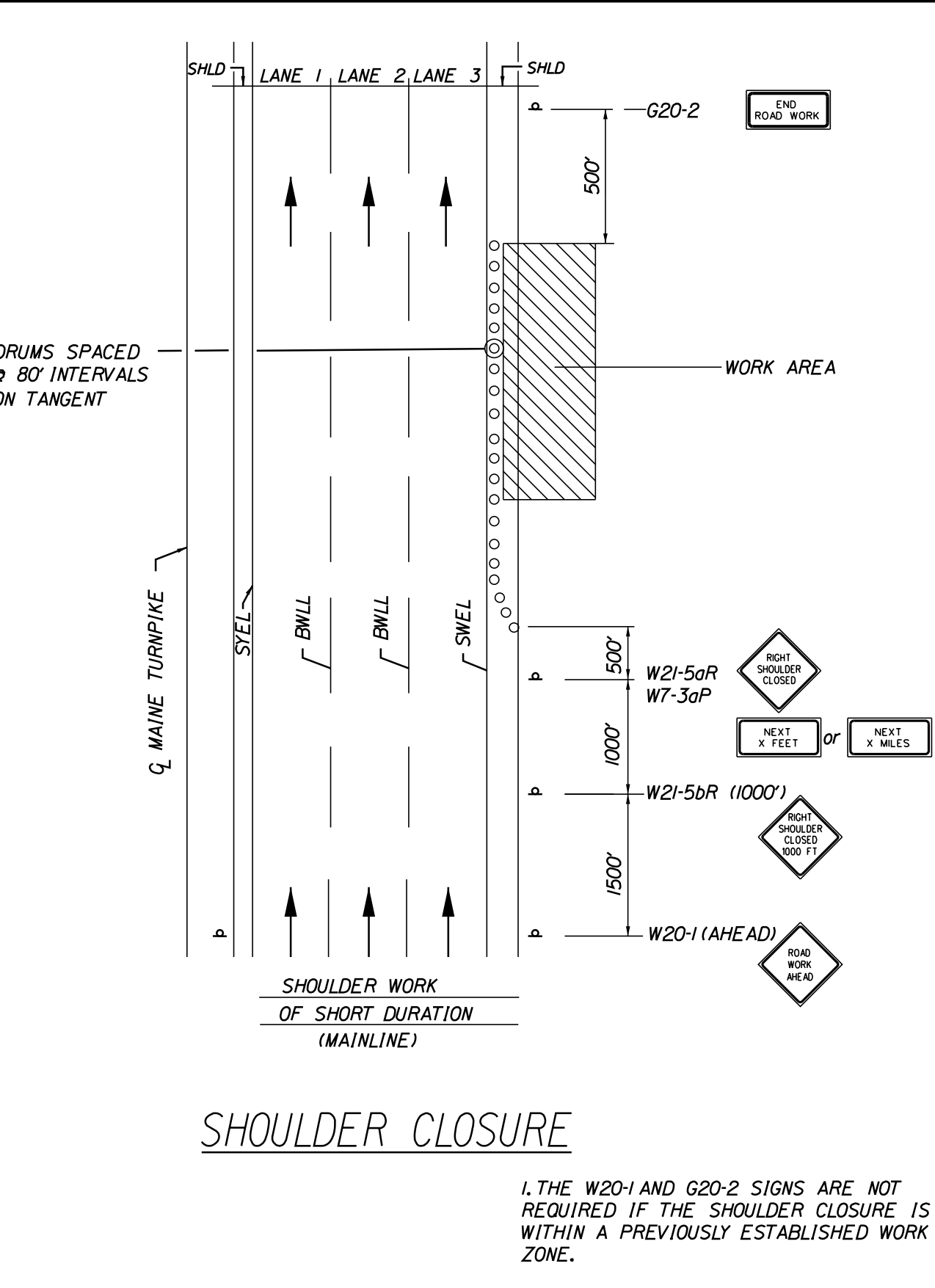
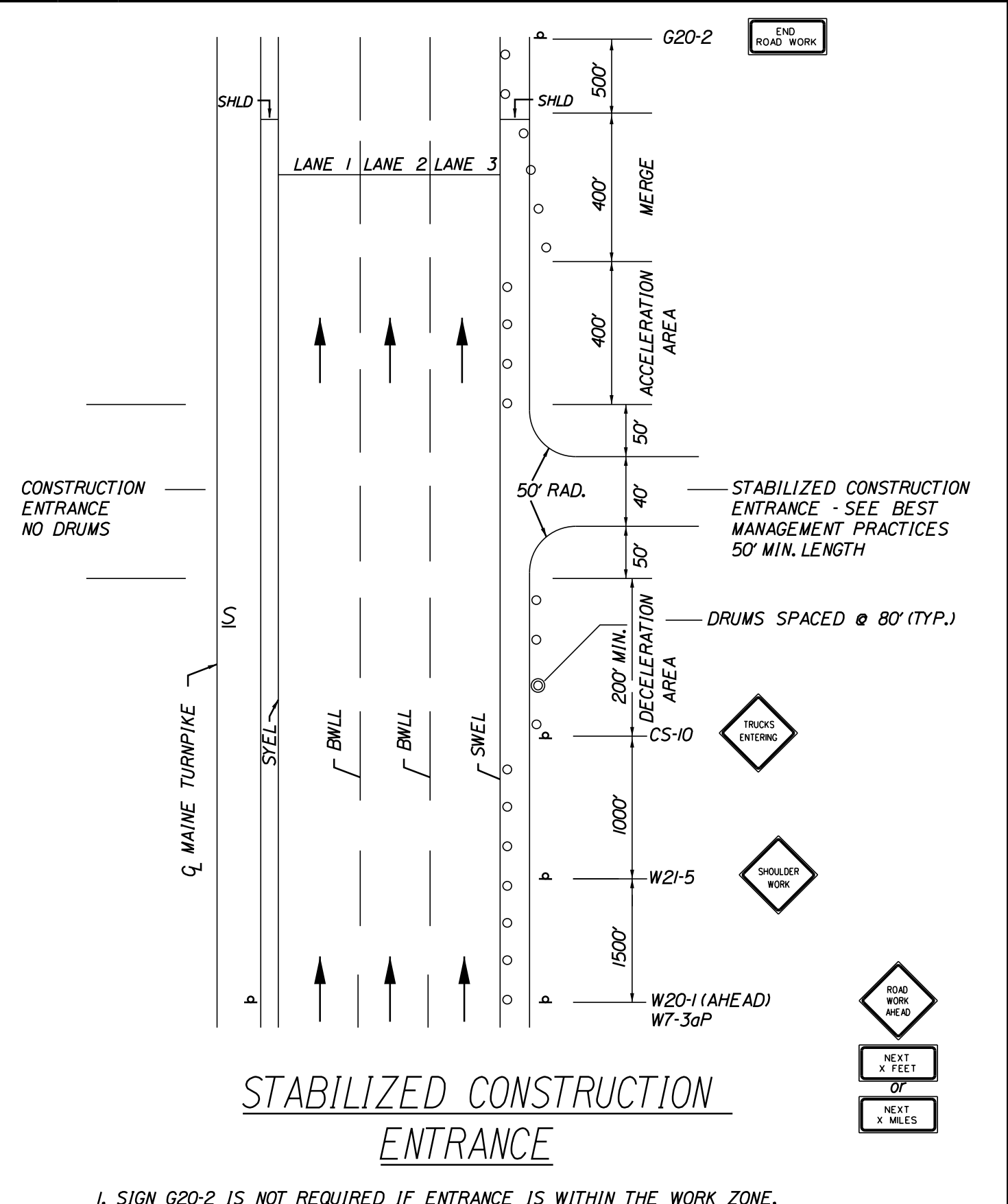
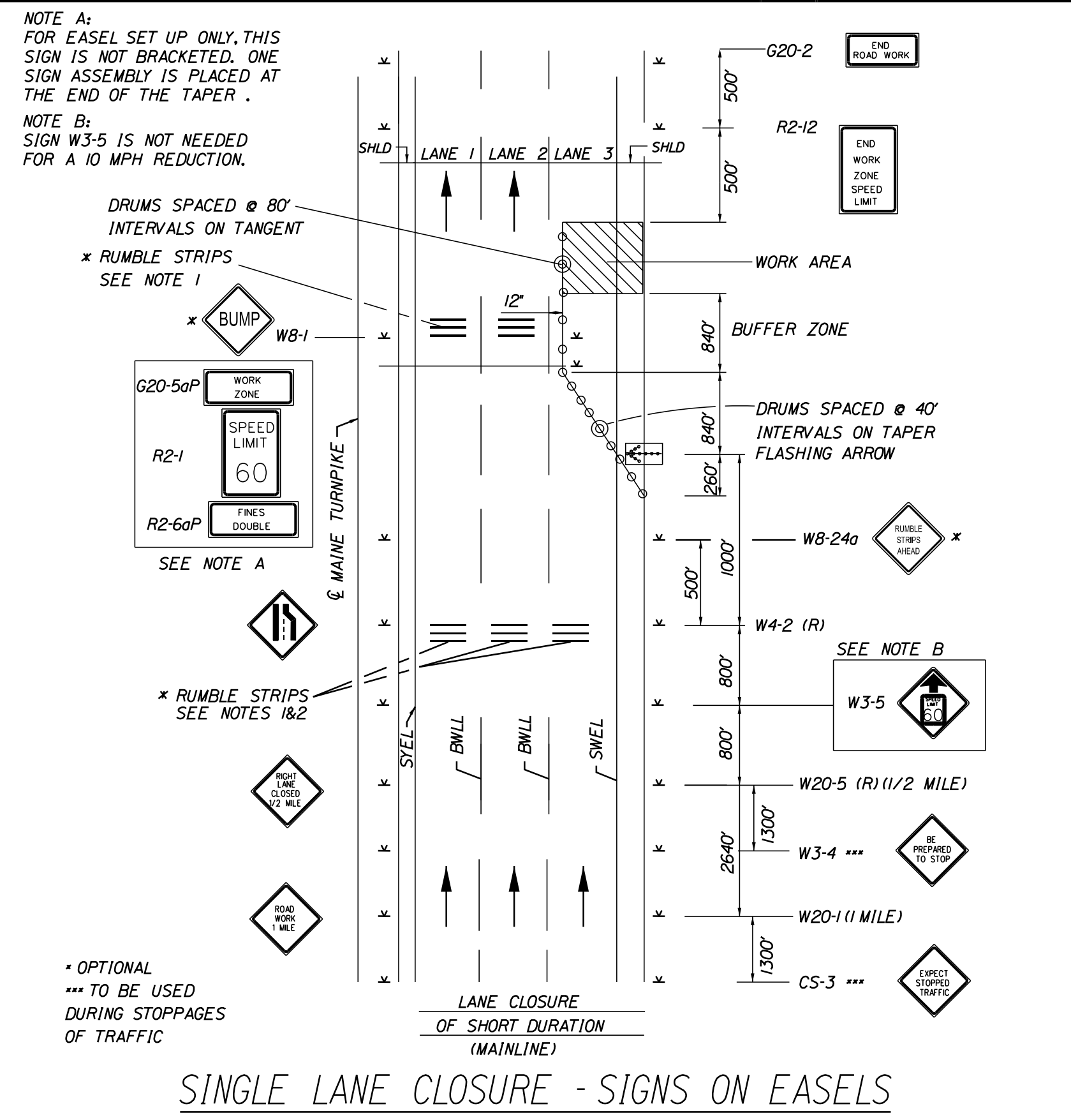
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 MAINTENANCE OF TRAFFIC DETAILS
 (02 OF 04)

VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:
 8 OF 23

Date: 3/19/2025



- 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)
W8-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST RUMBLE STRIP AT ANY LOCATION. ONLY ONE SET OF W8-240 SIGNS ARE REQUIRED FOR ANY OF THE ABOVE CONFIGURATIONS.
 - 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 W8-240 SIGNS SHALL BE MOVED TO 400' AFTER THE W20-5 SIGNS.

Scale:

No.	Revision	By	Date

Designed by:

By	Date	Checked	By	Date
MLG	3/20/25	MDS	MDS	3/20/25
JAR	3/20/25	MEB	MEB	3/20/25

CONSULTANT PROJECT MANAGER: M. Bowe

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

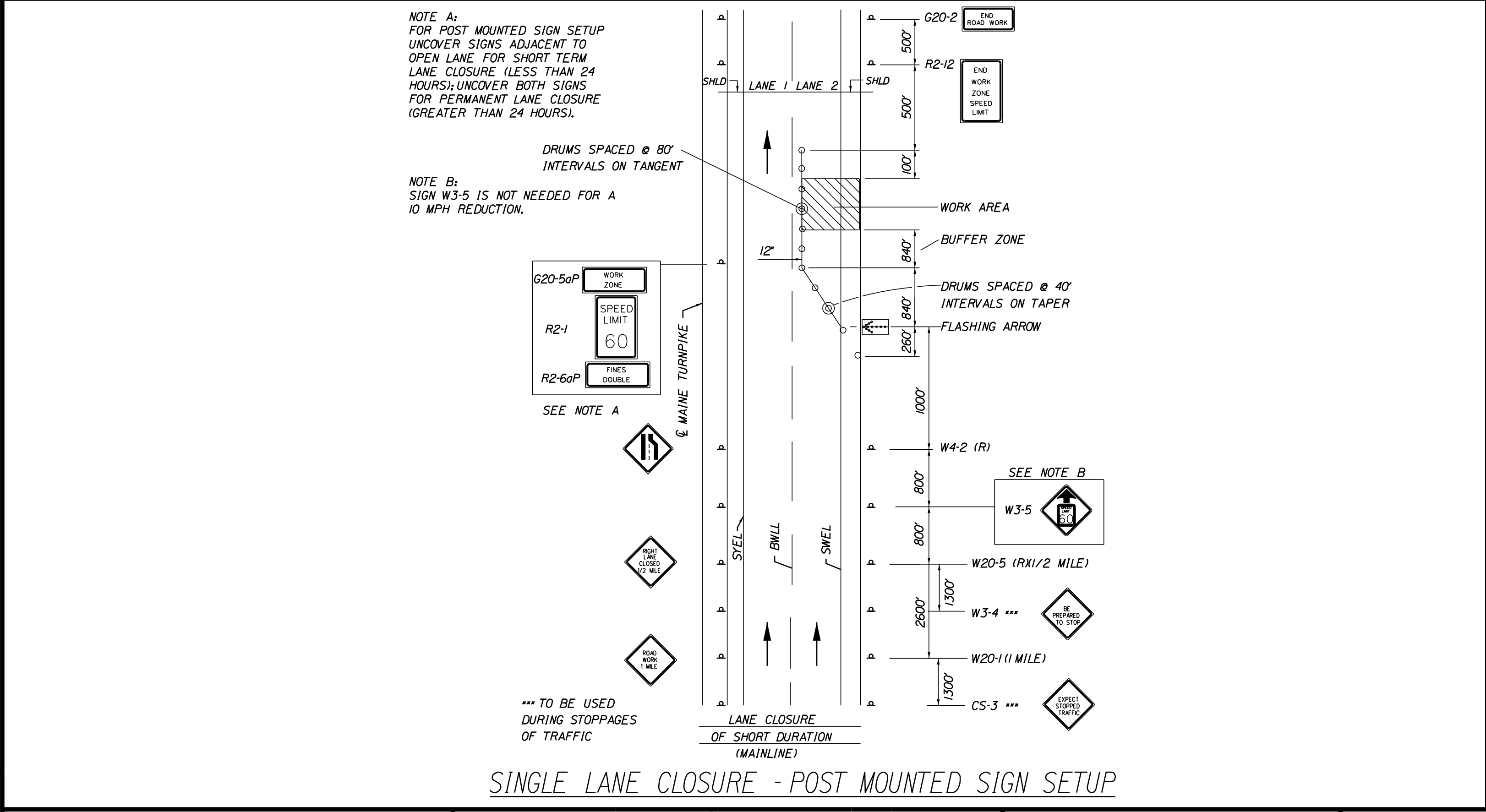
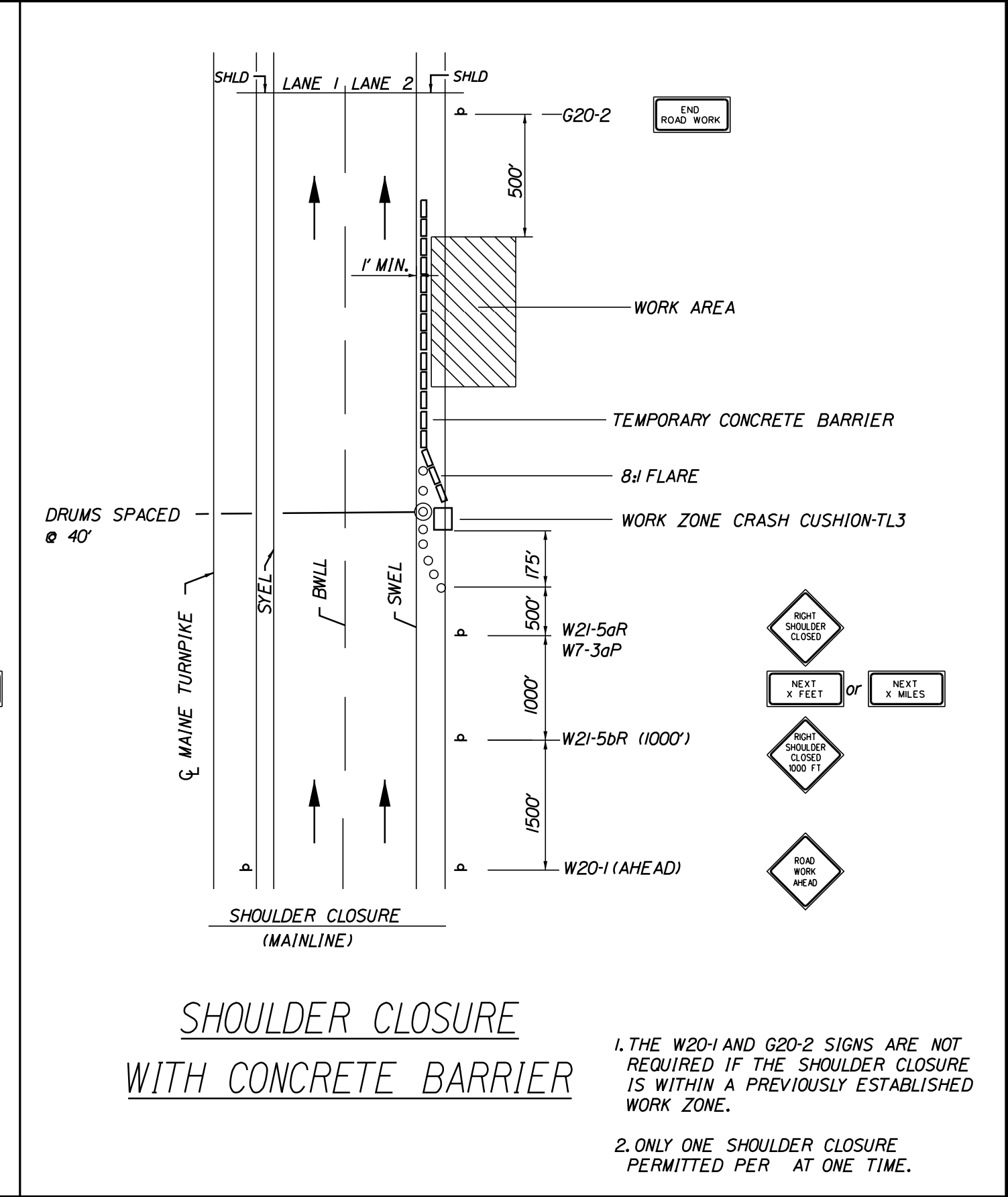
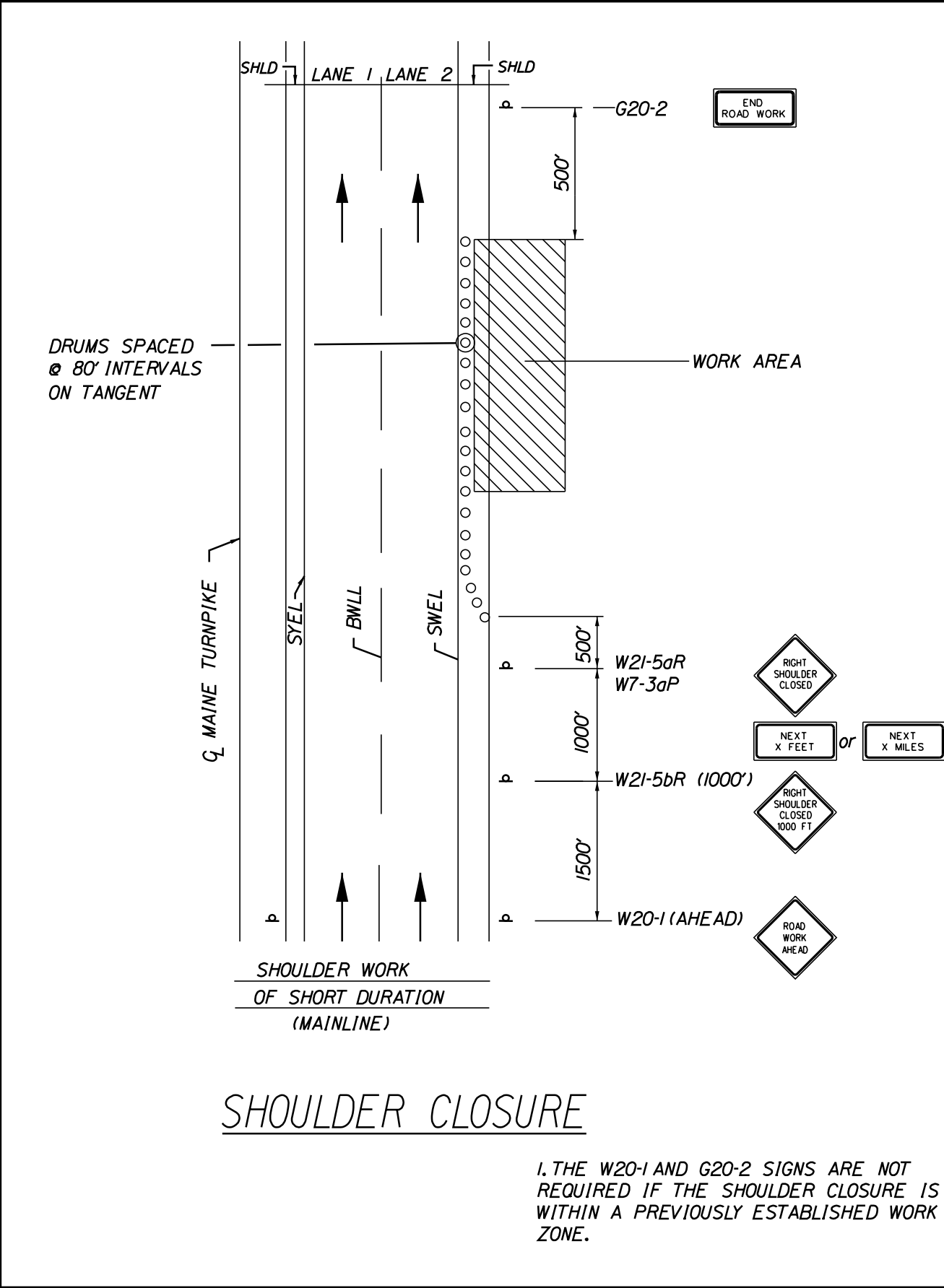
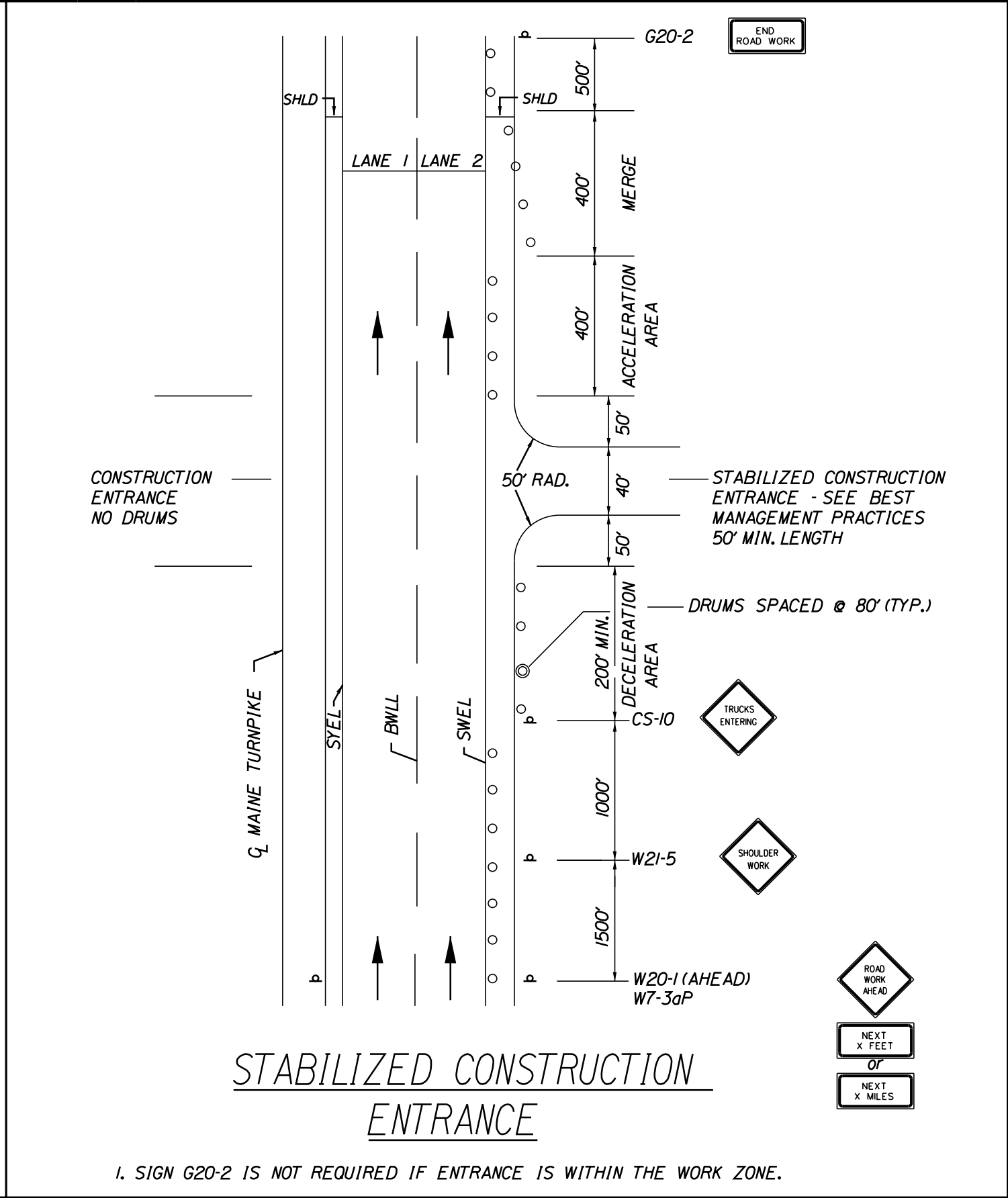
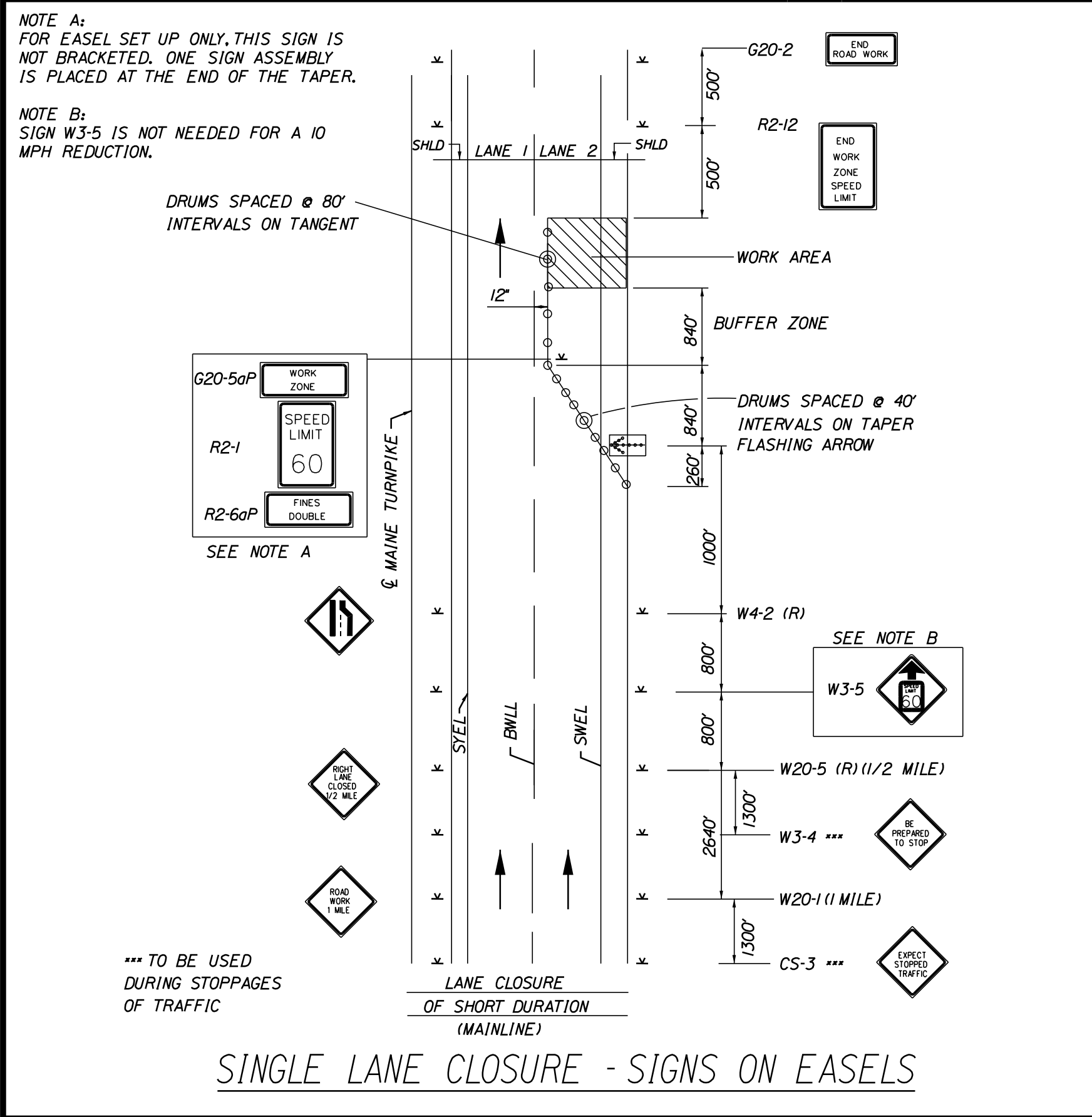
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
MAINTENANCE OF TRAFFIC DETAILS
(03 OF 04)

VHB: 55813.00
CONTRACT: 2025.07

SHEET NUMBER:
9 OF 23

Date: 3/19/2025



- 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.
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 - 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.
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 - 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**
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 TSWLL = TEMPORARY SOLID WHITE LANE LINE
 TSYCL = TEMPORARY SOLID YELLOW CENTER LINE
 TSYL = TEMPORARY SOLID YELLOW LING (TAPE)
 TSWL = TEMPORARY SOLID WHITE LINE (TAPE)
 DWL = EXISTING DASHED WHITE LANE LINE
 SWL = EXISTING SOLID WHITE LINE
 SYL = EXISTING SOLID YELLOW 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)
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 - 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:

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date		By	Date
Designed	MLG	3/20/25	Checked	MDS	3/20/25
Drawn	JAR	3/20/25	In Charge of	MEB	3/20/25

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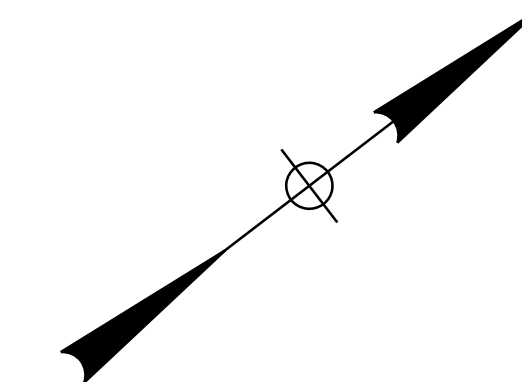
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

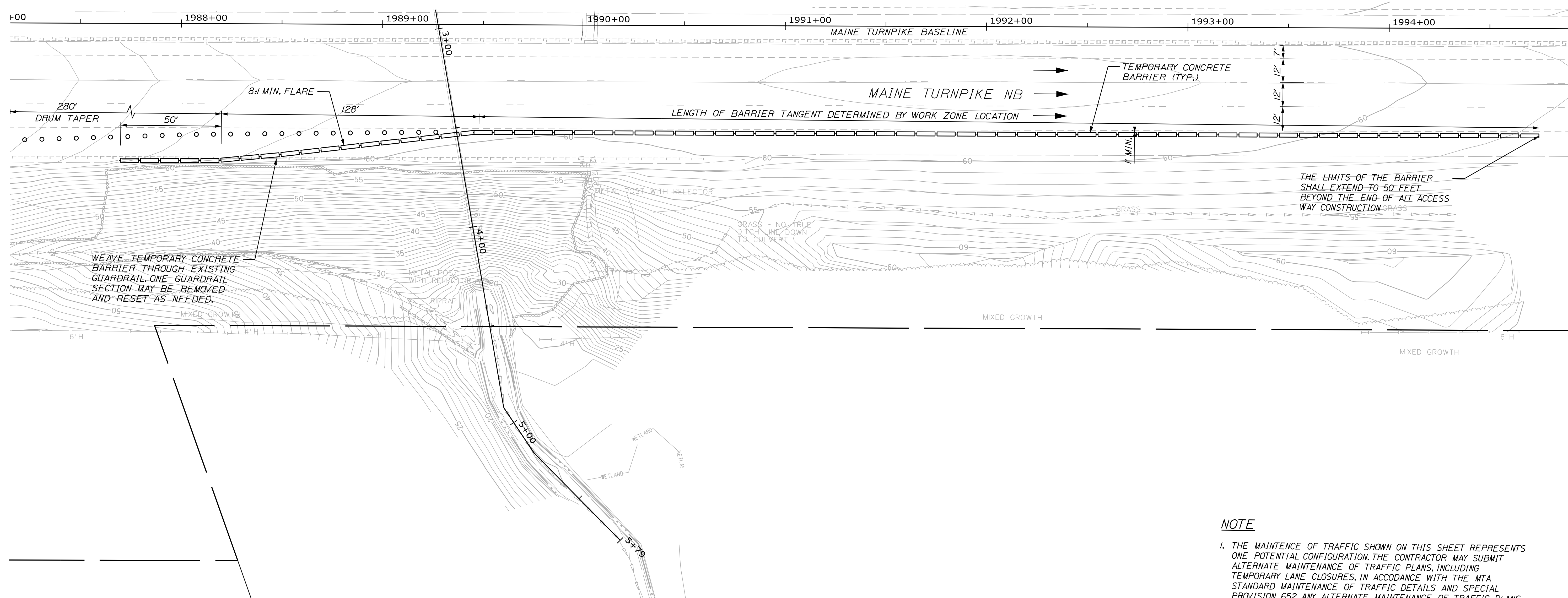
MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 MAINTENANCE OF TRAFFIC DETAILS
 (04 OF 04)

VHB: 55813.00
 CONTRACT: 2025.07
 SHEET NUMBER:
 10 OF 23

Filename: ...010_Workzone_04.dgn

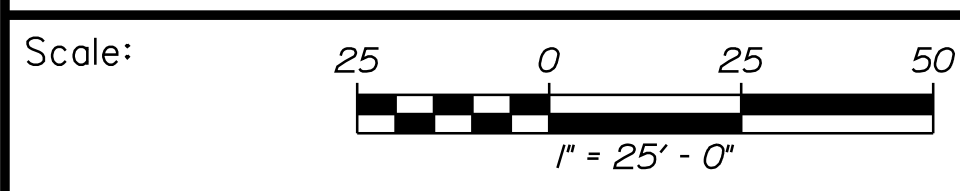


Date: 3/19/2025



NOTE
 1. THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, INCLUDING TEMPORARY LANE CLOSURES, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.

Filename: ... \001_Plan_NB_Dunston.dgn



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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 DUNSTAN RIVER CULVERT (MM 40.30)
 EXISTING CONDITIONS & MOT PLAN - NB

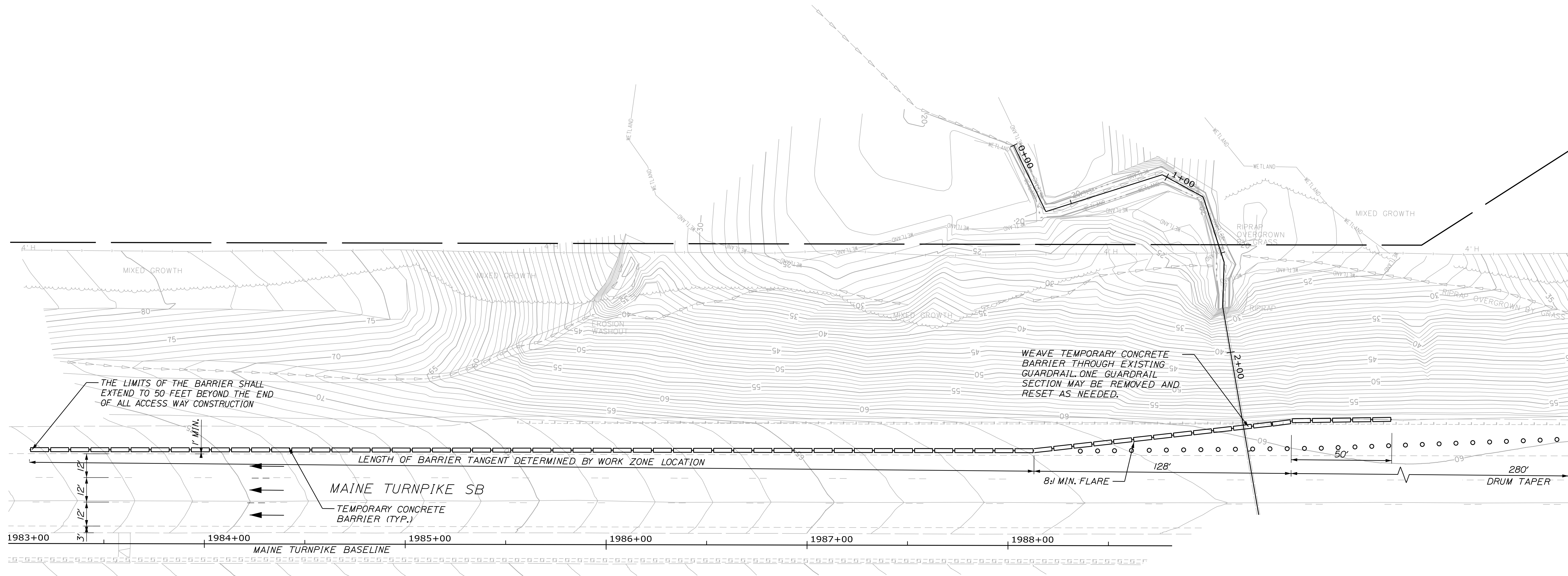
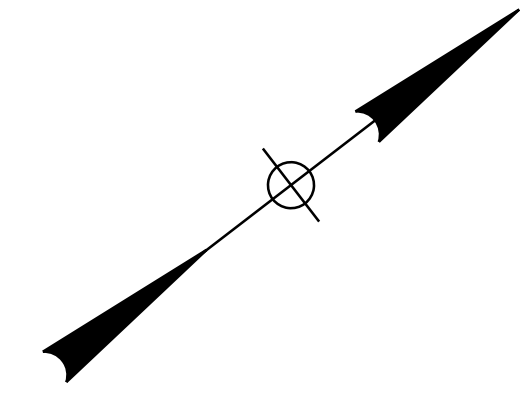
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	ECF	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

VHB: 55813.00
 CONTRACT: 2025.07
 SHEET NUMBER: 11 OF 23

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

Date: 3/19/2025



WEAVE TEMPORARY CONCRETE BARRIER THROUGH EXISTING GUARDRAIL. ONE GUARDRAIL SECTION MAY BE REMOVED AND RESET AS NEEDED.

NOTE


1. THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, INCLUDING TEMPORARY LANE CLOSURES, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.

Filename: ...\\002_Plan_SB_Dunstan.dgn



No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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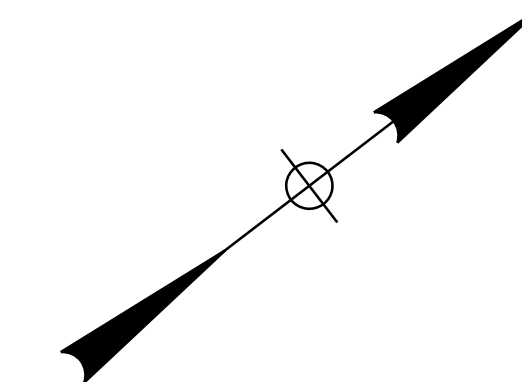
**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

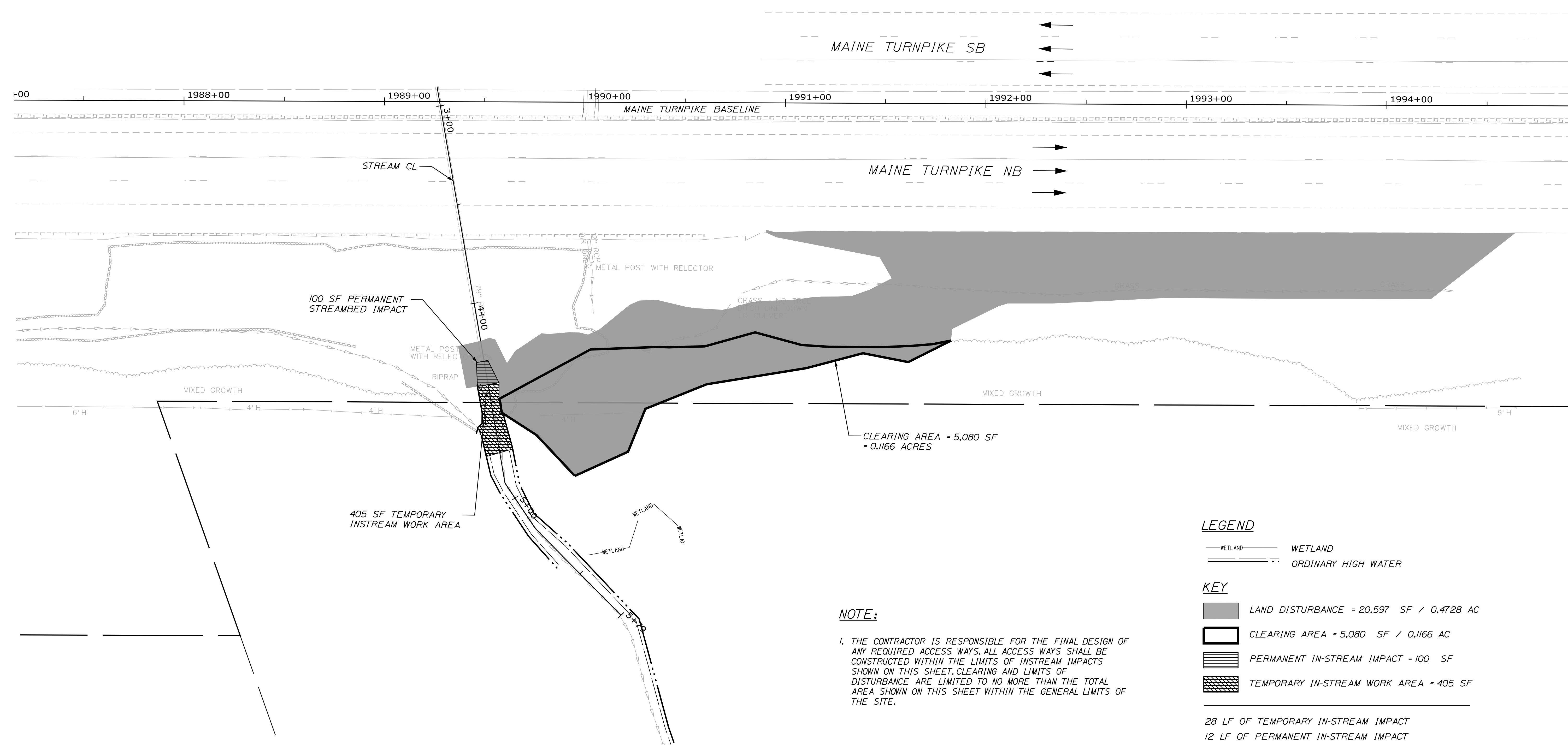
MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 DUNSTAN RIVER CULVERT (MM 40.30)
 EXISTING CONDITIONS & MOT PLAN - SB

VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:
 12 OF 23



Date: 3/19/2025



LEGEND

- WETLAND
- ORDINARY HIGH WATER

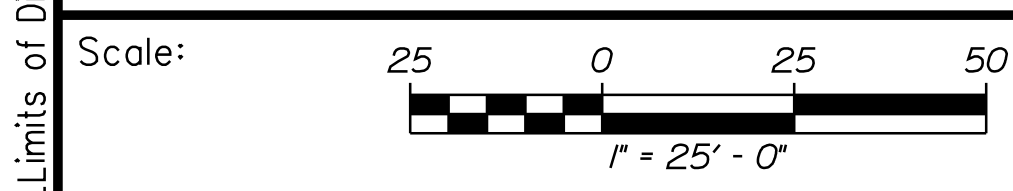
KEY

- LAND DISTURBANCE = 20,597 SF / 0.4728 AC
- CLEARING AREA = 5,080 SF / 0.1166 AC
- PERMANENT IN-STREAM IMPACT = 100 SF
- TEMPORARY IN-STREAM WORK AREA = 405 SF

28 LF OF TEMPORARY IN-STREAM IMPACT
12 LF OF PERMANENT IN-STREAM IMPACT


NOTE:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ANY REQUIRED ACCESS WAYS. ALL ACCESS WAYS SHALL BE CONSTRUCTED WITHIN THE LIMITS OF INSTREAM IMPACTS SHOWN ON THIS SHEET. CLEARING AND LIMITS OF DISTURBANCE ARE LIMITED TO NO MORE THAN THE TOTAL AREA SHOWN ON THIS SHEET WITHIN THE GENERAL LIMITS OF THE SITE.



No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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**THE GOLD STAR
MEMORIAL HIGHWAY**

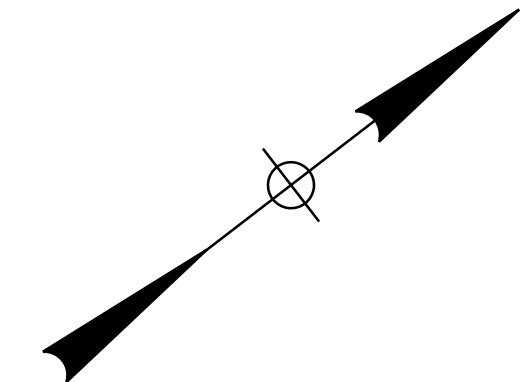
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
DUNSTAN RIVER CULVERT (MM 40.30)
DISTURBANCE IMPACT PLAN - NORTHBOUND

VHB: 55813.00
CONTRACT: 2025.07

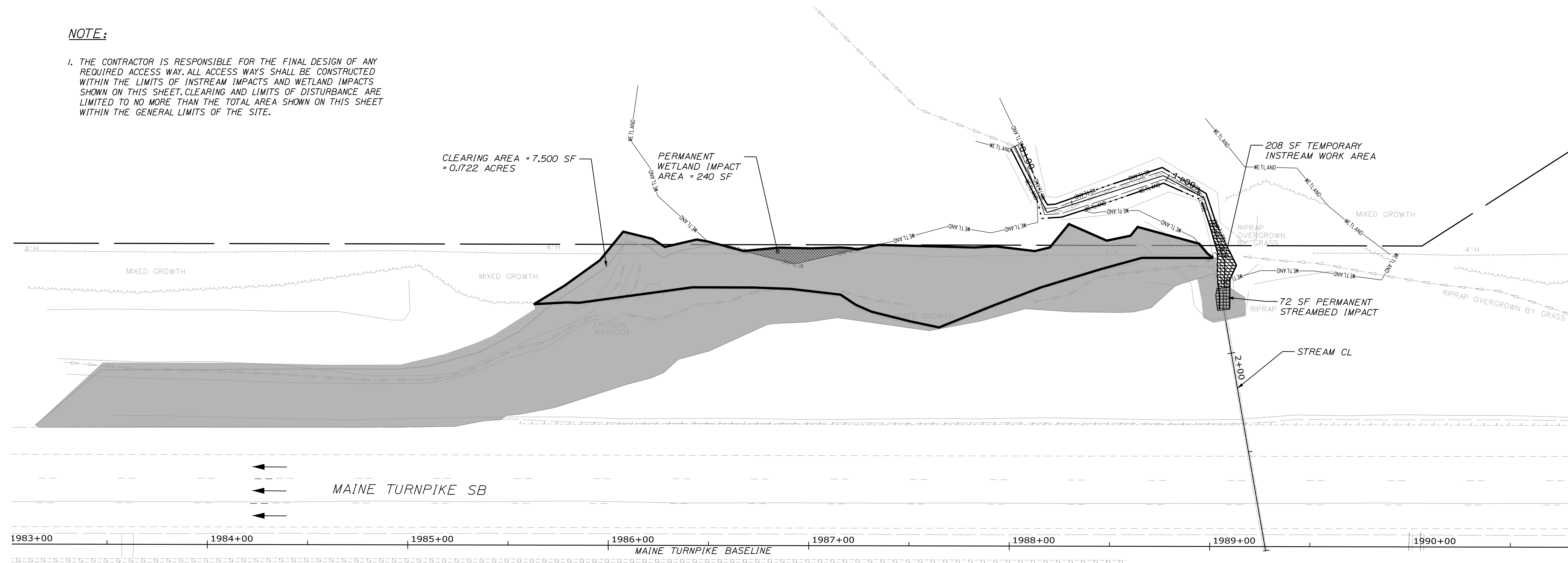
SHEET NUMBER:
13 OF 23

Filename: ...\\005_Limits of Dist_NB_Dunston.dgn



NOTE:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ANY REQUIRED ACCESS WAY. ALL ACCESS WAYS SHALL BE CONSTRUCTED WITHIN THE LIMITS OF INSTREAM IMPACTS AND WETLAND IMPACTS SHOWN ON THIS SHEET. CLEARING AND LIMITS OF DISTURBANCE ARE LIMITED TO NO MORE THAN THE TOTAL AREA SHOWN ON THIS SHEET WITHIN THE GENERAL LIMITS OF THE SITE.



LEGEND

- WETLAND
- ORDINARY HIGH WATER

29 LF OF TEMPORARY IN-STREAM IMPACT
 11 LF OF PERMANENT IN-STREAM IMPACT

KEY

- LAND DISTURBANCE = 22,717 SF / 0.5215 AC
- CLEARING AREA = 7,500 SF / 0.1722 AC
- PERMANENT IN-STREAM IMPACT = 72 SF
- PERMANENT WETLAND IMPACT AREA = 240 SF
- TEMPORARY IN-STREAM WORK AREA = 208 SF

Date: 3/19/2025

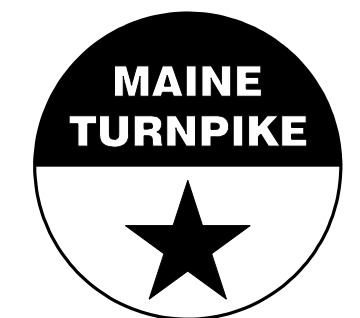
Filename: ...\\006.Limits of Dist..SB..Dunston.dgn



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 South Portland, ME 04106
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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 DUNSTAN RIVER CULVERT (MM 40.30)
 DISTURBANCE IMPACT PLAN- SOUTHBOUND

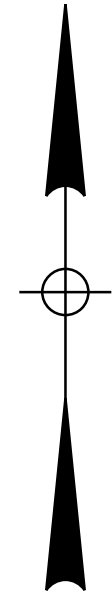
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	ECF	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

Date: 3/19/2025

Filename: ...007_Stream_Profile_Dunstan.dgn



RESTORE ALL AREAS DISTURBED FOR INSTALLATION OF PIPE EXTENSION AND HEADWALL WITH 24" THICK RIPRAP BLANKET. EXTEND RIPRAP BLANKET TO RESTORE ADJACENT SLOPE SINKHOLES.

PROPOSED HEADWALL WITH WINGWALLS (SEE SPECIAL PROVISION 534)

SLIPLINE CULVERT OUTLET EXTENDED 5 FT STA. 1+72, ELEV. 18.45 FT BEVELED OR FLARED RADIUS INLET (SEE SPECIAL PROVISION 509)

CONSTRUCT INLET POOL (SEE CULVERT REPAIRS STREAM DETAILS SHEET)

STA. 0+00-0+00 ELEV. 19.90

EXISTING CULVERT STA. 1+77 ELEV. 18.16

EXISTING CULVERT STA. 4+32 ELEV. 15.87

RESTORE ALL AREAS DISTURBED FOR INSTALLATION OF PIPE EXTENSION AND HEADWALL WITH 24" THICK RIPRAP BLANKET

PROPOSED HEADWALL WITH WINGWALLS (SEE SPECIAL PROVISION 534)

SLIPLINE CULVERT OUTLET EXTENDED 5 FT STA. 4+37, ELEV. 16.06 FT (SEE SPECIAL PROVISION 509)

STREAM FLOW DIRECTION

EXISTING 78" CMP CULVERT PIPE

1" MIN. ANNULAR SPACE GROUT

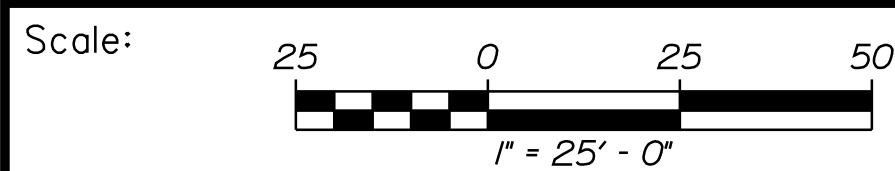
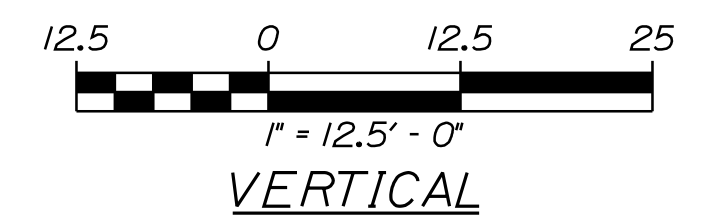
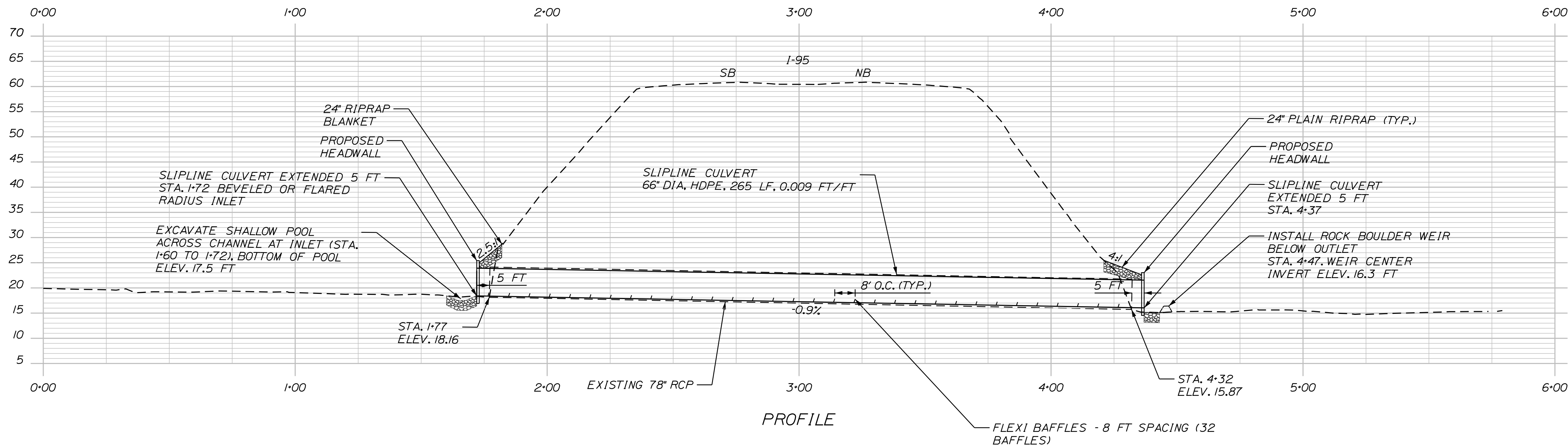
PROPOSED 66" CULVERT LINER PIPE

CULVERT LINING TYPICAL SECTION
NOT TO SCALE

CONSTRUCT TEMPORARY COFFERDAM AS NEEDED TO DIVERT FLOW TO PERFORM SLIPLINING IN THE DRY (TYP BOTH ENDS OF CULVERT) (SEE SPECIAL PROVISION 511)

CONSTRUCT BOULDER WEIR (APPROX. STA. 4+47) (KEEP INSIDE ROW) (SEE STREAM DETAILS SHEET)

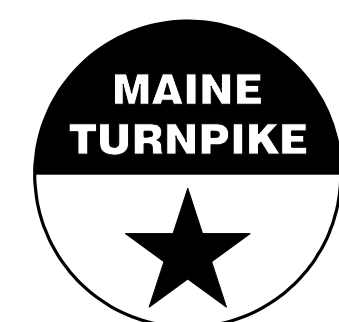
SLIPLINE CULVERT 66" DIA, HDPE, 265 LF, 0.0093 FT/FT



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

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
DUNSTAN RIVER CULVERT (MM 40.30)
STREAM PLAN AND PROFILE

No.	Revision	By	Date

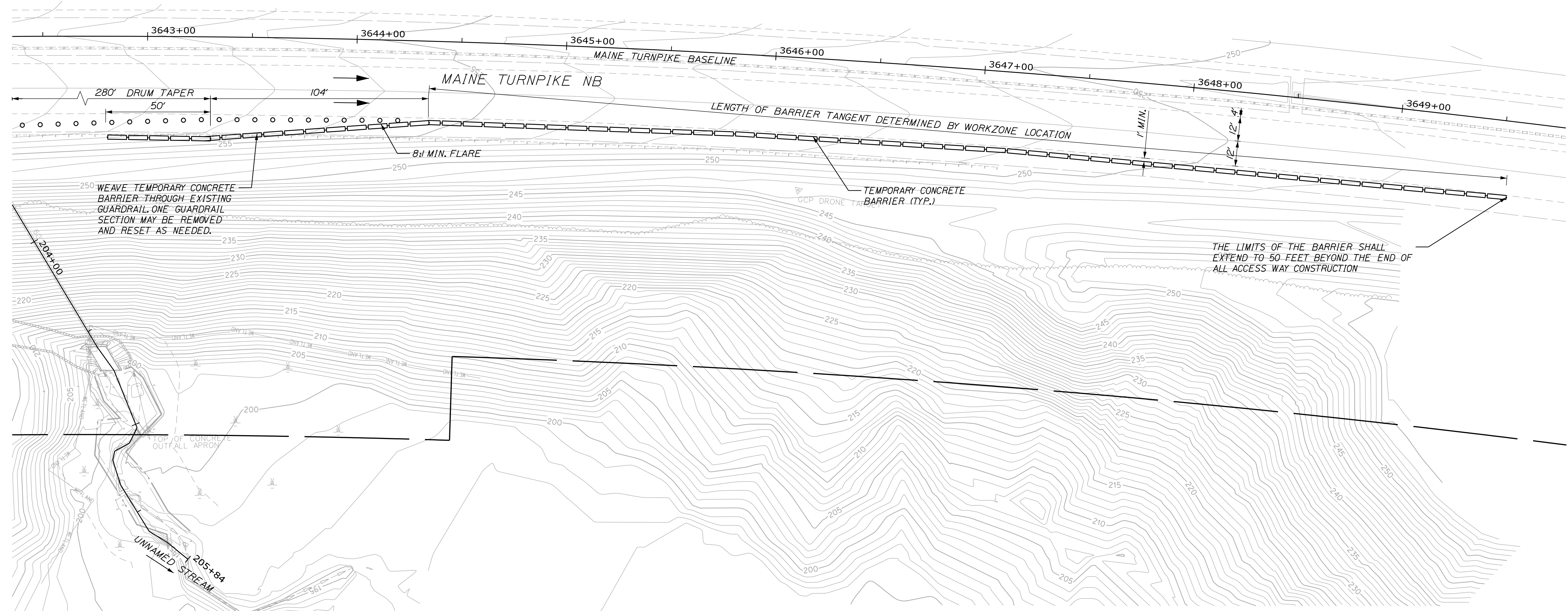
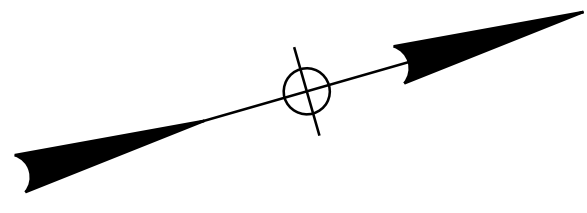
CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

VHB: 55813.00
CONTRACT: 2025.07

SHEET NUMBER:

15 OF 23



WEAVE TEMPORARY CONCRETE BARRIER THROUGH EXISTING GUARDRAIL. ONE GUARDRAIL SECTION MAY BE REMOVED AND RESET AS NEEDED.

THE LIMITS OF THE BARRIER SHALL EXTEND TO 50 FEET BEYOND THE END OF ALL ACCESS WAY CONSTRUCTION

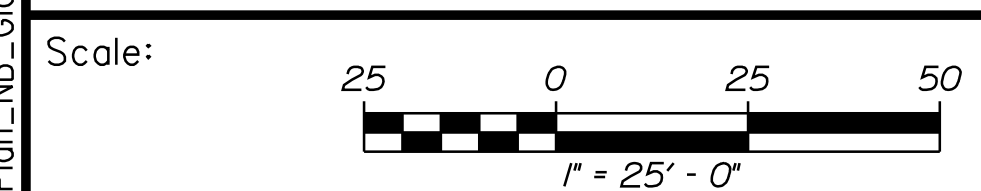
NOTE

1. THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, INCLUDING TEMPORARY LANE CLOSURES, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.

MAP 10, LOT 29
N/F
SMALL WOODLAND OWNERS
ASSOCIATION OF MAINE

Date: 3/19/2025

Filename: ...001_Plan_NB_Clouch.dgn



Designed by:

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	By	Date	
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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**THE GOLD STAR
MEMORIAL HIGHWAY**

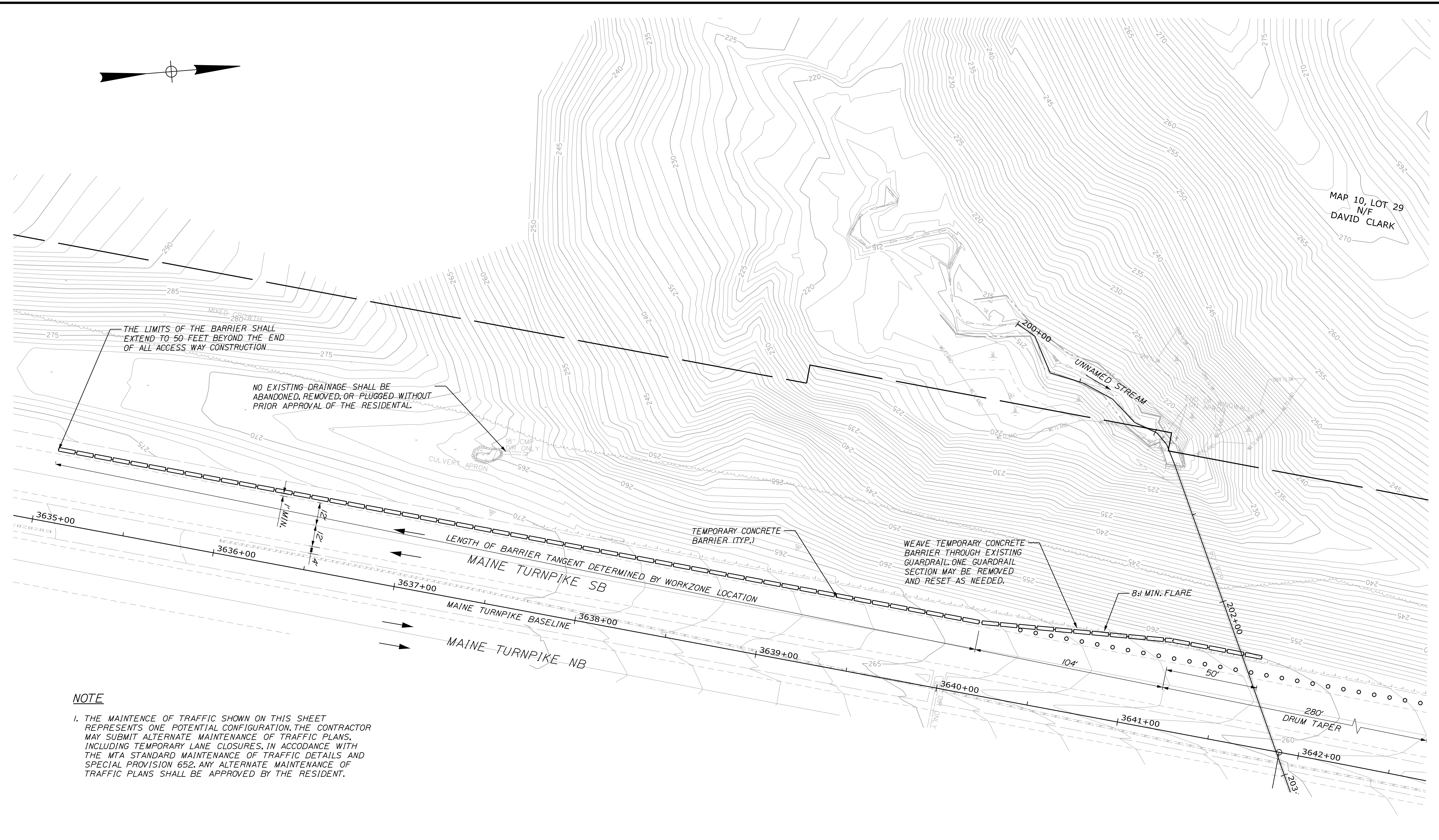
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
UNNAMED STREAM CULVERT (MM 72.00)
EXISTING CONDITIONS & MOT PLAN - NB

VHB: 55813.00 SHEET NUMBER: 16 OF 23
CONTRACT: 2025.07

Date: 3/19/2025

Filename: ...002_Plan_SB_Glouch.dgn



NOTE

1. THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, INCLUDING TEMPORARY LANE CLOSURES, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.



Designed by:

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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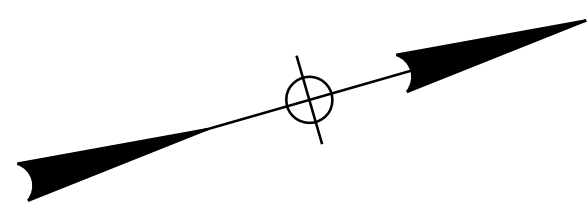
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 UNNAMED STREAM CULVERT (MM 72.00)
 EXISTING CONDITIONS & MOT PLAN - SB

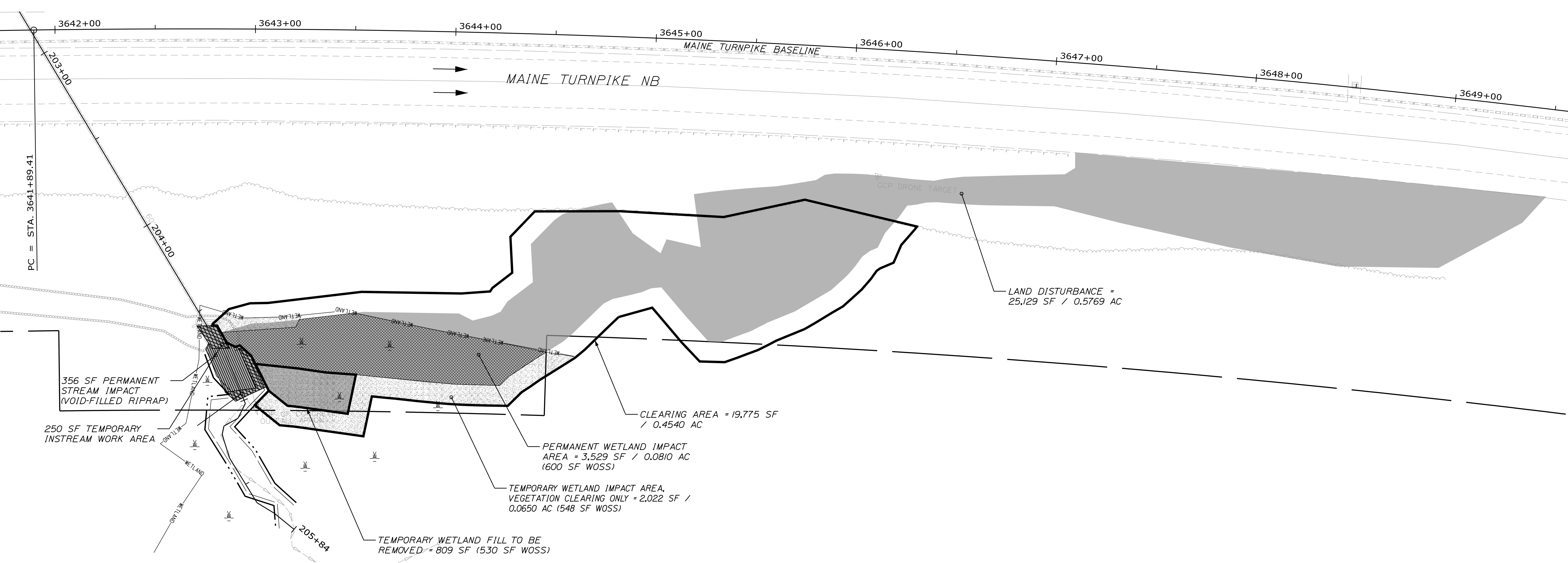
VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:
 17 OF 23



Date: 3/19/2025

Filename: ...\\005_Limits of Dist_NB_Glouch.dgn



NOTE:

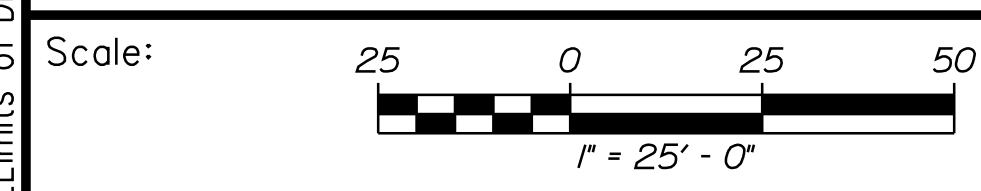
1. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ANY REQUIRED ACCESS WAYS. ALL ACCESS WAYS SHALL BE CONSTRUCTED WITHIN THE LIMITS OF INSTREAM IMPACTS AND WETLAND IMPACTS SHOWN ON THIS SHEET. CLEARING AND LIMITS OF DISTURBANCE ARE LIMITED TO NO MORE THAN THE TOTAL AREA SHOWN ON THIS SHEET WITHIN THE GENERAL LIMITS OF THE SITE.

LEGEND

- WETLAND — WETLAND
- ==== ORDINARY HIGH WATER
- 15 LF OF TEMPORARY IN-STREAM IMPACT
- 25 LF OF PERMANENT IN-STREAM IMPACT

KEY

- LAND DISTURBANCE = 25,129 SF / 0.5769 AC
- CLEARING AREA = 19,775 SF / 0.4540 AC
- TEMPORARY WETLAND IMPACT AREA TOTAL = 2,831 SF / 0.0650 AC (VEGETATION CLEARING AND TEMPORARY FILL COMBINED) (1,078 SF WITHIN WOSS)
- PERMANENT WETLAND IMPACT AREA = 3,529 SF / 0.0810 AC (600 SF WITHIN WOSS)
- TEMPORARY IN-STREAM WORK AREA = 250 SF
- PERMANENT IN-STREAM IMPACT AREA = 356 SF



Designed by:



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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 UNNAMED STREAM CULVERT (MM 72.00)
 DISTURBANCE IMPACT PLAN - NORTHBOUND

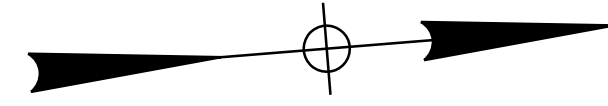
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date		By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:
 18 OF 23



NOTE:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ANY REQUIRED ACCESS WAYS. ALL ACCESS WAYS SHALL BE CONSTRUCTED WITHIN THE LIMITS OF INSTREAM IMPACTS AND WETLAND IMPACTS SHOWN ON THIS SHEET. CLEARING AND LIMITS OF DISTURBANCE ARE LIMITED TO NO MORE THAN THE TOTAL AREA SHOWN ON THIS SHEET WITHIN THE GENERAL LIMITS OF THE SITE.

MAP 10, LOT 29
N/F
DAVID CLARK

CLEARING AREA = 16,022 SF
= 0.3678 ACRES

LAND DISTURBANCE =
20,196 SF / 0.4636 AC

TEMPORARY WETLAND IMPACT AREA,
VEGETATION CLEARING ONLY = 1,136 SF /
0.0324 AC (1,147 SF WOSS)

PERMANENT WETLAND IMPACT
AREA = 804 SF / 0.0185 AC
(215 SF WOSS)

TEMPORARY WETLAND
FILL TO BE REMOVED =
276 SF (202 SF WOSS)

516 SF TEMPORARY
INSTREAM WORK AREA

WETLAND (TYP.)

TEMPORARY WORKPAD TO
BE REMOVED

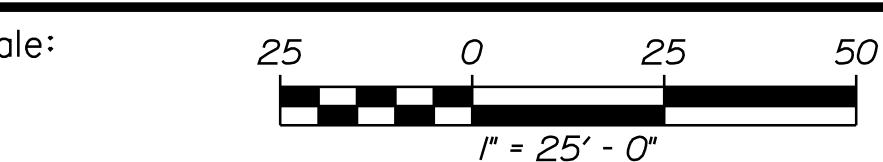
LEGEND

- WETLAND — WETLAND
- ORDINARY HIGH WATER — ORDINARY HIGH WATER

KEY

- LAND DISTURBANCE = 20,196 SF / 0.4636 AC
- CLEARING AREA = 16,022 SF / 0.3678 AC
- TEMPORARY WETLAND IMPACT AREA = 1,136 SF / 0.0324 AC
(VEGETATION CLEARING AND TEMPORARY FILL COMBINED)
(1,349 SF WITHIN WOSS)
- PERMANENT WETLAND IMPACT AREA = 804 SF /
0.0185 AC (215 SF WITHIN WOSS)
- TEMPORARY IN-STREAM WORK AREA = 516 SF

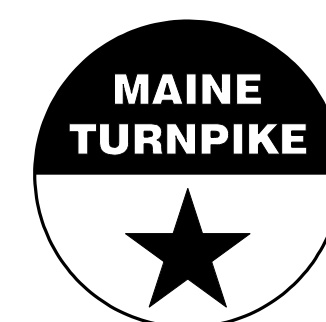
40 LF OF TEMPORARY IN-STREAM IMPACT
0 LF OF PERMANENT IN-STREAM IMPACT



Designed by:



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Suite 105B
South Portland, ME 04106
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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
UNNAMED STREAM CULVERT (MM 72.00)
DISTURBANCE IMPACT PLAN - SOUTHBOUND

VHB: 55813.00
CONTRACT: 2025.07

SHEET NUMBER:

19 OF 23

Date: 3/19/2025

Filename: ...\\006.Limits of Dist..SB_Glouch.dgn

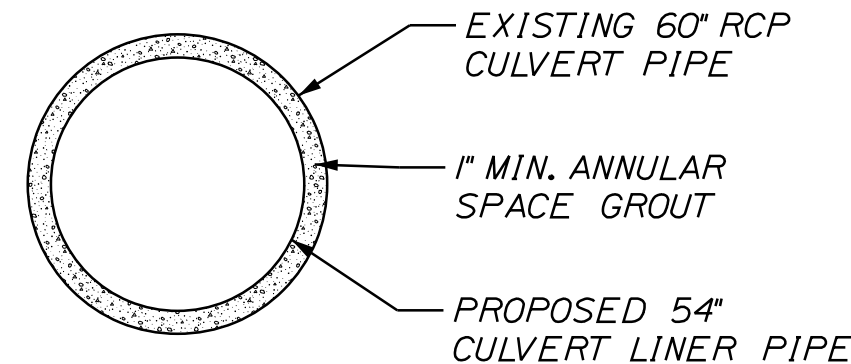
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date		By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

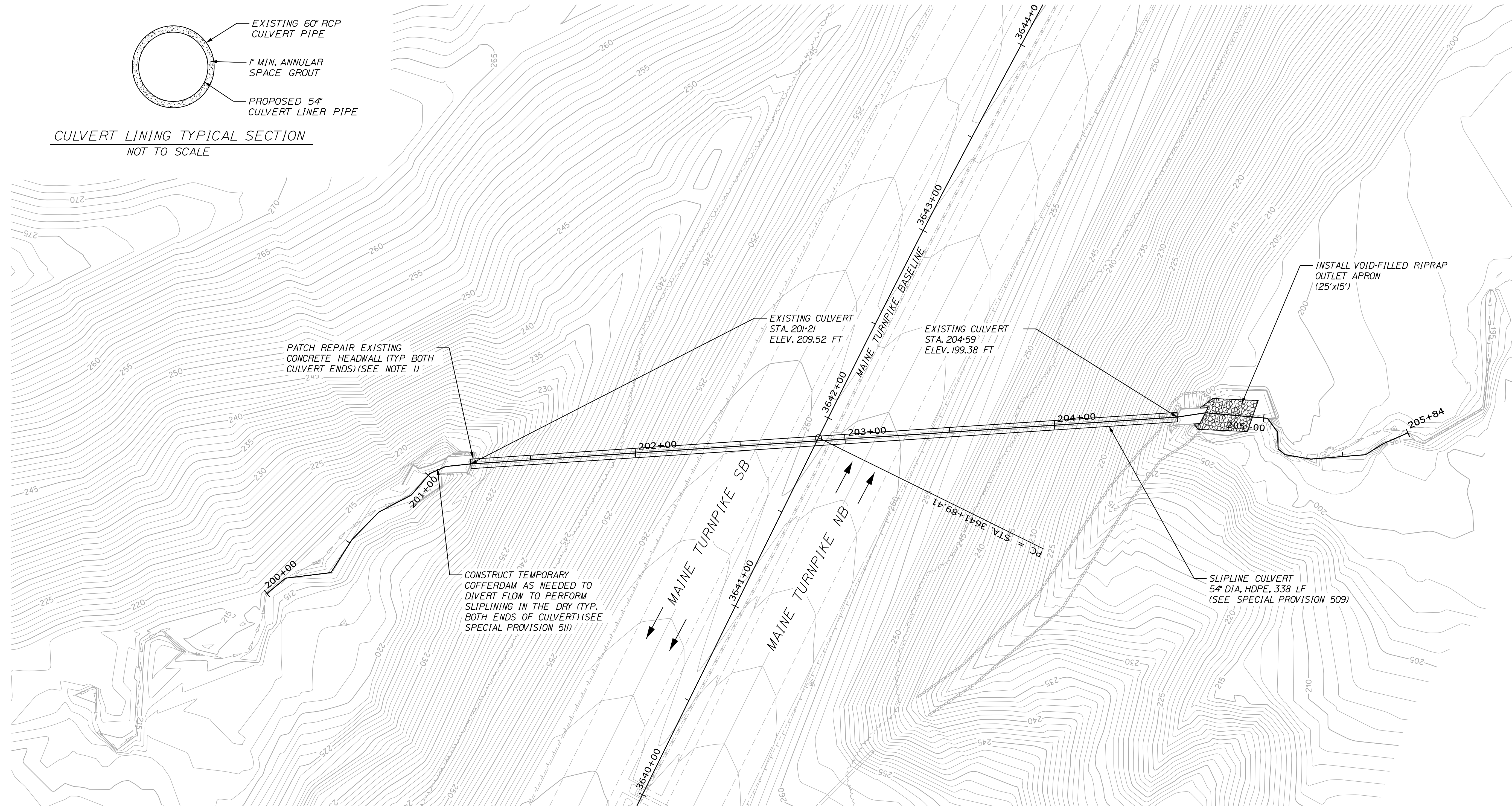
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

Date: 3/19/2025

Filename: ...\\007_Plan_Stream_Glouch.dgn



CULVERT LINING TYPICAL SECTION
NOT TO SCALE




NOTE
1. PATCH REPAIR OF THE EXISTING CONCRETE HEADWALLS SHALL BE INCIDENTAL TO ITEM 509.2022. CULVERT LINING (UNNAMED STREAM CULVERT MM 72.00). ESTIMATED REPAIR AREA IS APPROXIMATELY 10SF. SEE CONCRETE REPAIR DETAILS SHEET FOR ADDITIONAL DETAILS.



No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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**THE GOLD STAR
MEMORIAL HIGHWAY**

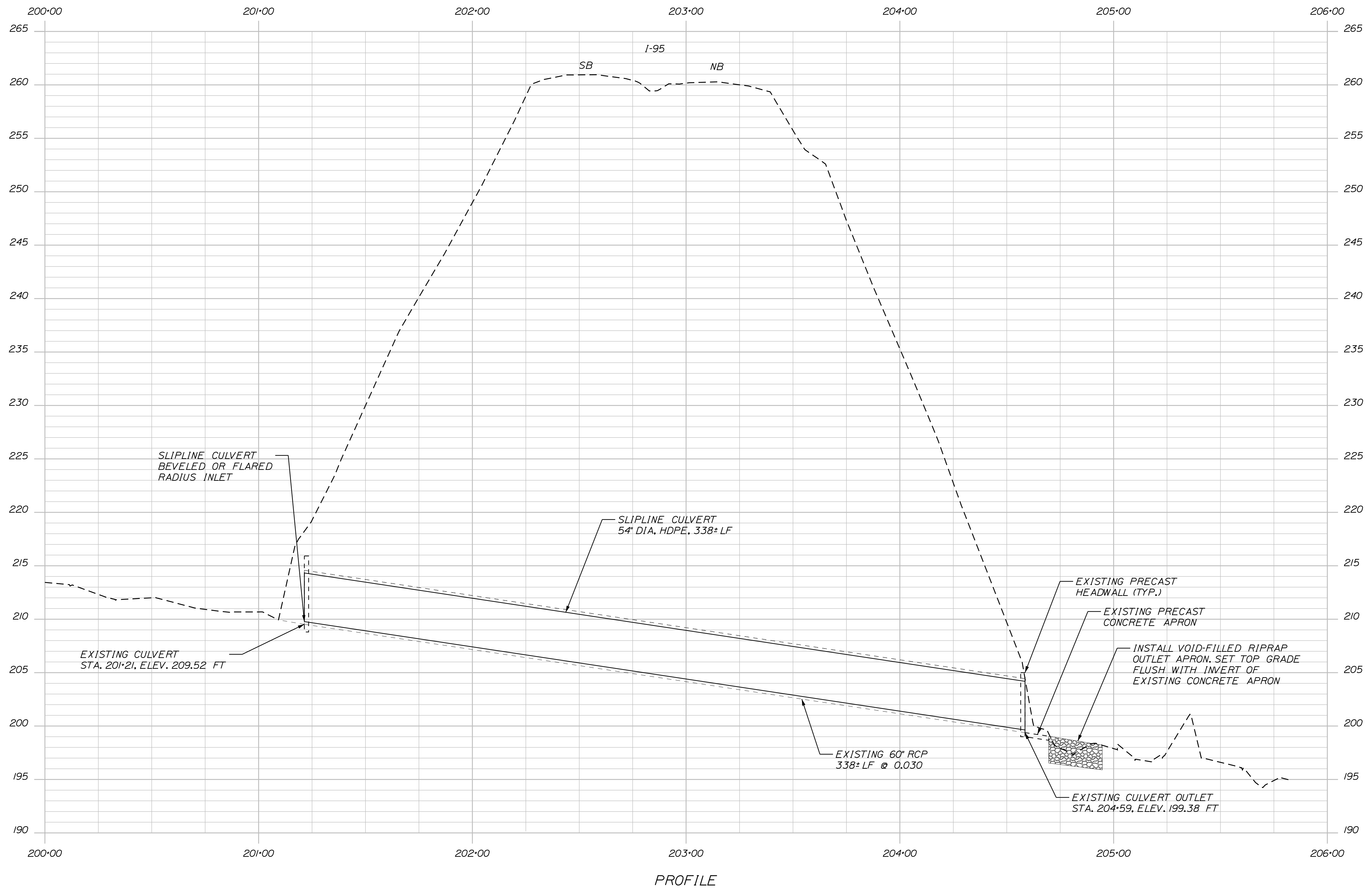
MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
CULVERT REPAIRS
UNNAMED STREAM CULVERT (MM 72.00)
STREAM PLAN

VHB: 55813.00
CONTRACT: 2025.07

SHEET NUMBER:
20 OF 23

Date: 3/19/2025



Filename: ...008_Profile_Stream_Glouch.dgn

Scale: HORIZ. 1" = 25', 0", 25', 50'
 VERT. 1" = 5', 0', 5', 10'

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: M. Bowe

	By	Date	Checked	By	Date
Designed	SRP	3/20/25	Checked	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 UNNAMED STREAM CULVERT (MM 72.00)
 STREAM PROFILE

VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER: 21 OF 23

Date: 3/19/2025

NOTES

1. UPON COMPLETION OF SLIPLINE INSTALLATION, THE ACCESS WAY SHALL BE RESTORED TO THE EXISTING CONDITION AS DIRECTED BY THE RESIDENT. THE AERIAL IMAGE SHOWN ON THIS SHEET MAY NOT BE REPRESENTATIVE OF THE EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS PRIOR TO STARTING ANY WORK. PAYMENT FOR WORK TO ALLOW ACCESS AND RESTORATION SHALL BE INCIDENTAL ITEM 509.2023, CULVERT LINING (CULVERT MM 72.20).
2. THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.



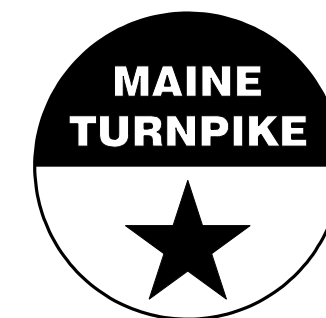
Filename: ... \PlanSet\001_Plan_MM72.2.dgn



Designed by:



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 Suite 105B
 South Portland, ME 04106
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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 CULVERT (MM 72.20)
 GENERAL PLAN (1 OF 2)

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	ECF	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

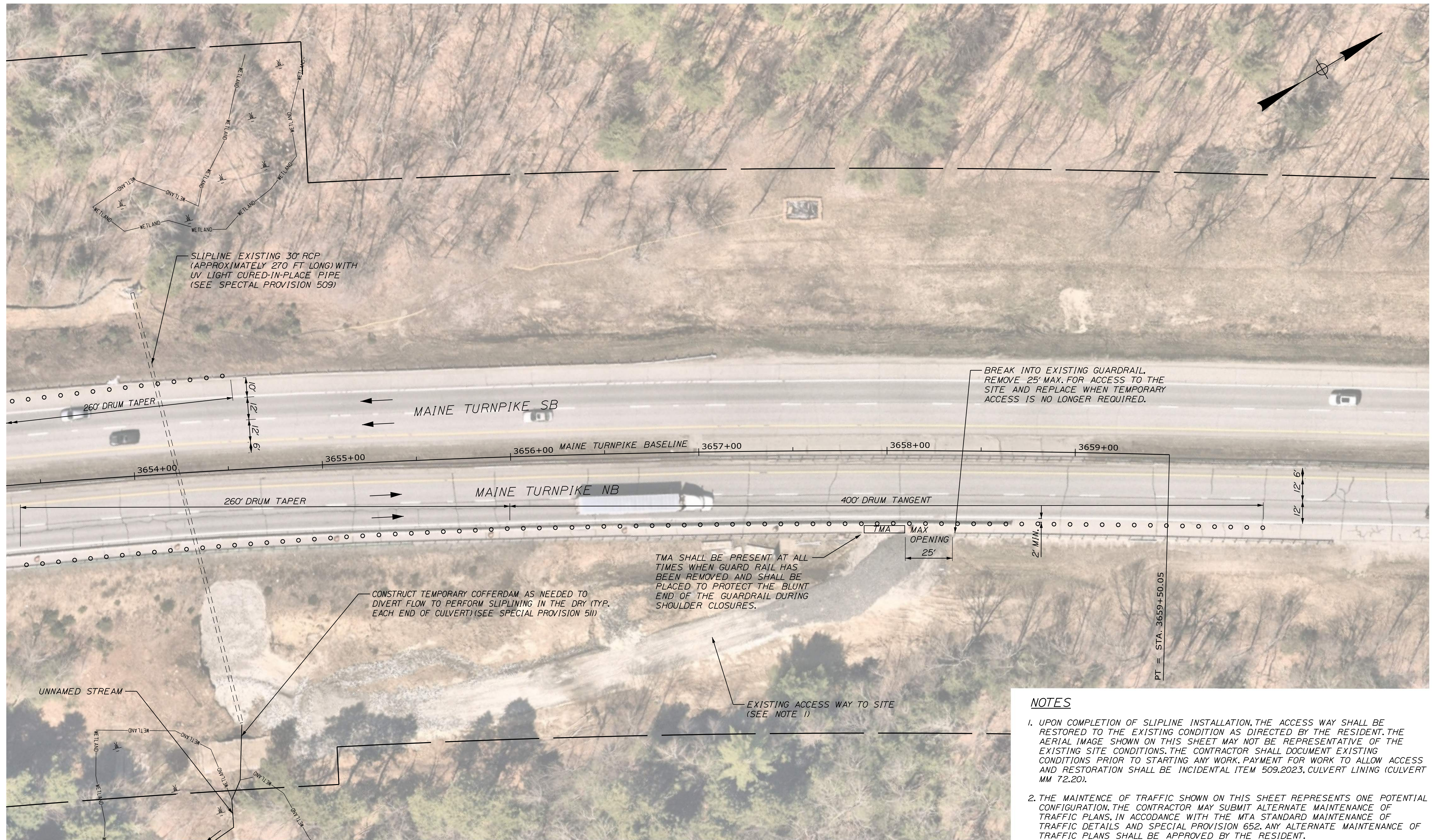
VHB: 55813.00
 CONTRACT: 2025.07

SHEET NUMBER:

MTA PROJECT MANAGER: Kristi Van Ooyen, PE

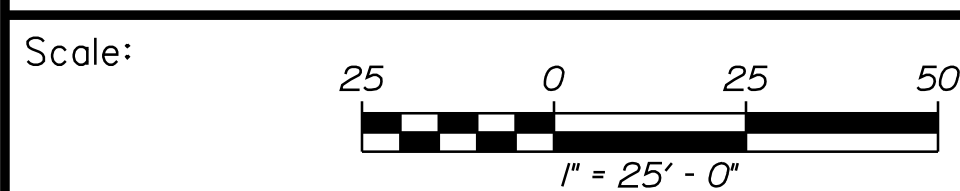
Date: 3/19/2025

Filename: ...Planset\002_Plan_MM72.2.dgn



NOTES

- UPON COMPLETION OF SLIPLINE INSTALLATION, THE ACCESS WAY SHALL BE RESTORED TO THE EXISTING CONDITION AS DIRECTED BY THE RESIDENT. THE AERIAL IMAGE SHOWN ON THIS SHEET MAY NOT BE REPRESENTATIVE OF THE EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS PRIOR TO STARTING ANY WORK. PAYMENT FOR WORK TO ALLOW ACCESS AND RESTORATION SHALL BE INCIDENTAL ITEM 509.2023, CULVERT LINING (CULVERT MM 72.20).
- THE MAINTENANCE OF TRAFFIC SHOWN ON THIS SHEET REPRESENTS ONE POTENTIAL CONFIGURATION. THE CONTRACTOR MAY SUBMIT ALTERNATE MAINTENANCE OF TRAFFIC PLANS, IN ACCORDANCE WITH THE MTA STANDARD MAINTENANCE OF TRAFFIC DETAILS AND SPECIAL PROVISION 652. ANY ALTERNATE MAINTENANCE OF TRAFFIC PLANS SHALL BE APPROVED BY THE RESIDENT.



Designed by:



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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT NO. 2025.07
 CULVERT REPAIRS
 CULVERT (MM 72.20)
 GENERAL PLAN (2 OF 2)

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: M. Bowe					
	By	Date	Checked	By	Date
Designed	SRP	3/20/25	ECF	ECF	3/20/25
Drawn	BRT	3/20/25	In Charge of	MEB	3/20/25

MTA PROJECT MANAGER: Kristi Van Ooyen, PE