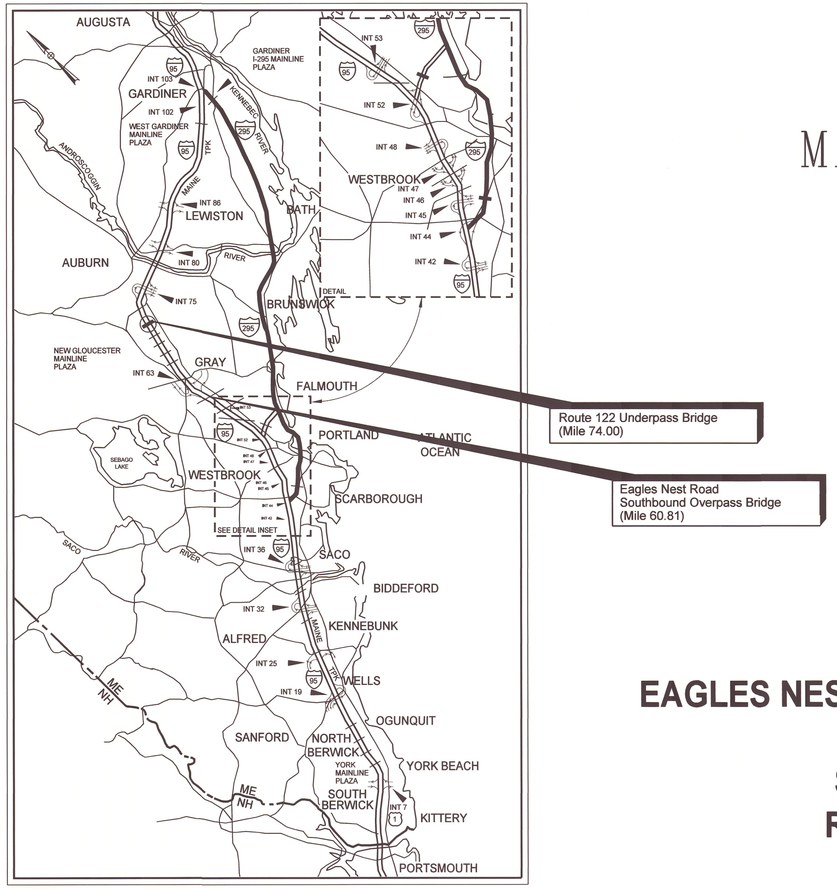

LOCATION MAP

MAINE TURNPIKE

THE GOLD STAR
MEMORIAL HIGHWAY

MAINE TURNPIKE AUTHORITY

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

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2023.03

BRIDGE REPAIRS
EAGLES NEST ROAD SOUTHBOUND OVERPASS (MILE 60.81)

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS (MILE 74.00)

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6	Detour Plan
7	Framing Plan & Diaphragm Details
	Structure 2 - Route 122 Underpass
8	Typical Sections
9-10	Details (2 Sheets)
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26	Detour Plan
27	Bridge Plan & Elevation
28	Bridge Survey Layout Plan
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30	Abutment No. 1 Repair and Modifications
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32	Abutment No. 2 Removal
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58	Deck End Details
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60	Snow Fence Details
61	Reinforcing Steel Schedule

APPROVED:

MAINE TURNPIKE AUTHORITY

PETER S. MERFELD, P.E. - CHIEF OPERATIONS OFFICER — DATE 02-09-23

STEPHEN R. TARTRE, P.E., - CHIEF ENGINEER & DIRECTOR OF ENGINEERING — DATE 2/9/23

vhb

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

STATE OF MAINE — GORDON M. EDINGTON No. 13206 LICENSED PROFESSIONAL ENGINEER

2/3/2023
DATE

Contract 2023.03

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\001_title_01.dgn

Date:2/3/2023

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.10	Removing Existing Superstructure Property of Contractor (362 CY)*	1	LS
202.17	Removing Existing Structural Concrete	95	CY
202.191	Removing Existing Drain Troughs	1	LS
202.202	Removing Pavement Surface	680	SY
203.20	Common Excavation	345	CY
203.25	Granular Borrow	160	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	160	CY
304.14	Aggregate Base Course - Type A	150	CY
403.207	Hot Mix Asphalt - 19 mm	107	TON
403.208	Hot Mix Asphalt - 12.5 mm	200	TON
403.213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)	140	TON
409.15	Bituminous Tack Coat RS-1 or RS1h - Applied	120	GAL
411.10	Untreated Aggregate Surface Course, Truck Measure	2	CY
419.30	Sawing Bituminous Pavement	250	LF
502.21	Structural Concrete, Abutments and Retaining Walls	83	CY
502.23	Structural Concrete Piers (290 CY)*	15	CY
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (54 CY)*	1	LS
502.49	Structural Concrete Curbs and Sidewalks	1	LS
502.602	Pier Pedestal Concrete	16	CF
503.12	Reinforcing Steel, Fabricated and Delivered	2,150	LB
503.13	Reinforcing Steel, Placing	2,150	LB
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	128,250	LB
503.15	Epoxy-Coated Reinforcing Steel, Placing (217,600 LB)*	128,250	LB
504.70	Structural Steel Fabricated and Delivered (217,600 LB)*	1	LS
504.71	Structural Steel Erection	1	LS
504.80	Eagles Nest Road Southbound Overpass Steel Repair (4,730 EA)*	1	LS
505.08	Shear Connectors	1	LS
506.9104	Thermal Spray Coating (Shop Applied) (720 LF)*	1	LS
507.0821	Steel Bridge Railing, 3 Bar (1,050 SY)*	1	LS
508.14	High Performance Waterproofing Membrane (170 SY)*	1	LS
508.15	Membrane Waterproofing	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
515.201	Pigmented Protective Coating for Concrete Surfaces	790	SY
515.202	Clear Protective Coating for Concrete Surfaces	510	SY
518.20	Pier Repairs (68 LF)*	185	SF
520.21	Expansion Device - Gland Seal	2	EA
523.52	Bearing Installation	35	EA
523.5401	Laminated Elastomeric Bearings, Fixed	5	EA
523.54021	PTFE Elastomeric Bearings, Expansion	30	EA
524.40	Protective Shielding - Steel Girders (600 LF)*	1,470	SY
526.306	Temporary Concrete Barrier, Type 1 - Supplied by the Authority	1	LS
527.341	Work Zone Crash Cushions - TL-3	2	UNIT
606.1301	31" W-Beam Guardrail - Mid-way Splice	125	LF
606.1305	31" W-Beam Guardrail - Mid-way Splice Flared Terminal	2	EA
606.1721	Bridge Transition - Type 1	4	EA
606.178	Guardrail Beam	25	LF
606.23	Guardrail Type 3c - Single Rail	25	LF
606.352	Reflectorized Beam Guardrail Delineator	10	EA
606.353	Reflectorized Flexible Guardrail Marker	4	EA
607.17	Chain Link Fence - 6 Foot	180	LF
607.23	Chain Link Fence Gate	2	EA
607.32	Bracing Assembly Type 1 - Metal Posts	16	EA
607.33	Bracing Assembly Type 11 - Metal Posts	2	EA
607.431	Snow Fence	221	LF
609.11	Vertical Curb Type 1	36	LF
609.23	Terminal Curb Type 1	32	LF
610.08	Plain Riprap	440	CY
610.18	Stone Ditch Protection	75	CY
610.181	Temporary Stone Check Dam	10	CY
613.319	Erosion Control Blanket	39	SY
615.07	Loam	111	CY
618.14	Seeding Method Number 2	9	UN
619.1201	Mulch - Plan Quantity	9	UN
619.1202	Temporary Mulch	1	LS
619.1401	Erosion Control Mix	35	CY
620.58	Erosion Control Geotextile	695	SY
627.712	White or Yellow Pavement Marking Line	2,100	LF
629.05	Hand Labor, Straight Time	20	HR
631.10	Air Compressor (Including Operator)	20	HR
631.11	Air Tool (Including Operator)	20	HR
631.12	All Purpose Excavator (Including Operator)	20	HR
631.172	Truck - Large (Including Operator)	40	HR
631.36	Foreperson	20	HR
639.18	Field Office, Type A	1	EA
652.30	Flashing Arrow	2	EA
652.312	Type III Barricades	11	EA
652.33	Drum	115	EA
652.34	Cone	50	EA
652.35	Construction Signs	1,277	SF

* Quantities are Estimated Only

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	110	HR
652.41	Portable-Changeable Message Sign	3	EA
652.45	Truck Mounted Attenuator	160	CD
652.452	Automated Trailer Mounted Speed Limit Sign	2	EA
656.50	Baled Hay, in place	10	EA
656.632	30 inch Temporary Silt Fence	1,060	LF
659.10	Mobilization	1	LS

* Quantities are Estimated Only

EARTHWORK SUMMARY

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE 2/3/2023

COMMON EXCAVATION (FROM MODEL OR PLANS)	247	
GRUBBING IN FILL	18	
DOWNSPOUTS CUT	75	
UNDERCUT	0	
MUCK EXCAVATION	0	
PEAT EXCAVATION	0	
CULVERT INLET AND OUTLET DITCHES	0	
PAVEMENT SALVAGE IN FILL	0	
TOTAL COMMON EXCAVATION		340

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM MODEL OR PLANS)	64	
GRUBBING IN FILL	18	
LOAM SALVAGE IN FILL	0	
UNDERCUT	0	
MUCK EXCAVATION	0	
PEAT EXCAVATION	0	
PAVEMENT SALVAGE IN FILL	0	
RECYCLED PAVEMENT REMOVAL IN FILL	0	
TOTAL FILL		82

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

ALL DEDUCTIONS:		
GRUBBING IN CUT		104
GRUBBING IN FILL		18
LOAM SALVAGE IN CUT		0
LOAM SALVAGE IN FILL		0
DOWNSPOUTS CUT		75
MUCK EXCAVATION		0
PEAT EXCAVATION		0
PAVEMENT SALVAGE (CUT & FILL)		82
TOTAL DEDUCTIONS		280
TOTAL AVAILABLE COMMON EXCAVATION (-) TOTAL DEDUCTIONS		60
TOTAL AVAILABLE STRUCTURAL EXCAVATION		160
RIPRAP EXCAVATION		220
TOTAL AVAILABLE NON-ROCK EXCAVATION		440

COMPUTATION FOR SURPLUS MATERIAL OR COMMON BORROW FOR ESTIMATE

TOTAL AVAILABLE NON-ROCK EXCAVATION	440 x 0.90	=	396
TOTAL AVAILABLE ROCK EXCAVATION	0 x 1.30	=	0
TOTAL AVAILABLE STRUCTURAL ROCK EXCAVATION	0 x 1.30	=	0
TOTAL WASTE MATERIAL TO BE UTILIZED	0 x 0.90	=	0
TOTAL AVAILABLE EXCAVATION			396
BORROW NEEDED = TOTAL FILL (-) TOTAL AVAILABLE EXCAVATION			0
SURPLUS MATERIAL = AVAILABLE EXCAVATION (-) TOTAL FILL, (+) TOTAL WASTE MATERIAL TO BE WASTED			314
SURPLUS MATERIAL			**314 CY**

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Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

CONTRACT 2023.03

ESTIMATED QUANTITIES

VHB: 55347.01 SHEET NUMBER: 2

CONTRACT: 2023.03 2 OF 61

Date:2/3/2023

GENERAL CONSTRUCTION NOTES

1. 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.

2. During construction, Route 122 and Eagles Nest Road/Upper Marginal Way will be closed to traffic for time periods specified in the Special Provisions.

3. For construction limits and right of way lines, refer to General Plan. There are no permanent or temporary easements associated with this project. All work must be completed within the existing Right of Way.

4. Right of way property lines are shown for information purposes only.

5. Chain link fence gates shall be 3 feet wide single gates. A gate shall be located on each side of the turnpike roadway at the Route 122 Underpass. Exact location of the gate shall be determined in the field by the Resident.

6. Connections to existing fence shall be incidental to the proposed fence items.

7. At the Route 122 Underpass, existing ROW fence within the limits of work, as shown on the plans or as directed by the Resident, shall be removed and disposed. This work shall be incidental to the proposed fence items.

8. The Contractor shall submit proposed staging area(s) and field trailer location to the Resident for approval prior to starting work.

9. At the Route 122 Underpass, all portions of the existing bridge superstructure and specified portions of the bridge substructure are to be removed by and become the property of the Contractor.

10. The steel portions of the existing bridges are assumed to 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 at each bridge.

11. Milling of existing pavement shown at end of Route 122 shall be paid under Item 202.202 Removing Pavement Surface.

12. Copies of the As-Built plans are posted on the Maine Turnpike Authority website at www.maineturnpike.com. The completeness and accuracy of these plans is not guaranteed.

13. Chamfer all exposed concrete edges ¾" unless otherwise noted.

14. The proposed elevations are based on the NAVD 88 datum. The as-built plans are based on NGVD 29 datum.

15. Existing timber gutters and drainage systems in front of the abutments shall be removed at the Route 122 Underpass. See Special Provision Section 202.

16. All existing substructure elevations shown in these plans are based on existing plans and limited survey. Prior to any substructure removal or fabrication of substructure reinforcing steel, the Contractor shall field verify all existing substructure elevations and adjust reinforcing lengths as needed.

17. All Granular Borrow shall meet the requirements for underwater backfill as specified in Standard Specification 703.19.

18. All clearing shall be considered incidental to the Contract and no separate payment will be made. The actual lines for clearing shall be established in the field by the Contractor as indicated on the Plans and approved by the Resident.

EARTHWORK NOTES - ROUTE 122 UNDERPASS

1. The clearing limits at the Route 122 Underpass shall be 5' beyond and parallel to construction slope lines or as shown on the plans. The exact limits will be established in the field by the Resident. All clearing shall be within the existing ROW. Payment for clearing will be considered incidental to Contract Items.

2. Do not excavate for Type A Gravel where existing material is suitable as determined by the Resident.

3. Existing pavement removal in fill areas will be paid for under Item 203.20, Common Excavation. Shim material required for these areas below the subbase will be paid under Item 304.14, Type A Gravel.

4. The Contractor shall minimize slope disturbances at the Route 122 Underpass where possible, as directed by the Resident. There shall be no slope disturbances at the Eagles Nest Road Southbound Overpass.

EROSION CONTROL NOTES - ROUTE 122 UNDERPASS

1. The anticipated erosion control devices are shown on the plans. The Contractor shall propose actual type and location of devices for approval by the Resident. Additional devices may be proposed by the Contractor to implement additional measures. Any additional measures approved by the Resident will be measured for payment.

2. Temporary seed shall be applied to all disturbed areas that will not be completed within 30 days.

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

4. Item 613.319, Erosion Control Blanket, shall be installed on 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.

5. Place loam 4 inches deep on all new or reconstructed sideslopes or as directed by the Resident. Place Erosion Control Mix 4 inches deep on all areas below the Route 122 Underpass that are beyond the limits of riprap or as directed by the Resident.

GUARDRAIL NOTES - ROUTE 122 UNDERPASS

1. Prior to opening to traffic, all guardrail within work areas accessible to traffic shall have an approved crashworthy end treatment.

2. Connections for proposed guardrail to existing guardrail shall be incidental to the proposed guardrail items.

3. Guardrail removed and not reset or stacked shall be incidental to contract items and include all removal, disposal, equipment, and labor necessary to satisfactorily complete the work.

DRILLED AND GROUTED REINFORCING STEEL NOTES - ROUTE 122 UNDERPASS

1. The anchoring material shall be one of the products on the Maine Department of Transportation Prequalified List. Installation shall be in accordance with the Manufacturer's recommendations.

2. Drilling and grouting shall be incidental to Items 503.13, Reinforcing Steel, Placing and 503.15, Epoxy-Coated Reinforcing Steel, Placing.

3. All reinforcing steel on the project shall be epoxy coated, unless otherwise noted.

ABUTMENT NOTES - ROUTE 122 UNDERPASS

1. Reinforcing steel shall have a minimum concrete cover of 2 inches in walls.

2. Cover joints where waterstops are not required in accordance with Standard Detail 502(01).

3. Abutments and wingwalls shall be backfilled with Granular Borrow as shown in the plans.

UTILITIES NOTES - ROUTE 122 UNDERPASS

1. 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.

2. 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 the notification. No excavation shall be permitted until the authority has located and marked its underground utilities. The Resident shall be provided a digital copy of all Dig Safe tickets within 24 hours of their release for project notifications and 3rd party utility locater coordination.

3. 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.

4. Following the completion of the initial utility locate. The Contractor will GPS all utilities within the project limits and provide a copy of the Dig Safe record to the Authority. The Contractor, acting as the Authority's third party locater shall be responsible for remarking all Maine Turnpike facilities when a Dig Safe utility locate is called in for the Project. This work shall be considered incidental to related Contract Items.

5. The anticipated utilities involved in this contract are:
   Central Maine Power Company

6. Contractor shall protect all new and existing utilities from damage during the construction as approved by the utility owners.

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

8. The cost of all work related to utility coordination is incidental to the contract.

9. All clearing shall be completed by June 1, 2023.

10. The Contractor shall coordinate with CMP to complete work necessary to allow for the utility relocations during the 2023 construction season.

Filename: ...\MSTA\003_gen_notes_01.dgn

Scale:

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

CONTRACT 2023.03

GENERAL NOTES

VHB: 55347.01 SHEET NUMBER: 3

CONTRACT: 2023.03 3 OF 61

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. These traffic control details apply to the Route 122 Underpass 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.maineturnpike.com. See also the Special Provisions for more details on specific temporary traffic controls with time and date restrictions.

2. Traffic control plan for the Eagles Nest Road Overpass repair project is to close the underpass on Upper Marginal Way to all traffic for the duration of the repairs. While work is being completed a temporary detour is proposed along Upper Marginal Way, Hunts Hill Road, and Maine Route 26/100. See Detour Plan for details.

3. All orange construction signs shall be fluorescent orange with Type VIII, IX or XI sheeting. All signs shall be new or in like new condition and maintained in like new condition throughout the project duration. Placement of signs shall be adjusted to avoid obstructing existing signs and to ensure proper sight lines to the construction signs as determined by the Resident and shall be new or like new conditions.

4. 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.

5. All lane closures shall require approval from the Maine Turnpike Authority through the Resident. The Resident is required to submit a request for lane closures by noon on Thursday for any lane closures needed for the following week. The Contractor shall plan the work and requests for lane closures accordingly.

6. 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.

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 lane closures are in place.

LOCAL ROAD SINGLE LANE CLOSURE / SHOULDER CLOSURE

CONSTRUCTION SIGN SUMMARY

Sign	Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
G20-2 END ROAD WORK	Text Dimensions Shall Conform to "Standard Highway Signs" - 2012		36"x18"	2 - Black on Orange
W20-1 ROAD WORK AHEAD			36"x36"	2 - Black on Orange
W20-4 ONE LANE ROAD AHEAD			36"x36"	2 - Black on Orange
W20-7			36"x36"	2 - Black on Orange

TURNPIKE SHOULDER CLOSURES

CONSTRUCTION SIGN SUMMARY

Sign	Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
G20-2 END ROAD WORK	Text Dimensions Shall Conform to "Standard Highway Signs" - 2012		48"x24"	2 - Black on Orange
W7-3aP NEXT X FEET or NEXT X MILES			36"x30"	2 - Black on Orange
W20-1 (AHEAD) ROAD WORK AHEAD			48"x48"	2 - Black on Orange
W21-5aR RIGHT SHOULDER CLOSED 1000 FT			48"x48"	2 - Black on Orange
W21-5bR RIGHT SHOULDER CLOSED			48"x48"	2 - Black on Orange

STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SIGN SUMMARY

Sign	Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
G20-2 END ROAD WORK	Text Dimensions Shall Conform to "Standard Highway Signs" - 2012		48"x24"	1 - Black on Orange
W7-3aP NEXT X FEET or NEXT X MILES			36"x30"	2 - Black on Orange
W20-1 (AHEAD) ROAD WORK AHEAD			48"x48"	2 - Black on Orange
W21-5 SHOULDER WORK			48"x48"	1 - Black on Orange
CS-10 TRUCKS ENTERING			48"x48"	1 - Black on Orange

TURNPIKE SINGLE LANE CLOSURES

CONSTRUCTION SIGN SUMMARY

Sign	Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
CS-3 EXPECT STOPPED TRAFFIC	7" 7" 7"	4" 4"	48"x48"	4 - Black on Orange
G20-2 END ROAD WORK	Text Dimensions Shall Conform to "Standard Highway Signs" - 2012		48"x24"	4 - Black on Orange
G20-5aP WORK ZONE			36"x24"	2 - Black on Orange
R2-1(60) SPEED LIMIT 60			48"x60"	2 - Black on White
R2-6aP FINES DOUBLE			36"x24"	2 - Black on White
R2-12 END WORK ZONE SPEED LIMIT			36"x54"	4 - Black on White
W3-4 BE PREPARED TO STOP			48"x48"	4 - Black on Orange
W3-5(60) SPEED LIMIT 60			48"x48"	4 - Black on Orange
W4-2(I)			48"x48"	4 - Black on Orange
W4-2(R)			48"x48"	4 - Black on Orange
W20-1 (1 MILE) ROAD WORK 1 MILE			48"x48"	4 - Black on Orange
W20-5L LEFT LANE CLOSED X MILE			48"x48"	4 - Black on Orange
W20-5R RIGHT LANE CLOSED X MILE			48"x48"	4 - Black on Orange

Date:1/31/2023

Filename: ...\MSTA\004_workzone_01.dgn

Scale:

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MLG	2/3/23	Checked	MDS	2/3/23
Drawn	JAR	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

CONTRACT 2023.03

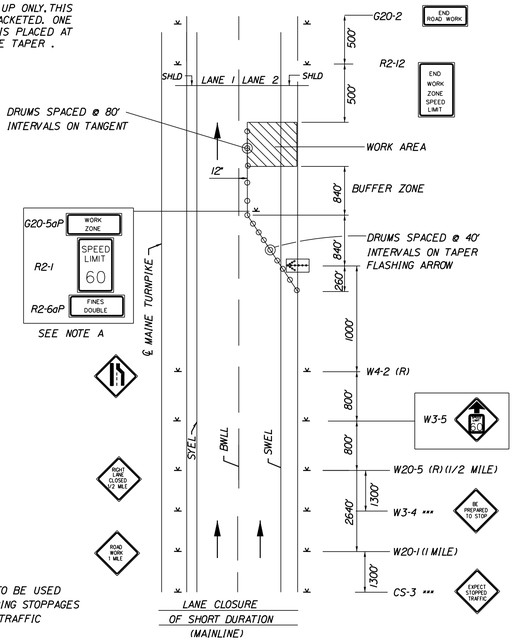
MAINTENANCE OF TRAFFIC DETAILS (1 OF 2)

VHB: 55347.01 SHEET NUMBER: 4

CONTRACT: 2023.03 4 OF 61

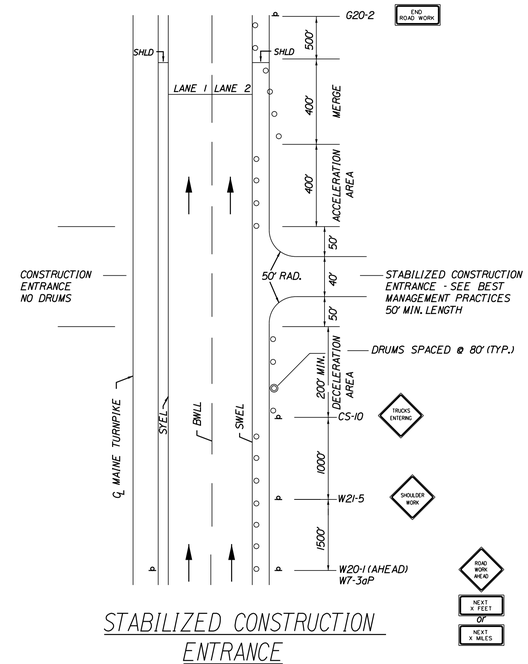
Date:1/31/2023

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



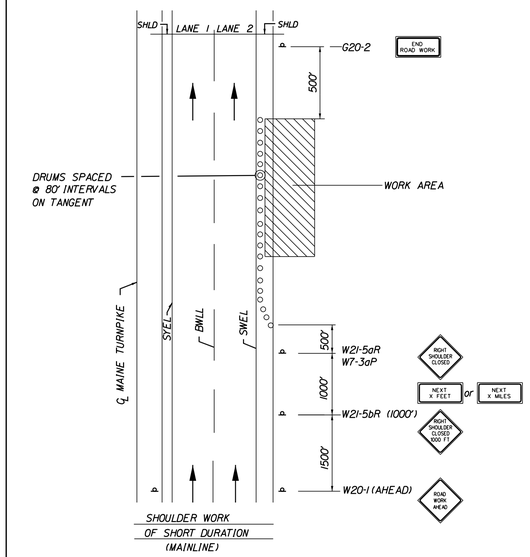
*** TO BE USED DURING STOPPAGES OF TRAFFIC

SINGLE LANE CLOSURE - SIGNS ON EASELS



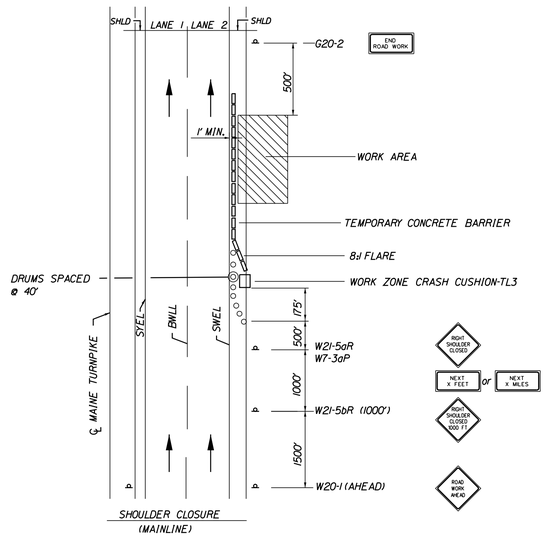
STABILIZED CONSTRUCTION ENTRANCE

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



SHOULDER CLOSURE

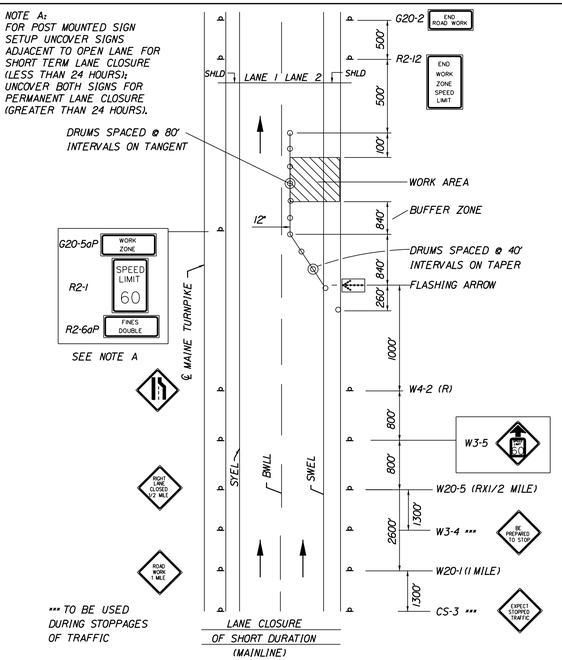
1. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.



SHOULDER CLOSURE WITH CONCRETE BARRIER

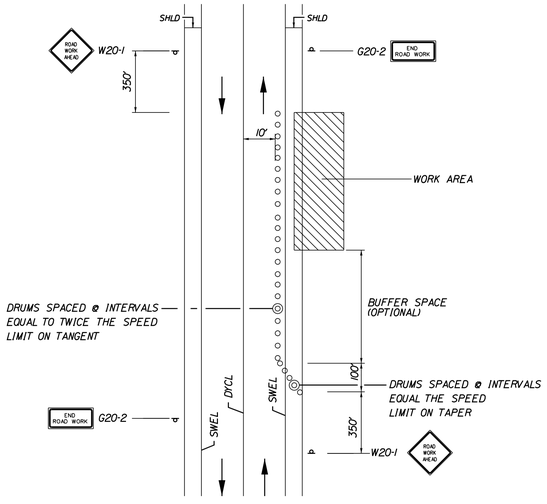
1. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.
2. ONLY ONE SHOULDER CLOSURE PERMITTED PER AT ONE TIME.

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).



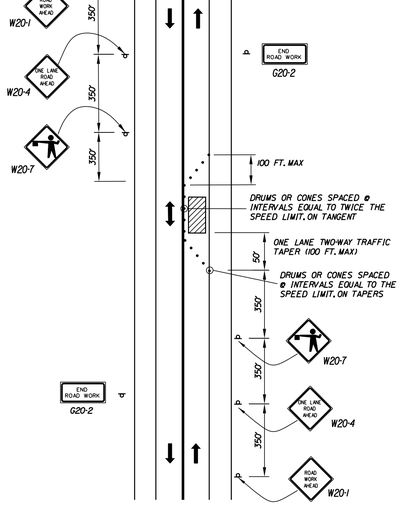
*** TO BE USED DURING STOPPAGES OF TRAFFIC

SINGLE LANE CLOSURE - POST MOUNTED SIGN SETUP



LOCAL ROAD SHOULDER CLOSURE

NOTES:
1. FOR SHORT DURATION WORK (<1HR HOUR), 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:

1. 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. TEMPORARY STRIPING SHALL BE COMPLETED AT LEAST ONCE PER CONSTRUCTION SEASON OR AS DIRECTED BY THE RESIDENT.
2. 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.
3. 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.
4. EXPOSED BARRIER ENDS ON THE MAINE TURNPIKE SHALL BE PROTECTED BY A WORK ZONE CRASH CUSHION.
5. SPEED LIMIT, STOP, YIELD AND EXIT SIGNS SHALL BE A MINIMUM OF 5' ABOVE THE PAVEMENT.
6. 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

Filename: ...\MSTA\005_workzone_02.dgn

Scale:

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MLG	2/3/23	Checked	MDS	2/3/23
Drawn	JAR	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

CONTRACT 2023.03

MAINTENANCE OF TRAFFIC DETAILS (2 OF 2)

VHB: 55347.01 SHEET NUMBER: 5

CONTRACT: 2023.03 5 OF 61

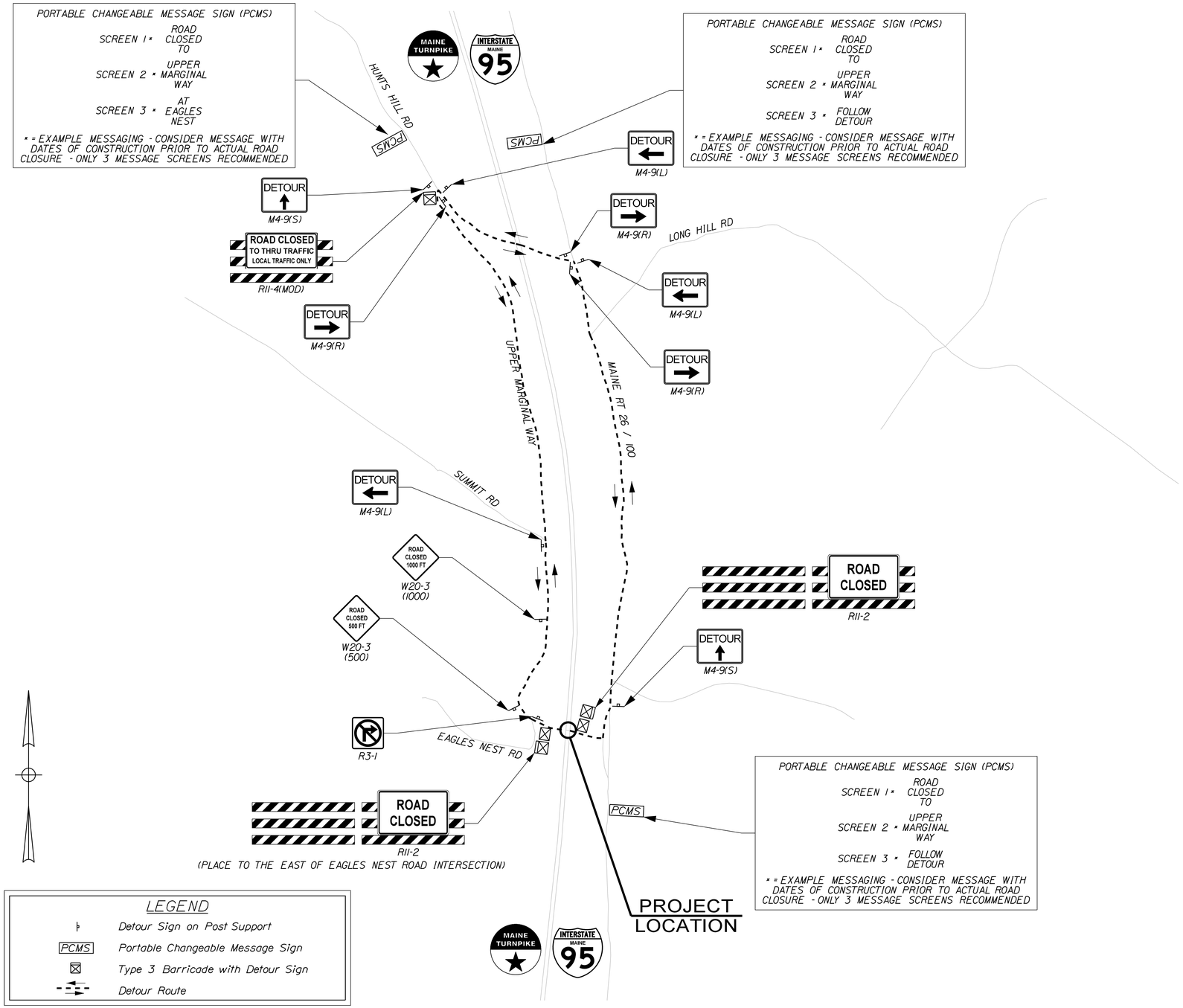
DETOUR FOR EAGLES NEST ROAD OVERPASS CLOSURE

DETOUR SIGN SUMMARY

Sign		Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
M4-9(L)	DETOUR ←	SHSB		30"x24"	3 - Black on Orange
M4-9(R)	DETOUR →			30"x24"	3 - Black on Orange
M4-9(S)	DETOUR ↑			30"x24"	2 - Black on Orange
W20-3 (1000)	ROAD CLOSED 1000 FT			36"x36"	1 - Black on Orange
W20-3 (500)	ROAD CLOSED 500 FT			36"x36"	1 - Black on Orange
R3-1				24"x24"	1 - Red/Black on White
RII-2	ROAD CLOSED			48"x30"	2 - Black on White
RII-4(MOD)	ROAD CLOSED TO THRU TRAFFIC LOCAL TRAFFIC ONLY	6" 5" 4"	3.38" 3.38"	60"x30"	1 - Black on White

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
SCREEN 1 * ROAD CLOSED TO
SCREEN 2 * UPPER MARGINAL WAY
SCREEN 3 * AT EAGLES NEST
* = EXAMPLE MESSAGING - CONSIDER MESSAGE WITH DATES OF CONSTRUCTION PRIOR TO ACTUAL ROAD CLOSURE - ONLY 3 MESSAGE SCREENS RECOMMENDED

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
SCREEN 1 * ROAD CLOSED TO
SCREEN 2 * UPPER MARGINAL WAY
SCREEN 3 * FOLLOW DETOUR
* = EXAMPLE MESSAGING - CONSIDER MESSAGE WITH DATES OF CONSTRUCTION PRIOR TO ACTUAL ROAD CLOSURE - ONLY 3 MESSAGE SCREENS RECOMMENDED



LEGEND

- Detour Sign on Post Support
- PCMS — Portable Changeable Message Sign
- Type 3 Barricade with Detour Sign
- Detour Route

Scale: 500 0 1000
1" = 500'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MLG	2/3/23	Checked	MDS	2/3/23
Drawn	JAR	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

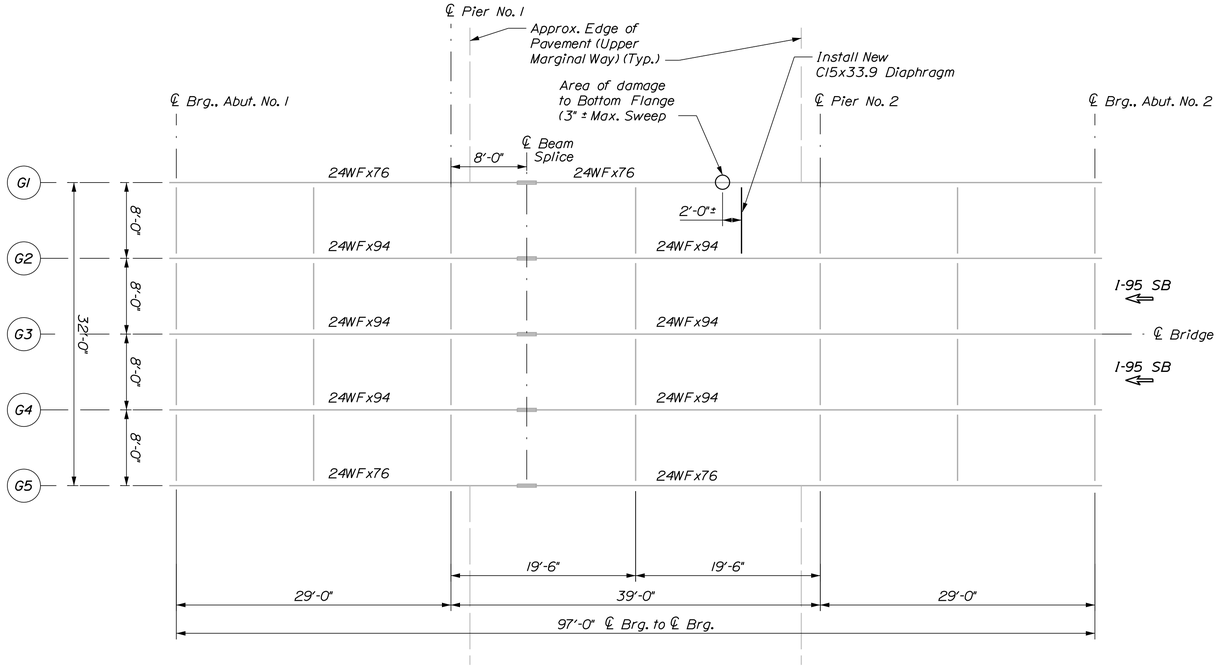
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

BRIDGE REPAIR
EAGLES NEST ROAD
SOUTHBOUND OVERPASS
DETOUR PLAN

VHB: 55347.01 SHEET NUMBER: 6
CONTRACT: 2023.03 6 OF 61

Date:1/31/2023

Filename: ...\MSTA\006_DetourPlan_02.dgn



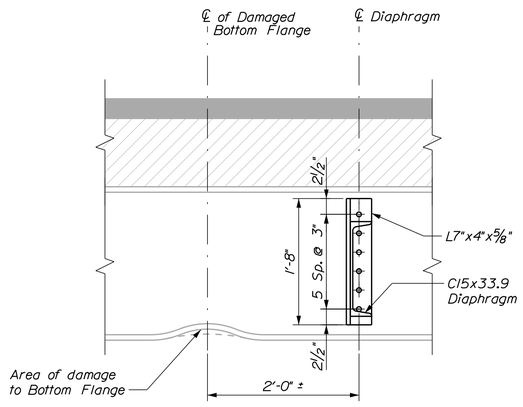
FRAMING PLAN
Scale: 1/8" = 1'-0"

SCOPE OF WORK NOTES:

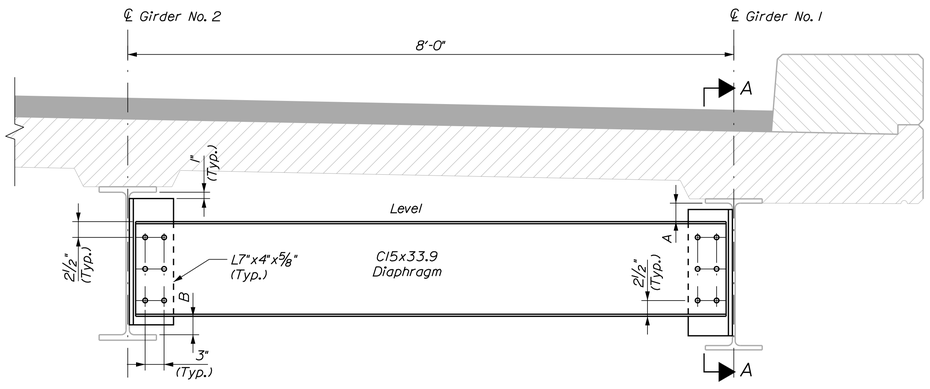
1. All work shall be completed in accordance with the 2014 MaineDOT Standard Specifications and the applicable Special Provisions.
2. All existing bridge dimensions shown are from as-built plans and the accuracy of these dimensions is not guaranteed. Prior to any material fabrication, the Contractor shall field verify all dimensions that effect the work. The final location of the proposed diaphragm shall be approved by the Resident prior to any material fabrication.
3. Install new diaphragm and connection angles at the location shown. Holes in angle sections and G2 end of the diaphragm shall be shop drilled. Holes in G1 end of diaphragm shall be field drilled.
4. Grind gouges at impact locations on G1 and G2 smooth. All grinding shall be done in the direction of the girder centerline.
5. Repair damaged protective coating system in areas damaged by vehicle impact, including areas where gouges were ground on G1 and G2.
6. All work shall be done as directed by the Resident.
7. All work at the Eagles Nest Road Southbound Overpass shall be paid as Item 504.80. See Special Provision 504 for additional information.

MATERIAL NOTES:

1. Fabricate diaphragm and connection angles in accordance with MaineDOT Standard Specification Section 504. All steel shall be galvanized in accordance with ASTM A123.
2. All bolts shall conform to ASTM F1445, Grade A325 and shall be galvanized in accordance with ASTM A153.
3. Protective coating repair shall be done with a cold galvanizing compound selected from the MaineDOT Qualified Products List or a zinc-rich coating system selected from the Northeast Protective Coating Committee (NEPCOAT) Qualified Products List (QPL) A or B list.



SECTION A-A
Scale: 1" = 1'-0"



DIAPHRAGM DETAIL
Scale: 1" = 1'-0"

NOTE: Dimension "A" shall be approximately equal to, but not greater than, dimension "B".

8 0 8 16
1/8" = 1'-0"
1 0 2
1" = 1'-0"

Filename: ...\MSTA\007_Framing_Fix_01.dgn

Date: 2/8/2023

No.	Revision	By	Date

Scale:

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed		2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

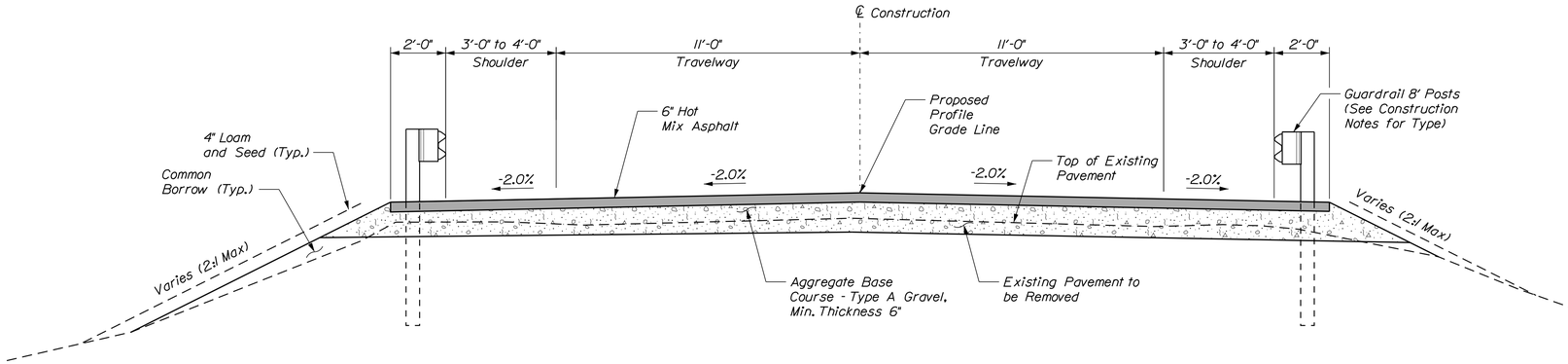
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

BRIDGE REPAIR
EAGLES NEST ROAD
SOUTHBOUND OVERPASS
FRAMING PLAN & DIAPHRAGM DETAILS

VHB: 55347.01 SHEET NUMBER: 7

CONTRACT: 2023.03



NORMAL CROWN ROADWAY APPROACH SECTION

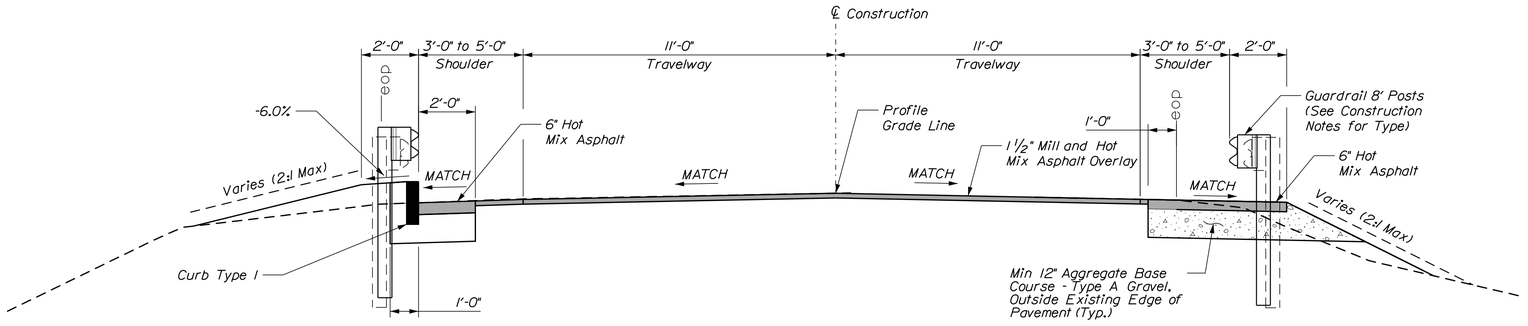
Scale: 3/8" = 1'-0"

HMA NOTE

Hot Mix Asphalt - Approaches
Surface: 1 1/2" HMA (12.5 mm)
Intermediate: 1 1/2" HMA (12.5 mm)
Base: 3" HMA (19 mm)

TYPICAL SECTION NOTES

1. The pavement and subbase depths as shown on the plans are nominal.
2. Crowns for all courses of subbase and pavement shall be straight.
3. All necessary pavement cutting shall be sawcut and done in such a manner as to leave a clean vertical face.
4. Bituminous tack coat is required between all lifts of pavement and on all existing paved or milled surfaces prior to placing proposed pavement or as directed by the Resident.



MILL AND INLAY WITH GUARDRAIL

Scale: 3/8" = 1'-0"

HMA NOTE

Hot Mix Asphalt - Mill and Overlay Areas
Surface: 1/2" HMA (12.5 mm)
Intermediate in Shoulder Reconstruction: 1/2" HMA (12.5 mm)
Base in Shoulder Reconstruction: 3" HMA (19 mm)

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

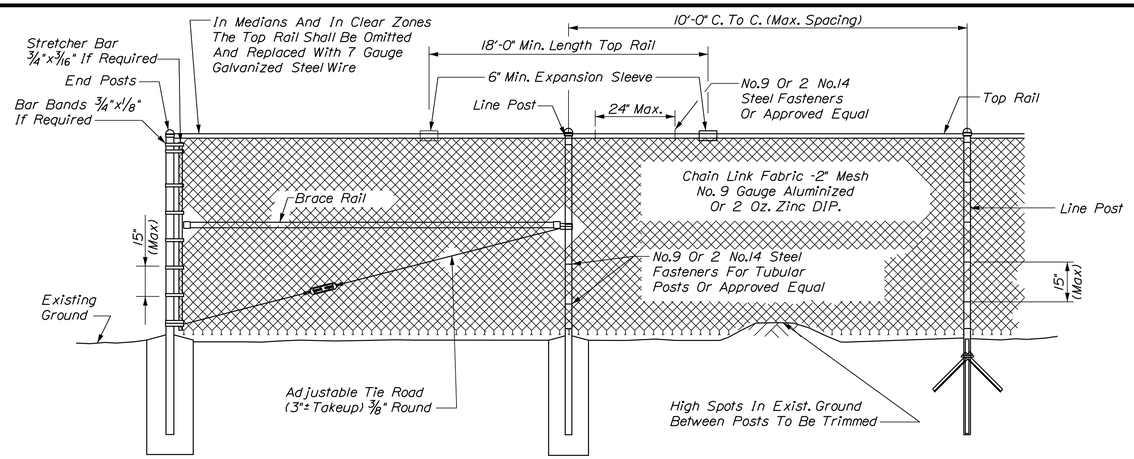
TYPICAL ROADWAY SECTION

VHB: 55347.01
CONTRACT: 2023.03

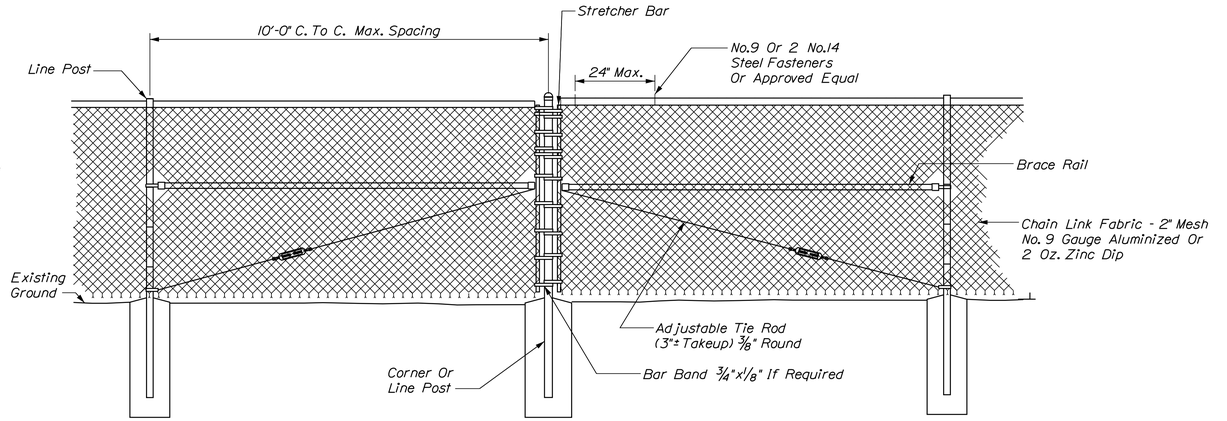
SHEET NUMBER: 8
8 OF 61

Date:2/3/2023

Filename: ...\HIGHWAY\MSTA\008_Typicals.dgn

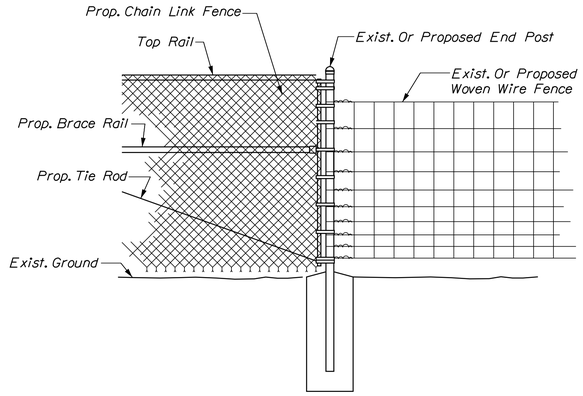


TYPICAL TYPE I END PANEL
N.T.S.

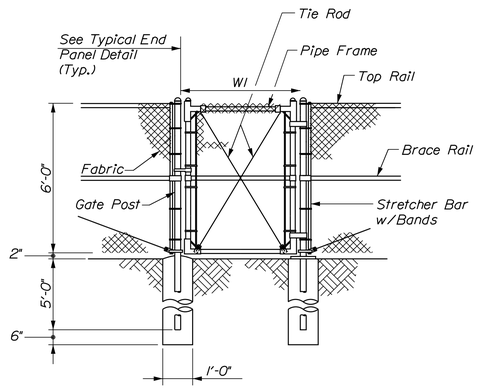


TYPICAL TYPE II BRACE PANEL
N.T.S.

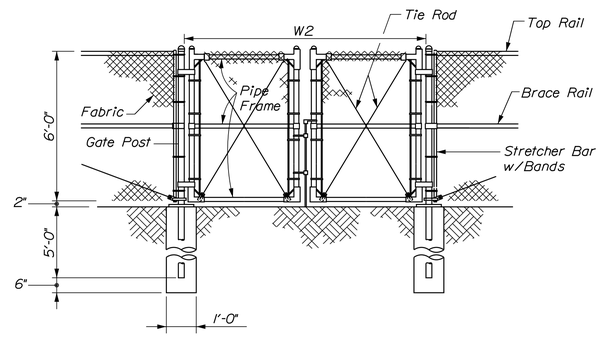
TYPICAL INTERMEDIATE PANEL
N.T.S.



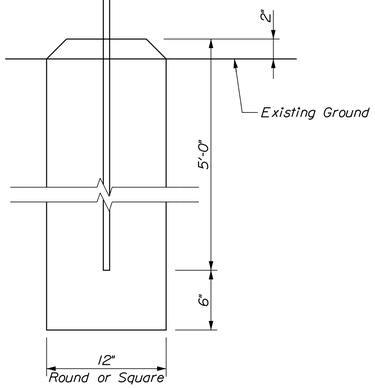
METHOD OF ATTACHING CHAIN LINK FENCE TO WOVEN WIRE FENCE
N.T.S.



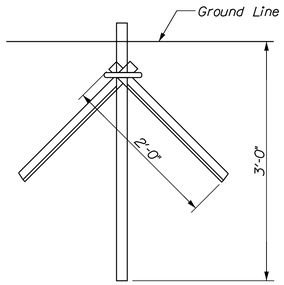
SINGLE GATE



DOUBLE GATE



BRACE, GATE AND END POST BASE DETAIL
N.T.S.



LINE POST DRIVE ANCHOR DETAIL
N.T.S.

Gate Width		Gate Post
W1	W2	O.D.
to 6'	to 12'	3"
6' to 12'	12' to 24'	4"
12' to 18'	24' to 36'	6"

Bending moments based on grade 1 (schedule 40 steel)

Chain Link Fence	Shape	Nominal Size (Inches)	Bending Moment* (lbs.-in.)
End & Corner Posts	ϕ	2 I.D.	14,025
Line Posts	ϕ	1-1/2 I.D.	8,150
Top & Brace Rails	ϕ	1-1/4 I.D.	5,875

* Material for grade 2 end, corner & line posts and top & brace rails must meet or exceed bending moments for grade 1 steel as noted above.

NOTES

1. Brace panels shall be installed where the change in grade between any three posts exceeds 15 percent.
2. No additional payment will be made for longer posts necessitated by large grade differential.
3. Type I bracing will be used at fence ends. Type II bracing will be used at corner posts.
4. When ledge is encountered, steel posts shall be set and grouted 12" deep unless the posts penetrate the ground to the depth indicated on the drawings.
5. Concrete for post foundation shall be Class B.
6. Brace, gate and end posts shall be set in concrete.
7. Chain link fence shall be installed with barbs down.
8. All components of chain link fence shall be in accordance with AASHTO M181.

Date: 2/3/2023

Filename: ...\MSTA\009_Fence_Dt_01.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

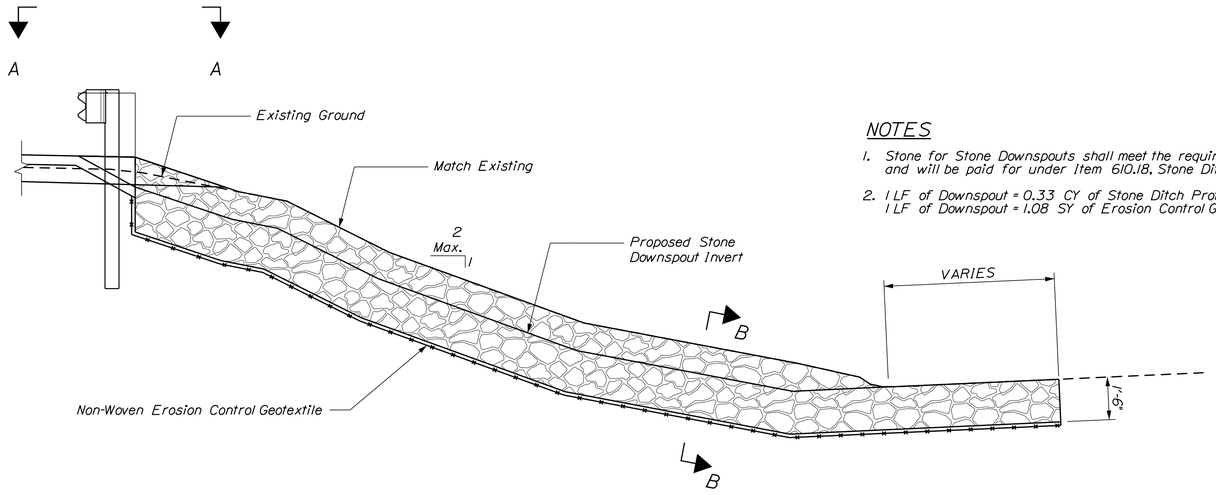
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

FENCING DETAILS

VHB: 55347.01 SHEET NUMBER: 9

CONTRACT: 2023.03 9 OF 61

Date:2/3/2023

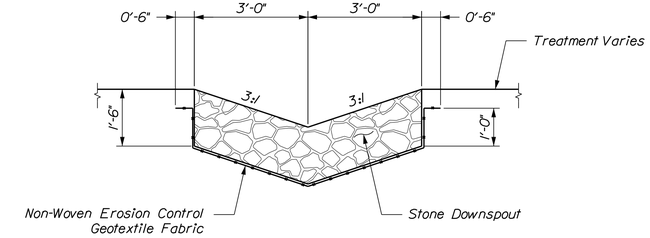


NOTES

1. Stone for Stone Downspouts shall meet the requirements of MaineDOT Specification 703.29, and will be paid for under Item 610.18, Stone Ditch Protection.
2. 1 LF of Downspout = 0.33 CY of Stone Ditch Protection
   1 LF of Downspout = 1.08 SY of Erosion Control Geotextile Fabric

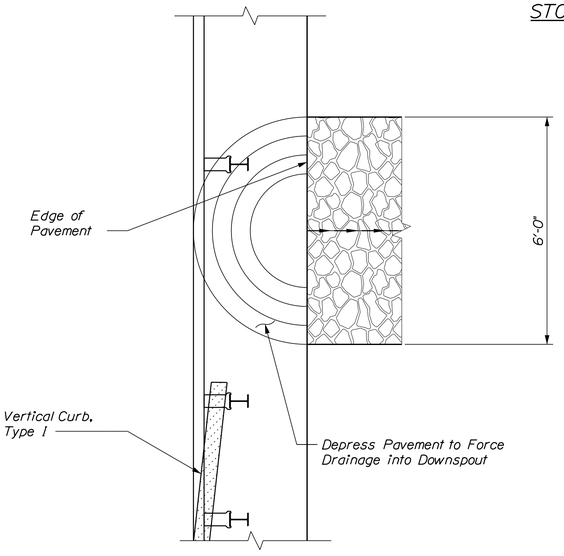
STONE DOWNSPOUT ELEVATION

Scale: 3/8" = 1'-0"



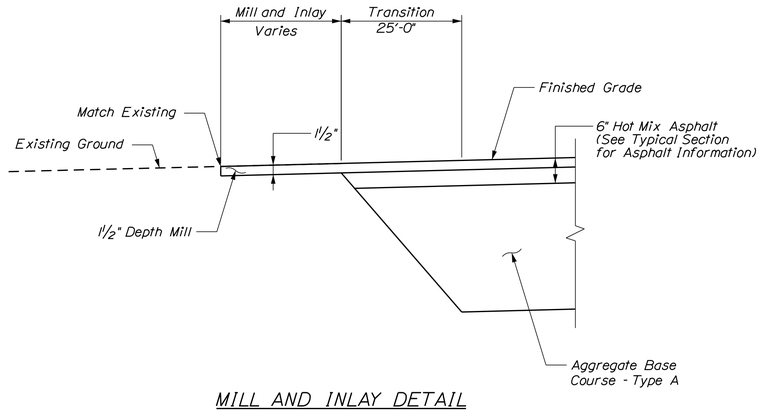
SECTION B-B

Scale: 1/2" = 1'-0"



VIEW A-A

Scale: 1/2" = 1'-0"



MILL AND INLAY DETAIL

Not to Scale

1 0 5
1/2" = 1'-0"

1 0 7
3/8" = 1'-0"

Filename: ...\HIGHWAY\MSTA\008_Typicals.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

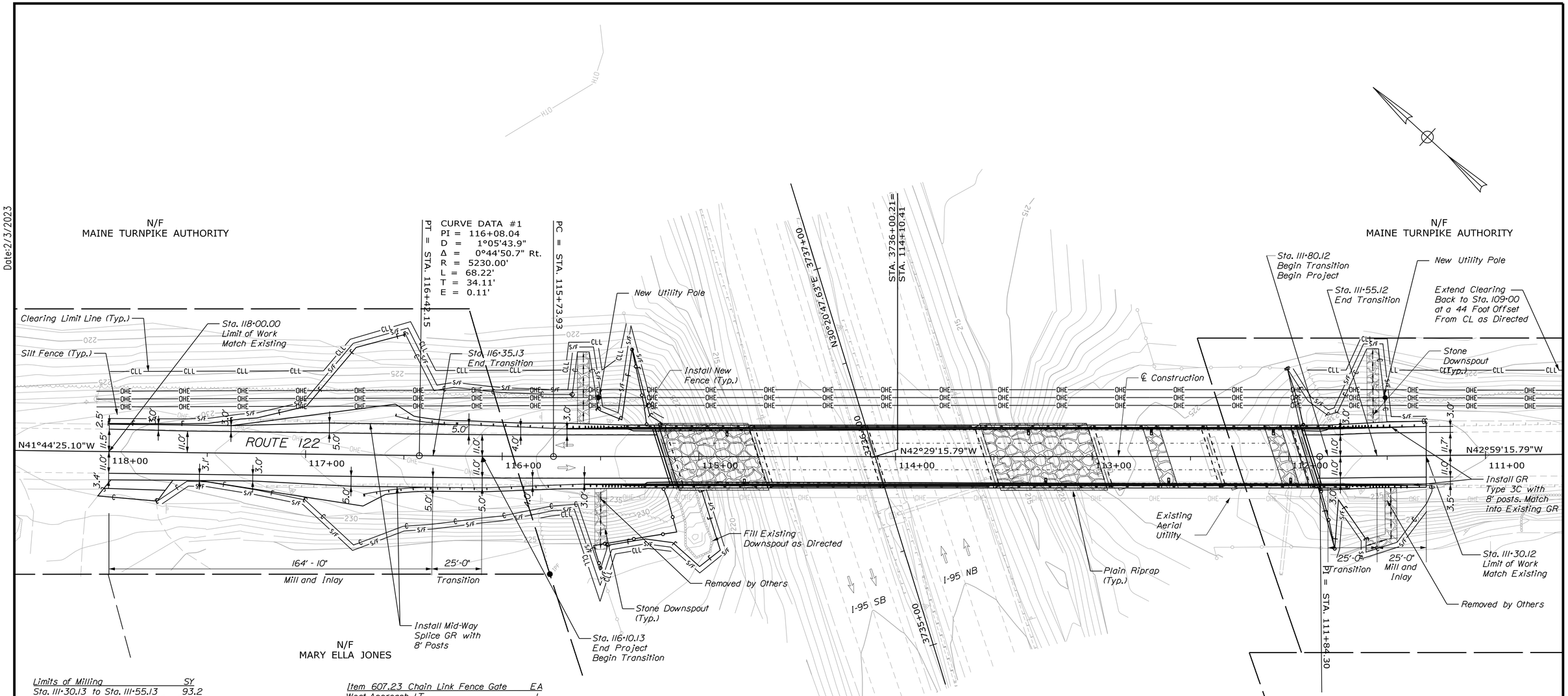
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

TYPICAL DOWNSPOUT DETAIL

VHB: 55347.01 SHEET NUMBER: 10

CONTRACT: 2023.03 10 OF 61

Date:2/3/2023



Limits of Milling — SY

Sta. 111+30.13 to Sta. 111+55.13	93.2
Sta. 116+35.13 to Sta. 118+00.00	579.5

Item 606.1301 31" W-Beam Guardrail - Mid-way Splice — LF

Sta. 115+67.0, LT to Sta. 116+70.34, LT	50
Sta. 115+58.2, RT to Sta. 116+54.42, RT	75

Item 606.1305 - 31" W-Beam Guardrail - Mid-way Splice Flared Terminal — EA

Sta. 116+70.3, LT to Sta. 117+07.8, LT	1
Sta. 116+54.4, RT to Sta. 116+91.9, RT	1

Item 606.23 Guardrail Type 3C — LF

Sta. 111+27.4 LT to Sta. 111+39.9 LT	12.5
Sta. 111+36.2 RT to Sta. 111+48.7 RT	12.5

Item 607.17 Chain Link Fence - 6 Foot — LF

Sta. 111+80.6, LT 29.8' to Sta. 111+84.1, LT 16.6'	32
Sta. 111+92.7, RT 16.2' to Sta. 111+96.8, RT 32.4'	30
Sta. 115+17.9, LT 16.0' to Sta. 115+53.5, LT 45.3'	52
Sta. 115+26.6, RT 16.4' to Sta. 115+30.8, RT 39.6'	40

Item 607.23 Chain Link Fence Gate — EA

West Approach, LT	1
East Approach, RT	1

Item 609.11 Vertical Curb, Type 1 — LF

Sta. 115+37.9, RT to Sta. 115+46.7, RT	8.8
Sta. 115+29.1, LT to Sta. 115+37.9, LT	8.8
Sta. 111+68.9, RT to Sta. 111+77.7, RT	8.8
Sta. 111+60.3, LT to Sta. 111+69.1, LT	8.8

Item 609.23 Terminal Curb, Type 1 — LF

Sta. 115+46.7, RT to Sta. 115+54.7, RT	8.0
Sta. 115+37.9, LT to Sta. 115+45.9, LT	8.0
Sta. 111+60.9, RT to Sta. 111+68.9, RT	8.0
Sta. 111+52.3, LT to Sta. 111+60.3, LT	8.0

Item 610.10 Plain Riprap — CY

Sta. 112+00.0 to Sta. 112+08.0	29.8
Sta. 112+61.0 to Sta. 112+69.0	29.8
Sta. 112+98.0 to Sta. 113+52.0	205.2
Sta. 114+70.0 to Sta. 115+16.0	172.3

Item 610.18 Stone Ditch Protection — CY

Sta. 111+48.2, RT	19.0
Sta. 111+57.0, LT	19.0
Sta. 115+50.0, RT	15.0
Sta. 115+58.7, LT	18.0

Drives and Entrances

Stationing	Type
Sta. 117+83 LT	Gravel Drive

NOTES

1. Remove existing sign. Install new sign and post provided by Maine Turnpike Authority. Installation shall be paid under item 645.272.
2. Pavement markings not shown.

Scale: 25 0 25 50
1" = 25'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

VANASSE HANGEN BRUSTLIN, INC.
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FAX (207) 253-5596

MAINE TURNPIKE

MTA PROJECT MANAGER: Ryan Barnes

THE GOLD STAR MEMORIAL HIGHWAY

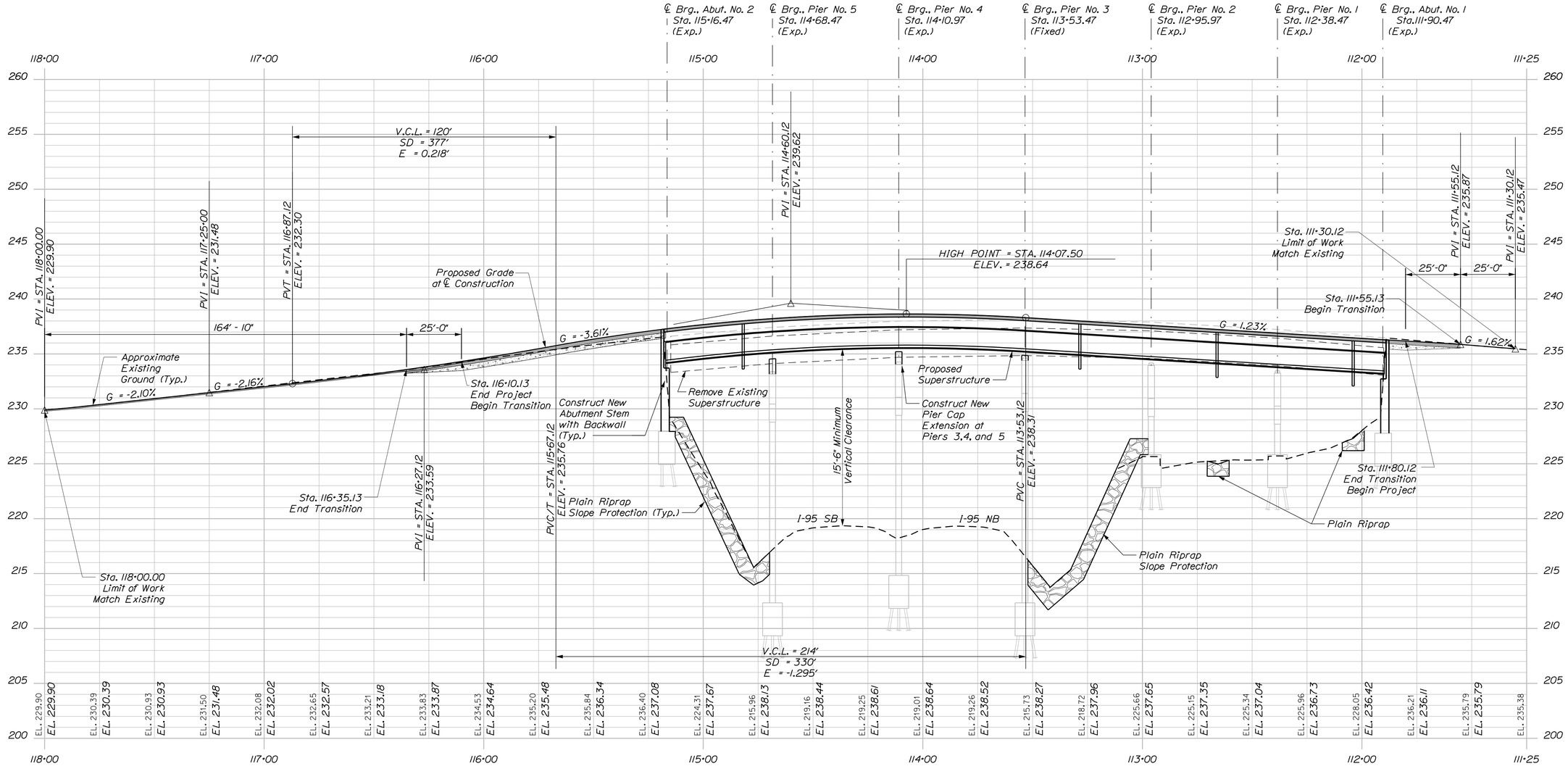
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

GENERAL PLAN

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 11

Filename: ...\HIGHWAY\MSTA\011_HDPlan.dgn



PROFILE

Date:2/3/2023

Filename: ...\HIGHWAY\MSTA\012_HDProfile.dgn

Scale: Horiz. 25 0 25 50
Vert. 5 0 5 10

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: C. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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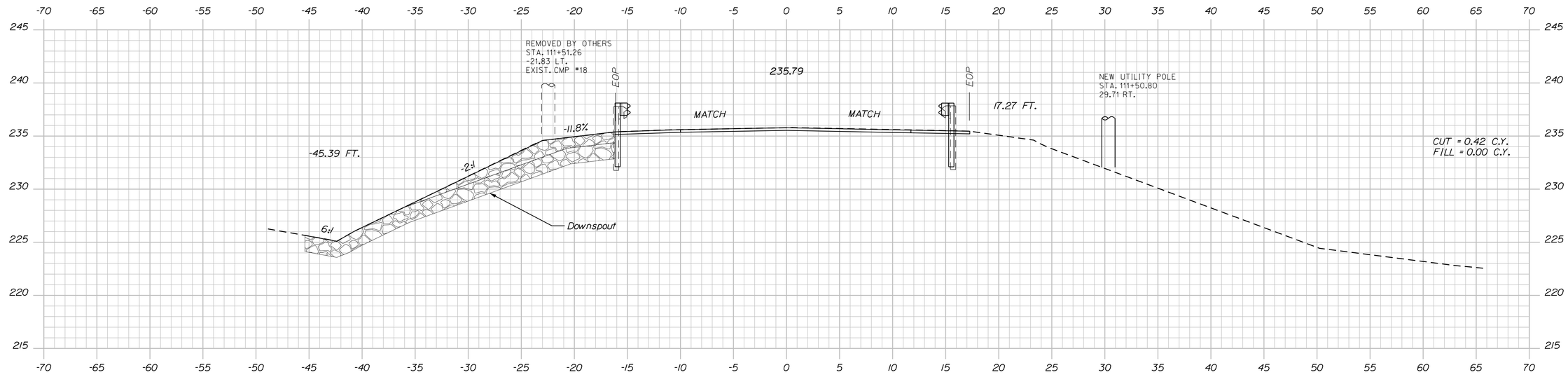
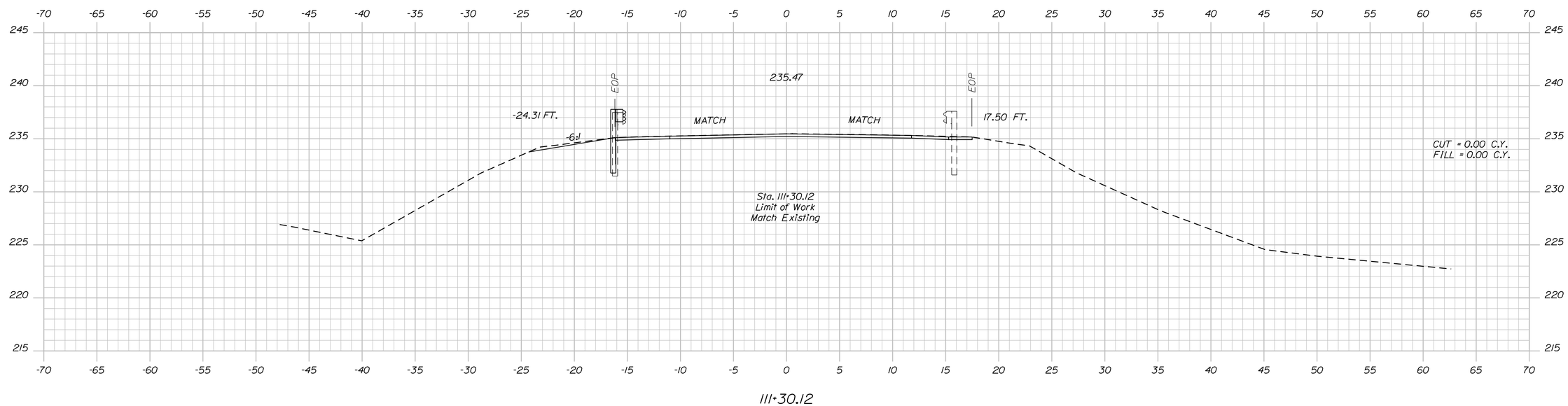
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

PROFILE

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 12
12 OF 61





Date: 2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
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MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

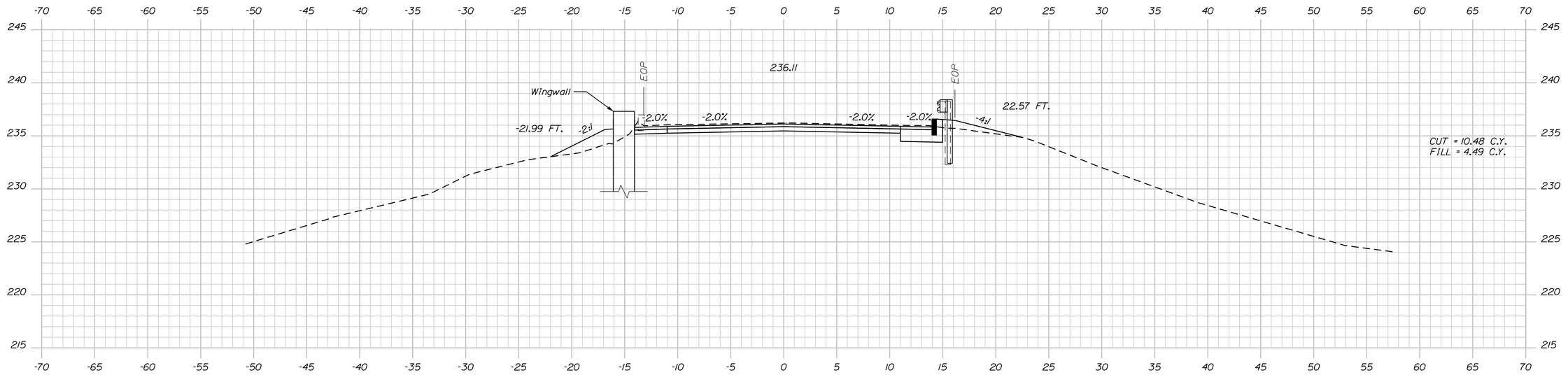
CROSS SECTIONS (1 OF 12)

VHB: 55347.01 SHEET NUMBER: 13

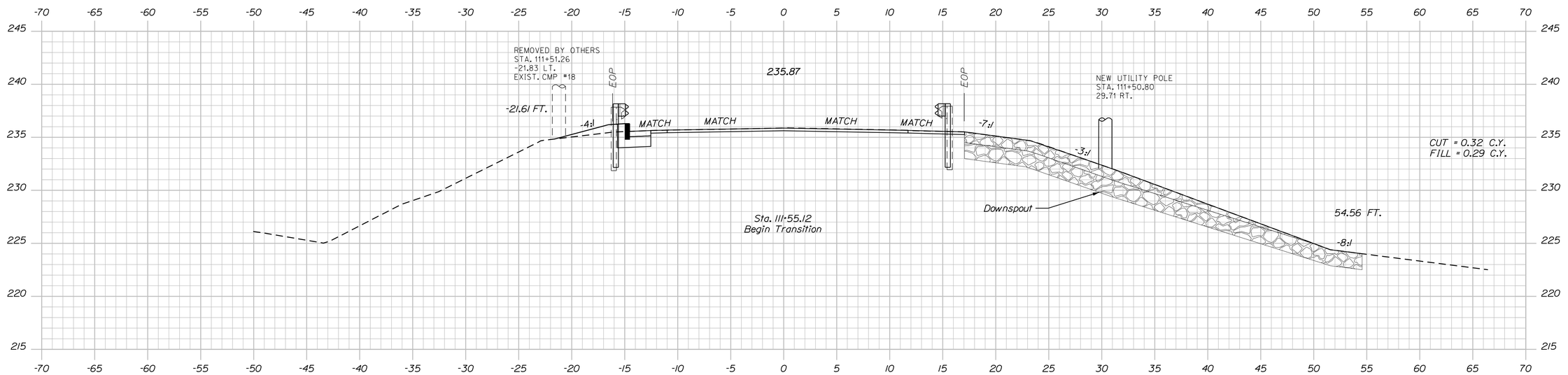
CONTRACT: 2023.03 13 OF 61

Sta. 111+30.13 to Sta. 111+50.00

Date:2/3/2023



111+75.00



111+55.12

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MTA PROJECT MANAGER: Ryan Barnes

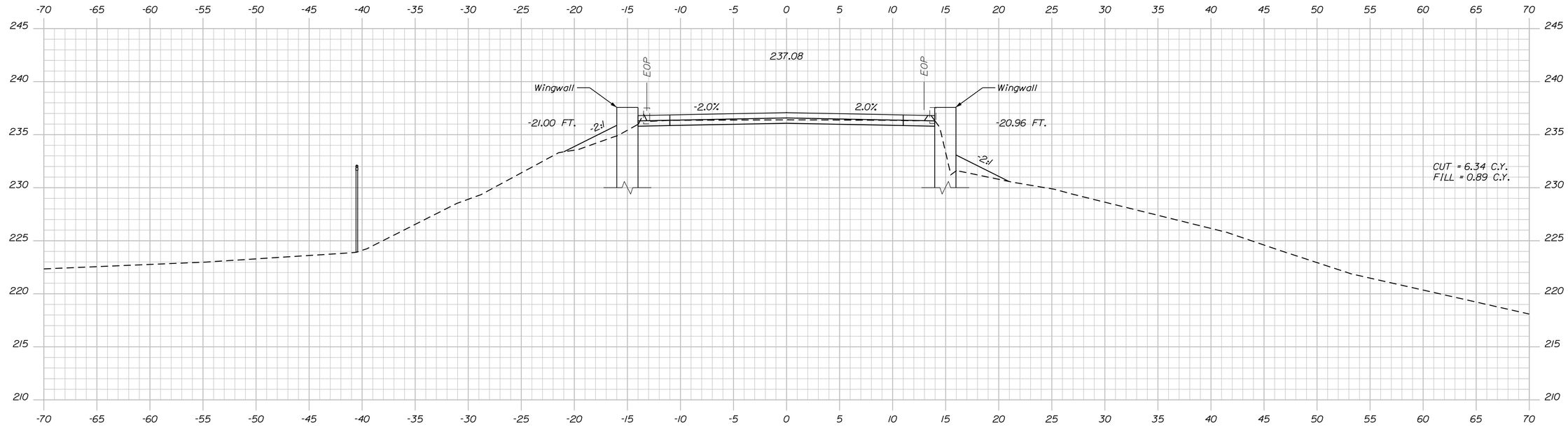
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

CROSS SECTIONS (2 OF 12)

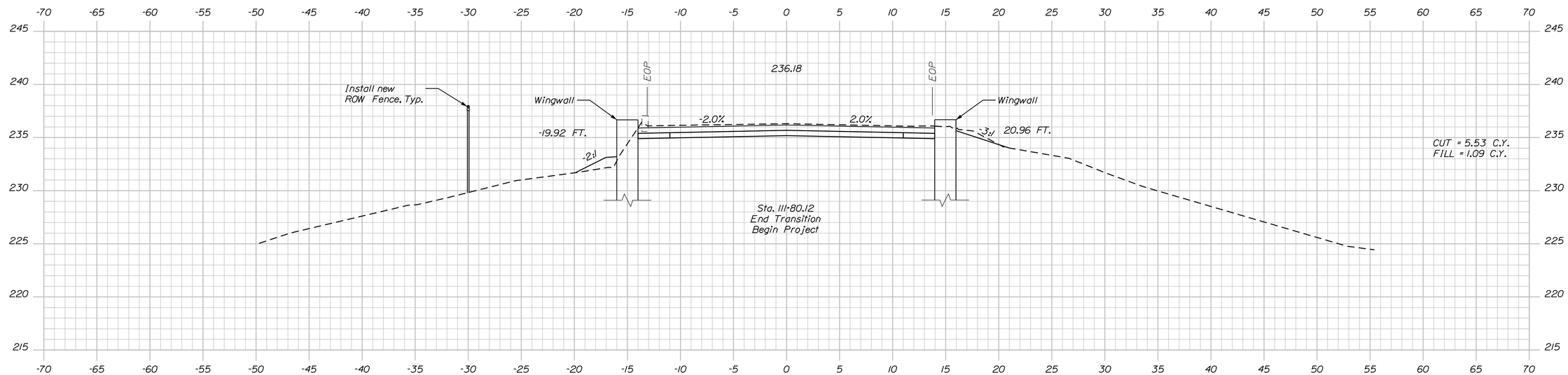
VHB: 55347.01 SHEET NUMBER: 14
CONTRACT: 2023.03 14 OF 61

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Sta. 111+55.13 to Sta. 111+75.00



115+25.00



111+80.12

Date:2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

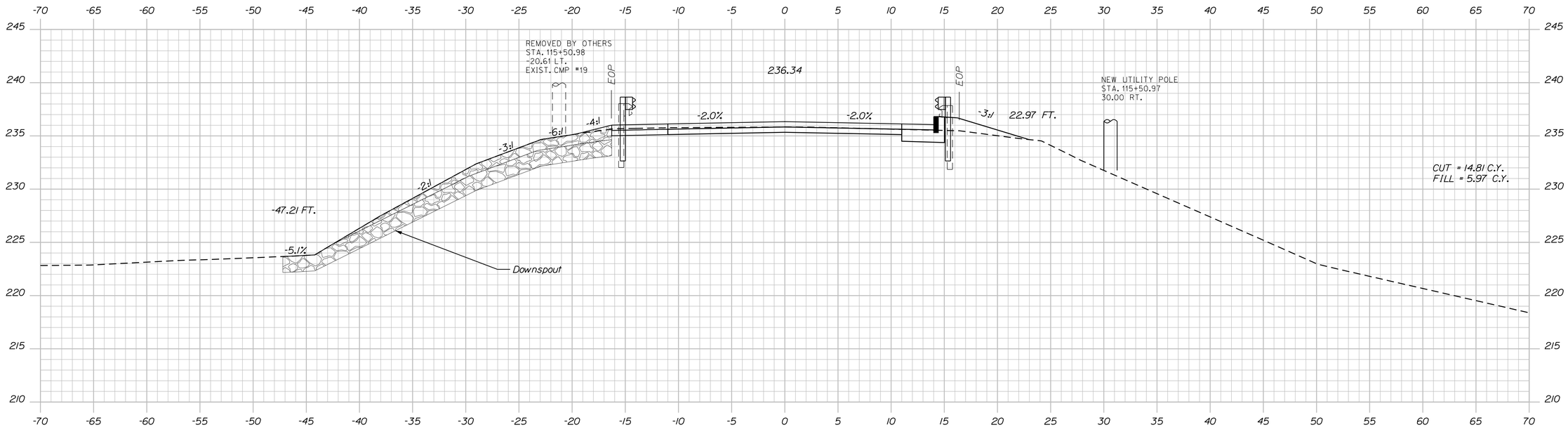
CROSS SECTIONS (3 OF 12)

VHB: 55347.01 SHEET NUMBER: 15

CONTRACT: 2023.03 15 OF 61

Sta. 111+80.13 to Sta. 115+25.00

Date:2/3/2023



115+50.00

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

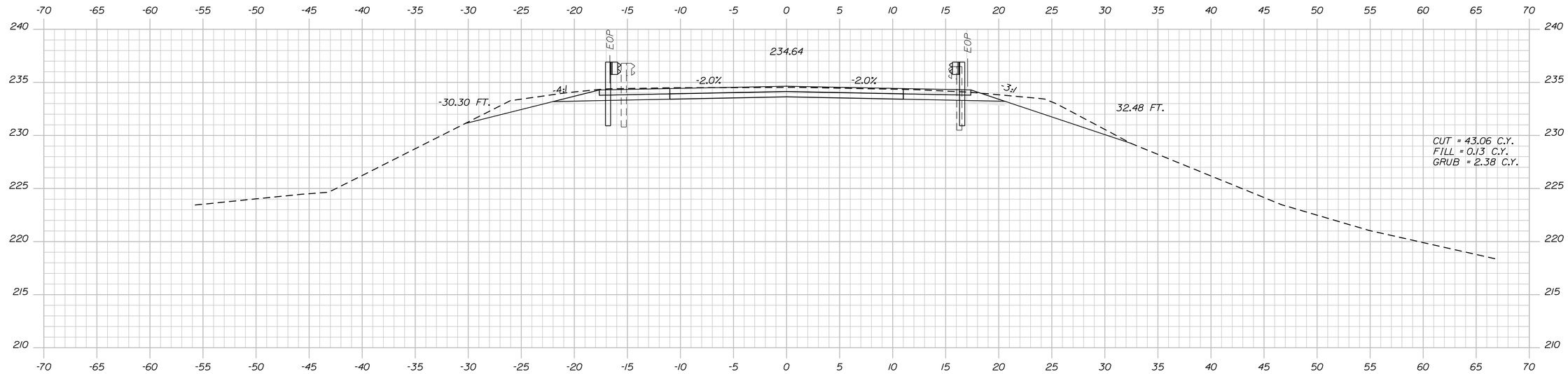
CROSS SECTIONS (4 OF 12)

VHB: 55347.01
CONTRACT: 2023.03

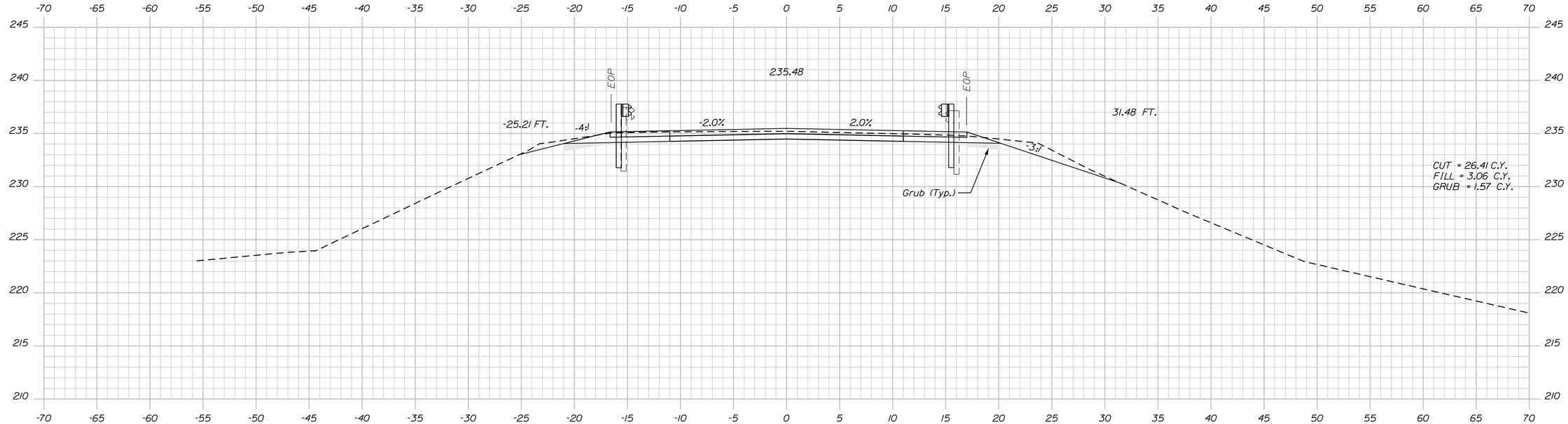
SHEET NUMBER: 16
16 OF 61

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Sta. 115+50.00 to Sta. 115+50.00



116+00.00



115+75.00

Date:2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

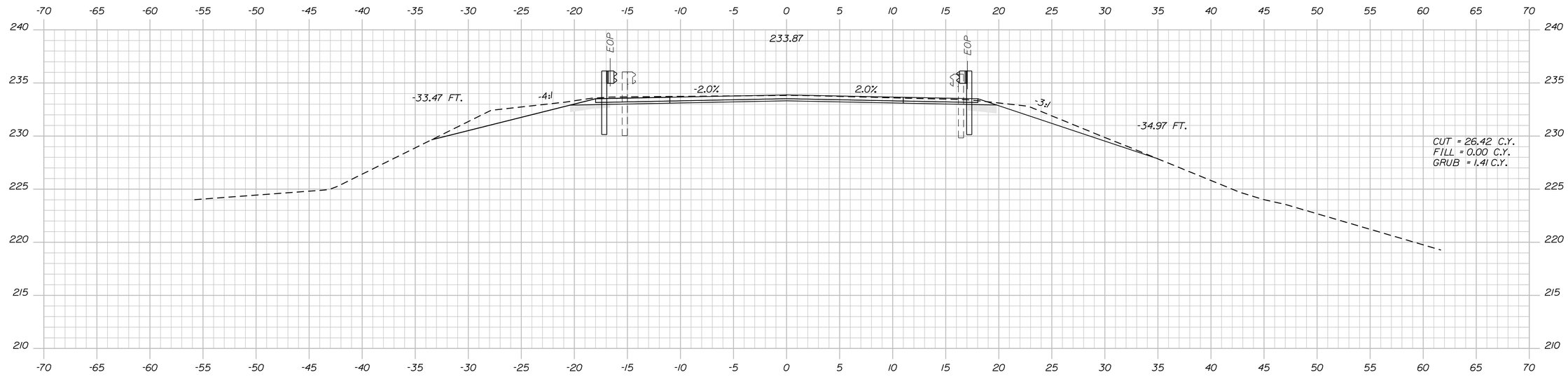
MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS

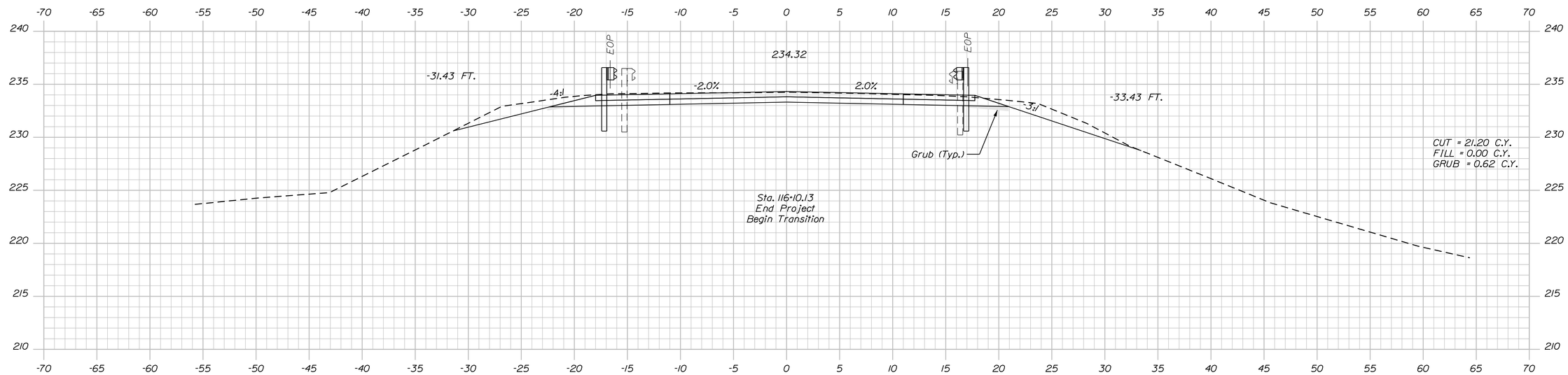
CROSS SECTIONS (5 OF 12)

VHB: 55347.01 SHEET NUMBER: 17
CONTRACT: 2023.03 17 OF 61

Sta. 115+75.00 to Sta. 116+00.00



116+25.00



116+10.13

Date:2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

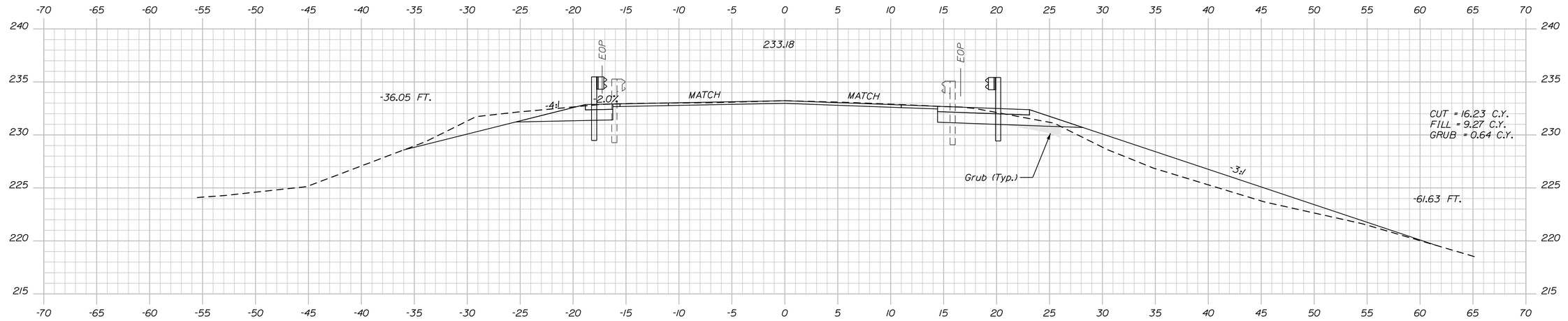
CROSS SECTIONS (6 OF 12)

VHB: 55347.01 SHEET NUMBER: 18

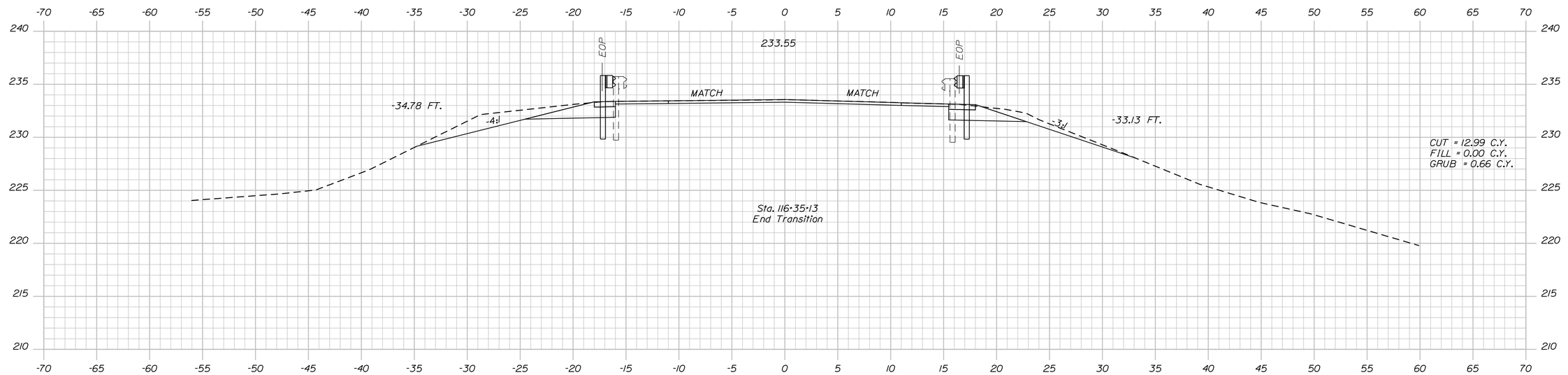
CONTRACT: 2023.03 18 OF 61

Sta. 116+10.13 to Sta. 116+25.00

Date:2/3/2023



116+50.00



116+35.13

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

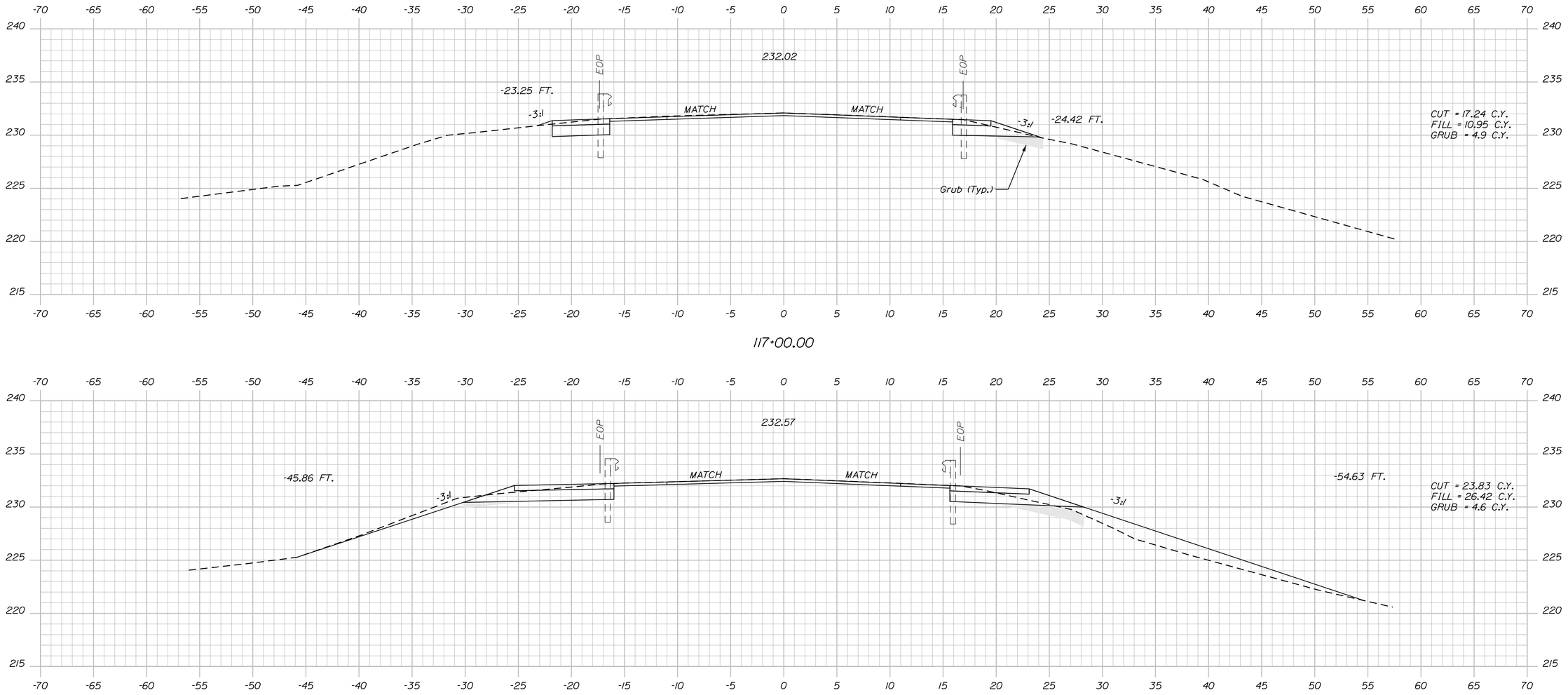
CROSS SECTIONS (7 OF 12)

VHB: 55347.01 SHEET NUMBER: 19
CONTRACT: 2023.03 19 OF 61

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Sta. 116+35.13 to Sta. 116+50.00

Date:2/3/2023



117+00.00

116+75.00

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

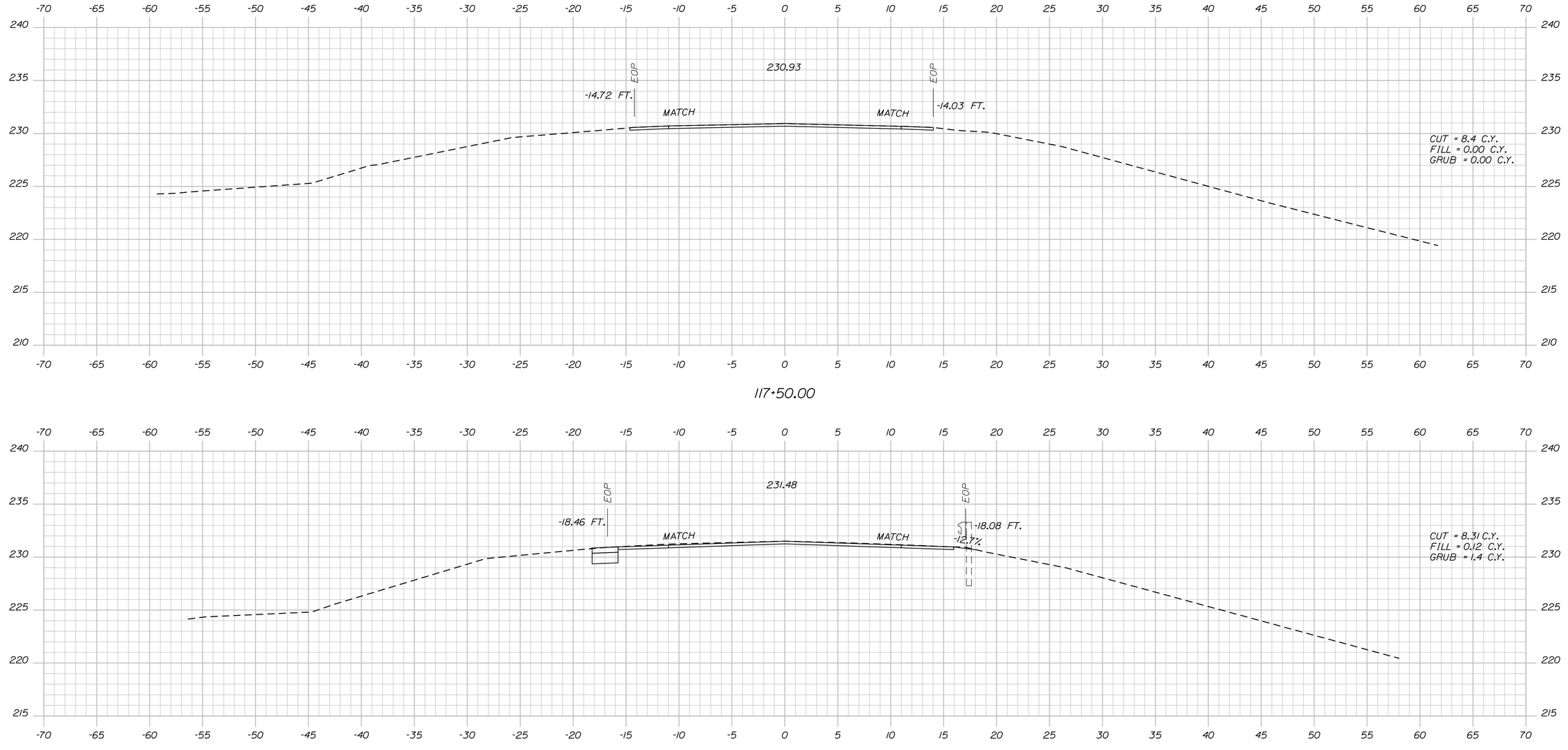
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

CROSS SECTIONS (8 OF 12)

VHB: 55347.01 SHEET NUMBER: 20
CONTRACT: 2023.03 20 OF 61

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Sta. 116+75.00 to Sta. 117+00.00



Date:2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

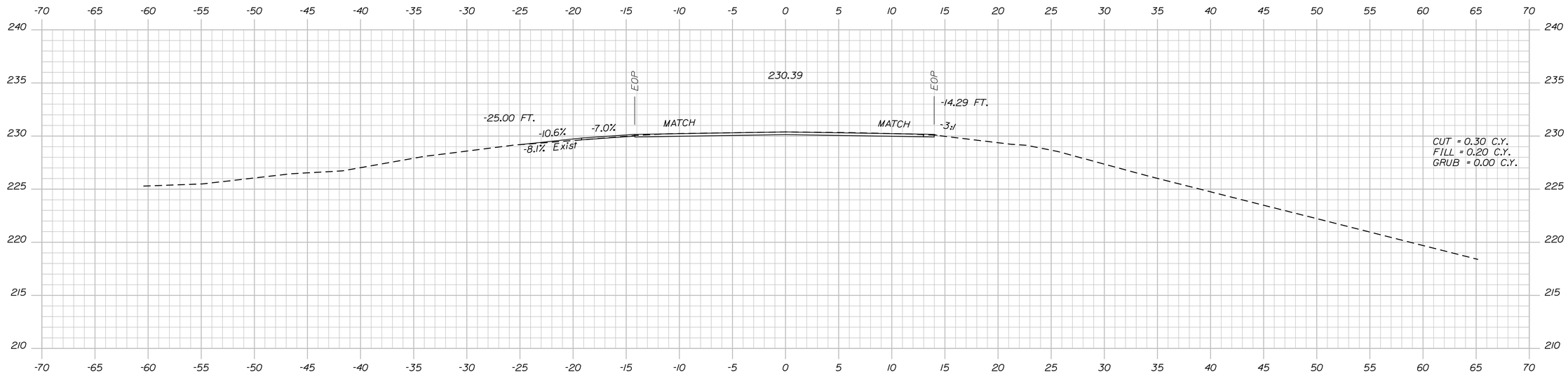
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

CROSS SECTIONS (9 OF 12)

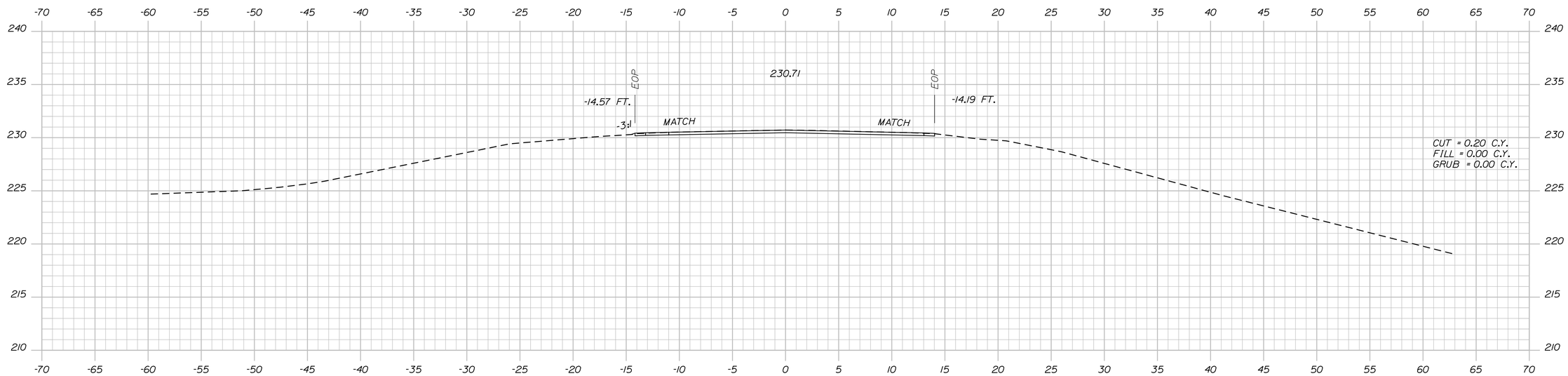
VHB: 55347.01 SHEET NUMBER: 21

CONTRACT: 2023.03 21OF 61

Sta. 117+25.00 to Sta. 117+50.00



117+75.00



117+60.13

Date:2/3/2023

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

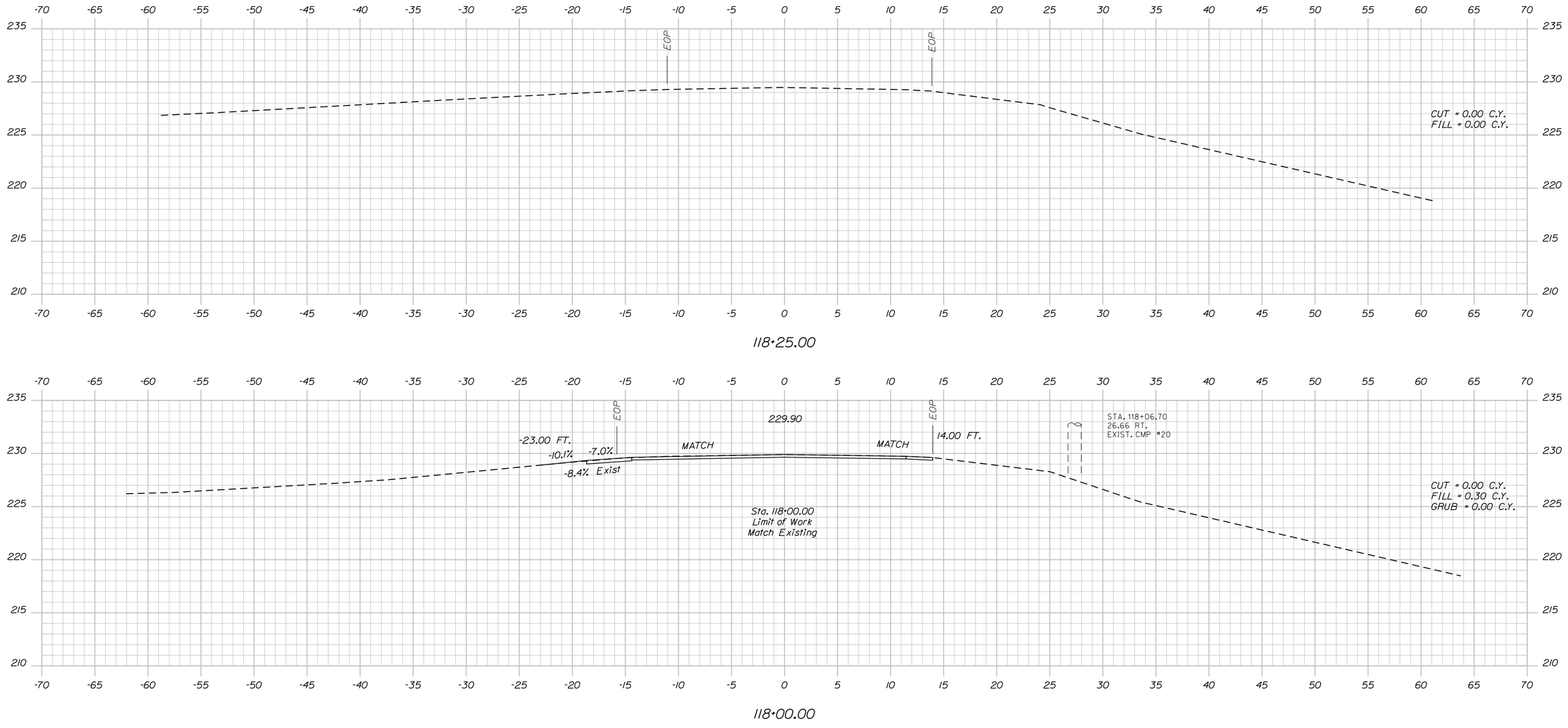
CROSS SECTIONS (10 OF 12)

VHB: 55347.01 SHEET NUMBER: 22

CONTRACT: 2023.03 22 OF 61

Sta. 117+60.13 to Sta. 117+75.00

Date:2/3/2023



Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

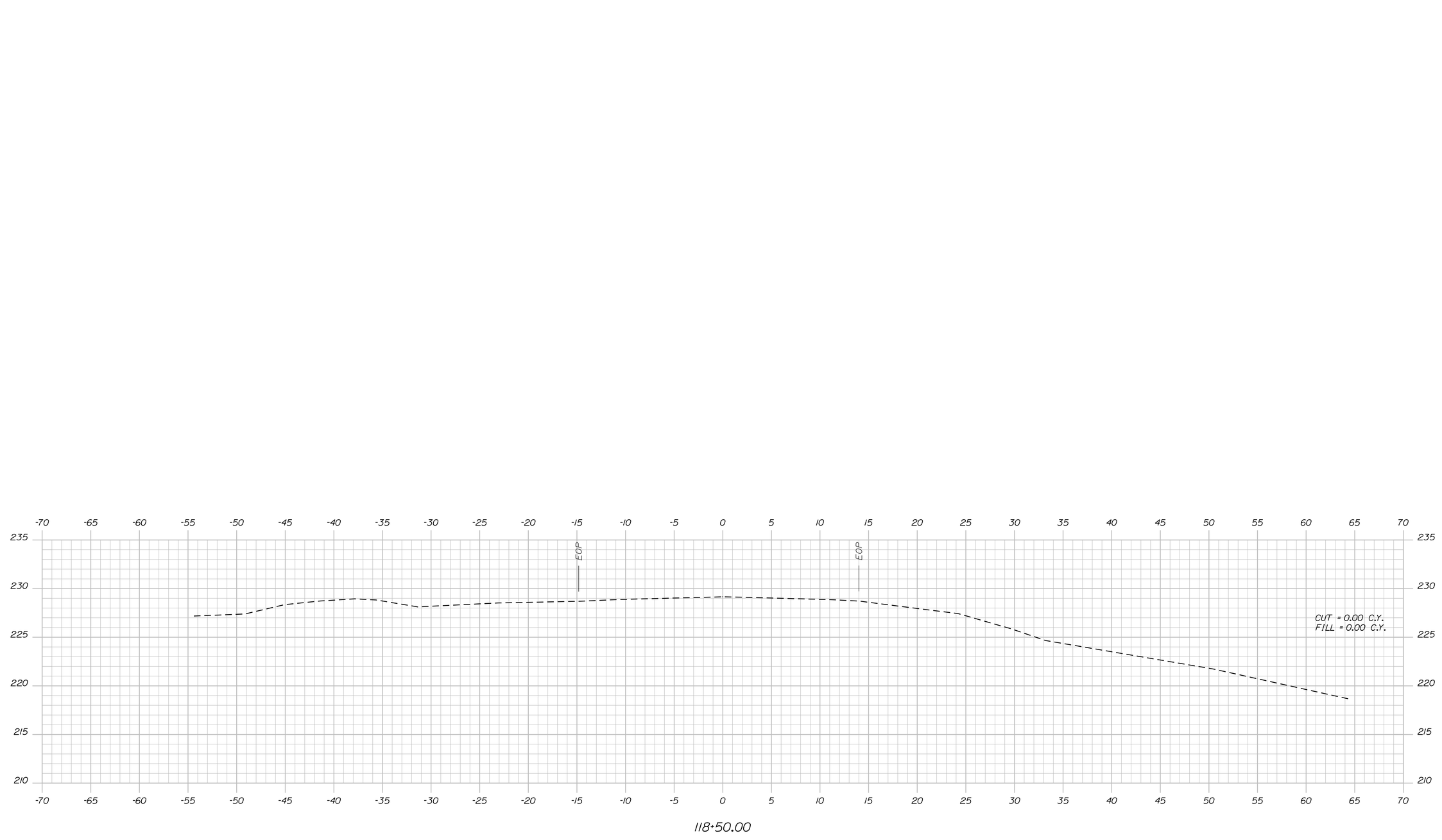
CROSS SECTIONS (11 OF 12)

VHB: 55347.01 SHEET NUMBER: 23

CONTRACT: 2023.03 23 OF 61

Sta. 118+00.00 to Sta. 118+25.00

Date:2/3/2023



118+50.00

Filename: ...\MSTA\013-034_Xsect-Rt122.dgn

Scale: 5 0 5 10
1" = 5'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

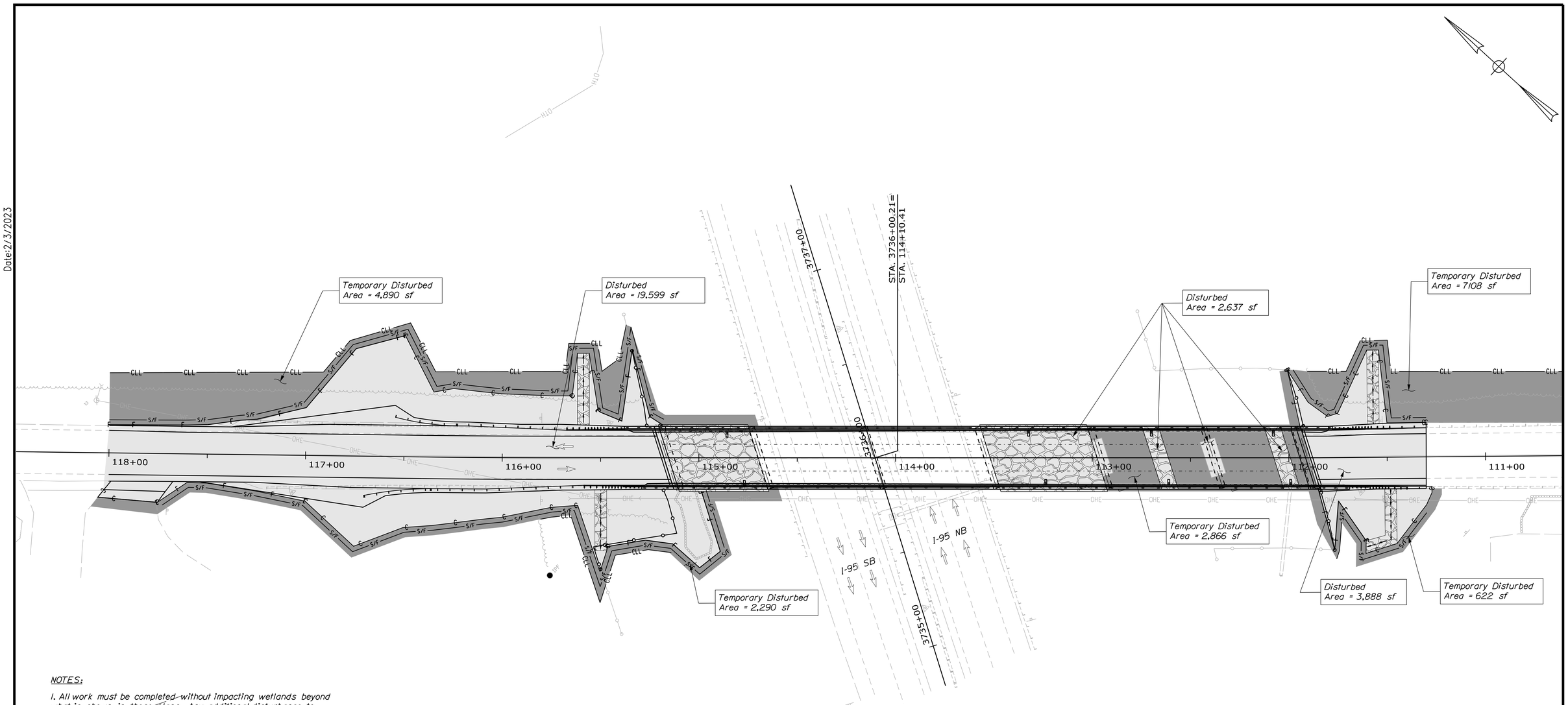
CROSS SECTIONS (12 OF 12)

VHB: 55347.01 SHEET NUMBER: 24

CONTRACT: 2023.03 24 OF 61

Sta. 118+50.00 to Sta. 118+50.00

Date:2/3/2023



NOTES:

1. All work must be completed without impacting wetlands beyond what is shown in these plans. Any additional disturbance to existing wetlands shall be reported immediately to the resident. Any corrective actions or delays resulting from environmental non-compliance shall be at the sole cost of the contractor.

2. Erosion and sedimentation control devices required for the contractor's access locations and storage areas will not be measured for payment.

3. See specifications for contractor's submittal requirements if adding additional limits of disturbance to the project estimated quantities.

4. An additional 0.5 acre has been estimated for the contractor's access locations and storage areas.

5. The net new permanent impervious area is 11,514 SF / 0.264 AC.

KEY

TEMPORARY IMPACTS = 17,776 SF / 0.408 AC

PERMANENT IMPACTS = 26,124 SF / 0.600 AC

TOTAL IMPACTS (INCLUDING 0.5 ACRE LAYDOWN) = 65,680 SF / 1.508 AC

Scale: 25 0 25 50
1" = 25' - 0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	ECF	2/3/2023	Checked	GME	2/3/2023
Drawn	AHS	2/3/2023	In Charge of	TSB	2/3/2023

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

DISTURBANCE IMPACT PLAN

VHB: 55347.01
CONTRACT: 2023.03

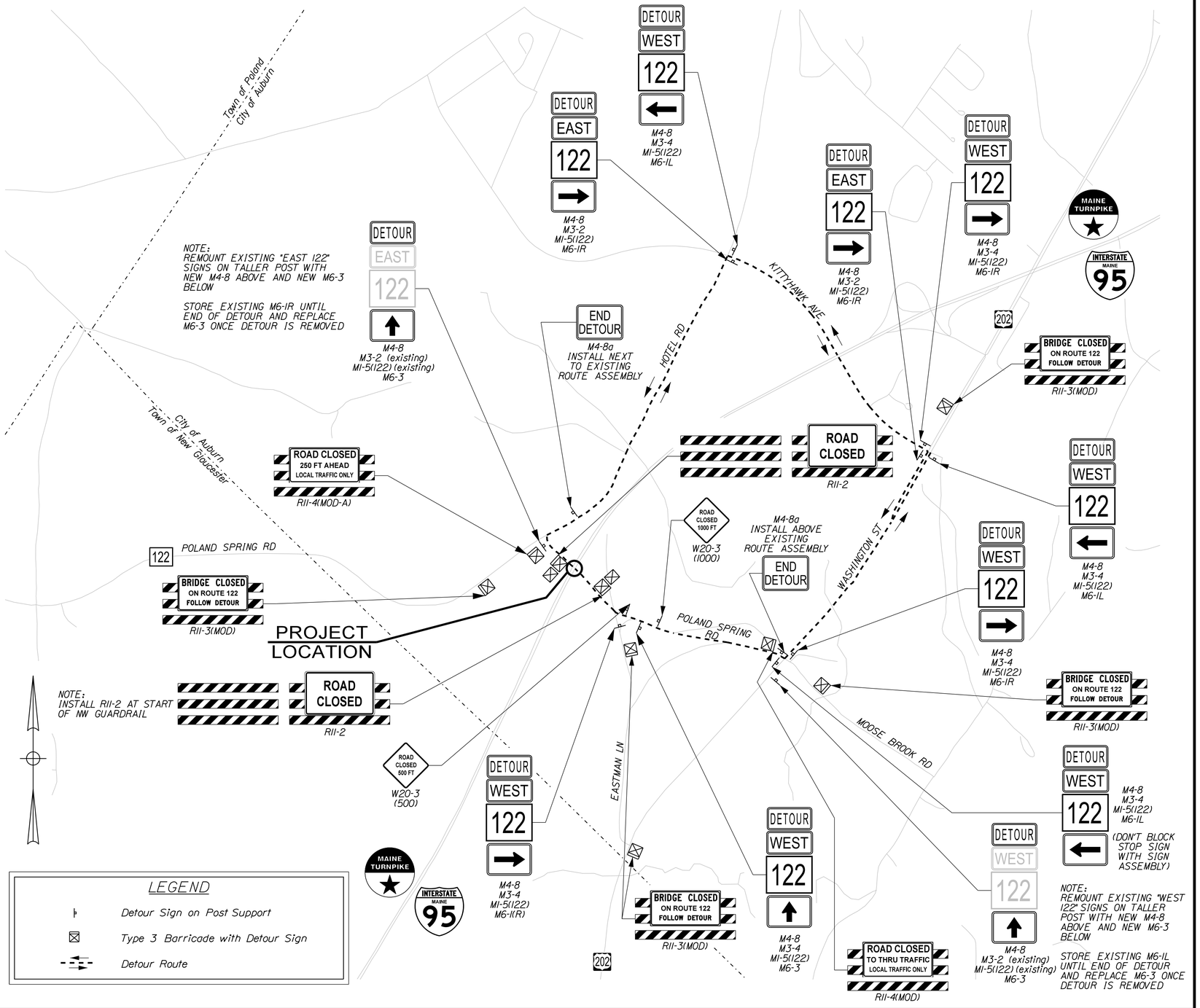
SHEET NUMBER: 25
25 OF 61

Filename: ...\MSTA\025_DisturbancePlan.dgn

DETOUR FOR ROUTE 122 UNDERPASS CLOSURE

DETOUR SIGN SUMMARY

Sign	Text Dimensions (Inches) Letter Height	Text Dimensions (Inches) Vertical Spacing	Size	Quantity and Color
M1-5(122) 122	SHSB		30"x24"	9 - Black on White
M3-2 EAST			24"x12"	2 - Black on White
M3-4 WEST			24"x12"	7 - Black on White
M4-8 DETOUR			24"x12"	11 - Black on Orange
M4-8a END DETOUR			24"x18"	2 - Black on Orange
M6-1L			21"x15"	3 - Black on White
M6-1R			21"x15"	5 - Black on White
M6-3			21"x15"	3 - Black on White
W20-3 (1000) ROAD CLOSED 1000 FT			36"x36"	1 - Black on Orange
W20-3 (500) ROAD CLOSED 500 FT			36"x36"	1 - Black on Orange
R11-2 ROAD CLOSED			48"x30"	2 - Black on White
R11-3(MOD) BRIDGE CLOSED ON ROUTE 122 FOLLOW DETOUR	6" 5" 4"	3.38" 3.38"	60"x30"	5 - Black on White
R11-4(MOD) ROAD CLOSED TO THRU TRAFFIC LOCAL TRAFFIC ONLY	6" 5" 4"	3.38" 3.38"	60"x30"	1 - Black on White
R11-4(MOD-A) ROAD CLOSED 250 FT AHEAD LOCAL TRAFFIC ONLY	6" 5" 4"	3.38" 3.38"	60"x30"	1 - Black on White



LEGEND

- Detour Sign on Post Support
- Type 3 Barricade with Detour Sign
- Detour Route

Date:1/31/2023

Filename: ...\MSTA\026_DetourPlan_01.dgn

Scale: 800 0 1600
1" = 800'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MLG	2/3/23	Checked	MDS	2/3/23
Drawn	JAR	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

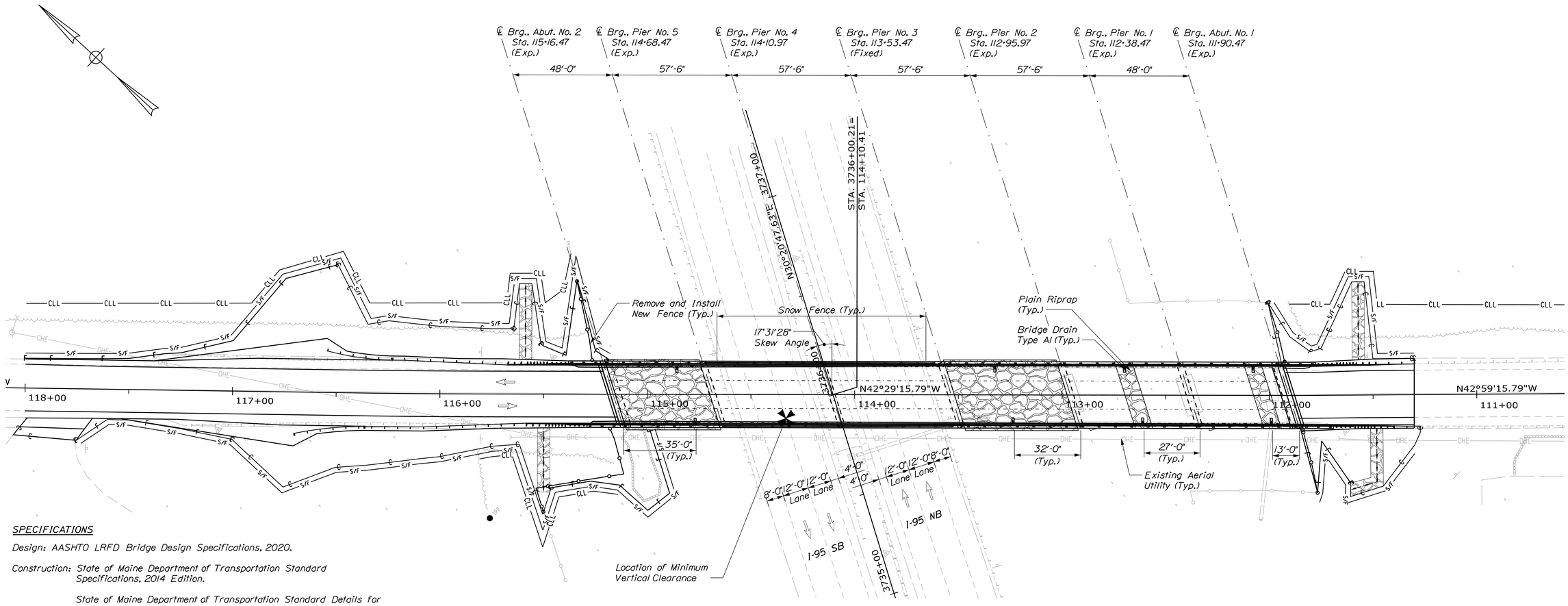
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

DETOUR PLAN

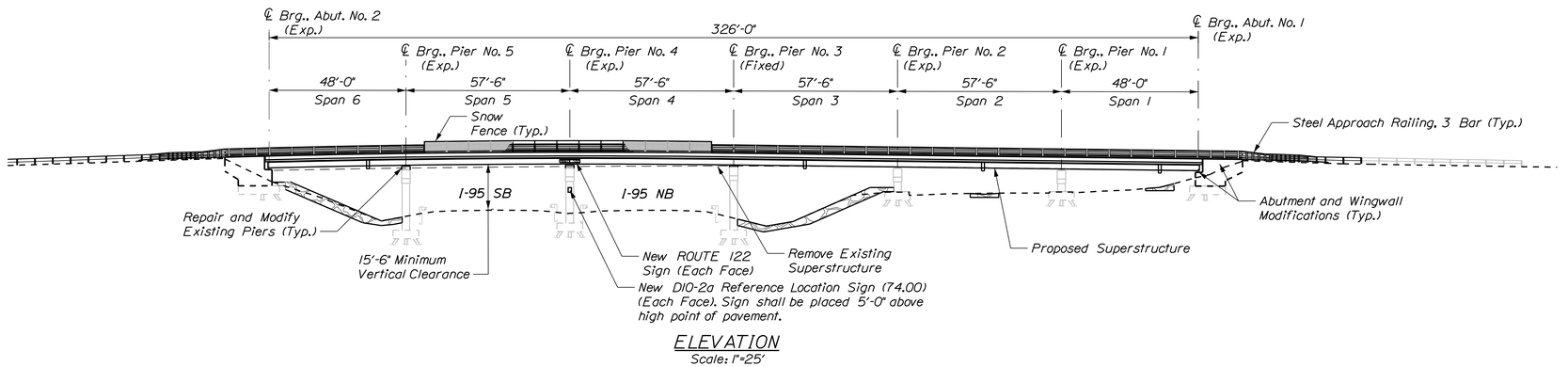
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 26

Date:2/3/2023



PLAN
Scale: 1"=25'



ELEVATION
Scale: 1"=25'

SPECIFICATIONS

Design: AASHTO LRFD Bridge Design Specifications, 2020.

Construction: State of Maine Department of Transportation Standard Specifications, 2014 Edition.

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 (Piers, Abutments)	Class A
Concrete (All other)	Class AAA - Modified
Reinforcing Steel	ASTM A615/A615M, Grade 60 (Epoxy Coated, Unless otherwise Noted)
Structural Steel:	
All Material (except as noted)	ASTM A709/A709M, Grade 50, Metalized
High Strength Bolts (except as noted)	ASTM A325, Type 3

BASIC DESIGN STRESSES (NEW MATERIALS)

Concrete, Class A	f'c = 4,000 psi
Concrete, Class AAA	f'c = 4,500 psi
Reinforcing Steel	fy = 60,000 psi
Structural Steel:	
ASTM A 709/A 709M, Grade 50	Fy = 50,000 psi
ASTM A 709/A 709M, Grade 36	Fy = 36,000 psi
ASTM A 325	Fu = 120,000 psi

TRAFFIC DATA - ROUTE 122

AADT	3,472
Heavy Trucks (% AADT)	N/A
Design Speed (MPH)	40
Functional Class	Major Collector

Scale: 25 0 50
1" = 25'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

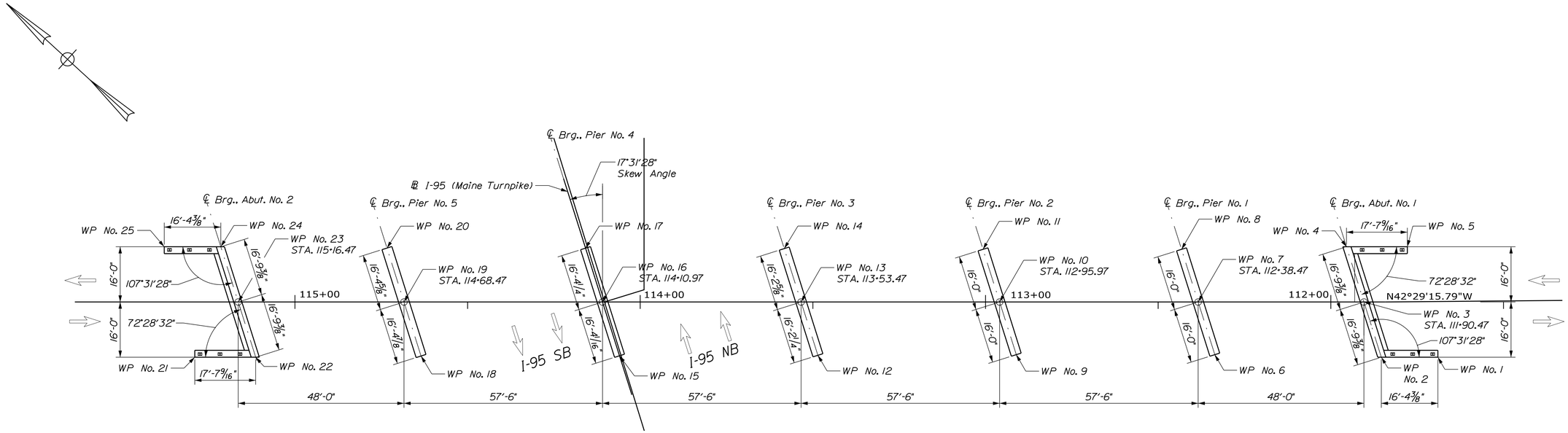
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

BRIDGE PLAN & ELEVATION

VHB: 55347.01 SHEET NUMBER: 27
CONTRACT: 2023.03 27 OF 61

Filename: ...\BRIDGE\MSTA\027-Plan-Elev.dgn



SURVEY LAYOUT
1/16" = 1'-0"

WP No.	STATION	OFFSET
1	111+69.194	16.132
2	111+85.420	16.000
3	111+90.473	0.000
4	111+95.525	16.000
5	111+77.756	15.943
6	112+33.655	15.257
7	112+38.473	0.000
8	112+43.290	15.257
9	112+91.155	15.257
10	112+95.973	0.000
11	112+95.973	0.000
12	113+48.598	15.436
13	113+53.473	0.000
14	113+58.356	15.466
15	114+06.053	15.580
16	114+10.973	0.000
17	114+15.897	15.595
18	114+63.533	15.645
19	114+68.473	0.000
20	114+73.407	15.625
21	115+29.050	16.000
22	115+11.420	16.000
23	115+16.473	0.000
24	115+21.525	16.000
25	115+37.891	16.000

BRIDGE LAYOUT NOTES

1. The centerline construction location and alignment of Route 122 are based on existing plans and survey points obtained at abutments, pier seats and wingwalls.

Date: 2/3/2023

Filename: ...\BRIDGE\MSTA\028_SURVEY.dgn

Scale: 16 0 16 32
1/16" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn		2/3/23	In Charge of	TSB	2/3/23

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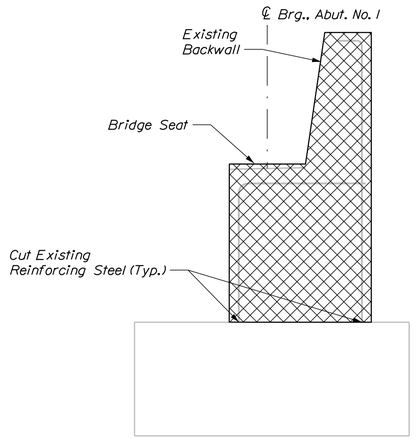
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

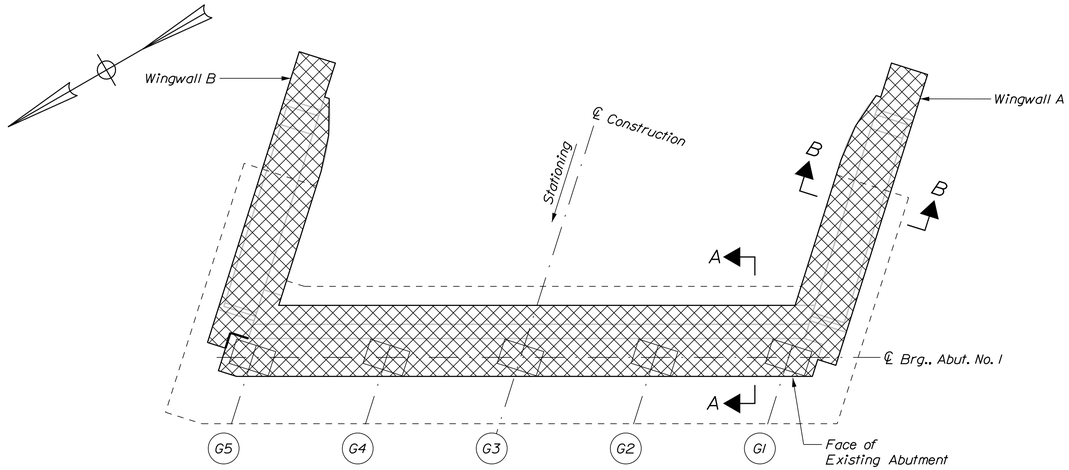
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS BRIDGE SURVEY LAYOUT PLAN

VHB: 55347.01
CONTRACT: 2023.03

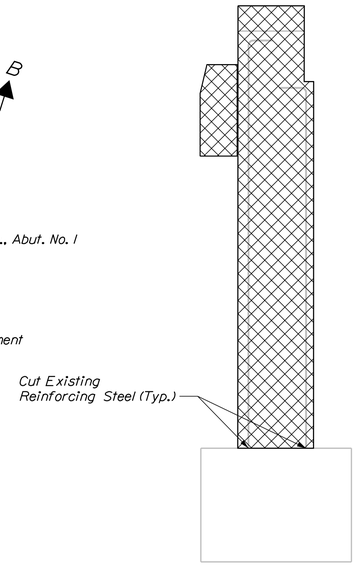
SHEET NUMBER: 28



SECTION A-A
Scale: 1/2" = 1'-0"



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



SECTION B-B
Scale: 1/2" = 1'-0"

ABUTMENT REMOVAL NOTES

1. Concrete demolition, which generally includes portions of wingwalls, portions of bridge seat, and abutment backwalls, will be measured for payment under pay Item 202.17, Removing Existing Structural Concrete. This work shall include sawcutting and removing existing concrete and reinforcing steel to the limits shown in the plans.

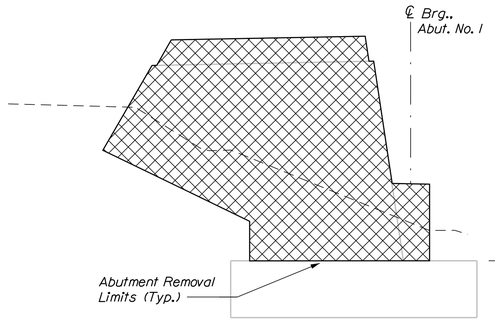
2. Excavation required to complete partial abutment removal and construction will not be measured for payment and shall be considered incidental to Item 202.17, Remove Existing Structural Concrete. Backfill of the repair areas shall be measured for payment under pay Item 203.25, Granular Borrow as shown in the plans.

DEMOLITION QUANTITY (CY)

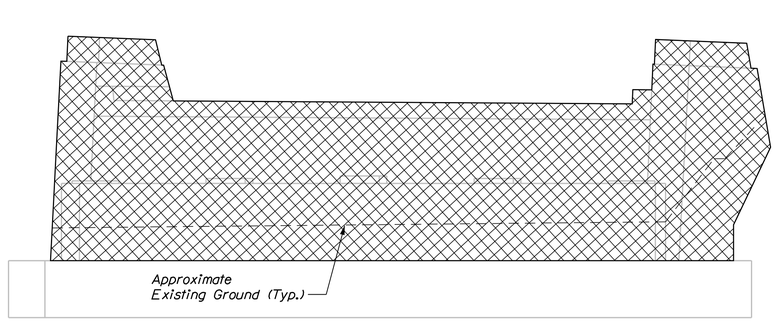
Removing Existing Structural Concrete	48

KEY

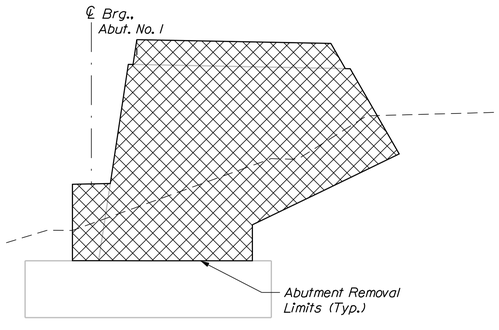
= Concrete Removal (Item 202.17)



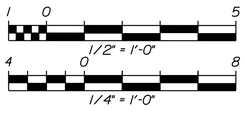
ELEVATION
WINGWALL B
Scale: 1/4" = 1'-0"



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



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



Filename: ...\029_Abutment_ 1_ Rem_01.dgn

Date:2/3/2023

Scale:AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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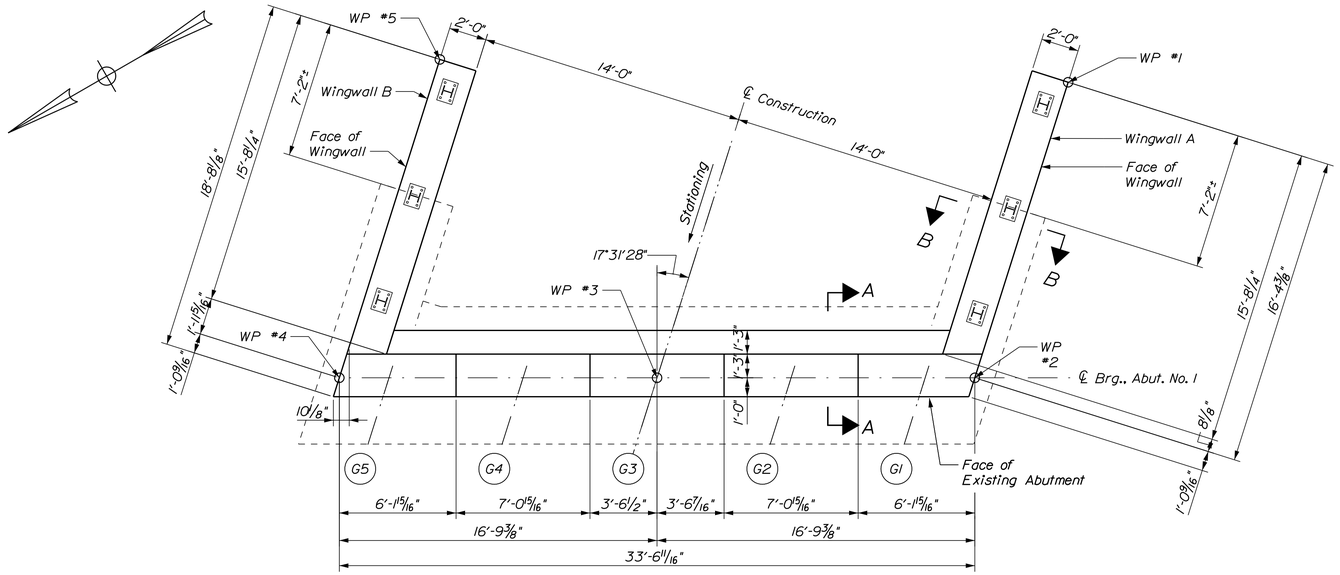
MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 1
REMOVAL

VHB: 55347.01 SHEET NUMBER: 29
CONTRACT: 2023.03 29 OF 61



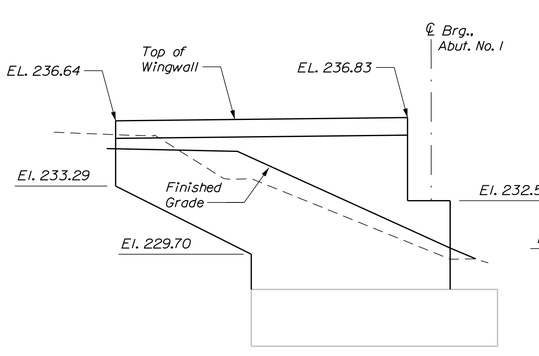
PLAN
Scale: 1/4" = 1'-0"

ABUTMENT CONSTRUCTION NOTES

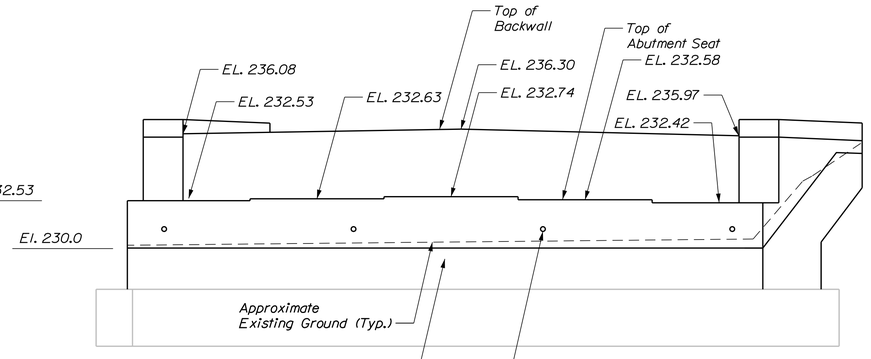
1. Remove abutment seat concrete and reinforcing steel within the limits shown, including bearing anchor bolts.
2. Install new reinforcing steel and drill and grout bars into existing concrete as required.
3. Install form work and bearing anchor rods and place class AAA concrete.
4. Perform general finishing.
5. Top of backwall elevations are given at the face of backwall.

SHEET NOTES

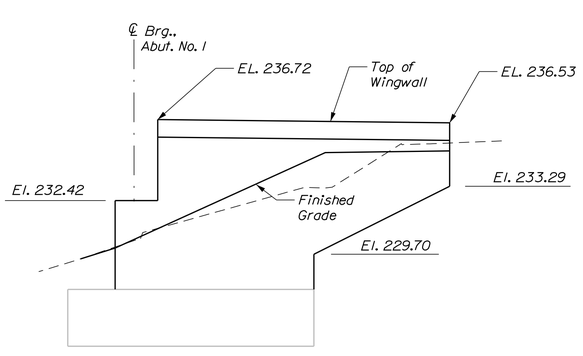
1. See Abutment No. 1 Removal Sheet for Abutment Removal Notes.
2. See Abutment Wingwalls Reinforcement Sheet for Wingwall Reinforcement.
3. See Miscellaneous Abutment Details Sheet for Section A-A and Section B-B.



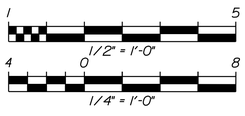
ELEVATION
WINGWALL B
Scale: 1/4" = 1'-0"



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



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



Date:2/3/2023

Filename: ...\030_Abutment_ 1_ Mod_02.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by:

vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

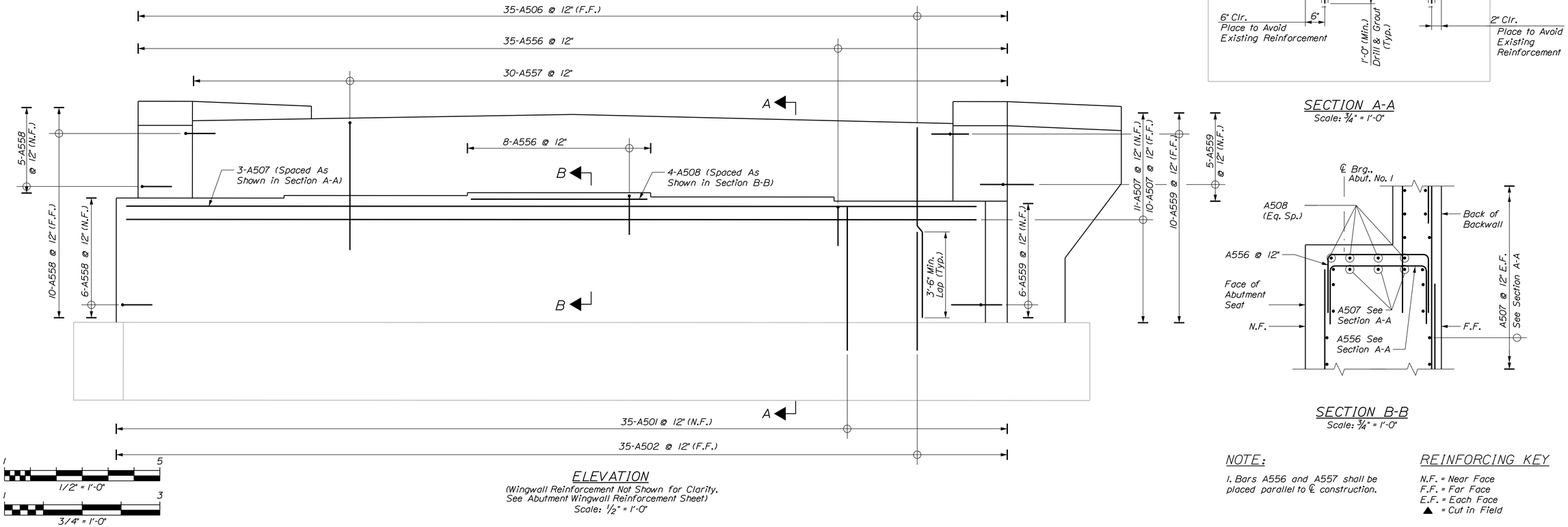
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 1
REPAIR AND MODIFICATIONS

VHB: 55347.01 SHEET NUMBER: 30

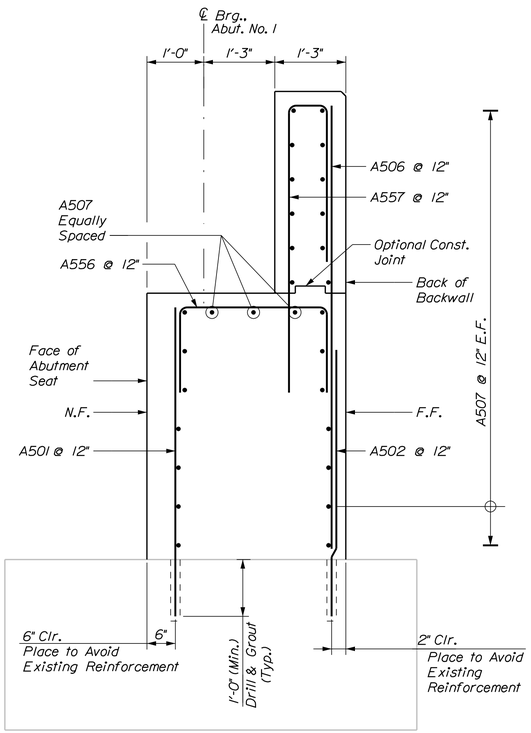
CONTRACT: 2023.03 30 OF 61

Date:2/3/2023



ELEVATION

(Wingwall Reinforcement Not Shown for Clarity. See Abutment Wingwall Reinforcement Sheet)
Scale: 1/2" = 1'-0"



SECTION A-A

Scale: 3/4" = 1'-0"

SECTION B-B

Scale: 3/4" = 1'-0"

1 5
1/2" = 1'-0"

1 3
3/4" = 1'-0"

NOTE:

1. Bars A556 and A557 shall be placed parallel to ℄ construction.

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

Filename: ...\031_Abutment_1_Reinf_03.dgn

Scale:

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

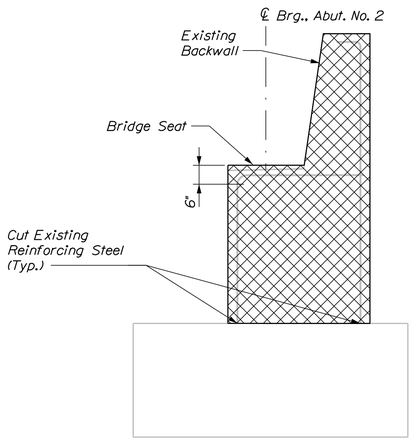
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

THE GOLD STAR MEMORIAL HIGHWAY

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 1
REINFORCEMENT

VHB: 55347.01 SHEET NUMBER: 31
CONTRACT: 2023.03 31OF 61

Date:2/3/2023



SECTION A-A
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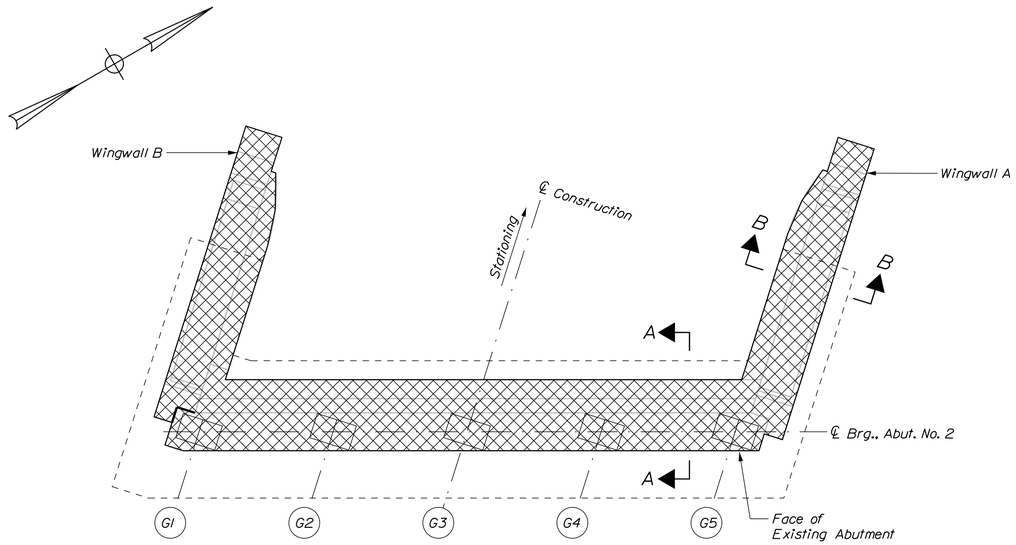
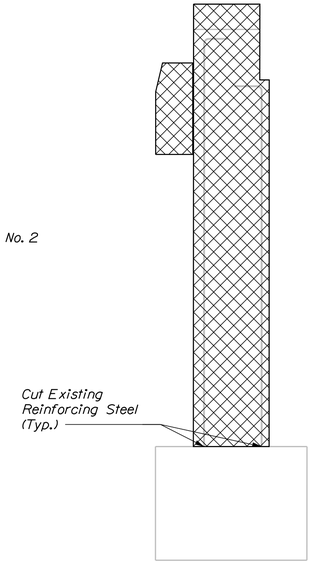


PLAN
Scale: 1/4" = 1'-0"



SECTION B-B
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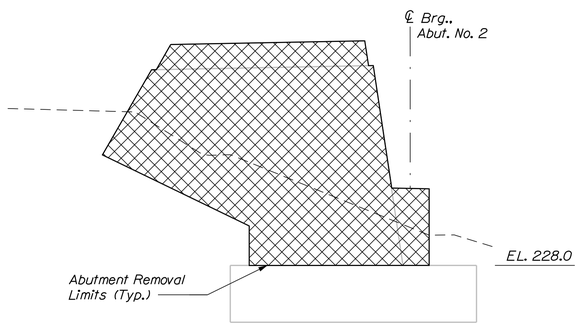
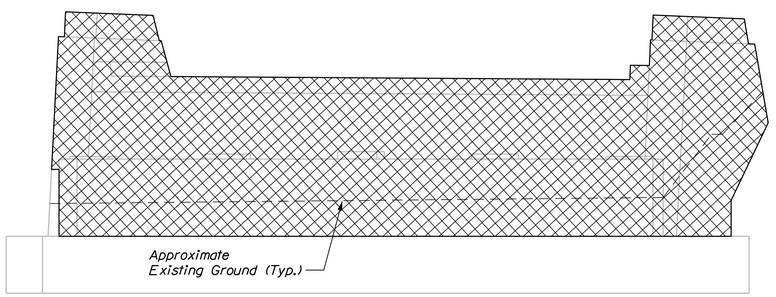


ELEVATION WINGWALL B
Scale: 1/4" = 1'-0"



ELEVATION
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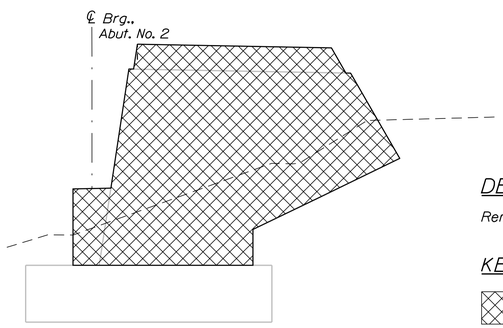

ELEVATION WINGWALL A
Scale: 1/4" = 1'-0"

1 0 5
1/2" = 1'-0"
4 0 8
1/4" = 1'-0"

DEMOLITION QUANTITY (CY)

Removing Existing Structural Concrete	47

KEY

= Concrete Removal (Item 202.17)

SHEET NOTE:

1. See Abutment No. 1 Removal Sheet for Abutment Removal Notes.

Filename: ...\032_Abutment_ 2_ Rem_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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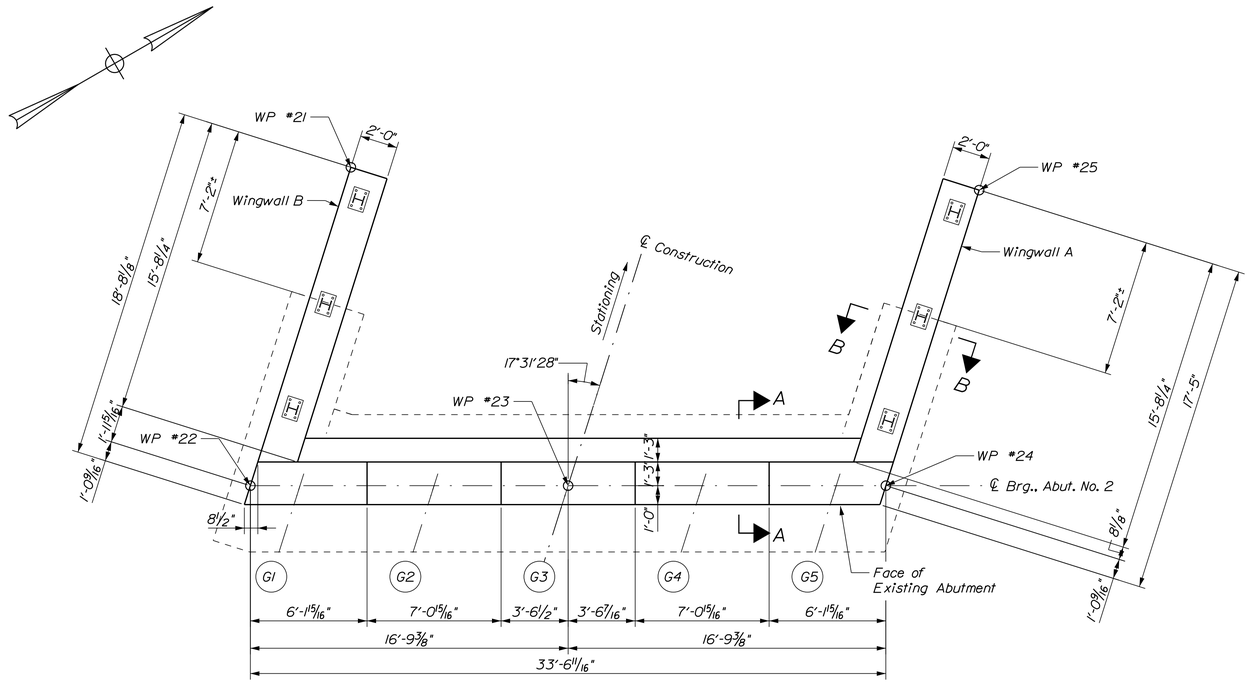
MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 2
REMOVAL

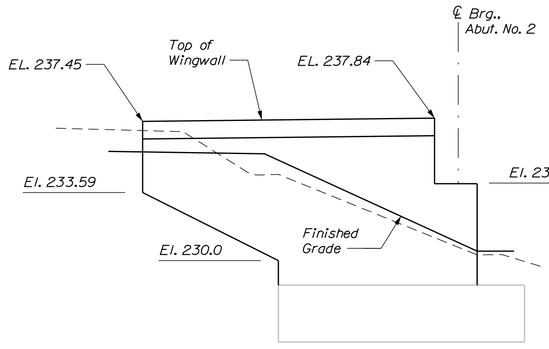
VHB: 55347.01 SHEET NUMBER: 32
CONTRACT: 2023.03 32 OF 61



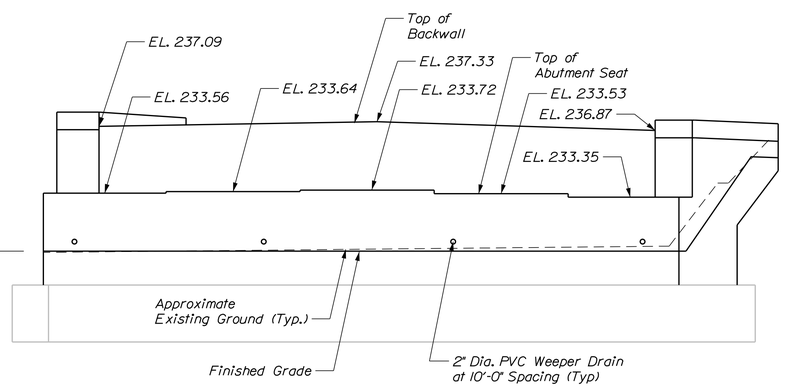
PLAN
Scale: 1/4" = 1'-0"

SHEET NOTES

1. See Abutment No. 1 Removal Sheet for Abutment Removal Notes.
2. See Abutment Wingwalls Reinforcement Sheet for Wingwall Reinforcement.
3. See Abutment No. 1 Repair and Modifications Sheet for Abutment Construction Notes.
4. See Miscellaneous Abutment Details Sheet for Section A-A and Section B-B.



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



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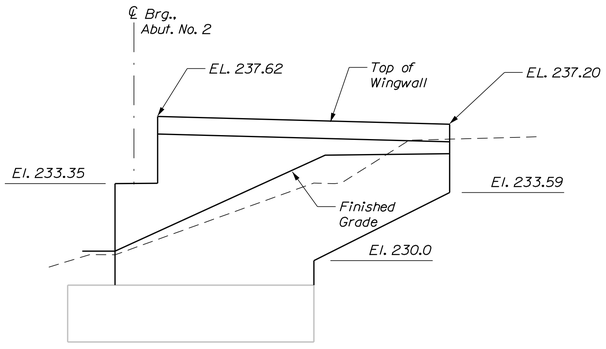

ELEVATION
WINGWALL A
Scale: 1/4" = 1'-0"

1 0 5 — 1/2" = 1'-0"
4 0 8 — 1/4" = 1'-0"

Scale: AS NOTED

No.	Revision	By	Date

Designed by:

vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

VANASSE HANGEN BRUSTLIN, INC.
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FAX (207) 253-5596

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

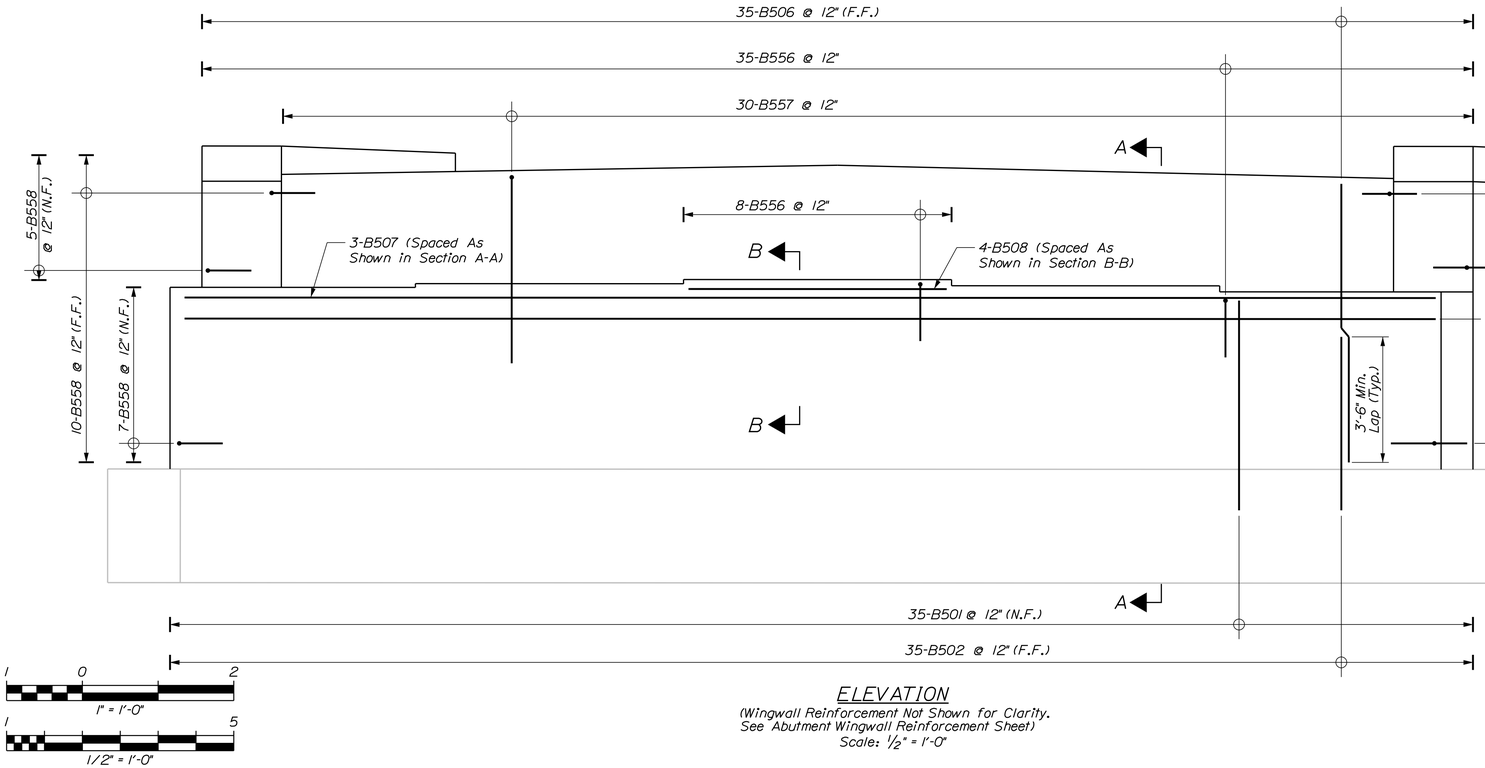
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 2
REPAIR AND MODIFICATIONS

VHB: 55347.01 SHEET NUMBER: 33
CONTRACT: 2023.03 33 OF 61

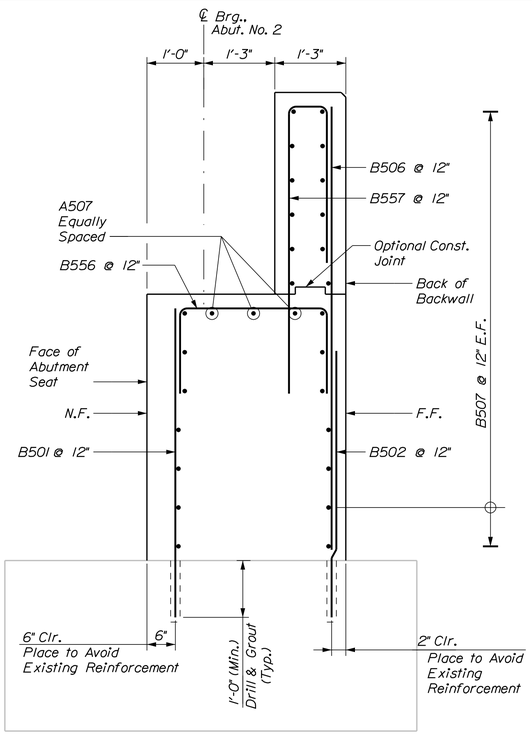
Date:2/3/2023
Filename: ...\033_Abutment_ 2_ Mod_02.dgn

Date:2/3/2023



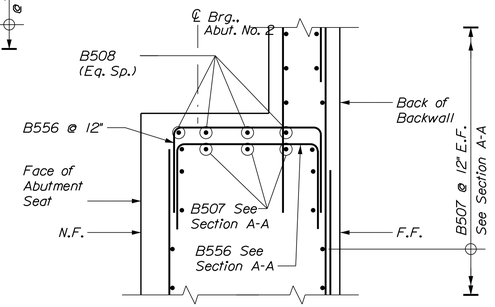
ELEVATION

(Wingwall Reinforcement Not Shown for Clarity. See Abutment Wingwall Reinforcement Sheet)
Scale: 1/2" = 1'-0"



SECTION A-A

Scale: 3/4" = 1'-0"



SECTION B-B

Scale: 3/4" = 1'-0"

NOTE:

1. Bars B556 and B557 shall be placed parallel to ℄ construction.

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

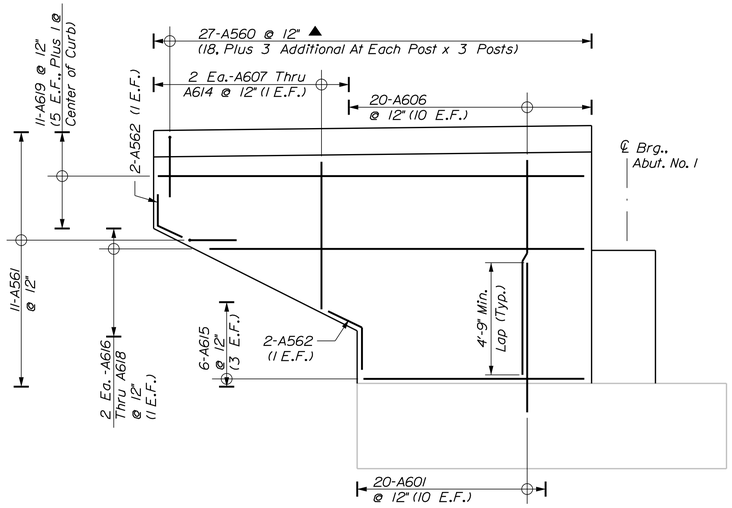
THE GOLD STAR MEMORIAL HIGHWAY

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
ABUTMENT NO. 2
REINFORCEMENT

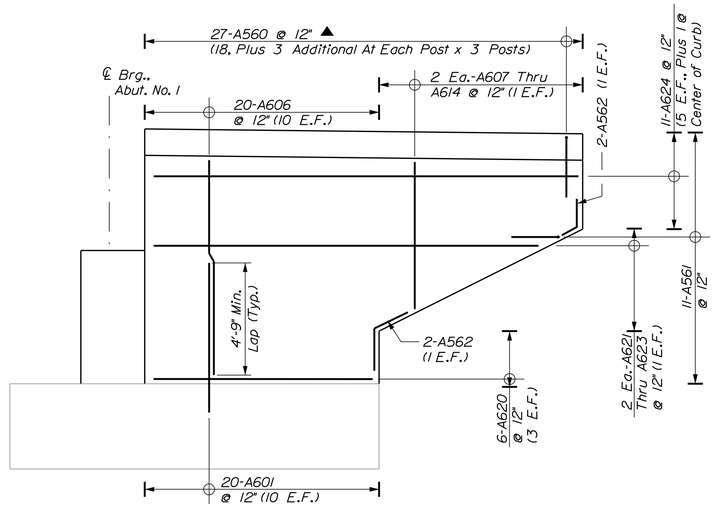
VHB: 55347.01 SHEET NUMBER: 34
CONTRACT: 2023.03 34 OF 61

Filename: ...\034_Abutment_ 2_ Reinf_03.dgn

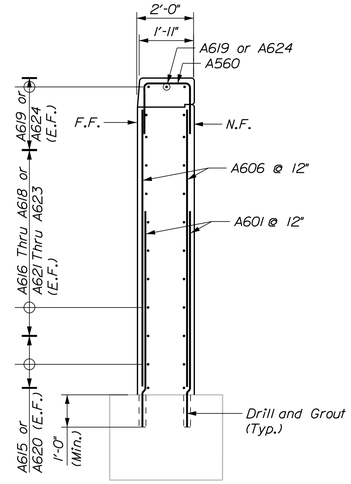
Date:2/3/2023



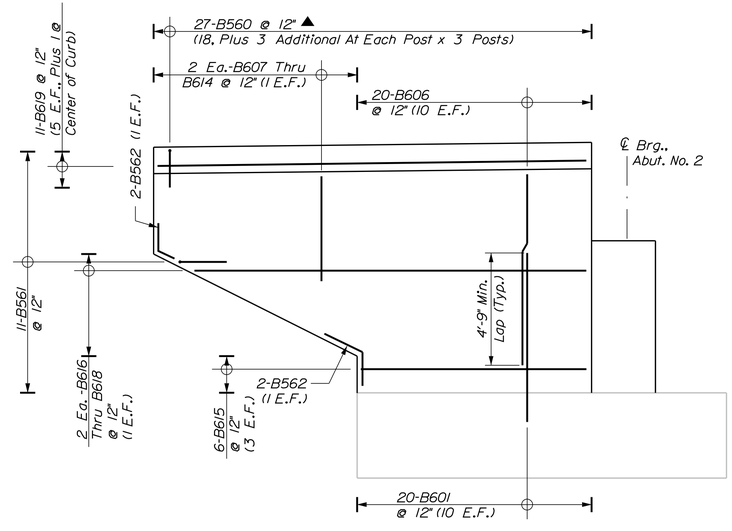
ABUTMENT NO. 1
WINGWALL B ELEVATION
Scale: 1/4" = 1'-0"



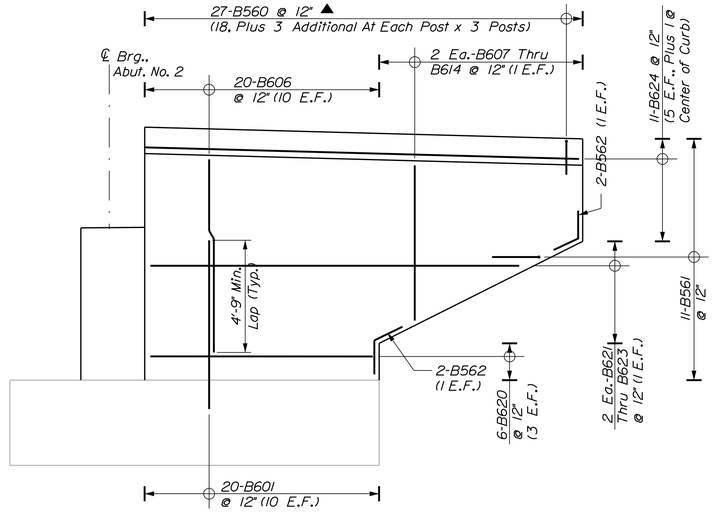
ABUTMENT NO. 1
WINGWALL A ELEVATION
Scale: 1/4" = 1'-0"



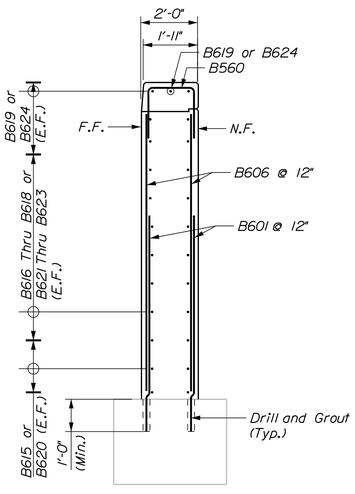
TYPICAL WINGWALL SECTION
ABUTMENT NO. 1
3/4" = 1'-0"



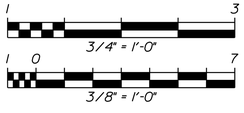
ABUTMENT NO. 2
WINGWALL B ELEVATION
Scale: 1/4" = 1'-0"



ABUTMENT NO. 2
WINGWALL A ELEVATION
Scale: 1/4" = 1'-0"



TYPICAL WINGWALL SECTION
ABUTMENT NO. 2
3/4" = 1'-0"



NOTE:
1. Bars A560 and B560 shall be placed parallel to the ℄ Brg.

REINFORCING KEY
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

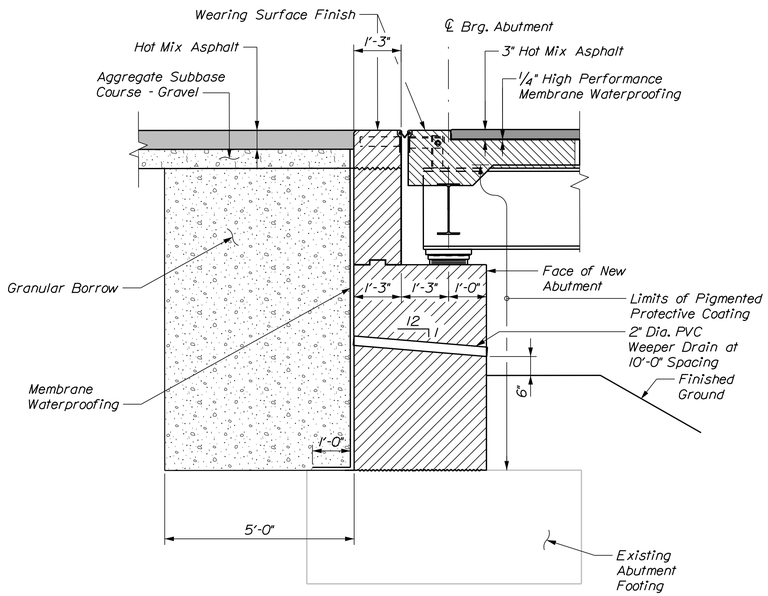
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

ABUTMENT WINGWALLS REINFORCEMENT

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 35
35 OF 61

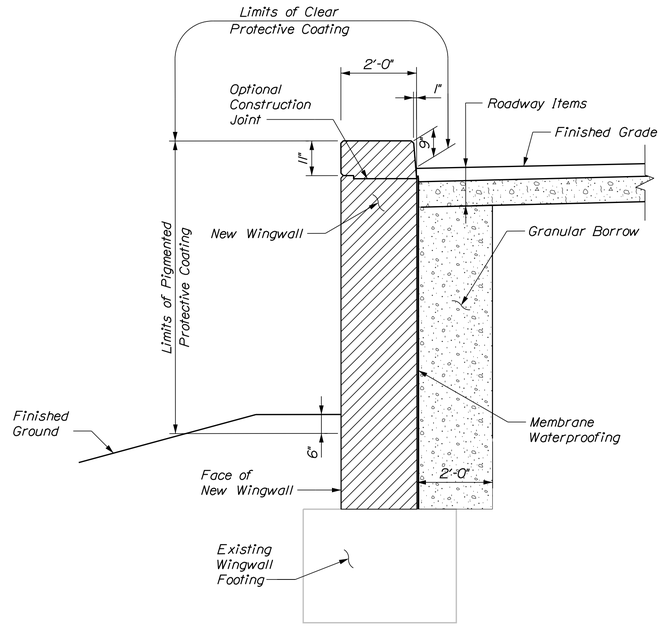
Filename: ...\MSTA\035_Wingwall_01.dgn



SECTION A-A

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

Scale: 1/2" = 1'-0"



SECTION B-B

Scale: 1/2" = 1'-0"

1.5 0 1.5

1 1/2" = 1'-0"

1 0 5

1/2" = 1'-0"

Scale: AS NOTED

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	GCB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

MISCELLANEOUS ABUTMENT DETAILS

VHB: 55347.01

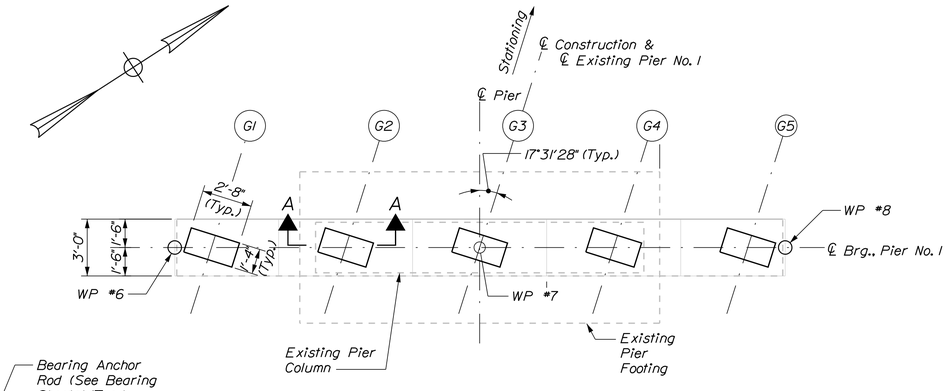
CONTRACT: 2023.03

SHEET NUMBER: 36

36 OF 61

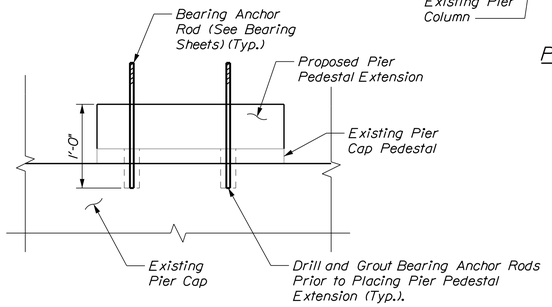
Date: 2/3/2023

Filename: ...\MSTA\036_Abut_Misc_Det.dgn



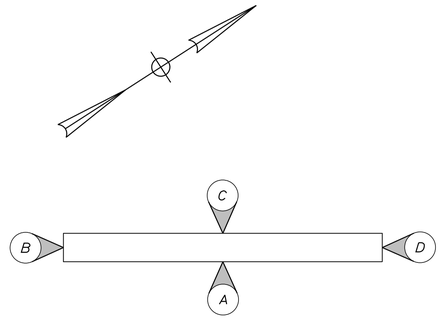
PIER NO. 1 - PLAN

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



SECTION A-A

Not to Scale



PIER ELEVATION KEY

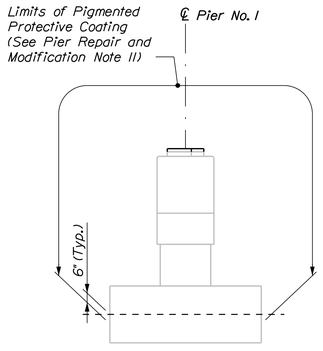
Not to Scale

TOP OF PEDESTAL ELEVATIONS					
	G1	G2	G3	G4	G5
EXISTING*	232.6	232.7	232.8	232.7	232.6
PROPOSED	232.97	233.13	233.29	233.18	233.07

*Existing top of pedestal elevations are based on as-built plans.

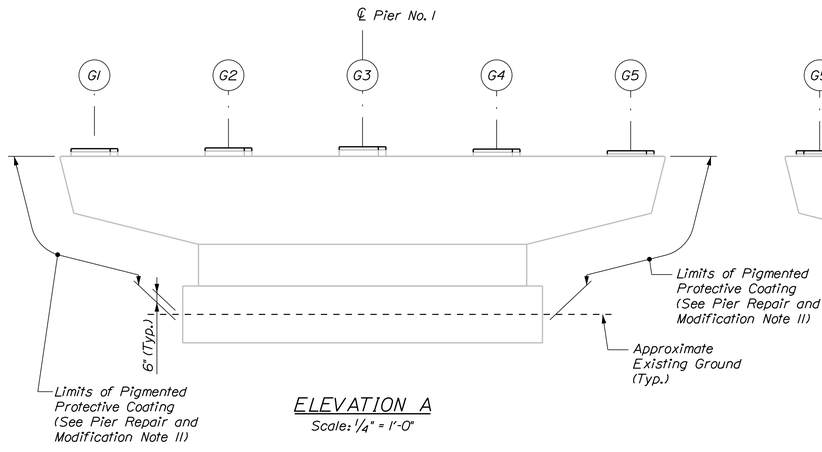
PIER REPAIR AND MODIFICATIONS NOTES

1. Pier repair work shall include: providing access for pier inspection and pier surface patch repairs.
2. Where pier surface patch repairs are specified the work shall include removal of unsound concrete and placement and curing of the repair materials. Repairs shall be measured for payment under Item 518.20, Pier Repairs.
3. All existing anchor rods shall be cut and removed to be flush with the top of existing pier cap.
4. Actual repair areas will be determined by the Resident during construction. If pier surface patch repairs are required to extend more that 1/3 the width of the column stem the work shall be sequenced such that removal of the column concrete is limited to no more than 1/3 of the column width at any one time. The removal restrictions do not apply to the ends of the pier column stem or if the work is only being done to one pier face and the depth of the repair is less than 6". At the direction of the Resident, the removal restrictions may be waived if the work is performed while the superstructure is not in place.
5. Pier cap modifications shall not be performed when traffic is active on the roadway above unless authorized by the Resident.
6. Prior to the placement of pier extension concrete or pier pedestal extension, the Contractor shall intentionally roughen the top surface of the existing pier caps or pier pedestals to 1/4" anchor profile or as directed by The Resident. Cost for intentionally roughening surface shall be incidental to Item 502.23, Structural Concrete Piers or Item 502.602, Pier Pedestal Concrete.
7. All exposed pier surfaces shall be coated with a protective coating for concrete surfaces as shown.
8. All excavation required for the pier repair and protective coating application shall be incidental to Item 518.20, Pier Repairs.
9. Prior to the placement of pier extension concrete, the Contractor shall prepare the area in accordance with Special Provision Section 518. All costs for removal of unsound concrete and surface preparation shall be incidental to Item 502.23, Structural Concrete Piers.
10. All costs for Pier Redestal Extensions shall be included in Item 502.602. See Special Provision Section 502 for material and construction requirements for the Pier Pedestal Extensions and Piers 1 and 2.
11. Pigmented Protective Coating shall be placed on all surfaces of the pier, including proposed pedestal and cap extensions, to 6" below existing ground.



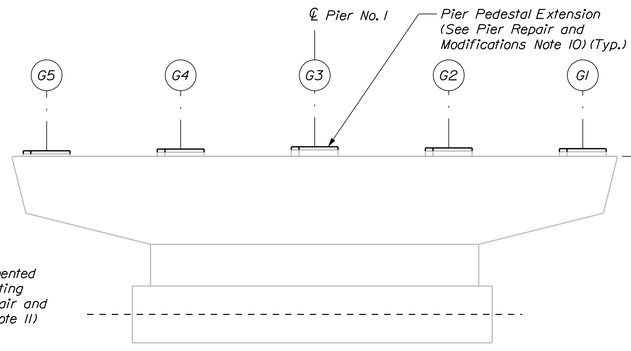
ELEVATION B

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



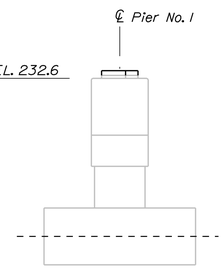
ELEVATION A

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



ELEVATION C

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



ELEVATION D

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

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\037_Pier 1_01.dgn

Scale: 4 0 8 — 1/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

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Designed	MEB	2/3/23	Checked	GME	2/3/23
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

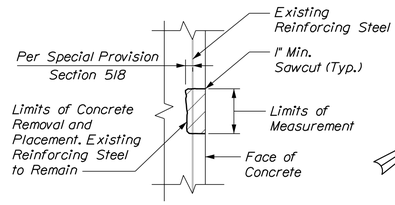
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

PIER NO. 1 REPAIR AND MODIFICATIONS

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 37



CONCRETE SURFACE REPAIR DETAIL

Not to Scale

CONCRETE SURFACE REPAIR NOTES

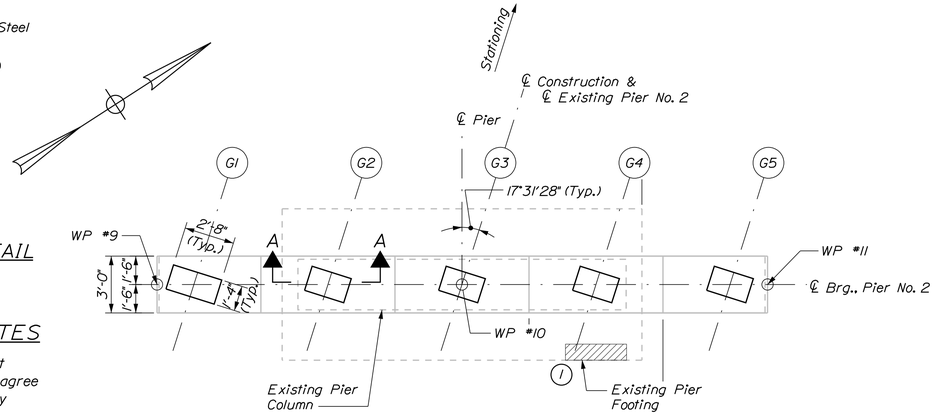
1. Prior to the start of concrete removal the Resident and the Contractor shall sound the concrete and agree on the repair limits. Estimated repair quantity may increase at the Resident's discretion.

2. Saw cut 1" deep cuts along limits of removal.

3. Chip concrete to depth shown. 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.

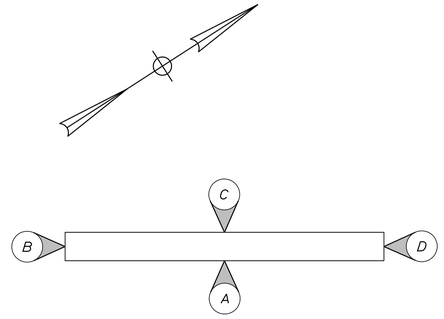
4. Prepare and patch repair areas with Class AAA concrete.

5. Perform general finishing.



PIER NO. 2 - PLAN

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



PIER ELEVATION KEY

Not to Scale

SHEET NOTE

1. See Pier No. 1 Repairs and Modifications sheet for Section A-A and Pier Repair and Modification Notes.

ESTIMATED REPAIR QUANTITIES (SF)

Pier Surface Patch Repairs 15 *

* Includes 12 S.F. Additional Repair Quantity As A Contingency

KEY

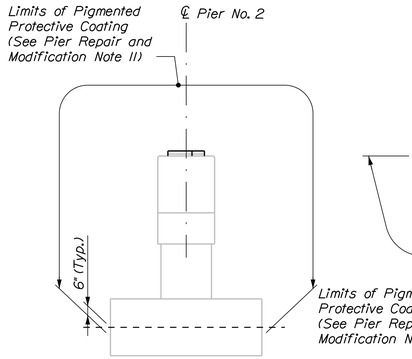
= Concrete Patch Repair (Item 518.20)

= Top of Pier Cap Surface Patch Repair (See Pier Repair and Modifications Note 9)

(#) = Square Foot Area of Repair

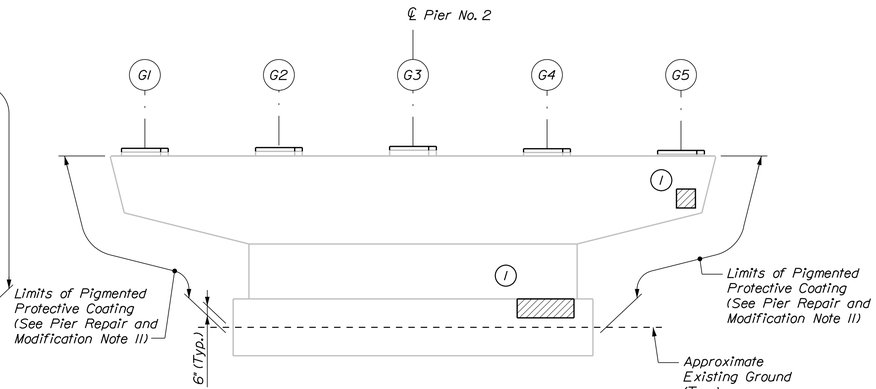
TOP OF PEDESTAL ELEVATIONS					
	G1	G2	G3	G4	G5
EXISTING*	233.3	233.4	233.5	233.4	233.3
PROPOSED	233.67	233.83	233.99	233.88	233.78

*Existing top of pedestal elevations are based on as-built plans.



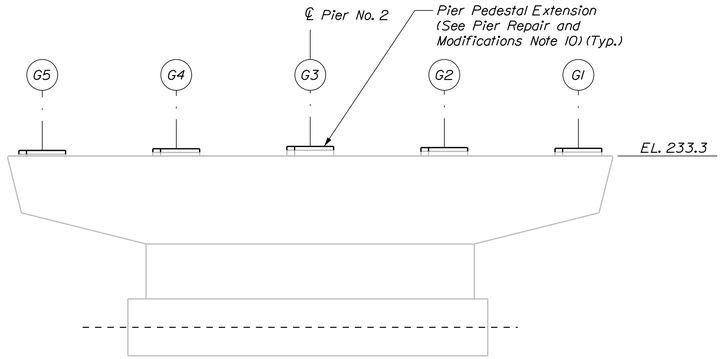
ELEVATION B

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



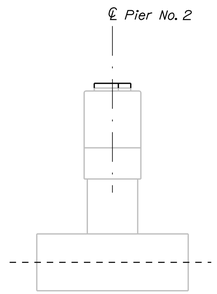
ELEVATION A

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



ELEVATION C

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



ELEVATION D

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

Scale: 4 0 8 — 1/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

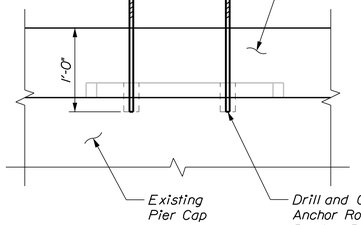
PIER NO. 2 REPAIR AND MODIFICATIONS

VHB: 55347.01 SHEET NUMBER: 38

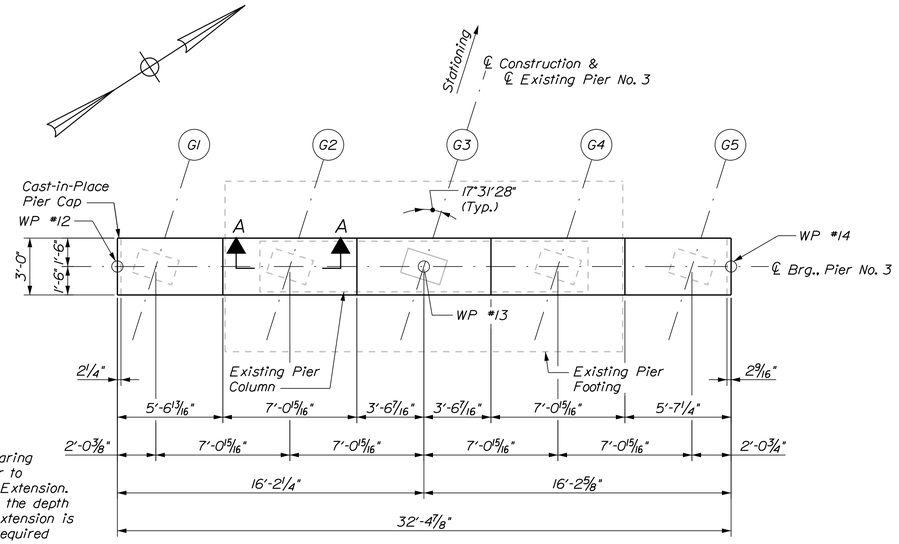
CONTRACT: 2023.03 38 OF 61

Date: 2/3/2023

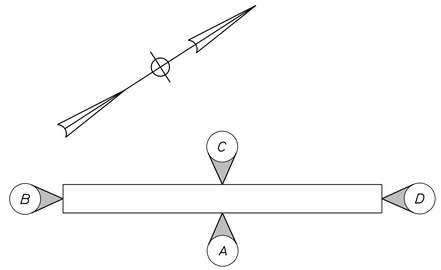
Filename: ...\BRIDGE\MSTA\038_Pier 2_01.dgn



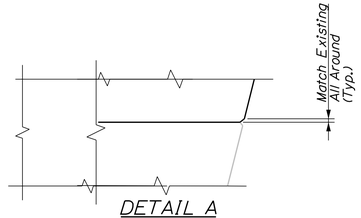
SECTION A-A
Not to Scale



PIER NO. 3 - PLAN
Scale: 1/4" = 1'-0"



PIER ELEVATION KEY
Not to Scale



DETAIL A
Not to Scale

SHEET NOTES

1. See Pier No. 1 Repairs and Modifications sheet for Pier Repair and Modification Notes.
2. See Pier No. 2 Repairs and Modifications sheet for Concrete Surface Repair Detail and Notes.

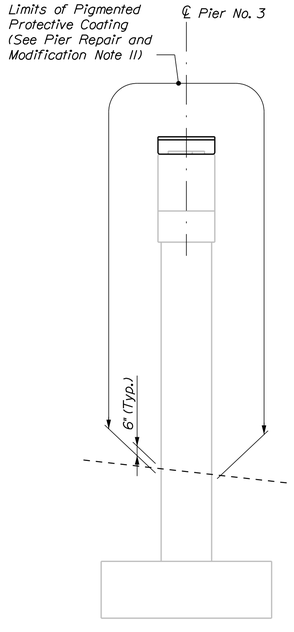
ESTIMATED REPAIR QUANTITIES (SF)

Pier Surface Patch Repairs	30*

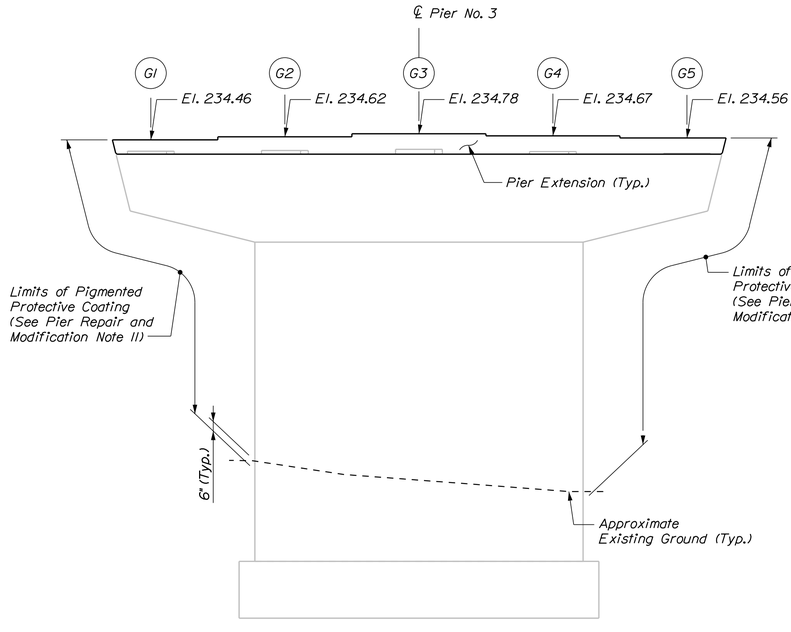
* Includes 10 S.F. Additional Repair Quantity As A Contingency

KEY

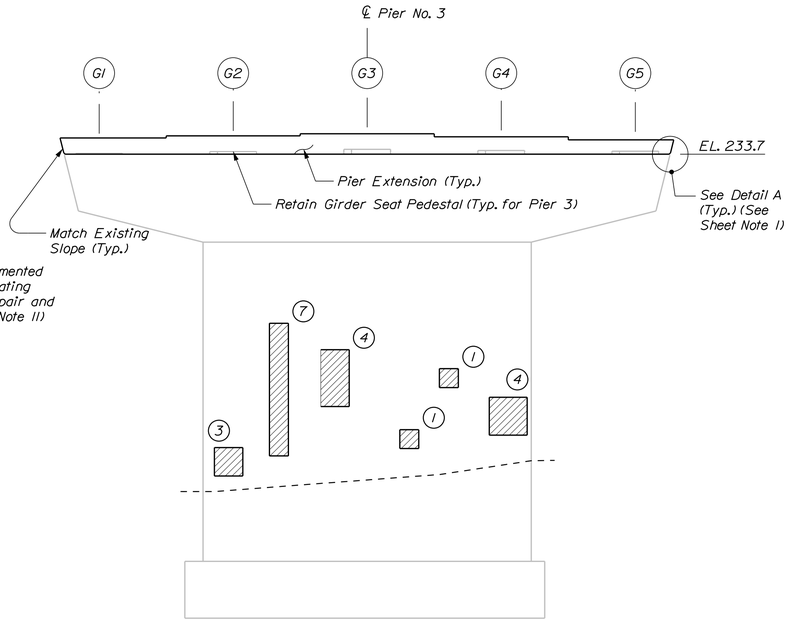
- = Concrete Patch Repair (Item 5I8.20)
- = Top of Pier Cap Surface Patch Repair (See Pier Repair and Modifications Note 9)
- (#) = Square Foot Area of Repair



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



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



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

Scale: 4 0 8 — 1/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

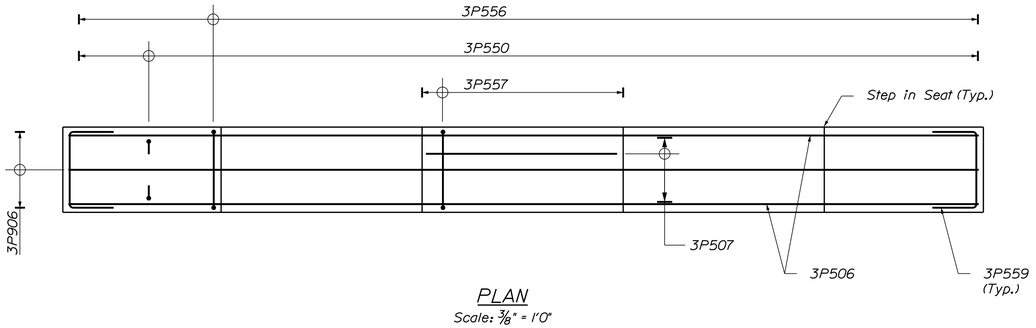
PIER NO. 3 REPAIR AND MODIFICATIONS

VHB: 55347.01
CONTRACT: 2023.03

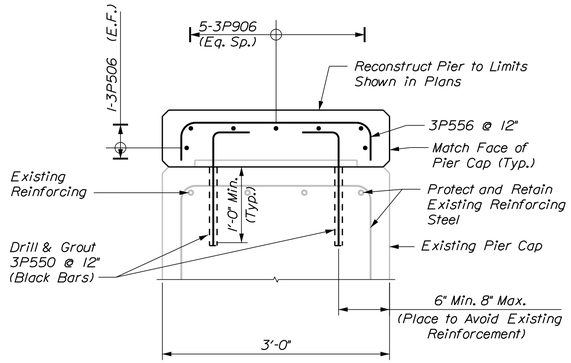
SHEET NUMBER: 39
39 OF 61

Date: 2/3/2023

Filename: ...\BRIDGE\WSTA\039_Pier 3_01.dgn



PLAN
Scale: 3/8" = 1'0"



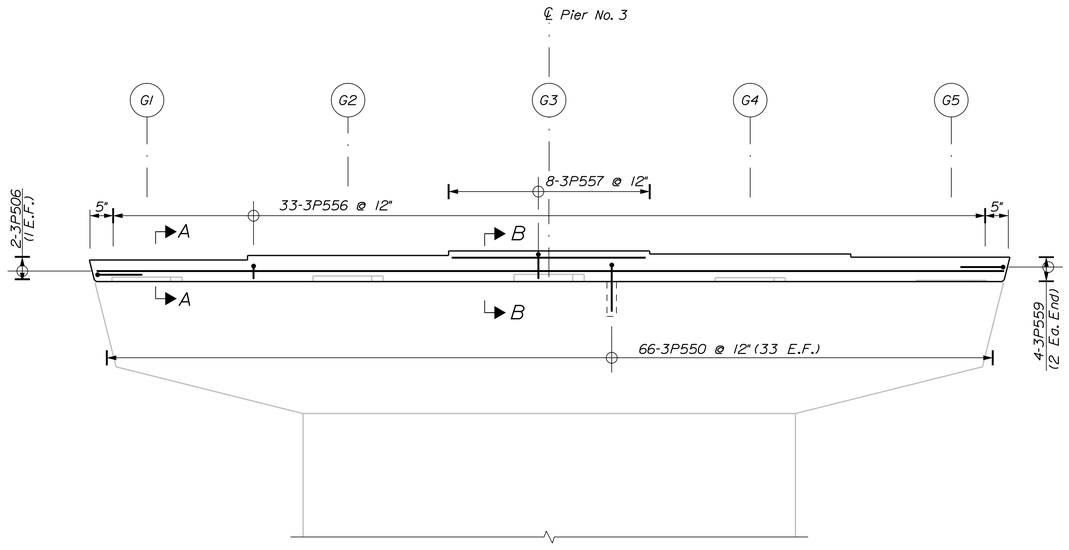
SECTION A-A
Scale: 1" = 1'-0"

NOTE

1. Adjust longitudinal reinforcement to ensure anchor rods and reinforcement do not conflict.

SHEET NOTE

1. See Pier Repair and Modifications Notes on Pier No. 1 Repair and Modifications Sheet.

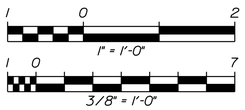


ELEVATION
Scale: 3/8" = 1'0"

SECTION B-B
Scale: 1" = 1'-0"

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field



Date:2/3/2023

Filename: ...\BRIDGE\MSTA\040_Pier 3_02.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

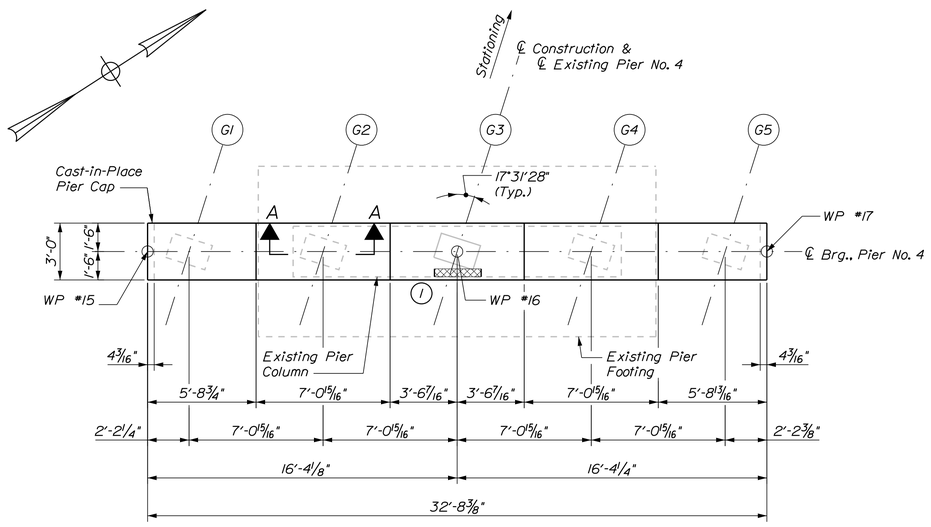
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

PIER CAP NO. 3 REINFORCEMENT

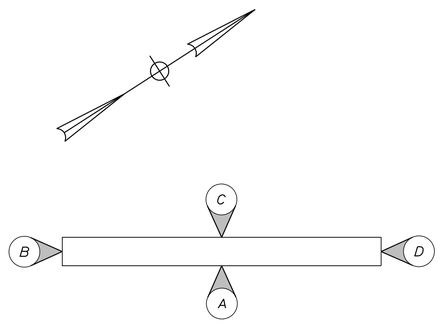
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 40



PIER NO. 4 - PLAN

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



PIER ELEVATION KEY

Not to Scale

SHEET NOTES

1. See Pier No. 3 Repair and Modifications Sheet for Detail A and Section A-A.
2. See Pier No. 1 Repairs and Modifications sheet for Pier Repair and Modification Notes.
3. See Pier No. 2 Repairs and Modifications sheet for Concrete Surface Repair Detail and Notes.

ESTIMATED REPAIR QUANTITIES (SF)

Pier Surface Patch Repairs	90*

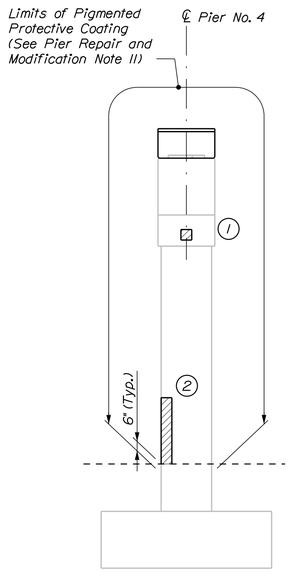
* Includes 17 S.F. Additional Repair Quantity As A Contingency

KEY

= Concrete Patch Repair (Item 518.20)

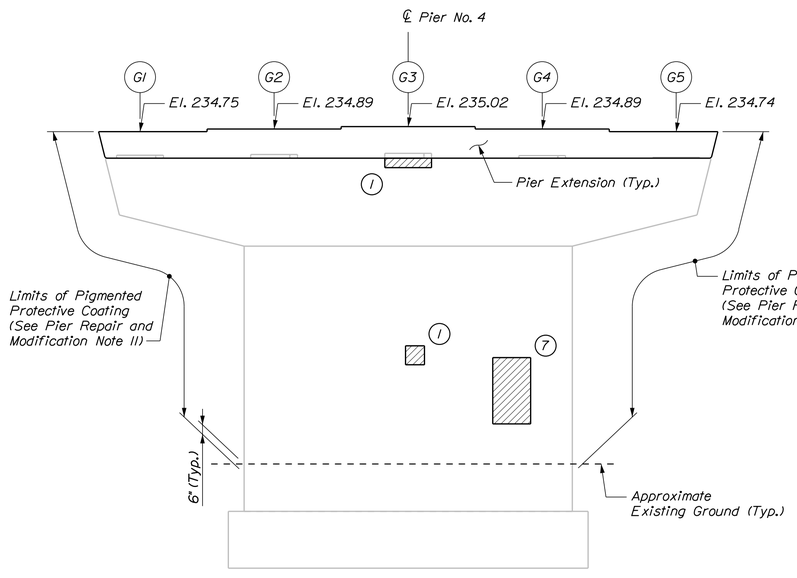
= Top of Pier Cap Surface Patch Repair (See Pier Repair and Modifications Note 9)

(#) = Square Foot Area of Repair



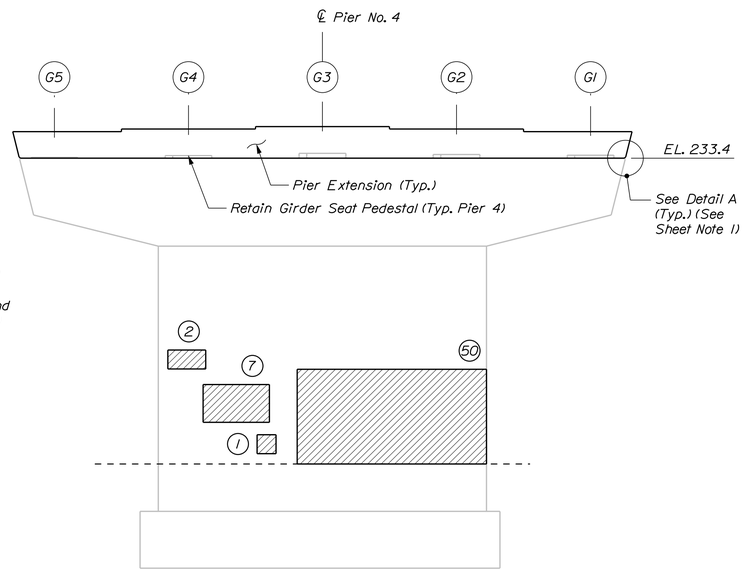
ELEVATION B

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



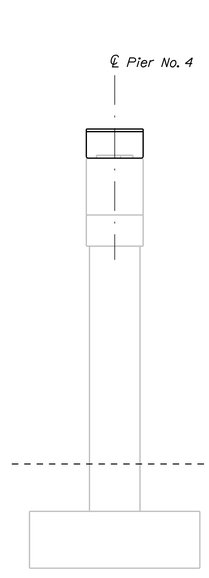
ELEVATION A

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



ELEVATION C

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



ELEVATION D

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

Scale: 4 0 8 — 1/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

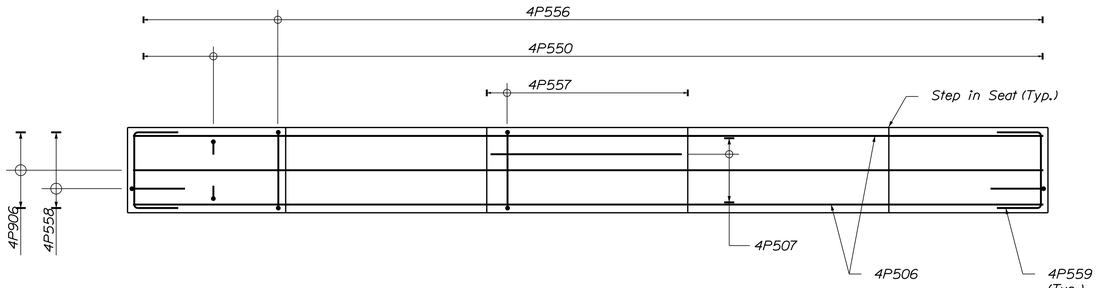
PIER NO. 4 REPAIR AND MODIFICATIONS

VHB: 55347.01 SHEET NUMBER: 41

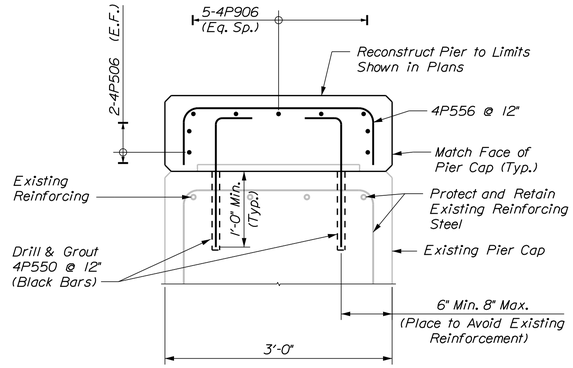
CONTRACT: 2023.03 41OF 61

Date:2/3/2023

Filename: ...\BRIDGE\WSTA\041_Pier 4_01.dgn



PLAN
Scale: 3/8" = 1'0"



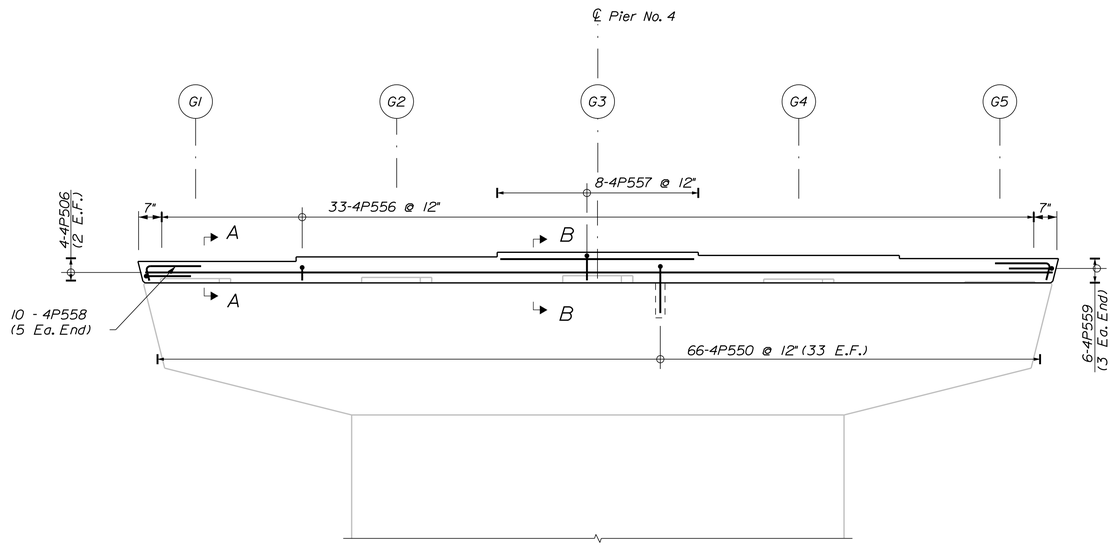
SECTION A-A
Scale: 1" = 1'-0"

NOTE

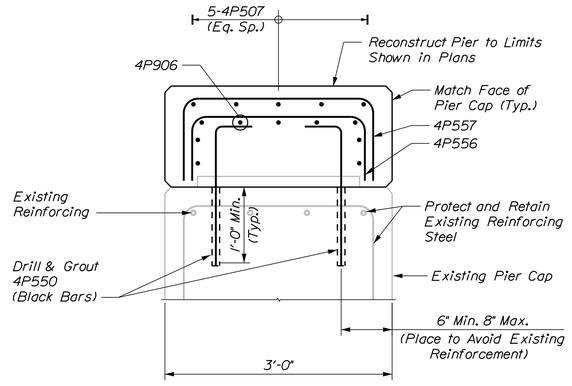
1. Adjust longitudinal reinforcement to ensure anchor rods and reinforcement do not conflict.

SHEET NOTE

1. See Pier Repair and Modifications Notes on Pier No. 1 Repair and Modifications Sheet.



ELEVATION
Scale: 3/8" = 1'0"



SECTION B-B
Scale: 1" = 1'-0"

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

1 0 2
1" = 1'-0"

1 0 7
3/8" = 1'-0"

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\042_Pier 4_02.dgn

Scale:AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MGB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

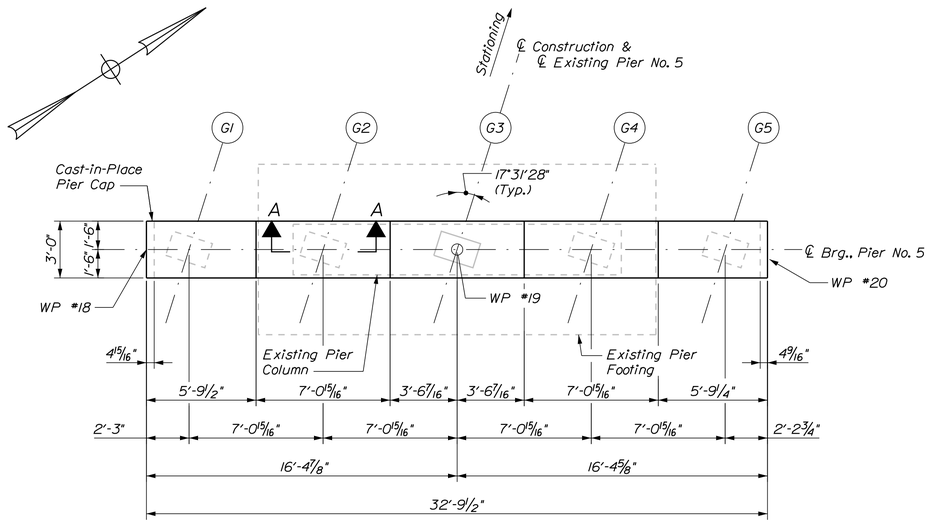
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

PIER CAP NO. 4 REINFORCEMENT

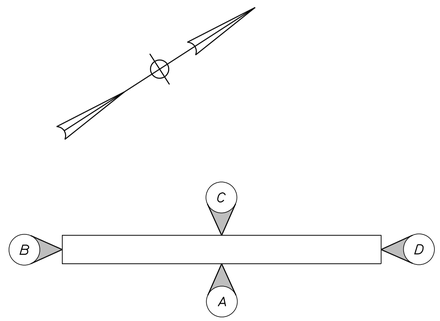
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 42



PIER NO. 5 - PLAN

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



PIER ELEVATION KEY

Not to Scale

SHEET NOTES

1. See Pier No. 3 Repair and Modifications Sheet for Detail A and Section A-A.
2. See Pier No. 1 Repairs and Modifications sheet for Pier Repair and Modification Notes.
3. See Pier No. 2 Repairs and Modifications sheet for Concrete Surface Repair Detail and Notes.

ESTIMATED REPAIR QUANTITIES (SF)

Pier Surface Patch Repairs	50*

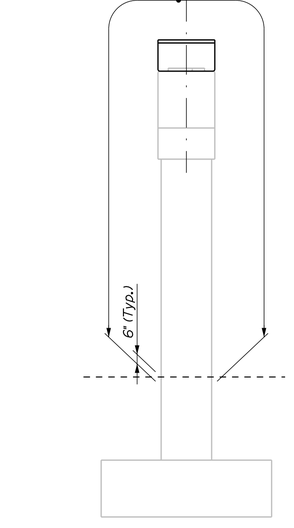
* Includes 12 S.F. Additional Repair Quantity As A Contingency

KEY

= Concrete Patch Repair (Item 518.20)

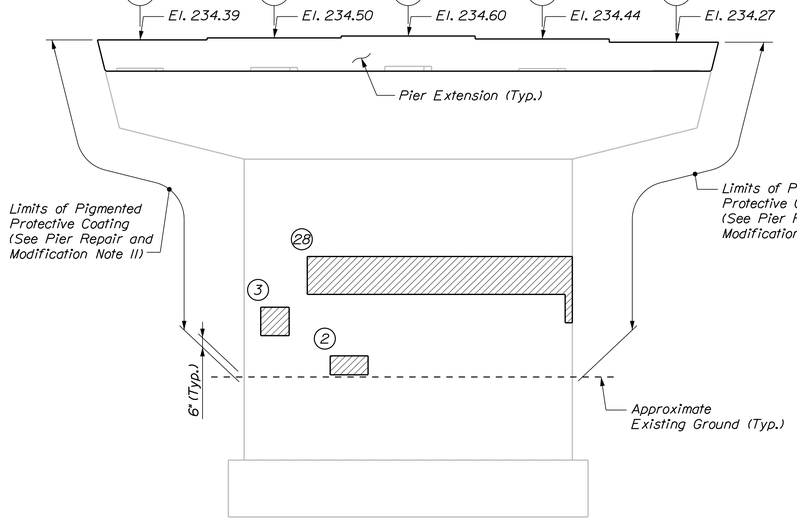
= Top of Pier Cap Surface Patch Repair (See Pier Repair and Modifications Note 9)

(#) = Square Foot Area of Repair



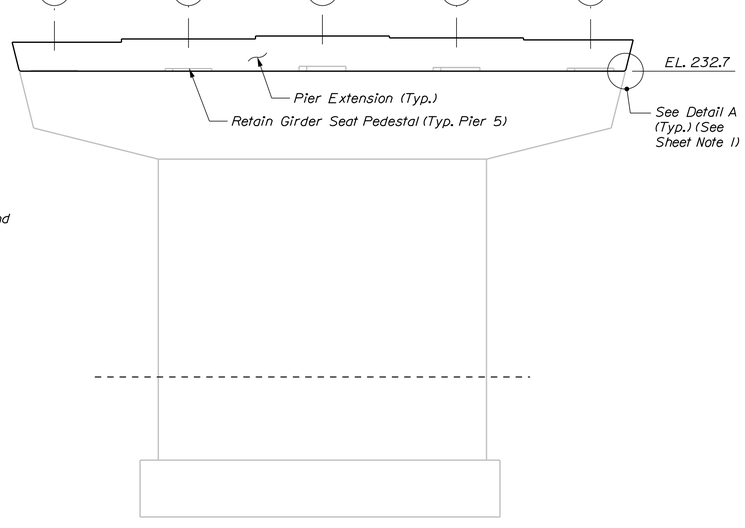
ELEVATION B

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



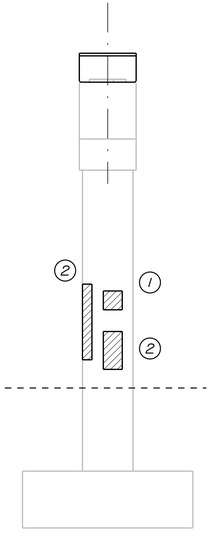
ELEVATION A

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



ELEVATION C

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



ELEVATION D

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

Scale: 4 0 8 — 1/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

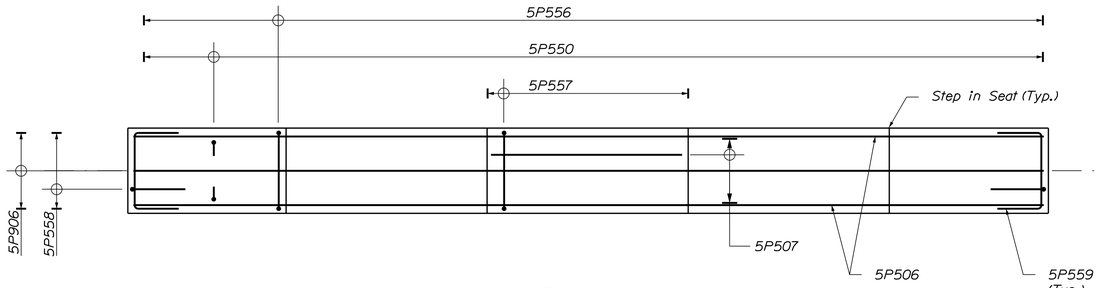
PIER NO. 5 REPAIR AND MODIFICATIONS

VHB: 55347.01
CONTRACT: 2023.03

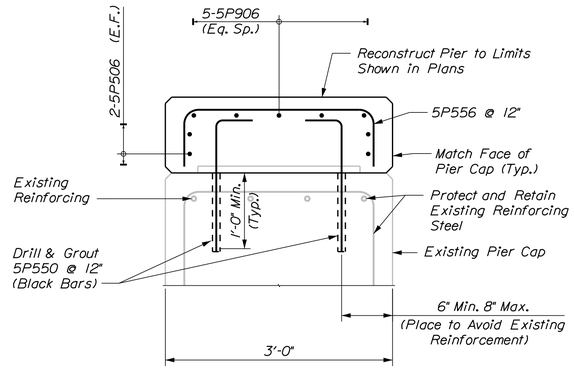
SHEET NUMBER: 43
43 OF 61

Date: 2/3/2023

Filename: ...\BRIDGE\WSTA\043_Pier 5_01.dgn



PLAN
Scale: 3/8" = 1'0"



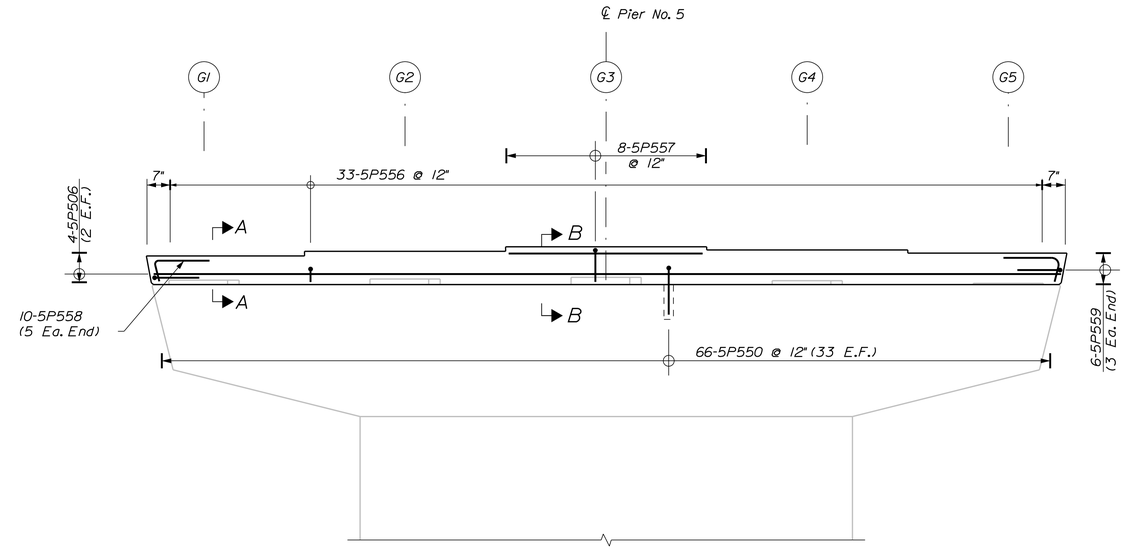
SECTION A-A
Scale: 1" = 1'-0"

NOTE

1. Adjust longitudinal reinforcement to ensure anchor rods and reinforcement do not conflict.

SHEET NOTE

1. See Pier Repair and Modifications Notes on Pier No. 1 Repair and Modifications Sheet.



ELEVATION
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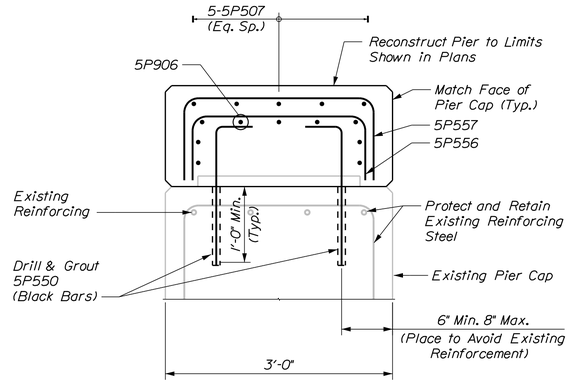
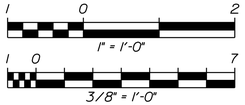


SECTION B-B
Scale: 1" = 1'-0"



REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

Date: 2/3/2023

Filename: ...\BRIDGE\WSTA\044_Pier 5_02.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by:

vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MCB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

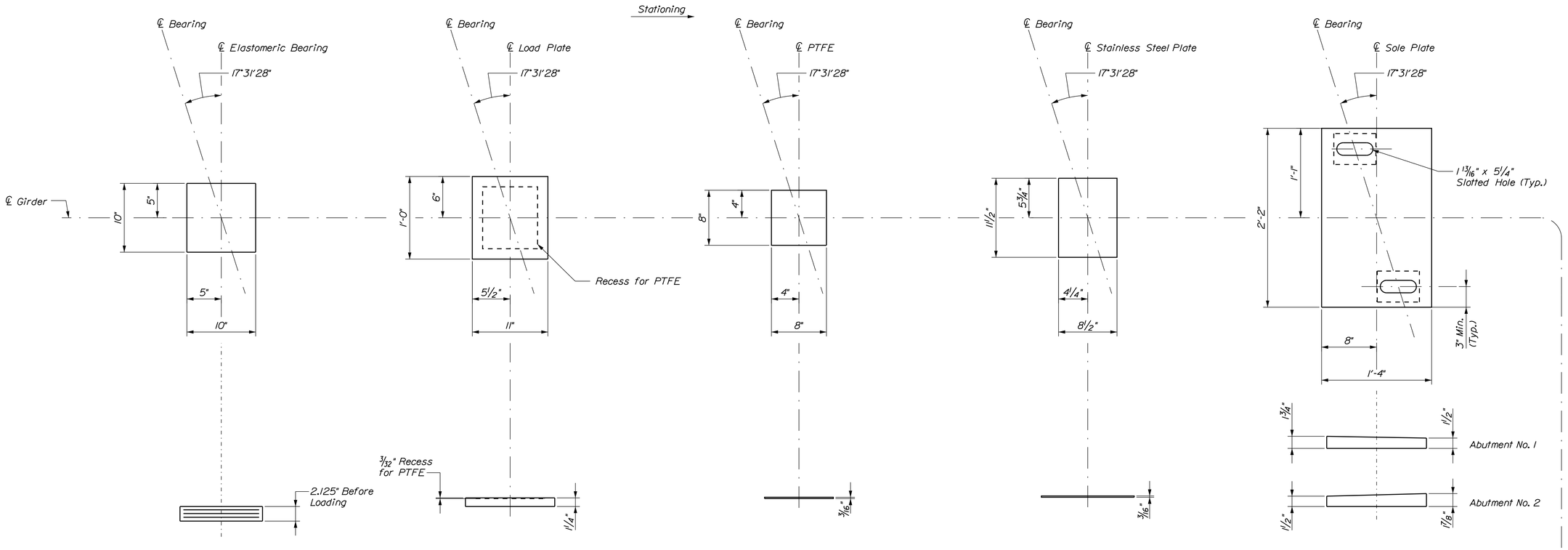
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

PIER CAP NO. 5 REINFORCEMENT

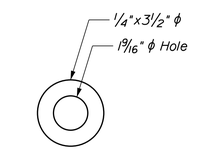
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 44

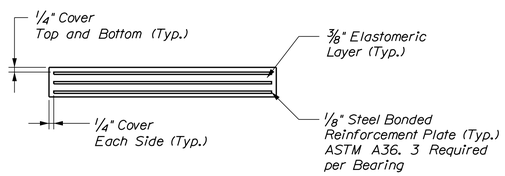
Date:2/3/2023



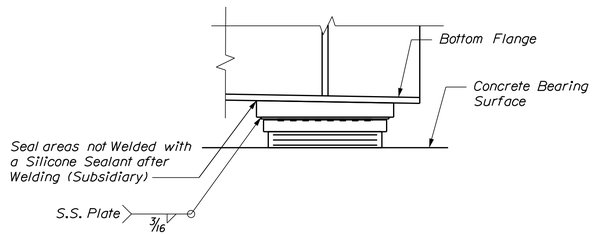
ELASTOMERIC BEARING | LOAD PLATE | PTFE | STAINLESS STEEL PLATE | BEVELED SOLE PLATE



WASHER DETAIL
Not to Scale



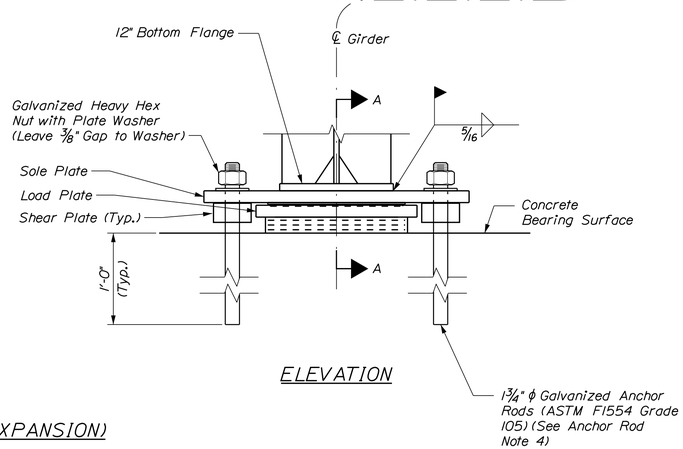
ELASTOMERIC BEARING DETAIL
Not to Scale



SECTION A-A

SHEET NOTE

1. See Elastomeric Bearing Notes, Anchor Rod Notes and Bearing Design Criteria on Fixed Pier Bearing Details Sheet.



ELEVATION

ABUTMENT BEARINGS (EXPANSION)

Filename: ...\BRIDGE\MSTA\045_bearing_01.dgn

Scale: 1 0 1 — 1 1/2" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

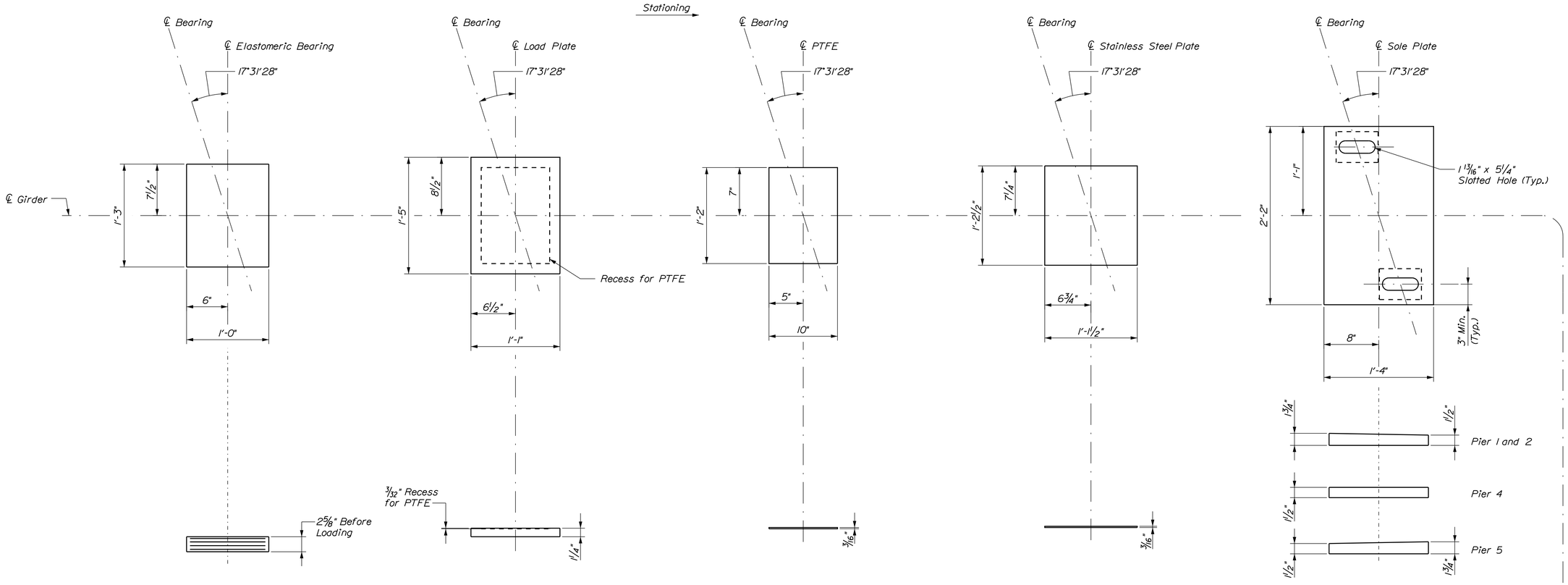
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

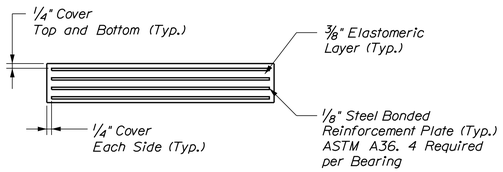
ABUTMENT BEARING DETAILS

VHB: 55347.01
CONTRACT: 2023.03

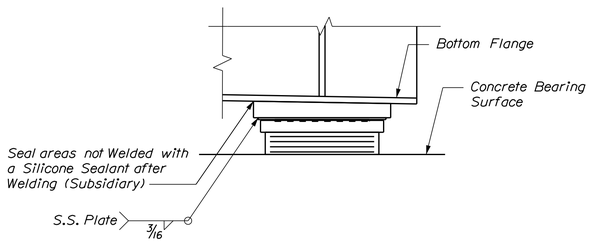
SHEET NUMBER: 45

Date:2/3/2023

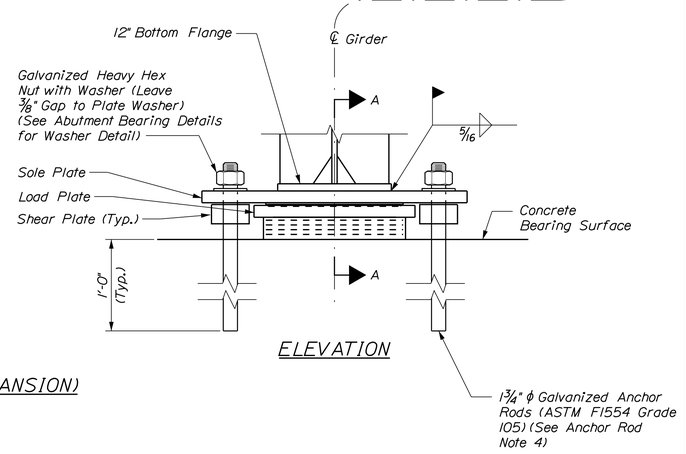




ELASTOMERIC BEARING DETAIL
Not to Scale



SECTION A-A



ELEVATION

PIER BEARINGS (EXPANSION)

SHEET NOTES

1. See Elastomeric Bearing Notes, Anchor Rod Notes and Bearing Design Criteria on Fixed Pier Bearing Details Sheet.
2. See Plate Washer Detail on Abutment Bearing Details Sheet.

Scale: 1 0 1
1 ½" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

EXPANSION PIER BEARING DETAILS

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 46

Filename: ...\BRIDGE\MSTA\046_bearing_02.dgn

Date:2/3/2023

ELASTOMERIC BEARING NOTES

1. Elastomer shall be virgin Neoprene (Polychloroprene) with a durometer of 50.
2. Vulcanizing of the elastomer to the steel plates shall be done during the primary mold process.
3. Masonry plates, sole plates, and load plates shall meet the requirements of ASTM A709/A709M, Grade 50.
4. Horizontal PTFE at pier expansion bearings shall be dimpled and lubricated. Lubrication shall be supplied and installed per the bearing manufacturers recommendation to ensure a coefficient of friction less than or equal to 0.04 at 68 degrees F. Cost included in the applicable Bearing item.
5. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow which points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
6. Bearings shall be covered during transit.
7. All necessary precautions shall be taken to protect bearing components from field weld flash and spatter.
8. The bearings are designed so that the superstructure may be erected when the ambient air temperature is within the range of 65 degrees F and 90 degrees F. If the ambient air temperature is outside this range, the bridge shall be jacked and the bearings shall be reset as directed by the Resident.
9. Masonry plates, sole plates and load plates shall be galvanized in accordance with ASTM A123.

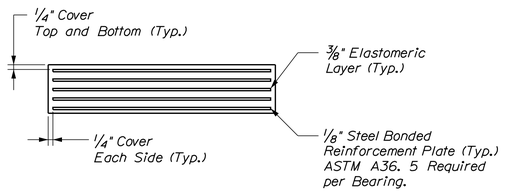
ANCHOR ROD NOTES

1. All anchor rods, nuts, and plate washers shall be galvanized after fabrication in accordance with ASTM A153. Anchor rods shall be fully threaded.
2. Burr threads on anchor rods after nuts tightened snug to prevent removal. Touch up damaged galvanized areas with zinc-rich paint. Cost included in the applicable Bearing item.
3. The Contractor shall adjust longitudinal reinforcement to ensure anchor rods and reinforcement do not conflict. Cost shall be included in the applicable Bearing item.
4. Abutment bearing anchor rods shall be cast into abutment concrete. Pier bearing anchor rods shall be drilled and grouted into pier caps. Anchoring material shall be a chemical or cementitious Anchoring Material from the MaineDOT Qualified Products List. The Contractor shall submit the proposed Anchoring Material to the Resident for approval.

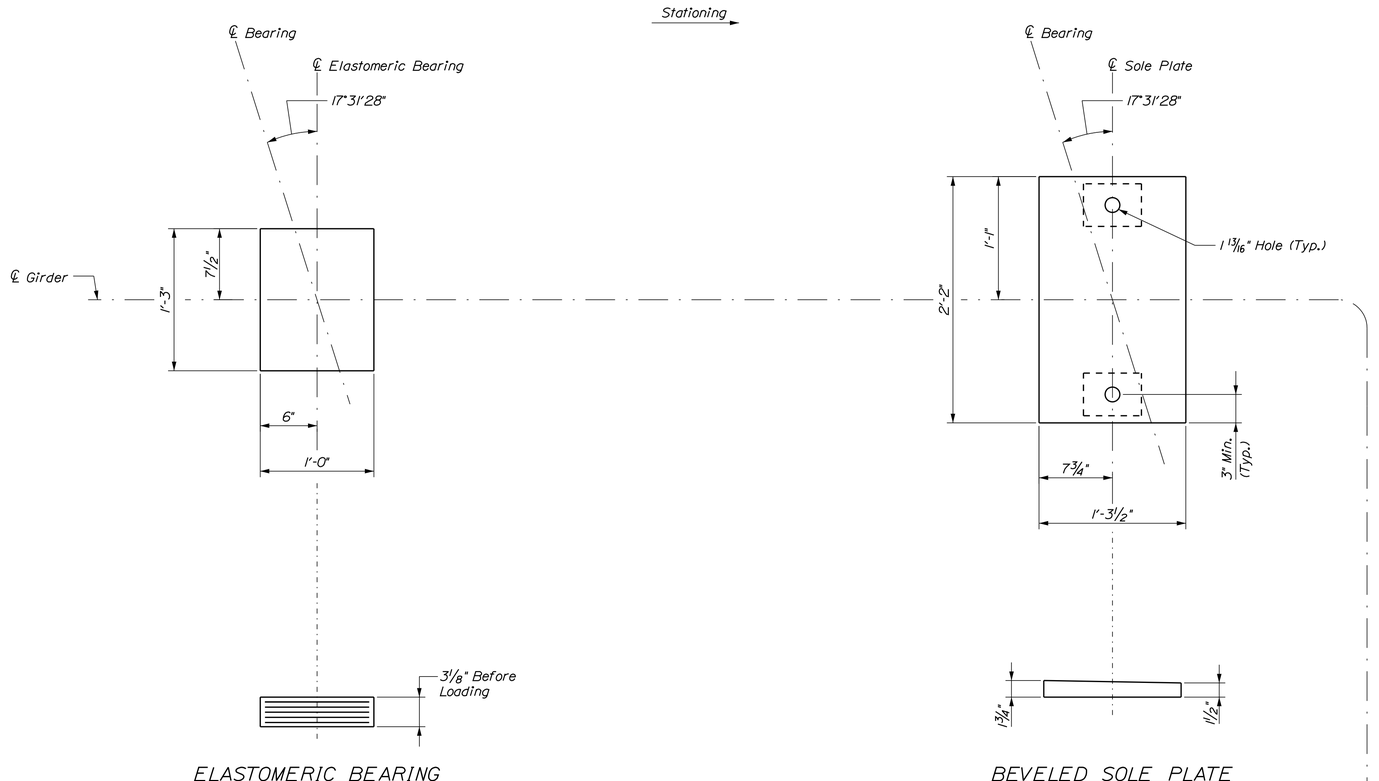
SHEET NOTE

1. See Washer Detail on Abutment Bearing Details Sheet.

BEARING DESIGN CRITERIA			
LOADS	ABUTMENTS	EXP. PIERS	FIXED PIERS
Unfactored Dead Load (Max.)	22 Kips	71 Kips	69 Kips
Unfactored Live Load (Max.)	69 Kips	105 Kips	106 Kips
DESIGN METHOD A			

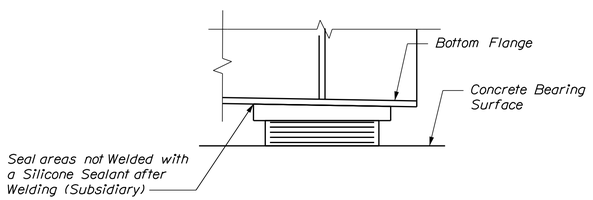


ELASTOMERIC BEARING DETAIL
Not to Scale

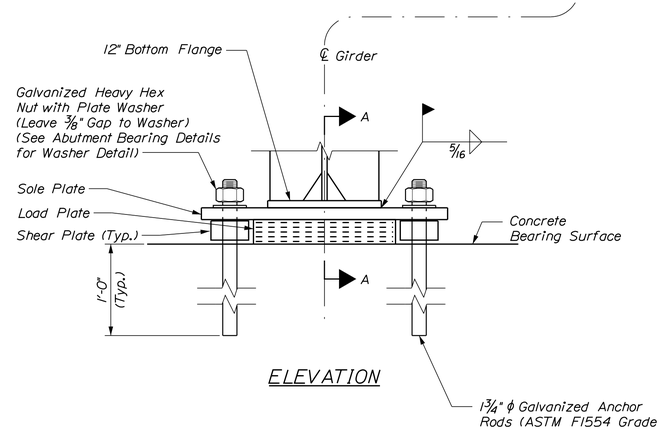


ELASTOMERIC BEARING

BEVELED SOLE PLATE



SECTION A-A



ELEVATION

PIER BEARINGS (FIXED)

Filename: ...\BRIDGE\MSTA\047_bearing_03.dgn

Scale: 1 0 1
1 1/2" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

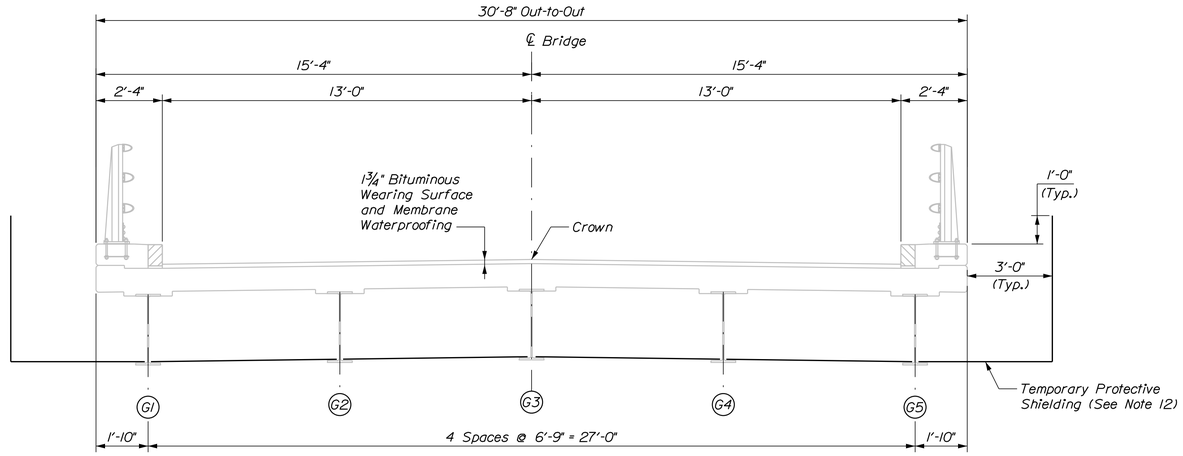
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

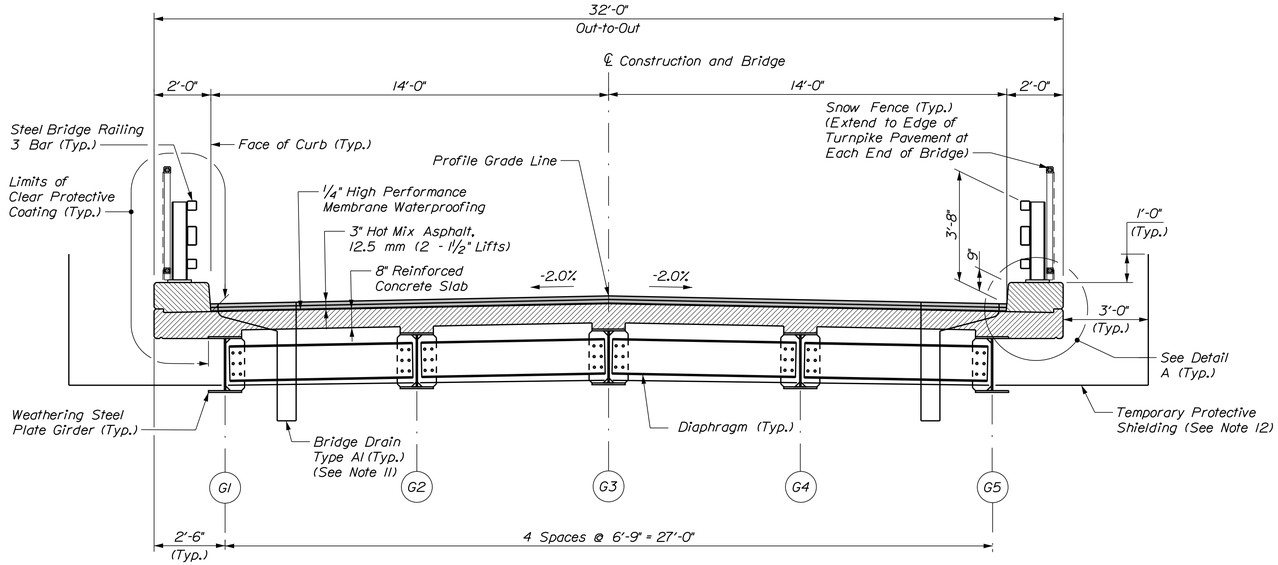
FIXED PIER BEARING DETAILS

VHB: 55347.01
CONTRACT: 2023.03



EXISTING SUPERSTRUCTURE SECTION

Scale: ⅜" = 1'-0"



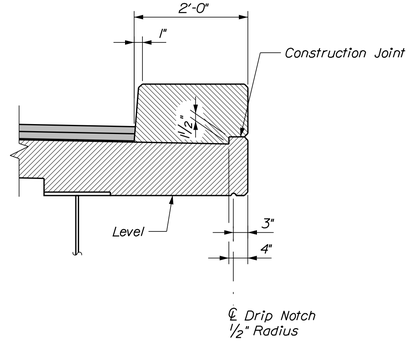
PROPOSED SUPERSTRUCTURE SECTION

(Looking Upstation)
Scale: ⅜" = 1'-0"

SUPERSTRUCTURE NOTES

1. All bridge curb concrete, including inside faces, top and outside faces, approach curb and deck fascia shall have a rubbed finish prior to the application of the Clear Protective Coating for Concrete Surface.
2. The concrete deck shall be given a smooth ordinary finish.
3. Prior to installing the proposed shear studs the Contractor shall clean the girder top flange so that it is free of debris, rust, scale, oil and other contaminates that would adversely affect the welding operation. All the grinding shall be performed in the longitudinal direction of the beam. Payment for preparing girder top flange for installation of proposed shear studs shall be incidental to Item 505.08, Shear Connectors.
4. Protective shielding shall be required per Special Provision Section 524.
5. The theoretical blocking used for design of the structure is 3½" at the centerline of bearing at the abutments and piers.
6. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
7. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
8. The superstructure slab concrete shall be placed in one continuous operation and the concrete shall be kept plastic one complete span behind the span being placed.
9. See Framing Plan and Girder Elevation sheet for Structural Steel notes.
10. Install 1" diameter PVC deck drains per Standard Detail 502(04) and Supplemental Specification Section 502.17 as required and as directed by the Resident. Drains shall extend 1'-0" below bottom flange.
11. See Standard Details 502(15) through 502(24) for Bridge Drain Type A1 details.
12. See Special Provision 524 for Temporary Protective Shielding Requirements.
13. The use of precast deck panels is prohibited.

APPROXIMATE SHIELDING QUANTITIES			
	Demolition	Construction	Total
Approx. Width of Shielding Installed (FT)	36.67 FT	38 FT	74.67 FT
Approx. Area of Shielding Installed (SY)	730 SY	740 SY	1,470 SY



DETAIL A

Scale: ¾" = 1'-0"

1 0 3
3/4" = 1'-0"

1 0 7
3/8" = 1'-0"

Date: 2/3/2023

Filename: ...\MSTA\048_Bridge_Typ_01.dgn

Scale: AS NOTED

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Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

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Designed	MEB	2/3/23	Checked	GME	2/3/23
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MAINE TURNPIKE

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

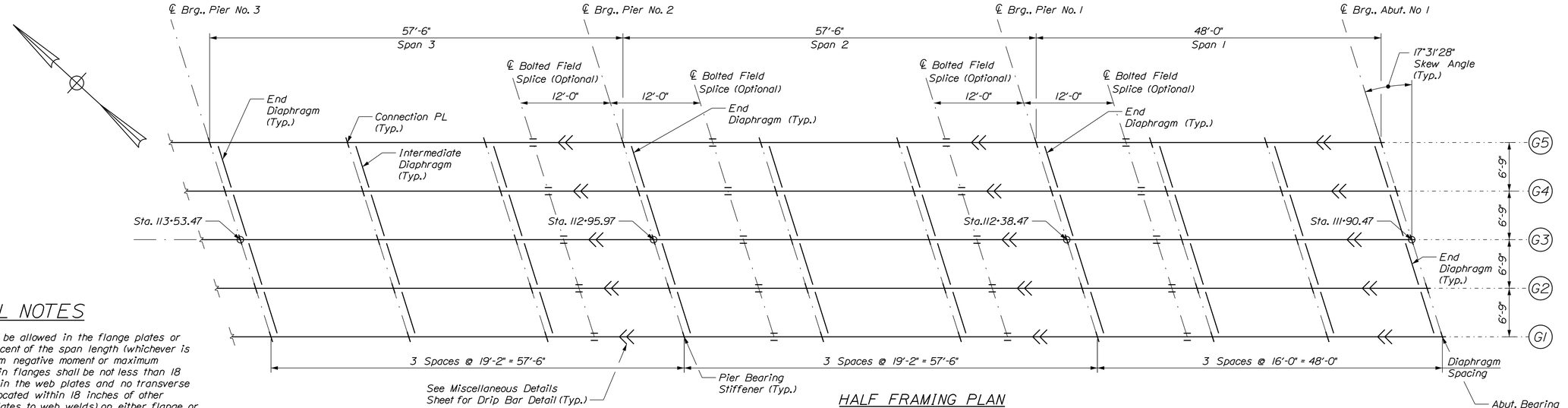
THE GOLD STAR MEMORIAL HIGHWAY

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS TYPICAL BRIDGE SECTIONS AND DETAILS

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 48

Date:2/3/2023



HALF FRAMING PLAN

(Spans 1-3 Shown, Spans 4-6 Similar. See Sheet 50)
Scale: 1/8" = 1'-0"

STRUCTURAL STEEL NOTES

1. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 feet or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. Butt weld splices in flanges shall be not less than 18 inches from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 18 inches of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt weld splices will be allowed in areas of stress reversal.

2. Bearing stiffeners and girder ends shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange. Girder webs may be plumb in the no-load condition or full dead load condition for erection purposes.

3. Diaphragm connection plates may be either plumb or normal to the top flange.

4. All bolts shall be 7/8" diameter ASTM A325 Type 3 high strength bolts. Holes shall be 15/16" unless otherwise noted. Bolts shall be installed with heads down at all bottom flange connections and heads up at all top flange connections. In painted areas, bolts shall be Type 1 galvanized.

5. Shear studs shall extend a minimum of 2" into the slab. See Shear Connector Detail on Miscellaneous Details Sheet.

6. Prior to erection of structural steel the Contractor shall submit a detailed erection plan for approval.

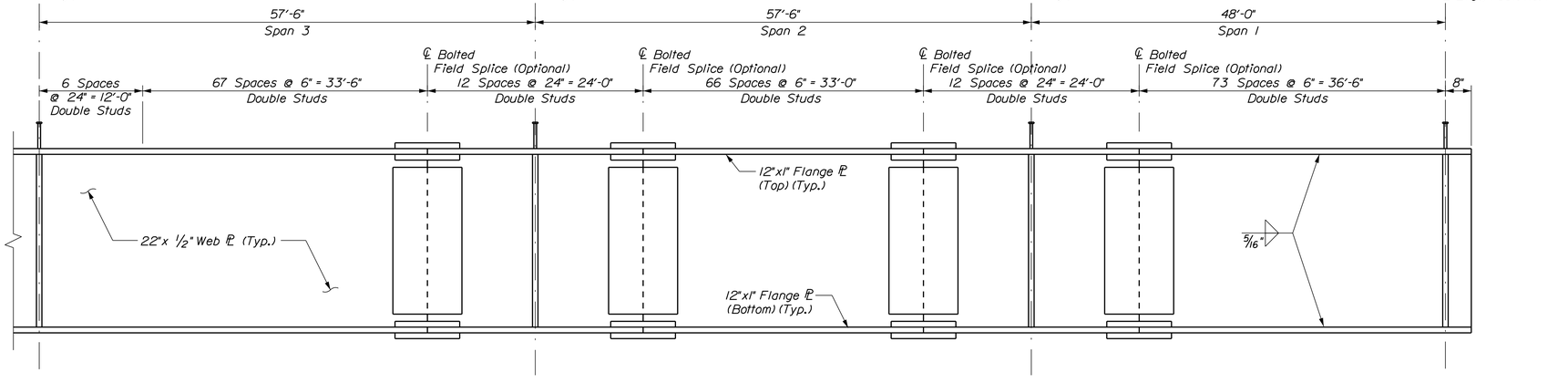
7. Bearing stiffeners shall be mill-to-bear on the bottom flange and tight fit to the top flange. Bearing stiffeners used as connection plates shall be detailed as connection plates.

8. All faying surfaces, with the exception of field splices, shall be painted or sealed in accordance with FHWA Technical Advisory T5140.22, Section 4.c.2.c to prevent the formation of pack rust.

9. All plan dimensions provided are horizontal at 45 degrees F without accounting for profile grade, unless otherwise noted.

10. Girder plates, including flanges, webs, connection plates, field splice plates, bearing stiffeners, and intermediate stiffeners, shall be metalized after fabrication in accordance with Special Provision Section 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating - Shop Applied). Diaphragms shall either be metallized or hot-dipped galvanized after fabrication. Payment for metallizing and/or galvanizing, as applicable, shall be made under Item 506.9104, Thermal Spray Coating (Shop Applied).

11. At the Contractor's option, W24x117 rolled beams may be used in place of the specified welded plate girder. If the Contractor elects to use W24x117 beams, they shall be responsible for ensuring proper detailing and fit up of the rolled beams. Rolled beams shall be paid as Item 504.70, Structural Steel, Fabricated and Delivered and no pay adjustment shall be made for this substitution.



GIRDER ELEVATION AND STUD LAYOUT

(Spans 1-3 Shown, Spans 4-6 Similar. See Sheet 50)
(Connection Plates and Drip Bars not Shown)
946 Shear Studs per Girder
(4,730 Shear Studs Total)
Not to Scale

Scale: 8 0 8 16 — 1/8" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

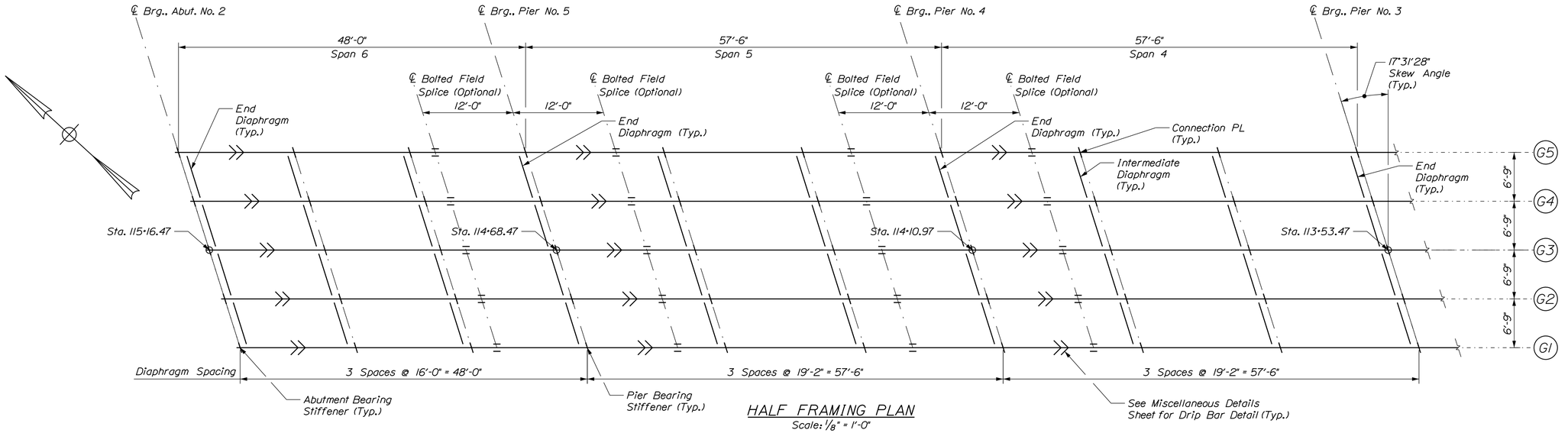
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS FRAMING PLAN & GIRDER ELEVATION (1 OF 2)

VHB: 55347.01
CONTRACT: 2023.03

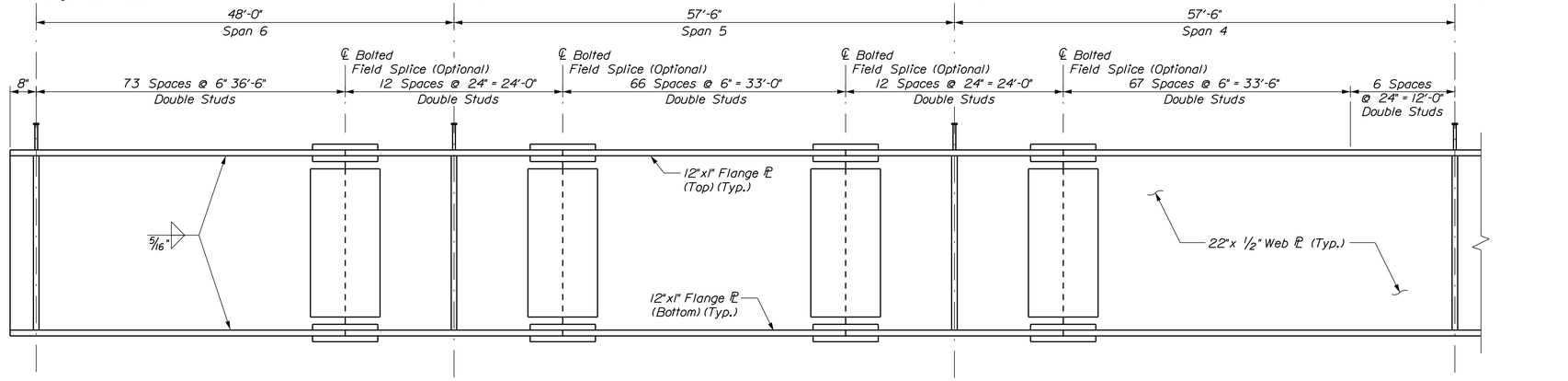
SHEET NUMBER: 49
49 OF 61

Filename: ...\BRIDGE\WSTA\049_Framing_01.dgn



HALF FRAMING PLAN

Scale: 1/8" = 1'-0"



GIRDER ELEVATION AND STUD LAYOUT

(Connection Plates and Drip Bars not Shown)

Not to Scale

Date: 2/3/2023

Filename: ...\BRIDGE\MSTA\050_Framing_02.dgn

Scale: 8 0 8 16

1/8" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

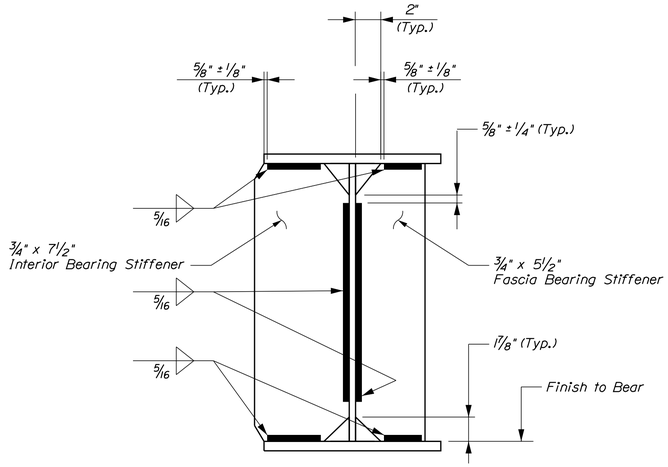
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS FRAMING PLAN & GIRDER ELEVATION (2 OF 2)

VHB: 55347.01

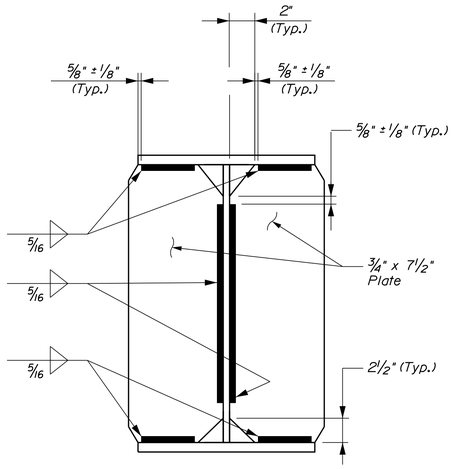
CONTRACT: 2023.03

SHEET NUMBER: 50



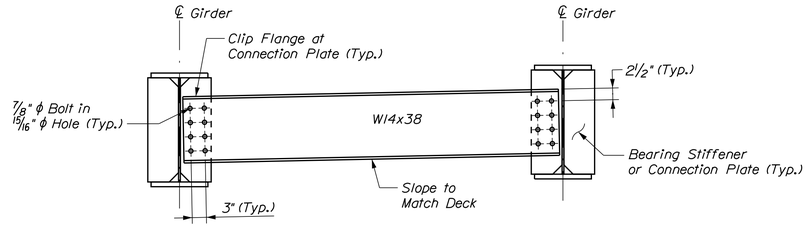
BEARING STIFFENER

Not to Scale



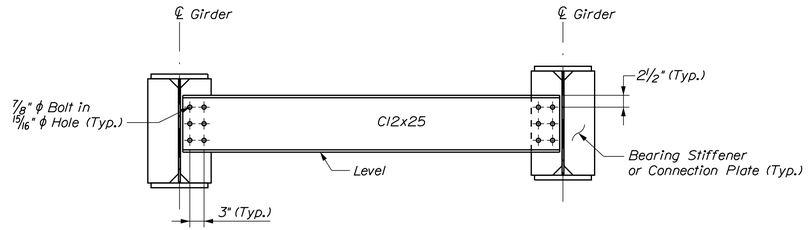
CONNECTION PLATE

(Interior Girder Shown)
Not to Scale



END DIAPHRAGM

(Typical all Bays)
Not to Scale



INTERMEDIATE DIAPHRAGM

(Typical all Bays)
Not to Scale

NOTE:

1. See Standard Details 504 for additional diaphragm details.

Date: 2/3/2023

Filename: ...\WSTA\051_Diaphragm_01.dgn

Scale: As Noted

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
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MAINE TURNPIKE

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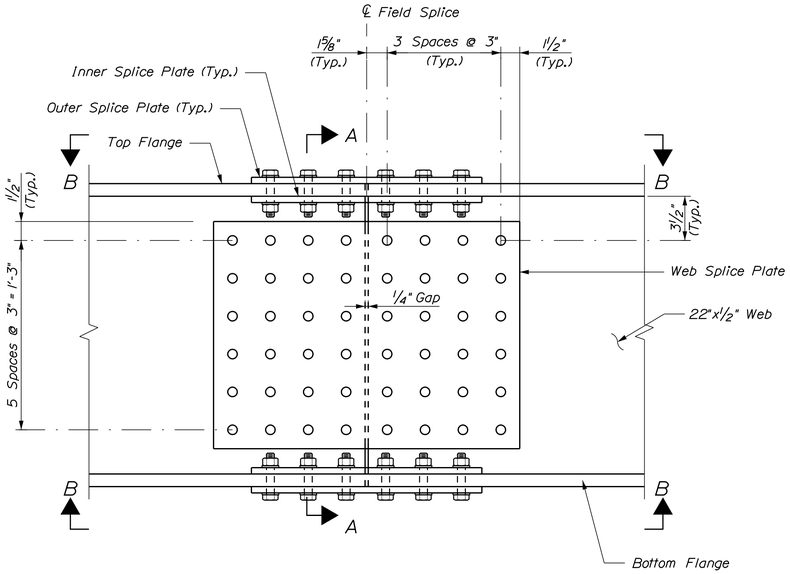
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

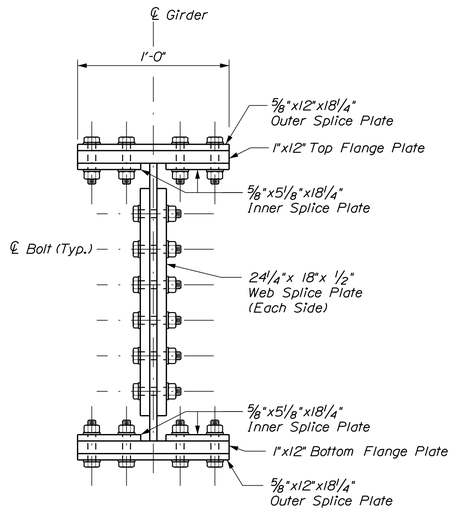
DIAPHRAGM DETAILS

VHB: 55347.01
CONTRACT: 2023.03

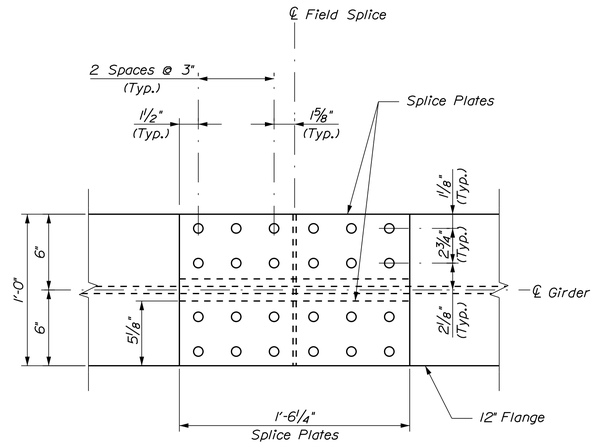
SHEET NUMBER: 51



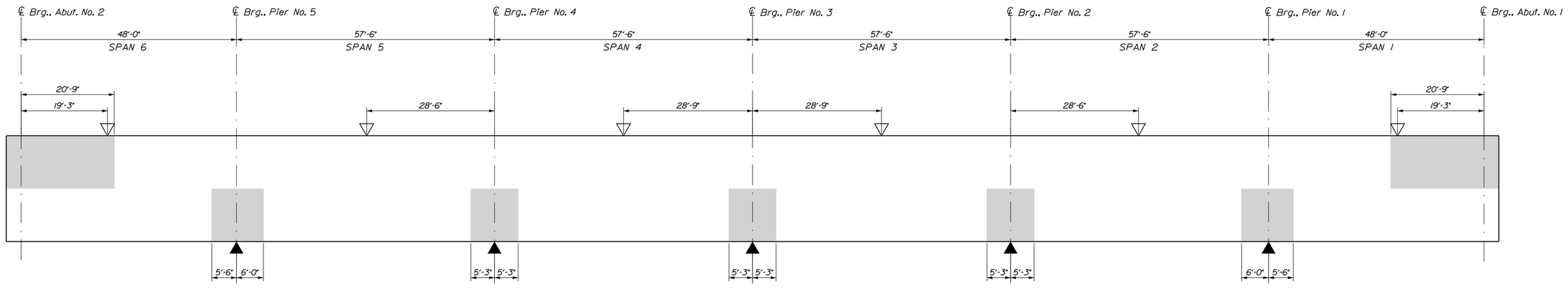
BOLTED FIELD SPLICE ELEVATION
Scale: 2" = 1'-0"



SECTION A-A
Scale: 2" = 1'-0"



VIEW B-B
Scale: 2" = 1'-0"



SCHEMATIC
GIRDER STRESS DIAGRAM
Not to Scale

KEY:
Indicates Areas Always in Compression. All Other Areas are in Tension or have Stress Reversals.
▽ Point of Maximum Positive Moment
▲ Point of Maximum Negative Moment

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\052_beam_01.dgn

Scale: 1 0.5 0 0.5
2" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

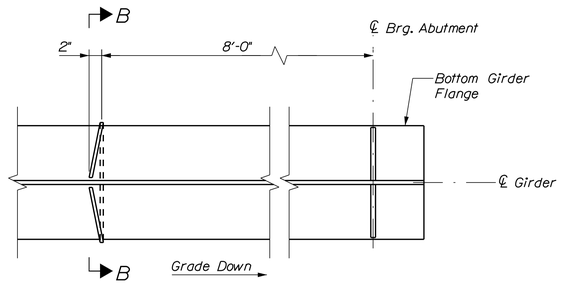
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

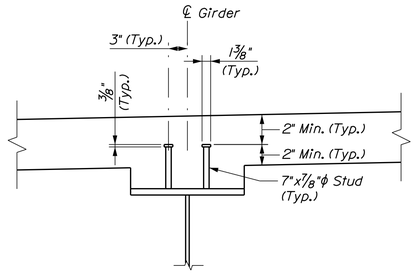
SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

FIELD SPLICE AND STRESS DIAGRAM

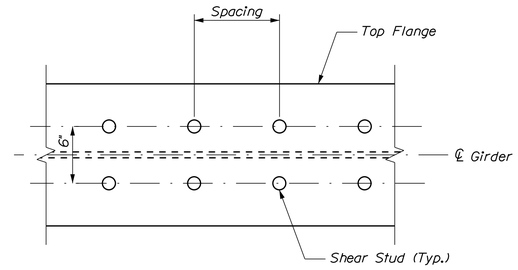
VHB: 55347.01 SHEET NUMBER: 52
CONTRACT: 2023.03 52 OF 61



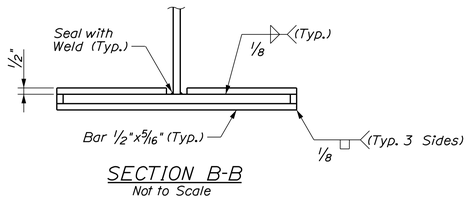
FLANGE DRIP BAR DETAIL
(Abutment Location Shown, Pier Location Similar)
Not to Scale



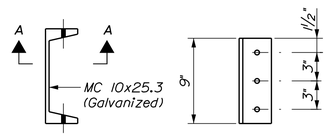
SHEAR CONNECTOR DETAIL
Not to Scale



SHEAR CONNECTOR LAYOUT
(Adjust Shear Connector Spacing as Required Around Splice Plate Bolts)
Not to Scale



SECTION B-B
Not to Scale



SIGN SUPPORT
(4 Required)

SECTION A-A

SIGN SUPPORT DETAILS
Scale: 1 1/2" = 1'-0"

SIGN SUPPORT NOTES

1. One street sign shall be placed on each bridge fascia. Location of Street Sign Support shall be field determined by the Resident.
2. Bolts shall be 1/2" diameter A325 Type I galvanized.
3. Sign Brackets shall be located within two feet of sign ends. Bracket spacing shall be 5' on center maximum.
4. Street Signs shall be provided by the Authority.
5. Installation of the sign and supports will not be measured for payment and will be considered incidental to Item 504.71, Structural Steel Erection.

Scale: 1 0 1
1 1/2" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS

MISCELLANEOUS DETAILS

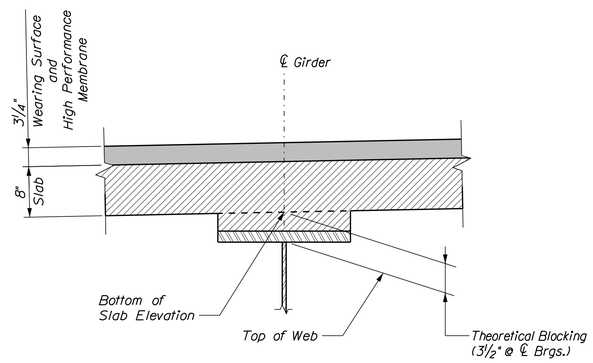
VHB: 55347.01 SHEET NUMBER: 53
CONTRACT: 2023.03 53 OF 61

Date:2/8/2023

Filename: ...\BRIDGE\MSTA\053_Misc_Bm_02.dgn

TABLE OF DEFLECTIONS (in)

Girder	Load	Span No. 1										
		Abut. 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Pier 1
All Girders	Steel Dead Load	0.00	-0.03	-0.05	-0.06	-0.07	-0.07	-0.06	-0.04	-0.02	-0.01	0.00
	Fluid Dead Load	0.00	-0.12	-0.23	-0.30	-0.33	-0.32	-0.27	-0.20	-0.11	-0.04	0.00
	Superimposed Dead Load	0.00	-0.03	-0.05	-0.07	-0.08	-0.08	-0.07	-0.05	-0.03	-0.01	0.00
	Sum	0.00	-0.18	-0.33	-0.43	-0.48	-0.47	-0.40	-0.29	-0.16	-0.05	0.00
Girder	Load	Span No. 2										
		Pier 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Pier 2
All Girders	Steel Dead Load	0.00	-0.01	-0.02	-0.04	-0.06	-0.06	-0.06	-0.04	-0.03	-0.01	0.00
	Fluid Dead Load	0.00	-0.04	-0.12	-0.22	-0.29	-0.31	-0.29	-0.22	-0.13	-0.04	0.00
	Superimposed Dead Load	0.00	-0.01	-0.03	-0.05	-0.07	-0.07	-0.07	-0.05	-0.03	-0.01	0.00
	Sum	0.00	-0.05	-0.18	-0.31	-0.41	-0.45	-0.41	-0.32	-0.18	-0.06	0.00
Girder	Load	Span No. 3										
		Pier 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Pier 3
All Girders	Steel Dead Load	0.00	-0.01	-0.03	-0.05	-0.06	-0.06	-0.06	-0.05	-0.03	-0.01	0.00
	Fluid Dead Load	0.00	-0.04	-0.13	-0.23	-0.30	-0.32	-0.30	-0.23	-0.13	-0.04	0.00
	Superimposed Dead Load	0.00	-0.01	-0.03	-0.05	-0.07	-0.08	-0.07	-0.05	-0.03	-0.01	0.00
	Sum	0.00	-0.06	-0.19	-0.33	-0.43	-0.47	-0.43	-0.33	-0.19	-0.06	0.00
Girder	Load	Span No. 4										
		Pier 3	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Pier 4
All Girders	Steel Dead Load	0.00	-0.01	-0.03	-0.05	-0.06	-0.06	-0.06	-0.05	-0.03	-0.01	0.00
	Fluid Dead Load	0.00	-0.04	-0.13	-0.23	-0.30	-0.32	-0.30	-0.23	-0.13	-0.04	0.00
	Superimposed Dead Load	0.00	-0.01	-0.03	-0.05	-0.07	-0.08	-0.07	-0.05	-0.03	-0.01	0.00
	Sum	0.00	-0.06	-0.19	-0.33	-0.43	-0.47	-0.43	-0.33	-0.19	-0.06	0.00
Girder	Load	Span No. 5										
		Pier 4	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Pier 5
All Girders	Steel Dead Load	0.00	-0.01	-0.03	-0.04	-0.06	-0.06	-0.06	-0.04	-0.02	-0.01	0.00
	Fluid Dead Load	0.00	-0.04	-0.13	-0.22	-0.29	-0.31	-0.29	-0.22	-0.12	-0.04	0.00
	Superimposed Dead Load	0.00	-0.01	-0.03	-0.05	-0.07	-0.07	-0.07	-0.05	-0.03	-0.01	0.00
	Sum	0.00	-0.06	-0.18	-0.32	-0.41	-0.45	-0.41	-0.31	-0.18	-0.05	0.00
Girder	Load	Span No. 6										
		Pier 5	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	Abut. 2
All Girders	Steel Dead Load	0.00	-0.01	-0.02	-0.04	-0.06	-0.07	-0.07	-0.06	-0.05	-0.03	0.00
	Fluid Dead Load	0.00	-0.04	-0.11	-0.20	-0.27	-0.32	-0.33	-0.30	-0.23	-0.12	0.00
	Superimposed Dead Load	0.00	-0.01	-0.03	-0.05	-0.07	-0.08	-0.08	-0.07	-0.05	-0.03	0.00
	Sum	0.00	-0.05	-0.16	-0.29	-0.40	-0.47	-0.48	-0.43	-0.33	-0.18	0.00



BLOCKING DETAIL
Not to Scale

BOTTOM OF SLAB ELEVATIONS @ 10TH POINTS

Span No. 1											
Girder	℄ Brg., Abut. No. 1	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	℄ Brg., Pier No. 1
1	235.06	235.13	235.20	235.26	235.33	235.38	235.44	235.49	235.54	235.59	235.65
2	235.22	235.29	235.36	235.43	235.49	235.55	235.60	235.65	235.70	235.75	235.81
3	235.38	235.45	235.52	235.59	235.65	235.71	235.76	235.81	235.86	235.91	235.97
4	235.27	235.34	235.41	235.48	235.54	235.60	235.65	235.70	235.75	235.80	235.86
5	235.16	235.23	235.30	235.37	235.43	235.49	235.54	235.59	235.64	235.70	235.75
Span No. 2											
Girder	℄ Brg., Pier No. 1	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	℄ Brg., Pier No. 2
1	235.65	235.72	235.80	235.88	235.96	236.03	236.10	236.16	236.22	236.28	236.35
2	235.81	235.88	235.96	236.04	236.12	236.19	236.26	236.32	236.38	236.45	236.51
3	235.97	236.04	236.12	236.20	236.28	236.35	236.42	236.48	236.55	236.61	236.67
4	235.86	235.93	236.01	236.09	236.17	236.24	236.31	236.38	236.44	236.50	236.56
5	235.75	235.82	235.90	235.98	236.06	236.13	236.20	236.26	236.33	236.39	236.45
Span No. 3											
Girder	℄ Brg., Pier No. 2	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	℄ Brg., Pier No. 3
1	236.35	236.43	236.50	236.58	236.66	236.73	236.80	236.87	236.93	236.99	237.05
2	236.51	236.59	236.67	236.75	236.82	236.90	236.96	237.03	237.09	237.15	237.22
3	236.67	236.75	236.83	236.91	236.99	237.06	237.13	237.19	237.25	237.31	237.38
4	236.56	236.64	236.72	236.80	236.88	236.95	237.02	237.08	237.14	237.20	237.27
5	236.45	236.53	236.61	236.69	236.77	236.84	236.91	236.97	237.03	237.09	237.16
Span No. 4											
Girder	℄ Brg., Pier No. 3	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	℄ Brg., Pier No. 4
1	237.05	237.13	237.20	237.27	237.32	237.37	237.40	237.42	237.43	237.43	237.43
2	237.22	237.29	237.36	237.42	237.48	237.52	237.55	237.57	237.57	237.57	237.57
3	237.38	237.45	237.52	237.58	237.63	237.67	237.69	237.71	237.71	237.71	237.70
4	237.27	237.33	237.40	237.46	237.51	237.54	237.57	237.58	237.58	237.57	237.57
5	237.16	237.22	237.28	237.34	237.38	237.42	237.44	237.45	237.45	237.44	237.43
Span No. 5											
Girder	℄ Brg., Pier No. 4	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	℄ Brg., Pier No. 5
1	237.43	237.44	237.43	237.42	237.41	237.38	237.33	237.28	237.21	237.14	237.07
2	237.57	237.57	237.56	237.55	237.53	237.50	237.45	237.40	237.33	237.25	237.18
3	237.70	237.70	237.69	237.68	237.65	237.62	237.57	237.51	237.44	237.36	237.28
4	237.57	237.56	237.55	237.53	237.51	237.47	237.42	237.35	237.28	237.20	237.12
5	237.43	237.42	237.40	237.38	237.35	237.31	237.26	237.19	237.12	237.04	236.95
Span No. 6											
Girder	℄ Brg., Pier No. 5	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	℄ Brg., Abut. No. 2
1	237.07	237.01	236.95	236.88	236.81	236.73	236.64	236.54	236.43	236.32	236.19
2	237.18	237.11	237.05	236.98	236.91	236.83	236.73	236.63	236.52	236.40	236.28
3	237.28	237.22	237.15	237.08	237.00	236.92	236.83	236.72	236.61	236.49	236.36
4	237.12	237.05	236.98	236.91	236.83	236.74	236.65	236.54	236.43	236.30	236.17
5	236.95	236.88	236.81	236.74	236.65	236.56	236.47	236.36	236.24	236.12	235.98

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\054_table_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT
ROUTE 122 UNDERPASS
TABLE OF DEFLECTIONS
AND BOTTOM OF SLAB ELEVATIONS

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 54

Date:2/3/2023

TABLE OF CAMBER ORDINATES PER SPAN ("COS") (in) @ 10TH POINTS

Girder	℄ Brg.. Abut. No. 1	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	℄ Brg.. Pier No. 1
Span No. 1											
1	0.00	0.17	0.31	0.41	0.45	0.44	0.37	0.27	0.15	0.05	0.00
2	0.00	0.18	0.33	0.43	0.48	0.47	0.40	0.29	0.16	0.05	0.00
3	0.00	0.18	0.33	0.43	0.48	0.47	0.40	0.29	0.16	0.05	0.00
4	0.00	0.18	0.33	0.43	0.48	0.47	0.40	0.29	0.16	0.05	0.00
5	0.00	0.17	0.31	0.41	0.45	0.44	0.37	0.27	0.15	0.05	0.00
Span No. 2											
Girder	℄ Brg.. Pier No. 1	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	℄ Brg.. Pier No. 2
1	0.00	0.05	0.17	0.29	0.38	0.42	0.39	0.30	0.17	0.05	0.00
2	0.00	0.05	0.18	0.31	0.41	0.45	0.41	0.32	0.18	0.06	0.00
3	0.00	0.05	0.18	0.31	0.41	0.45	0.41	0.32	0.18	0.06	0.00
4	0.00	0.05	0.18	0.31	0.41	0.45	0.41	0.32	0.18	0.06	0.00
5	0.00	0.05	0.17	0.29	0.38	0.42	0.39	0.30	0.17	0.05	0.00
Span No. 3											
Girder	℄ Brg.. Pier No. 2	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	℄ Brg.. Pier No. 3
1	0.00	0.06	0.18	0.31	0.40	0.44	0.40	0.31	0.18	0.06	0.00
2	0.00	0.06	0.19	0.33	0.43	0.47	0.43	0.33	0.19	0.06	0.00
3	0.00	0.06	0.19	0.33	0.43	0.47	0.43	0.33	0.19	0.06	0.00
4	0.00	0.06	0.19	0.33	0.43	0.47	0.43	0.33	0.20	0.07	0.00
5	0.00	0.06	0.19	0.32	0.41	0.45	0.42	0.33	0.20	0.08	0.00

TABLE OF CAMBER ORDINATES PER SPAN ("COS") (in) @ 10TH POINTS

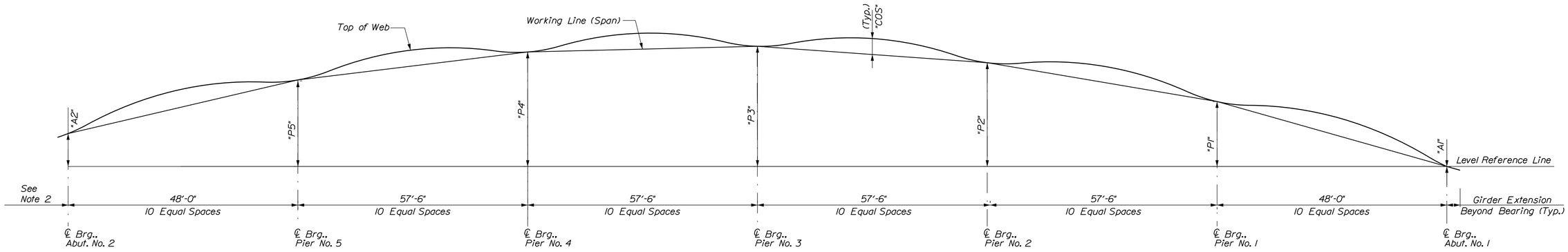
Girder	℄ Brg.. Pier No. 3	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	℄ Brg.. Pier No. 4
Span No. 4											
1	0.00	0.44	0.88	1.23	1.46	1.55	1.47	1.24	0.89	0.46	0.00
2	0.00	0.46	0.90	1.27	1.50	1.58	1.50	1.27	0.91	0.46	0.00
3	0.00	0.46	0.91	1.27	1.50	1.59	1.50	1.27	0.91	0.47	0.00
4	0.00	0.46	0.91	1.27	1.50	1.59	1.50	1.27	0.91	0.47	0.00
5	0.00	0.46	0.90	1.25	1.48	1.56	1.48	1.25	0.90	0.46	0.00
Span No. 5											
Girder	℄ Brg.. Pier No. 4	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	℄ Brg.. Pier No. 5
1	0.00	0.46	0.89	1.24	1.46	1.54	1.46	1.23	0.88	0.45	0.00
2	0.00	0.46	0.90	1.26	1.49	1.57	1.48	1.25	0.89	0.45	0.00
3	0.00	0.46	0.90	1.26	1.49	1.57	1.48	1.25	0.89	0.45	0.00
4	0.00	0.46	0.90	1.26	1.49	1.57	1.48	1.25	0.89	0.45	0.00
5	0.00	0.46	0.89	1.24	1.46	1.54	1.46	1.23	0.88	0.45	0.00
Span No. 6											
Girder	℄ Brg.. Pier No. 5	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	℄ Brg.. Abut. No. 2
1	0.00	0.33	0.65	0.92	1.12	1.22	1.20	1.06	0.81	0.45	0.00
2	0.00	0.33	0.66	0.94	1.14	1.25	1.23	1.09	0.83	0.46	0.00
3	0.00	0.33	0.66	0.94	1.14	1.25	1.23	1.09	0.83	0.46	0.00
4	0.00	0.33	0.66	0.94	1.14	1.25	1.23	1.09	0.83	0.46	0.00
5	0.00	0.33	0.65	0.92	1.12	1.22	1.20	1.06	0.81	0.45	0.00

TABLE OF CAMBER DIMENSIONS (ft)

Girder	A2	P5	P4	P3	P2	P1	A1
1	1.13	2.01	2.38	2.00	1.29	0.59	0.00
2	1.06	1.96	2.35	2.00	1.29	0.59	0.00
3	0.98	1.90	2.32	2.00	1.29	0.59	0.00
4	0.90	1.85	2.29	1.99	1.29	0.59	0.00
5	0.82	1.79	2.26	1.99	1.29	0.59	0.00

CAMBER NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.
2. Dimensions shown do not account for shop fabrication temperature or girder extensions beyond bearing at abutments.



CAMBER DIAGRAM
Not to Scale

Filename: ...\BRIDGE\MSTA\055_camber_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

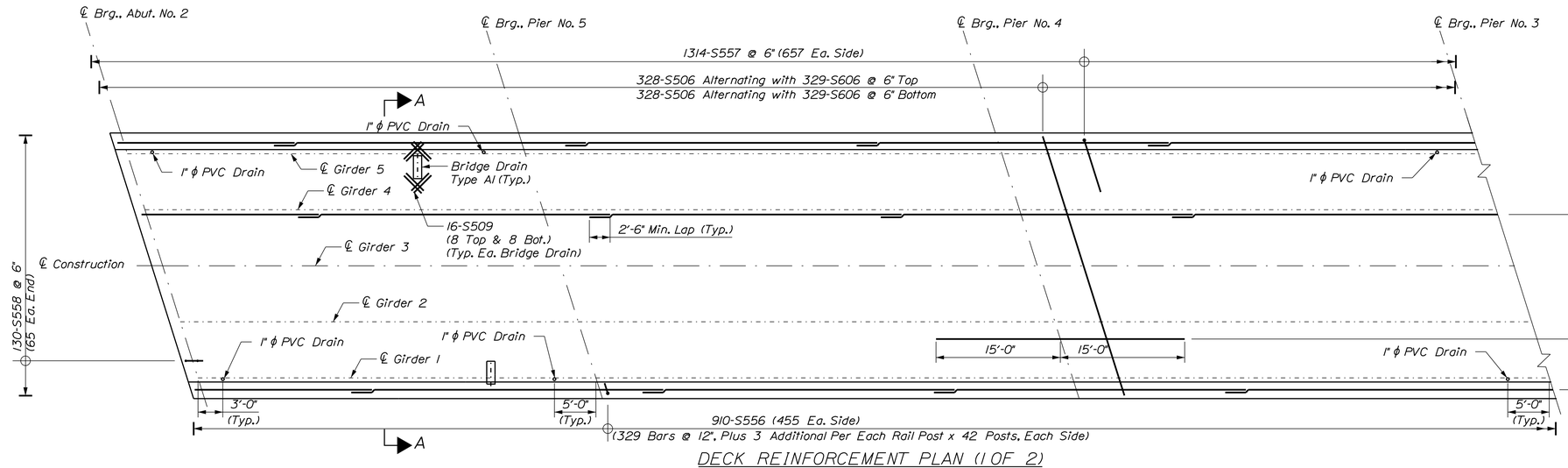
THE GOLD STAR MEMORIAL HIGHWAY

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

CAMBER ORDINATES AND DIAGRAM

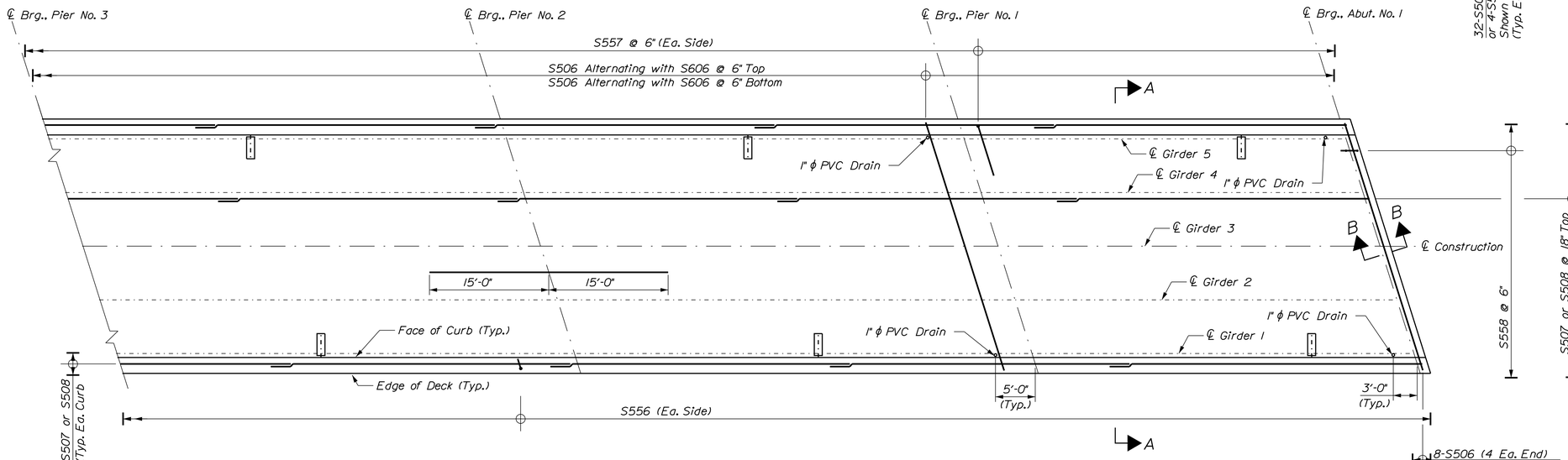
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 55



DECK REINFORCEMENT PLAN (1 OF 2)

Scale: 1/8" = 1'-0"



DECK REINFORCEMENT PLAN (2 OF 2)

Scale: 1/8" = 1'-0"

SHEET NOTE

1. See Deck Reinforcement (2 of 2) for Section A-A.
2. See Deck End Details for Section B-B.

NOTE

Alternate position of bars S507 and S508 such that longitudinal bar laps are staggered between adjacent lines of reinforcement.

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

8 0 8 16
1/8" = 1'-0"

Date:2/3/2023

Filename: ...\MSTA\056_DeckRein_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

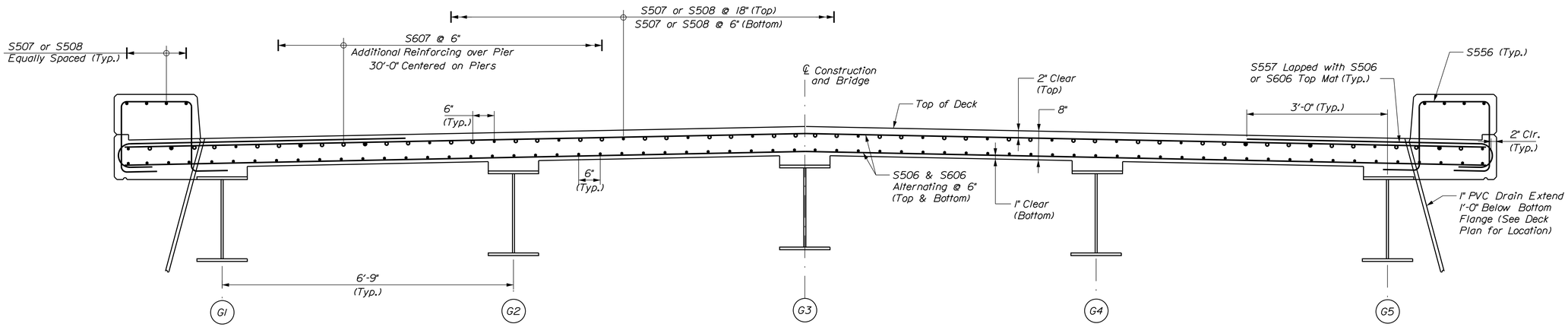
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

DECK REINFORCEMENT (1 OF 2)

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 56
56 OF 61



SECTION A-A
(Pavement not Shown)
Scale: 3/4" = 1'-0"

SHEET NOTE

1. See Deck Reinforcing (1 of 2) for location of Section A-A.

REINFORCING KEY

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
▲ = Cut in Field

Scale: 1 3/4" = 1'-0"

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

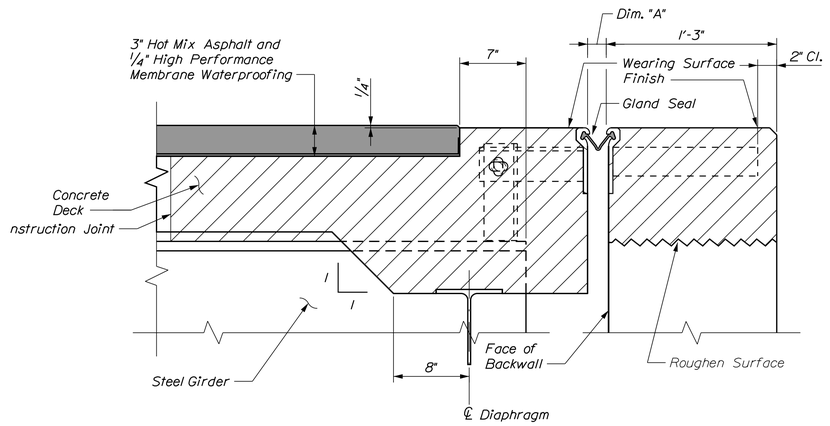
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

DECK REINFORCEMENT (2 OF 2)

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 57
57 OF 61



DECK END DETAIL

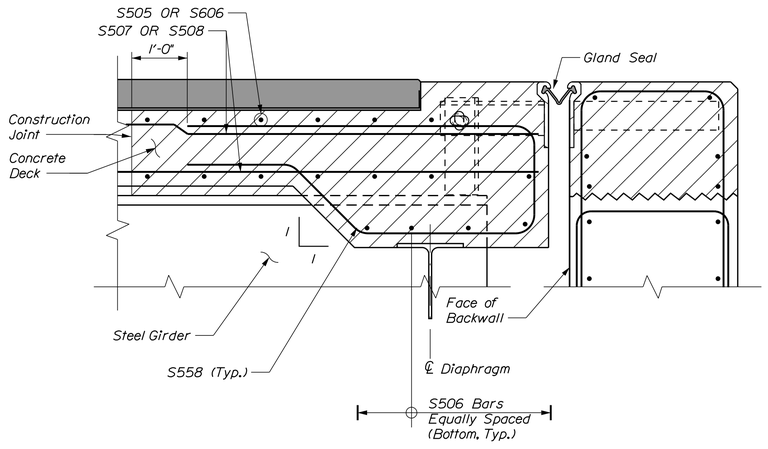
(Perpendicular to ℄ Brg.)
(Showing Hot Mix Asphalt Pavement Wearing Surface)
Scale: 1 1/2" = 1'-0"

EXPANSION JOINT SETTING TABLE	
Temperature	Dimension "A"
25°F	2 1/4"
35°F	2 1/8"
45°F	2"
55°F	1 7/8"
65°F	1 3/4"
75°F	1 5/8"
85°F	1 1/2"

Dimension "A" is normal to the centerline of bearing

GLAND SEAL NOTES:

1. Gland Seals shall be paid as Item 520.21.
2. See Standard Details 520(01) through 520(08) for Gland Seal details, materials, and installation requirements.
3. The Gland Seal shall be selected from the MaineDOT Qualified Products List and sized for the Expansion Joint Setting Table. The Contractor shall submit their selected Gland Seal to Resident for approval prior to any joint fabrication.



SECTION B-B

(Perpendicular to ℄ Brg.)
Scale: 1 1/2" = 1'-0"

SHEET NOTE

1. See Deck Reinforcing (1 of 2) for location of Section B-B.

Date:2/3/2023

Filename: ...\MSTA\058_Deck_End_Det.dgn

Scale:

No.	Revision	By	Date

Designed by:

vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	MEB	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

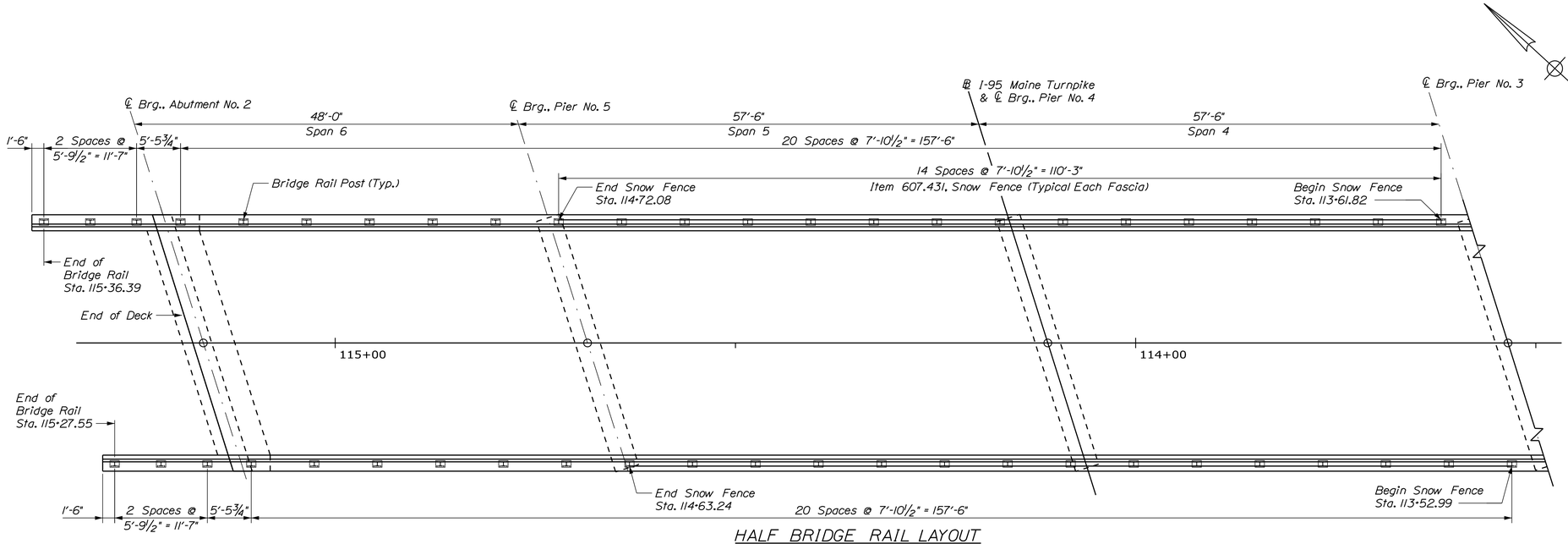
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

DECK END DETAILS

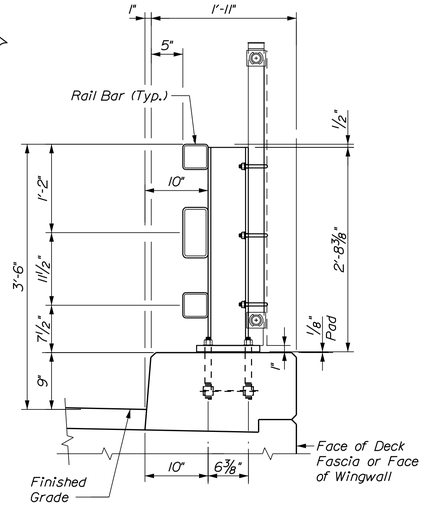
VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 58



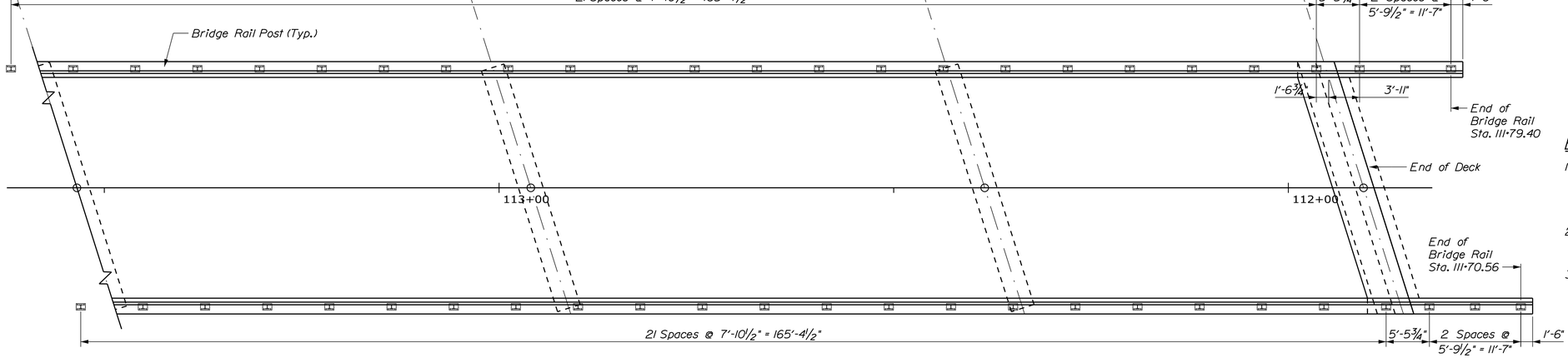
HALF BRIDGE RAIL LAYOUT

(Dimensions at Face of Rail)
Scale: 1/8" = 1'-0"



3-BAR TRAFFIC RAIL

Scale: 1" = 1'-0"



HALF BRIDGE RAIL LAYOUT

(Dimensions at Face of Rail)
Scale: 1/8" = 1'-0"

BRIDGE RAIL NOTES:

1. Structural tubing shall conform to the requirements of ASTM A500, Grade B, Structural Tubing. Rail tubing shall meet the longitudinal charpy v-notch requirements of 15 ft. Lbs. At 0 degrees F. For ASTM A500, Grade B. The test samples shall be taken after forming the tubes.
2. Rail posts and base plates shall conform to the requirements of ASTM A572 Grade 50, except anchor plates may be ASTM A36.
3. Bolts and matching nuts for rail-to-post attachment shall conform to ASTM A307 or A449. All other bolts and nuts shall conform to ASTM 307 and ASTM 563 Grade A respectively or better, except ASTM A307 nuts may be used on the bottom of anchor assembly. Washers shall be hardened steel commercial Type A plain wide washers and shall meet dimensional requirements of ANSI B18.22. Anchor rods shall conform to ASTM A449.
4. All steel components (except stainless) shall be galvanized after fabrication in conformance to AASHTO M232 (ASTM A153) and AASHTO M111 (ASTM A123). The galvanizing kettle shall have 0.05 to 0.09 percent nickel. Galvanizing surfaces shall have a uniform appearance and galvanizing material shall be properly stored.
5. Preformed bearing pads (1/8" thick) shall conform to AASHTO M251.
6. See MaineDOT Standard Details 507 for notes, details, and other information not shown.

1 0 2
1" = 1'-0"
8 0 8 16
1/8" = 1'-0"

Date: 2/3/2023

Filename: ...\BRIDGE\MSTA\059_Rail_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

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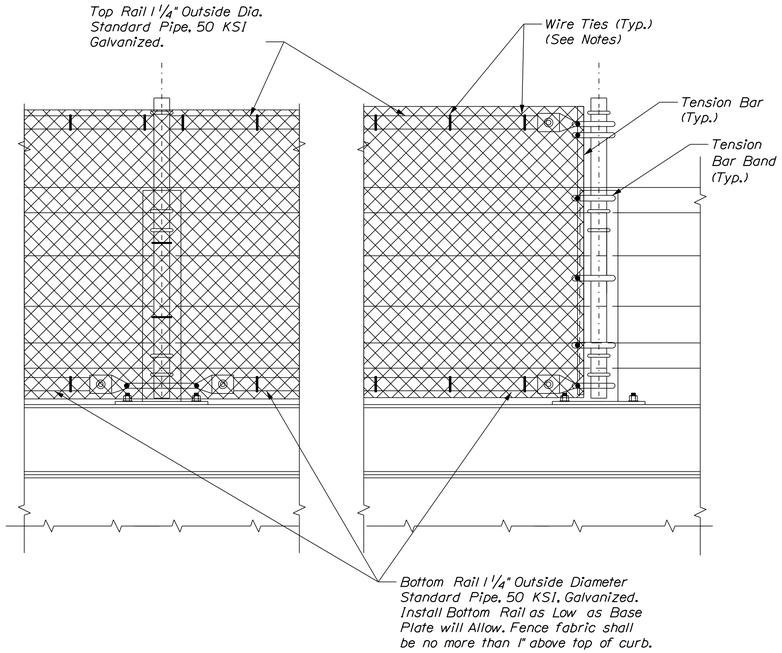
MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS BRIDGE RAIL LAYOUT

VHB: 55347.01
CONTRACT: 2023.03

SHEET NUMBER: 59
59 OF 61

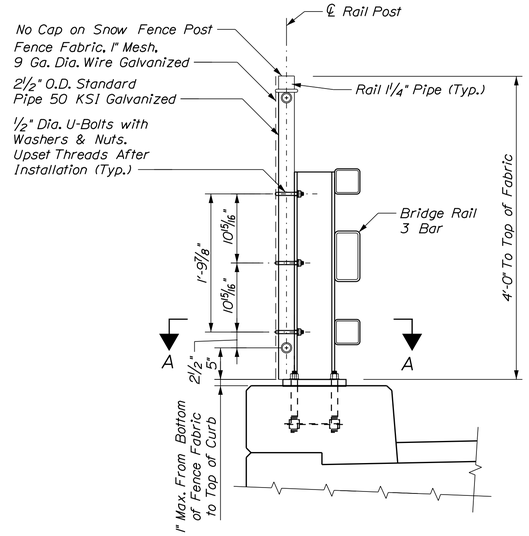


ELEVATION INTERIOR POST

ELEVATION END POST

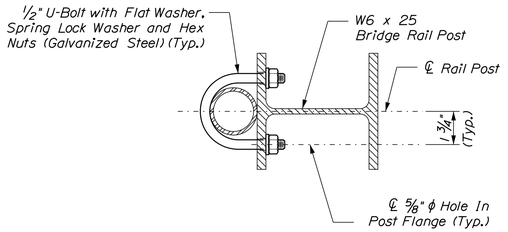
SNOW FENCE POST ATTACHMENT TO TWO - RAIL RAILING

Scale: 1" = 1'-0"



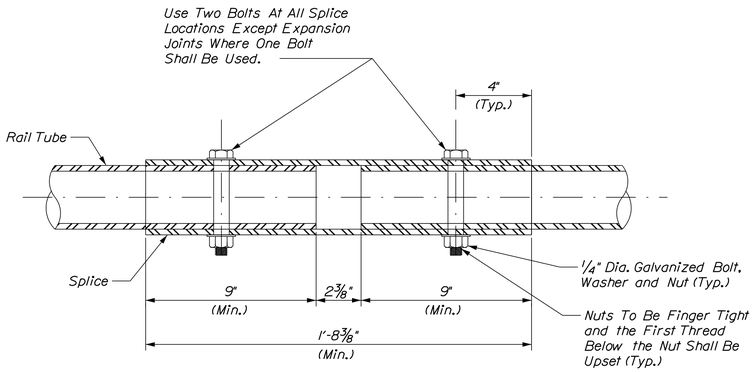
BARRIER DETAIL

Scale: 1" = 1'-0"



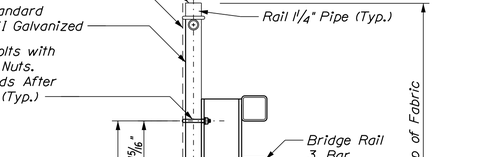
SECTION A-A

Scale: 3" = 1'-0"



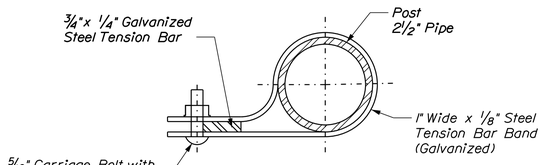
TYPICAL RAIL SPLICE DETAIL (TOP & BOTTOM RAIL)

Not to Scale



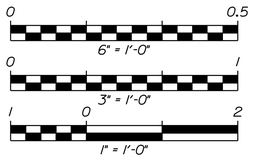
DOUBLE PIGTAILED TIE

Not to Scale



TENSION BAND DETAIL

Scale: 6" = 1'-0"



SNOW FENCE NOTES

1. Chain-link fabric shall be 9 gauge steel, zinc-coated conforming to AASHTO M181, Type I, Class D (ASTM A392), aluminum-coated conforming to AASHTO M181, Type II (ASTM A491). Chain-link fabric shall be knuckled on top and bottom. The size of wire mesh (fabric) shall be 1 1/2".
2. Wire ties shall be standard round 9 gauge zinc- or aluminum-coated steel or 6 gauge aluminum alloy conforming to ASTM F626. All ties shall be wrapped around chain-link fabric twice (double pigtailed) at both ends. Space ties @ 6" o.c. to bottom rail and @ 12" o.c. to all posts and other rails. Mechanical/Power fastened fence ties acceptable.
3. Post, rail pipe and splice sleave shall be hot-dip galvanized steel conforming to AASHTO M181, Grade 1 (ASTM F1083) or aluminum alloy conforming to AASHTO M181 (ASTM B429, alloy 6063-T6). All pipe shall be schedule 40, standard weight. Nominal pipe sizes are shown on the drawing.
4. Tension bars and bar bands shall be steel or aluminum alloy conforming to AASHTO M181 (ASTM F626). Steel components shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
5. All bolts and nuts shall be steel conforming to ASTM A307 and ASTM A563 Grade A respectively. Washers shall be hardened steel commercial Type A plain and shall meet the dimensional requirements of ANSI B18.22. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
6. Rail may be field cut (sawn) to fit post spacing. Galvanized rail, cut or drilled as allowed.

Date:2/3/2023

Filename: ...\BRIDGE\MSTA\060_Snow_01.dgn

Scale: AS NOTED

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
Drawn	DPD	2/3/23	In Charge of	TSB	2/3/23

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

SNOW FENCE DETAILS

VHB: 55347.01 SHEET NUMBER: 60

CONTRACT: 2023.03 60 OF 61

STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION
S506	664	33'-2"	Deck Slab				
S507	768	40'-0"					
S508	96	28'-1"					
S509	128	3'-0"					
S606	658	33'-2"					
S607	210	30'-0"					
A501	35	5'-6"	Abutment 1				
A502	35	5'-0"					
A506	35	7'-11"					
A507	24	33'-2"					
A508	4	6'-8"					
B501	35	6'-2"	Abutment 2				
B502	35	5'-2"					
B506	35	8'-6"					
B507	25	33'-2"					
B508	4	6'-8"					
A601	40	6'-1"	Abutment 1 Wingwalls				
A606	40	7'-7"					
A607	4	5'-5"					
A608	4	4'-11"					
A609	4	4'-5"					
A610	4	3'-11"					
A611	4	3'-5"					
A612	4	2'-11"					
A613	4	2'-5"					
A614	4	1'-11"					
A615	6	8'-2"					
A616	2	9'-10"					
A617	2	11'-10"					
A618	2	13'-10"					
A619	11	15'-4"					
A620	6	7'-7"					
A621	2	9'-0"					
A622	2	11'-0"					
A623	2	13'-0"					
A624	11	14'-9"					
B601	40	6'-3"	Abutment 2 Wingwalls				
B606	40	7'-10"					
B607	4	6'-2"					
B608	4	5'-8"					
B609	4	5'-2"					
B610	4	4'-8"					
B611	4	4'-2"					
B612	4	3'-8"					
B613	4	3'-2"					
B614	4	2'-8"					
B615	6	8'-2"					
B616	2	9'-3"					
B617	2	11'-3"					
B618	2	13'-3"					
B619	11	15'-4"					
B620	6	7'-7"					
B621	2	9'-6"					
B622	2	11'-6"					
B623	2	13'-6"					
B624	11	14'-9"					
3P506	2	31'-8"	Pier 3				
3P507	5	6'-8"					
3P906	5	31'-10"					
4P506	4	31'-8"	Pier 4				
4P507	5	6'-8"					
4P906	5	32'-2"					
5P506	4	31'-8"	Pier 5				
5P507	5	6'-8"					
5P906	5	32'-3"					

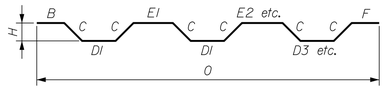
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION

BENT BARS

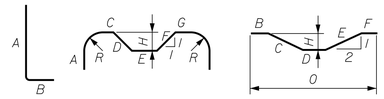
MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
S556	910	6'-0"	S	0'-10"	1'-4"	1'-8"	1'-4"			0'-10"				Deck Slab
S557	1314	6'-1"	C	0'-7"	5'-6"	0'-0"								
S558	130	10'-7"	SJ	2'-7"	1'-0"	1'-5"	0'-11"	4'-8"						
A556	43	9'-2"	S	0'-0"	3'-1"	3'-0"	3'-1"			0'-0"				Abutment 1
A557	30	9'-0"	S	0'-0"	5'-4"	0'-11"	2'-9"			0'-0"				
A558	21	9'-8"	A				4'-10"	4'-10"			4'-7"			
A559	21	9'-8"	V				4'-10"	4'-10"			4'-7"			
B556	43	9'-2"	S	0'-0"	3'-1"	3'-0"	3'-1"			0'-0"				Abutment 2
B557	30	9'-0"	S	0'-0"	5'-4"	0'-11"	2'-9"			0'-0"				
B558	22	9'-8"	A				4'-10"	4'-10"			4'-7"			
B559	22	9'-8"	V				4'-10"	4'-10"			4'-7"			
A560	54	11'-2"	S	0'-0"	4'-9"	1'-8"	4'-9"			0'-0"				Abutment 1 Wingwalls
A561	22	10'-0"	S	0'-0"	4'-2"	1'-8"	4'-2"			0'-0"				
A562	8	3'-6"	V				1'-9"	1'-9"			0'-9"			
B560	54	11'-8"	S	0'-0"	5'-0"	1'-8"	5'-0"			0'-0"				Abutment 2 Wingwalls
B561	22	10'-0"	S	0'-0"	4'-2"	1'-8"	4'-2"			0'-0"				
B562	8	3'-6"	V				1'-9"	1'-9"			0'-9"			
3P550	66	2'-4"	L	0'-10"	1'-6"									Pier 3
3P556	33	3'-6"	S	0'-0"	0'-5"	2'-8"	0'-5"			0'-0"				
3P557	8	4'-0"	S	0'-0"	0'-8"	2'-8"	0'-8"			0'-0"				
3P559	4	8'-2"	S	0'-0"	2'-9"	2'-8"	2'-9"			0'-0"				
4P550	66	2'-11"	L	0'-10"	2'-1"									Pier 4
4P556	33	4'-8"	S	0'-0"	1'-0"	2'-8"	1'-0"			0'-0"				
4P557	8	5'-2"	S	0'-0"	1'-3"	2'-8"	1'-3"			0'-0"				
4P558	10	3'-9"	A				2'-9"	1'-0"			0'-11 1/2"			
4P559	6	8'-2"	S	0'-0"	2'-9"	2'-8"	2'-9"			0'-0"				
5P550	66	3'-2"	L	0'-10"	2'-4"									Pier 5
5P556	33	5'-0"	S	0'-0"	1'-2"	2'-8"	1'-2"			0'-0"				
5P557	8	5'-8"	S	0'-0"	1'-6"	2'-8"	1'-6"			0'-0"				
5P558	10	3'-11"	A				2'-9"	1'-2"			1'-1"			
5P559	6	8'-2"	S	0'-0"	2'-9"	2'-8"	2'-9"			0'-0"				

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

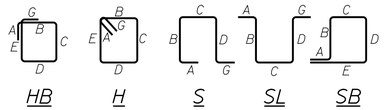
TYPE - BENDING DIAGRAMS



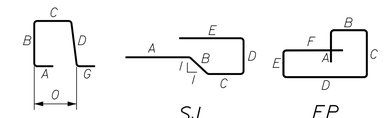
B



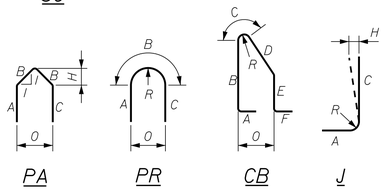
L W M



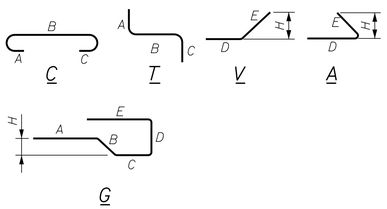
HB H S SL SB



SC SJ EP



PA PR CB J



C T V A G

All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60

GENERAL NOTES

1. The first digit following the letter(s) of the mark indicate the size ofthe bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6

Date:2/3/2023

Filename: ...\MSTA\061_Reinfsch_01.dgn

Scale:NOT TO SCALE

No.	Revision	By	Date

Designed by: vhb

CONSULTANT PROJECT MANAGER: G. Edington

	By	Date		By	Date
Designed	BGP	2/3/23	Checked	GME	2/3/23
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ryan Barnes PE, CPESC

SUPERSTRUCTURE REPLACEMENT ROUTE 122 UNDERPASS

REINFORCING STEEL SCHEDULE

VHB: 55347.01 SHEET NUMBER: 61

CONTRACT: 2023.03 61OF 61