STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD
Bridge Design Specifications, 8th Edition.

DESIGN LOADING

Live Load ..... HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2015) AADT	18860
Future (2035) AADT	22630
DHV - % of AADT	10%
Design Hour Volume	2263
Heavy Trucks (% of AADT)	3%
Heavy Trucks (% of DHV)	3%
Directional Distribution (% of DHV)	50%
18 kip Equivalent P 2.0	189
18 kip Equivalent P 2.5	181
Design Speed (mph)	25 mph

HYDROLOGIC DATA

Drainage Area	3435 sq mi
Ordinary High Water Discharge (Q1.1)	27,500 cfs
Design Discharge (Q50)	89,300 cfs
Check Discharge (Q100)	99,700 cfs

Headwater Elevation & Discharge Velocities vary
See General Notes for more information

MATERIALS

Concrete:
- Sidewalk on bridge, Curbs on Walls and Moment Slabs, Top of Backwall, and Concrete Barrier ..... Class "LP"
- All Other (including Concrete Fill, Leveling Slabs, and Seals) ..... Class "A"

Reinforcing Bars
- Deck Bent Bars, Sidewalk on Bridge Bent Bars, Curbs on Walls and Moment Slabs, Top of Backwall, and Concrete Barrier ..... ASTM A 1035, Grade 100
- Deck Straight Bars, Sidewalk on Bridge Straight Bars ..... ASTM D 7957
- All Other ..... ASTM A 615/A 615M, Grade 60

Structural Steel:
- All Material (except as noted) ..... ASTM A 709, Grade 50 Metalized
- High Strength Bolts ..... ASTM F 3125, Grade A325, Type I, Galvanized

BASIC DESIGN STRESSES

Concrete (Class A)	f 'c = 4,000 psi
Concrete (Class LP)	f 'c = 5,000 psi

Reinforcing Steel Bars:

ASTM A 1035, Grade 100	f y = 100,000 psi
ASTM A 615, Grade 60	f y = 60,000 psi

GFRP Reinforcing Bars:
ASTM D 7957

Structural Steel:

ASTM A 709, Grade 50	F y = 50,000 psi
ASTM F 3125, Grade A325	F μ = 120,000 psi

BRUNSWICK - TOPSHAM
CUMBERLAND & SAGADAHOC COUNTIES
FRANK J. WOOD BRIDGE
OVER
ANDROSCOGGIN RIVER
ROUTE 201/24B
PROJECT NO. STP-2260(300)
PROJECT LENGTH 0.3 mi.
BRIDGE NO. 2016

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
General Notes	3
Construction Notes	4
Drainage Summary	5
Plan (3 Sheets)	6-8
Profile (3 Sheets)	9-11
Curb Geometry (2 Sheets)	12-13
Grading Plan	14
Landscape Plans (13 Sheets)	15-27
Typical Roadway Sections (2 Sheets)	28-29
Cross Sections (8 Sheets)	30-37
Phasing Plans (4 Sheets)	38-41
Detour Plans (7 Sheets)	42-48
Sign Summary (4 Sheets)	49-52
Boring Location Plan (3 Sheets)	53-55
Interpretive Subsurface Profile (3 Sheets)	56-58
Boring Logs (3 Sheets)	59-61
Bridge Plan & Elevation	62
Geometric Layout Plan	63
Abutment No. 1 (13 Sheets)	64-76
Abutment No. 2 (6 Sheets)	77-82
Piers (9 Sheets)	83-91
Retaining Wall Key Plan (2 Sheets)	92-93
Retaining Walls (9 Sheets)	94-102
Moment Slabs (6 Sheets)	103-108
Ornamental Bridge Rail Details (2 Sheets)	109-110
Bearings (2 Sheets)	111-112
Framing Layout Plan	113
Framing Plans (4 Sheets)	114-117
Girder Elevation (2 Sheets)	118-119
Girder Details (6 Sheets)	120-125
Sidewalk Bumpout Bracket	126
Camber Diagram	127
Dead Load Deflections	128
Girder Stress Diagram & BOS Elevations	129
Transverse Section	130
Superstructure Slab (4 Sheets)	131-134
Slab Reinforcement Section	135
Slab Reinforcement Plan (4 Sheets)	136-139
Deck Drain Details	140
Bridge Barrier Details (4 Sheets)	141-144
Finger Joint Details (5 Sheets)	145-149
Curtain Trough Details (2 Sheets)	150-151
Reinforcing Steel Schedule (5 Sheets)	152-156
Lighting Details & Notes (5 Sheets)	157-161
Right of Way Plans (2 Sheets)	162-163
Utility Plans - Consolidated Communications (7 Sheets)	T1-T7
Utility Plans - Brunswick & Topsham Water District (11 Sheets)	C1-C10
Utility Plans - Central Maine Power (11 Sheets)	E1-E11
Utility Plans - Comcast, FirstLight, GWI (7 Sheets)	U1-U7

UTILITIES

Central Maine Power	Brunswick & Topsham Water District
Consolidated Communications	FirstLight Fiber
Comcast Corporation	Great Works Internet
Topsham Sewer District	Brookfield Renewable Energy

MAINTENANCE OF TRAFFIC

Maintain two lanes of traffic over existing bridge and approaches during construction.

PROJECT LOCATION	Frank J. Wood Bridge # 2016 on the Brunswick-Topsham TL which carries Route 201/24B over the Androscoggin River. Latitude 43° 55'14.27N" Longitude 69° 57'57.46W"
PROGRAM AREA	BRIDGE PROGRAM
OUTLINE OF WORK	BRIDGE REPLACEMENT

STP-2260(300) WIN 22603.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

	DATE
APPROVED	
COMMISSIONER:	1-31-23
CHIEF ENGINEER:	1-31-2023

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE
12572 — P.E. NUMBER
1/31/2022 — DATE

PROJECT INFORMATION

PROGRAM	BRIDGE
PROJECT MANAGER	S. ROLLINS
DESIGNER	D. BRYANT
CONSULTANT	T.Y. LIN INTERNATIONAL
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

TOPSHAM - BRUNSWICK
FRANK J. WOOD BRIDGE

TITLE SHEET

SHEET NUMBER
1
OF 163

Date:10/15/2022
Username:
Division:
Filename:\125860\106180_1\001_Title.dgn

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.23	Removing Single Tree Top Only	5	EA
201.24	Removing Stump	5	EA
202.15	Removing Existing Manhole or Catch Basin	1	EA
202.19	Removing Existing Bridge (3,350,000 LB, 1,550 CY)	1	LS
202.202	Removing Pavement Surface	400	SY
203.20	Common Excavation	1,655	CY
203.24	Common Borrow	500	CY
203.25	Granular Borrow	2,630	CY
203.35	Crushed Stone 3/4-inch	57	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	1,770	CY
206.092	Structural Rock Excavation - Major Structures	420	CY
304.10	Aggregate Subbase Course - Gravel	1,740	CY
304.14	Aggregate Base Course - Type A	22	CY
403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)	470	TON
403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)	110	TON
403.213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)	400	TON
403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)	470	TON
409.15	Bituminous Tack Coat, Applied	350	G
502.21	Structural Concrete, Abutments and Retaining Walls	730	CY
502.219	Structural Concrete, Abutments and Retaining Walls (480 CY)	1	LS
502.2356	Miscellaneous Concrete: Thickened Slab	56	CY
502.239	Structural Concrete Piers (480 CY)	1	LS
502.24	Structural Concrete Piers (placed under water)	480	CY
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (1,080 CY)	1	LS
502.31	Structural Concrete Approach Slabs (24 CY)	1	LS
502.49	Structural Concrete Curbs And Sidewalks (510 CY)	1	LS
502.565	Concrete Fill	410	CY
502.703	FRP Downspout	3	EA
502.77	FRP Bridge Drain - Type "B"	24	EA
503.12	Reinforcing Steel, Fabricated and Delivered	199,800	LB
503.13	Reinforcing Steel, Placing	199,800	LB
503.19	Low-Carbon Chromium Reinforcement, Fabricated and Delivered	78,900	LB
503.20	Low-Carbon Chromium Reinforcement, Placing	78,900	LB
504.702	Structural Steel Fabricated and Delivered, Welded (2,420,000 LB)	1	LS
504.71	Structural Steel Erection (2,420,000 LB)	1	LS
505.08	Shear Connectors (7,433 EA)	1	LS
506.9104	Thermal Spray Coating (Shop Applied)	1	LS
507.0831I	Ornamental Steel Bridge Railing, 4 Bar, with Pales (637 LF)	1	LS
507.0843	Aluminum Pipe Hand Railing (58 LF)	1	LS
507.0849I	Barrier-Mounted Aluminum Pedestrian Railing (1,565 LF)	1	LS
508.14	High Performance Waterproofing Membrane (2,900 SY)	1	LS
510.11	Special Detour, Pedestrian Traffic Only	1	LS
511.07	Cofferdam: Abutment 1	1	LS
511.07	Cofferdam: Abutment 2	1	LS
511.07	Cofferdam: Pier 1	1	LS
511.07	Cofferdam: Pier 2	1	LS
511.07	Cofferdam: Pier 3	1	LS
512.081	French Drains (580 LF)	1	LS
515.21	Protective Coating For Concrete Structures (3,510 SY)	1	LS
518.60	Repair of Vertical Surfaces < 8 inches	200	SF
521.23	Expansion Device - Finger Joint	2	EA
521.32	Fabric Trough for Finger Joint	2	EA
523.52	Bearing Installation	25	EA
523.5551	Pot or Disc Bearings, Fixed	5	EA
523.5552	Pot or Disc Bearings, Expansion	20	EA
524.301	Temporary Structural Support	1	LS
525.75	Granite Bench (Type A seating)	8	EA
525.75	Granite Bench (Type B)	23	EA
525.75	Granite Bench (Type BI)	2	EA
525.75	Granite Bench (Type C - Amphitheater)	26	EA
526.301	Portable Concrete Barier, Type 1 (910 LF)	1	LS
526.341	Permanent Concrete Barrier, Special (1,640 LF)	1	LS
530.30	GFRP, Reinforcement Bars, Fabricated & Delivered	365,400	LF
530.31	GFRP, Reinforcement Bars, Placing	365,400	LF
603.159	12 inch Culvert Pipe Option III	227	LF
603.169	15 inch Culvert Pipe Option III	24	LF
603.179	18 inch Culvert Pipe Option III	27	LF
603.199	24 inch Culvert Pipe Option III	27	LF
604.072	Catch Basin Type AI-C	3	EA
604.15	Manhole	2	EA
604.164	Rebuilding Catch Basin	6	EA
604.18	Adjusting Manhole or Catch Basin To Grade	1	EA
604.244	Catch Basin Type F4	4	EA
604.246	Catch Basin Type F5	1	EA
604.248	Catch Basin Type F6	2	EA
604.74	Special Drain	1	EA
605.09	6 inch Underdrain Type B	1,250	LF
606.353	Reflectorized Flexible Guardrail Marker	2	EA
606.356	Underdrain Delineator Post	2	EA
606.365	Guardrail, Remove, Modify, and Reset (Type 3B to 3C)	200	EA
607.19	Chain Link Fence - 8 Foot	46	LF

ESTIMATED QUANTITIES CONTINUED

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
607.2323	Chain Fence Gate 6'X8' Opening	1	EA
607.243	Remove Chain Link Fence	150	LF
607.39	Pedestrian Fence	280	LF
608.08	Reinforced Concrete Sidewalk	840	SY
608.15	Brick Sidewalk with Bituminous Base	130	SY
608.26	Curb Ramp Detectable Warning Field	85	SF
608.282	Granite Pavers with Concrete Base	126	SY
609.11	Vertical Curb Type 1	1,200	LF
609.12	Vertical Curb Type 1 - Circular	95	LF
609.13	Vertical Bridge Curb Type 1	1,635	LF
609.221	Terminal Curb Type 1	94	LF
609.222	Terminal Curb Type 1 - Circular	20	LF
609.441	Curbing Removed And Stacked	1,250	LF
610.08	Plain Riprap	130	CY
610.16	Heavy Riprap	340	CY
610.18	Stone Ditch Protection	2	CY
610.21	River Stone (2"-3" Dia.)	6	CY
610.35	Amphitheater Stone Paving	301	SF
610.61	Natural Boulders	26	EA
613.319	Erosion Control Blanket	220	SY
615.07	Loam	460	CY
616.08	Sodding	480	SY
618.13	Seeding Method Number 1	3	Unit
619.12	Mulch	3	Unit
619.13	Bark Mulch	65	CY
619.14	Erosion Control Mix	10	CY
620.58	Erosion Control Geotextile	585	SY
621.129	Small Deciduous Trees 6'-8' Multistem Group A	10	EA
621.269	Large Decid. Trees 1 3/4"-2" cal. 10'-12' Group C B&B Multi Stem min 3 stem Clump Select	6	EA
621.285	Large Deciduous Trees 3"-3 1/2" Group A B&B	9	EA
621.389	Evergreen Shrubs 15"-18" Container Group A	203	EA
621.395	Evergreen Shrubs 18"-24" Container Group A	129	EA
621.546	Deciduous Shrubs 2'-3' Container Group A	98	EA
621.552	Deciduous Shrubs 3'-4' Container Group A	33	EA
621.71	Herbaceous Perennials 1 Gal Container Group A	756	EA
621.80	Two-Year Establishment Period Warrantee Bond	1	LS
621.98	Metal Landscape Edging	34	LF
626.11	Precast Concrete Junction Box	1	EA
626.22	Non-metallic Conduit	3,250	LF
626.221	Non-metallic Conduit, Concrete Encased	320	LF
626.411	18-inch Diameter Foundation	110	LF
627.733	4" White or Yellow Painted Pavement Marking Line	4,550	LF
627.75	White or Yellow Pavement & Curb Marking	410	SF
627.752	Temporary White or Yellow Pavement & Curb Marking	210	SF
627.77	Removing Pavement Markings	260	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	16,200	LF
629.05	Hand Labor, Straight Time	100	HR
631.10	Air Compressor (including operator)	40	HR
631.11	Air Tool (including operator)	40	HR
631.12	All Purpose Excavator (including operator)	60	HR
631.172	Truck - large (including operator)	60	HR
631.18	Chain Saw Rental (including operator)	40	HR
631.20	Stump Chipper Rental (including operator)	40	HR
631.21	Road Broom Rental (including operator & hauler)	40	HR
631.22	Front End Loader (including operator)	60	HR
631.32	Culvert Cleaner (including operators)	60	HR
633.01	Seat Walls	116	LF
634.160	Highway Lighting	1	LS
634.162	Park Lighting System (Brunswick)	1	LS
634.162	Park Lighting System (Topsham)	1	LS
634.2101	Type A Lighting Standard	33	EA
634.2102	Type B Lighting Standard	12	EA
639.18	Field Office, Type A	1	EA
642.17	Cast-in-place Concrete Steps: with Granite Treads	19	CY
642.183	Granite Step: Amphitheater	1	LS
643.62	Rectangular Rapid Flashing Beacon	4	EA
643.72	Temporary Traffic Signal: Brunswick Approach	1	LS
645.306	Flexible Reflectorized Delineator	2	EA
645.51	Special Signing	1	LS
652.312	Type III Barricades	6	EA
652.33	Drum	25	EA
652.34	Cone	75	EA
652.35	Construction Signs	860	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	10,500	HR
652.41	Portable Changeable Message Signs	9	EA
656.75	Temporary Soil Erosion And Water Pollution Control	1	LS
658.20	Acrylic Latex Finish, Green	1,550	SY
659.10	Mobilization	1	LS
660.21	On The Job Training	2,000	HR
841.48	Bollards	3	EA
841.481	Removable Bollard	3	EA

ESTIMATED QUANTITIES: BRUNSWICK & TOPSHAM WATER DISTRICT

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.21	Rock Excavation	100	CY
403.207	Hot Mix Asphalt - 19 mm	200	TON
403.208	Hot Mix Asphalt - 12.5 mm	200	TON
461.131	Temporary Pavement	100	TON
501.25	Steel Casing - 30" Galvanized	40	LF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	200	HR
801.03	Test Pits	2	EA
802.10	12" Ductile Iron Watermain	20	LF
822.322	6-Inch Ductile Iron Pipe	130	LF
822.34	8" Class 52 Ductile Iron Pipe	20	LF
822.3701	16" Ductile Iron Water Main	800	LF
823.3105	12" Insertion Valve And Valve Box	1	EA
823.3112	16" Gate Valve With Box	2	EA
823.33	6" Gate Valve With Box	1	EA
824.30	Fire Hydrant	1	EA
825.322	2" Curb Stop	1	EA
825.3221	2" Corporation Stop	1	EA
825.333	1" Air Release Valve, Manual	1	EA
825.4221	2" Polyethylene Service	40	LF
825.5411	Temporary Watermain, 6"	1	LS
827.33	Trench Insulation	40	LF
830.104	Watermain Bridge Crossing, 16" Preinsulated	900	LF

ESTIMATED QUANTITIES: CONSOLIDATED COMMUNICATIONS

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
604.18	Adjust Manhole or Catch Basin To Grade	2	EA
629.05	Hand Labor, Straight Time	8	HR
652.38	Flaggers	144	HR
910.301	Special Work - Utility Conduit (CC - Approaches Only)	1	LS
910.301	Special Work - Utility Conduit (CC - Bridge Only)	1	LS

ESTIMATED QUANTITIES: CENTRAL MAINE POWER

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
604.158	Utility Vault (CMP)	1	EA
604.18	Adjust Manhole or Catch Basin To Grade	1	EA
652.38	Flaggers	100	HR
845.10	Structural Steel Utility Support (Elec. & Comms.)	0.5	LS
910.301	Special Work - Utility Conduit (CMP - Bridge Only)	1	LS
910.301	Special Work - Utility Conduit (CMP - Approach Only)	1	LS

ESTIMATED QUANTITIES: GWI, COMCAST, & FIRSTLIGHT

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
604.158	Utility Vault (GWI, Comcast & FirstLight)	2	EA
652.38	Flaggers	100	HR
845.10	Structural Steel Utility Support (Elec. & Comms.)	0.5	LS
910.301	Special Work - Utility Conduit (GWI, Comcast & FirstLight - Bridge Only)	1	LS
910.301	Special Work - Utility Conduit (GWI, Comcast & FirstLight - Approaches Only)	1	LS

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	DATE
BY	10/22
D.Myers	10/22
D.Bryant	
Scott Rollins	
PROJ. MANAGER	
D.Myers	
D.Bryant	
DESIGN-DETAILED	
CHECKED-REVIEWED	
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ESTIMATED QUANTITIES

SHEET NUMBER
2
OF 163

Filename: ...\106180_109\002_Estimate_01.dgn Division: Username: Date:10/15/2022

Filename: ...\003_Notes_General_1.dgn Username: Division: Date:10/15/2022

GENERAL CONSTRUCTION NOTES

1. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
2. The location of existing underground utilities and drainage shown on plans and cross-sections is approximate and should be confirmed by the Contractor.
3. For easements, construction limits, and right-of-way lines, refer to Right of Way Maps.
4. Pavement thicknesses shown on the typical sections are intended to be nominal.
5. Where pavement under this contract joins an existing pavement, the existing pavement shall be saw cut along a smooth line to a neat, even, vertical joint, as directed by the Resident. Broken or raveled edges will not be permitted. All work necessary for the preparation of this joint will be considered incidental to the related contract items.
6. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.
7. Driveway fill side slopes shall be the same as the non-guardrail fill slopes unless otherwise noted on the plans.
8. Existing inslopes steeper than 2:1 in proposed fill areas shall be benched as directed by the Resident.
9. Commercial paved entrances shall be constructed with 3 inches of hot mix asphalt and 11 inches of aggregate subbase course gravel.
10. Cross slopes for normal and superelevated sections will be straight unless otherwise directed by the Department.
11. Existing culverts and catch basins to remain shall be cleaned as directed by the Resident. Payment will be made under Item 631.32, Culvert Cleaner (Including Operators).
12. No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.
13. The culvert sizes shown on the plans and cross sections are for smooth lined pipes. For comparable corrugated sizes see the drainage tabulation.
14. Flat tops for catch basins are not allowed unless noted on the Plans or directed by the Resident.
15. The following items shall be incidental to the 603 item(s):

    Plugging of existing pipes.

    Removal of existing pipes and furnishing, placing, grading and compacting of any new granular and/or fill material for bedding of the new pipe.
16. All existing guardrail to be removed shall become the property of the Contractor. Removal and disposal shall be considered incidental to the contract.
17. A delineator post will be installed at each underdrain outlet.
18. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.
19. In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.
20. All embankment material, except as otherwise shown, placed below elevation 18.0 in Brunswick and elevation 28.0 in Topsham shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Material for Underwater Backfill.
21. Place heavy riprap on sideslopes up to EL. 16.0 at Brunswick side and EL. 24.0 at Topsham.
22. Where it is apparent that runoff will cause continual erosion, extended-use Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed. Payment will be made under the appropriate contract items.
23. The Contractor shall submit a Bridge Demolition Plan to the Resident at least 15 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. No work related to the removal of the bridge shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting, and finalizing the Demolition Plan will be considered incidental to the bridge removal pay item.
24. Existing signs within the Project limits shall be removed and reset as shown on the plans or as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.
25. Demounting of wood and U-channel posts will not be paid for directly but will be considered incidental. Posts that are damaged by the Contractor and that are designated to be reset shall be replaced by the Contractor with new posts conforming to the applicable Specifications at no additional costs to the Department.
26. Resetting wood and U-channel posts will not be paid for directly but will be considered incidental. Furnishing and installing new wood and U-channel posts due to the condition of existing posts will not be paid for directly but will be considered incidental to the contract. Earth excavation and backfilling, furnishing and placing assembly hardware, backfilling material, and other incidentals necessary for the installation of the posts, will not be paid for directly but will be considered incidental.
27. When the new bridge is open to traffic, the Contractor shall notify the MaineDOT Region 2 Traffic Engineer that the new bridge is open so the weight limit restriction signs which are currently located outside the project limits may be removed by MaineDOT. Removal of the weight limit restriction signs within the project limits shall be the Contractor's responsibility.
28. Place loam 2 inches deep on all new or reconstructed sideslopes unless otherwise noted or directed by the Resident.
29. Any base pavement not surfaced before winter will require temporary pavement markings of paint, both yellow centerline and white edge lines and will be considered part of Standard Specifications Item 627.78, Temporary Pavement Marking Line, White or Yellow.
30. Place a 24 inch wide strip of Erosion Control Blanket on the side slopes along the top of the riprap and behind the wingwalls.
31. Pavement markings shall conform to the standard details and latest edition of the Manual on Uniform Traffic Control Devices. The abbreviations shown on the plans are as follow.
    DYCL - 4" Double Yellow Centerline
    SWEL - 4" Single White Edge Line
    SL - 12" White Stop Line
32. Protective coating for concrete surfaces shall be applied to the following areas:

    All exposed surfaces of concrete curbs and sidewalks, including curbs on overlook walls, retaining walls, and moment slabs.

    Fascias down to the drip notch.

    All exposed surfaces of concrete barriers.

    All exposed surfaces of retaining wall 3.

    Top of abutment backwalls and wingwalls, exposed concrete at stairs and seat walls, to one foot below ground on vertical walls against earth.
33. The Structural Excavation pay limits will be bounded by vertical planes 18" beyond the horizontal limits of the concrete structure or by vertical planes at the limits of the structure's unreinforced leveling slab or concrete seal as dimensioned on the plans, whichever is greater, unless noted otherwise on the plans.
34. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
35. Headwater Elevations and Discharge Velocities vary widely across the site due to the nearby dam and the riverbed topography. Span 1 and Span 3 results are approximated below. Refer to the hydrologic report for more information.

	Span 1	Span 3
Headwater Elevation (Q1.1)	±10.0 ft.	±19.0 ft.
Headwater Elevation (Q25)	±17.0 ft.	±23.0 ft.
Headwater Elevation (Q50)	±18.0 ft.	±23.0 ft.
Headwater Elevation (Q100)	±20.0 ft.	±24.0 ft.
Discharge Velocity (Q1.1)	±7.0 fps	±12.0 fps
Discharge Velocity (Q25)	±9.0 fps	±18.0 fps
Discharge Velocity (Q50)	±10.0 fps	±20.0 fps
Discharge Velocity (Q100)	±12.0 fps	±21.0 fps

The Powerhouse can flow approximately 8,200 cfs
One Tainter gate can flow approximately 10,000 cfs (There are two gates ttal, plus the spillway).

36. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.
37. The project geotechnical report titled: Frank J. Wood Bridge No. 2016 over the Androscoggin River, Geotechnical Design Report 09.0025917.02, July 29, 2019 may be accessed at the MaineDOT web address.
38. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.
39. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

    If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

    If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

    If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.
40. The existing bridge shall be removed by and become the property of the Contractor. The steel portions of the existing bridge may be coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including the lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required to remove and dispose of the existing bridge will be made incidental to the bridge removal pay item. Item 202.19, Removing Existing Bridge.
41. Existing bridge superstructure and Pier 1 shall be removed in their entirety. Existing Pier 2 shall remain in place. Pier 1 shall be removed to an elevation flush with the existing river bed. Concrete and granite masonry abutments shall be removed down to the elevations shown on the plans.
42. MaineDOT Bridge Maintenance will be maintaining the existing bridge, which is in poor condition and needing regular maintenance and inspection. The Contractor shall allow for mobilization of equipment and no additional compensation shall be paid to the Contractor for delay as a result of repairs or inspection completed by MaineDOT Bridge Maintenance.
43. Before fabrication of landscape items (benches, amphitheater, etc.) the Contractor and Supplier shall meet with the Resident Engineer and Project Landscape Architect to review and approve samples, piece detailing and finishes, and construction sequencing and delivery.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	BY	DATE
Scott Rollins		
PROJ. MANAGER		
DESIGN-DETAILED	M.Devoid	2/21
CHECKED-REVIEWED	D.Myers	2/21
DESIGN2-DETAILED2	D.Bryant	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GENERAL NOTES

SHEET NUMBER
3
OF 163

TYLin

ITEM 201.23 - REMOVE SINGLE TREE TOP ONLY

STATION	OFFSET	TYPE
3+57.02	113.15' RT	15" PINE
3+75.08	62.91' RT	14" HARDWOOD
13+33.00	12.23' LT	16" ASH DOUBLE
13+41.28	14.76' LT	16" ASH CLUMP
13+65.64	18.68' LT	16" ASH TRIPLE

ITEM 201.24 - REMOVE STUMP

STATION	OFFSET	TYPE
3+57.02	113.15' RT	15" PINE
3+75.08	62.91' RT	14" HARDWOOD
13+33.00	12.23' LT	16" ASH DOUBLE
13+41.28	14.76' LT	16" ASH CLUMP
13+65.64	18.68' LT	16" ASH TRIPLE

ITEM 202.15 - REMOVE EXISTING MANHOLE OR CATCH BASIN

STATION	OFFSET
3+77.10	21.56' RT

ITEM 507.0831I - ORNAMENTAL STEEL BRIDGE RAILING, 4 BAR, WITH PALES

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
1+81.93	26.30' RT		3+64.21	27.59' RT	190.52'
2+23.62	25.16' LT		3+07.47	32.75' LT	85.28'
3+64.21	27.58' RT		4+38.13	22.58' RT	88.95'
4+09.40	67.59' LT		4+37.79	22.58' LT	97.23'
12+57.29	22.58' RT		13+17.68	29.35' RT	63.52'
12+64.25	22.23' LT		12+92.84	22.00' LT	28.66'
12+99.28	22.00' LT		13+95.00	22.00' LT	95.72'
13+27.35	29.35' RT		13+65.57	22.71' RT	41.59'

ITEM 603.159 - 12" CULVERT PIPE OPTION III

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
2+80.14	43.85' RT		2+96.38	66.98' RT	45.0'
3+60.29	40.40' RT		3+58.00	60.04' RT	18.0'
3+58.00	60.04' RT		3+50.87	92.91' RT	34.0'
3+58.00	60.04' RT		4+04.56	53.16' RT	49.0'
3+71.27	57.76' RT		3+76.49	50.11' RT	9.0'
12+78.33	36.99' RT		12+85.45	56.03' RT	19.0'
12+85.45	56.03' RT		13+00.40	61.97' RT	14.5'
13+00.40	61.97' RT		12+95.19	72.37' RT	9.0'
13+51.06	32.35' RT		13+67.73	40.66' RT	19.0'

ITEM 603.169 - 15" CULVERT PIPE OPTION III

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
13+61.64	16.85' RT		13+68.93	39.63' RT	27.25'

ITEM 603.179 - 18" CULVERT PIPE OPTION III

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
4+00.00	14.88' RT		4+08.18	14.88' LT	30.13'

ITEM 603.199 - 24" CULVERT PIPE OPTION III

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
4+08.18	14.88' LT		4+16.30	48.18' LT	28.76'

ITEM 604.072 - CATCH BASIN TYPE AI-C

STATION	OFFSET
4+00.00	14.88' RT
4+08.18	14.88' LT
13+61.03	14.95' RT

ITEM 604.15 - MANHOLE

STATION	OFFSET
3+58.00	60.04' RT
13+00.40	61.97' RT

ITEM 604.164 - REBUILDING CATCH BASIN

STATION	OFFSET	TYPE
0+82.73	24.23' RT	CASCADE GRATE
13+69.53	41.54' RT	TYPE D FRAME & COVER
14+03.41	33.91' RT	TYPE D FRAME & COVER
14+21.73	50.18' RT	CASCADE GRATE
15+48.12	22.33' RT	CASCADE GRATE
15+70.82	14.91' LT	CASCADE GRATE

ITEM 604.244 - CATCH BASIN TYPE F4

STATION	OFFSET
2+80.14	43.85' RT
3+71.27	57.76' RT
3+76.49	50.11' RT
12+78.33	36.99' RT

ITEM 604.246 - CATCH BASIN TYPE F5

STATION	OFFSET
12+85.45	56.03' RT

ITEM 604.248 - CATCH BASIN TYPE F6

STATION	OFFSET
3+60.29	40.40' RT
13+51.06	32.35' RT

ITEM 605.09 - 6" UNDERDRAIN TYPE B

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
0+70.00	17.26' LT		4+08.18	15.00' LT	322.24'
0+88.64	23.09' RT		4+00.00	15.00' RT	315.41'
12+75.75	15.88' LT		15+68.82	15.17' LT	293.07'
12+75.75	15.88' RT		13+59.03	15.88' RT	83.28'
13+67.00	15.00' RT		15+46.17	21.91' RT	179.88'

ITEM 607.19 - CHAIN LINK FENCE - 8 FOOT

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
4+12.81	78.87' LT		4+19.81	45.63' LT	45.63'

ITEM 607.2323 - CHAIN FENCE GATE 6'X8' OPENING

STATION	OFFSET	TO	STATION	OFFSET
4+09.47	67.70' LT		4+12.81	72.87' LT

ITEM 607.243 - REMOVE CHAIN LINK FENCE

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
3+59.97	10.14' LT		4+09.40	66.87' LT	82'
12+60.15	16.01' RT		12+84.69	37.29' LT	60'

ITEM 607.39 - PEDESTRIAN FENCE

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
2+56.42	95' RT		4+18.80	23.99' RT	104'
4+19.90	45.66' LT		4+37.30	23.56' LT	29'
12+57.70	22.58' LT		13+00.45	22.00' LT	66'
12+57.84	24.33' RT		12+92.86	66.98' RT	81'

ITEM 608.26 - CURB RAMP DECTECTABLE WARNING FIELD

STATION	OFFSET	AREA (SF)
13+89.07	32.04' RT	26.77
14+36.23	32.47' RT	15.22

ITEM 609.1I - VERTICAL CURB TYPE I

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
0+70.00	26.50' RT		4+35.69	16.00' RT	371.67'
0+70.00	20.72' LT		1+49.80	16.00' LT	80.05'
2+26.38	16.00' LT		3+03.34	16.00' LT	75.42'
3+70.49	26.12' LT		3+86.50	40.48' LT	21.02'
3+74.86	16.00' LT		4+35.81	16.00' LT	60.44'
12+59.19	16.00' LT		15+68.82	15.30' LT	309.74'
12+59.31	16.00' RT		13+58.66	16.00' RT	99.24'
13+17.09	28.00' LT		13+93.51	32.67' LT	76.80'
13+97.67	47.15' RT		14+01.86	65.62' RT	18.94'
14+32.23	34.58' RT		14+38.54	28.58' RT	8.71'
14+71.38	19.20' RT		14+82.75	24.01' RT	12.34'

ITEM 609.12 - VERTICAL CURB TYPE I - CIRCULAR

STATION	OFFSET	TO	STATION	OFFSET	RADIUS	LENGTH
13+58.66	16.00' RT		13+75.19	19.58' RT	40.00'	17.04'
13+85.21	26.09' RT		13+93.22	35.86' RT	40.00'	14.19'
13+96.34	42.58' RT		13+97.67	47.15' RT	40.00'	2.67'
14+20.88	61.27' RT		14+27.31	40.89' RT	30.63'	21.68'
14+45.88	23.35' RT		14+61.70	17.71' RT	34.30'	16.97'
14+61.70	17.71' RT		14+71.38	19.20' RT	20.00'	9.90'

ITEM 609.221 - TERMINAL CURB TYPE I

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
1+49.80	16.00' LT		1+68.30	16.02' LT	18.00'
2+18.21	16.00' LT		2+26.38	16.00' LT	8.00'
3+03.34	16.00' LT		3+13.54	16.00' LT	10.00'
3+66.69	16.00' LT		3+74.86	16.00' LT	8.00'
3+67.51	23.35' LT		3+70.49	26.12' LT	4.00'
3+86.50	40.48' LT		3+89.62	43.17' LT	4.00'
14+27.31	40.89' RT		14+32.23	34.58' RT	8.00'
14+38.54	28.58' RT		14+45.88	23.35' RT	9.02'

ITEM 609.222 - TERMINAL CURB TYPE I - CIRCULAR

STATION	OFFSET	TO	STATION	OFFSET	RADIUS	LENGTH
13+75.19	19.58'		13+85.21	26.09'	40.00'	12.00'
13+93.22	35.86'		13+96.34	42.58'	40.00'	8.00'

ITEM 609.441 - CURBING REMOVED AND STACKED

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
0+70.00	26.50' RT		4+00.22	59.07' RT	344.26'
0+70.00	20.72' LT		1+67.86	18.23' LT	96.96'
2+18.05	14.34' LT		3+02.75	0.64' LT	84.98'
3+56.10	13.23' RT		4+09.22	30.98' RT	57.39'
12+62.01	36.23' RT		15+68.82	15.94' LT	319.66'
12+72.19	64.34' RT		14+01.12	65.78' RT	143.49'
14+20.88	61.27' RT		14+84.47	24.73' RT	84.81'

ITEM 610.08 - PLAIN RIPRAP

STATION	TO	STATION
3+90. LT		4+36. LT

ITEM 610.16 - HEAVY RIPRAP

STATION	TO	STATION
4+11. LT		4+74. LT
12+77. RT		12+99. RT

ITEM 618.13 - SEEDING METHOD I

STATION	TO	STATION
0+70. RT		4+00. RT
12+58. RT		14+00. RT
12+67. LT		15+74. LT
14+29. RT		14+52. RT

ITEM 626.11 - PRECAST CONCRETE JUNCTION BOX

STATION	TO	OFFSET	QUANTITY
13+50.51		68.54' RT	1

ITEM 645.306 - FLEXIBLE REFLECTORIZED DELINEATOR

STATION	TO	OFFSET	QUANTITY
2+21.20		22.83' LT	1
2+26.34		22.83' LT	1

DRIVES AND ENTRANCES

STATION	TYPE	OPENING WIDTH
1+93.19 LT	CONSTRUCT PAVED DRIVE	49.03'
3+37.03 LT	CONSTRUCT PAVED DRIVE	46.34'
14+11.28 RT	CONSTRUCT PAVED DRIVE	105.25'

Date:10/15/2022

Username:

Division:

Filename: ...\004_ConstructionNotes_01.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572

P.E. NUMBER

9/23/2022

DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	P.McClure	BY	DATE
CHECKED-REVIEWED	D.Burhons	P.McClure	7/20
DESIGN2-DETAILED2		D.Burhons	7/20
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONSTRUCTION NOTES

SHEET NUMBER

4

OF 163

TYLin

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III														TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL		TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	F4	F5	F6	A1-C	OTHER	SPAN	RISE	LENGTH	THICKNESS		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
STA. 0+82.73, 24.23' RT																													REBUILD
STA. 0+70.00, 17.26' LT TO STA. 4+06.18, 15.00' LT																						322'							
STA. 0+88.64, 23.09' RT TO STA. 3+98.00, 15.00' RT																						316'							
STA. 4+00.00, 14.88' RT															1														
STA. 4+08.18, 14.88' LT															1														
STA. 4+00.00, 14.88' RT TO STA. 4+08.18, 14.88' LT								18"	30'	18"	30'																		
STA. 4+08.18, 14.88' LT TO STA. 4+16.30, 43.19' LT								24"	29'	24"	29'																		
STA. 12+75.75, 15.88' LT TO STA. 15+68.82, 15.17' LT																						293'							
STA. 12+75.75, 15.88' RT TO STA. 13+59.03, 15.88' RT																						83'							
STA. 13+61.03, 14.95' RT															1														
STA. 13+61.64, 17.00' RT TO STA. 13+68.93, 39.63' RT								15"	28'	15"	28'																		
STA. 13+67.00, 15.00' RT TO STA. 15+46.17, 21.91' RT																						180'							
STA. 13+69.53, 41.54' RT																													ALTER CB TO MH/REBUILD
STA. 14+03.41, 33.91' RT																													ALTER CB TO MH/REBUILD
STA. 14+21.73, 50.18' RT																													REBUILD
STA. 15+48.12, 22.33' RT																													REBUILD
STA. 15+70.82, 14.91' LT																													REBUILD
SITE AMENITIES																													
STA. 2+80.14, 43.85' RT												1																	
STA. 2+80.14, 43.85' RT TO STA. 3+13.57, 92.20' RT								12"	59'	12"	59'																		
STA. 3+60.29, 40.40' RT														1															
STA. 3+60.29, 40.40' RT TO STA. 3+58.00, 60.04' RT								12"	18'	12"	18'																		
STA. 3+58.00, 60.04' RT																					1								
STA. 3+58.00, 60.04' RT TO STA. 3+50.87, 92.91' RT								12"	34'	12"	34'																		
STA. 3+58.00, 60.04' RT TO STA. 4+04.56, 53.16' RT								12"	49'	12"	49'																		
STA. 3+71.27, 57.76' RT												1																	
STA. 3+71.27, 57.76' RT TO STA. 3+76.49, 50.11' RT								12"	9'	12"	9'																		
STA. 3+76.49, 50.11' RT												1																	
STA. 12+78.33, 36.99' RT												1																	
STA. 12+78.33, 36.99' RT TO STA. 12+85.45, 56.03' RT								12"	19'	12"	19'																		
STA. 12+85.45, 56.03' RT													1																
STA. 12+85.45, 56.03' RT TO STA. 13+00.40, 61.97' RT								12"	14'	12"	14'																		
STA. 13+00.40, 61.97' RT																					1								
STA. 13+00.40, 61.97' RT TO STA. 12+95.19, 72.37' RT								12"	9'	12"	9'																		
STA. 13+51.06, 32.35' RT														1															
STA. 13+51.06, 32.35' RT TO STA. 13+67.73, 40.66' RT								12"	19'	12"	19'																		

Username:
Division:
Filename: ...\005_Drainage_Summary.dgn
Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	Scott Rollins	DATE
PROJ. MANAGER		
DESIGN-DETAILED	P.McClure	7/20
CHECKED-REVIEWED	D.Bryant	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

DRAINAGE SUMMARY

SHEET NUMBER
5
OF 163

TYLin

Username:

Date:10/15/2022

Division:

Filename: ...\106207_4\006_HDPlan_01.DGN

CURVE DATA #1
PI = 2+73.46
D = 7°09'43.1"
Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

50.00' Transition

STA. 0+70.00 Limit of Work
Match Existing Pavement and Curb
Begin Mill & Overlay

STA. 1+20.00 End Mill & Overlay
Begin Full Depth Construction

PC = STA. 1+29.36

PRC = STA. 4+14.51

Match Line STA. 6+00

Measured Along ℄ Construction

Span 1 = 260'-0"

To Brunswick

N15°36'51.02"E

SWEL

DYCL

US Route 201 & Route 24B

Curve 1

Curve 2

Chain Link Fence - 8'

Plain Riprap (Typ.)

℄ Brg. Abut. 1
Sta. 4+40.00

6'x8' Gate

Heavy Riprap (Typ.)

24" Opt. III

Wingwall (Typ.)

90°0'0"(Typ.)

Moment Slab

Private Sign, Remove and Reset

4-Conduit Duct Bank

16" Water Line

12-Conduit Duct Bank

Bridge Lighting Conduit (Typ.)

18" Opt. III

No Parking & Fire Lane Sign, Remove and Reset

Remove Existing Retaining Wall

Concrete Slope Protection and Delineators (See Grading Plan)

Private Sign, Retain

Remove Sign Post

Remove 15" Pipe

Adjust to Grade (See Central Maine Power Plans)

Adjust to Grade

No Parking Sign, Remove and Reset to existing location

New Pole (See Central Maine Power Plans)

Amtrak & Quiet Zone Sign, Remove and Reset

Remove Pole (See Central Maine Power Plans)

Retaining Wall

Remove Trees

Remove Fence (Partial)

New Pole (See Central Maine Power Plans)

Remove Fence

Trucks Entering Sign, Remove and Reset

Remove Shrubs Payment will be made under Item 203.21 Common Excavation

Retain Existing Pole

Rebuild Existing CB

℄ Proposed Construction U.S. Route 201 & Route 24B

Protect 250th Anniversary Park Sign

Speed Limit 25, Retain

Moment Slab

Remove Tree

No Parking & Fire Lane Sign, Remove and Reset

Remove Existing MH and Valve (See Brunswick & Topsham Water District Plans)

Temp. Utility Pole (By FirstLight)

Rte 201 & 24 Sign, Remove and Reset

Weight Limit 25 Tons, Remove after new bridge is open to traffic

Brunswick Overlook Wall

Retaining Wall

Remove 12" Pipe

Remove CB

Partially Remove Existing Abutment

Adjust MH to Grade (See Consolidated Communications Plans)

Topsham Town Line Sign, Remove and Reset

Remove Tree

Meter and Electric MH to be Removed (See Lighting Plans)

Brunswick Overlook Wall

Remove Tree

Retain Existing Electrical Vault

Retain Existing Pole (See Central Maine Power Plans)

Remove Boulders Paid as Common Excavation

Remove Hydrant (See Brunswick & Topsham Water District Plans)

Existing Bridge To Be Removed

Androscoggin River Flow

Notes:

1. See Plan Sheet 3 of 3 for Bike Lane Pavement Marking Details.

2. Brunswick Amenities, Sta. 1+50.00, RT. to Sta. 4+20.00, RT. are detailed in the Site Design/Amenities Sheets.

3. See Lighting Plans and Details for Lighting Information.

4. See Retaining Wall Key Plan sheets for moment slab and retaining wall layouts.

5. Removal of existing fence shall be considered incidental to excavation items. The fence noted for partial removal shall be removed between Sta. 1+42.22 RT and Sta. 1+62.66 RT only.

6. See Consolidated Communications Plans, Central Maine Power Plans, Brunswick & Topsham Water District Plans, and Cable Company Plans elsewhere in this plan set for utility relocations.

PLAN

25 0 25 50

Scale of Feet

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Robins		
DESIGN-DETAILED	D.Burhans	T. Artz	7/20
CHECKED-REVIEWED	D.Burhans	D.Bryant	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PLAN
SHEET 1 OF 3

SHEET NUMBER
6
OF 163

Username:

Date:10/15/2022

Division:

Filename: ...\106207_5\007_HDPlan_02.DGN

CURVE DATA #2
PI = 8+60.04
D = 4°46'28.7"
Δ = 40°44'15.8" Rt.
R = 1200.00'
L = 853.21'
T = 445.53'
E = 80.04'

℄ Brg. Pier 1
Sta. 7+00.00

℄ Brg. Pier 2
Sta. 9+05.00

℄ Construction Proposed
US Route 201/Route 24B

℄ Brg. Pier 3
Sta. 11+10.00

Curve 2

SWEL

DYCL

US Route 201 & Route 24B

90°0'0"(Typ.)

Bridge Lighting Conduit (Typ.)

4-Conduit Duct Bank

4-Conduit Duct Bank

6+00

7+00

8+00

9+00

10+00

11+00

Match Line Sta. 6+00

Match Line Sta. 12+00

35°0"

Span 1 = 260'-0"

Span 2 = 205'-0"

Span 3 = 205'-0"

Span 4 = 145'-0"

Measured Along
℄ Construction

16" Water Line

12-Conduit Duct Bank

Remove Existing
Pier 1 Flush
with Riverbed

Remove Existing Bridge

Existing Pier 2
Pier to Remain

Androscoggin River

Flow

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN
22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	T.Artz	7/20
CHECKED-REVIEWED	D.Bryant	D.Burhans	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PLAN
SHEET 2 OF 3

SHEET NUMBER
7
OF 163

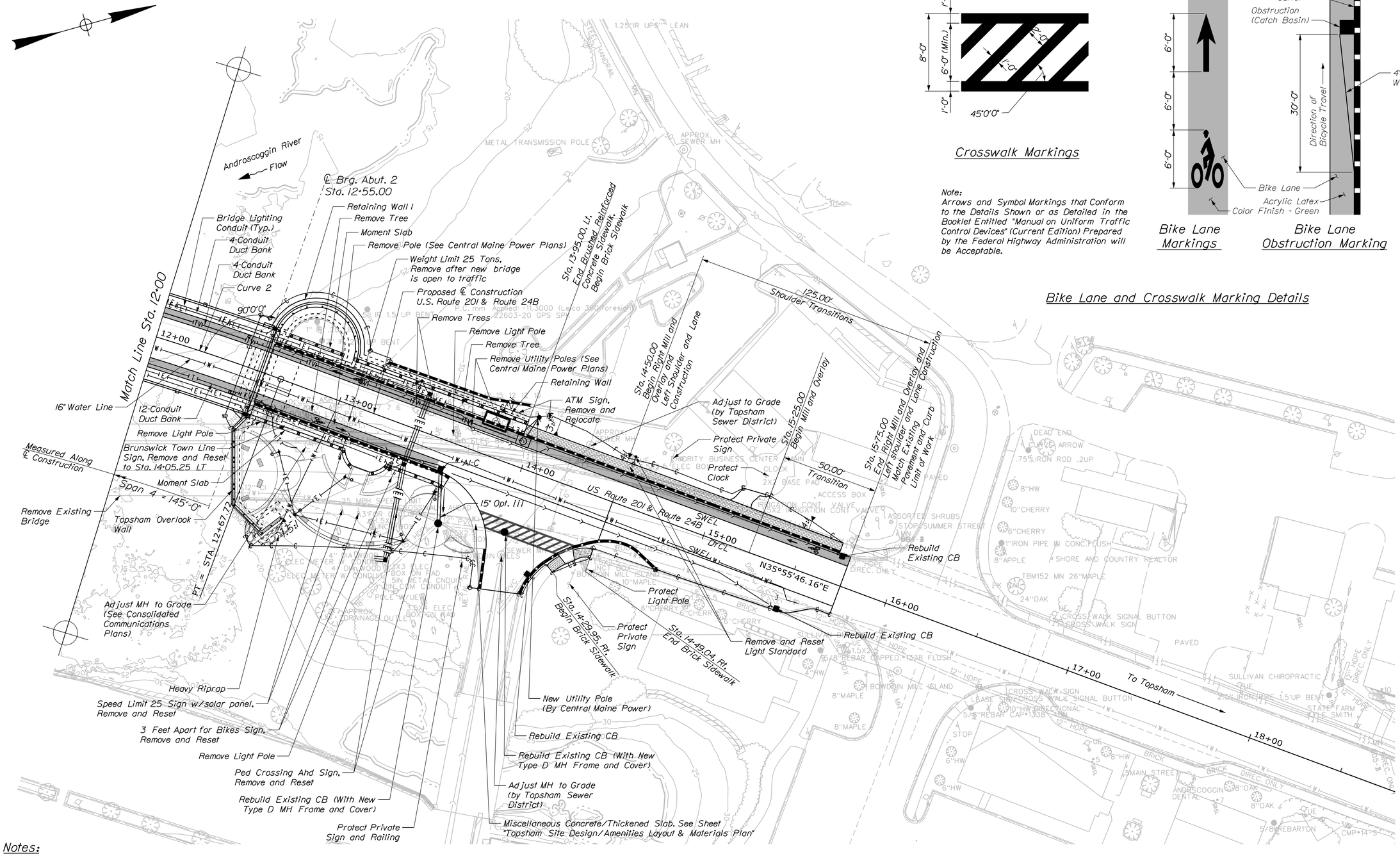
TYLin

Username:

Date:10/15/2022

Division:

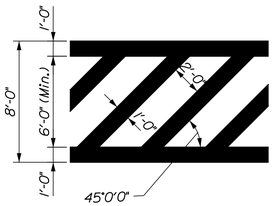
Filename: ...\106207_6\008_HDPlan_03.DGN



PLAN

25 0 25 50

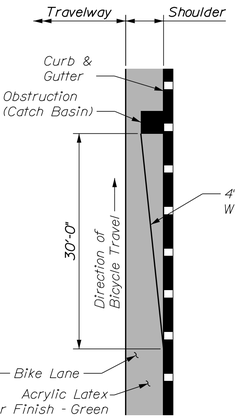
Scale of Feet



Crosswalk Markings

Note:
Arrows and Symbol Markings that Conform to the Details Shown or as Detailed in the Booklet Entitled "Manual on Uniform Traffic Control Devices" (Current Edition) Prepared by the Federal Highway Administration will be Acceptable.

Bike Lane Markings



Bike Lane Obstruction Marking

Bike Lane and Crosswalk Marking Details

Notes:

1. Topsham Amenities, Sta. 12+55.00, RT. to Sta. 14+00.00, RT., and Sta. 12+55.00 LT. to Sta. 13+20.00, LT., are detailed in the Site Design/ Amenities Sheets.

3. Removal of existing brick sidewalks shall be considered incidental to excavation items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	Scott Rollins		
PROJ. MANAGER			
DESIGN-DETAILED	D.Burhans	T.Artz	7/20
CHECKED-REVIEWED	D.Burhans	D.Bryant	7/20
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DESIGN3-DETAILED3			
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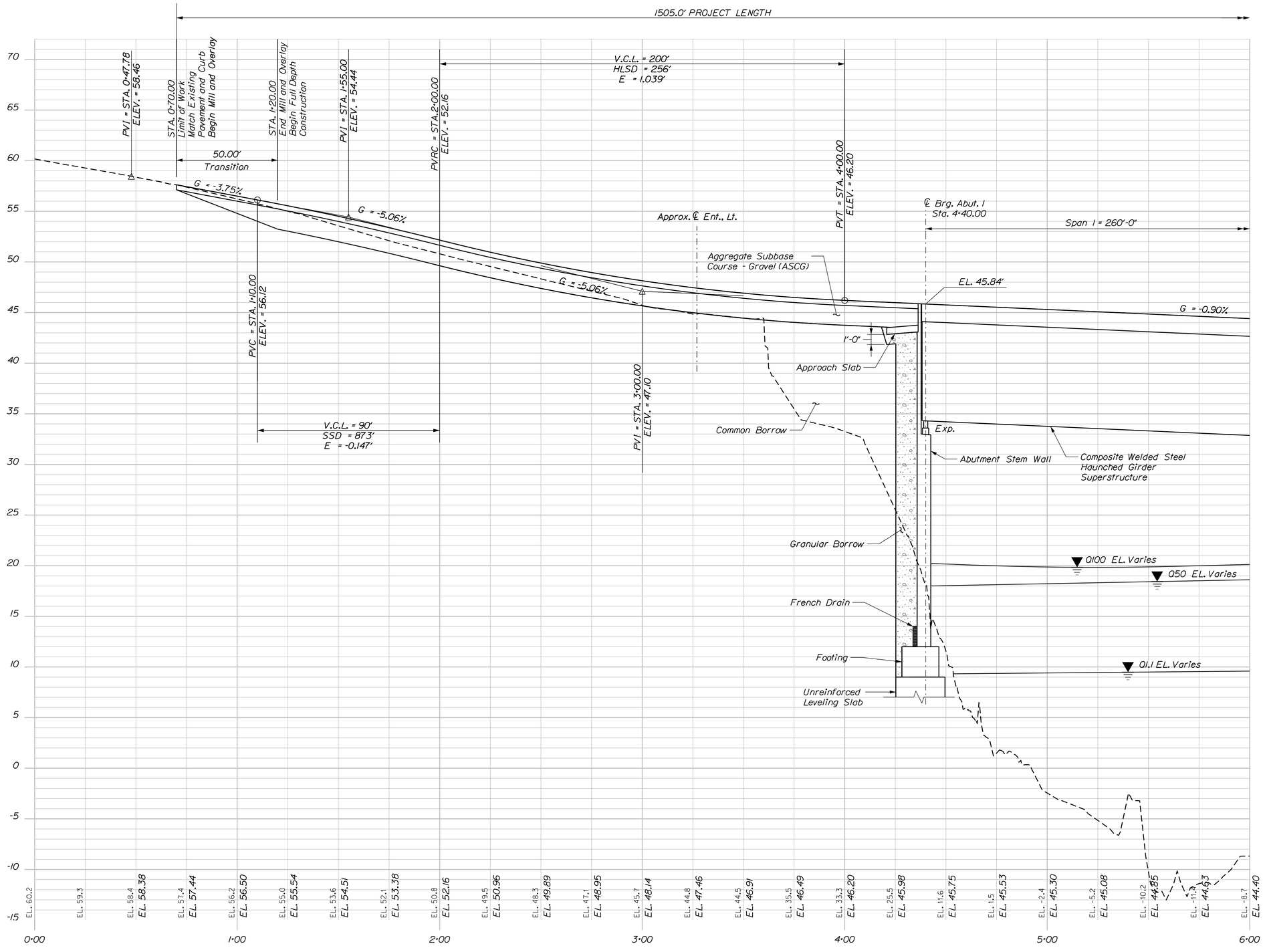
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PLAN
SHEET 3 OF 3

SHEET NUMBER
8
OF 163

TYLin



PROFILE: U.S. ROUTE 201 / ROUTE 24B

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

Filename: ...\106207_7\009_HDProfile_01.DGN Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	D.Burhons	7/20
CHECKED-REVIEWED	D.Bryant	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

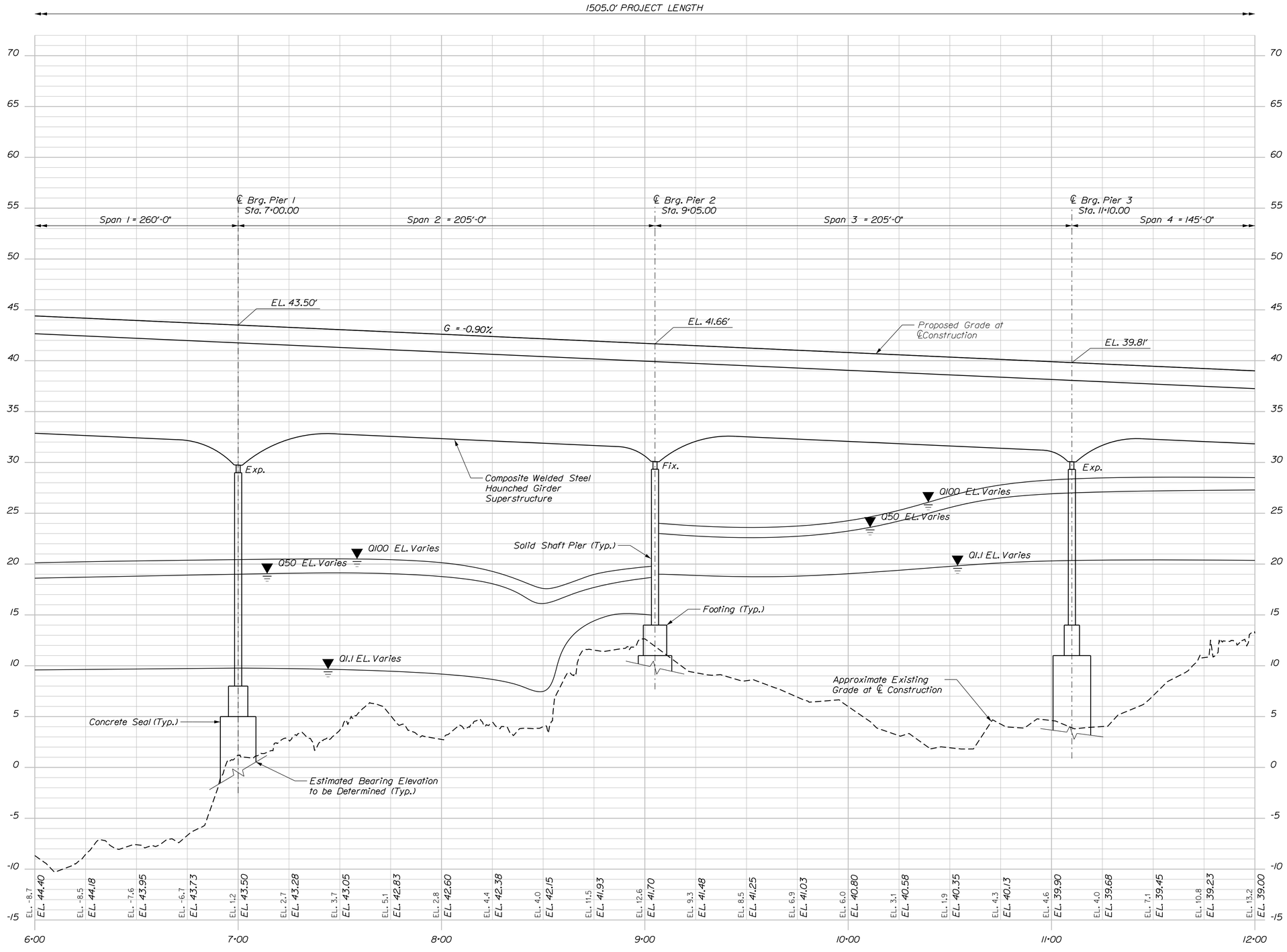
BY | DATE

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PROFILE
SHEET 1 OF 3

TYLin

SHEET NUMBER
9
OF 163



PROFILE: U.S. ROUTE 201 / ROUTE 24B

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

TYLin

Filename: ...\106207_8\010_HDProfile_02.DGN Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

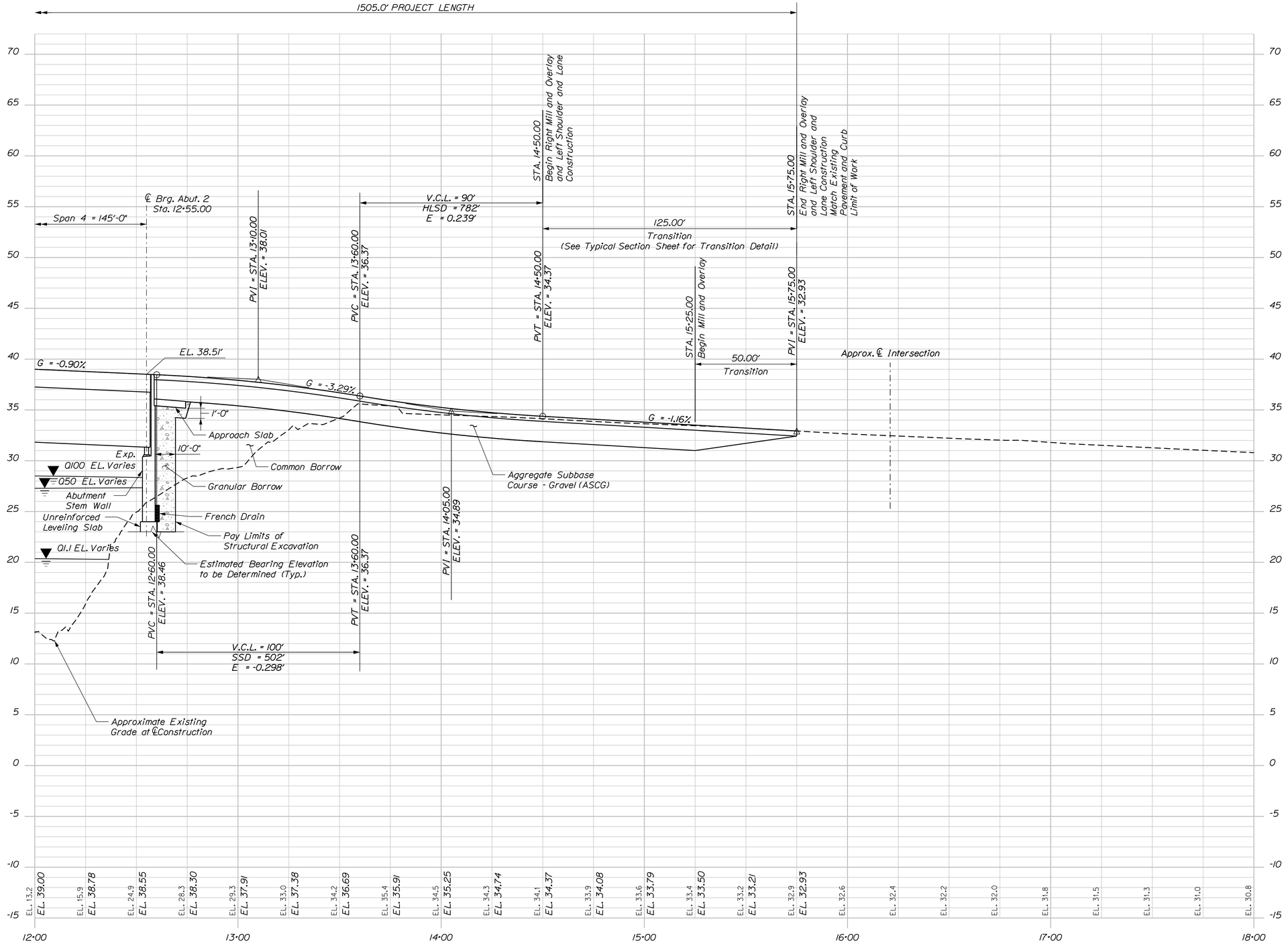
	BY	DATE
Scott Rollins		
PROJ. MANAGER	T.Aritz	7/20
DESIGN-DETAILED	D.Burhans	7/20
CHECKED-REVIEWED	D.Bryant	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PROFILE
SHEET 2 OF 3

SHEET NUMBER
10
OF 163

Username:
Date:10/15/2022
Division:
Filename: ...\106207_9\011_HDProfile_03.DGN



PROFILE: U.S. ROUTE 201 / ROUTE 24B

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016 — BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

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9/23/2022
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REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PROFILE
SHEET 3 OF 3

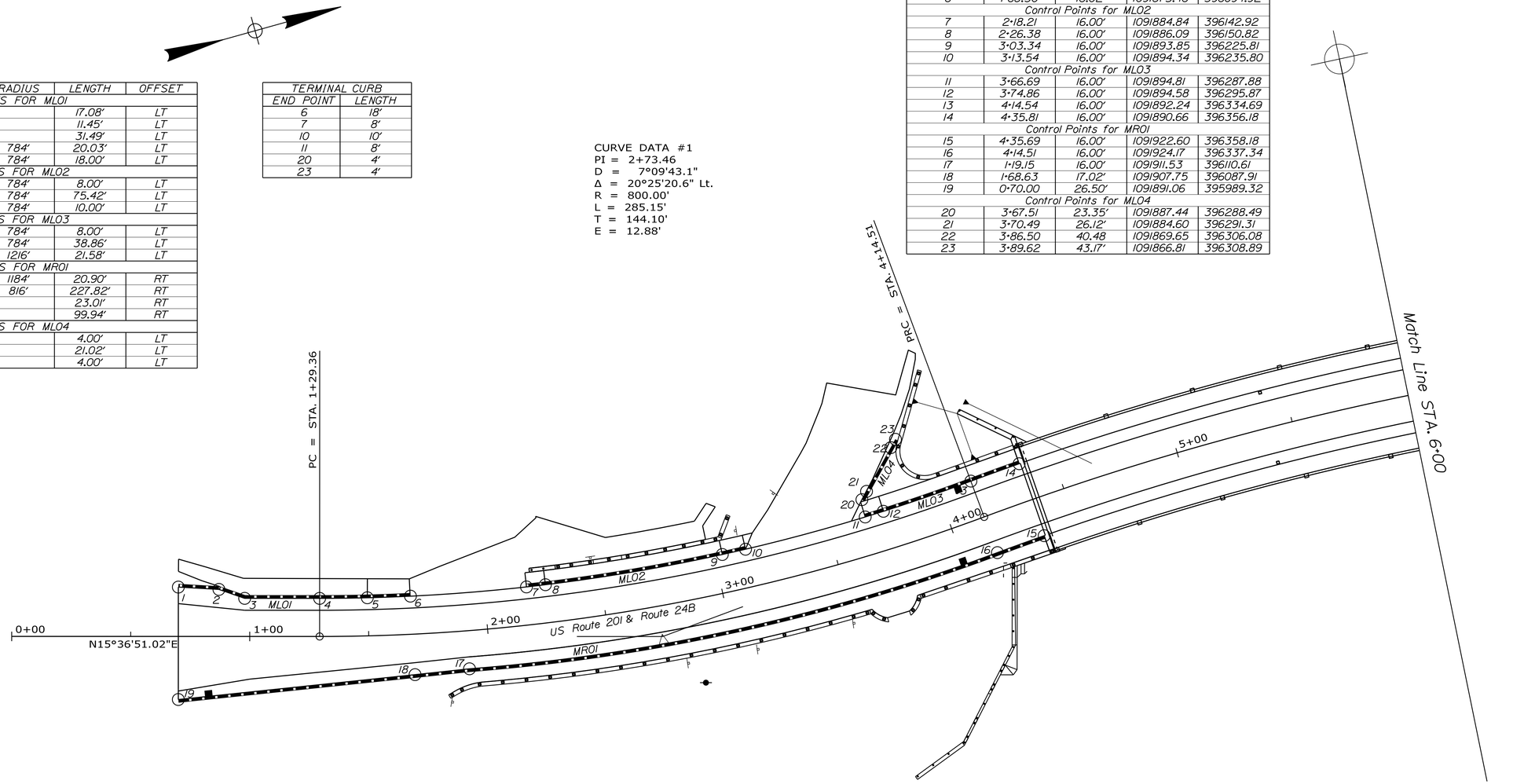
SHEET NUMBER
11
OF 163

PT. TO PT.	RADIUS	LENGTH	OFFSET
CONTROL POINTS FOR ML01			
1-2		17.08'	LT
2-3		11.45'	LT
3-4		31.49'	LT
4-5	784'	20.03'	LT
5-6	784'	18.00'	LT
CONTROL POINTS FOR ML02			
7-8	784'	8.00'	LT
8-9	784'	75.42'	LT
9-10	784'	10.00'	LT
CONTROL POINTS FOR ML03			
11-12	784'	8.00'	LT
12-13	784'	38.86'	LT
13-14	1216'	21.58'	LT
CONTROL POINTS FOR MR01			
15-16	1184'	20.90'	RT
16-17	816'	227.82'	RT
17-18		23.01'	RT
18-19		99.94'	RT
CONTROL POINTS FOR ML04			
20-21		4.00'	LT
21-22		21.02'	LT
22-23		4.00'	LT

TERMINAL CURB	
END POINT	LENGTH
6	18'
7	8'
10	10'
11	8'
20	4'
23	4'

CURVE DATA #1
PI = 2+73.46
D = 7°09'43.1"
Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

Point No.	Station	Offset	X Coord.	Y Coord.
Control Points for ML01				
1	0+70.00	20.72'	1091845.58	396002.03
2	0+87.05	19.75'	1091851.11	396018.19
3	0+97.87	16.00'	1091857.63	396027.60
4	1+29.36	16.00'	1091866.11	396057.93
5	1+49.80	16.00'	1091871.25	396077.29
6	1+68.30	16.02'	1091875.46	396094.92
Control Points for ML02				
7	2+18.21	16.00'	1091884.84	396142.92
8	2+26.38	16.00'	1091886.09	396150.82
9	3+03.34	16.00'	1091893.85	396225.81
10	3+13.54	16.00'	1091894.34	396235.80
Control Points for ML03				
11	3+66.69	16.00'	1091894.81	396287.88
12	3+74.86	16.00'	1091894.58	396295.87
13	4+14.54	16.00'	1091892.24	396334.69
14	4+35.81	16.00'	1091890.66	396356.18
Control Points for MR01				
15	4+35.69	16.00'	1091922.60	396358.18
16	4+14.51	16.00'	1091924.17	396337.34
17	1+19.15	16.00'	1091911.53	396110.61
18	1+68.63	17.02'	1091907.75	396087.91
19	0+70.00	26.50'	1091891.06	395989.32
Control Points for ML04				
20	3+67.51	23.35'	1091887.44	396288.49
21	3+70.49	26.12'	1091884.60	396291.31
22	3+86.50	40.48	1091869.65	396306.08
23	3+89.62	43.17'	1091866.81	396308.89



PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	T.Antz	BY	7/20 DATE
CHECKED-REVIEWED	D.Bryant	BY	7/20 DATE
DESIGN2-DETAILED2		BY	DATE
DESIGN3-DETAILED3		BY	DATE
REVISIONS 1		BY	DATE
REVISIONS 2		BY	DATE
REVISIONS 3		BY	DATE
REVISIONS 4		BY	DATE
FIELD CHANGES		BY	DATE

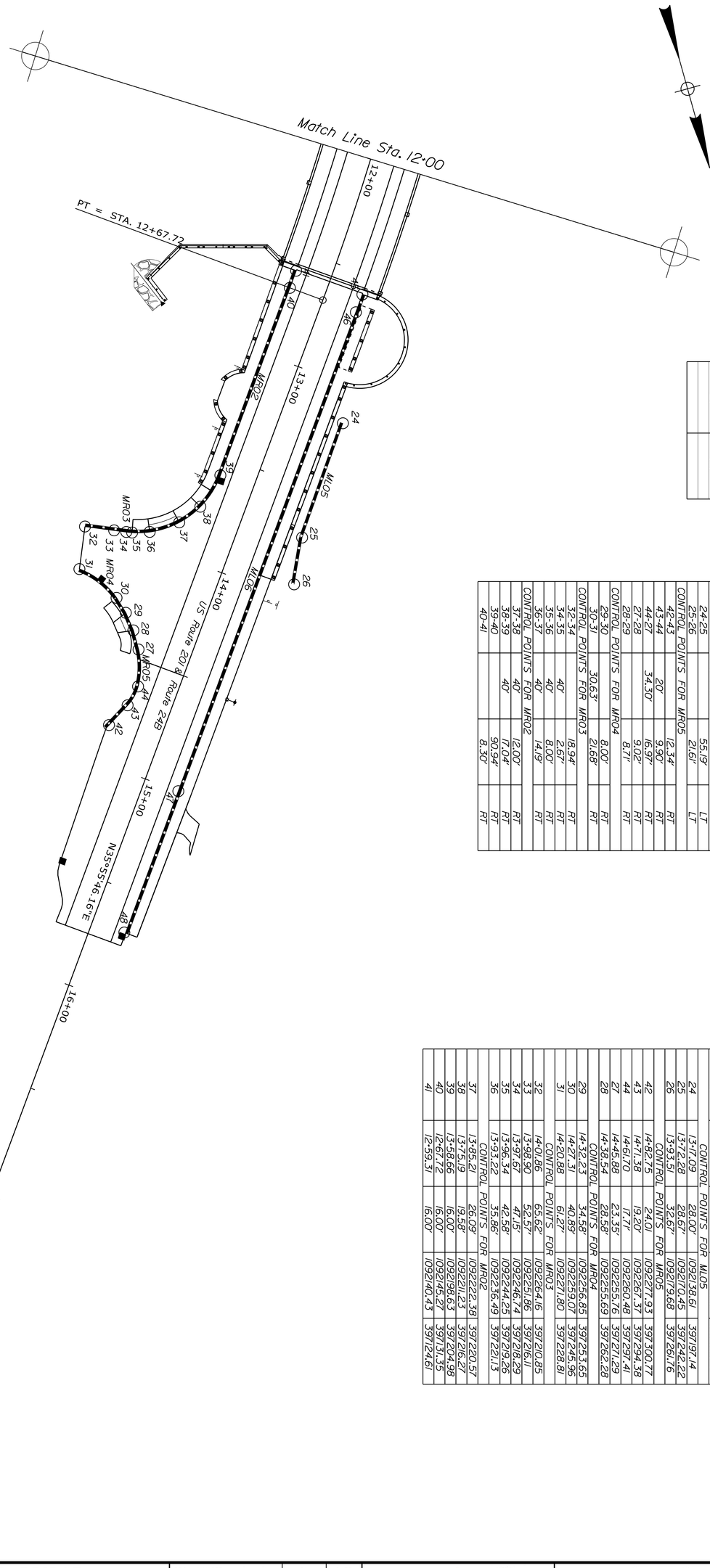
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CURB GEOMETRY
SHEET 1 OF 2

SHEET NUMBER
12
OF 163

TYLin

Username:
Date:10/15/2022
Division:
Filename: ...\012_Curb_Geometry_01.DGN



PLAN

Scale of Feet: 25 0 25 50

TERMINAL CURB END POINT	LENGTH
37	12.0'
36	8.0'
28	9.0'
29	8.0'

PT TO PT. CONTROL POINTS FOR MLO6	RADIUS	LENGTH	OFFSET
45-46		8.64'	LT
46-47		232.28'	LT
47-48		68.82'	LT
CONTROL POINTS FOR MLO5	55.19'	21.61'	LT
24-25			
25-26			
CONTROL POINTS FOR MRO5	12.34'		RT
42-43			
43-44	20'	9.96'	RT
44-27	34.30'	16.97'	RT
27-28		9.02'	RT
CONTROL POINTS FOR MRO4	8.71'		RT
28-29			
29-30	8.00'		RT
30-31	30.63'	21.68'	RT
CONTROL POINTS FOR MRO3			
32-34	18.94'		RT
34-35	2.67'		RT
35-36	40'	8.00'	RT
CONTROL POINTS FOR MRO2	14.19'		RT
36-37			
37-38	40'	12.00'	RT
38-39	40'	17.04'	RT
39-40		90.94'	RT
40-41		8.30'	RT

Point No.	Station	Offset	X Coord.	Y Coord.
	CONTROL POINTS FOR MLO6			
45	12+59.19	16.00'	1092114.32	397143.11
46	12+67.72	16.00'	1092119.36	397150.12
47	15+00.00	16.00'	1092255.66	397338.21
48	15+68.82	15.30'	1092296.61	397393.52
	CONTROL POINTS FOR MLO5			
24	13+17.09	28.00'	1092138.61	397197.14
25	13+72.28	28.67'	1092170.45	397242.22
26	13+93.51	32.67'	1092179.68	397261.76
	CONTROL POINTS FOR MRO5			
42	14+82.75	24.01	1092277.93	397300.77
43	14+71.38	19.20'	1092260.48	397294.38
44	14+61.70	17.71'	1092260.37	397297.41
27	14+45.88	23.35'	1092255.76	397271.29
28	14+38.54	28.58'	1092255.69	397262.28
	CONTROL POINTS FOR MRO4			
29	14+32.23	34.58'	1092256.85	397253.65
30	14+27.31	40.89'	1092259.07	397245.96
31	14+20.88	61.27'	1092271.80	397228.81
	CONTROL POINTS FOR MRO3			
32	14+01.86	65.62'	1092264.16	397210.85
33	13+98.90	52.57'	1092251.86	397216.11
34	13+97.67	47.15'	1092246.74	397218.29
35	13+96.34	42.58'	1092244.25	397219.26
36	13+93.22	35.86'	1092236.49	397221.13
	CONTROL POINTS FOR MRO2			
37	13+85.21	26.09'	1092222.38	397220.57
38	13+75.19	19.58'	1092211.23	397216.27
39	13+58.66	16.00'	1092198.63	397204.98
40	12+67.72	16.00'	1092145.27	397131.35
41	12+59.31	16.00'	1092140.43	397124.61

TYLin

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CURB GEOMETRY SHEET 2 OF 2

PROJ. MANAGER	Scott Rollins	BY	DATE
DESIGN-DETAILED	T.Antz	T.Antz	7/20
CHECKED-REVIEWED	D.Bryant	D.Bryant	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED
PROFESSIONAL ENGINEER

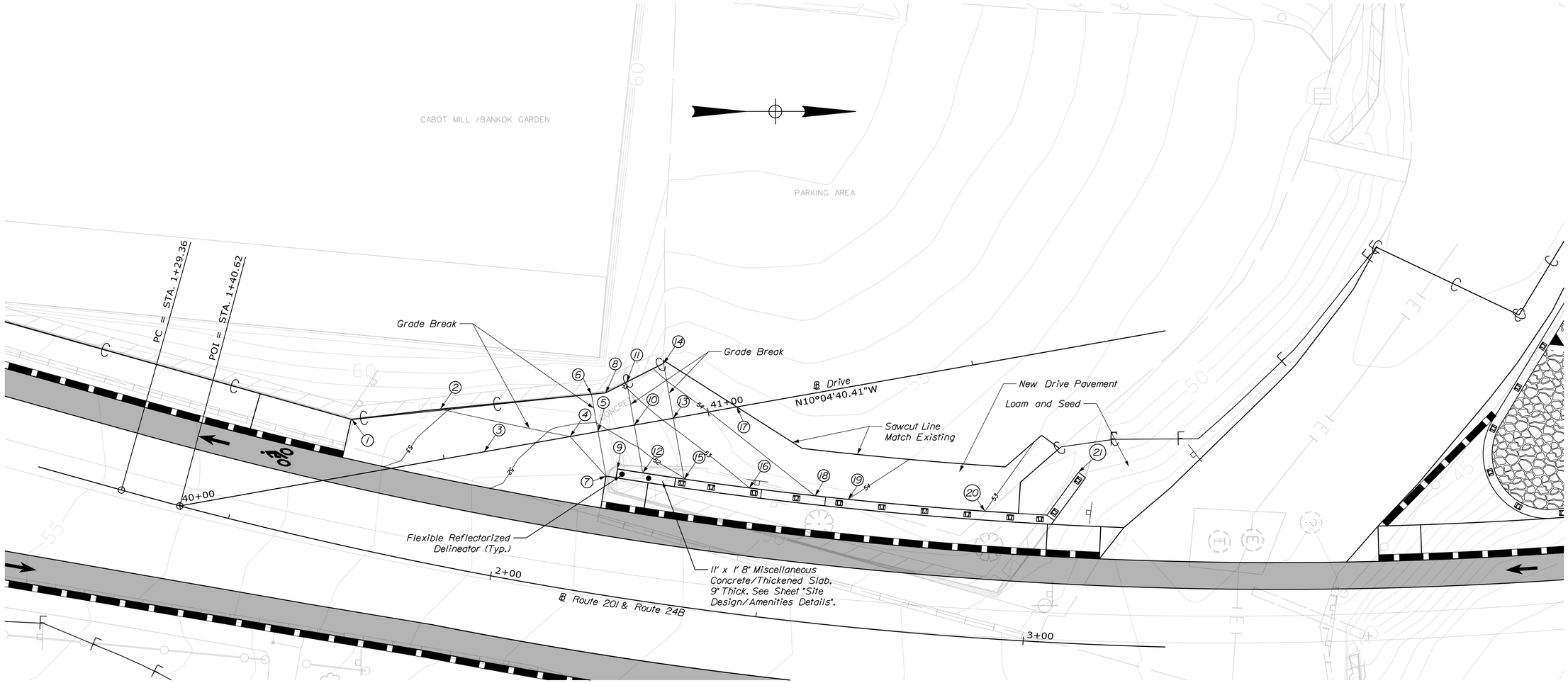
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016 BRIDGE PLANS

SHEET NUMBER 13 OF 163



Point	Station	offset	Elevation	X Coord.	Y Coord.	Notes/Description
1	40+34.56	10.28' LT	53.64'	1091868.33	396096.54	Back of Sidewalk
2	40+50.95	9.26' LT	53.07'	1091866.43	396113.02	Edge of Wall
3	40+57.59	0.00'	52.34'	1091874.39	396121.18	Baseline of Drive
4	40+73.84	0.00'	51.77'	1091871.55	396137.19	Baseline of Drive/Grade Break
5	40+79.14	0.00'	51.86'	1091870.62	396142.41	Baseline of Drive/Grade Break
6	40+79.14	7.07' LT	52.47'	1091863.66	396141.17	Edge of Wall
7	40+79.14	8.43' RT	51.13'	1091878.92	396143.88	Edge of Wall
8	40+81.79	6.86' LT	52.41'	1091863.40	396143.82	Exist. Elev./Edge of Wall
9	40+81.49	7.49' RT	51.38'	1091877.58	396146.03	Edge of Pavement/Back Face of Wall
10	40+86.00	0.00'	52.38'	1091869.42	396149.16	Baseline of Drive/Grade Break
11	40+86.00	8.13' LT	53.12'	1091861.41	396147.73	Edge of Wall
12	40+86.00	9.04' RT	51.51'	1091878.33	396150.74	Edge of Pavement/Back Face of Wall
13	40+93.38	0.00'	53.23'	1091868.13	396156.43	Baseline of Drive/Grade Break
14	40+93.38	10.37' LT	54.36'	1091857.92	396154.61	Edge of Wall/Sawcut
15	40+93.38	11.52' RT	51.97'	1091879.47	396158.44	Edge of Pavement/Back Face of Wall
16	41+05.00	15.21' RT	53.00'	1091881.12	396170.58	Edge of Pavement/Back Face of Wall
17	41+05.40	0.00'	54.61'	1091866.03	396168.26	Exist. Elev./Centerline of Drive
18	41+16.86	18.86' RT	54.00'	1091882.59	396182.85	Edge of Pavement/Back Face of Wall
19	41+22.80	20.59' RT	54.00'	1091883.25	396188.99	Edge of Pavement/Back Face of Wall
20	41+47.50	27.22' RT	53.00'	1091885.46	396214.48	Edge of Pavement/Back Face of Wall
21	41+65.92	23.15' RT	52.75'	1091878.23	396231.90	Back Face/End of Wall

NOTES:

1. See Plan Sheets and Cross Sections for Additional Information.
2. See Structural Plans for Retaining Wall and Hand Rail Information.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	T.Kelley	T.Antz	7/20
CHECKED-REVIEWED	T.Antz	T.Kelley	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

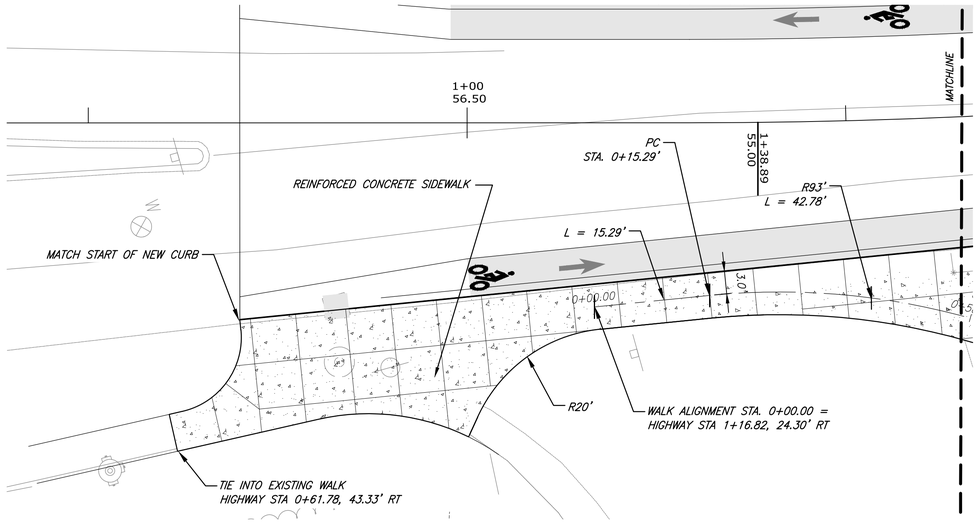
GRADING PLAN

SHEET NUMBER
14
OF 163

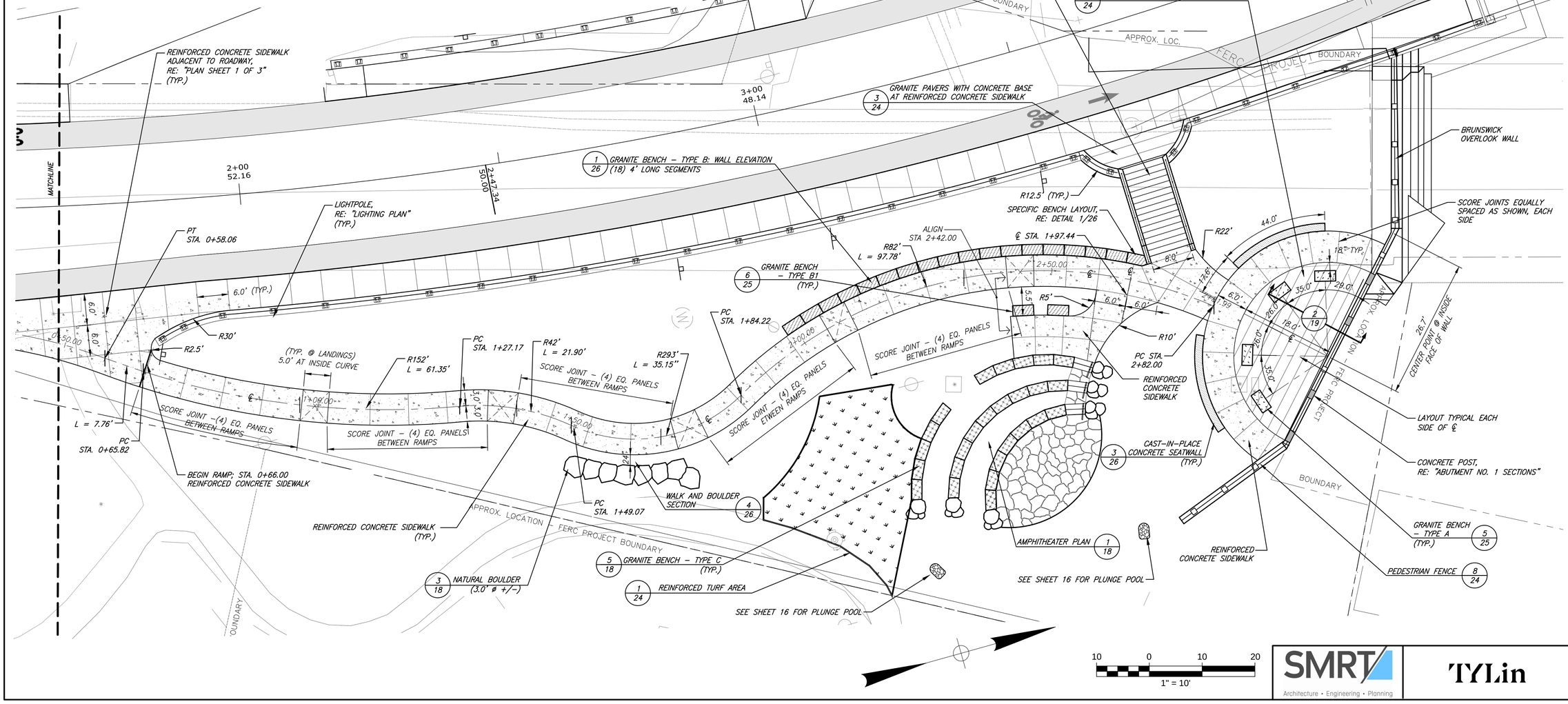
TYLin

Username:
Date:10/15/2022
Division:
Filename: ...\106207_37\014_Grading Plan.dgn

NOTE: REFER TO SHEET 27 FOR PAVER PATTERNS.



CONCRETE WALK SOUTH END PLAN (1)
1" = 10'



SMRT Architecture • Engineering • Planning

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

LICENSED LANDSCAPE ARCHITECT
MARK G. JOHNSON
NO. 1857
STATE OF MAINE

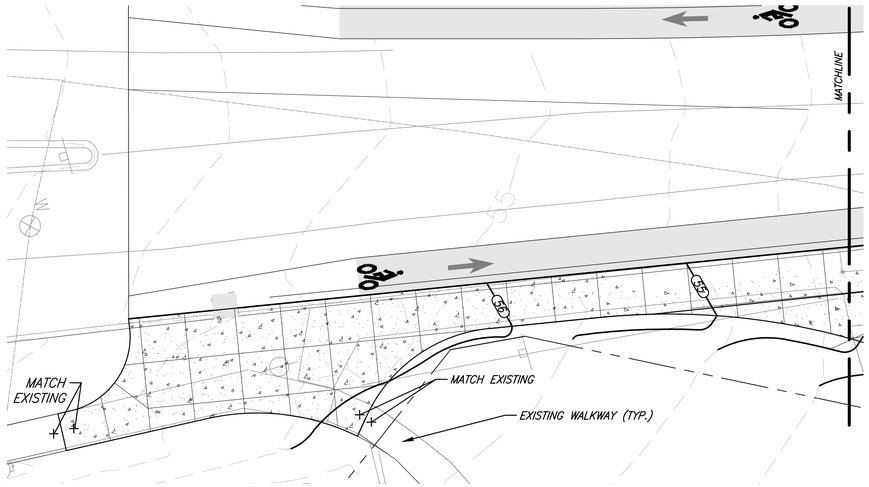
SIGNATURE	P.E. NUMBER	DATE
	1857	12-17-21

PROJ. MANAGER	BY	DATE
D. Bryant	W. MacDaniels	7-13-20
DESIGN-DETAILED	M. Johnson	W. MacDaniels	2-28-21
DESIGN-DETAILED2	M. Johnson	W. MacDaniels	8-20-21
DRAFT PS&E	M. Johnson	T. Nein-Large	9-13-21
DRAFT PS&E2	M. Johnson	W. MacDaniels	12-17-21
PS&E Plans	M. Johnson	W. MacDaniels	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM
CUMBERLAND

BRUNSWICK SITE DESIGN/AMENITIES LAYOUT & MATERIALS PLAN

SHEET NUMBER
15
OF 163



REINFORCED CONCRETE SIDEWALK SOUTH END PLAN (1)
1" = 10'

ABBREVIATIONS

BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
TS	TOP OF STEP
TW	TOP OF WALL

APPROX. LOCATION – FERC PROJECT BOUNDARY
FERC PROJECT BOUNDARY
APPROX. LOC. FERC PROJECT BOUNDARY
APPROX. LOCATION FERC PROJECT
BOUNDARY
APPROX. BRIDGE LOCA
MATCHLINE
TOP OF RAMP 53.1
WALKWAY LANDING (TYP.)
12" CULVERT PIPE OPTION III SD–1 S 0.036 L 59.0'
4/25 CULVERT PIPE OPTION III (TYP.)
ENERGY DISSIPATER – PLUNGE POOL; STONE SHALL MEET REQUIREMENTS OF 610.18, STONE DITCH PROTECTION
1/25 CATCH BASIN CB–1, TYPE F4 RIM 42.8 INV. 40.0
12" CULVERT PIPE OPTION III SD=2 L 18.0' S 0.037
1/25 CATCH BASIN CB–2, TYPE F6 RIM 41.2 INV. OUT 36.5
INV. OUT 37.90
INV. OUT 35.5
SEE SHEET 19 FOR AMPHITHEATER GRADING
ENERGY DISSIPATER – PLUNGE POOL; STONE SHALL MEET REQUIREMENTS OF 703.29, STONE DITCH PROTECTION
1/25 CATCH BASIN CB–3, TYPE F4 RIM 38.2 INV. 36.3
12" CULVERT PIPE OPTION III SD–4 L 49.0' S 0.01
1/25 CATCH BASIN CB–4, TYPE F4 RIM 39.0 INV. 36.05
12" CULVERT PIPE OPTION III SD–5 L 9.0' S 0.01 CONNECT TO SD–4
2/25 MANHOLE MH–1 RIM 39.0 INV. IN 35.8 (CB–2) INV. IN 35.8 (CB–3) INV. OUT 35.7
12" CULVERT PIPE OPTION III SD–3 L 34.0' S 0.006
BW 47.0
BW 46.25
TS 46.9
HP 39.2
TW 40.4
BS 39.4
TW 40.4
BS 39.28
38.3
38.5
38.3
39.0
39.7
40.1
40.23
40.33
40.21
42.70
42.60
42.48
42.58
40.5
45.18
45.28
45.06
45.16
47.88
47.78
47.76
47.66
50.50
50.40
50.38
50.28
53.0
S=.08
S=.02
.02
NSD
3+00 48.14
2+00 52.16
4+00 46.20

1" = 10'

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STP-2260(300)

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W. MacDaniels	12-17-21

D. Bryant	M. Johnson	W. MacDaniels
PROJ. MANAGER	DESIGN-DETAILED	DESIGN-DETAILED2
DESIGN-DETAILED	DRAFT PS&E	DRAFT PS&E2
DESIGN-DETAILED2	PS&E Plans	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

BRUNSWICK - TOPSHAM

CUMBERLAND

BRUNSWICK SITE DESIGN/AMENITIES GRADING & DRAINAGE PLAN

SHEET NUMBER

16

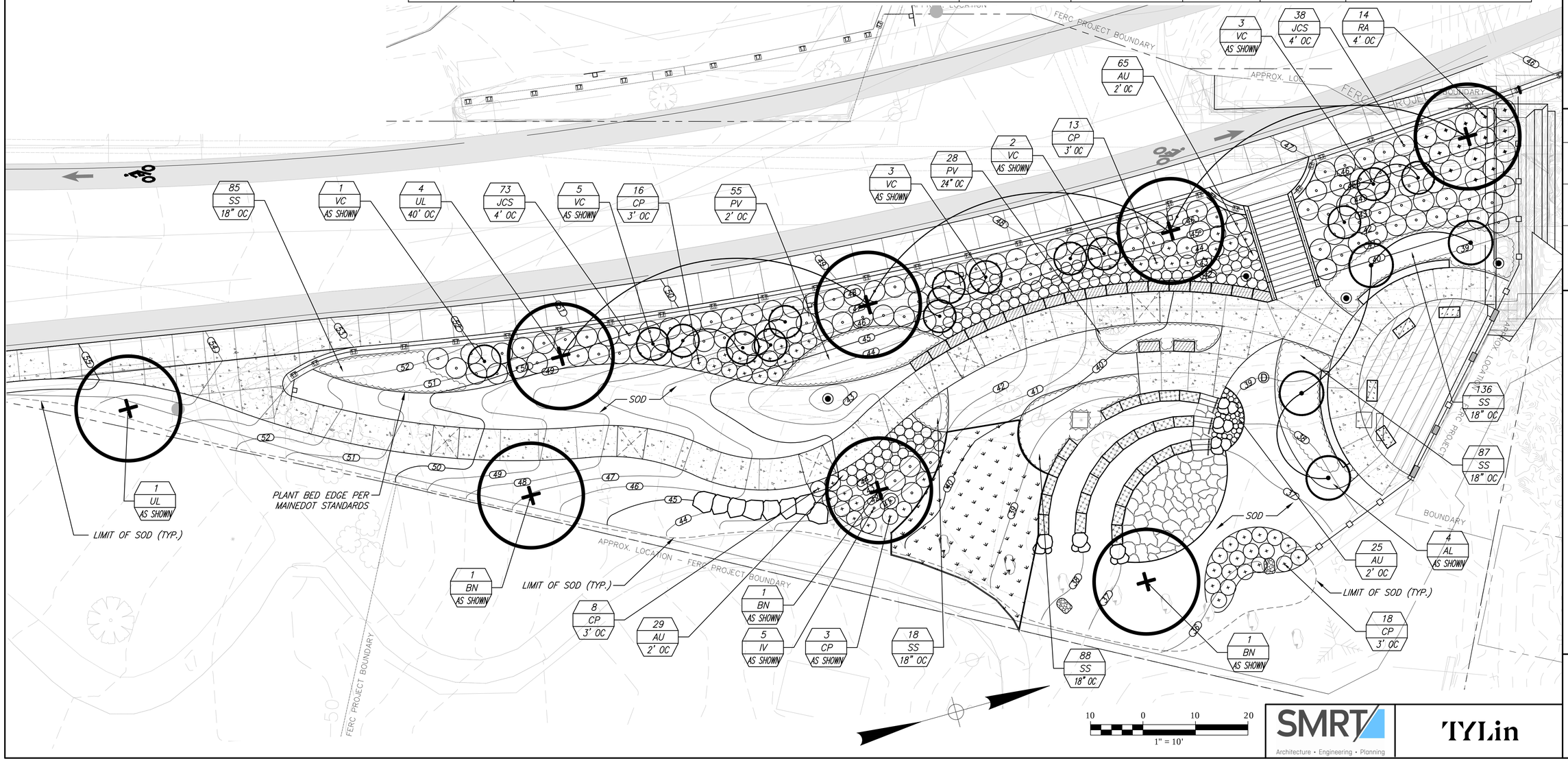
OF 163

PLANT LIST:

NOTES:

1. REFER TO MAINEDOT STANDARD SPECIFICATIONS AND STANDARD DETAILS (LATEST EDITIONS) FOR PLANT INSTALLATIONS.
2. ALL PLANTING BEDS TO RECEIVE 18" OF LOAM.

MARK	SCIENTIFIC NAME / COMMON NAME	SIZE CAL	HEIGHT	ROOT	QUANTITY	REMARKS
TREES						
AL	Amelanchier laevis / Alleghany Serviceberry	1 1/2"	6'-8'	B & B	4	Clump form, 3-stem minimum
BN	Betula nigra 'Heritage' / Heritage River Birch	1 3/4"	10' - 12'	B & B	3	Clump form, 3-stem minimum
UL	Ulmus 'Patriot' / Patriot Elm	3" - 3.5"	14' - 16'	B & B	5	Full, matched specimens
SHRUBS						
AU	Arctostaphylos uva-ursi / Bearberry	#2	6"	Cont.	138	
CP	Comptonia peregrina / Sweetfern	#2	2'	Cont.	59	
IV	Ilex verticillata / Winterberry	#2	4'	Cont.	5	
JCS	Juniperus chinensis 'Sargentiii' / Sargent Juniper	#2	18" - 24"	Cont.	111	
RA	Rhus aromatica 'Gro-Low' / Aromatic Sumac	#2	4'	Cont.	14	
VC	Viburnum carlesii / Koreanspice Viburnum	#3	3'	Cont.	14	
PERENNIALS						
PV	Panicum virgatum 'Hans Herms' / Hans Herms Switchgrass	#1	-	Cont.	83	
SS	Schizachyrium scoparium 'The Blues'/Little Bluestem	#1	-	Cont.	414	



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M. Johnson	
M. Johnson	
M. Johnson	
M. Johnson	

PROJ. MANAGER	
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DESIGN-DETAILED2	M. Johnson
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DRAFT PS&E2	M. Johnson
PS&E Plans	M. Johnson

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CUMBERLAND

BRUNSWICK SITE DESIGN/AMENITIES PLANTING PLAN

SHEET NUMBER

17

OF 163

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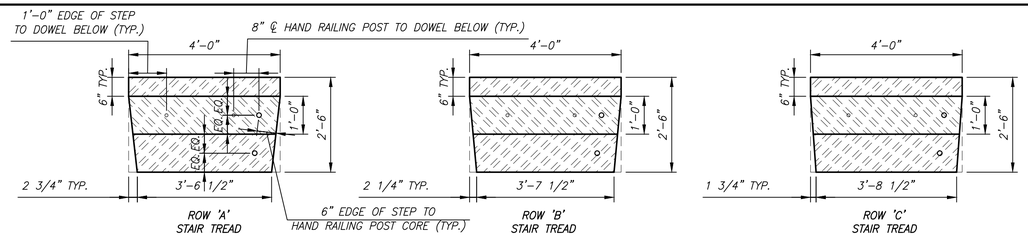
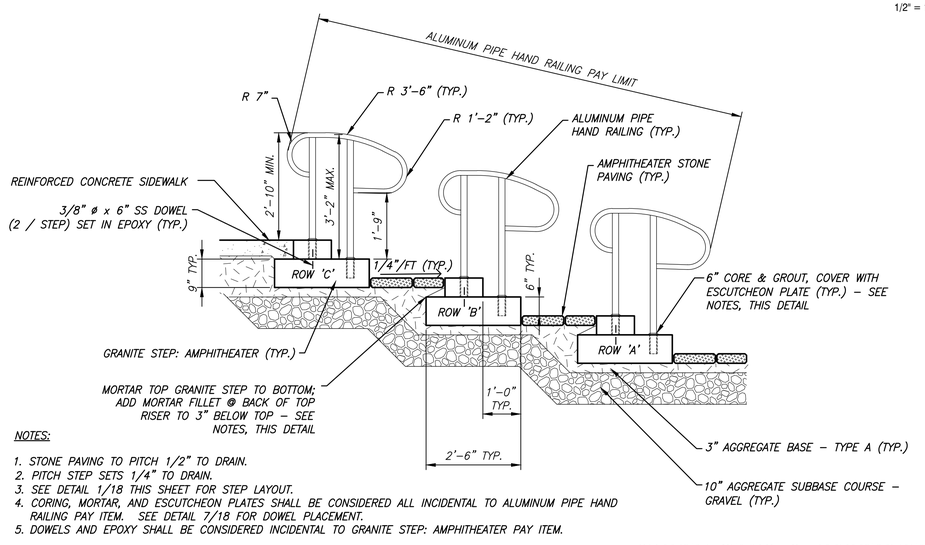


GRANITE STEP: AMPHITHEATER MITRE PLANS (7)

1/2" = 1'-0"

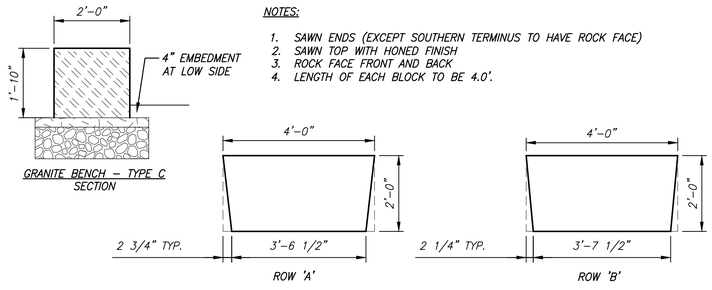


NOTES:

1. STONE PAVING TO PITCH 1/2" TO DRAIN.
2. PITCH STEP SETS 1/4" TO DRAIN.
3. SEE DETAIL 1/18 THIS SHEET FOR STEP LAYOUT.
4. CORING, MORTAR, AND ESCUTCHEON PLATES SHALL BE CONSIDERED ALL INCIDENTAL TO ALUMINUM PIPE HAND RAILING PAY ITEM. SEE DETAIL 7/18 FOR DOWEL PLACEMENT.
5. DOWELS AND EPOXY SHALL BE CONSIDERED INCIDENTAL TO GRANITE STEP: AMPHITHEATER PAY ITEM.

GRANITE STEPS @ AMPHITHEATER (6)

1/2" = 1'-0"

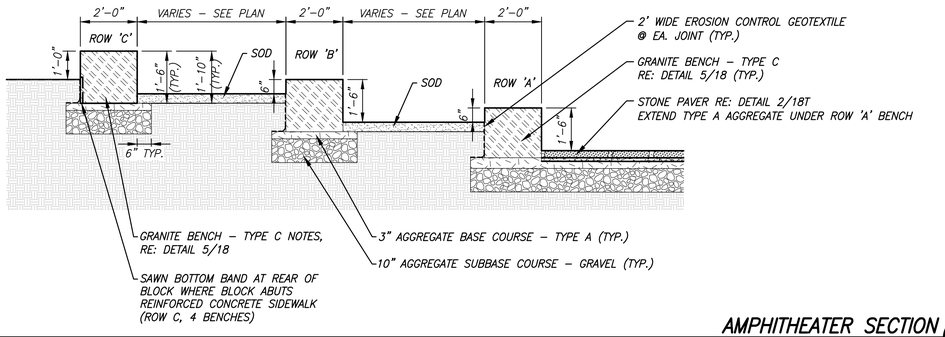


NOTES:

1. SAWN ENDS (EXCEPT SOUTHERN TERMINUS TO HAVE ROCK FACE)
2. SAWN TOP WITH HONED FINISH
3. ROCK FACE FRONT AND BACK
4. LENGTH OF EACH BLOCK TO BE 4.0'.

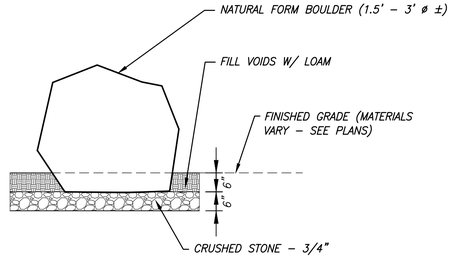
GRANITE BENCH – TYPE C (AMPHITHEATER) MITRE PLANS & SECTION (5)

PLAN 1/2" = 1'-0"



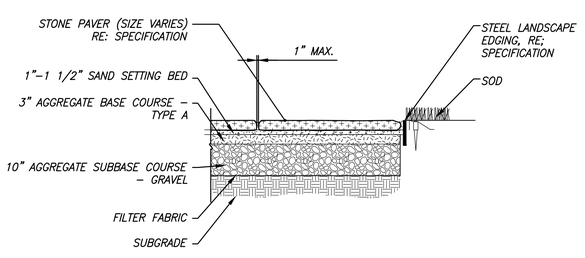
AMPHITHEATER SECTION (4)

3/8" = 1'-0"



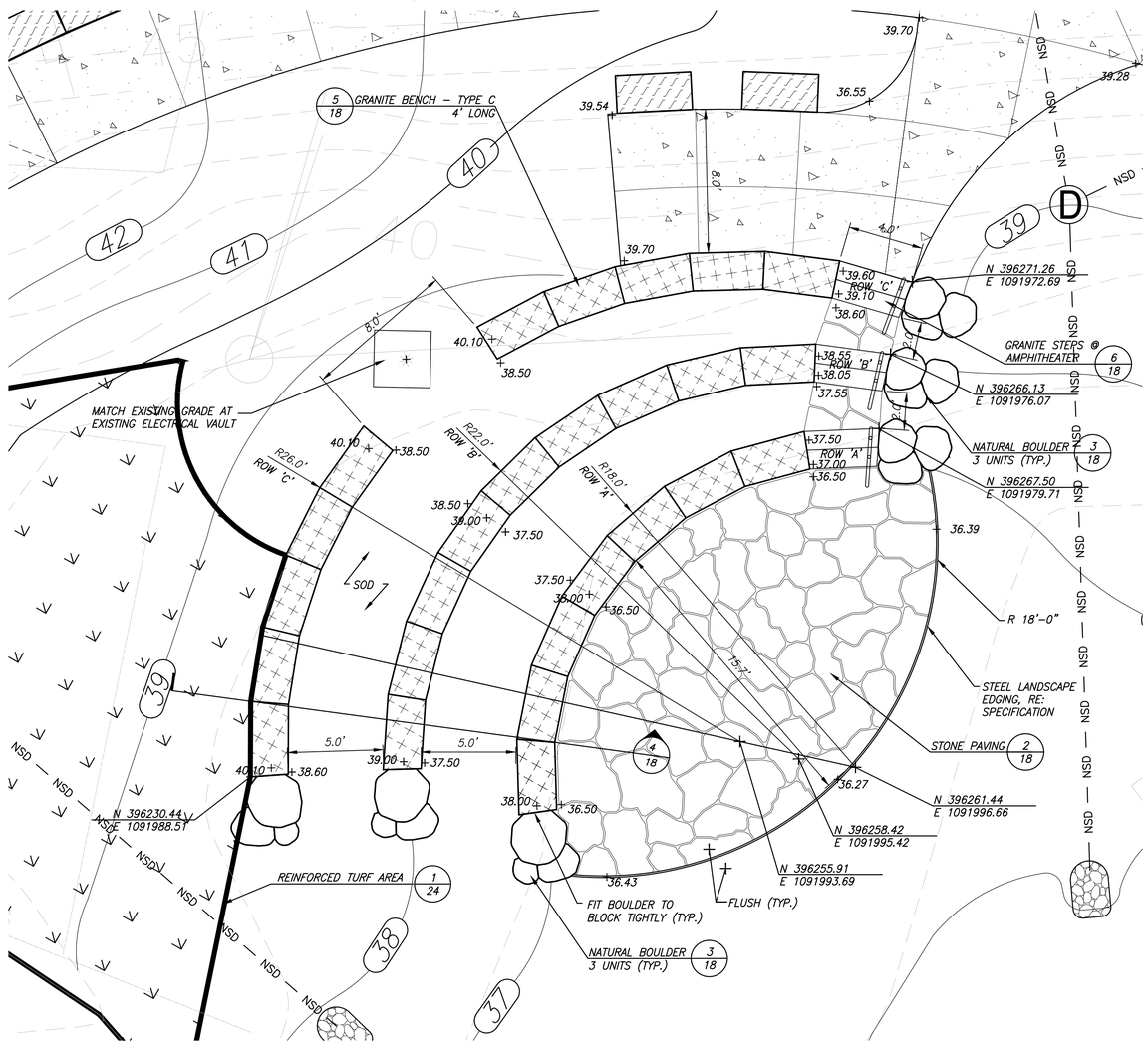
NATURAL BOULDER (3)

1/2" = 1'-0"



AMPHITHEATER STONE PAVING (2)

1/2" = 1'-0"



AMPHITHEATER PLAN (1)

1/4" = 1'-0"

0" 1/2" 1" 2" 3"

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DRAFT PS&E2	M. Johnson
PS&E Plans	M. Johnson

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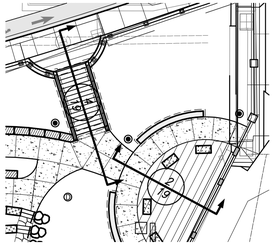
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM
CUMBERLAND

BRUNSWICK SITE DESIGN/AMENITIES AMPHITHEATER PLAN & DETAILS

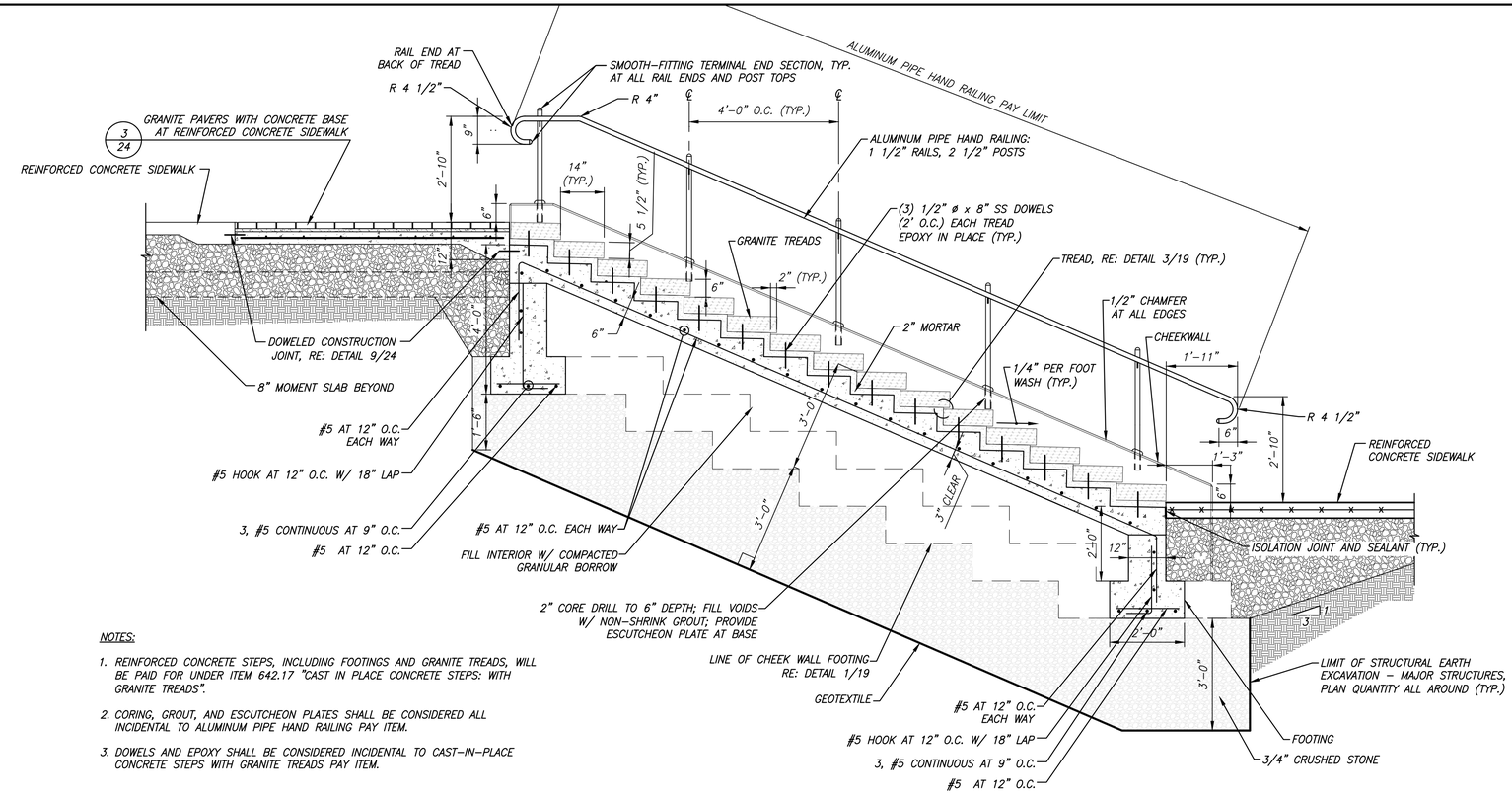
SHEET NUMBER

18

OF 163



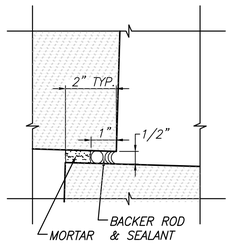
KEY PLAN 5
N.T.S.



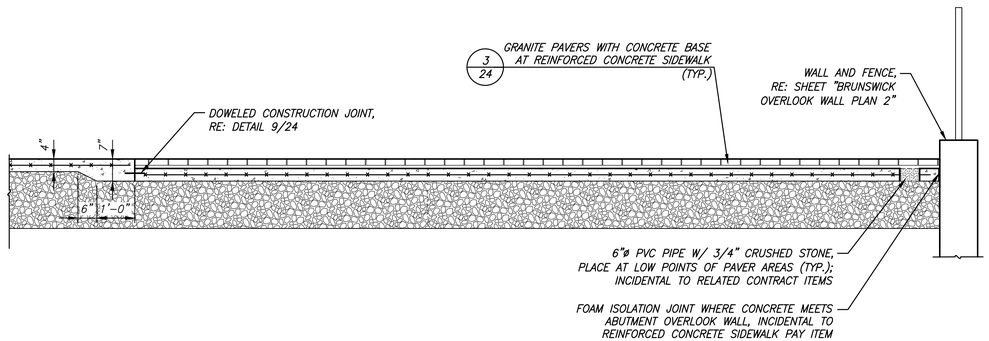
NOTES:

1. REINFORCED CONCRETE STEPS, INCLUDING FOOTINGS AND GRANITE TREADS, WILL BE PAID FOR UNDER ITEM 642.17 "CAST IN PLACE CONCRETE STEPS: WITH GRANITE TREADS".
2. CORING, GROUT, AND ESCUTCHEON PLATES SHALL BE CONSIDERED ALL INCIDENTAL TO ALUMINUM PIPE HAND RAILING PAY ITEM.
3. DOWELS AND EPOXY SHALL BE CONSIDERED INCIDENTAL TO CAST-IN-PLACE CONCRETE STEPS WITH GRANITE TREADS PAY ITEM.

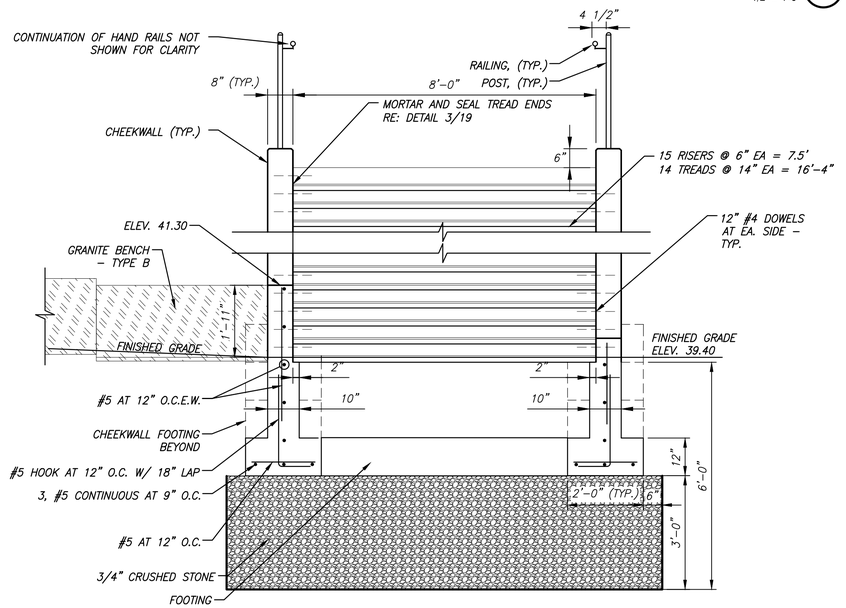
CAST-IN-PLACE CONCRETE STEPS WITH GRANITE TREADS - SECTION 4
1/2" = 1'-0"



TREAD DETAIL 3
N.T.S.



BRUNSWICK ABUTMENT OVERLOOK SECTION 2
1/2" = 1'-0"



CAST-IN-PLACE CONCRETE STEPS WITH GRANITE TREADS - ELEVATION 1
1/2" = 1'-0"

1" 0 1" 2"

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PS&E Plans	M. Johnson

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM
CUMBERLAND

BRUNSWICK SITE DESIGN/AMENITIES
SITE SECTIONS

SHEET NUMBER
19
OF 163

TOPSHAM UPSTREAM OVERLOOK

8/24 PEDESTRIAN FENCE (TYP.)

7/24

GRANITE BENCH –TYPE A 5/25 (TYP. OF 3)

GRANITE PAVERS WITH CONCRETE BASE AT REINFORCED CONCRETE SIDEWALK 3/24

REINFORCED CONCRETE SIDEWALK

MATCH WALK TO WALL END (TYP.)

CONTROL JOINT (TYP. EACH SIDE)

2.7' (TYP.)

42.0'

42.0'

12+00
39.00

ALIGN SCORE JOINTS AS SHOWN THIS AREA

13+00
37.91

GRANITE PAVERS WITH CONCRETE BASE AT REINFORCED CONCRETE SIDEWALK 3/24

3/26 CAST–IN–PLACE CONCRETE SEATWALL (TYP.)

3/26 CAST–IN–PLACE CONCRETE SEATWALL (TYP.)

ALIGN SCORE JOINTS AS SHOWN THIS AREA

CENTER POINT STA 13+22.43, 18.00' RIGHT

CAST–N–PLACE CONCRETE STEPS WITH GRANITE TREADS 1/23

5/25 GRANITE BENCH – TYPE A (TYP. OF 4)

6.0' TYP.

45.3°

CENTER POINT STA 12+85.80, 45.14' RIGHT

12"

DOWELED CONSTRUCTION JOINT, RE: DETAIL 9/24; HAUNCH REINFORCED CONCRETE SIDEWALK TO MEET END OF THICKENED SLAB

14+00
35.25

22.0'

R22.0'

45.3°

R9.0'

4.0' TYP.

4.0'

4.0'

R 24'

CENTER POINT AT INSIDE FACE OF WALL

4/24 MISCELLANEOUS CONCRETE; THICKENED SLAB 9" CONCRETE

6.0'

18" (TYP.)

59.5° TYP.

12"

2/24 GRANITE PAVERS WITH CONCRETE BASE

45.3°

2.5'

CENTER POINT STA 13+87.4, 25.38' RIGHT

CONCRETE POST, RE: "TOPSHAM OVERLOOK WALL SECTIONS"

CENTER POINT STA. 13+64.01, 42.29' RIGHT

4.0' TYP.

12.0'

3.3' TYP.

CURB RAMP DETECTABLE WARNING FIELD 35.0' RADIUS

3/26 CAST–IN–PLACE CONCRETE SEATWALL (TYP.)

21.1° TYP.

2/23

P14.0'

REMOVABLE BOLLARD (TYP. OF 3); 7.0' O.C. WITHIN THICKENED SLAB 6/24

2.5'

15+00
33.79

8/24 PEDESTRIAN FENCE (TYP.)

MISCELLANEOUS CONCRETE: THICKENED SLAB 9" CONCRETE 4/24

22.0'

R48.0'

22.0'

REINFORCED CONCRETE SIDEWALK
ALTERNATE POURS: POUR (3) 'A' BANDS AS SHOWN PRIOR TO 'B' BANDS

6/25 GRANITE BENCH – TYPE B 4.0' LENGTH (TYP. OF 5)

2/24 GRANITE PAVERS WITH CONCRETE BASE

3/25 RIVER STONE DRIP STRIP 2" – 3" DIA.

FIXED BOLLARD (TYP. OF 3, INCLUDING WEST END); 7.0' O.C. CENTER WITHIN CONCRETE BAND 5/24

CONCRETE WALK AND RAMP WITH DETECTABLE WARNING FIELD RE: "PLAN SHEET 3 OF 3"

APPROX. LOCATION - FERC PROJECT BOUNDARY

NOTE: REFER TO SHEET 27 FOR PAVER PATTERNS.

10 0 10 20
1" = 10'

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TOPSHAM SITE DESIGN/AMENITIES
LAYOUT & MATERIALS PLAN

SHEET NUMBER
20
OF 163

THROUGH-WALL DRAIN, RE: SHEET "RETAINING WALL NO. 1 PLAN & ELEVATION"

ENERGY DISSIPATER – PLUNGE POOL; STONE SHALL MEET REQUIREMENTS OF 703.29, STONE DITCH PROTECTION

ABBREVIATIONS

BC	BOTTOM OF CURB
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
TC	TOP OF CURB
TS	TOP OF STEP
TW	TOP OF WALL

35.00

1/25 CATCH BASIN
CB-7, TYPE F4
RIM 34.4
INV. 31.4

12" CULVERT PIPE OPTION III
SD-6
L 19.0'
S 0.02

34.50

S .025

1/25 CATCH BASIN
CB-8, TYPE F5
RIM 34.4
INV. IN 31.0
INV. OUT 29.9

12" CULVERT PIPE OPTION III
SD-7
L 14.50'
S 0.02

12" CULVERT PIPE OPTION III
SD-8
L 9.0'
S 0.01

HEAVY RIP RAP, RE: "PLAN SHEET 3 OF 3"

INVERT OUT 30.50

CATCH BASIN, RE: "PLAN SHEET 3 OF 3"

35.00

S .020

36.17

TS 38.00

TW 36.50

BW 34.90

BS 35.00

BW 34.90

S .020

34.42

34.42

MANHOLE
MH-2
RIM 34.20
INV. IN 30.70
INV. OUT 30.60
3/25

CULVERT PIPE OPTION III (TYP.) 4/25

APPROX. LOCATION - FERC PROJECT BOUNDARY

CATCH BASIN
CB-9, TYPE F6
RIM 35.40
INV. OUT 32.50
1/25

BW 35.80

36.32

36.12

TW 36.50

36.17

35.50

12" CULVERT PIPE OPTION-III
SD-9
L 19.0'
S 0.02
INVERT IN TO EXISTING MANHOLE 30.37

35.43

35.10

FLUSH

TC 34.98
BC 34.40
(VERIFY BC IN FIELD)

35.10

NEW CAST IRON MANHOLE FRAME AND STANDARD LID; RAISE AS REQUIRED TO MATCH FINISHED GRADE

BC 33.75±
(VERIFY IN FIELD)

EXISTING OUTFALL

10 0 10 20
1" = 10'

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TOPSHAM SITE DESIGN/AMENITIES
GRADING & DRAINAGE PLAN

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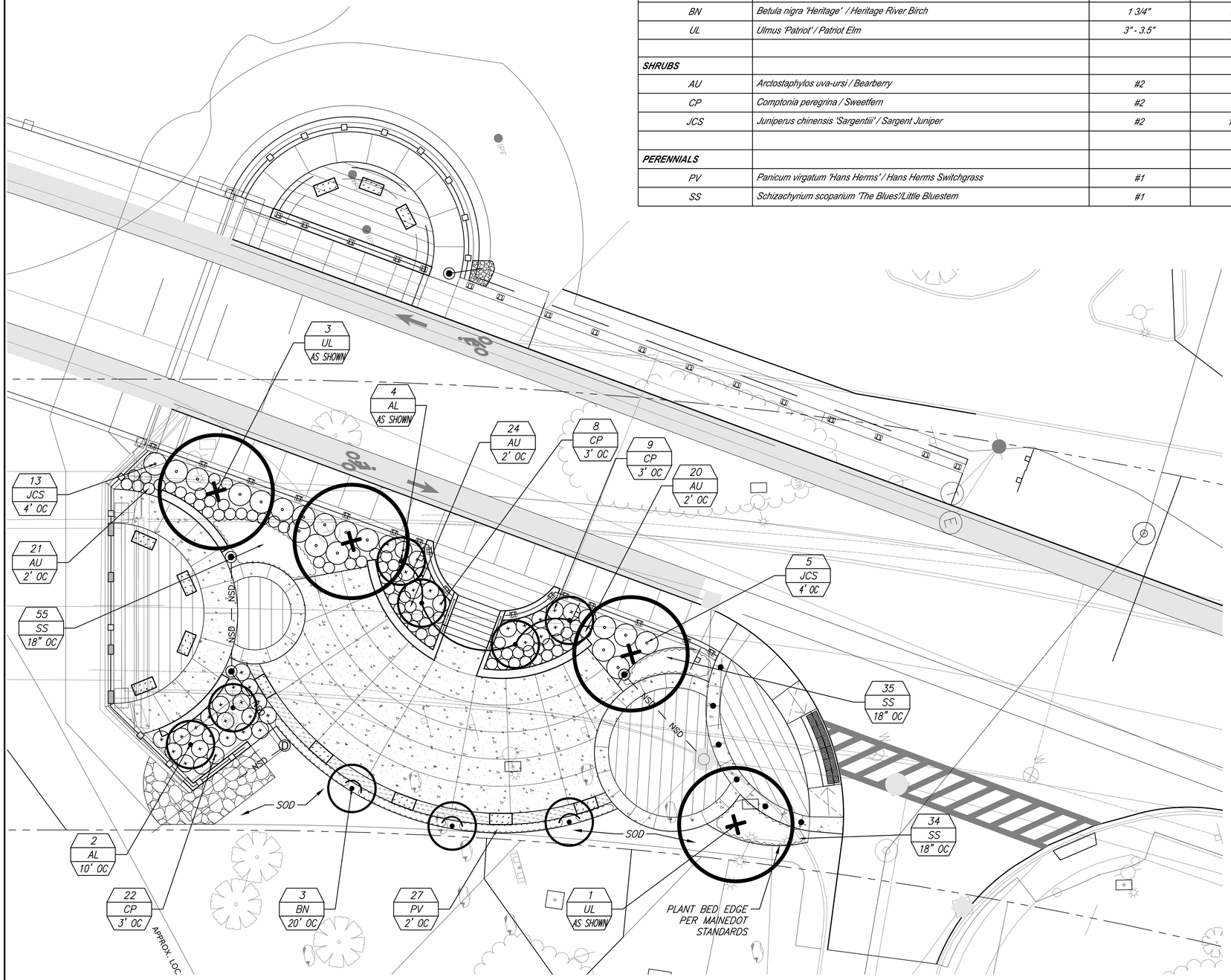
SHEET NUMBER
21
OF 163

NOTES:

1. REFER TO MAINEDOT STANDARD SPECIFICATIONS AND STANDARD DETAILS (LATEST EDITIONS) FOR PLANT INSTALLATIONS.
2. ALL PLANTING BEDS TO RECEIVE 18" OF LOAM.

PLANT LIST:

MARK	SCIENTIFIC NAME / COMMON NAME	SIZE CAL	HEIGHT	ROOT	QUANTITY	REMARKS
TREES						
AL	*Amelanchier laevis / Alleghany Serviceberry*	1 1/2"	6'-8'	B & B	6	Clump form, 3-stem minimum
BN	*Betula nigra 'Heritage' / Heritage River Birch*	1 3/4"	10' - 12'	B & B	3	Clump form, 3-stem minimum
UL	*Ulmus 'Patriot' / Patriot Elm*	3" - 3.5"	14' - 16'	B & B	4	Full, matched specimens
SHRUBS						
AU	*Arctostaphylos uva-ursi / Bearberry*	#2	6"	Cont.	65	
CP	*Comptonia peregrina / Sweetfern*	#2	2'	Cont.	39	
JCS	*Juniperus chinensis 'Sargentii' / Sargent Juniper*	#2	18" - 24"	Cont.	18	
PERENNIALS						
PV	*Panicum virgatum 'Hans Herms' / Hans Herms Switchgrass*	#1	-	Cont.	27	
SS	*Schizachyrium scoparium 'The Blues'/Little Bluestem*	#1	-	Cont.	124	



10 0 10 20
1" = 10'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

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BRIDGE PLANS

BRIDGE NO. 2016

LICENSED LANDSCAPE ARCHITECT
MARK G. JOHNSON
NO. 1857
STATE OF MAINE

	SIGNATURE	P.E. NUMBER
		1857
		DATE
		12-17-21

PROJ. MANAGER	BY	DATE
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DESIGN-DETAILED2	W. MacDaniels	2-28-21
DRAFT PS&E	W. MacDaniels	8-20-21
DRAFT PS&E2	T. Nein-Large	9-13-21
PS&E Plans	W. MacDaniels	12-17-21
D. Bryant	M. Johnson	M. Johnson

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND

TOPSHAM SITE DESIGN/AMENITIES
PLANTING PLAN

SHEET NUMBER
22
OF 163

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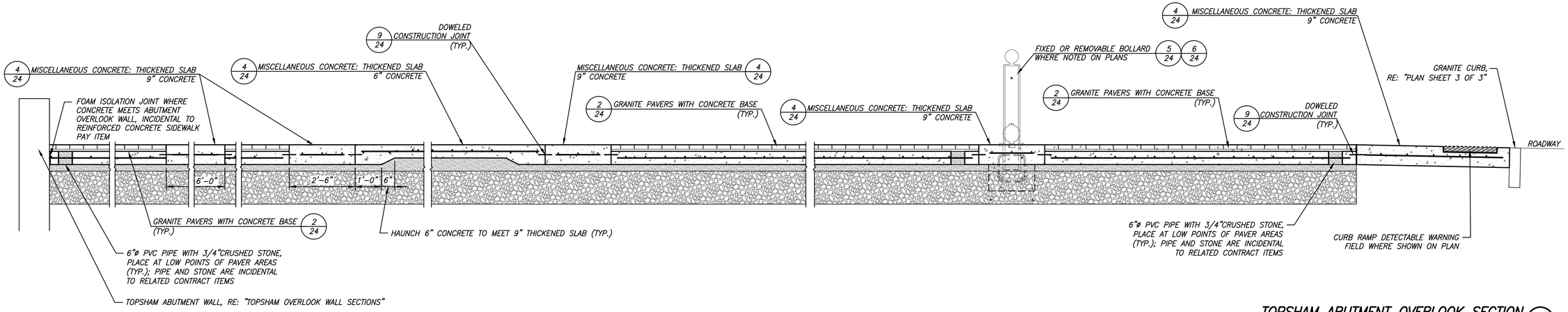
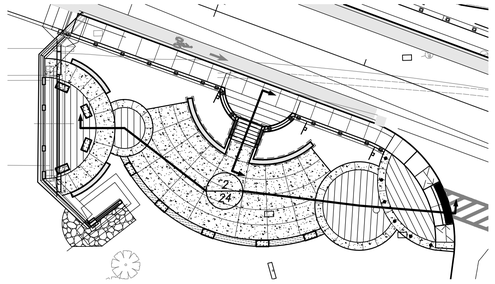


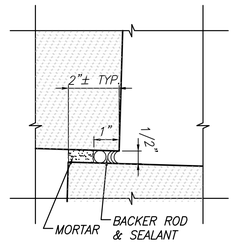
TOPSHAM ABUTMENT OVERLOOK SECTION 2

1/2" = 1'-0"



KEY PLAN 5

N.T.S.



TREAD DETAIL 4

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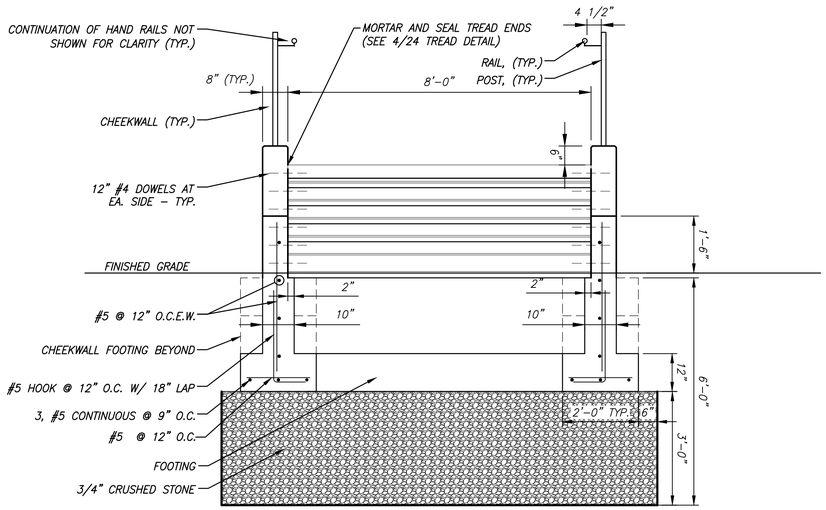
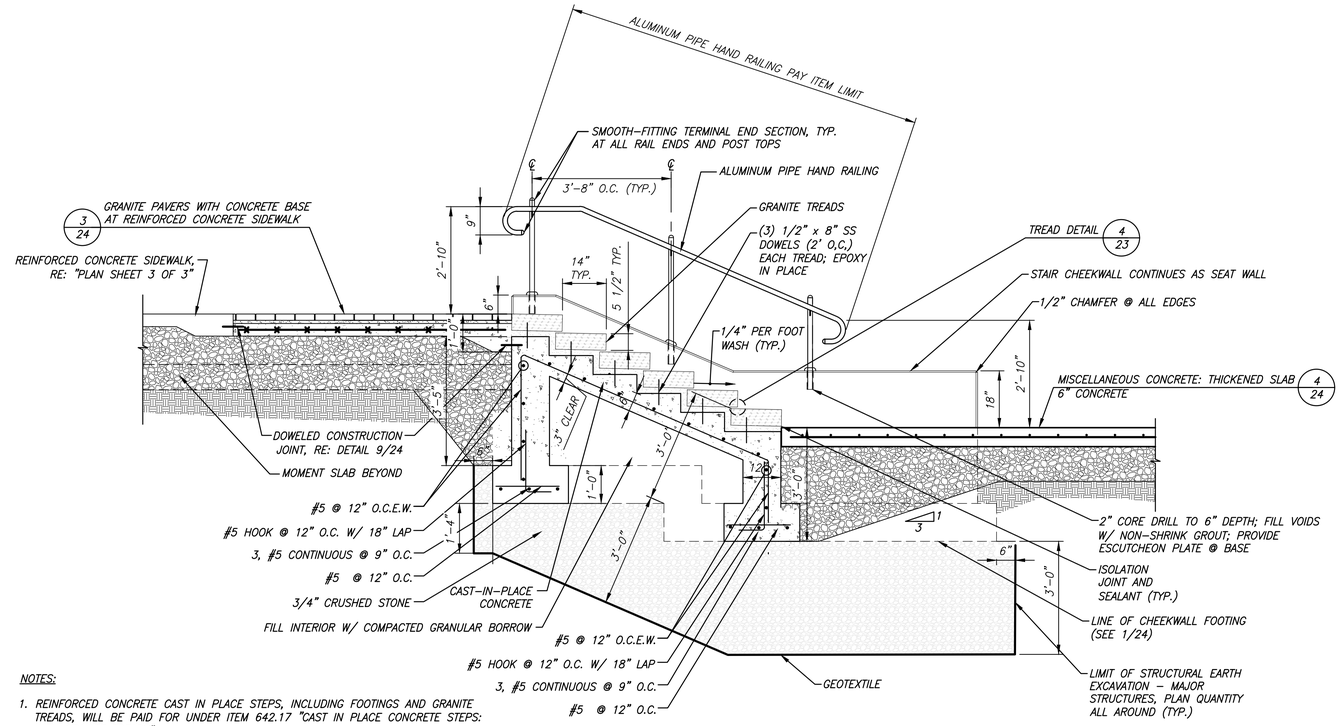


CAST–IN–PLACE CONCRETE STEPS WITH GRANITE TREADS – ELEVATION 3

1/2" = 1'-0"



NOTES:

1. REINFORCED CONCRETE CAST IN PLACE STEPS, INCLUDING FOOTINGS AND GRANITE TREADS, WILL BE PAID FOR UNDER ITEM 642.17 "CAST IN PLACE CONCRETE STEPS: WITH GRANITE TREADS".
2. CORING, GROUT, AND ESCUTCHEON PLATES SHALL BE CONSIDERED ALL INCIDENTAL TO ALUMINUM PIPE HAND RAILING PAY ITEM.
3. DOWELS AND EPOXY SHALL BE CONSIDERED INCIDENTAL TO CAST–IN–PLACE CONCRETE STEPS WITH GRANITE TREADS PAY ITEM.

CAST–IN–PLACE CONCRETE STEPS WITH GRANITE TREADS – SECTION 1

1/2" = 1'-0"

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BRUNSWICK - TOPSHAM
CUMBERLAND

TOPSHAM SITE DESIGN/AMENITIES
SITE SECTIONS

SHEET NUMBER
23
OF 163

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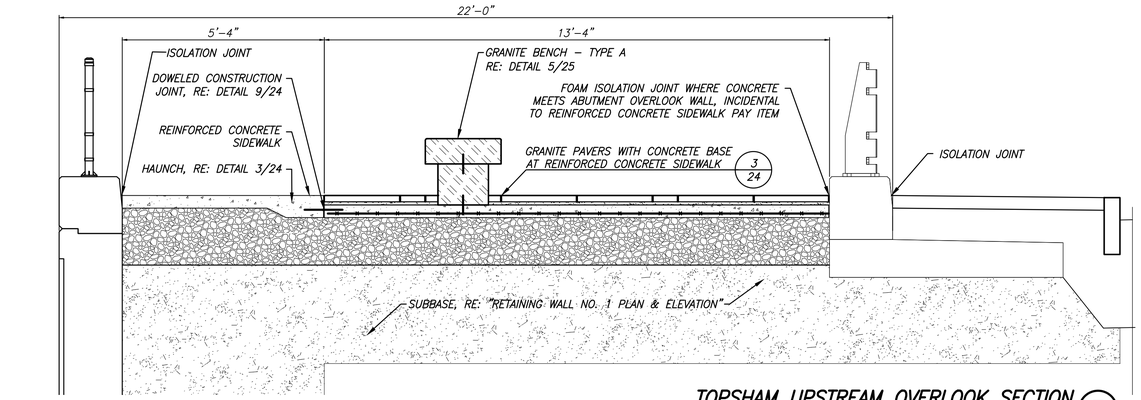
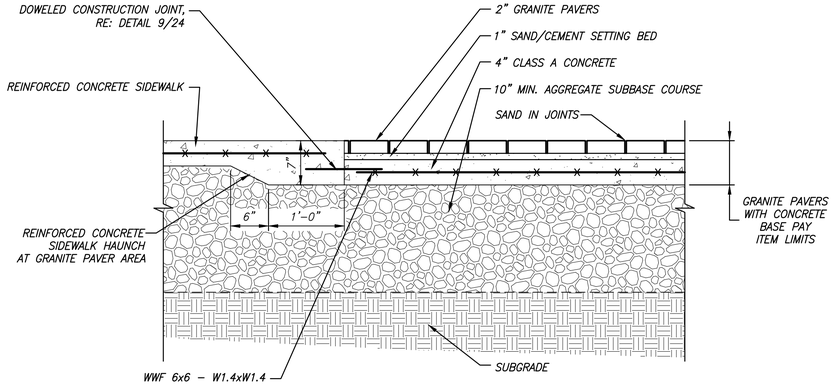


TOPSHAM UPSTREAM OVERLOOK SECTION 7

1/2" = 1'



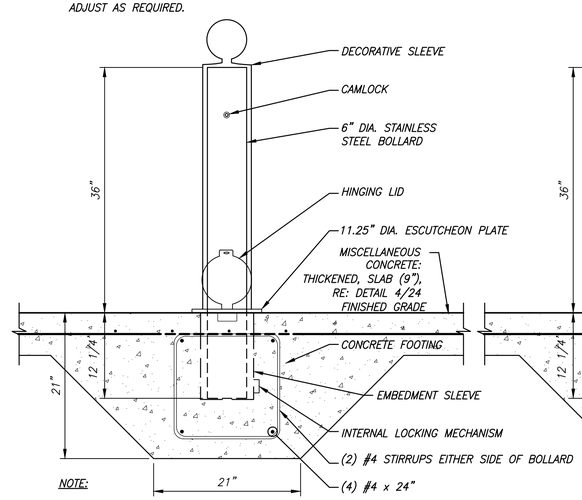
NOTE: PAVERS TO BE INSTALLED USING THIS METHOD AT LOCATIONS ADJACENT TO REINFORCED CONCRETE SIDEWALK.

GRANITE PAVERS WITH CONCRETE BASE AT REINFORCED CONCRETE SIDEWALK 3

1" = 1'-0"

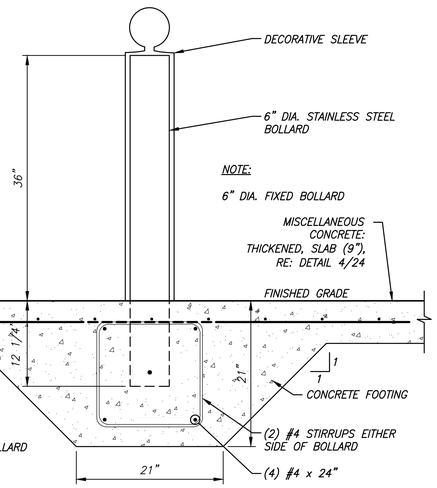
BOLLARD NOTES:

1. HAUNCH THICKENED SLAB TO DEPTH SHOWN TO FORM 21" SQUARE BOLLARD FOOTING.
2. THICKENED SLAB REINFORCING TO RUN THROUGH BOLLARD LOCATIONS UNINTERRUPTED. ADJUST AS REQUIRED.



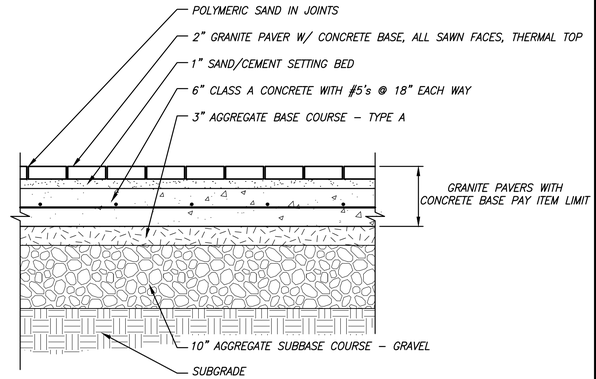
REMOVABLE BOLLARD 6

N.T.S.



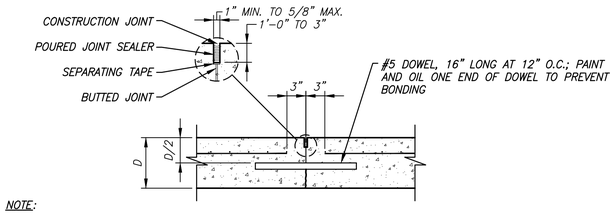
FIXED BOLLARD 5

N.T.S.



GRANITE PAVERS WITH CONCRETE BASE 2

1" = 1'-0"

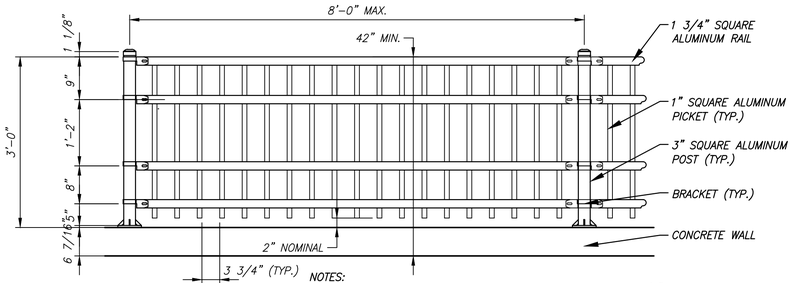


NOTE:

SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF CONCRETE AND AT LOCATIONS WHERE CONCRETE POURING OPERATIONS ARE STOPPED FOR MORE THAN ONE HALF HOUR. COSTS SHALL BE INCIDENTAL TO RELATED CONCRETE ITEMS.

DOWELED CONSTRUCTION JOINT 9

N.T.S.

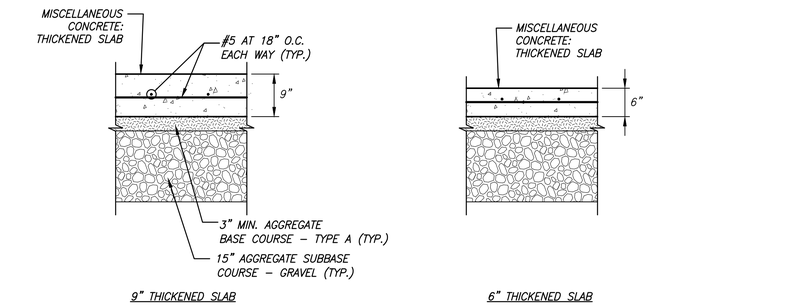


NOTES:

1. PEDESTRIAN RAIL POST ANCHORAGE SHALL CONSIST OF 4 1/2"ø ASTM F1554 GRADE 55 ANCHOR RODS SPACED ON A 4 1/2" x 4 1/2" PATTERN. THE ANCHORAGE SHALL BE ABLE TO DEVELOP THE FULL ANCHOR ROD CAPACITY. ANCHORAGE DETAILS SHALL BE SUBMITTED TO THE RESIDENT FOR APPROVAL.
2. PEDESTRIAN RAIL POST ANCHORAGE HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 AND SHALL BE BLACK IN COLOR.

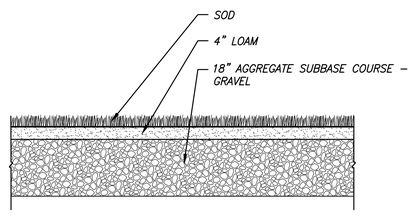
PEDESTRIAN FENCE 8

N.T.S.



MISCELLANEOUS CONCRETE: THICKENED SLAB 4

3/4" = 1'-0"



REINFORCED TURF AREA 1

NOT TO SCALE

0 1/2" 1" 2" 3"

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BRIDGE NO. 2016

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NO. 1857
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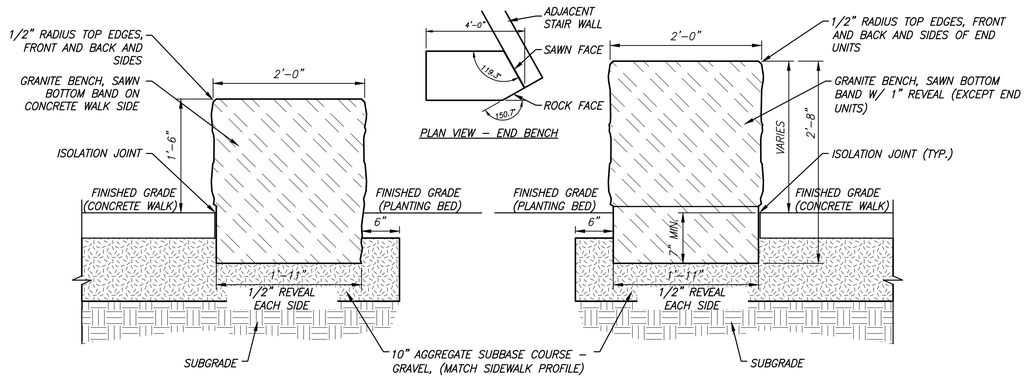
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM
CUMBERLAND

SITE DESIGN/AMENITIES DETAILS

SHEET NUMBER

24

OF 163



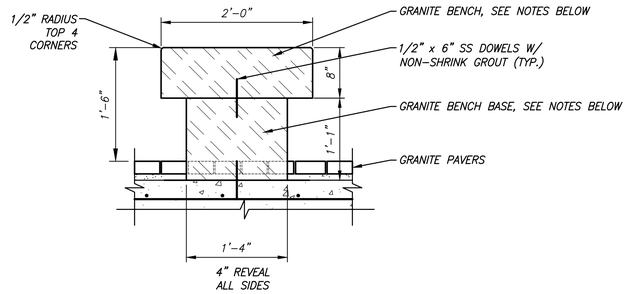
TYPE B1 TYPE B

NOTES:

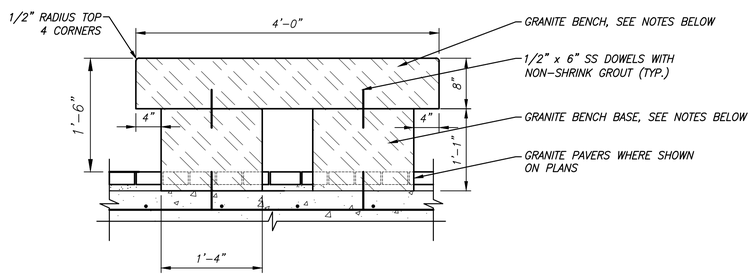
1. SAWN BOTTOM AND ENDS (EXCEPT SOUTHERN TREMINUS TO HAVE ROCKFACE).
2. SAWN TOP WITH HONED FINISH.
3. ROCKFACE FRONT AND BACK WITH SAWN BOTTOM BAND (TYPE B1 HAS SAWN BAND ON CONCRETE SIDE ONLY).
4. LENGTH OF EACH BLOCK TO BE 4.0'.

GRANITE BENCH - TYPE B AND TYPE B1 (6)

1" = 1'-0"



SIDE ELEVATION

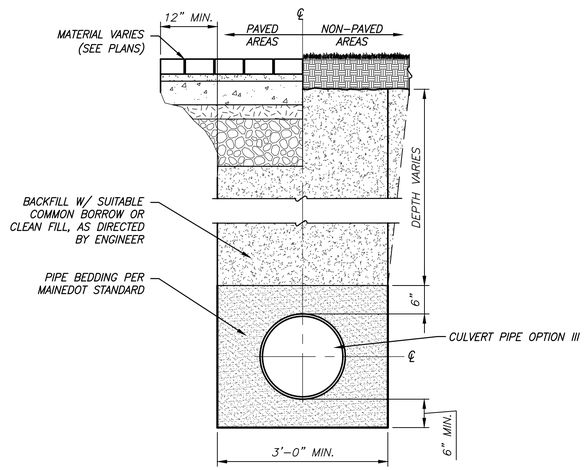


NOTES:

1. GRANITE BENCH BASE SAWN AND HONED ALL SIDES WITH EASED EDGES 16" x 16" x 13" -TYP. OF 2.
2. GRANITE BENCH SAWN BOTTOM WITH SAWN AND HONED TOP WITH EASED BOTTOM EDGES 24" x 48" x 8".
3. GRANITE BENCH HONED SIDES ALL EDGES EASED EXCEPT WHERE NOTED OTHERWISE.
4. AMPHITHEATER BENCHES: ENDS TO BE MITER-SAWN AS SHOWN.
5. LENGTH OF EACH BENCH TO BE 4.0'.

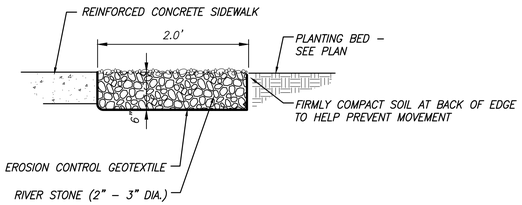
GRANITE BENCH - TYPE A (5)

1" = 1'-0"



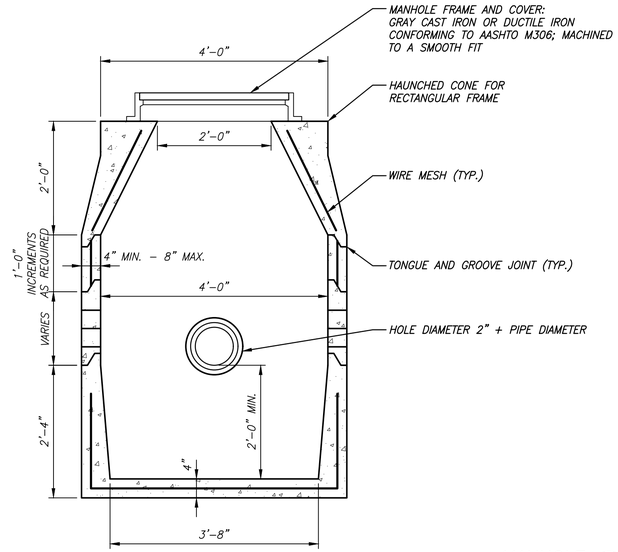
CULVERT PIPE OPTION III (4)

N.T.S.



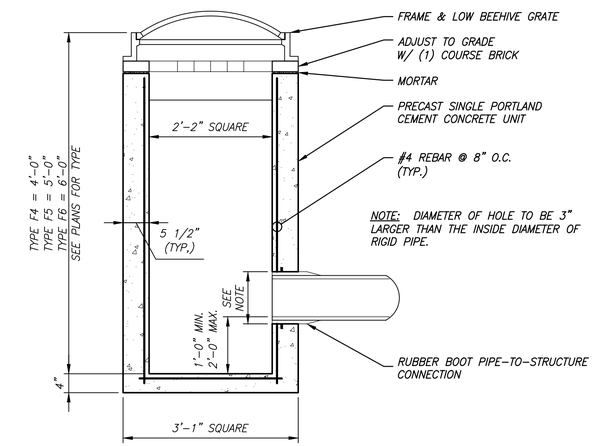
RIVER STONE DRIP STRIP (3)

N.T.S.



MANHOLE (2)

N.T.S.



CATCH BASIN (1)

N.T.S.

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SITE DESIGN/AMENITIES DETAILS

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OF 163

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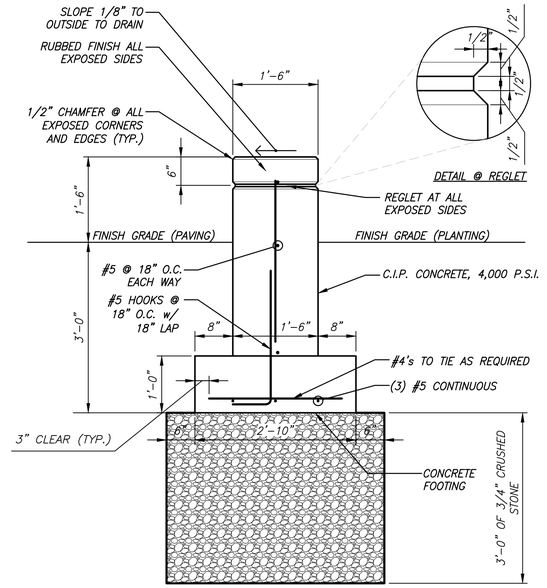
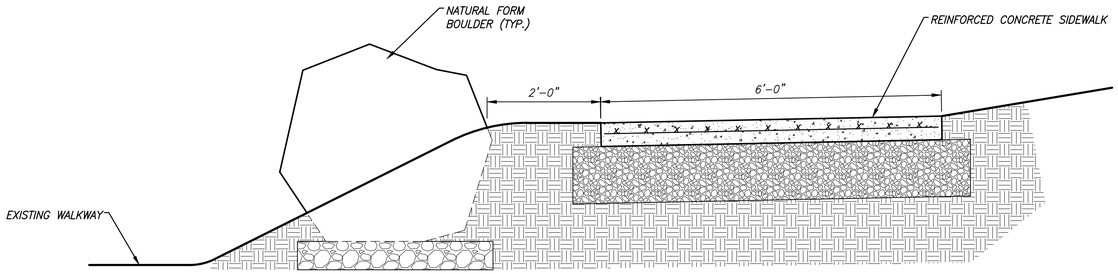


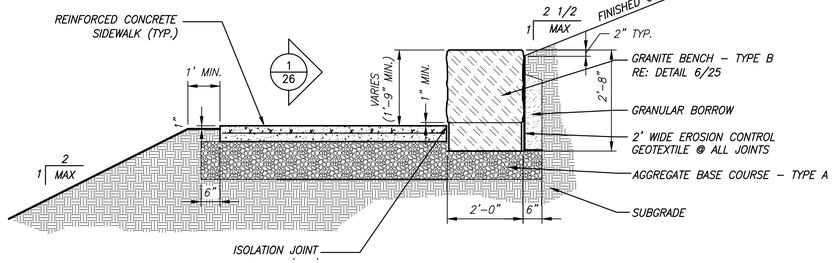
CAST-IN-PLACE CONCRETE SEAT WALL (3)

3/4" = 1'-0"



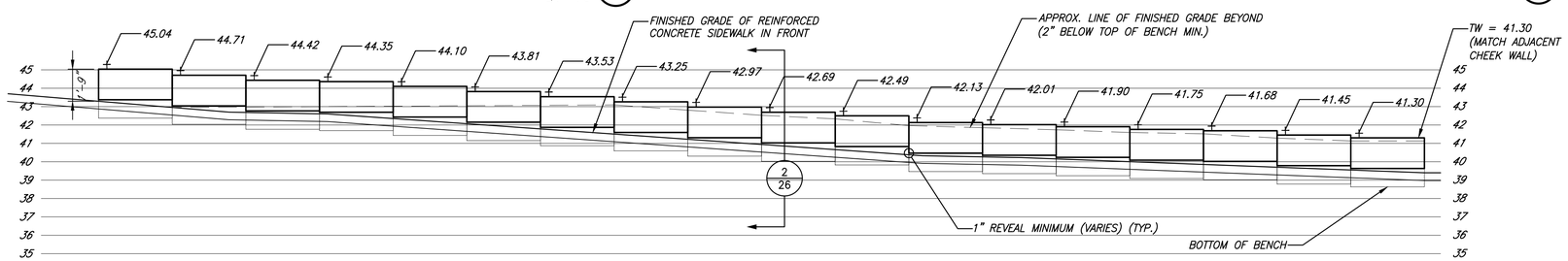
WALK AND BOULDER SECTION (4)

3/4" = 1'-0"



GRANITE BENCH - TYPE B: WALL/WALK SECTION (2)

1/2" = 1'-0"



GRANITE BENCH - TYPE B: WALL ELEVATION (1)

1/4" = 1'-0"

1" 1/2" 0 1" 2"

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SITE DESIGN/AMENITIES DETAILS

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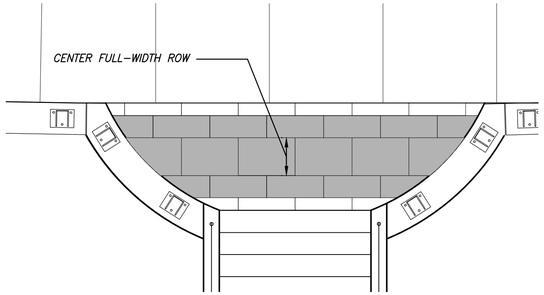
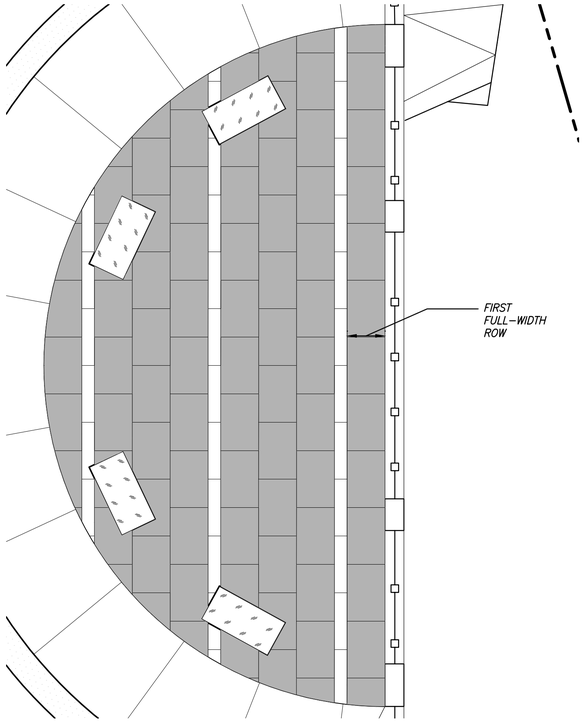
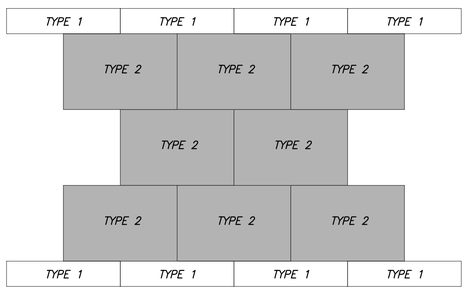


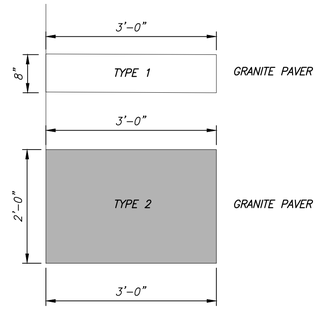
BRUNSWICK STEP LANDING 6
1/4" = 1'



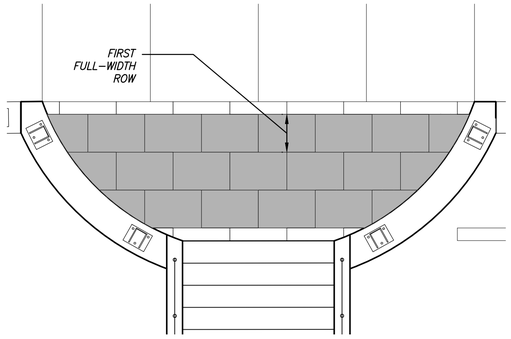
BRUNSWICK ABUTMENT OVERLOOK 7
1/4" = 1'



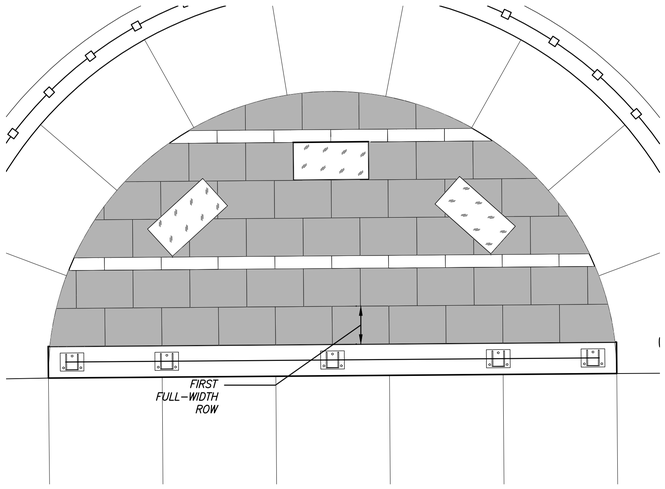
GRANITE PAVER PATTERN 8
1/2" = 1'



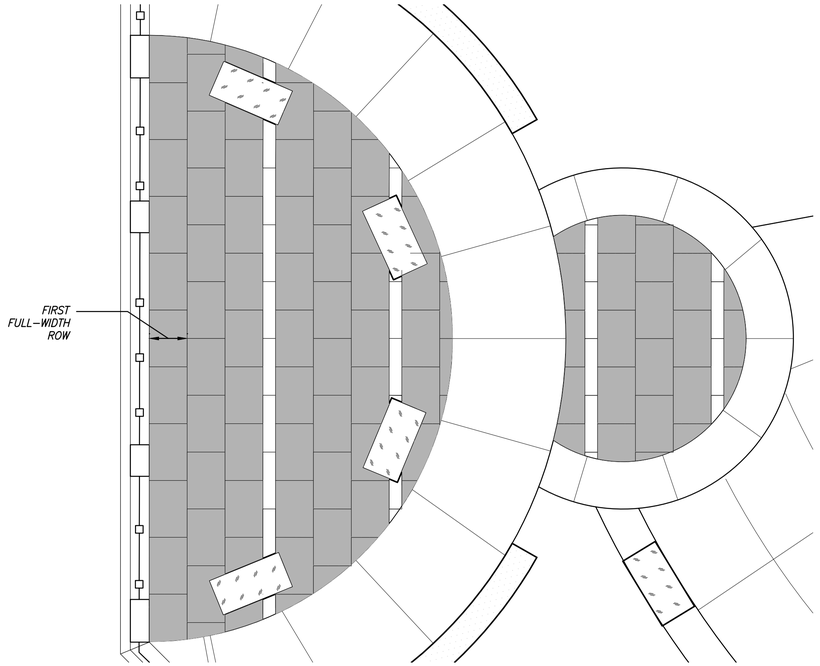
GRANITE PAVER TYPES 3
3/4" = 1'



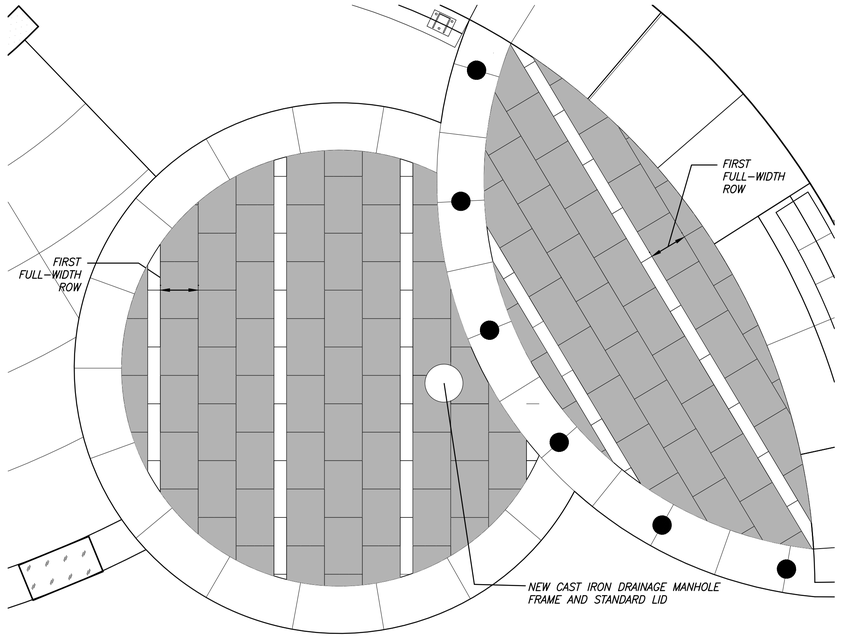
TOPSHAM STEP LANDING 4
1/4" = 1'



TOPSHAM UPSTREAM OVERLOOK 5
1/4" = 1'



TOPSHAM ABUTMENT OVERLOOK 1
1/4" = 1'



TOPSHAM ABUTMENT OVERLOOK 2
1/4" = 1'

0 1/2" 1" 2" 3"

SMRT Architecture • Engineering • Planning

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

LICENSED LANDSCAPE ARCHITECT
MARK G. JOHNSON
NO. 1857
STATE OF MAINE

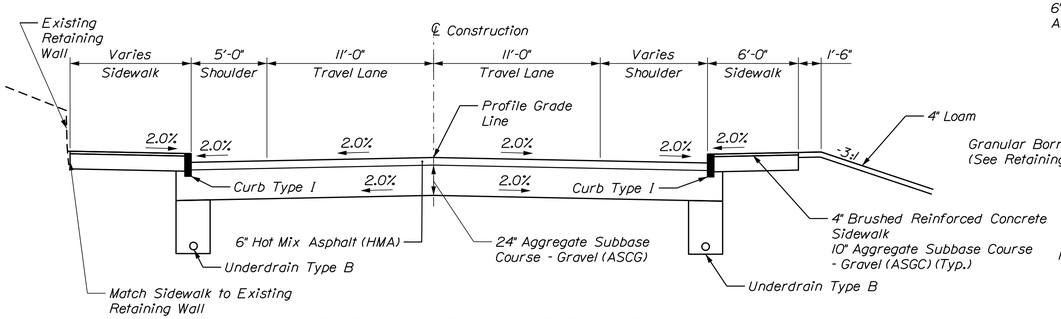
	SIGNATURE	P.E. NUMBER	DATE
		1857	12-17-21

PROJ. MANAGER	D. Bryant	BY	DATE
DESIGN-DETAILED	M. Johnson	W. MacDaniels	7-13-20
DESIGN-DETAILED2	M. Johnson	W. MacDaniels	2-28-21
DRAFT PS&E	M. Johnson	W. MacDaniels	8-20-21
DRAFT PS&E2	M. Johnson	T. Nein-Large	9-13-21
PS&E Plans	M. Johnson	W. MacDaniels	12-17-21

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND

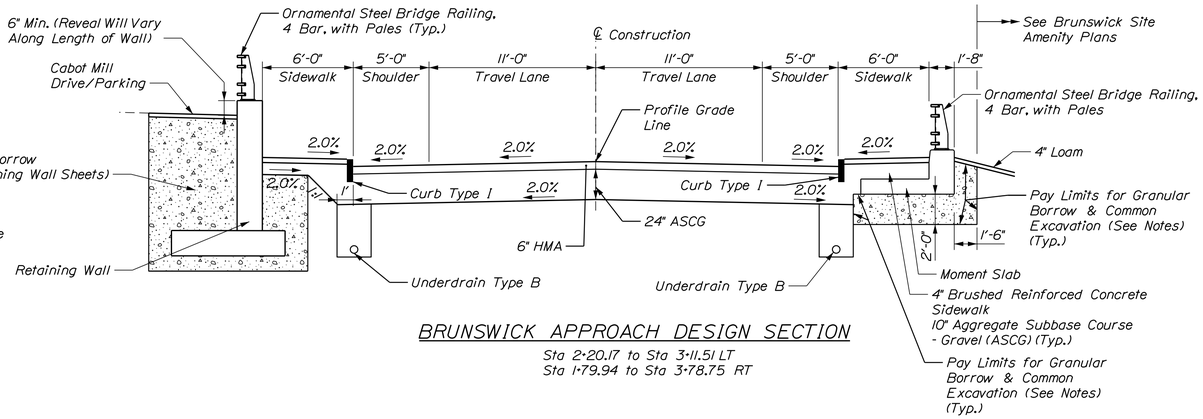
SITE DESIGN/AMENITIES
PAVER PATTERN DETAILS

SHEET NUMBER
27
OF 163



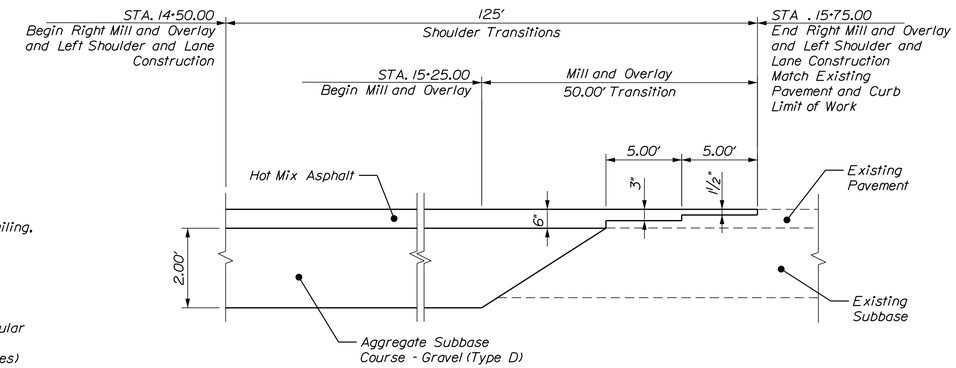
BRUNSWICK APPROACH DESIGN SECTION

Sta 1+00.00 to Sta 2+20.17 LT
Sta 0+70.00 to Sta 1+79.94 RT



BRUNSWICK APPROACH DESIGN SECTION

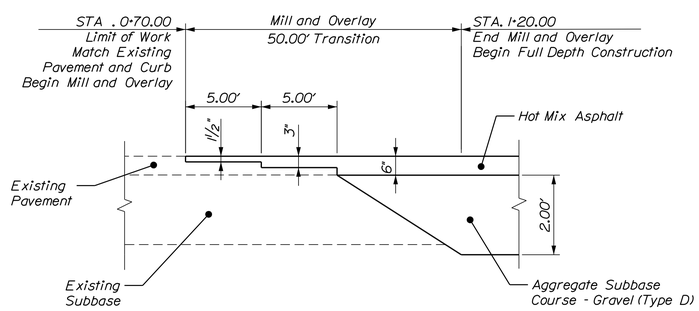
Sta 2+20.17 to Sta 3+11.51 LT
Sta 1+79.94 to Sta 3+78.75 RT



APPROACH PAVEMENT STEPPING DETAIL - TOPSHAM

BRUNSWICK APPROACH DESIGN SECTION

Sta 3+11.51 to Sta 4+37.75 LT
Sta 3+78.75 to Sta 4+37.75 RT



APPROACH PAVEMENT STEPPING DETAIL - BRUNSWICK

Notes:

1. The pavement, base, and subbase depths as shown on the plans are intended to be nominal.
2. When superelevation exceeds the slope of the low side shoulder, the low side shoulder shall have the same slope as the travelway.
3. Crowns for both normal and superelevation sections for all courses of subbase and pavement shall be straight.
4. The algebraic difference between the shoulder and travelway cross slopes "rollover" shall not exceed 8%.
5. The stationing shown under each typical is approximate.
6. Granular borrow beneath moment slabs shall conform to the requirements of Standard Specification 703.19, Granular Borrow, Material for Underwater Backfill.

SUPERELEVATION TABLE

LT. SHOULDER	LT. TRAVEL LANE	STATION	RT. TRAVEL LANE	RT. SHOULDER
Match Existing	Match Existing	0+70.00	Match Existing	Match Existing
-2.00%	-2.00%	1+00	-2.00%	-2.00%
-2.00%	-2.00%	14+59	-2.00%	-2.00%
-3.63%	-2.00%	15+00	-2.00%	-2.00%
-3.63%	-2.00%	15+35	-2.00%	-2.00%
Match Existing	Match Existing	15+75.00	Match Existing	Match Existing

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 — STATE OF MAINE — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE
12572 — P.E. NUMBER
9/28/2022 — DATE

	Scott Rollins	DATE
PROJ. MANAGER		
DESIGN-DETAILED	T.Antz	7/20
CHECKED-REVIEWED	D.Bryant	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

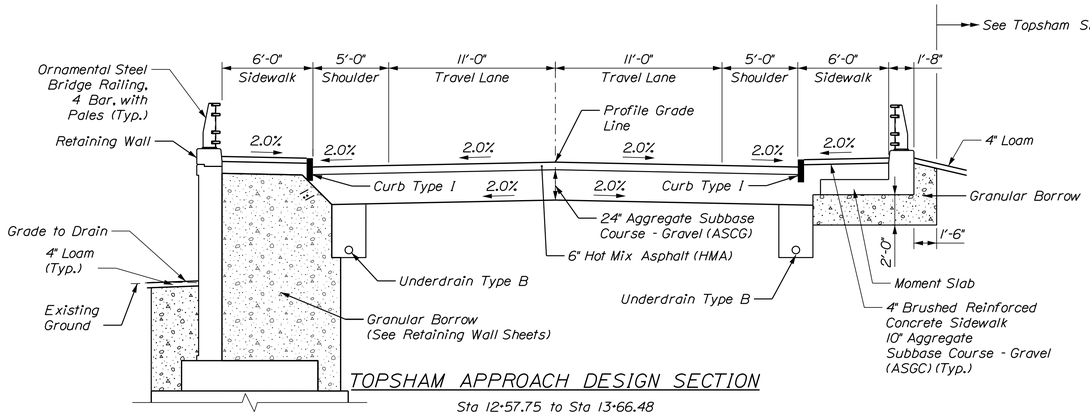
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

TYPICAL ROADWAY SECTIONS
SHEET 1 OF 2

SHEET NUMBER
28
OF 163

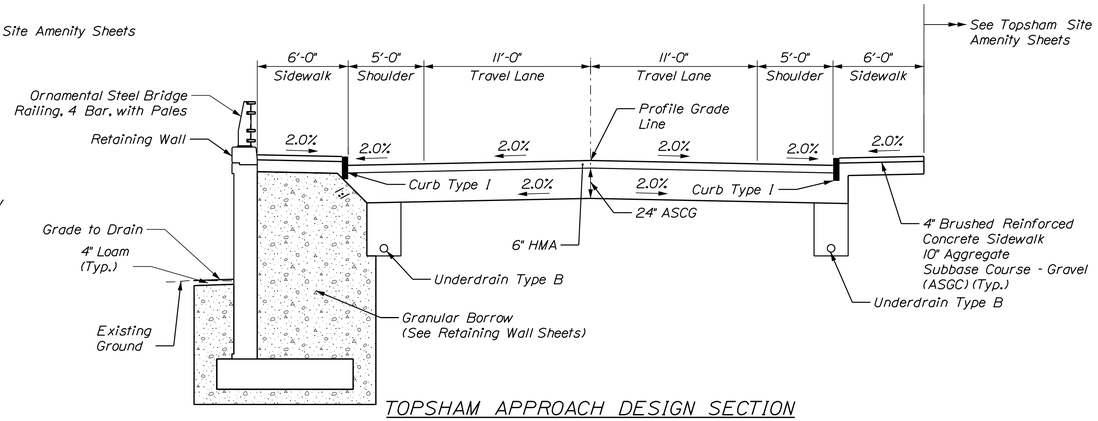
TYLin

Date:10/15/2022
Username:
Division:
Filename: ...\106207_10\028_Typical_01.dgn



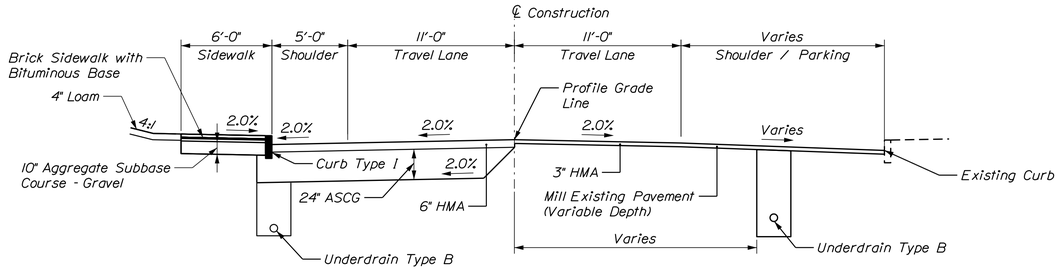
TOPSHAM APPROACH DESIGN SECTION

Sta 12+57.75 to Sta 13+66.48



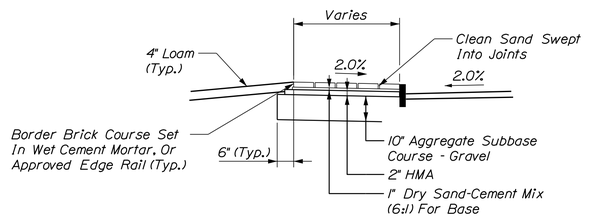
TOPSHAM APPROACH DESIGN SECTION

Sta 13+66.48 LT. to Sta 13+95.00 LT. Sta 13+66.48 RT. to Sta 14+50.00 RT.



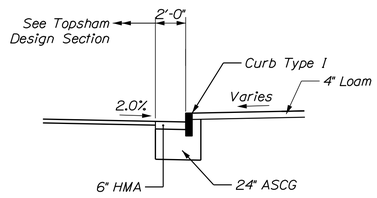
TOPSHAM APPROACH DESIGN SECTION

Sta 13+95.00 LT. to Sta 15+75.00 LT. Sta 14+84.47 RT. to Sta 15+75.00 RT.



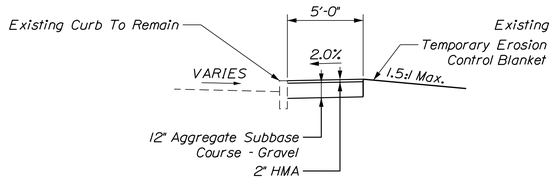
Bricks To Be Used:
New bricks shall match the existing bricks as closely as possible. Final brick selection to be approved by the Resident.

ITEM 608.15 BRICK SIDEWALK WITH BITUMINOUS BASE



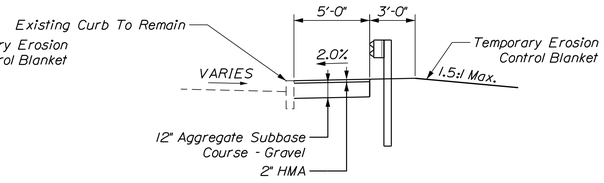
TOPSHAM APPROACH CURB DETAIL

Sta 14+50.00 RT. to Sta 14+84.47 RT.



TEMPORARY SIDEWALK

For Use During Construction Phasing



TEMPORARY SIDEWALK WITH GUARDRAIL

For Use During Construction Phasing

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	T.Antz	7/20
CHECKED-REVIEWED	D.Bryant	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

TYPICAL ROADWAY SECTIONS
SHEET 2 OF 2

SHEET NUMBER 29 OF 163

TYLin

Filename: ...\106207_48\029_Typical_02.dgn Division: Username: Date:10/15/2022

Username:

Date:10/15/2022

Division:

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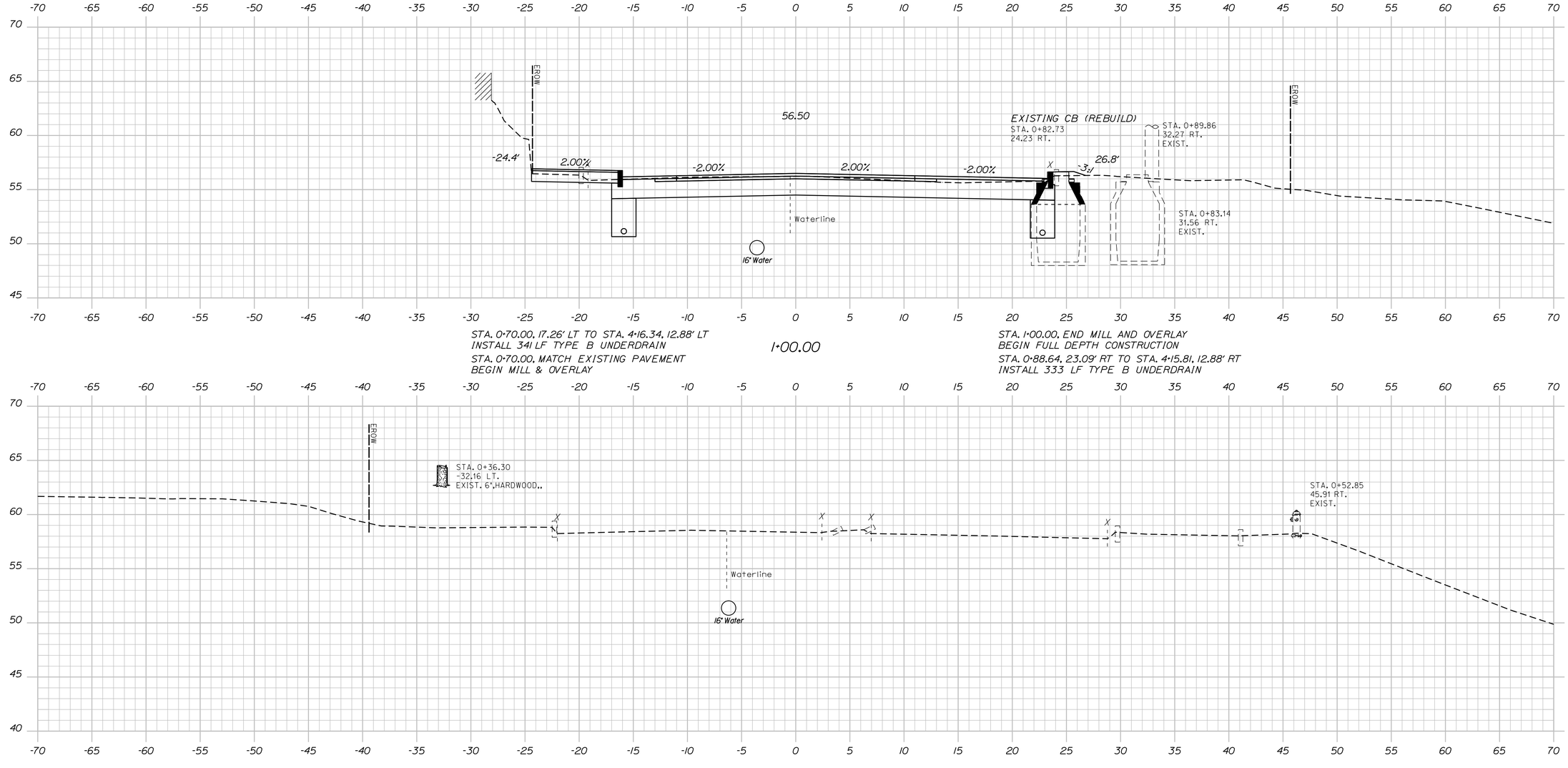


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhons	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

SHEET NUMBER

30

OF 163

TYLin

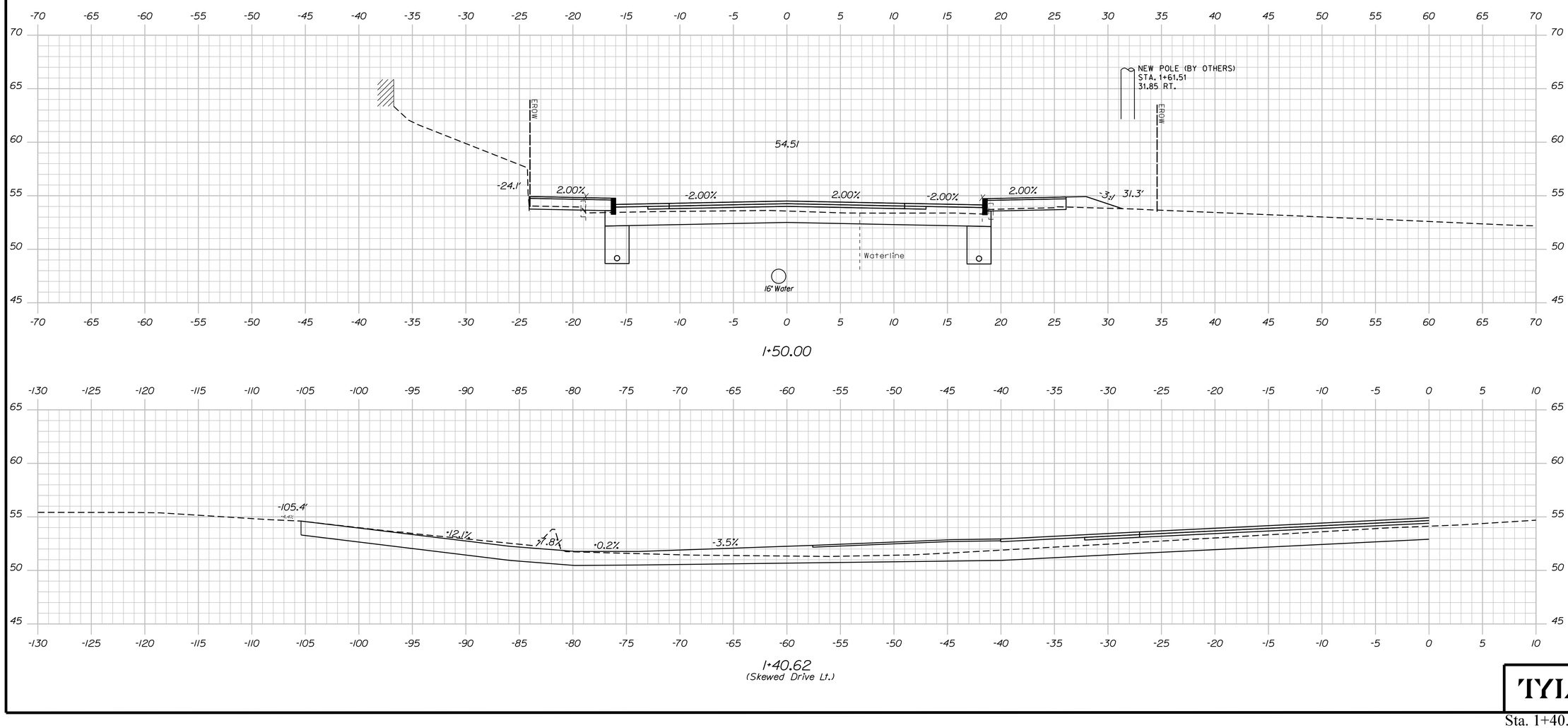
Sta. 0+50.00 to Sta. 1+00.00

Date:10/15/2022

Username:

Division:

Filename: ...\106207_40\031_XSections_02.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

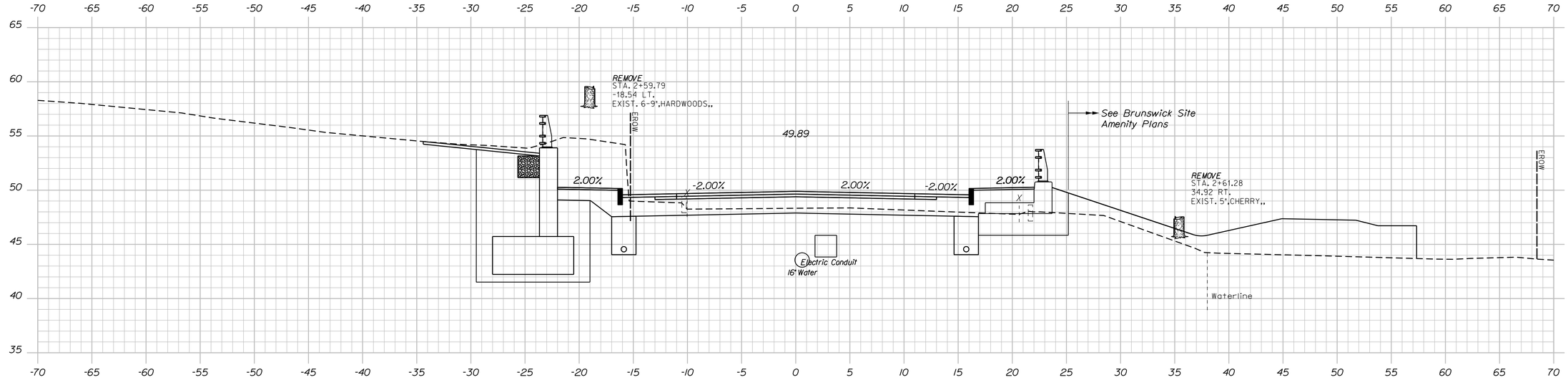
SHEET NUMBER

31

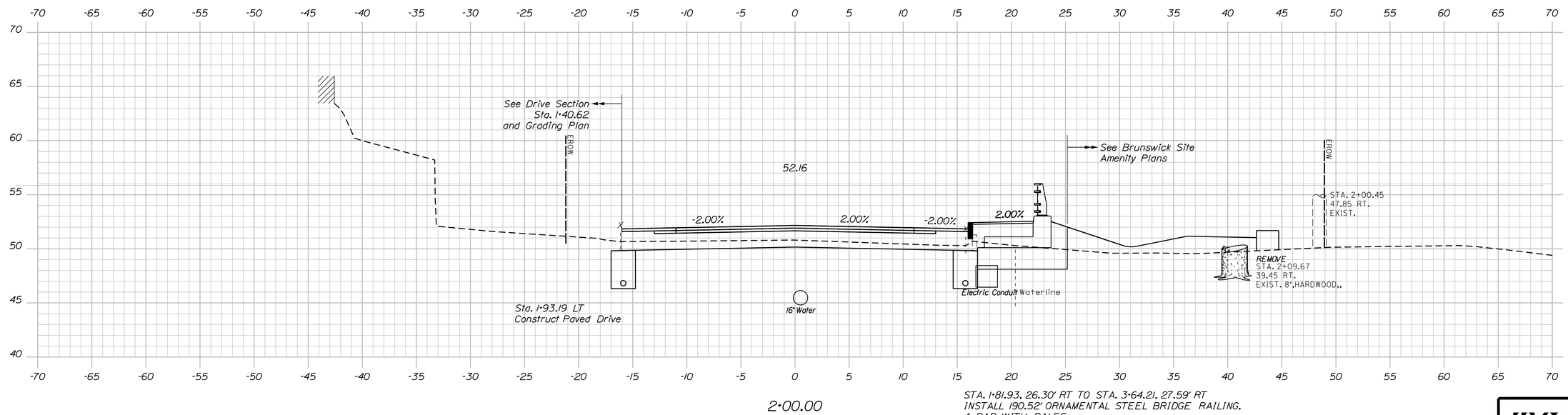
OF 163

TYLin

Sta. 1+40.62 to Sta. 1+50.00



STA. 2+23.62, 25.16' LT TO STA. 3+07.47, 32.75' LT
INSTALL 85.28' ORNAMENTAL STEEL BRIDGE RAILING. 2+50.00
4 BAR. WITH PALES.



2+00.00

STA. 1+81.93, 26.30' RT TO STA. 3+64.21, 27.59' RT
INSTALL 190.52' ORNAMENTAL STEEL BRIDGE RAILING.
4 BAR. WITH PALES.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

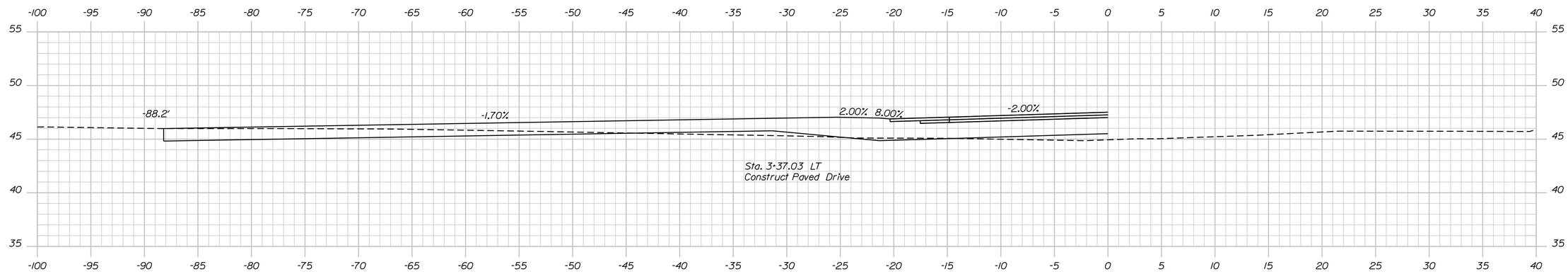
CROSS SECTIONS

SHEET NUMBER
32
OF 163

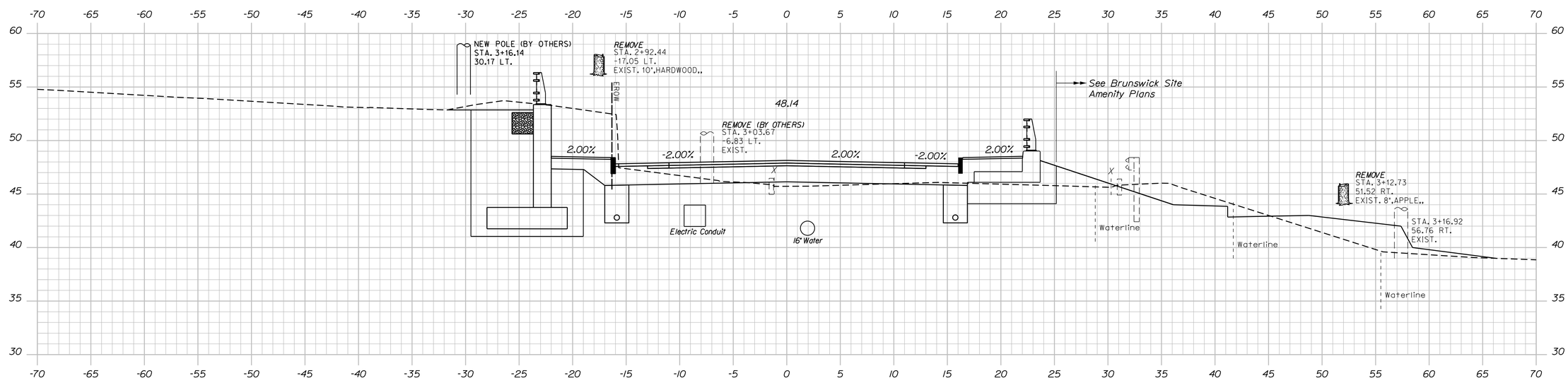
Date:10/15/2022
Username:
Division:
Filename: ...\106207_41\032_XSections_03.dgn

Sta. 2+00.00 to Sta. 2+50.00

Date:10/15/2022
Username:
Division:
Filename: ...\106207_42\033_XSections_04.dgn



3+23.07
(Skewed Drive Lt.)



3+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	D.Burhons	M.Devold
CHECKED-REVIEWED	P.McClure	P.McClure
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

SHEET NUMBER
33
OF 163

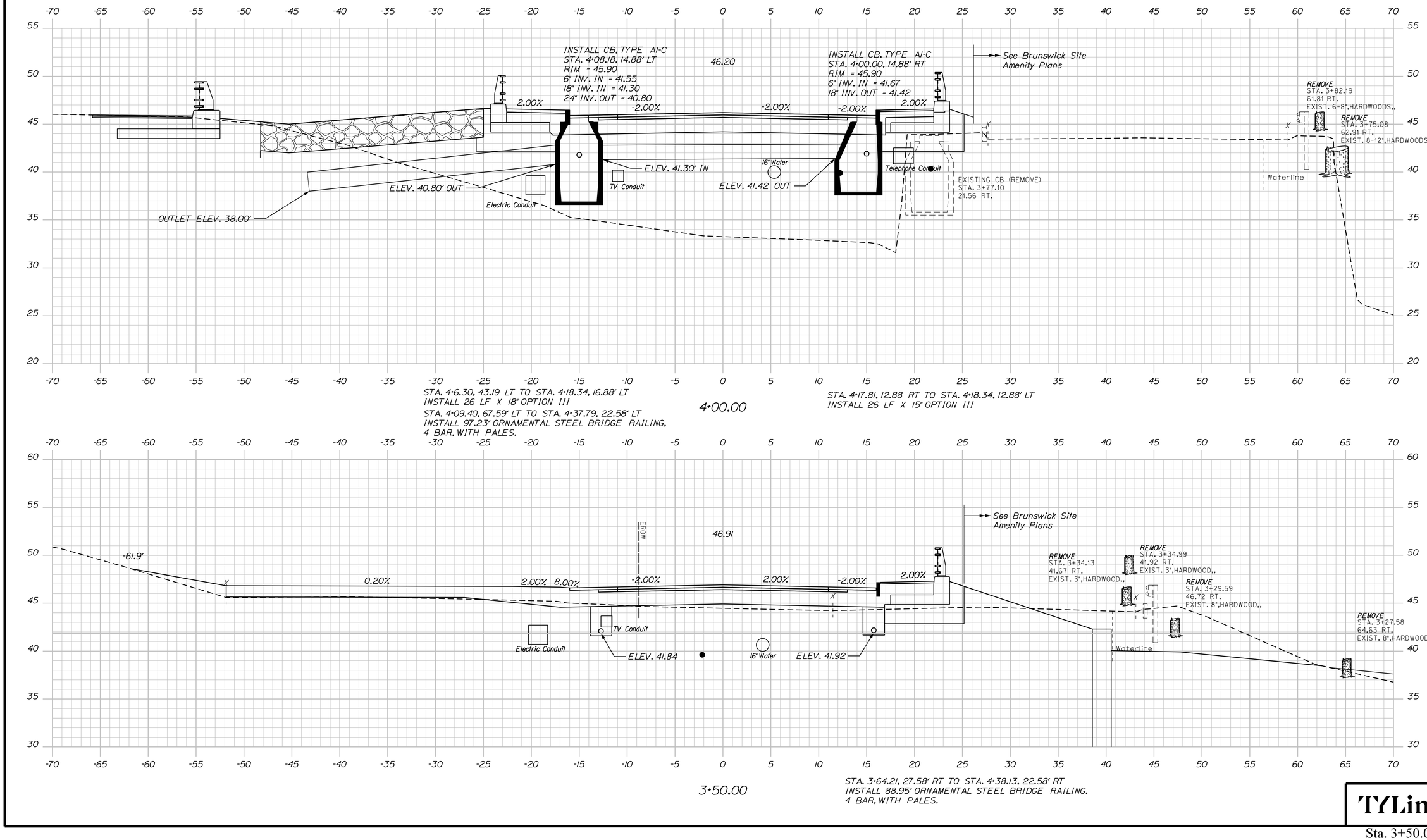
TYLin

Sta. 3+00.00 to Sta. 3+23.07

Filename: ...\106207_43\034_XSections_05.dgn Division: Username:

Date:10/15/2022

STA. 4+40 TO STA. 12+55
BRIDGE



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	M.Devoid	7/20
CHECKED-REVIEWED	D.Burhons	7/20
DESIGN2-DETAILED2	P.McClure	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

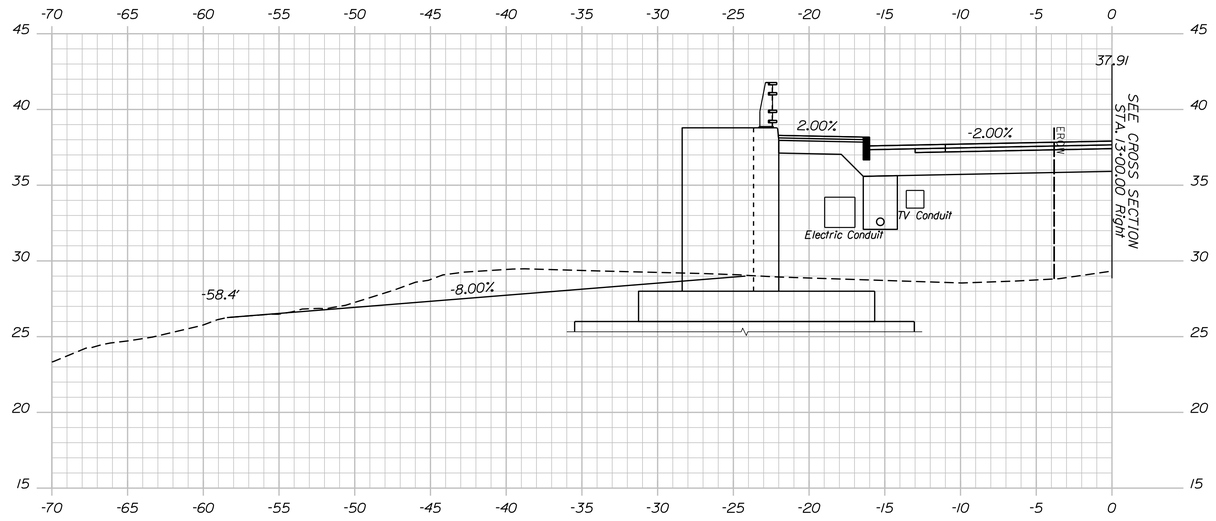
SHEET NUMBER

34

OF 163

TYLin

Sta. 3+50.00 to Sta. 4+00.00

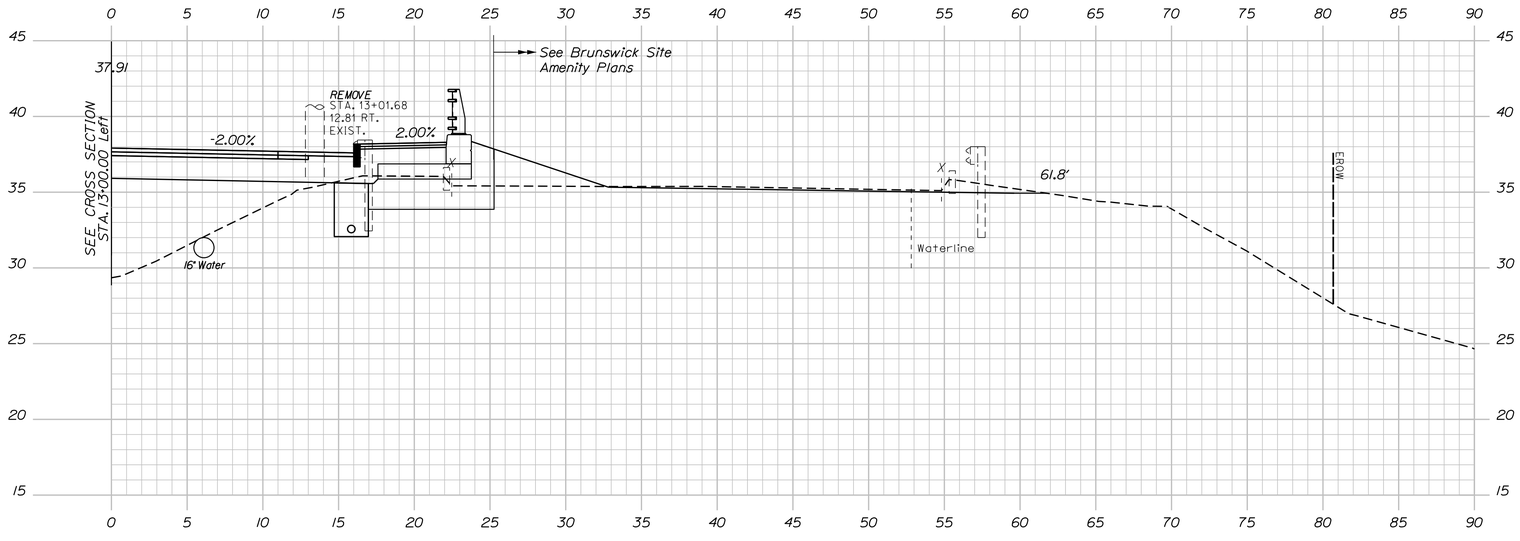


STA. 12+75.75, 15.88' LT TO STA. 15+68.82, 15.17' LT
INSTALL 293 LF TYPE B UNDERDRAIN

13+00.00, Left

STA. 12+64.25, 22.23' LT TO STA. 12+92.84, 22.00' LT
INSTALL 28.66' ORNAMENTAL STEEL BRIDGE RAILING.
4 BAR. WITH PALES.

STA. 12+99.28, 22.00' LT TO STA. 13+95.00, 22.00' LT
INSTALL 95.72' ORNAMENTAL STEEL BRIDGE RAILING.
4 BAR. WITH PALES.



STA. 12+75.75, 15.88' RT TO STA. 13+59.03, 15.88' RT
INSTALL 83 LF TYPE B UNDERDRAIN

13+00.00, Right

STA. 12+57.29, 22.58' RT TO STA. 13+17.68, 29.35' RT
INSTALL 63.52' ORNAMENTAL STEEL BRIDGE RAILING.
4 BAR. WITH PALES.

STA. 4+40 TO STA. 12+55
BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED
PROFESSIONAL
ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

SHEET NUMBER
35
OF 163

TYLin

Filename: ...\106207_44\035_XSections_06.dgn Division: Username: Date:10/15/2022

Sta. 13+00.00 Right to Sta. 13+00.00 Left

Date:10/15/2022

Username:

Division:

Filename: ...\106207_45\036_XSections_07.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

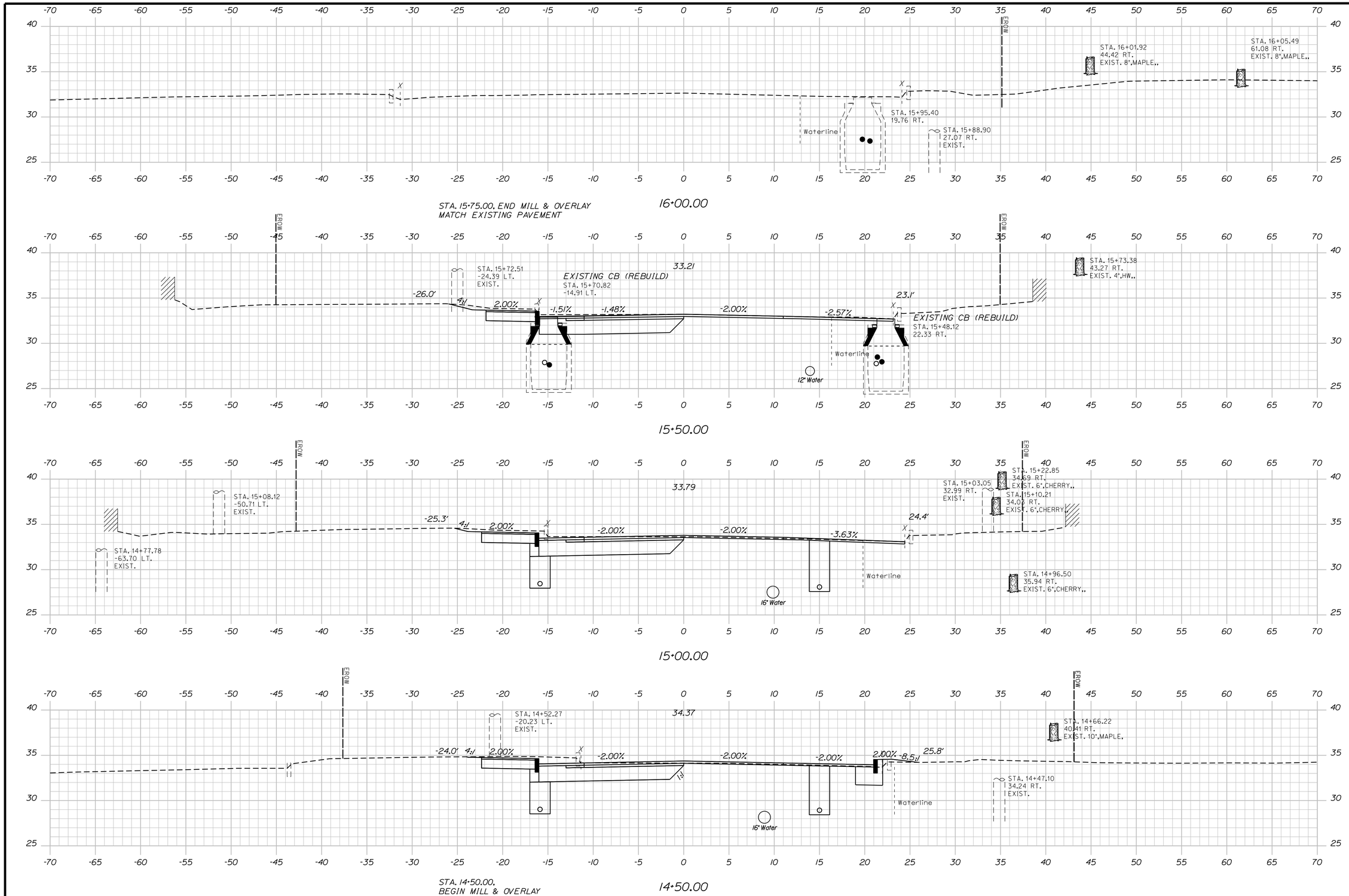
SHEET NUMBER

36

OF 163

TYLin

Sta. 13+50.00 to Sta. 14+50.00



Date:10/15/2022

Username:

Division:

Filename: ...\106207_46\037_XSections_08.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Burhans	M.Devoid	7/20
CHECKED-REVIEWED	P.McClure	P.McClure	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CROSS SECTIONS

SHEET NUMBER
37
OF 163

TYLin

Sta. 15+00.00 to Sta. 16+00.00

Date:10/15/2022

Username:

Division:

Filename: ...\038_Phase_I_Plan_01.DGN

CONSTRUCTION NOTES:

Rectangular Rapid Flashing Beacon (Phase I Only)

Station	Offset
3+76.50	53.46' RT
3+99.60	29.38' RT

Terminal Curb Type I

Station	Offset	to	Station	Offset	Length
3+62.57	46.95' RT		3+69.78	49.28' RT	8'
3+75.73	51.26' RT		3+78.30	52.48' RT	4'

Vertical Curb Type I

Station	Offset	to	Station	Offset	Length
1+56.33	17.78' RT		1+75.11	16.69' RT	19.22'

Curbing Removed and Stacked

Station	Offset	to	Station	Offset	Length
3+62.57	46.95' RT		3+78.30	52.48' RT	18.62'
1+56.33	17.78' RT		1+75.11	16.69' RT	19.22'

Curb Ramp Detectable Warning Field

Station	Offset	Area
3+72.48	51.22' RT	12.24 SF
4+01.39	32.45' RT	14.0 SF

Erosion Control Blanket

Station	Offset	to	Station	Offset
1+56.56	RT		4+02.14	RT

Temporary 4" Painted Pavement Marking Line White or Yellow

Station	Offset	to	Station	Offset	Length
0+64.78	2.55 RT		4+86.61	72.46' RT	433.24'
3+69.78	49.28' RT		3+95.89	32.85' RT	31.99'
3+75.73	51.26' RT		4+01.74	35.12' RT	31.82'

Pedestrian APS Push Button Assembly (Payment Incidental to 510 Items)

Station	Offset
See Plan View	

Removing Pavement Markings

Station	Offset	to	Station	Offset	Length
0+63.53	4.28' RT		4+86.61	72.46' RT	430.13'

Guardrail, Remove, Modify and Reset (Type 3B to 3C)

Station	Offset	to	Station	Offset	Length
3+77.48	31.98' RT		4+08.31	62.87' RT	142.31'

Portable Concrete Barrier, Type I

Station	Offset	to	Station	Offset	Length
0+69.99	20.73' LT		1+68.51	15.93' LT	100.80'
2+18.13	13.52' LT		3+14.31	16.52' LT	108.00'
3+56.34	9.97' LT		4+14.74	23.20' RT	94.72'
4+10.12	30.23' RT		4+67.65	52.50' RT	90.72'

Sta 3+65, Beginning of Full Depth Construction up to Top of Base/Bottom of Pavement. Extend to Back of Proposed South Abutment. No Approach Paving to be Placed During Phase I. See Cross Sections for Placement Width.

Provide Tapered Gravel Fill to Partly Construct Subgrade/Subbase of Roadway While Maintaining Drive Access During Phase I.

Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

PC = STA. 1+29.36

PRC = STA. 4+14.51

WII-2 (Both Sides)
WI6-7P(L) (Both Sides)
RI0-25

Solar Powered Rectangular Rapid Flashing Beacon Assembly (Double-Sided)

Pedestrian APS Push Button Assembly (Payment Incidental to 510 Items)

Construct Full Abutment

Temporary Bracket On Existing Bridge For Overhead Utility Support (By Others)

Portable Concrete Barrier, Type I

Construct Retaining Wall and Sidewalk

Phase I Construction

Construct Footing and Partial Height Wingwall

Construct 10 ft Pedestrian Ramp With Detectable Warning Field

22' Wide Temp Travelway

22.0 ft

Sidewalk Closed

Portable Concrete Barrier, Type I

Remove Detectable Warning Field and Close Curb Cut

Remove And Reset Signs That Conflict With Temporary Sidewalk (Incidental to Conctract)

Temporary Utility Pole (By FirstLight)

Remove And Reset Signs That Conflict With Temporary Sidewalk (Incidental to Conctract)

Remove And Reset Guardrail

Construct Temporary Crosswalk

Construct Pedestrian Landing Area With Detectable Warning Field

Construct 8 ft Pedestrian Ramp

Construct Temporary 5' Sidewalk using Existing Curb

Maintain Vehicle and Pedestrian Traffic on Existing Bridge

0+00 1+00 2+00 3+00 4+00 5+00

N15°36'51.02"E

Phase I Notes:

1. Shift traffic on south bridge approach and maintain traffic on existing bridge while constructing new bridge and approaches.

2. Conceptual Phase I Plans show two-way traffic maintained during construction. NB closure detour plans and full closure detour Plans are provided elsewhere in this plan set for those time periods noted in the special provisions when one or two lane closures are allowed.

PLAN

25 0 25 50
Scale of Feet

Legend

Phase I Construction

Vehicle Traffic

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Robins		
DESIGN-DETAILED	D.Bryant	M.Devoid	2/21
CHECKED-REVIEWED	D.Burhons	D.Bryant	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONCEPTUAL PHASE I PLAN
SHEET 1 OF 2

SHEET NUMBER
38
OF 163

TYLin

Date:10/15/2022

Username:

Division:

Filename: ...\039_Phase_I_Plan_02.DGN

CONSTRUCTION NOTES:

Rectangular Rapid Flashing Beacon (Phase I Only)

Station	Offset
12+72.94	39.16' RT
12+83.99	62.48' RT

Terminal Curb Type I

Station	Offset	to	Station	Offset	Length
12+80.32	61.47' RT		12+84.06	60.16' RT	4.0'
12+88.80	58.49' RT		12+96.35	55.86' RT	8.0'

Terminal Curb Type I - Circular

Station	Offset	to	Station	Offset	Length	Radius
13+60.00	40.73' RT		13+68.00	51.34' RT	8.0'	55'
13+81.47	43.76' RT		13+85.15	45.31' RT	4.0'	55'

Curbing Removed and Stacked

Station	Offset	to	Station	Offset	Length
12+80.32	61.47' RT		12+96.35	55.86' RT	17.0'
13+60.00	40.73' RT		13+85.15	45.31' RT	25.8'

Curb Ramp Detectable Warning Field

Station	Offset	Area
12+86.76	60.27' RT	10.03 SF
13+74.61	42.88' RT	27.07 SF

Temporary 4" Painted Pavement Marking Line White or Yellow

Station	Offset	to	Station	Offset	Length
11+99.88	71.88' RT		15+35.31	0' RT	346.75'
12+75.62	41.27' RT		12+84.06	60.16' RT	20.68'
12+79.97	38.74' RT		12+88.80	58.49' RT	21.63'
13+68.00	40.92' RT		14+38.75	28.49' RT	71.84'
13+81.47	53.63' RT		14+32.30	34.62' RT	60.15

Pedestrian APS Push Button Assembly (Payment Incidental to 510 Items)

Station	Offset
16+74.35	23.28' LT

Removing Pavement Markings

Station	Offset	to	Station	Offset	Length
11+99.88	71.88' RT		15+35.31	0' RT	341.44'

Portable Concrete Barrier, Type I

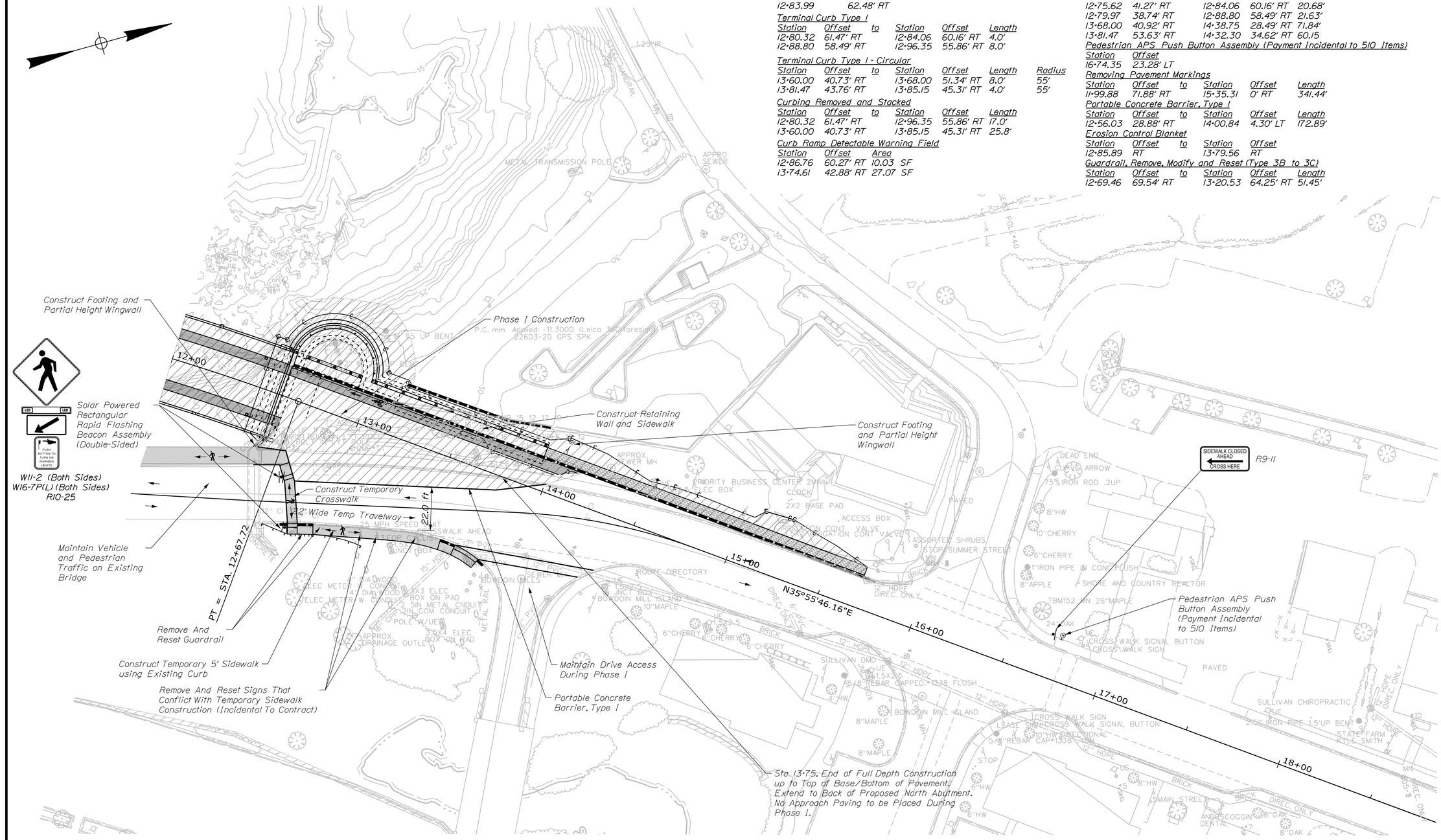
Station	Offset	to	Station	Offset	Length
12+56.03	28.88' RT		14+00.84	4.30' LT	172.89'

Erosion Control Blanket

Station	Offset	to	Station	Offset
12+85.89	RT		13+79.56	RT

Guardrail, Remove, Modify and Reset (Type 3B to 3C)

Station	Offset	to	Station	Offset	Length
12+69.46	69.54' RT		13+20.53	64.25' RT	51.45'



PLAN

25 0 25 50

Scale of Feet

Legend

Phase I Construction

Vehicle Traffic

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

12572
P.E. NUMBER

9/28/2022
DATE

SIGNATURE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Bryant	M.Dewoid	2/21
CHECKED-REVIEWED	D.Burhons	D.Bryant	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONCEPTUAL PHASE I PLAN
SHEET 2 OF 2

SHEET NUMBER

39

OF 163

TYLin

Phase II Notes:

1. Shift Traffic On South Bridge Approach And Maintain Traffic On New Bridge While Removing The Old Bridge And Reconstructing Approaches.

Legend

- Phase II Construction
- Vehicle Traffic

CONSTRUCTION NOTES:

Portable Concrete Barrier, Type I

Station	Offset	to	Station	Offset	Length
0+00.85	35.49' RT		5+13.14	11.17' RT	517.30'

Temporary 4" Painted Pavement Marking Line, White or Yellow

Station	Offset	to	Station	Offset	Length
0+69.08	5.26' RT		5+49.60	0' RT	479.75'

CURVE DATA #1
PI = 2+73.46
D = 7°09'43.1"
Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

Placement of all Subbase From Beginning of Project to Drive Access to Back of Fort Andros / Brookfield Dam Will be Placed During Phase 2 After Traffic Shifted to Proposed Bridge and Will Require Short Term Temporary One Way Traffic Under Flaggers Alternating Excavation and Build-up the NB and SB Sides.

Complete Construction of Drive While Maintaining Access

Sidewalk to be Constructed During Phase 1

PC = STA. 1+29.36

PRC = STA. 4+14.51

Temp Striping. Permanent Striping not Shown for Clarity and are to be Placed as part of Completion of Work.

22' Wide Temp Travelway

Portable Concrete Barrier, Type I

Construct Remaining Portion of Wingwall

Existing Bridge Closed to Traffic

Phase II Construction

N15°36'51.02"E

0+00 1+00 2+00 3+00 4+00 5+00

PLAN

25 0 25 50
Scale of Feet

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

	Scott Rollins		
PROJ. MANAGER			
DESIGN-DETAILED	D.Bryant	M.Devoid	2/21
CHECKED-REVIEWED	D.Burhans	D.Bryant	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONCEPTUAL PHASE II PLAN
SHEET 1 OF 2

SHEET NUMBER
40
OF 163

Username: Division: Date:10/15/2022
Filename: ...\040_Phase_II_Plan_01.DGN

Filename: ...\041_Phase_II_Plan_02.DGN Division: Username: Date:10/15/2022

CONSTRUCTION NOTES:

Portable Concrete Barrier, Type I

Station	Offset	to	Station	Offset	Length
12+00.38	15.93' RT		14+00.53	48.00' RT	216.63'
14+20.65	48.00' RT		15+74.66	13.25' RT	168.15'

Legend

- *Phase II Construction*
- *Vehicle Traffic*

Portable Conc. Barrier

Construct Remaining Portion of Wingwall

Existing Bridge Closed to Traffic

Placement of all Subbase From Sta 13+75 to End of Project will be Placed During Phase 2 After Traffic Shifted to Proposed Bridge and Will Require Short Term Temporary One Way Traffic Under Flaggers Alternating Excavation and Build-Up Between the NB and SB Sides.

Phase II Construction

Sidewalk to be Constructed During Phase I.

Maintain Drive Access During Phase II

12+00 13+00 14+00 15+00 16+00 17+00 18+00

24.0' ±

24' Wide Temp Travelway

PT = STA. 12+67.72

N35°55'46.16"E

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE

12572 — P.E. NUMBER

9/28/2022 — DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Bryant	M.Devoid	2/21
CHECKED-REVIEWED	D.Burhans	D.Bryant	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

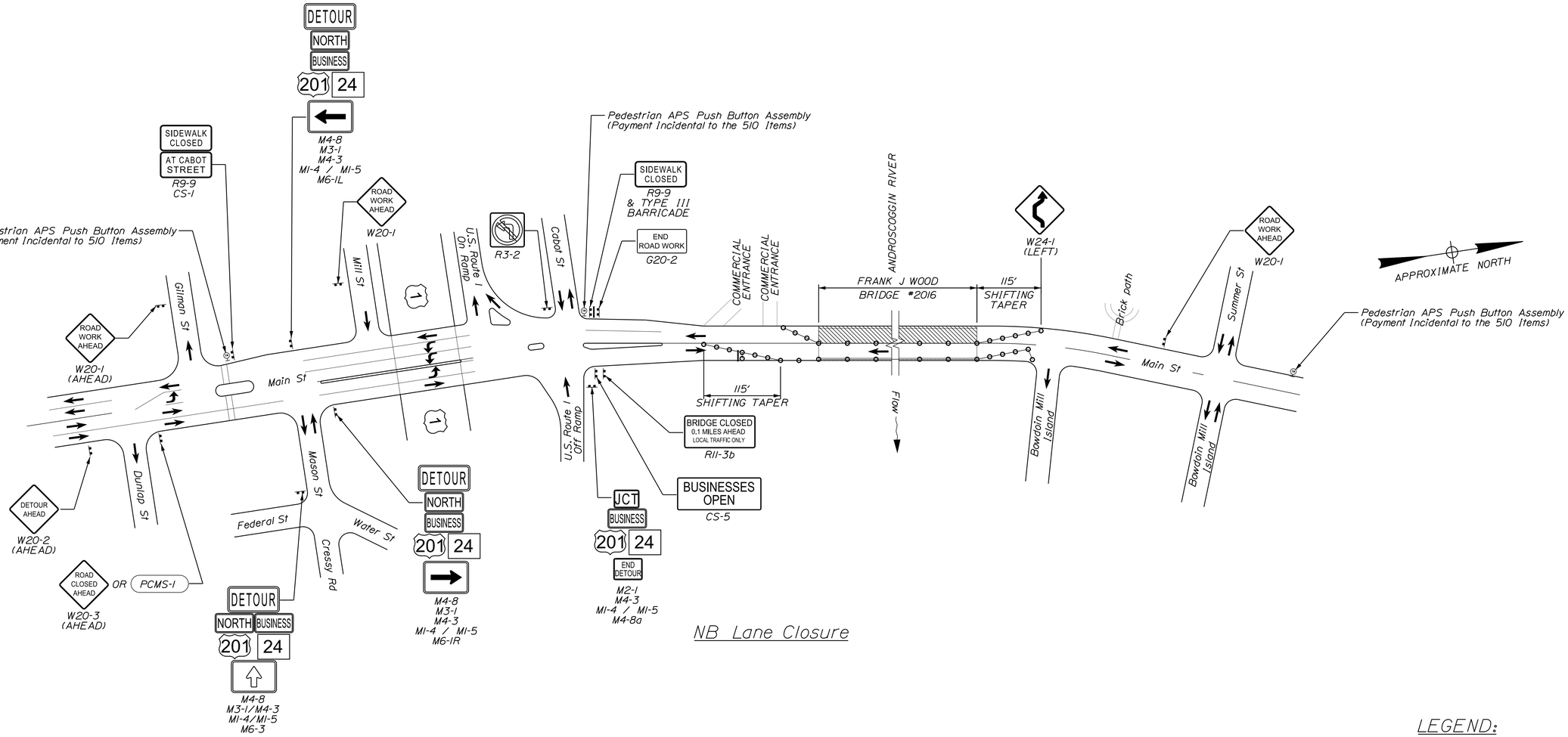
CONCEPTUAL PHASE II PLAN
SHEET 2 OF 2

SHEET NUMBER

41

OF 163

TYLin



NB Lane Closure

LEGEND:

- DRUM
- TYPE III BARRICADE
- SIGN
- DIRECTION OF TRAFFIC
- INSPECTION AREA

Note:
See Narrative and Attachments B and C for additional information.
NB Closure Detour Sheets 2 and 3 for additional information.

Username:

Date:10/15/2022

Filename: ...\042_NB_Closure_Detour_Plan_01.dgn Division:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins	BY	DATE
DESIGN-DETAILED	D.Bryant	P. McClure	3/22
CHECKED-REVIEWED	D.Burhons	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

NB CLOSURE DETOUR
SHEET 1 OF 4

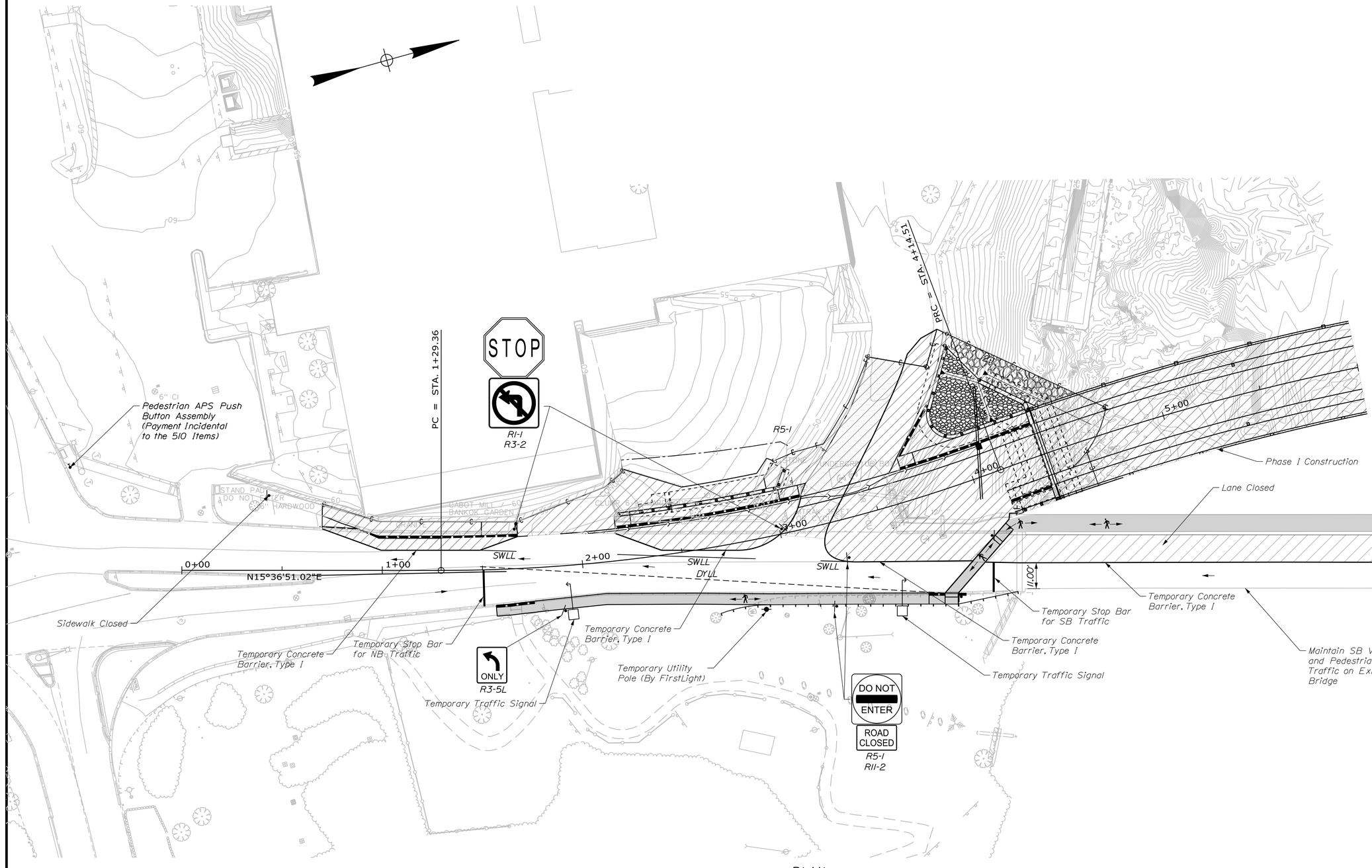
SHEET NUMBER
42
OF 163

TYLin

Username:

Date:10/15/2022

Filename: ...\043_NB_Closure_Detour_Plan_02.DGN Division:



Temporary Signal Plan

PLAN

25 0 25 50

Scale of Feet

Legend

Phase I Construction

Vehicle Traffic

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016 BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

PROJ. MANAGER	Scott Robins	BY	DATE
DESIGN-DETAILED	D. Bryant	T. Antz	3/22
CHECKED-REVIEWED	D. Bryant	D.Bryant	3/22
DESIGN2-DETAILED2	D.Burhons		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

NB CLOSURE DETOUR
SHEET 2 OF 4

SHEET NUMBER

43

OF 163

Filename: ...\044_NB_Closure_Detour_Plan_03.dgn Division: Username: Date:10/15/2022

TOPSHAM

BRUNSWICK

LANE CLOSURES

INSET #1

INSET #2

INSET #3

INSET #4

ANDROSCOGGIN RIVER

COW ISLAND

NB Detour Plan

NOT TO SCALE

Note:
See following sheets for inserts.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

	Scott Rollins	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	D.Bryant	P. McClure	3/22
CHECKED-REVIEWED	D.Burhans	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

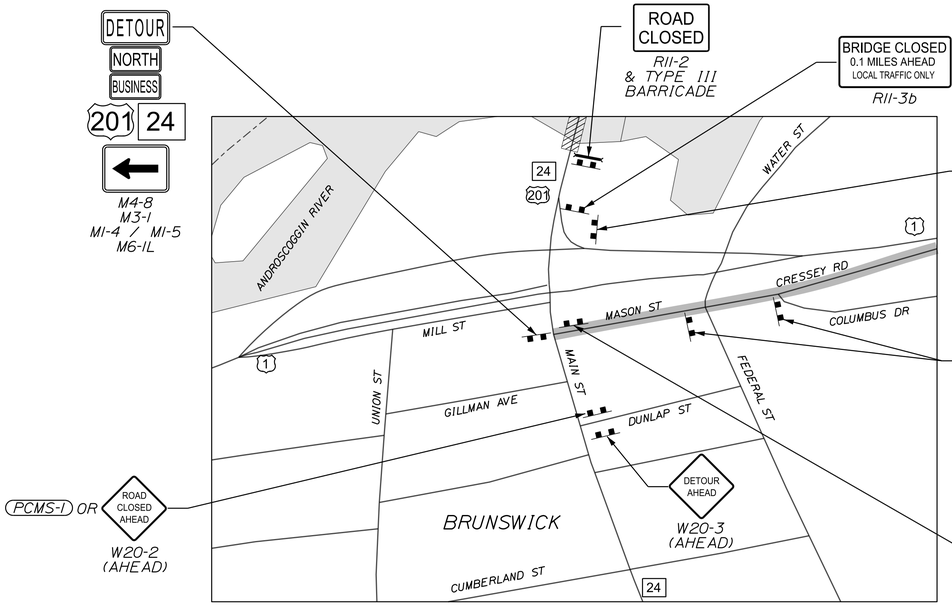
NB CLOSURE DETOUR SHEET 3 OF 4

SHEET NUMBER

44

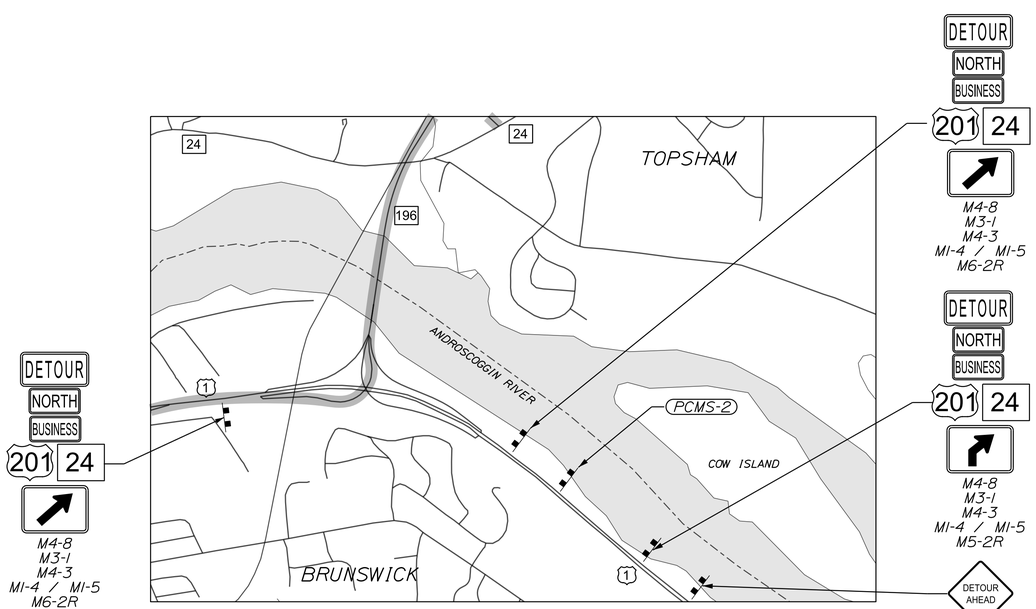
OF 163

TYLin



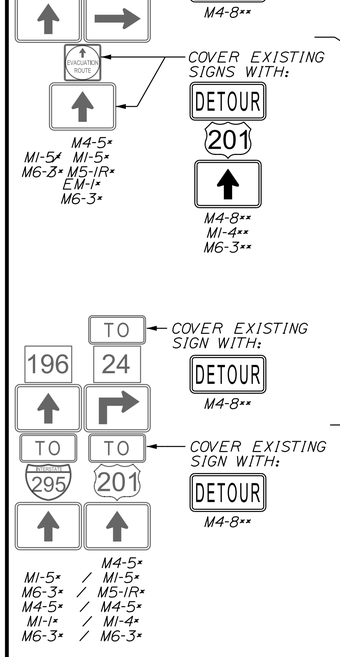
INSET - 1

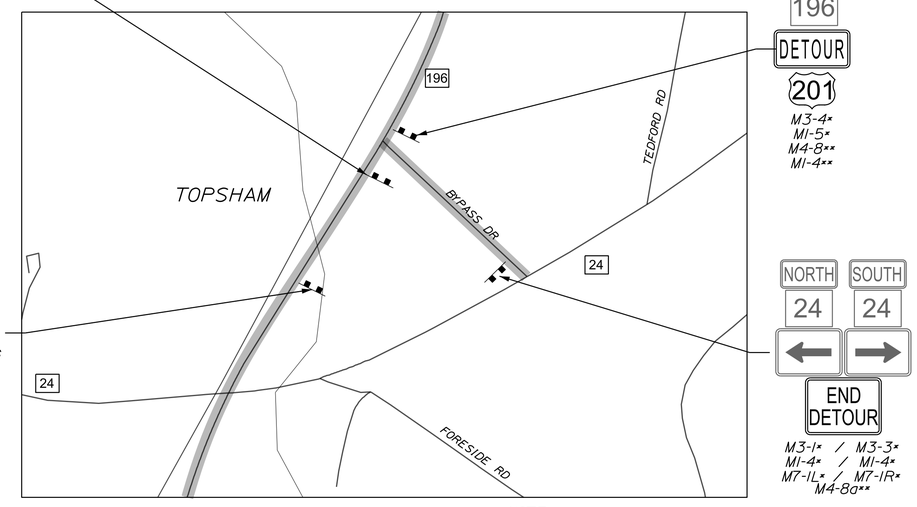
NOTES:
1. ALL SIGNS SHOWN ARE PROPOSED TEMPORARY SIGNS.
2. SEE LANE CLOSURES SHEET FOR ADDITIONAL INFORMATION.



INSET - 2

NOTE:
ALL SIGNS SHOWN ARE PROPOSED TEMPORARY SIGNS.

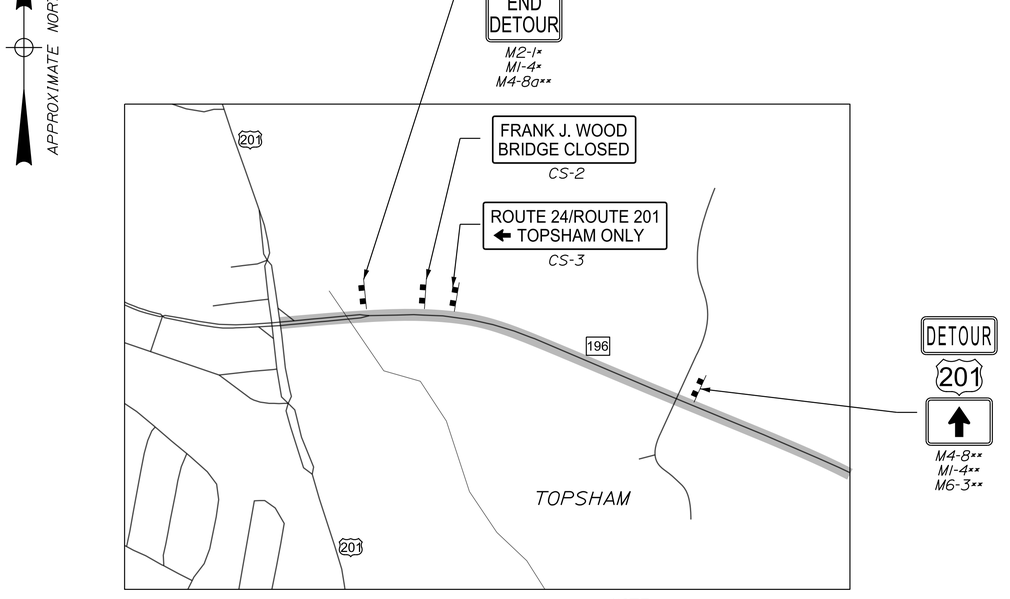




INSET - 3

NOTE:
* = EXISTING SIGN (IN PLACE)
** = PROPOSED SIGN TO BE TEMPORARILY ADDED

APPROXIMATE NORTH



INSET - 4

NOTE:
* = EXISTING SIGN (IN PLACE)
** = PROPOSED SIGN TO BE TEMPORARILY ADDED

LEGEND:

- TYPE III BARRICADE
- SIGN
- DETOUR ROUTE
- INSPECTION AREA

NB Closure Detour Inset Maps

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins	BY	
DESIGN-DETAILED	D.Bryant	P. McClure	3/22
CHECKED-REVIEWED	D.Burhons	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

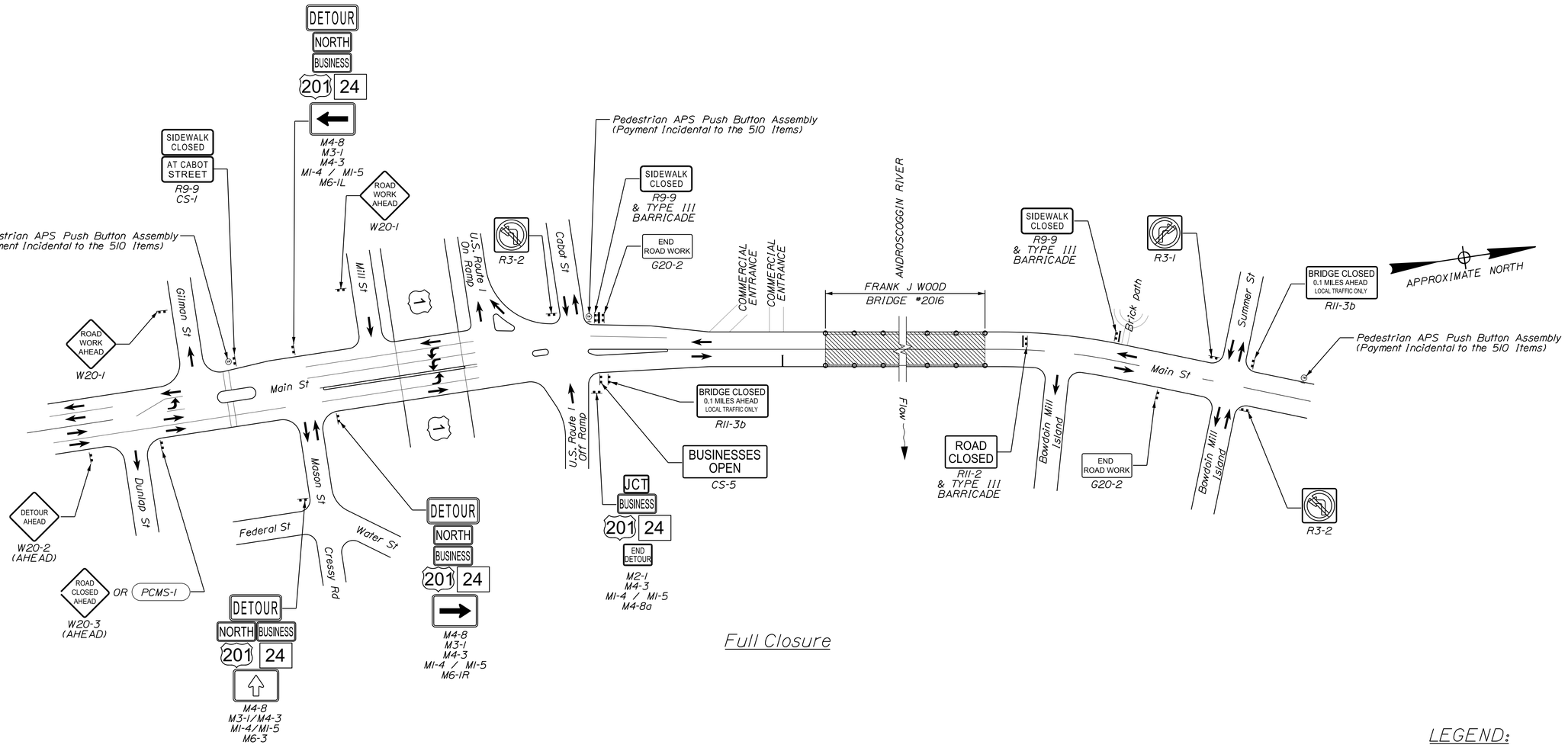
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

NB CLOSURE DETOUR
SHEET 4 OF 4

SHEET NUMBER
45
OF 163

TYLin

Date:10/15/2022
Username:
Filename: ...\045_NB_Closure_Detour_Plan_04.dgn Division:



Full Closure

LEGEND:

- DRUM
- TYPE III BARRICADE
- SIGN
- DIRECTION OF TRAFFIC
- INSPECTION AREA

Note:
See NB Closure Detour Sheets 2, 3, and 4 for additional information.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S Myers
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D. Bryant	P. McClure	3/22
CHECKED-REVIEWED	D. Burhans	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FULL CLOSURE DETOUR
SHEET 1 OF 3

SHEET NUMBER
46
OF 163

Filename: ...\046_Full_Closure_Detour_Plan_01.dgn Division: Username: Date:10/15/2022

Filename: ...\047_Full_Closure_Detour_Plan_02.dgn Division: Username: Date:10/15/2022

Portable Changeable Message Signs

FRANK J. WOOD BRIDGE CLOSED

USE ROUTE 196 TO BRUNSWICK

INSET #4

TOPSHAM

BRIDGE CLOSED AHEAD LOCAL TRAFFIC ONLY

RII-3b (AHEAD)

DETOUR

BRUNSWICK

M4-8 CS-4

INSET #3

INSET #2

Portable Changeable Message Signs

FRANK J. WOOD BRIDGE CLOSED

USE ROUTE 196 TO BRUNSWICK

LANE CLOSURES

INSET #1

ANDROSCOGGIN RIVER

COW ISLAND

BRUNSWICK

Full Closure Detail Plan

NOT TO SCALE

Note:
See following sheet for insets.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

DANIEL S. MYERS No. 12572 STATE OF MAINE LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

	BY	DATE
Scott Rollins		
PROJ. MANAGER		
DESIGN-DETAILED	P. McClure	3/22
CHECKED-REVIEWED	D.Bryant	3/22
DESIGN2-DETAILED2	D.Bryant	
DESIGN3-DETAILED3	D.Burhons	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

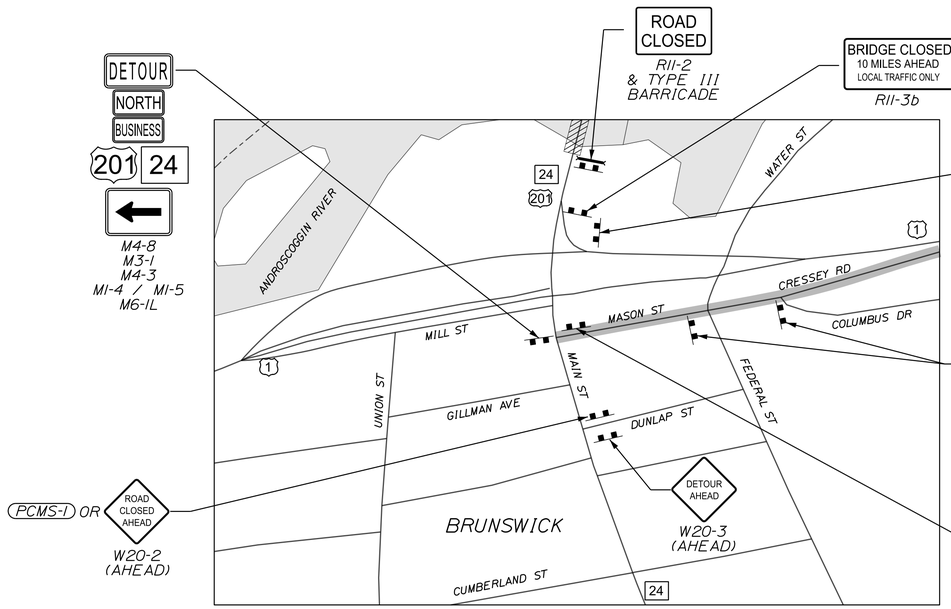
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FULL CLOSURE DETOUR
SHEET 2 OF 3

SHEET NUMBER

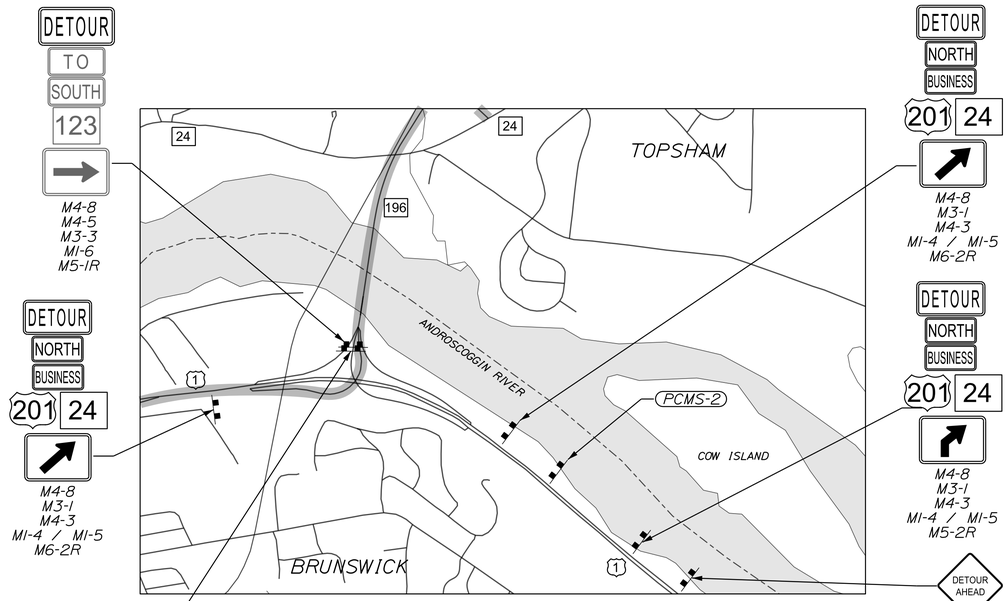
47

OF 163



INSET - 1

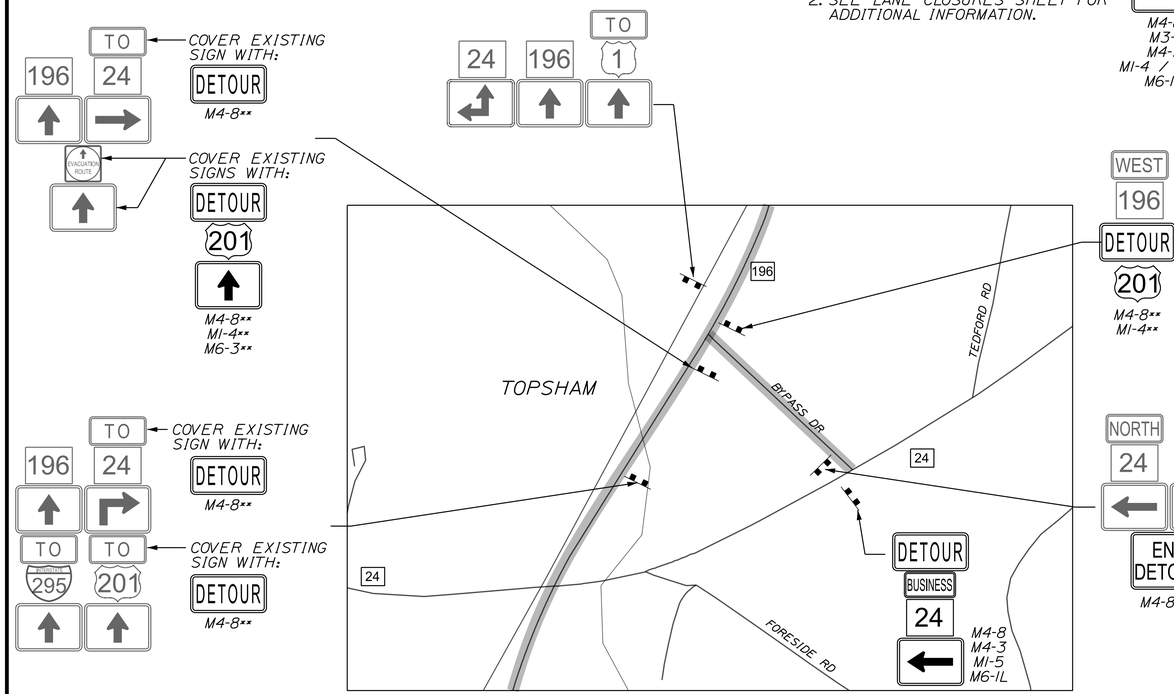
NOTES:
1. ALL SIGNS SHOWN ARE PROPOSED TEMPORARY SIGNS.
2. SEE LANE CLOSURES SHEET FOR ADDITIONAL INFORMATION.



INSET - 2

NOTE:
ALL SIGNS SHOWN ARE PROPOSED TEMPORARY SIGNS.

APPROXIMATE NORTH



INSET - 3

INSET - 4

NOTE:
* = EXISTING SIGN (IN PLACE)
** = PROPOSED SIGN TO BE TEMPORARILY ADDED

NOTE:
* = EXISTING SIGN (IN PLACE)
** = PROPOSED SIGN TO BE TEMPORARILY ADDED

LEGEND:
- SIGN
- TYPE III BARRICADE
- DETOUR ROUTE
- INSPECTION AREA

Full Closure Detour
Inset Maps

NOT TO SCALE

PRELIMINARY

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Bryant	P. McClure	3/22
CHECKED-REVIEWED	D.Burhans	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FULL CLOSURE DETOUR
SHEET 3 OF 3

SHEET NUMBER
48
OF 163

Date:10/15/2022
Username:
Filename: ...\048_Full_Closure_Detour_Plan_03.dgn Division:

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
CS-1	42"	24"	AT CABOT STREET	5D 5D	3"		1	WHITE	BLACK	1.5"	7.00 (7)	
CS-2	60"	24"	FRANK J. WOOD BRIDGE CLOSED	5C 5C	3.75"		1	ORANGE	BLACK	1.5"	10.00 (10)	
CS-3	84"	24"	ROUTE 24/ROUTE 201 TOPSHAM ONLY	5C 5C	3"	11.125" x6.75"	1	ORANGE	BLACK	1.5"	14.00 (14)	
CS-4	58"	12"	BRUNSWICK	5D		11.125" x6.75"	1	ORANGE	BLACK	1.5"	4.83 (4.83)	
CS-5	42"	18"	BUSINESSES OPEN	5C 5C	3"		1	ORANGE	BLACK	1.5"	5.25 (5.25)	
CS-6	44"	18"	BRUNSWICK MAINE ST.	5D 5D	3"		1	ORANGE	BLACK	1.5"	5.5 (5.5)	
MI-4	30" 45"	24" 36"	201	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			7 5	WHITE WHITE	BLACK BLACK		5.00 (35) 11.25 (56.25)	
MI-5	24" 36"	24" 36"	24				7 3	WHITE WHITE	BLACK BLACK		4.00 (28) 9.00 (27)	
MI-5	45"	36"	123				1	WHITE	BLACK		11.25 (11.25)	
M2-1	21"	15"	JCT				1	WHITE	BLACK		2.19 (2.19)	
M3-1	24" 36"	12" 18"	NORTH				4 3	WHITE WHITE	BLACK BLACK		2.00 (8) 4.50 (13.5)	
M3-3	24" 36"	12" 18"	SOUTH				1 1	WHITE WHITE	BLACK WHITE		2.00 (2) 4.50 (4.5)	

Filename: ...\049_MOT_Sign_Sum_01.dgn Username: Division: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	Scott Rollins	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.Toothaker	B.Toothaker	3/22
CHECKED-REVIEWED	J.Rollins	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CLOSURE SIGN SUMMARY
SHEET 1 OF 4

SHEET NUMBER
49
OF 163

T·Y·LIN INTERNATIONAL

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
M4-3	24"	12"	BUSINESS	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			7	WHITE	BLACK		2.00 (14)	
	36"	18"					3	WHITE	WHITE		4.50 (13.5)	
M4-5	36"	18"	TO				1	WHITE	BLACK		4.50 (4.5)	
M4-8	24"	12"	DETOUR				8	ORANGE	BLACK		2.00 (16)	
	30"	15"					10	ORANGE	BLACK		3.13 (31.30)	
M4-8a	24"	18"	END DETOUR				3	ORANGE	BLACK		3.00 (9)	
M5-2 (RIGHT)	30"	21"					1	WHITE	BLACK		4.38 (4.38)	
M6-1	21"	15"					3	WHITE	BLACK		2.19 (6.57)	
	30"	21"					2	WHITE	BLACK		4.38 (8.76)	
M6-2 (RIGHT)	30"	21"					2	WHITE	BLACK		4.38 (8.76)	
M6-3	21"	15"					4	WHITE	BLACK		2.19 (8.76)	
	30"	21"					1	WHITE	BLACK		4.38 (4.38)	
G20-2	36"	18"	END ROAD WORK				2	ORANGE	BLACK		4.50 (9)	
R1-1	30"	30"	STOP				2	RED	WHITE		6.25 (12.5)	
R3-1	24"	24					1	WHITE	BLACK/ RED		4.00 (4)	
R3-2	24"	24					4	WHITE	BLACK/ RED		4.00 (16)	

Filename: ...\050_MOT_Sign_Sum_02.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

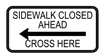
			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	BY	3/22
CHECKED-REVIEWED	J.Rollins	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CLOSURE SIGN SUMMARY
SHEET 2 OF 4

SHEET NUMBER
50
OF 163

TYLIN INTERNATIONAL

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
R3-5 (LEFT)	30"	36"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			1	WHITE	BLACK/ RED		7.50 (7.5)	
R5-1	24"	24					2	WHITE	RED		4.00 (8)	
R9-9	24"	12"					3	WHITE	BLACK		2.00 (6)	
R9-11	24"	18"					1	WHITE	BLACK		3.00 (3)	
R10-25	9"	12"					4	WHITE	BLACK		0.75 (3)	PAID UNDER ITEM 643.62
R11-2	48"	30"					3	WHITE	BLACK		10.00 (30)	
R11-3b (BRIDGE CLOSED)	60"	30"					3	WHITE	BLACK		12.50 (25)	
W11-2	30"	30"					8	YELLOW	BLACK		6.25 (12.5)	PAID UNDER ITEM 643.62
W16-7P (LEFT)	24"	12"					8	YELLOW	BLACK		2.00 (8)	PAID UNDER ITEM 643.62
W20-1 (AHEAD)	36"	36"					3	ORANGE	BLACK		9.00 (24)	
W20-2 (AHEAD)	36" 48"	36" 48"					1 1	ORANGE ORANGE	BLACK BLACK		9.00 (9) 16.00 (16)	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	BY	3/22
CHECKED-REVIEWED	J.Rollins	B.Toothaker	3/22
DESIGN2-DETAILED2		D.Bryant	
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CLOSURE SIGN SUMMARY
SHEET 3 OF 4

SHEET NUMBER
51
OF 163

TYLIN INTERNATIONAL

Filename: ...\051_MOT_Sign_Sum_03.dgn Division: Username: Date:10/15/2022

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
W20-3 (AHEAD)	36"	36"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009			1	ORANGE	BLACK		9.00 (9)	
W24-1 (LEFT)	36"	36"					1	ORANGE	BLACK		9.00 (9)	

Filename: ...\052_MOT_Sign_Sum_04.dgn Division: Username: Date:10/15/2022

TY·LIN INTERNATIONAL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	B.Toothaker	3/22
CHECKED-REVIEWED	J.Rollins	D.Bryant	3/22
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CLOSURE SIGN SUMMARY
SHEET 4 OF 4

SHEET NUMBER
52
OF 163

SHEET NUMBER 53 OF 163

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOCATION PLAN

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2	N.SHERWOOD	T.WHITE	SEP 2016
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

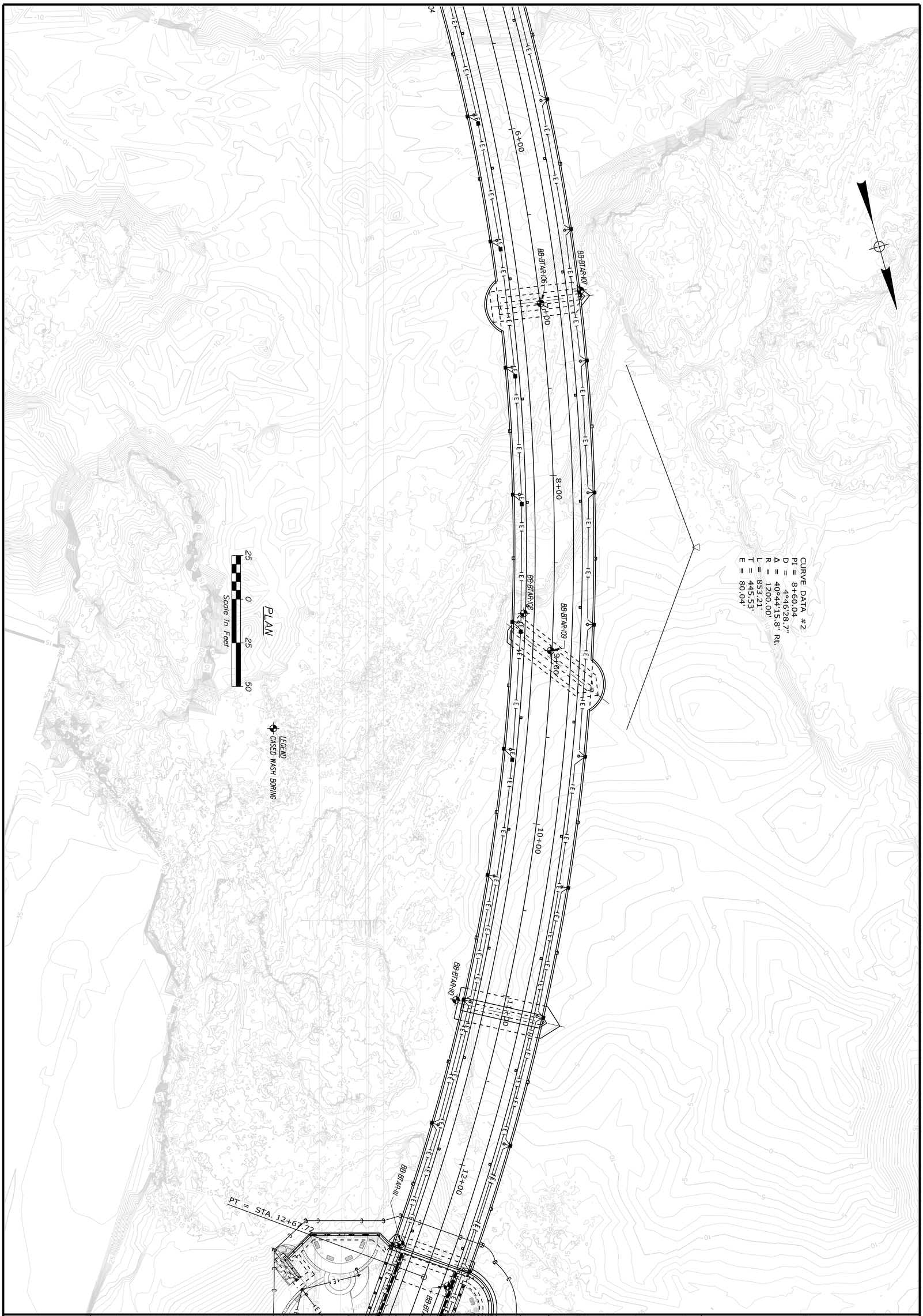
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

BRIDGE NO. 2016 **WIN 22603.00** BRIDGE PLANS

Filename: ...\00\GEOTECH\MSTA\043_BLP2.dgn Division: GEOTECH Username: terry.white Date:12/21/2021



PROJ. MANAGER		BY	DATE
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2	N.SHERWOOD	T.WHITE	SEP 2016
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 54 OF 163

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

BRIDGE NO. 2016 **WIN 22603.00** BRIDGE PLANS

SHEET NUMBER 55 OF 163

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOCATION PLAN

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2	N.SHERWOOD	T.WHITE	SEP 2016
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

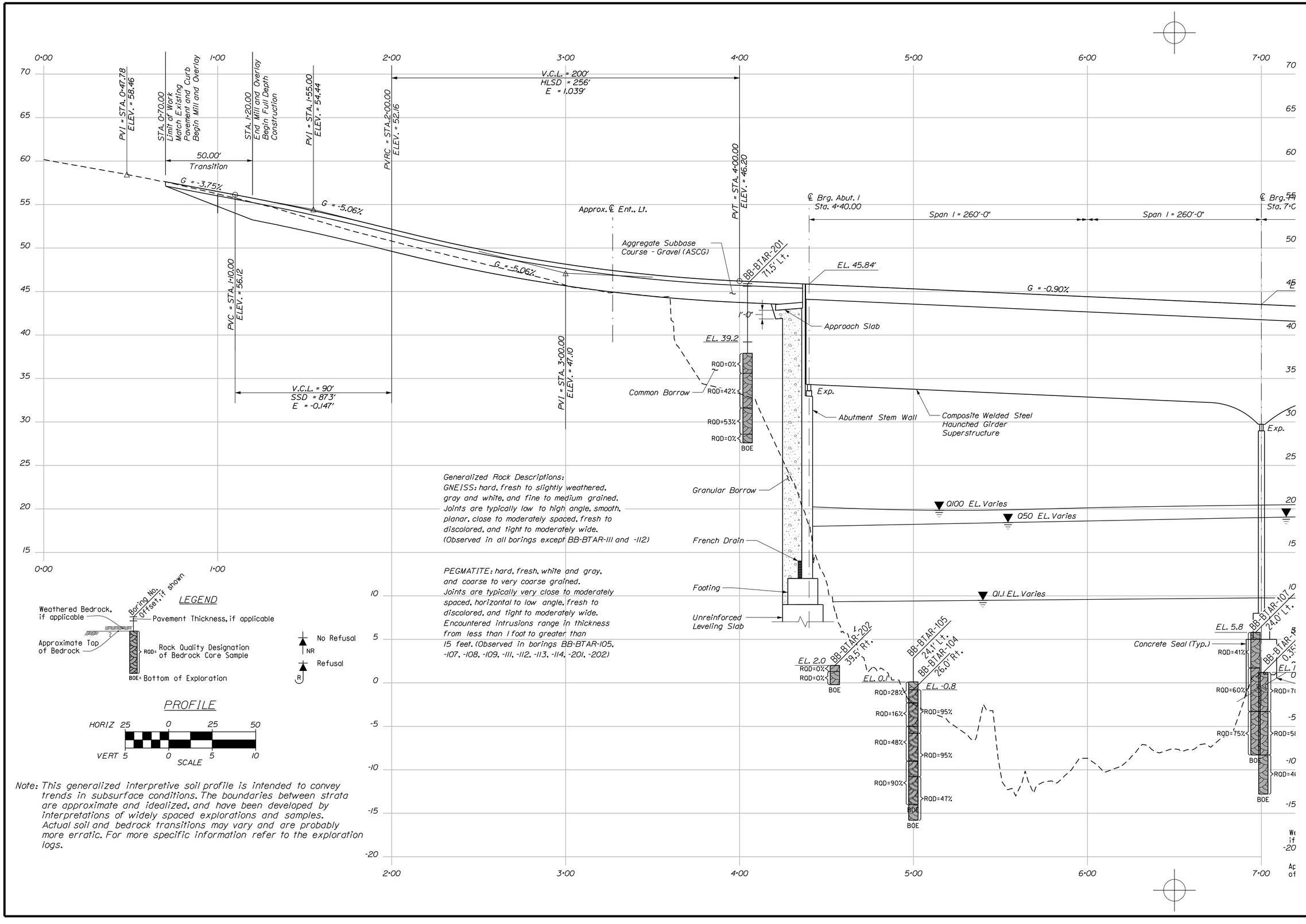
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

BRIDGE NO. 2016 **WIN 22603.00** BRIDGE PLANS

Filename: ...\00\GEOTECH\MSTA\045_ISP1.dgn Username: terry.white Date:12/17/2021 Division: GEOTECH



Note: This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and bedrock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	----------	----------
DESIGN-DETAILED	----------	----------
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	N.SHERWOOD	SEP. 2016
DESIGN3-DETAILED3	----------	----------
REVISIONS 1	------	------
REVISIONS 2	------	------
REVISIONS 3	------	------
REVISIONS 4	------	------
FIELD CHANGES	------	------

SIGNATURE

P.E. NUMBER

DATE

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

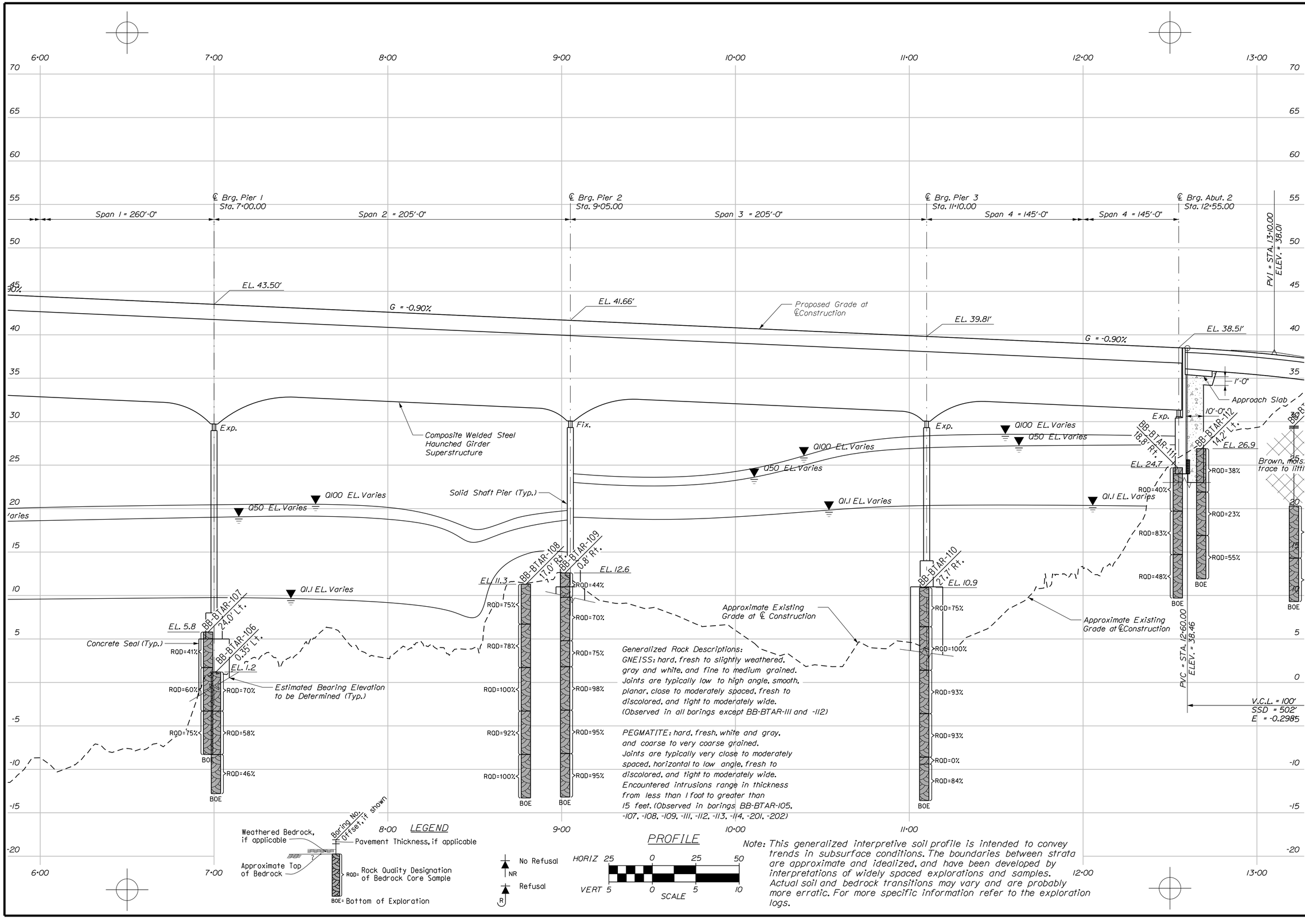
INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

56

OF 163

Filename: ...\00\GEOTECH\MSTA\046_ISP2.dgn Division: GEOTECH Username: terry.white Date:12/17/2021



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED	N.SHERWOOD	SEP 2016
DESIGN2-DETAILED2	T.WHITE	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

57

OF 163

Filename: ...\00\GEOTECH\MSTA\047_ISP3.dgn Division: GEOTECH Username: terry.white Date:12/17/2021

12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00

℄ Brg. Abut. 2
Sta. 12+55.00

Span 4 = 145'-0"

PVI = STA. 13+10.00
ELEV. = 38.01

PVC = STA. 13+60.00
ELEV. = 36.37

V.C.L. = 90'
HLSD = 782'
E = 0.239'

STA. 14+50.00
Begin Right Mill and Overlay and Left Shoulder and Lane Construction

PVT = STA. 14+50.00
ELEV. = 34.37

125.00'
Transition
(See Typical Section Sheet for Transition Detail)

STA. 15+25.00
Begin Mill and Overlay

50.00'
Transition

STA. 15+75.00
End Right Mill and Overlay and Left Shoulder and Lane Construction
Match Existing Pavement and Curb
Limit of Work

PVI = STA. 15+75.00
ELEV. = 32.93

Approx. ℄ Intersection

EL. 38.51'

G = -0.90%

G = -3.29%

G = -1.16%

1'-0"

Approach Slab

Exp.

10'-0"

BB-BTAR-111
18.8' Rt.

BB-BTAR-112
14.2' Lt.

BB-BTAR-113
23.1' Lt.

BB-BTAR-114
23.5' Lt.

Aggregate Subbase Course - Gravel (ASCG)

EL. Varies

O EL. Varies

EL. 24.7

EL. 26.9

Brown, moist, loose, SAND, trace to little gravel. (Fill).

EL. 20.3

EL. 19.8

PVI = STA. 14+05.00
ELEV. = 34.89

PVT = STA. 13+60.00
ELEV. = 36.37

ROD=38%
ROD=40%
ROD=23%
ROD=83%
ROD=55%
ROD=48%
ROD=32%
ROD=76%
ROD=70%
ROD=40%

BOE

01.1 EL. Varies

Approximate Existing Grade at ℄Construction

PVC = STA. 12+60.00
ELEV. = 38.46

V.C.L. = 100'
SSD = 502'
E = -0.298'

Generalized Rock Descriptions:
GNEISS: hard, fresh to slightly weathered, gray and white, and fine to medium grained. Joints are typically low to high angle, smooth, planar, close to moderately spaced, fresh to discolored, and tight to moderately wide. (Observed in all borings except BB-BTAR-111 and -112)

PEGMATITE: hard, fresh, white and gray, and coarse to very coarse grained. Joints are typically very close to moderately spaced, horizontal to low angle, fresh to discolored, and tight to moderately wide. Encountered intrusions range in thickness from less than 1 foot to greater than 15 feet. (Observed in borings BB-BTAR-105, -107, -108, -109, -111, -112, -113, -114, -201, -202)

LEGEND

Weathered Bedrock, if applicable
Approximate Top of Bedrock
Boring No. Offset, if shown
Pavement Thickness, if applicable
ROD= Rock Quality Designation of Bedrock Core Sample
BOE= Bottom of Exploration
No Refusal
NR
Refusal
R

PROFILE

HORIZ 25 0 25 50
VERT 5 0 5 10
SCALE

Note: This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and bedrock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

convey
n strata
by
es.
obably
exploration

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED	N.SHERWOOD	SEP. 2016
DESIGN2-DETAILED2	T.WHITE	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

58

OF 163

Usernname: terry.white

Date:12/17/2021

Division: GEOTECH

Filename: ...\MSTA\048_BORING LOGS1.dgn

Maine Department of Transportation — BB-BTAR-104

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-104 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): -0.8	Auger ID/OD: N/A
Operator:	Mike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	Wilder/Sherwood	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/24/2016 15:30-17:30	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	4+99.9, 26.0 Ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factors 0.9901 — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	60/60	0.00 - 5.00	RQD = 95%			NQ-2			Top of Bedrock at Elev. -0.8 feet. R1: Hard, fresh, fine to medium grained, gray and white, foliated, GNEISS. Joints are moderately spaced, low angle, fresh, tight, foliated, quartz seam at 0.1', horizontal fracture at 2.3'. R1 Rock Mass Quality = Excellent R1 Core Times (minssec): 0.0-1.0 ft (0145), 1.0-2.0 ft (1122), 2.0-3.0 ft (1151), 3.0-4.0 ft (1150), 4.0-5.0 ft (1128) 100% Recovery R2: Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are moderately spaced, low angle, planar, smooth, slightly discolored to fresh, tight, foliated. Pegmatite seam at 5.1' (1/4" thick) and 6.3' (3/4" thick). R2 Rock Mass Quality = Excellent R2 Core Times (minssec): 5.0-6.0 ft (1120), 6.0-7.0 ft (1122), 7.0-8.0 ft (1100), 8.0-9.0 ft (1100), 9.0-10.0 ft (1108) 100% Recovery R3: Hard, fresh, fine to medium grained, gray and white, foliated, GNEISS. Joints are close, low to high angle (vertical) fractures, from 11'-12', 13', and 14'+, planar, smooth, discolored, brown staining and occasional brown Clay infilling, tight. R3 Rock Mass Quality = Poor R3: Core Times (minssec): 10.0-11.0 ft (1117), 11.0-12.0 ft (1137), 12.0-13.0 ft (1129), 13.0-14.0 ft (2111), 14.0-15.0 ft (2100) 80% Recovery	Q_u=21.2 ksi
5	R2	60/60	5.00 - 10.00	RQD = 95%							
10	R3	60/54	10.00 - 15.00	RQD = 47%							
15								-15.8			
20								-20.8		Bottom of Exploration at 15.0 feet below ground surface.	
25								-25.8			

Remarks:

Hammer No. 283
600-800 pounds of down pressure on Core Barrel.
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-104

Maine Department of Transportation — BB-BTAR-105

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-105 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 0.1	Auger ID/OD: N/A
Operator:	Mike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	Wilder/Sherwood	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/24/2016 13:00-15:00	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	4+99.9, 24.1 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factor 0.9901 — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	28.8/24	0.00 - 2.40	RQD = 28%			NQ-2			Top of Bedrock at Elev. 0.1 feet. R1: Hard, fresh, fine to medium grained, gray and white, foliated, GNEISS. Joints are close, low angle, irregular, smooth. Slightly discolored, trace gray Clay infilling, tight to open. R1: Rock Mass Quality = Poor R1: Core Times (minssec): 0.0-1.0 ft (2:54), 1.0-2.0 ft (2:04), 2.0-3.0 ft (2:00) 83% Recovery Core Blocked R2: 2.4'-3.1': Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are close, low angle, planar, smooth, fresh to slightly discolored, tight to open. R2: 3.1'-5.1': Hard, fresh, coarse grained, tan/white/gray, PEGMATITE. Joints are very close, horizontal to low angle, planar, rough, discolored (dull), tight to open. R2: Rock Mass Quality = Very Poor R2: Core Times (minssec): 2.4-3.4 ft (1:10) 3.4-4.4 ft (2:38), 4.4-5.1 ft (3:00) 83% Recovery Core Blocked R3: Hard, fresh, coarse to very coarse grained, tan/gray/white, PEGMATITE. Joints are very close to close, horizontal, planar, smooth to rough, fresh, partially open to open. R3: Rock Mass Quality = Poor R3: Core Times (minssec): 5.1-6.1 ft (2:36) 6.1-7.1 ft (2:04), 7.1-8.1 ft (2:04), 8.1-9.1 ft (3:08) 100% Recovery R4: 9.1'-9.6': Hard, fresh, coarse to very coarse grained, tan/gray/white, PEGMATITE. Joints are very close to close, horizontal, planar, smooth to rough, fresh, partially open to open. R4: 9.6'-14.1': Hard, fresh, fine to medium grained, gray and white, foliated, GNEISS. Joints are close to moderately spaced, low angle, planar, smooth, fresh. R4: Rock Mass Quality = Good R4: Core Times (minssec): 9.1-10.1 ft (1:59), 10.1-11.1 ft (1:34), 11.1-12.1 ft (1:31), 12.1-13.1 ft (1:33), 13.1-14.1 ft (1:44) 100% Recovery Bottom of Exploration at 14.1 feet below ground surface.	Q_u=16.5 ksi
5	R2	32.4/29	2.40 - 5.10	RQD = 16%							
10	R3	48/48	5.10 - 9.10	RQD = 48%							
15	R4	60/57	9.10 - 14.10	RQD = 90%							
20								-14.0			
25								-19.0			

Remarks:

Hammer No. 283
600-800 pounds of down pressure on Core Barrel.
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-105

Maine Department of Transportation — BB-BTAR-106

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-106 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 1.2	Auger ID/OD: N/A
Operator:	Mike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	Wilder/Sherwood	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/24/2016 11:00-12:30	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	7+01.1, 0.35 Ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factor 0.9901 — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	54/51	0.00 - 4.50	RQD = 70%			NQ-2			Top of Bedrock at Elev. 1.2 feet. R1: Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are close to moderately spaced, low angle, planar, smooth, mostly fresh, slightly discolored near top, partially open to moderately wide. R1 Rock Mass Quality = Fair R1: Core Times (minssec): 0.0-1.0 ft (1:43), 1.0-2.0 ft (2:39), 2.0-3.0 ft (2:59), 3.0-4.0 ft (1:40), 4.0-5.0 ft (1:42) 96% Recovery Core Blocked R2: Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are moderately spaced to very close at bottom, low angle, planar, smooth, fresh to slightly discolored at 8.0', brown Clay infilling, open. R2: Rock Mass Quality = Fair R2: Core Times (minssec): 4.5-5.5 ft (1:28), 5.5-6.5 ft (2:07), 6.5-7.5 ft (2:02), 7.5-8.5 ft (1:24), 8.5-9.5 ft (1:25) 97% Recovery R3: Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are close, low angle, planar, smooth, fresh to slightly discolored at 12.5' (brown), partially open, foliated. R3: Rock Mass Quality = Fair R3: Core Times (minssec): 9.5-10.5 ft (1:12), 10.5-11.5 ft (1:12), 11.5-12.5 ft (1:21), 12.5-13.5 ft (1:10), 13.5-14.0 ft (1:08) 93% Recovery Core Blocked Bottom of Exploration at 14.0 feet below ground surface.	Q_u=19.2 ksi
5	R2	60/58	4.50 - 9.50	RQD = 58%							
10	R3	54/50	9.50 - 14.00	RQD = 46%							
15								-12.8			
20								-17.8			
25								-22.8			

Remarks:

Hammer No. 283
600-800 pounds of down pressure on Core Barrel.
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-106

Maine Department of Transportation — BB-BTAR-107

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-107 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 5.8	Auger ID/OD: N/A
Operator:	Mike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	Wilder/Sherwood	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/24/20161 09:00-10:30	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	6+96.6, 24.0 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factors 0.9901 — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	49/49	0.00 - 4.08	RQD = 41%			NQ-2	5.6		Top of Bedrock at Elev. 5.8 feet. R1: 0'-0.2': PEGMATITE. R1: 0.2'-4.1': Hard, fresh (slightly weathered in top 12"), fine to medium grained, gray and white, foliated. GNEISS. Joints are close to moderately spaced, low angle, planar smooth, fresh to slightly discolored, tight. R1 Rock Mass Quality = Poor R1 Core Times (minssec): 0.0-1.0 ft (3:13), 1.0-2.0 ft (1:40), 2.0-3.0 ft (2:11), 3.0-4.0 ft (2:25), 4.0-5.0 ft (1:00) 100% Recovery Core Blocked R2: 4.1'-4.8': Hard, fresh (slightly weathered in top 12"), fine to medium grained, gray and white, foliated. GNEISS, joints are close to moderately spaced, low angle, planar smooth, fresh to slightly discolored tight. Banding of GNEISS and PEGMATITE in 0.3'-0.7' thick layers from 4.8'-7.6'.	Q_u=31.1 ksi
5	R2	60/54	4.10 - 9.10	RQD = 60%				1.7			
10	R3	60/55	9.10 - 14.10	RQD = 75%				-1.8		R2: 7.6'-9.1': Hard, fresh, coarse to very coarse, white and gray banded, PEGMATITE. Joints are moderately spaced, low angle, planar, rough, fresh, tight. R2: Rock Mass Quality = Fair R2: Core Times (minssec): 4.1-5.1 ft (1:50), 5.1-6.1 ft (2:53), 6.1-7.1 ft (5:02), 7.1-8.1 ft (4:12), 8.1-9.1 ft (5:33) 98% Recovery R3: Hard, fresh, coarse to very coarse grained, white and gray banded, PEGMATITE. Joints are close to moderately spaced, horizontal, planar, rough, fresh, open to wide. R3: Rock Mass Quality = Good R3: Core Times (minssec): 9.1-10.1 ft (2:13), 10.1-11.1 ft (2:43), 11.1-12.1 ft (2:59), 12.1-13.1 ft (3:07), 13.1-14.1 ft (2:44) 92% Recovery	
15								-8.3		Bottom of Exploration at 14.1 feet below ground surface.	
20								-14.1			
25								-19.1			

Remarks:

Hammer No. 283
600-800 pounds of down pressure on Core Barrel.
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-107

Maine Department of Transportation — BB-BTAR-108

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-108 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 11.3	Auger ID/OD: N/A
Operator:	Mike Nadeau	Datum: NAVD88	Sampler: N/A
Logged By:	E. Friede (GZA)	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/30/20161 08:53-10:30	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	8+79.4, 17.0 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factor: -- — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	55/55	0.00 - 4.58	RQD = 75%						Top of Bedrock at Elev. 11.3 feet. R1: Hard, slightly weathered to fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are close to moderately spaced, low angle planar smooth, discolored (rusty), partially open. R1: Rock Mass Quality = Good R1: Core Times (minssec): 0.0-1.0 ft (2:09), 1.0-2.0 ft (1:48), 2.0-3.0 ft (2:26), 3.0-4.0 ft (1:32), 4.0-4.6 ft (1:03) 100% Recovery R2: 4.6'-5.6': Hard, fresh, fine to medium grained, dark gray, GNEISS. Joints are very close to moderately spaced, moderately dipping, planar, smooth, fresh, open, tight to partially open. Biotite rich. R2: 5.6'-6.1': Hard, fresh, coarse to very coarse grained, white and light gray, PEGMATITE. R2: 6.1'-9.6': Hard, fresh, light gray and white, foliated. GNEISS. Joints are close to moderately spaced, horizontal to moderately dipping, planar, smooth fresh, tight to open. Biotite rich. R2: Rock Mass Quality = Good R2: Core Times (minssec): 4.6-5.6 ft (1:00), 5.6-6.6 ft (1:26), 6.6-7.6 ft (1:33), 7.6-8.6 ft (1:15), 8.6-9.6 ft (1:42) 93% Recovery R3: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are close to wide, moderately dipping, planar, smooth, fresh, moderately wide. R3: Rock Mass Quality = Excellent R3: Core Times (minssec): 9.6-10.6 ft (1:36), 10.6-11.6 ft (2:06), 11.6-12.6 ft (2:02), 12.6-13.6 ft (2:07), 13.6-14.6 ft (2:38) 100% Recovery R4: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are close to wide, low angle, planar, smooth, fresh, tight to partially open. R4: Rock Mass Quality = Excellent R4: Core Times (minssec): 14.6-15.6 ft (2:36), 15.6-16.6 ft (2:43), 16.6-17.6 ft (3:11), 17.6-18.6 ft (2:28), 18.6-19.6 ft (2:12) 97% Recovery R5: Hard, fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are moderately spaced, low angle, planar, smooth, fresh, open to moderately wide. R5: Rock Mass Quality = Excellent R5: Core Times (minssec): 19.6-20.6 ft (2:18), 20.6-21.6 ft (2:17), 21.6-22.6 ft (2:38), 22.6-23.6 ft (2:17), 23.6-24.6 ft (3:09) 100% Recovery	Q_u=9.5 ksi
5	R2	60/58	4.60 - 9.60	RQD = 78%				5.7			
10	R3	60/60	9.60 - 14.60	RQD = 100%				5.2			
15	R4	60/58	14.60 - 19.60	RQD = 92%				-5.6			
20	R5	60/60	19.60 - 24.60	RQD = 100%				-13.3			
25								-24.6		Bottom of Exploration at 24.6 feet below ground surface.	

Remarks:

As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-108

Maine Department of Transportation — BB-BTAR-109

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-109 — WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 12.6	Auger ID/OD: N/A
Operator:	Mike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	E. Friede (GZA)	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/29/2016 10:53-11:30	Drilling Methods: NQ-2"	Core Barrels: NQ-2"
Boring Location:	9+00.4, 0.8 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed

Hammer Efficiency Factors: -- — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; WS = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WOP = Weight of Pre-Auger; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(rem)}$ = Lab Vane Undrained Shear Strength (psf); N_{cor} = Uncorrected + Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in. Driving Strength or RQD (%))	Uncorrected N	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing / Results / AASHTO and Unified Class
0	R1	34/34	0.00 - 2.83	RQD = 44%						Top of Bedrock at Elev. 12.6 feet. R1: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are close, moderately dipping, planar, smooth, fresh, partially open to moderately wide. R1: Rock Mass Quality = Poor R1: Core Times (minssec): 0.0-1.0 ft (4:37), 1.0-2.0 ft (5:04), 2.0-2.8 ft (4:49) 100% Recovery R2: 2.8'-7.4': Hard, fresh, fine to medium grained, light gray, GNEISS. Joints are very close to moderately spaced, horizontal to low angle, planar, fresh, smooth, open to moderately wide.	
5	R2	60/60	2.80 - 7.80	RQD = 70%				9.2			
10	R3	36/36	7.80 - 10.80	RQD = 75%				6.3			
15	R4	60/60	10.80 - 15.80	RQD = 98%				-7.4		R3: 7.4'-7.8': Hard, fresh, coarse grained, white, PEGMATITE. R3: Rock Mass Quality = Excellent R3: Core Times (minssec): 2.8-3.8 ft (3:52), 3.8-4.8 ft (3:00), 4.8-5.8 ft (2:45), 5.8-6.8 ft (1:24), 6.8-7.9 ft (1:25) 95% Recovery R3: 7.8'-8.5': Hard, fresh, coarse grained, white, PEGMATITE. Joints are close, low angle, planar, rough, fresh, moderately wide.	
20	R5	60/57	15.80 - 20.80	RQD = 95%				-12.5		R3: 8.5'-10.8': Hard fresh, fine to medium grained, gray and white, foliated. GNEISS. Joints are close to moderately spaced, horizontal, planar, smooth, fresh, open. R3: Rock Mass Quality = Good R3: Core Times (minssec): 7.8-8.8 ft (1:59), 8.8-9.8 ft (4:41), 9.8-10.8 ft (2:02) 100% Recovery R4: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are very close to widely spaced, moderately dipping to low angle, planar, smooth, fresh, open. R4: Rock Mass Quality = Excellent R4: Core Times (minssec): 10.8-11.8 ft (1:53), 11.8-12.8 ft (2:30), 12.8-13.8 ft (2:14), 13.8-14.8 ft (2:30), 14.8-15.8 ft (3:34) 100% Recovery R5: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are wide, low angle, planar, smooth, fresh, partially open. Biotite rich. R5: Rock Mass Quality = Excellent R5: Core Times (minssec): 15.8-16.8 ft (3:00), 16.8-17.8 ft (2:24), 17.8-18.8 ft (1:48), 18.8-19.8 ft (1:43), 19.8-20.8 ft (1:51) 95% Recovery R6: Hard, fresh, fine to medium grained, light gray and white, foliated. GNEISS. Joints are moderately spaced, low angle, planar, smooth, fresh, open to moderately wide. R6: Rock Mass Quality = Excellent R6: Core Times (minssec): 20.8-21.8 ft (1:36), 21.8-22.8 ft (1:48), 22.8-23.8 ft (1:52), 23.8-24.8 ft (2:24), 24.8-25.8 ft (1:58) 95% Recovery	
25	R6	60/57	20.80 - 25.80	RQD = 95%				-13.2			
30								-25.8		Bottom of Exploration at 25.8 feet below ground surface.	
35											
40											
45											
50											

Remarks:

As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-109

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	----------	-------
DESIGN-DETAILED	T. WHITE	MAY 2020
CHECKED-REVIEWED	C.SNOW	-------
DESIGN2-DETAILED2	----------	-------
DESIGN3-DETAILED3	----------	-------

SIGNATURE

P.E. NUMBER

DATE

REVISIONS 1	----------	-------
REVISIONS 2	----------	-------
REVISIONS 3	----------	-------
REVISIONS 4	----------	-------
FIELD CHANGES	----------	-------

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOGS

SHEET NUMBER

59

OF 163

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-110
WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 10.9	Auger ID/OD: N/A
Operator:	Wike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	E. Friede (GZA)	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/30/2016; 12:40-14:45	Drilling Methods: NQ-2"	Core Barrel: NQ-2"
Boring Location:	11+08.6, 27.7 ft Rt.	Casing ID/OD: N/A	Water Level(ft): None Observed

Hammer Efficiency Factor: -- Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions:
D = Split Spoon Sample; B = Rock Core Sample; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); S_t = Pocket Torvane Shear Strength (psf)
SS = Unsuccessful Split Spoon Sample Attempt; SSA = Solid Stem Auger; $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); WC = Water Content, percent
U = Thin Wall Tube Sample; HSA = Hollow Stem Auger; q_u = Unconfined Compressive Strength (tsf); LL = Liquid Limit
WU = Unsuccessful Thin Wall Tube Sample Attempt; RC = Roller Cone; N=uncorrected = Raw Field SPT N-value; PL = Plastic Limit
V = Field Vane Shear Test; WOH = Weight of Hammer; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; PI = Plasticity Index
PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; G = Grain Size Analysis
WH = Weight of the Person; N_{60} = Hammer Efficiency Factor/60%; N=uncorrected; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in.) or Pressure (psi) or RQD (%)	N=uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	R1	54/52	0.00 - 4.50	RQD = 75%						Top of Bedrock at Elev. 10.9 feet. R1: Hard, fresh, fine to medium grained, light gray, GNEISS. Joints are close to moderately spaced, low angle, planar, smooth, discolored in top 1.0' to fresh, partially open. R1 Rock Mass Quality = Good R1: Core Times (minssec): 0.0-1.0 ft (2:34), 1.0-2.0 ft (3:35), 2.0-3.0 ft (2:44), 3.0-4.0 ft (1:42), 4.0-4.5 ft (1:36) 96% Recovery R2: Hard, fresh, fine to medium grained, light gray and white, foliated, GNEISS. Joints are moderately spaced, moderately dipping, planar, smooth, fresh, partially open, Biotite rich. R2: Rock Mass Quality = Excellent R2: Core Times (minssec): 4.5-5.5 ft (1:18)+, 5.5-6.5 ft (1:55)+, 6.5-7.5 ft (2:15)+, 7.5-8.5 ft (2:09)+, 8.5-9.5 ft (2:33) 100% Recovery R3: Hard, fresh, fine to medium grained, light gray and white, foliated, GNEISS. Joints are moderately spaced, low angle, planar, smooth, fresh, tight to partially open, Biotite rich. R3: Rock Mass Quality = Excellent R3: Core Times (minssec): 9.5-10.5 ft (2:26), 10.5-11.5 ft (2:15), 11.5-12.5 ft (2:19), 12.5-13.5 ft (2:13), 13.5-14.5 ft (2:46) 100% Recovery R4: Hard, fresh, fine to medium grained, light gray and white, foliated, GNEISS. Joints are moderately spaced, low angle, planar, smooth, fresh, tight. Biotite rich. R4: Rock Mass Quality = Excellent R4: Core Times (minssec): 14.5-15.5 ft (3:36)+, 15.5-16.5 ft (3:09)+, 16.5-17.5 ft (2:39)+, 17.5-18.5 ft (1:48), 18.5-19.5 ft (2:30) 100% Recovery R5: 19.5'-20.0': Hard, fresh, fine to medium grained, foliated, light gray and white GNEISS. Quartz band from 20.0'-20.3'. Core blocked at 20.3'. R5: Rock Mass Quality = Very Poor R5: Core Times (minssec): 19.5-20.3 ft (2:20) 94% Recovery R6: Hard, fresh, fine to medium grained, light gray and white, foliated, GNEISS. Joints are close to moderately spaced, moderately dipping, planar, smooth, fresh, partially open. Biotite rich. R6: Rock Mass Quality = Good R6: Core Times (minssec): 20.3-20.5 ft (0:47), 20.5-21.5 ft (1:27), 21.5-22.5 ft (1:30)+, 22.5-23.5 ft (1:31), 23.5-24.5 ft (1:54) 94% Recovery Bottom of Exploration at 24.5 feet below ground surface.	q_u=6.6 ksi
5	R2	60/60	4.50 - 9.50	RQD = 100%							
10	R3	56/60	9.50 - 14.17	RQD = 93%							
15	R4	60/60	14.50 - 19.50	RQD = 93%							
20	R5	9/9	19.50 - 20.25	RQD = 0%							
	R6	51/48	20.30 - 24.55	RQD = 84%							
25											
30											
35											
40											
45											
50											

Remarks:
2" void observed at 3.8', noted by drop in drill rods. Clay observed at joint surface at bottom of the void.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-BTAR-110

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-111
WIN: 22603.00

Driller:	Northern Test Boring	Elevation (ft.): 24.7	Auger ID/OD: N/A
Operator:	Wike/Will	Datum: NAVD88	Sampler: N/A
Logged By:	E. Friede (GZA)	Rig Type: Diedrich D-50	Hammer Wt./Fall: N/A
Date Start/Finish:	8/31/2016; 08:50-10:00	Drilling Methods: NQ-2"	Core Barrel: NQ-2"
Boring Location:	12+54.5, 18.8 ft Rt.	Casing ID/OD: N/A	Water Level(ft): None Observed

Hammer Efficiency Factor: -- Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions:
D = Split Spoon Sample; B = Rock Core Sample; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); S_t = Pocket Torvane Shear Strength (psf)
SS = Unsuccessful Split Spoon Sample Attempt; SSA = Solid Stem Auger; $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); WC = Water Content, percent
U = Thin Wall Tube Sample; HSA = Hollow Stem Auger; q_u = Unconfined Compressive Strength (tsf); LL = Liquid Limit
WU = Unsuccessful Thin Wall Tube Sample Attempt; RC = Roller Cone; N=uncorrected = Raw Field SPT N-value; PL = Plastic Limit
V = Field Vane Shear Test; WOH = Weight of Hammer; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; PI = Plasticity Index
PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; G = Grain Size Analysis
WH = Weight of the Person; N_{60} = Hammer Efficiency Factor/60%; N=uncorrected; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in.) or Pressure (psi) or RQD (%)	N=uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	R1	60/60	0.00 - 5.00	RQD = 40%						Top of Bedrock at Elev. 24.7 feet. R1: Hard, fresh, coarse to very coarse grained, white and black, PEGMATITE with Biotite. Joints are close to moderately spaced, horizontal, planar, rough, fresh to discolored, tight to moderately tight. R1 Rock Mass Quality = Poor R1: Core Times (minssec): 0.0-1.0 ft (2:20), 1.0-2.0 ft (1:54), 2.0-3.0 ft (2:02), 3.0-4.0 ft (2:02), 4.0-5.0 ft (2:13) 100% Recovery R2: Hard, fresh, coarse to very coarse grained, gray and white, PEGMATITE. Joints are close to moderately close, horizontal to low angle, planar, rough, fresh to discolored, moderately wide. R2: Rock Mass Quality = Good R2: Core Times (minssec): 5.0-6.0 ft (1:34), 6.0-7.0 ft (1:58), 7.0-8.0 ft (2:09), 8.0-9.0 ft (2:25), 9.0-10.0 ft (1:51) 100% Recovery. R3: Hard, fresh, coarse to very coarse grained, white and gray, PEGMATITE. Joints are close to moderately close, horizontal to low angle, planar, rough, fresh to slightly discolored, moderately wide. R3: Rock Mass Quality = Poor R3: Core Times (minssec): 10.0-11.0 ft (2:35), 11.0-12.0 ft (2:33), 12.0-13.0 ft (1:58), 13.0-14.0 ft (1:54), 14.0-15.0 ft (1:33) 93% Recovery.	
5	R2	60/60	5.00 - 10.00	RQD = 83%							
10	R3	60/56	10.00 - 15.00	RQD = 48%					9.7		
15										Bottom of Exploration at 15.0 feet below ground surface.	15.0
20											
25											
30											
35											
40											
45											
50											

Remarks:
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-BTAR-111

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-112
WIN: 22603.00

Driller:	MaineDOT	Elevation (ft.): 26.9	Auger ID/OD: N/A
Operator:	Doggett/Burpee	Datum: NAVD88	Sampler: N/A
Logged By:	N. Sherwood	Rig Type: CME 45C	Hammer Wt./Fall: N/A
Date Start/Finish:	8/25/2016; 08:20-11:08	Drilling Methods: NQ-2"	Core Barrel: NQ-2"
Boring Location:	12+68.1, 14.2 ft Lt.	Casing ID/OD: N/A	Water Level(ft): None Observed

Hammer Efficiency Factor: 0.943 Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions:
D = Split Spoon Sample; B = Rock Core Sample; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); S_t = Pocket Torvane Shear Strength (psf)
SS = Unsuccessful Split Spoon Sample Attempt; SSA = Solid Stem Auger; $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); WC = Water Content, percent
U = Thin Wall Tube Sample; HSA = Hollow Stem Auger; q_u = Unconfined Compressive Strength (tsf); LL = Liquid Limit
WU = Unsuccessful Thin Wall Tube Sample Attempt; RC = Roller Cone; N=uncorrected = Raw Field SPT N-value; PL = Plastic Limit
V = Field Vane Shear Test; WOH = Weight of Hammer; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; PI = Plasticity Index
PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; G = Grain Size Analysis
WH = Weight of the Person; N_{60} = Hammer Efficiency Factor/60%; N=uncorrected; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in.) or Pressure (psi) or RQD (%)	N=uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	R1	60/58	0.00 - 5.00	RQD = 38%			NQ-2			Top of Bedrock at Elev. 26.9 feet. R1: Hard, fresh, coarse to very coarse grained, white and gray, PEGMATITE. Joints are close to very close at 3.0'-5.0', low angle, planar, rough, fresh, moderately wide. R1: Rock Mass Quality = Poor R1: Core Times (minssec): 0.0-1.0 ft (3:47), 1.0-2.0 ft (3:24), 2.0-3.0 ft (3:58), 3.0-4.0 ft (4:10), 4.0-5.0 ft (4:20) 97% Recovery R2: Hard, fresh, coarse to very coarse grained, white and black, PEGMATITE. Joints are close to moderately close, horizontal vertical fracture at 8.5'-1, planar, rough, fresh, moderately wide. 5.3'-10.0': Quartz seam. Lost water at 9.3 ft. R2: Rock Mass Quality = Very Poor R2: Core Times (minssec): 5.0-6.0 ft (4:30), 6.0-7.0 ft (3:57), 7.0-8.0 ft (3:50), 8.0-9.0 ft (6:00), 9.0-10.0 ft (6:10) 91% Recovery R3: Hard, fresh, coarse to very coarse grained, white and gray, PEGMATITE. Joints are close, horizontal to low angle, planar, rough, fresh, tight to open to moderately wide. Rock Mass Quality = Fair R3: Core Times (minssec): 10.0-11.0 ft (6:50), 11.0-12.0 ft (5:38), 12.0-13.0 ft (3:53), 13.0-14.0 ft (4:08), 14.0-15.0 ft (5:25) 100% Recovery	q_u=9.6 ksi
5	R2	60/58	5.00 - 10.00	RQD = 23%							
10	R3	60/60	10.00 - 15.00	RQD = 55%					11.9		
15										Bottom of Exploration at 15.0 feet below ground surface.	15.0
20											
25											
30											
35											
40											
45											
50											

Remarks:
400-500 pounds of down pressure on Core Barrel.
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-BTAR-112

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-113
WIN: 22603.00

Driller:	MaineDOT	Elevation (ft.): 29.5	Auger ID/OD: 5" Solid Stem
Operator:	Doggett/Burpee	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	N. Sherwood	Rig Type: CME 45C	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	8/25/2016; 12:20-13:47	Drilling Method: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	13+21.3, 23.1 ft Lt.	Casing ID/OD: NW-3"	Water Level(ft): None Observed

Hammer Efficiency Factor: 0.943 Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions:
D = Split Spoon Sample; B = Rock Core Sample; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); S_t = Pocket Torvane Shear Strength (psf)
SS = Unsuccessful Split Spoon Sample Attempt; SSA = Solid Stem Auger; $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); WC = Water Content, percent
U = Thin Wall Tube Sample; HSA = Hollow Stem Auger; q_u = Unconfined Compressive Strength (tsf); LL = Liquid Limit
WU = Unsuccessful Thin Wall Tube Sample Attempt; RC = Roller Cone; N=uncorrected = Raw Field SPT N-value; PL = Plastic Limit
V = Field Vane Shear Test; WOH = Weight of Hammer; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; PI = Plasticity Index
PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; G = Grain Size Analysis
WH = Weight of the Person; N_{60} = Hammer Efficiency Factor/60%; N=uncorrected; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in.) or Pressure (psi) or RQD (%)	N=uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	29.2		3-inch-layer HMA. 0.3 Brown, moist, loose, SAND, trace gravel, (Fill).	
5	10	24/20	5.00 - 7.00	3/4/3/3	7	11		23.1		4.0 Red-brown and light gray, moist, loose, SAND, little gravel, trace rootlets, (Fill).	
							10				
							13				
							35	20.3		9.2 0145 blows for 0.2 feet. Top of Bedrock at Elev. 20.3 feet. R1: Hard, slightly weathered (brown, dull), fine to medium grained, light gray, GNEISS. Joints are extremely close from 9.2'-11.2' to close, horizontal to moderately dipping, planar, smooth, discolored (brown staining and Clay infilling), open.	
10	R1	72/55	9.20 - 15.20	RQD = 32%			0145 NQ-2				
								16.2		13.3 R1: 13.3'-13.8': PEGMATITE	
								15.7		13.8 R1: 13.8'-15.2': GNEISS, same as above. R1: Rock Mass Quality = Poor R1: Core Times (minssec): 9.2-10.2 ft (3:55), 10.2-11.2 ft (2:30), 11.2-12.2 ft (4:15), 12.2-13.2 ft (4:20), 13.2-14.2 ft (3:46), 14.2-15.2 ft (4:08) 76% Recovery	
15	R2	60/58	15.20 - 20.20	RQD = 76%						R2: Hard, fresh, fine to medium grained, light gray and white, foliated, GNEISS, joints are moderately spaced, wide angle, planar, smooth, discolored (brown staining), open. R2: Rock Mass Quality = Good R2: Core Times (minssec): 15.2-16.2 ft (2:21), 16.2-17.2 ft (2:31), 17.2-18.2 ft (3:30), 18.2-19.2 ft (3:19), 19.2-20.2 ft (3:30) 97% Recovery	
								9.3		20.2 Bottom of Exploration at 20.2 feet below ground surface.	
20											
25											
30											
35											
40											
45											
50											

Remarks:
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-BTAR-113

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-114
WIN: 22603.00

Driller:	MaineDOT	Elevation (ft.): 32.3	Auger ID/OD: N/A
Operator:	Doggett/Burpee	Datum: NAVD88	Sampler: N/A
Logged By:	N. Sherwood	Rig Type: CME 45C	Hammer Wt./Fall: N/A
Date Start/Finish:	8/25/2016; 14:48-16:30	Drilling Methods: Cased Wash Boring	Core Barrel: NQ-2"
Boring Location:	13+76.3, 23.5 ft Lt.	Casing ID/OD: NW-3"	Water Level(ft): None Observed

Hammer Efficiency Factor: 0.943 Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions:
D = Split Spoon Sample; B = Rock Core Sample; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); S_t = Pocket Torvane Shear Strength (psf)
SS = Unsuccessful Split Spoon Sample Attempt; SSA = Solid Stem Auger; $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); WC = Water Content, percent
U = Thin Wall Tube Sample; HSA = Hollow Stem Auger; q_u = Unconfined Compressive Strength (tsf); LL = Liquid Limit
WU = Unsuccessful Thin Wall Tube Sample Attempt; RC = Roller Cone; N=uncorrected = Raw Field SPT N-value; PL = Plastic Limit
V = Field Vane Shear Test; WOH = Weight of Hammer; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; PI = Plasticity Index
PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; G = Grain Size Analysis
WH = Weight of the Person; N_{60} = Hammer Efficiency Factor/60%; N=uncorrected; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s /in.) or Pressure (psi) or RQD (%)	N=uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0										Drilling through trace roots& gravel in cuttings.	
5							7				
							7				
							9				
							16				
10							25				
							23				
							28				
15							21				
							22				
							21				
							33				
							29				
	R1	60/59	12.50 - 17.50	RQD = 70%			960 NQ-2	19.8		12.5 960 blows for 0.5 feet. Top of Bedrock at Elev. 19.8 feet. R1: 12.5'-14.5': Hard, slightly weathered, fine to medium grained, gray and white, foliated, GNEISS, joints are close, low angle, planar, smooth, discolored (brown and rusty stain, light gray Clay/Silt infilling, staining extends up beyond fracture), open to moderately wide, foliated.	
								17.8		14.5 R1: 14.5'-16.0': Hard, slightly weathered, coarse grained, white to gray, PEGMATITE, Joints are moderately spaced, low angle, planar, rough to smooth, discolored (gold stain, white Clay infilling), open,	
20								16.3		16.0 R1: 16.0'-17.5': Hard, slightly weathered, coarse grained, white and gray, GNEISS. Joints are moderately spaced, low angle, planar, rough to smooth, discolored, open. R1: Rock Mass Quality = Fair R1: Core Times (minssec): 12.5-13.5 ft (2:05), 13.5-14.5 ft (1:51), 14.5-15.5 ft (2:29), 15.5-16.5 ft (2:31), 16.5-17.5 ft (2:25) 98% Recovery	
	R2	60/57	17.50 - 22.50	RQD = 40%				10.5		21.8 R2: 21.8'-22.5': PEGMATITE. R2: Rock Mass Quality = Poor R2: Core Times (minssec): 17.5-18.5 ft (1:40), 18.5-19.5 ft (1:20)+, 19.5-20.5 ft (1:20)+, 20.5-21.5 ft (1:33)+, 21.5-22.5 ft (2:26) 95% Recovery	
25								9.8		22.5 Bottom of Exploration at 22.5 feet below ground surface.	
30											
35											
40											
45											
50											

Remarks:
Bedrock classifications made by Erik Friede (GZA) by observing rock core specimens in boxes after drilling.
As-drilled boring locations and ground surface elevations were surveyed by MaineDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-BTAR-114

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00
BRIDGE NO. 2016
BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	----------	------
DESIGN-DETAILED	T. WHITE	MAY 2020
CHECKED-REVIEWED	C.SNOW	------
DESIGN2-DETAILED2	----------	------
DESIGN3-DETAILED3	----------	------
REVISIONS 1	----------	------
REVISIONS 2	----------	------
REVISIONS 3	----------	------
REVISIONS 4	----------	------
FIELD CHANGES	----------	------

SIGNATURE

P.E. NUMBER

DATE

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOGS

SHEET NUMBER
60
OF 163

Filename: ...\MSTA\049_BORING LOGS2.dgn Division: GEOTECH Username: terry.white Date:12/17/2021

Username: terry.white
Date:12/17/2021
Division: GEOTECH
Filename: ...\MSTA\050_BORING LOGS3.dgn

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-201
WIN: 22603.00

Driller:	New England Boring Contractors	Elevation (ft.): 45.9	Auger ID/OD: N/A
Operator:	M. Porter	Datum: NAVD88	Sampler: Split Spoon
Logged By:	E. Friede	Rig Type: B-53	Hammer Wt./Fall: 140/30
Date Start/Finish:	12/7/18 – 12/7/18	Drilling Methods: Drive & Wash	Core Barrel: N/A
Boring Location:	N396321.0, E1091837.7	Casing ID/OD: 4/4.5", 3/3.5"	Water Level*: None Observed
Hammer Efficiency Factor: 0.931		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BR*SR*Nuncorrected; T_{60} = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in)	Sample Depth (ft.)	Blows / 6 in. Sheer Strength (psf) or ROD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	10	24/24	0.30 – 2.30	29-20-12-12	52	50	55A	45.6		ASPHALT – 0.3 Brown and gray, medium to coarse SAND, little Gravel, trace Silt. -FILL-	
5	20	24/24	4.50 – 6.50	3-3-7-6	10	16	34	39.2		Brown, moist, fine to coarse SAND, trace Gravel, trace Silt, trace roots, trace weathered rock fragments at bottom. -FILL- – 6.7 Top of rock.	
							40				
	R1	26/26	8.00 – 10.17	ROD = 0%			100/3 in			R1: Hard, slightly weathered, coarse to very coarse, white, PEGMATITE; Joints are extremely close to close, low to high angle, planar to undulating, discolored, trace grey Silt infilling, open. Rock Mass Quality = Very Poor Recovery = 100%	
10	R2	48/48	10.30 – 14.30	ROD = 42%			50/4	35.8		Rock Core Times (minssec): 8.0-9.0' (3:17), 9.0-10.0' (2:56), 10.0-10.3' (1:11) – 10.3 R2: Hard, fresh to slightly weathered, medium to coarse, grey and white foliated, GNEISS; Joints are very close to close, low angle to moderately dipping, discolored to slightly weathered, planar, tight. Rock Mass Quality = Poor Recovery = 100%	
15	R3	36/36	14.30 – 17.30	ROD = 53%			50/3			Rock Core Times (minssec): 10.3-11.3' (1:28), 11.3-12.3' (1:34), 12.3-13.3' (2:26), 13.3-14.3' (1:56) R3: Hard, fresh to slightly weathered, medium to coarse, grey and white foliated, GNEISS; Joints are very close to close, low angle to moderately dipping, discolored to slightly weathered, planar, tight, Silt infilling at 17.3'. Rock Mass Quality = Fair Recovery = 8%	
	R4	12/1	17.30 – 18.30	ROD = 0%			50/1	27.6		Rock Core Times (minssec): 14.3-15.3' (2:45), 15.3-16.3' (1:25), 16.3-17.3' (1:46) R4: Hard, fresh, recovery: remainder of core left in hole. Rock Mass Quality = Very Poor Recovery = 8% – 18.3 Bottom of Exploration at 18.3 feet below ground surface.	
20											
25											

Remarks:
1. Casing refusal at 6.7', advance roller cone to 8.0'. Set up to core.
2. Attempt to retrieve R4 rock core unsuccessful.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-201

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-202
WIN: 22603.00

Driller:	New England Boring Contractors	Elevation (ft.): 2.0	Auger ID/OD: N/A
Operator:	M. Porter	Datum: NAVD88	Sampler: Split Spoon
Logged By:	E. Friede	Rig Type: B-53	Hammer Wt./Fall: 140/30
Date Start/Finish:	12/6/18 – 12/6/18	Drilling Methods: Drive & Wash	Core Barrel: N/A
Boring Location:	N396378.2, E1091845.0	Casing ID/OD: 3/3.5"	Water Level*: River Level
Hammer Efficiency Factor: 0.931		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BR*SR*Nuncorrected; T_{60} = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in)	Sample Depth (ft.)	Blows / 6 in. Sheer Strength (psf) or ROD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	R1	8/6	0.00 – 0.67	ROD = 0%				1.3		R1: Hard, fresh to slightly weathered, medium grained, grey and white foliated, GNEISS; Joints are very close, low angle to moderately dipping, planar, discolored, open. Rock Mass Quality = Very Poor Recovery = 75% Rock Core Times (minssec): 0-0.7' (4:57) – 0.7	
	R2	18/12	0.70 – 2.20	ROD = 0%				-0.2		R2: 0.7'-1.0': Soft, highly weathered, grey, Rock fragments. – 1.0 R2: 1.0'-2.2': Hard, slightly weathered, medium grained, grey and white foliated, GNEISS. Joints are very close, low angle, planar to undulating, fresh, open. Rock Mass Quality = Very Poor Recovery = 67% Rock Core Times (minssec): 0.7-1.7' (6:30), 1.7-2.2' (4:50) Bottom of Exploration at 2.2 feet below ground surface. – 2.2	
5											
10											
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-202

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-302A
WIN: 22603.00

Driller:	New England Boring Contractors	Elevation (ft.): 53.0	Auger ID/OD: 4.25" OD SSA
Operator:	Eric Baron	Datum: NAVD 88	Sampler: Standard Splitspoon
Logged By:	M. Johnescu	Rig Type: Mobile B53	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	11/25/19-11/25/19	Drilling Methods: Drive & Wash	Core Barrel: 3" OD / 2.25" ID
Boring Location:	2+84.5, 21.9 ft Lt.	Casing ID/OD: 4"/4.25"	Water Level*: Not Observed
Hammer Efficiency Factor: 0.937		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BR*SR*Nuncorrected; T_{60} = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in)	Sample Depth (ft.)	Blows / 6 in. Sheer Strength (psf) or ROD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							55A			See boring BB-BTAR-302 for samples from 0'-6.0'. Advanced boring to 6.0' and continued sampling.	
5	40	24/13	6.00 – 8.00	1-2-2-4	4	6				Brown, moist, medium stiff, Clayey SILT, little sand, little gravel, trace roots. (Fill).	
	50	24/7	8.00 – 10.00	6-6-7-7	13	20	40			Brown, moist, very stiff, Clayey SILT, some gravel, little sand, brick fragments. (Fill).	
							34				
	60	24/5	10.00 – 12.00	5-5-6-5	11	17	51			Brown and grey, dry, medium dense, Sandy GRAVEL, trace silt. (Fill); Brick and glass fragments in wash return, heavy rig chatter.	
							72				
10							41	40.0		– 13.0	
							35				
							72				
	T0	19/14	15.00 – 16.58	19-63-95-40/1"	158	247	84			Brown and grey, wet, very dense, SAND, some gravel, some silt, (Glacial Till).	
							100	36.4		– 16.6	
15	R1	60/55	17.20 – 22.20	ROD = 60%			N/A			Split spoon refusal at 16.6', probable top of rock. R1: Hard, fresh, medium grained, grey and white, SCHIST to marginal Pegmatite; Joints are extremely close to moderately dipping, planar, fresh to discolored, tight to slightly open, with silt and sand infilling. One horizontal joint. Rock Mass Quality = Fair Recovery = 92% Rock Core Times (minssec): 17.2-18.2' (2:12), 18.2-19.2' (1:54), 19.2-20.2' (1:53), 20.2-21.2' (1:47), 21.2-22.2' (2:01)	
20	R2	60/60	22.20 – 27.20	ROD = 60%						R2: Hard to soft, fresh with highly weathered rock at 26.7', medium grained, SCHIST, with Pegmatite at 24.0'-24.6' and 25.9'-26.5'. Joints are extremely close to moderately spaced, moderately dipping, planar to undulating, rough, fresh to decomposed, tight to moderately wide, with silt and sand infilling. Rock Mass Quality = Fair Recovery = 98% Rock Core Times (minssec): 22.2-23.2' (1:59), 23.2-24.2' (1:32), 24.2-25.2' (1:40), 25.2-26.2' (1:33), 26.2-27.2' (1:34)	
25								25.8		– 27.2 Bottom of Exploration at 27.2 feet below ground surface.	
30											
35											
40											
45											
50											

Remarks:
1. Automatic hammer NEBC #B-24 Energy Transfer Ratio = 0.937

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-302A

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-301
WIN: 22603.00

Driller:	New England Boring Contractors	Elevation (ft.): 54.8	Auger ID/OD: 4.25" OD SSA
Operator:	Eric Baron	Datum: NAVD 88	Sampler: Standard Splitspoon
Logged By:	M. Johnescu	Rig Type: Mobile B53	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	11/25/19-11/25/19	Drilling Methods: Drive & Wash	Core Barrel: 3" OD / 2.25" ID
Boring Location:	2+41.7, 20.5 ft Lt.	Casing ID/OD: 4"/4.25"	Water Level*: Not Observed
Hammer Efficiency Factor: 0.937		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BR*SR*Nuncorrected; T_{60} = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in)	Sample Depth (ft.)	Blows / 6 in. Sheer Strength (psf) or ROD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	10	24/8	0.00 – 2.00	1-3-6-4	9	14	55A			Brown and tan, moist, loose, SAND, little Silt, little gravel, trace roots. (Fill).	
	20	24/9	2.00 – 4.00	3-3-3-3	6	9				Brown, moist, loose, SAND, little gravel, little silt, trace brick fragments. (Fill).	
5	30	24/4	4.00 – 6.00	1-2-1-2	3	5				Brown, moist, loose, SAND, little gravel, little silt, trace roots. (Fill).	
	40	24/12	6.00 – 8.00	WOH-1-1-2	2	3				Brown and black, moist, soft, Clayey SILT, little sand, trace gravel, trace roots. (Fill).	
	50	24/24	8.00 – 10.00	3-4-5-7	9	14				Brown and grey, moist, stiff, Clayey SILT, little sand, trace roots. (Fill).	
10							41				
	60	24/24	10.00 – 12.00	6-8-10-10	18	28	58			Brown, moist, medium dense, Silty SAND. (Fill).	
							64	42.7		– 12.1	
	R1	60/54	12.40 – 17.40	ROD = 64%			100/6			Casing refusal at 12.1', probable top of rock, advance roller bit to 12.4' and set up to core. R1: Hard to soft, fresh to moderately weathered, medium grained, grey and brown, SCHIST; Joints are very close to moderately spaced, moderately dipping, planar, rough, fresh to decomposed, partially open to moderately wide, silt and sand infilling. Rock Mass Quality = Fair Recovery = 90% Rock Core Times (minssec): 12.4-13.4' (1:42), 13.4-14.4' (1:05), 14.4-15.4' (1:07), 15.4-16.4' (1:19), 16.4-17.4' (1:16)	
15							NR				
	R2	60/60	17.40 – 22.40	ROD = 73%						R2: Hard, fresh to slightly weathered, medium grained, SCHIST; Joints are extremely close to moderately spaced, planar to undulating, rough, fresh to discolored, partially open to open, silt and sand infilling. Rock Mass Quality = Fair Recovery = 100% Rock Core Times (minssec): 17.4-18.4' (1:41), 18.4-19.4' (1:26), 19.4-20.4' (1:32), 20.4-21.4' (1:57), 21.4-22.4' (1:44)	
20								32.4		– 22.4 Bottom of Exploration at 22.4 feet below ground surface.	
25											

Remarks:
1. Casing stopped at 12.1', drilled down inside, heavy rig chatter, little loss of water.
2. Automatic hammer NEBC #B-24 Energy Transfer Ratio = 0.937

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Page 1 of 1 — Boring No.: BB-BTAR-301

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Frank J. Wood Bridge #2016 carries Route 201 over the Androscoggin River
Location: Brunswick-Topsham, Maine

Boring No.: BB-BTAR-302
WIN: 22603.00

Driller:	New England Boring Contractors	Elevation (ft.): 53.0	Auger ID/OD: 4.25" OD SSA
Operator:	Eric Baron	Datum: NAVD 88	Sampler: Standard Splitspoon
Logged By:	M. Johnescu	Rig Type: Mobile B53	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	11/25/19-11/25/19	Drilling Methods: Drive & Wash	Core Barrel: 3" OD / 2.25" ID
Boring Location:	2+95.3, 30.4 ft Lt.	Casing ID/OD: 4"/4.25"	Water Level*: Not Observed
Hammer Efficiency Factor: 0.937		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR = Weight of Rods or Casing; WOP = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = Hammer Efficiency Factor*BR*SR*Nuncorrected; T_{60} = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in)	Sample Depth (ft.)	Blows / 6 in. Sheer Strength (psf) or ROD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	10	18/7	0.20 – 1.70	8-6-5	11	17	55A	52.8		ASPHALT – 0.2 Bottom 5": Brown, dry, medium dense, S AND, some gravel, little silt, (Fill), No asphalt in sample.	
	20	24/6	2.00 – 4.00	5-7-10-38	17	27				Brown, dry, medium dense, SAND, some gravel, little silt, (Fill).	
5	30	24/12	4.00 – 6.00	5-3-3-2	6	9				Brown, moist, stiff, Clayey SILT, little sand, roots present, (Fill).	
								47.0		– 6.0 Bottom of Exploration at 6.0 feet below ground surface.	
10											
15											
20											
25											
30											
35											
40											
45											
50											

Remarks:
1. Driller encountered cobble in hole below sample 301 augers skewed around cobble. Hole abandoned; boring offset 2.0', see boring BB-BTAR-302A.
2. Automatic hammer NEBC #B-24 Energy Transfer Ratio = 0.937

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-BTAR-302

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-22260(300)

WIN 22603.00
BRIDGE NO. 2016

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	----------	------
DESIGN-DETAILED	C.SNOW	MAY 2020
CHECKED-REVIEWED	-----	------
DESIGN2-DETAILED2	-----	------
DESIGN3-DETAILED3	-----	------
REVISIONS 1	-----	------
REVISIONS 2	-----	------
REVISIONS 3	-----	------
REVISIONS 4	-----	------
FIELD CHANGES	-----	------

SIGNATURE

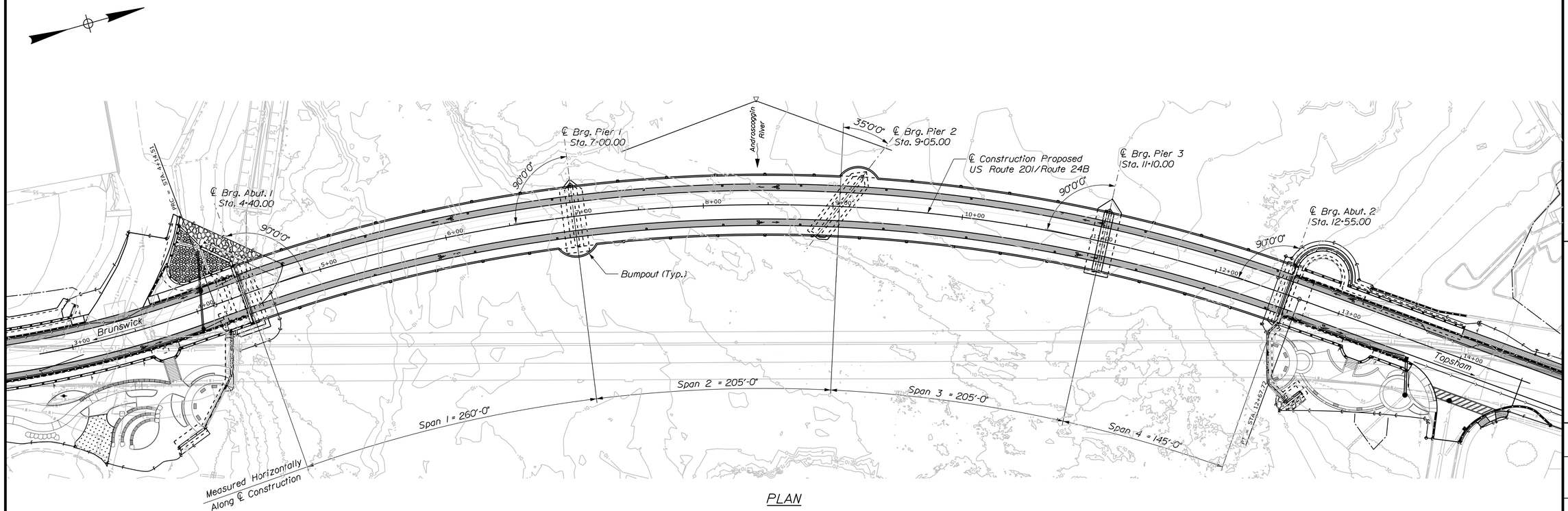
P.E. NUMBER

DATE

FRANK J WOOD
ANDROSCOGGIN RIVER
BRUNSWICK - TOPSHAM CUMBERLAND - SAGADAHOC

BORING LOGS

SHEET NUMBER
61
OF 163



Date:10/15/2022

Username:

Division:

Filename: ...\062_Plan_Elevation.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016 BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

Daniel S Myers

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	S.Morgan	BY	4/20 DATE
CHECKED-REVIEWED	D.Myers	BY	4/20 DATE
DESIGN2-DETAILED2		BY	DATE
DESIGN3-DETAILED3		BY	DATE
REVISIONS 1		BY	DATE
REVISIONS 2		BY	DATE
REVISIONS 3		BY	DATE
REVISIONS 4		BY	DATE
FIELD CHANGES		BY	DATE

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRIDGE PLAN & ELEVATION

SHEET NUMBER

62

OF 163

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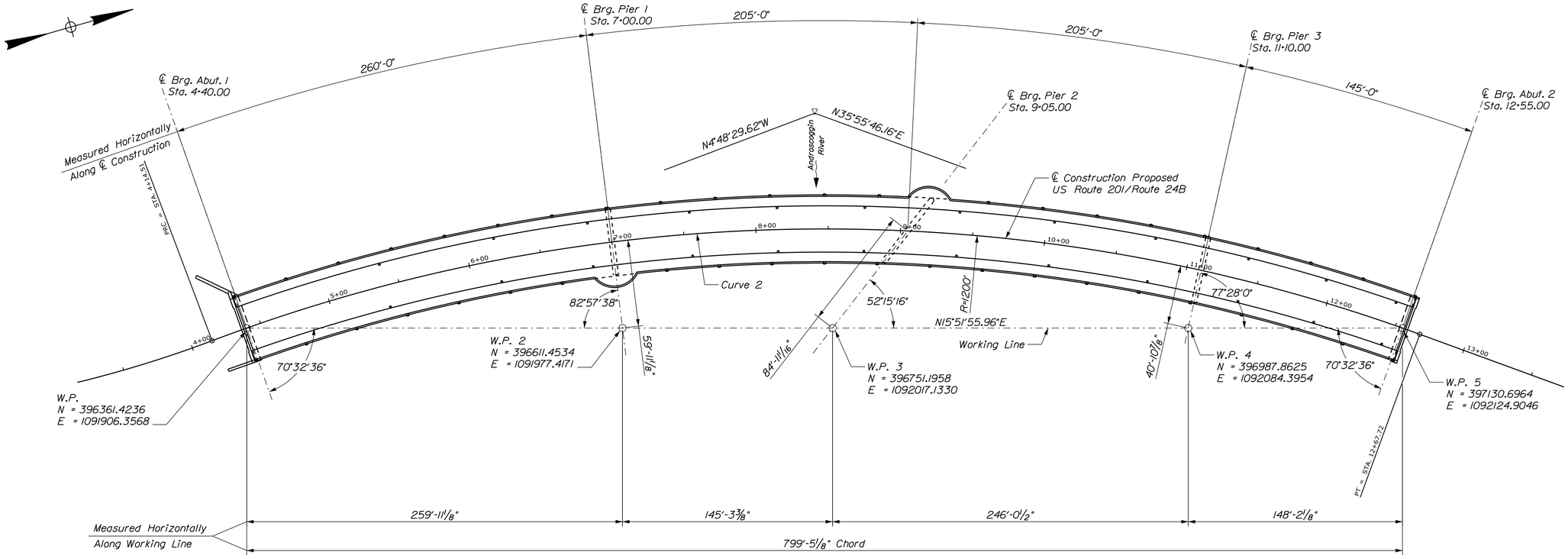

GEOMETRIC LAYOUT PLAN

40 0 40 80

Scale of Feet

Legend:

W.P. = Working Point

Note:

1. Retaining walls and moment slabs on approaches not shown for clarity. See retaining wall key plan sheets for approach structure layouts not shown.

Username: Date:10/15/2022

Filename: ...\063_Geometric_Layout_Plan.dgn Division:

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DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

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FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GEOMETRIC LAYOUT PLAN

SHEET NUMBER

63

OF 163

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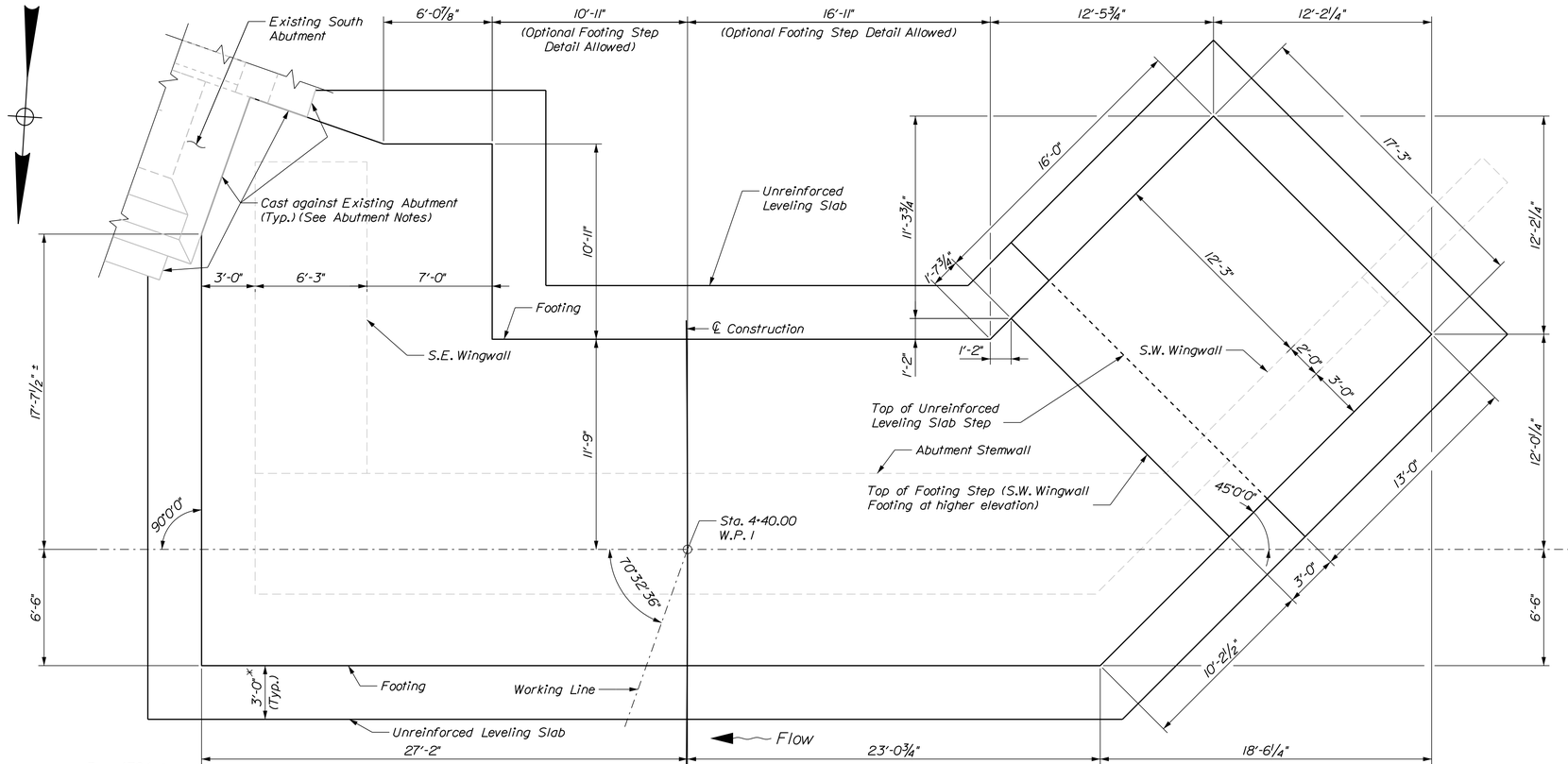
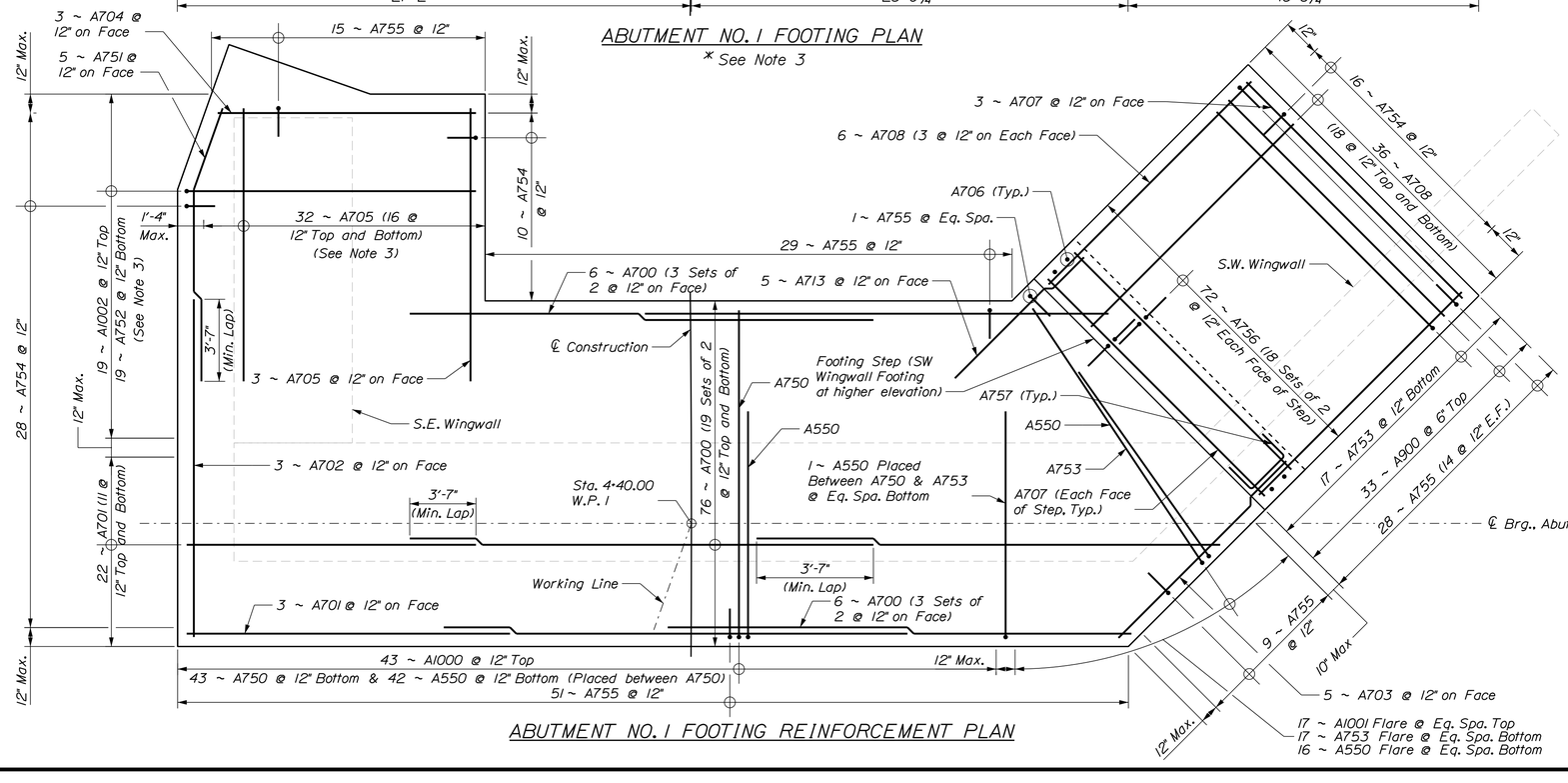


ABUTMENT NO. 1 FOOTING PLAN

* See Note 3



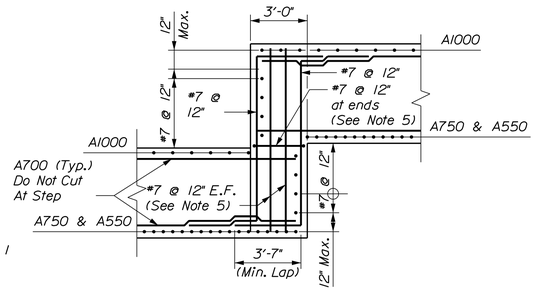
ABUTMENT NO. 1 FOOTING REINFORCEMENT PLAN

LEGEND:

C.J.R. = Construction Joint. Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

NOTES:

1. For Abutment Notes, see Sheet "Abutment No. 1 Plan".
2. Extents of the existing wingwall shown are approximate and provided for reference only. Footing bars which would conflict with the existing concrete to remain may be cut to fit or shifted, as directed by the Resident.
3. Leveling Slab dimensions denoted with * may be adjusted with approval of the Resident. Leveling Slab lateral offset from the edge of footing shall be a constant offset on each face and shall at a minimum be equal to the Leveling Slab height at that region of the Leveling Slab divided by 2. Leveling slab concrete above the normal water line that will be exposed in the final condition shall have a smooth, regular surface.
4. For bar layout details in footing step under S.W. Wingwall, see sheet "ABUTMENT NO. 1 SOUTHWEST WINGWALL".
5. For optional footing steps of greater height than the proposed footing thickness, a grid of #7 bars @ 12" maximum spacing shall be provided in the front and back faces of the step between the top of footing on the low side and the bottom of footing on the high side. For optional footing steps of height less than or equal to the proposed footing thickness, only the additional vertical bars shown in the step detail are required. A700 bars in near and far faces of footing shall not be cut at step.



ABUTMENT NO. 1 OPTIONAL FOOTING STEP DETAIL

See Abutment Notes 6 and 7, Sheet "Abutment No. 1 Plan"

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BRIDGE PLANS

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

Daniel S. Myers

SIGNATURE

12572

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		BY	DATE
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DESIGN3-DETAILED3			
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REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 1
FOOTING PLAN

SHEET NUMBER

64

OF 163

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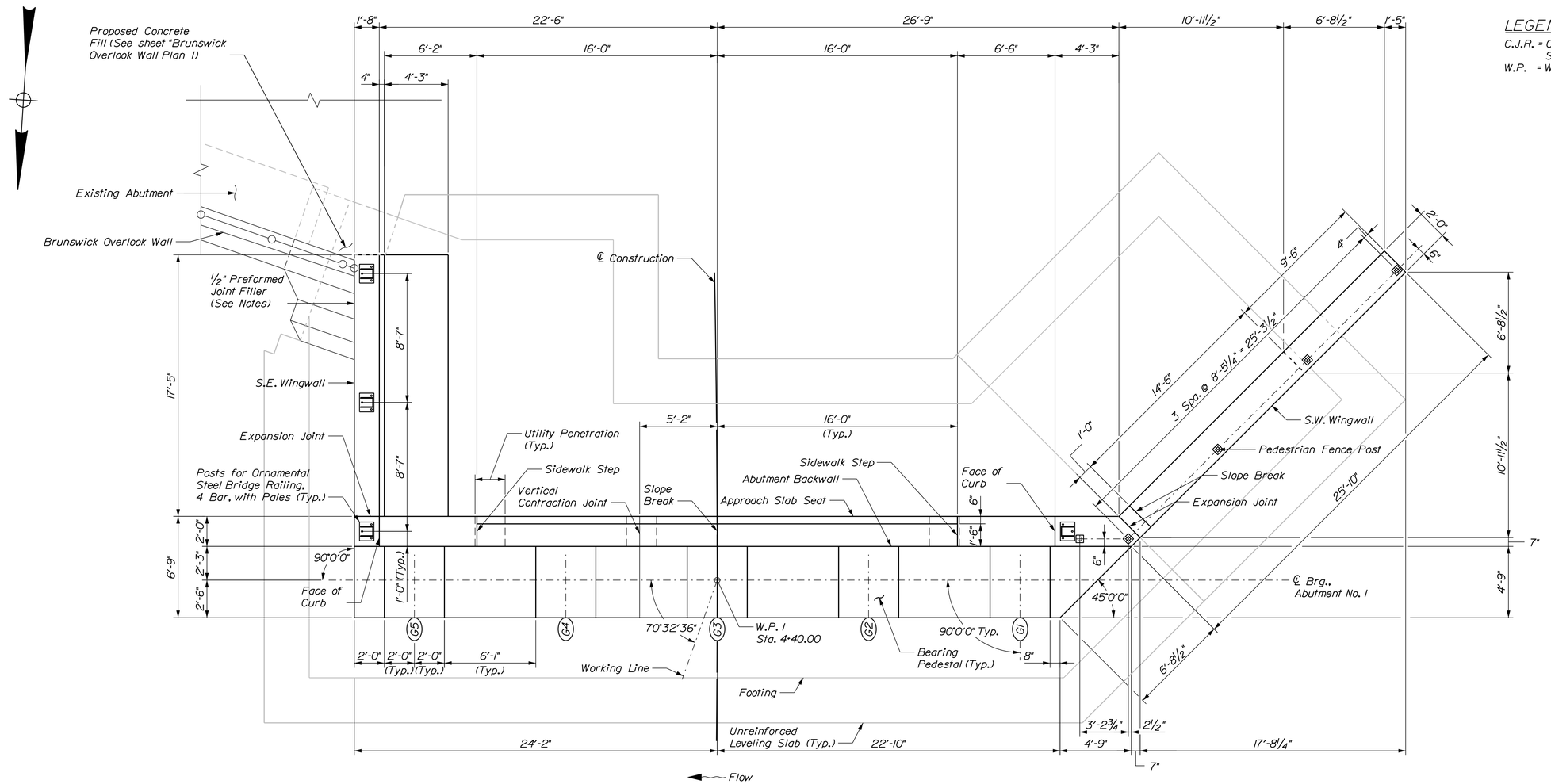
Username: Division: Date:10/15/2022

Filename: ...\064_Abut_1_Footing_Plan.dgn



LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

ABUTMENT NO. 1 PLAN

ABUTMENTS NOTES:

1. The maximum factored applied footing pressures are 26.4 ksf at Abutment No. 1 and 18.7 ksf at Abutment No. 2 at the strength limit state. The maximum factored footing bearing pressure is taken at the bottom of spread footing and does not include the self-weight of any leveling slab.
2. Abutments, wingwalls, and their footings shall be backfilled with Granular Borrow. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 10 feet behind the walls in fill areas or as noted on the plans.
3. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted. Minimum concrete cover shall be measured from the deepest point of any form liner used.
4. Place drains with a 4-inch diameter in the breastwall and wingwalls at 10 feet maximum spacing. The exact location will be determined by the Resident.
5. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
6. When bedrock protrudes above the bottom of footing, the footing may be raised and the vertical reinforcing may be cut in the field with the approval of the Resident. The minimum footing elevations are shown on the Plans and shall not be lowered without prior approval of the Engineer of Record. Payment for adjusting the footing elevations and reinforcing steel will be considered incidental to the related Contract Items. No separate payment will be made.
7. Bedrock elevations are anticipated to vary significantly at the Abutment No. 1 site. Footing steps may be added to accommodate variable bedrock elevations with the approval of the Resident. The final location of any footing steps required will be determined by the Resident in coordination with the Engineer prior to placement of any foundation concrete. Footing reinforcement may be adjusted or cut in the field with the approval of the Resident. Footing step reinforcing shall be as shown in detail "Abutment No. 1 Optional Footing Step Detail" on Sheet "Abutment No. 1 Footing Plan". Payment for adjusting the footing elevations, modifying or adding reinforcing steel, and adding the step will be considered incidental to the related Contract Items. No separate payment will be made.
8. At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092 Structural Rock Excavation - Major Structures.
9. When the prepared bedrock surface is below the bottom of the footing elevation shown on the plans, an unreinforced leveling slab may be placed to the elevation shown on the plans. Alternatively, the footing thickness may be increased up to an additional 1 foot as approved by the Resident. If the footing thickness is increased, the top of footing elevation shall be as shown on the Plans and all reinforcement shall be as shown on the Plans relative to the top of the footing. Added concrete footing thickness will be below all reinforcement.
10. Abutment concrete and leveling slab concrete shall be placed on bedrock cleaned of all weathered rock, loose fractured rock, and soil. The bedrock subgrade shall be confirmed to be relatively level. Where the bedrock slope exceeds 4H:1V, the bedrock surface shall be benched to create level steps or made completely level. The Resident shall approve the bedrock subgrade prior to the placement of the abutment concrete.
11. Prior to placing abutment concrete or leveling slab concrete, the bedrock subgrade shall be washed with high-pressure water and air. If bedrock surface is submerged in water, bedrock surface preparation shall be in accordance with "Seal Cofferdam Notes", on sheet "Pier No. 1 Footing Plan".
12. The footing and leveling slab shall be cast against the existing abutments as noted on the plans. Reinforcing bars in areas impacted by the existing abutments shall be cut or shifted in field, as required, to maintain appropriate concrete cover. Costs will be incidental to related contract items.
13. The concrete pedestal elevations shown are approximate. The actual elevations shall be adjusted to accommodate the bearings supplied by the Contractor. The elevations provided on the Plans assume overall bearing heights as described on the "Bearing Layout" sheet.
14. The utility conduits passing through the abutment backwalls shall be either cast in place or run through a utility blockout, at the option of the Contractor. Additional reinforcing steel shall be provided around the utility conduit for either option, as shown on the plans. If blockouts are used, all voids around the conduits shall be fully grouted with a MaineDOT pre-approved product. All costs associated with construction of utility conduit blockouts shall be incidental to Item 502.21, "Structural Concrete, Abutments and Retaining Walls."

(Abutment Notes continued on sheet Abutment No. 1 Elevation)

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins
DESIGN-DETAILED	R.Kravchuk
CHECKED-REVIEWED	B.Toothaker
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
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REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 1 PLAN

SHEET NUMBER

65

OF 163

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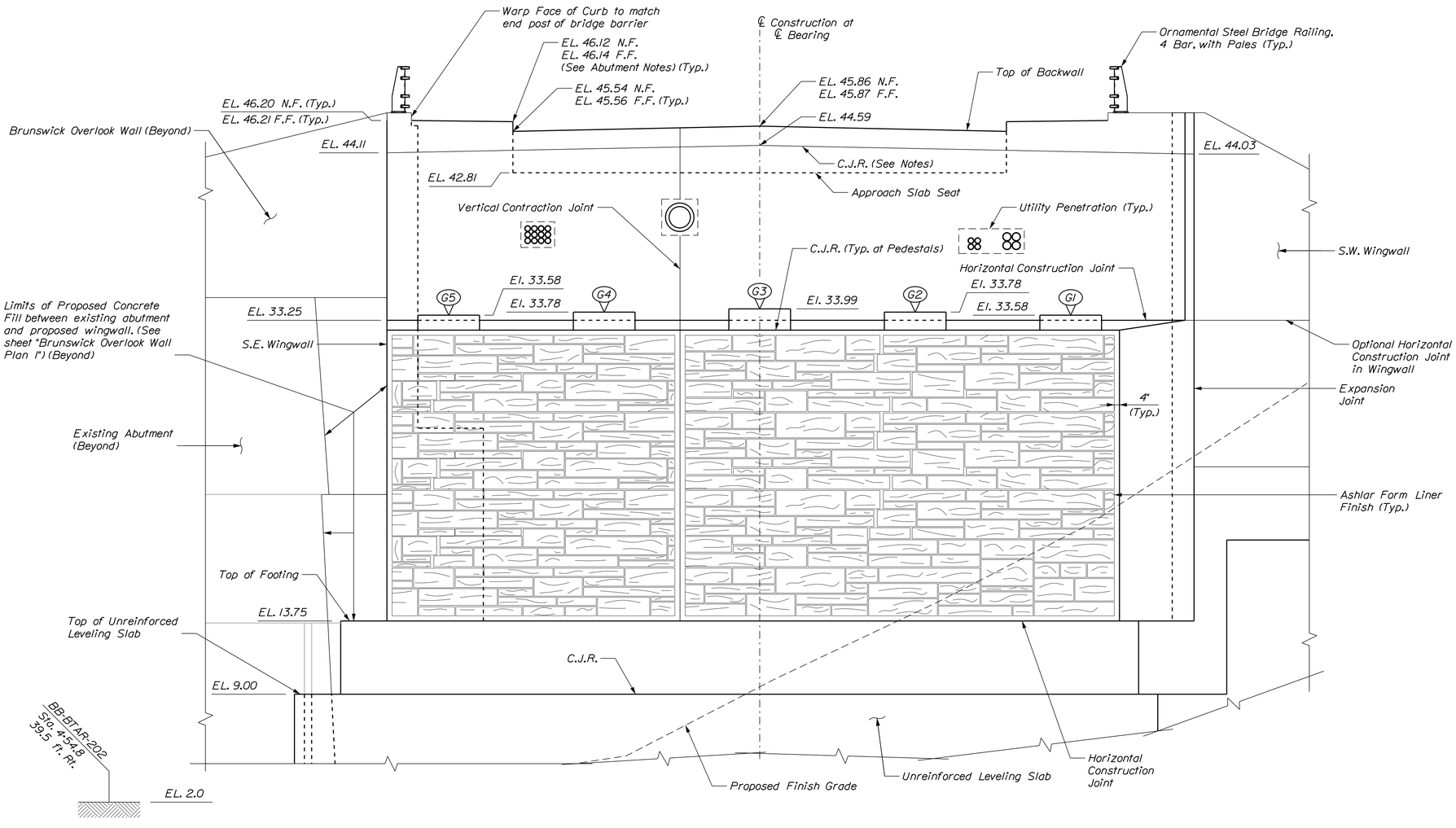
Date:10/15/2022
Username:
Division:
Filename: ...\106180_7\066_Abut_1_Elev.dgn

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point
N.F. = Near Face
F.F. = Far Face



ABUTMENT NO 1 ELEVATION

Flow

ABUTMENT NOTES, CONTINUED

15. Coordinate location of utility and bridge lighting conduit blockouts with placement of bridge-supported utility and bridge lighting conduits. Utilities shall have a minimum clearance of 3" to the bottom of the curtain trough.

16. The top of backwall elevations provided in abutment elevation views are provided to the concrete finish grade at all far face locations and to the final joint armor elevation or concrete finish grade elevation as appropriate at near face locations. See Finger Joint Detail sheets for additional details.

17. Pattern Abutment breastwalls and wingwalls as shown on the plans with concrete patterning in accordance with Special Provision 502 Concrete Form Liners.

18. Concrete in abutments, wingwalls, and footings will be paid under Item 502.21, "Structural Concrete, Abutments and Retaining Walls".

19. Concrete above C.J.R. at the top of the abutment backwall and in the curb cast on top of the S.E. Wingwall will be paid for under Item 502.49 "Structural Concrete Curbs and Sidewalks" and shall be Class "LP" Concrete.

20. Concrete fill between the existing abutments and wingwalls and new abutments and wingwalls will be paid under item 502.565, "Concrete Fill" and shall be Class "A" concrete.

21. Concrete for the Unreinforced Leveling Slab will be paid for under Item 502.565, "Concrete Fill" and shall be Class "A" concrete. Portions of the unreinforced leveling slab that are placed as a seal shall be done so in accordance with the Seal Cofferdam Notes (see sheet "Pier No. 1 Footing Plan"). Concrete for the leveling slab placed as a seal will still be paid for under item 502.565, "Concrete Fill", and other associated costs will be considered incidental to the relevant abutment Cofferdam pay item.

Notes:

1. For additional notes and details, see sheet "Abutment No. 1 Plan".
2. For additional details on Proposed Brunswick Overlook Wall, see sheet "Brunswick Overlook Wall Plan 1".
3. See Wingwall sheets for additional information and limits of architectural features.

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · LICENSED PROFESSIONAL ENGINEER

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FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 1 ELEVATION

SHEET NUMBER
66
OF 163

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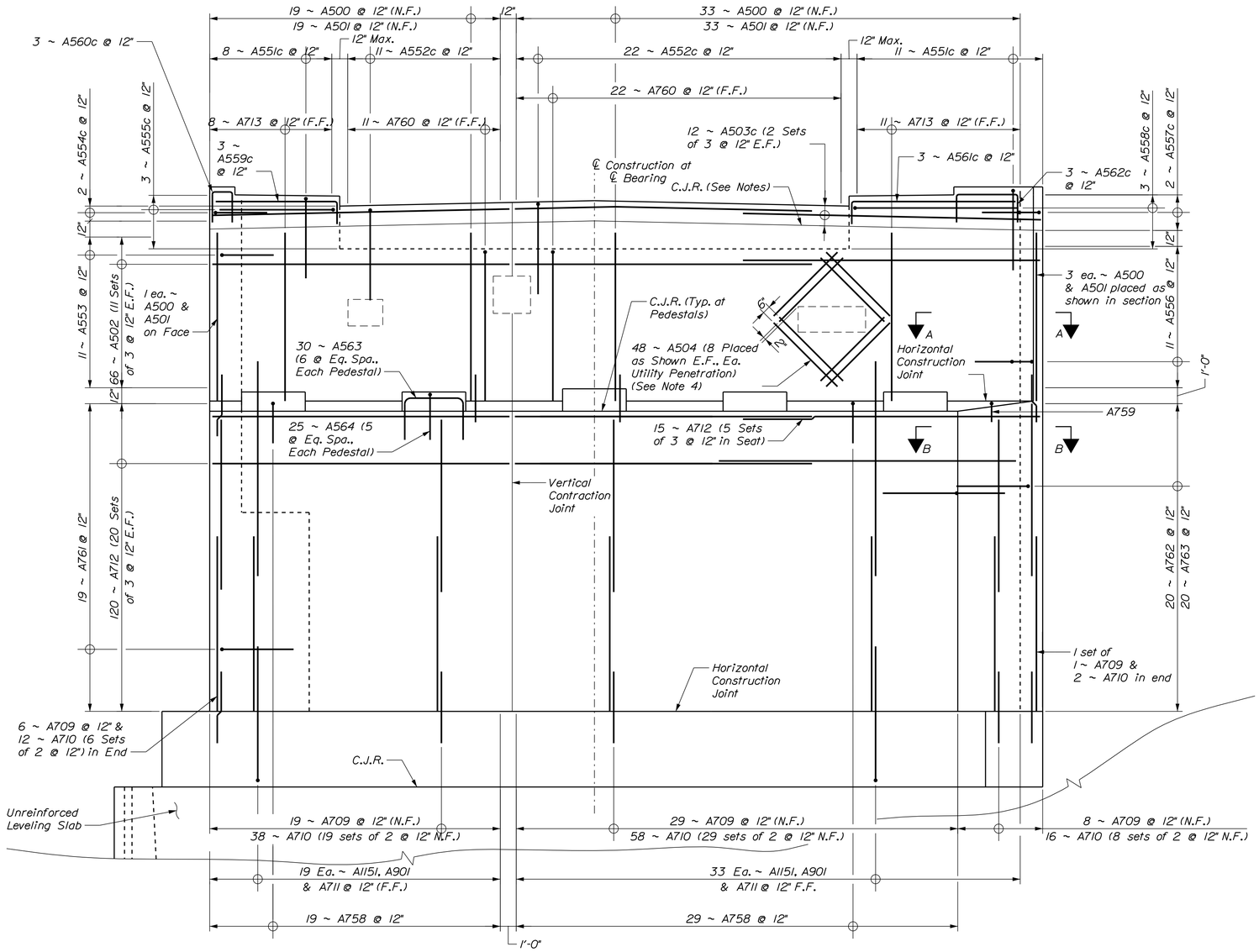
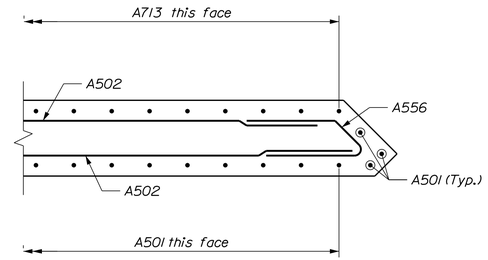


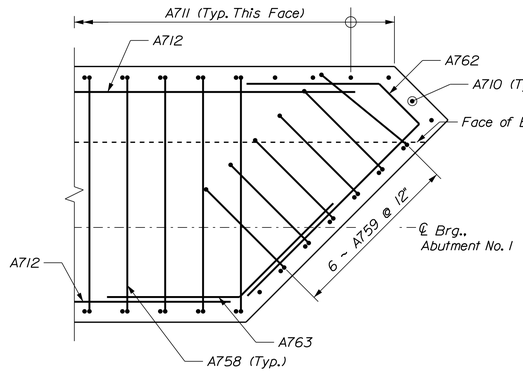
ABUTMENT NO 1 ELEVATION

Flow

Rebar shown assuming no footing step



SECTION A-A



SECTION B-B

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point
N.F. = Near Face
F.F. = Far Face

Notes:

1. For Abutment Notes, see sheet "Abutment No. 1 Plan".
2. For footing reinforcement, see "Abutment No. 1, Footing Plan" sheet.
3. Abutment stem reinforcement may be adjusted in the field to account for footing step. See Abutment Notes.
4. Utility penetration bars will be shifted to avoid the approach slab seat and the vertical contraction joint. Up to 4 vertical reinforcing bars and 2 horizontal reinforcing bars may be cut at as necessary on each face at each penetration.

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FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 1 REINFORCEMENT

SHEET NUMBER

67

OF 163

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Username:
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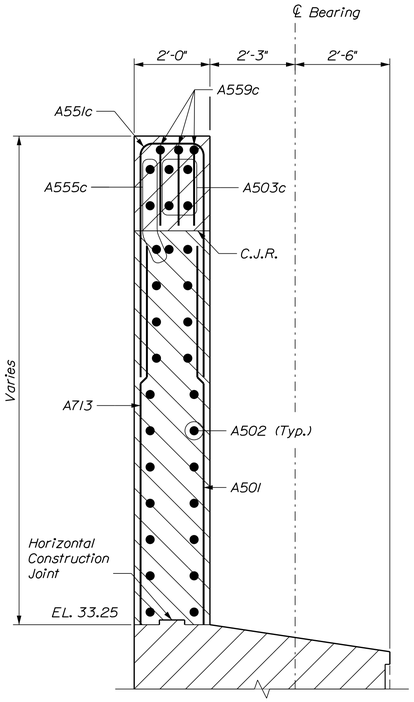
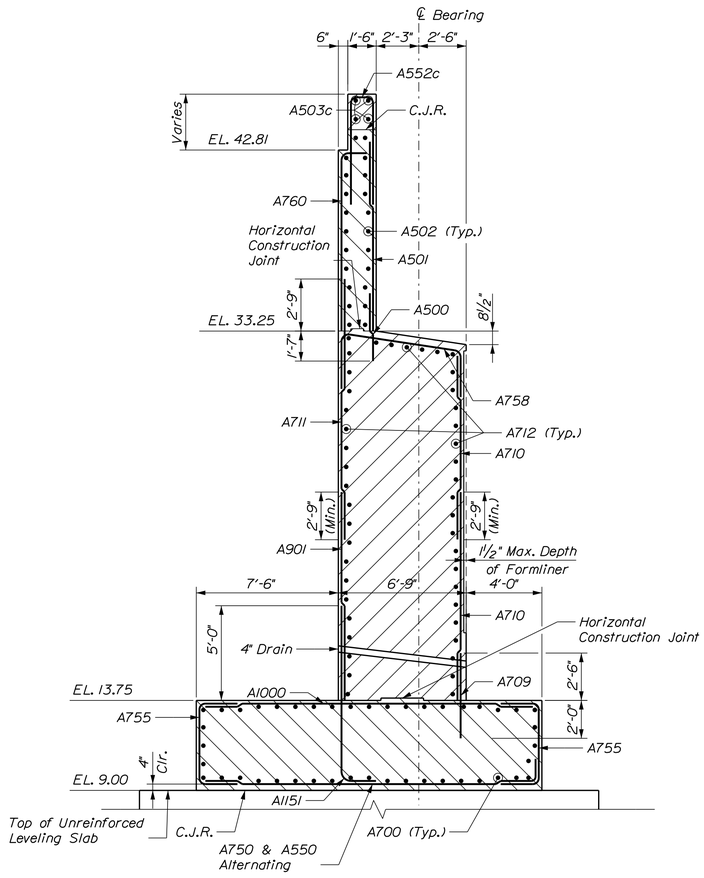
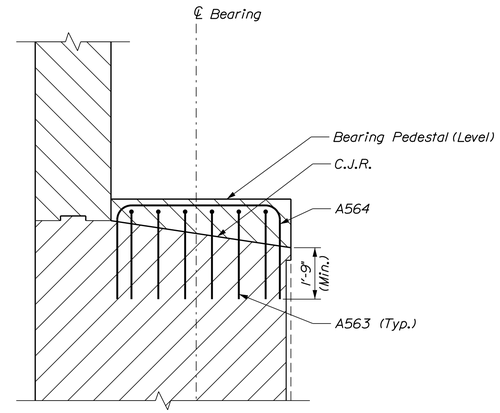


BACKWALL SIDEWALK DETAIL

Abutment Stem Reinforcement Omitted for Clarity
(East Sidewalk Shown, West Sidewalk Similar)



TYPICAL ABUTMENT SECTION



PEDESTAL DETAIL

Backwall and Abutment Stem
Reinforcement omitted for clarity

Note:

1. For additional notes and details, see sheet "Abutment No. 1 Plan".

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

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ABUTMENT NO. 1 SECTIONS

SHEET NUMBER

68

OF 163

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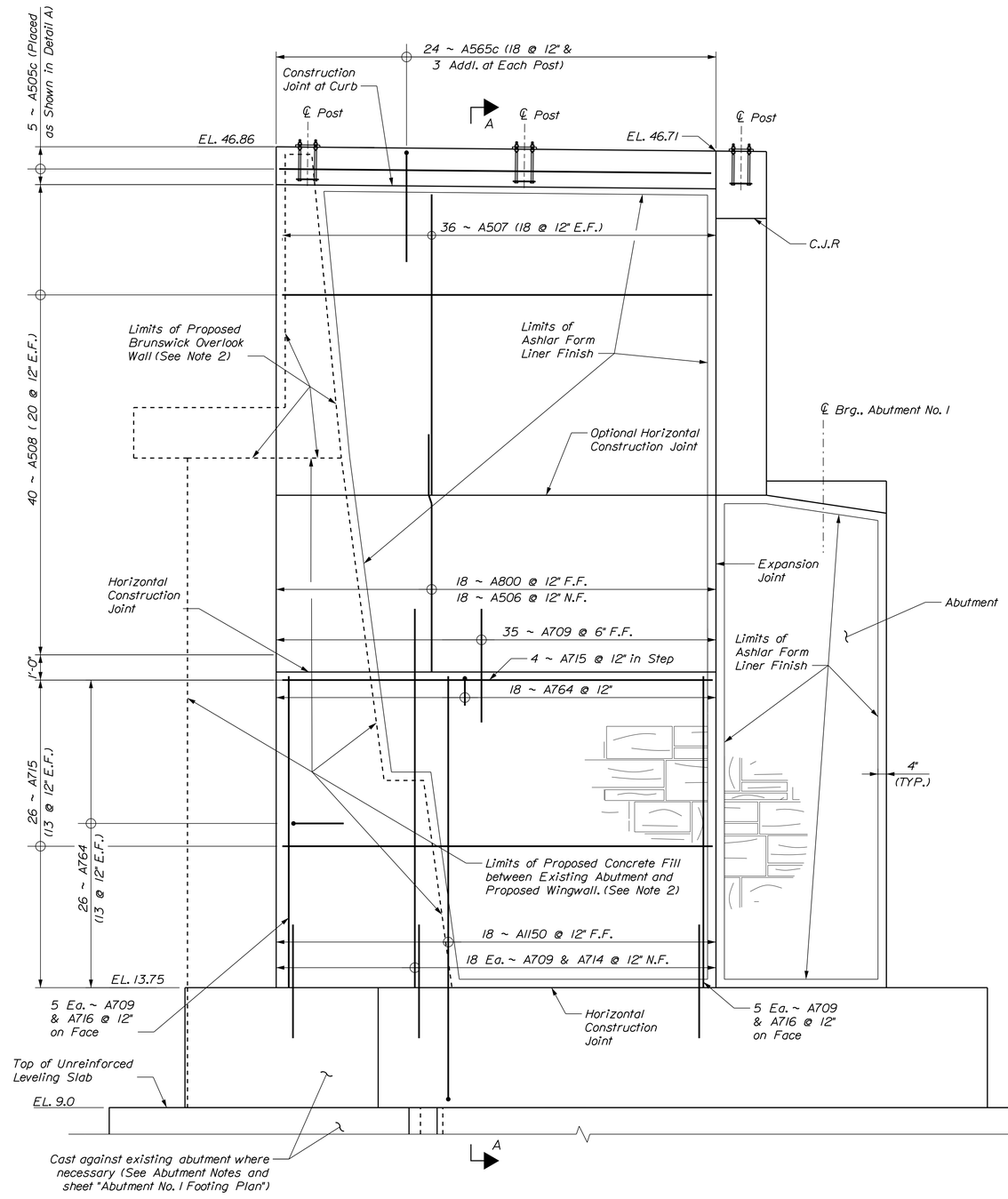
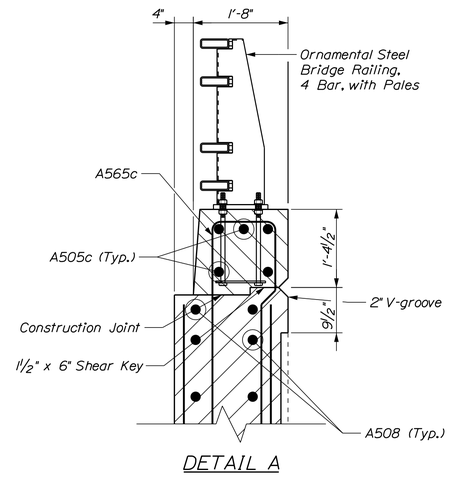
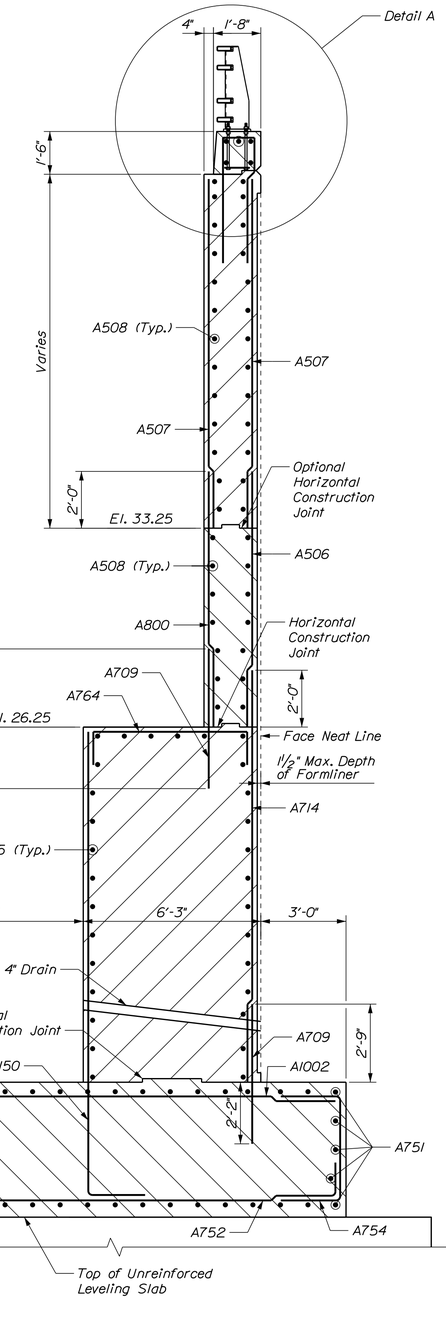


SOUTHEAST WINGWALL ELEVATION

(Abutment reinforcement not shown for clarity)



DETAIL A



SECTION A-A

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)

N.F. = Near Face

F.F. = Far Face

E.F. = Each Face

NOTES:

1. Wingwall footing reinforcement will be placed to the inside of the abutment reinforcement.
2. See "BRUNSWICK OVERLOOK WALL PLAN I" for additional notes and details.
3. See "ORNAMENTAL BRIDGE RAIL DETAILS - SHEET 1 OF 2" & SHEET 2 OF 2" sheets for additional post and curb details.

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Daniel S. Myers

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ABUTMENT NO. 1
SOUTHEAST WINGWALL

SHEET NUMBER

69

OF 163

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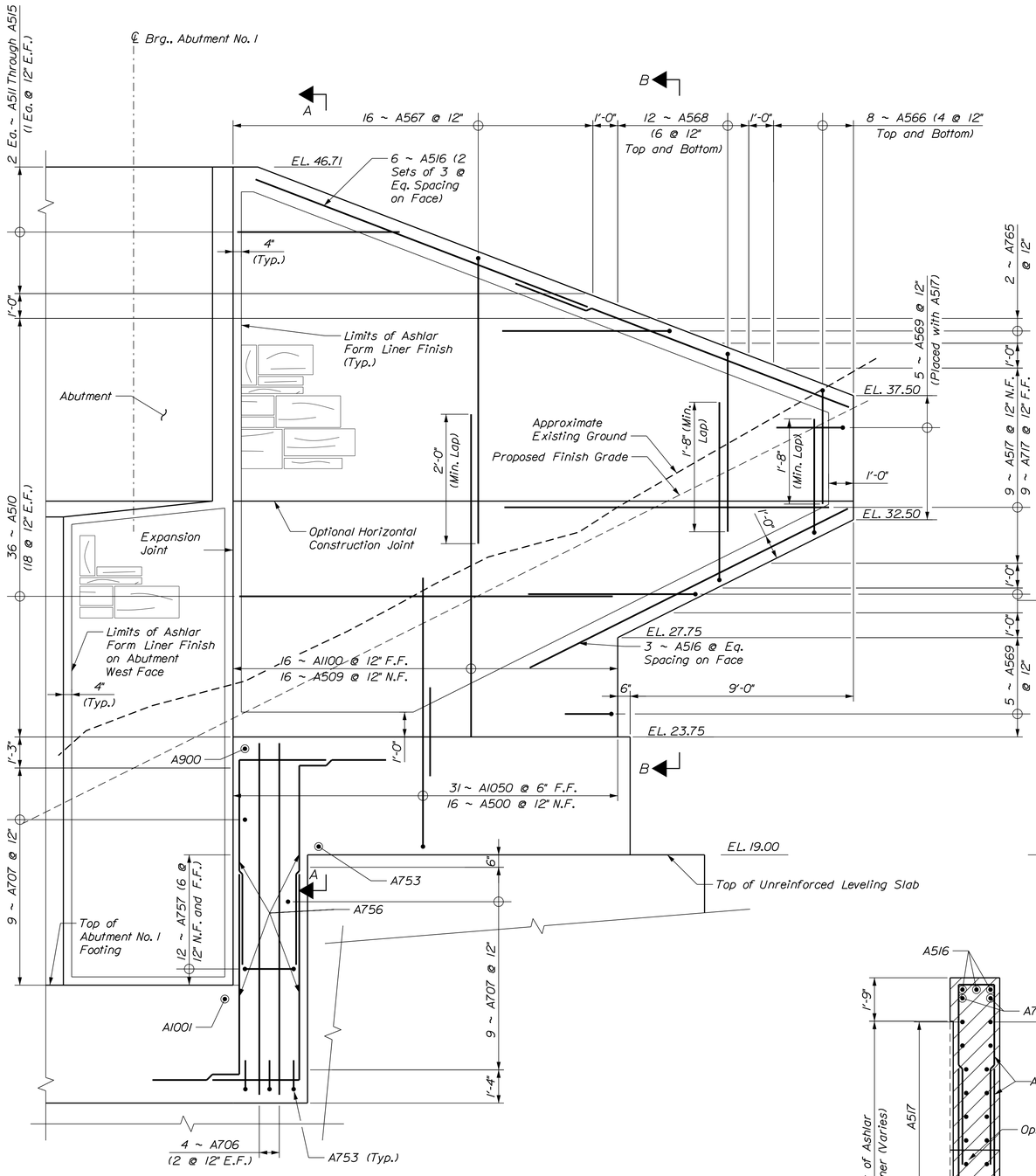
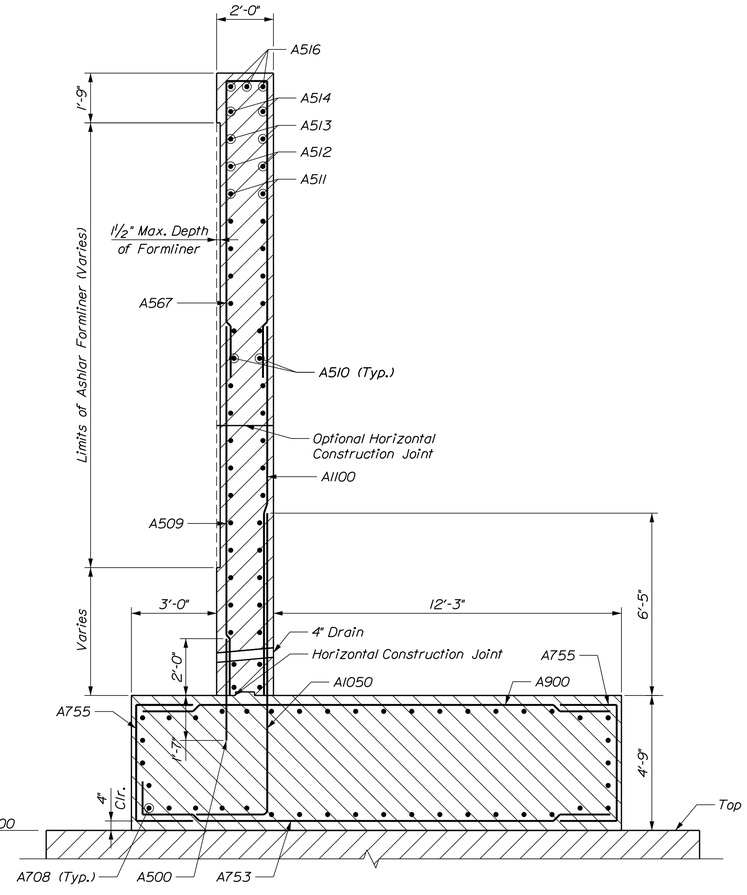
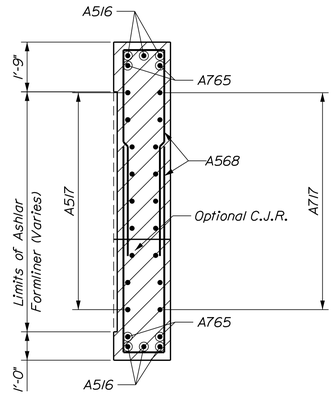


SOUTHWEST WINGWALL ELEVATION

(Typical footing reinforcement omitted for clarity, See Note 3)



SECTION A-A



SECTION B-B

NOTES:

1. For abutment notes see "Abument No. 1 Plan" sheet.
2. Adjust bar size to fit.
3. Only bars in footing step shown, for additional footing reinforcement layout details, see sheet "ABUTMENT NO. 1 FOOTING PLAN"

LEGEND:

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ABUTMENT NO. 1
SOUTHWEST WINGWALL

SHEET NUMBER 70 OF 163

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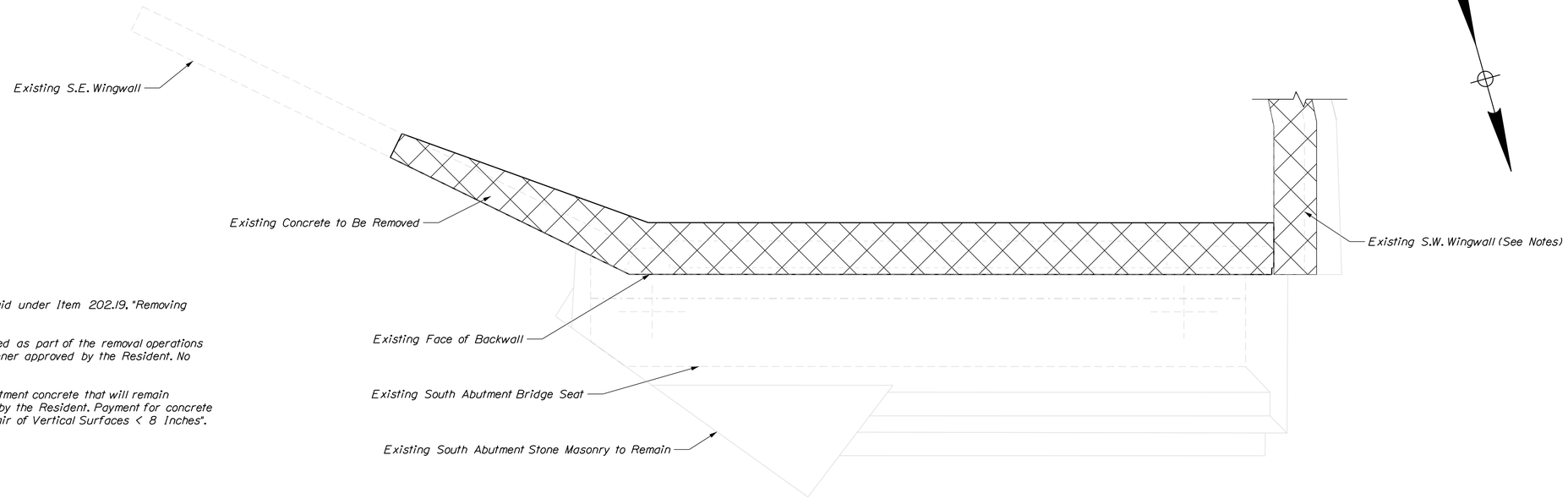
Filename: ...\070_Abut_1_SW_Wingwall.dgn Division: Username: Date:10/15/2022

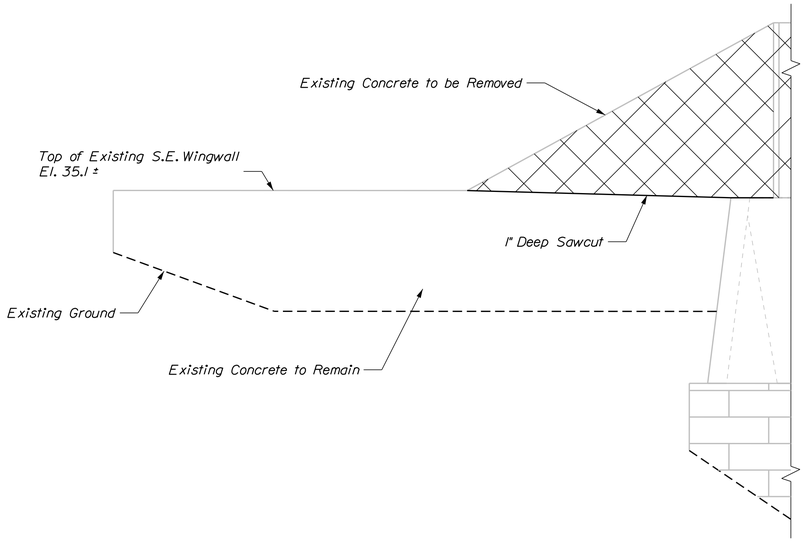
Date:10/15/2022
Username:
Division:
Filename: ...\071_Abut_1_Removal.dgn

ABUTMENT REMOVAL NOTES

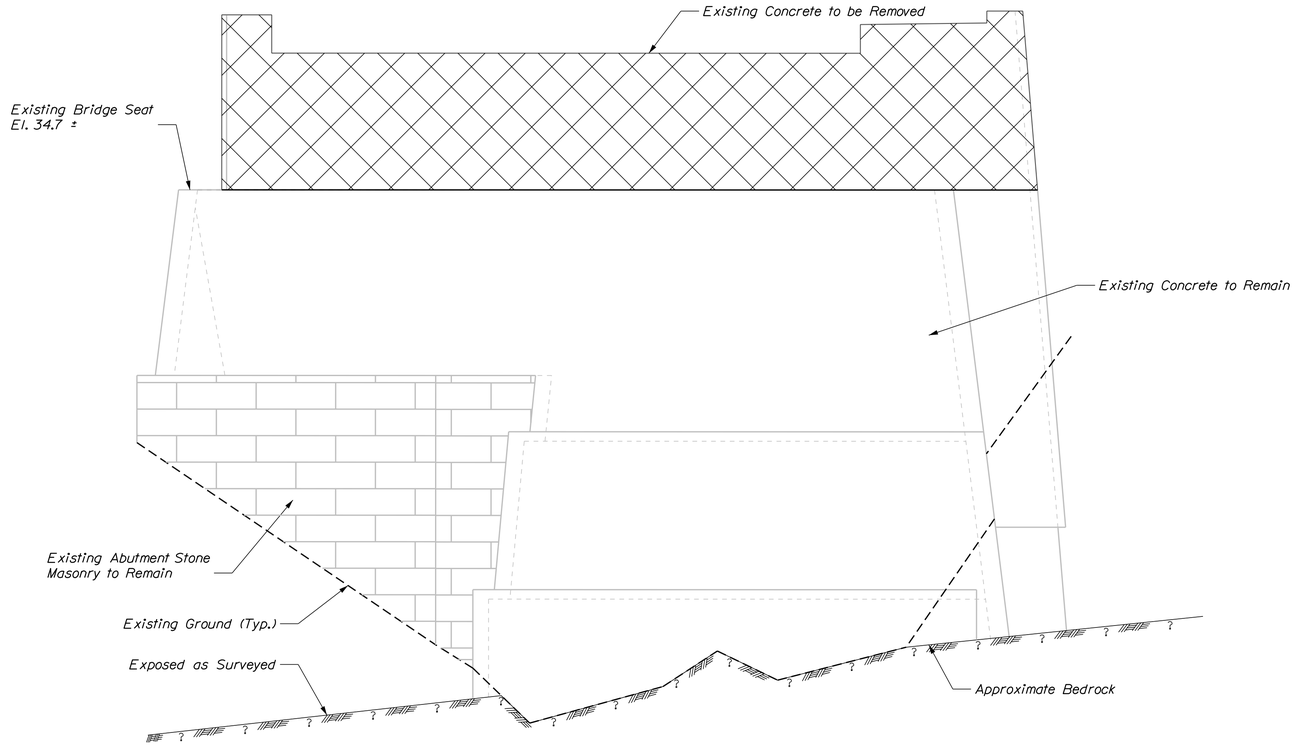
1. Existing abutment concrete removal will be paid under Item 202.19, "Removing Existing Bridge"
2. Existing concrete to remain which is damaged as part of the removal operations shall be repaired by the Contractor in a manner approved by the Resident. No additional payment will be made.
3. Contractor shall repair areas of existing abutment concrete that will remain exposed in the final condition as identified by the Resident. Payment for concrete repair will be made under Item 518.60, "Repair of Vertical Surfaces < 8 Inches".



EXISTING SOUTH ABUTMENT REMOVAL PLAN



EXISTING SOUTHEAST WINGWALL REMOVAL ELEVATION



EXISTING SOUTH ABUTMENT REMOVAL ELEVATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

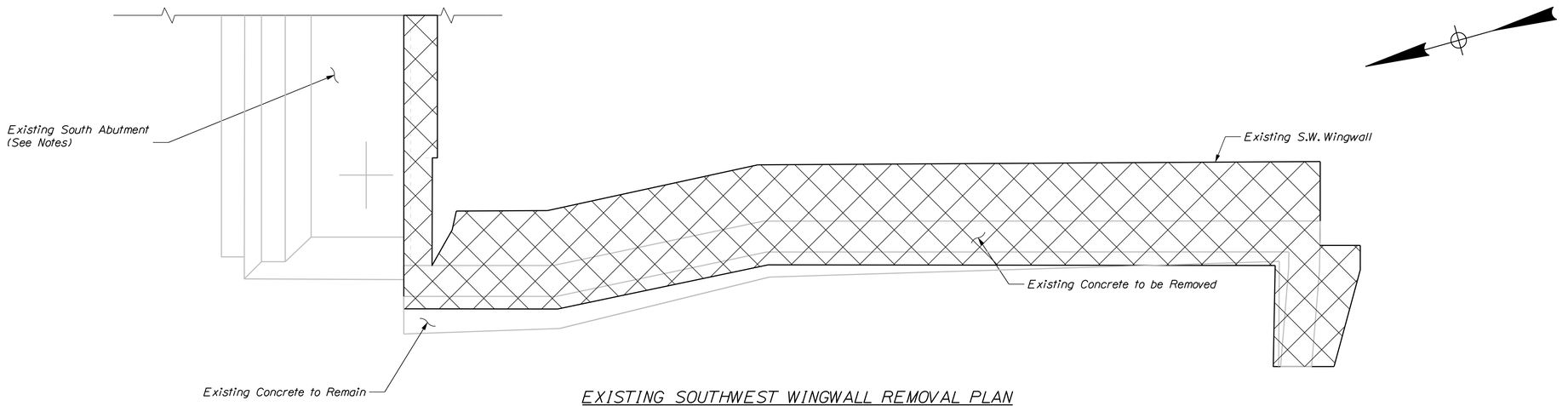
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Toothaker	S.Morgan 4/20
CHECKED-REVIEWED	D.Myers	B.Toothaker 7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

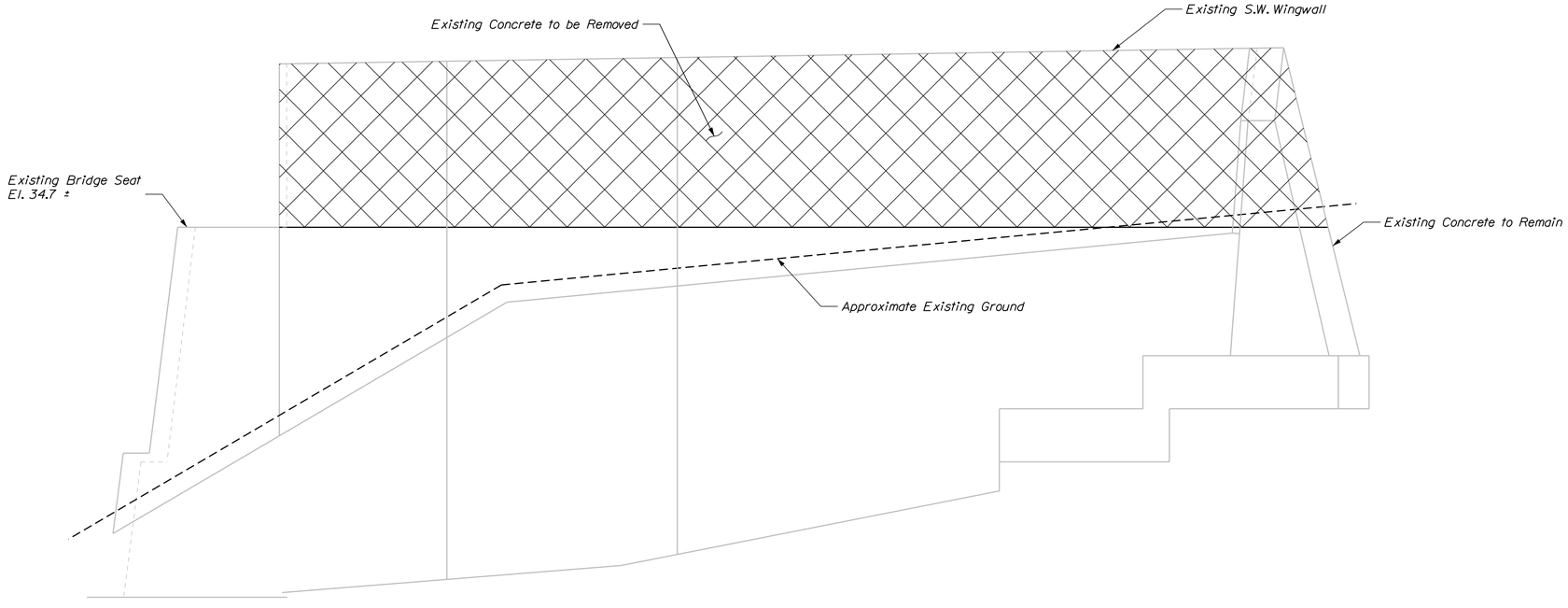
ABUTMENT NO.1
EXISTING ABUT. REMOVAL

SHEET NUMBER
71
OF 163

TYLin



EXISTING SOUTHWEST WINGWALL REMOVAL PLAN



EXISTING SOUTHWEST WINGWALL REMOVAL ELEVATION

Notes:

For additional notes and details, see "Abutment No. 1 Existing Abut Removal" sheet.

Filename: ...\072_Abut_1_Removal_SW_Wing.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

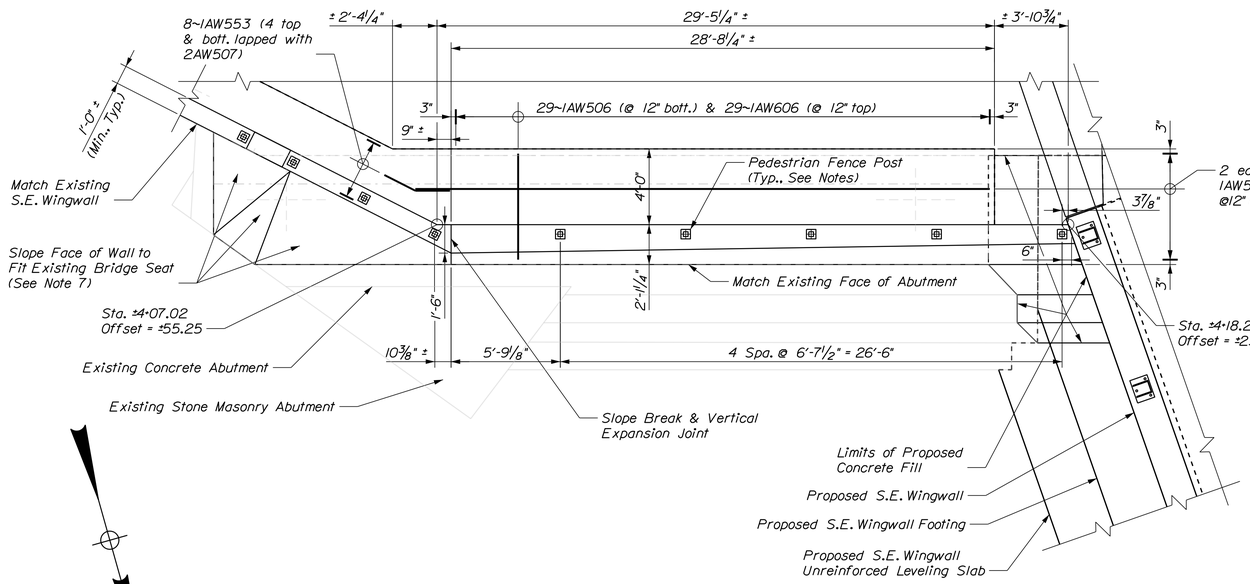
	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Toothaker	4/20
CHECKED-REVIEWED	D.Myers	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

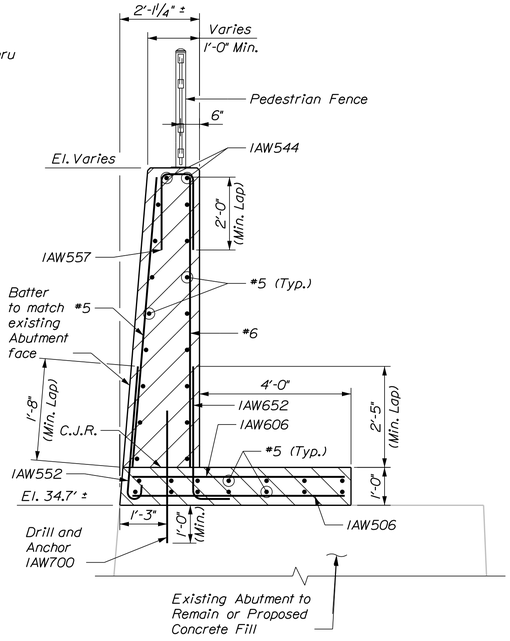
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 1
EXIST. SW WING REMOVAL

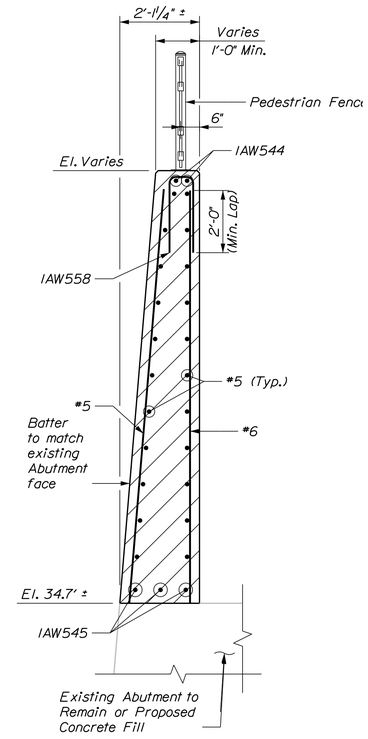
SHEET NUMBER
72
OF 163

TYLin



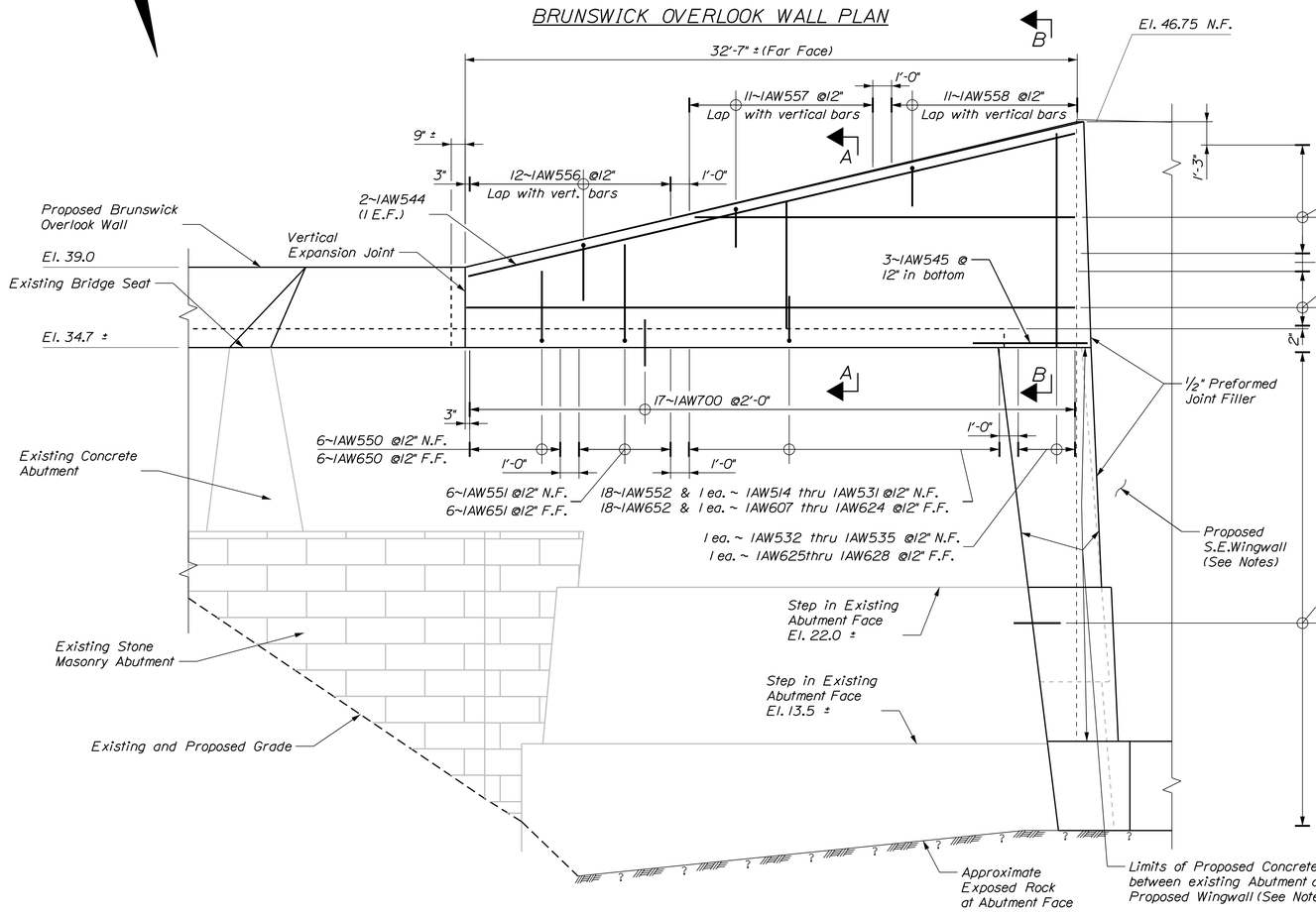


SECTION A-A



SECTION B-B

BRUNSWICK OVERLOOK WALL PLAN



BRUNSWICK OVERLOOK WALL ELEVATION

OVERLOOK WALL NOTES

1. Concrete fill shall be placed as shown on the plans in areas between existing concrete abutments to remain and proposed concrete abutments. The exposed face of the concrete fill shall match the batter and direction of the existing abutment to remain, up to the elevation of the adjacent bridge seat, as shown on the plans. Concrete surfaces shall be cleaned with high pressure water and air in a manner approved by the Resident prior to placement of any concrete fill. Payment for surface preparation shall not be made directly but shall be considered incidental to Item 502.565, "Concrete Fill".

2. The method of placing dowels in the existing abutments shall be approved by the Resident. The anchoring material shall be one of the products listed on the MaineDOT Qualified Products List of Grout Materials. Costs of anchoring shall be incidental to related contract items.

3. Existing concrete surfaces and proposed concrete fill top surfaces that are within the footing limits for the proposed overlook walls shall be cleaned with high pressure water and air in a manner approved by the Resident prior to the placement of any wall concrete. Payment for surface preparation will not be made directly but shall be considered incidental to related 502 items.

4. The overlook wall front face geometry provided on the plans is approximate. Final overlook wall layout shall match the batter and direction of the existing concrete abutment and proposed concrete fill on which the overlook wall is cast.

5. The contractor shall be responsible for taking field measurements and making adjustments to the reinforcing steel and pedestrian railing. Costs shall be incidental to related contract items.

6. In the sloped-face portions of the overlook wall, the back face of the wall will be held plumb, with the top of wall thickness varying to allow the front surface to match the batter of the existing abutment and concrete fill below.

7. The top of overlook wall over the existing S.E. bearing pedestal shall match the orientation of the adjacent S.E. wingwall and be a constant width. The exposed surface of the wall in this location shall slope to cover the limits of the existing bridge seat, as shown on the plans.

8. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.

9. Concrete in Brunswick & Topsham Overlook Walls and footings will be paid under Item 502.219, "Structural Concrete, Abutments and Retaining Walls".

10. Unreinforced Leveling Slabs for Brunswick & Topsham Overlook Walls will be paid under Item 502.565, "Concrete Fill" and shall be Class "A" concrete.

11. All Pedestrian Fence Posts shall be fabricated to be installed plumb. For Pedestrian Fence notes and details, see sheet, "Site Design/Amenities Details".

STATE OF MAINE
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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	7/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	2/21
DESIGN2-DETAILED2			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRUNSWICK OVERLOOK WALL PLAN 1

SHEET NUMBER

73

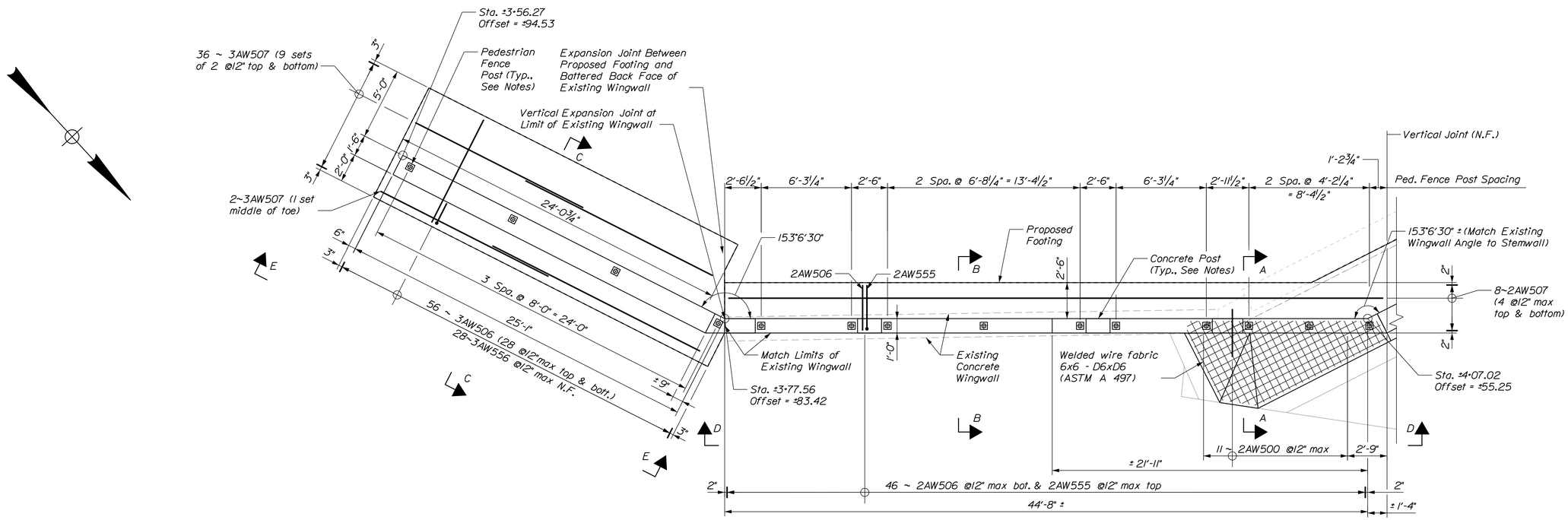
OF 163

TYLin

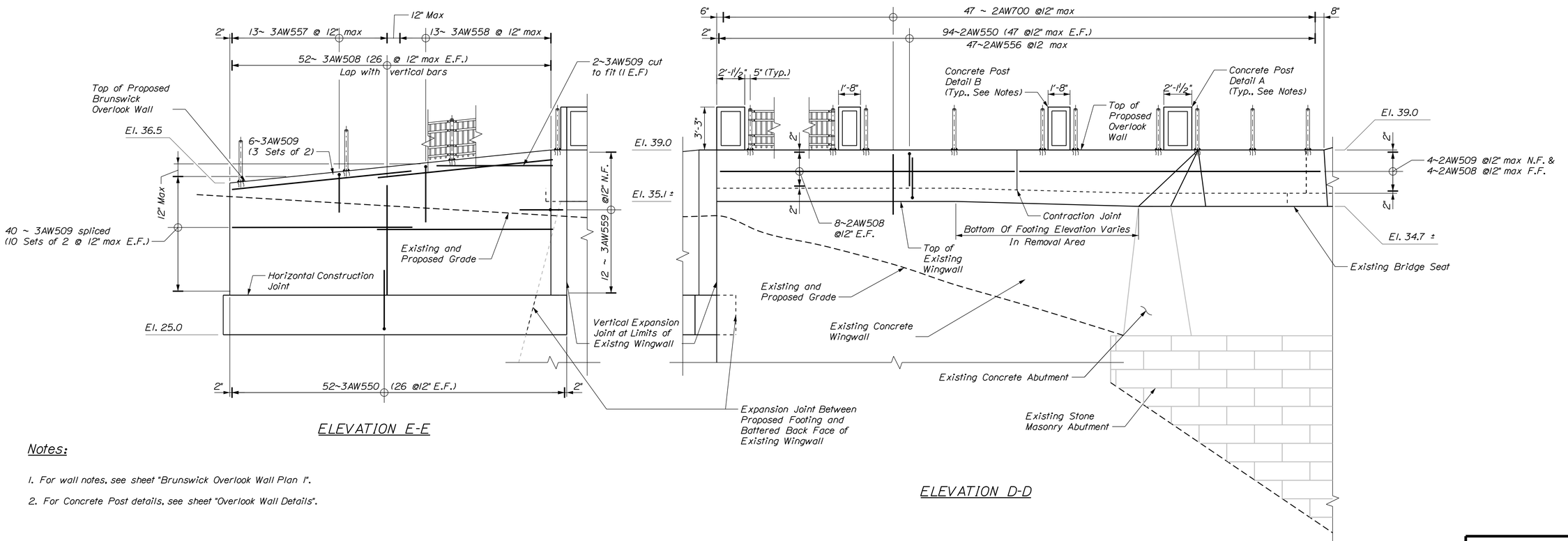
Date:10/15/2022

Username:

Filename: ...\073_Brunswick_Overlook_Wall_1.dgn Division:



BRUNSWICK OVERLOOK WALL PLAN



ELEVATION E-E

ELEVATION D-D

Notes:

1. For wall notes, see sheet "Brunswick Overlook Wall Plan 1".
2. For Concrete Post details, see sheet "Overlook Wall Details".

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Toothaker	7/20
CHECKED-REVIEWED	D.Myers	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	S.Morgan	
REVISIONS 2	B.Toothaker	
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRUNSWICK OVERLOOK WALL PLAN 2

SHEET NUMBER

74

OF 163

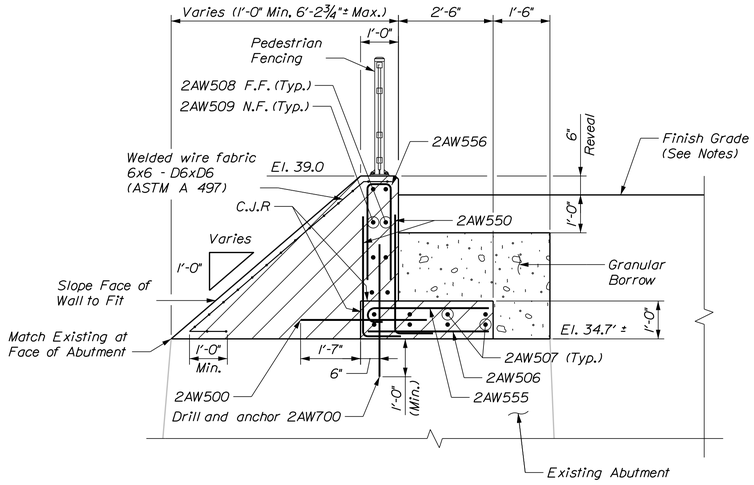
TYLin

Date:10/15/2022

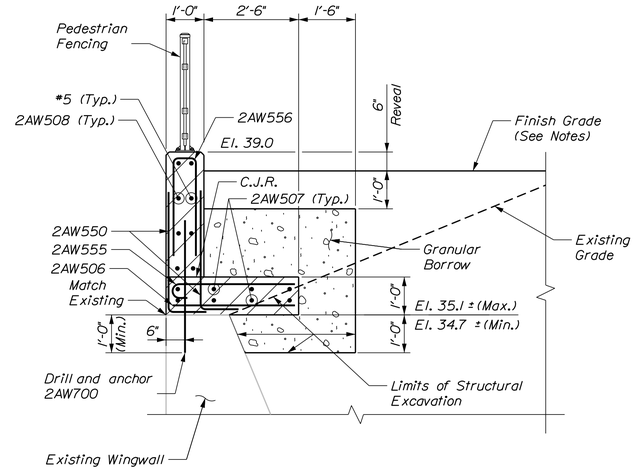
Username:

Division:

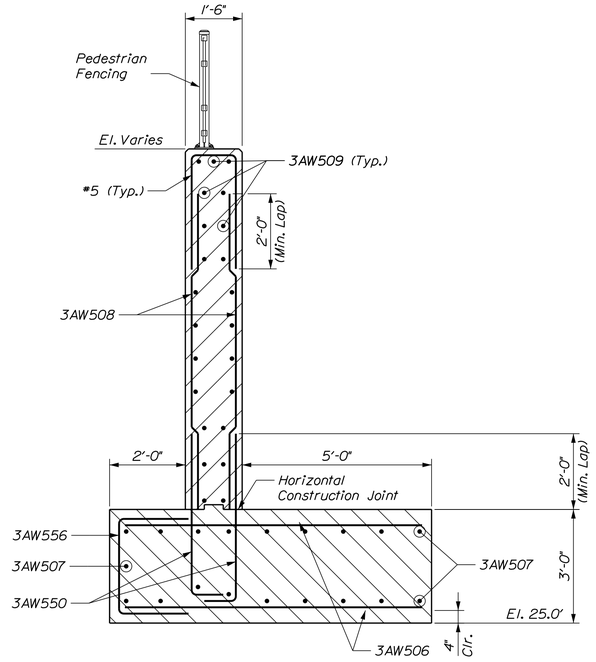
Filename: ...\074_Brunswick_Overlook_Wall_2.dgn



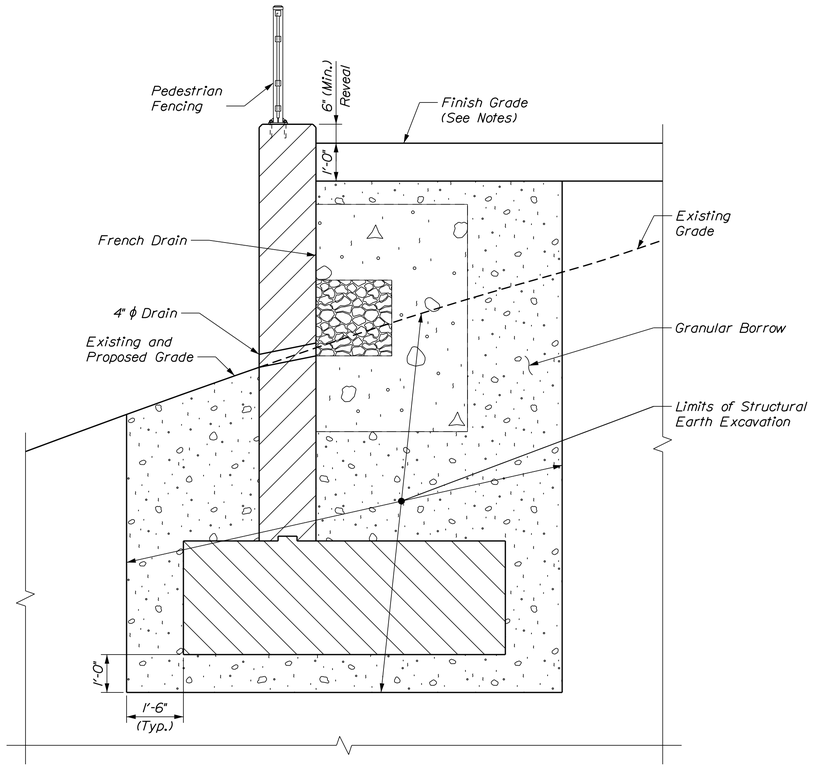
SECTION A-A



SECTION B-B



SECTION C-C



SECTION C-C (EARTHWORK)

(Full Height earthwork shown)

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
W.P. = Working Point

Notes:

1. For Wall Notes, see "Brunswick Overlook Wall I" sheet.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

			DATE
PROJ. MANAGER	Scott Robins	BY	
DESIGN-DETAILED	B.Toothaker	S.Morgan	7/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRUNSWICK OVERLOOK WALL SECTIONS

SHEET NUMBER

75

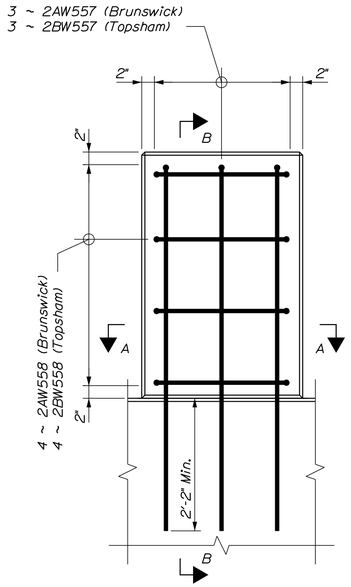
OF 163

TYLin

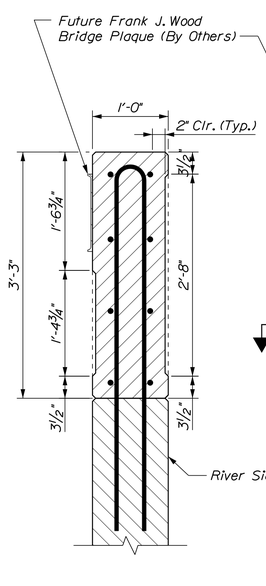
Date:10/15/2022

Username:

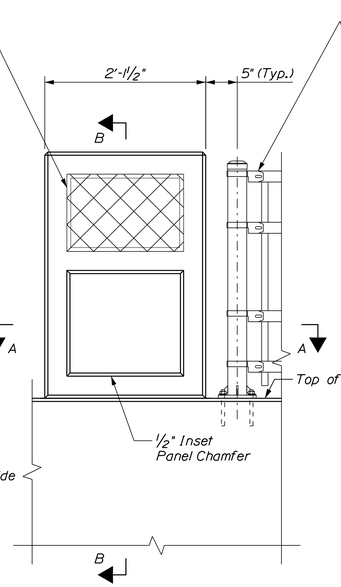
Filename: ...\075_Brunswick_Overlook_Wall_Sections.dgn



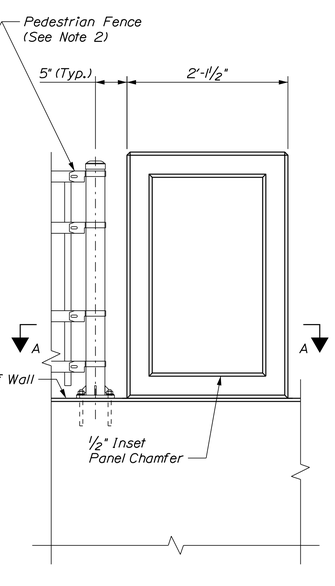
DETAIL A
(Rebar Detail, Wall Reinforcement Not Shown)



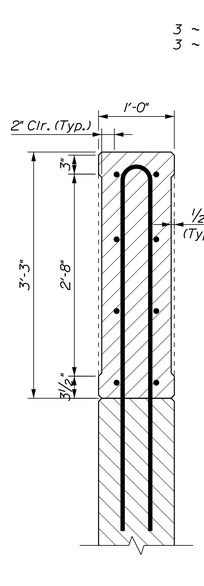
SECTION B-B
(Rebar Detail, Wall Reinforcement Not Shown)
(Brunswick Shown, Topsham Similar)



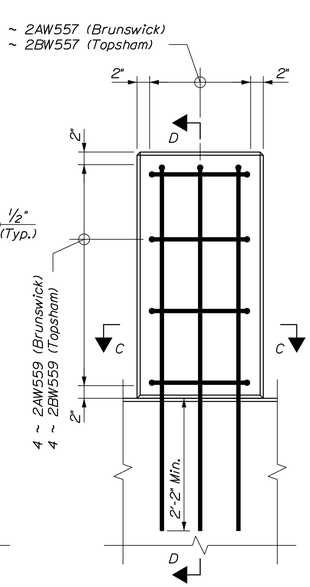
DETAIL A
(Park Side Elevation)



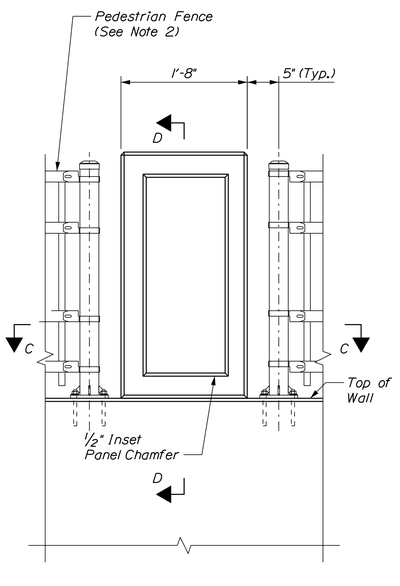
DETAIL A
(River Side Elevation)



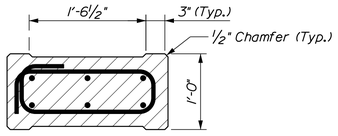
SECTION D-D
(Rebar Detail, Wall Reinforcement Not Shown)



DETAIL B
(Rebar Detail, Wall Reinforcement Not Shown)
(Brunswick Shown, Topsham Similar)



DETAIL B
(Park Side View, River Side View Inset Panel is the same)



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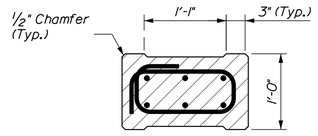


SECTION C-C

NOTES:

1. For overlook wall notes, see sheet "BRUNSWICK OVERLOOK WALL PLAN 1".
2. See sheet, "SITE DESIGN/AMENTITIES DETAILS".

Filename: ...\076_Overlook_Wall_Details.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE
12572 — P.E. NUMBER
9/28/2022 — DATE

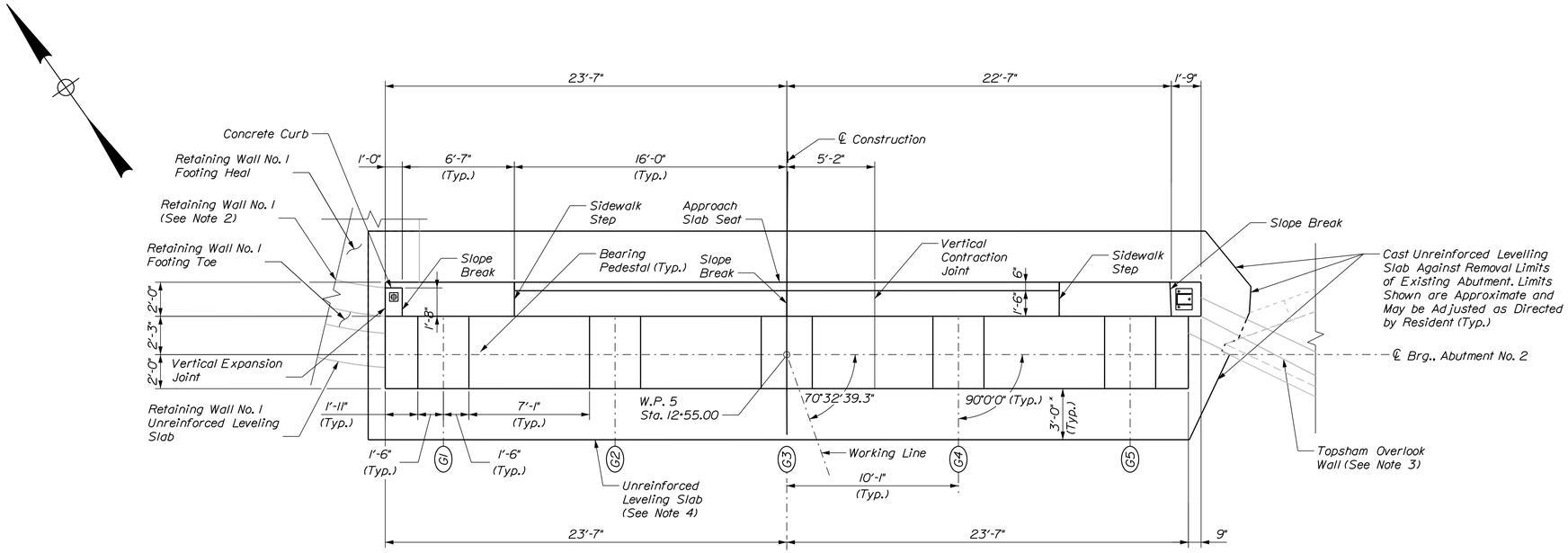
			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	J.Legere		6/21
CHECKED-REVIEWED	B.Toothaker		6/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

OVERLOOK WALL DETAILS

SHEET NUMBER
76
OF 163

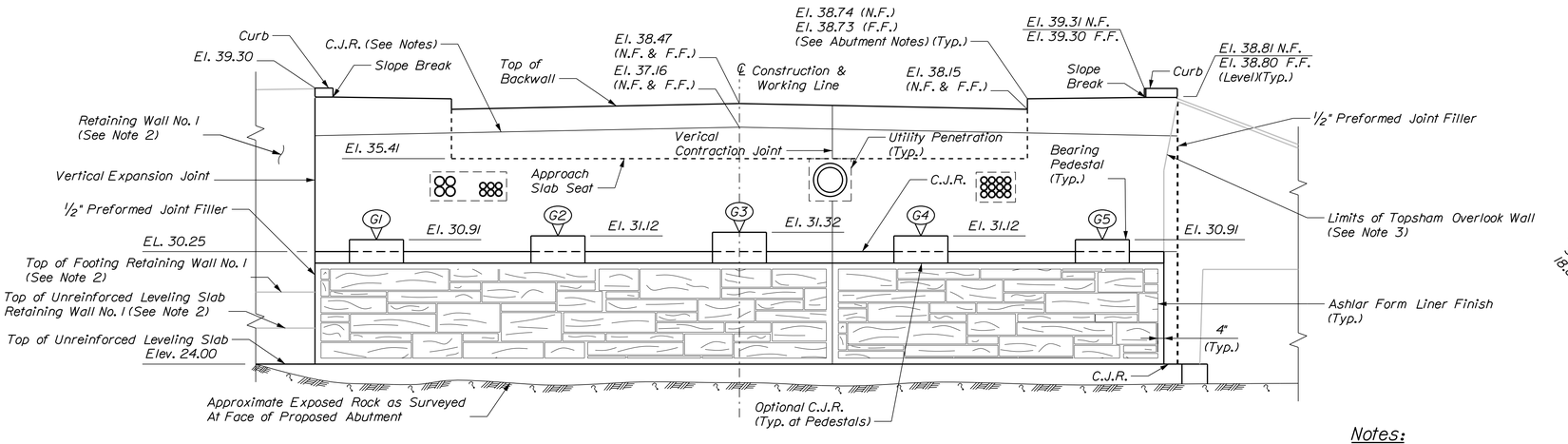
TYLin



ABUTMENT NO. 2 PLAN

Flow →

* See Note 5



ABUTMENT NO. 2 ELEVATION

Flow →

Notes:

1. For Abutment Notes, see "Abutment No. 1 Plan" sheet.
2. For Retaining Wall No. 1 notes and details, see sheet "Retaining Wall No. 1".
3. For Topsham Overlook Wall notes and details, see sheet "Topsham Overlook Wall".
4. Coordinate placement of leveling slab with removal limits for Existing Abutment No. 2 and with reconstruction limits for Topsham Overlook Wall. Unreinforced leveling slab will be cast against existing abutment after removal of the interfering wingwall. A bond breaker shall be applied between existing and fresh concrete.
5. Leveling Slab dimensions denoted with * may be adjusted with approval of the Resident. Leveling Slab lateral offset from the edge of footing shall be a constant offset on each face and shall at a minimum be equal to the Leveling slab height in that region of the Leveling Slab divided by 2. Leveling slab concrete above the normal water line that will be exposed in the final condition shall have a smooth, regular surface.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	Scott Rollins	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	R.Kravchuk	S.Morgan	4/20
CHECKED-REVIEWED	B.Toothaker	B.Toothaker	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 2
PLAN & ELEVATION

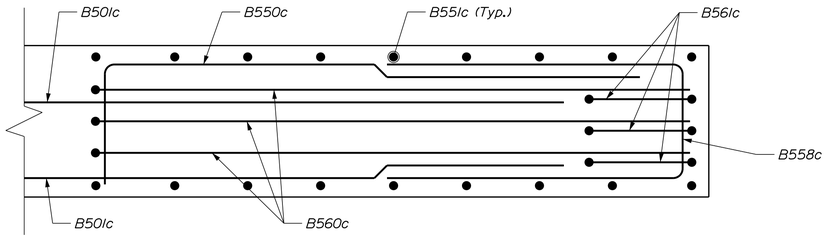
SHEET NUMBER

77

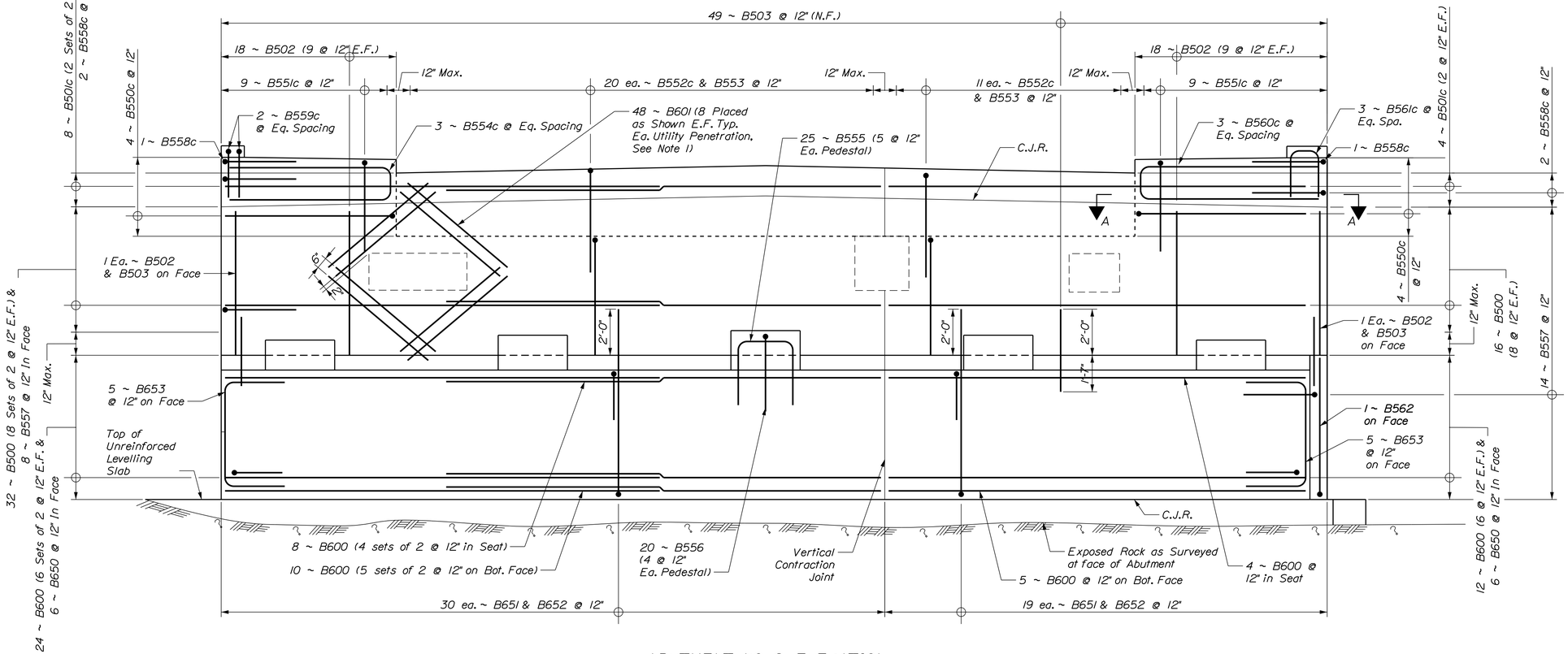
OF 163

TYLin

Date:10/15/2022 Username: Division: Filename: ...\077_Abut_2_Plan_Elev.dgn



SECTION A-A



ABUTMENT NO. 2 ELEVATION

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

NOTES:

1. Utility penetration bars will be shifted to avoid the approach slab seat and the vertical contraction joint. Up to 4 vertical reinforcing bars and 2 horizontal reinforcing bars may be cut at as necessary on each face at each penetration.

Filename: ...\078_Abut_2_Reinforcement.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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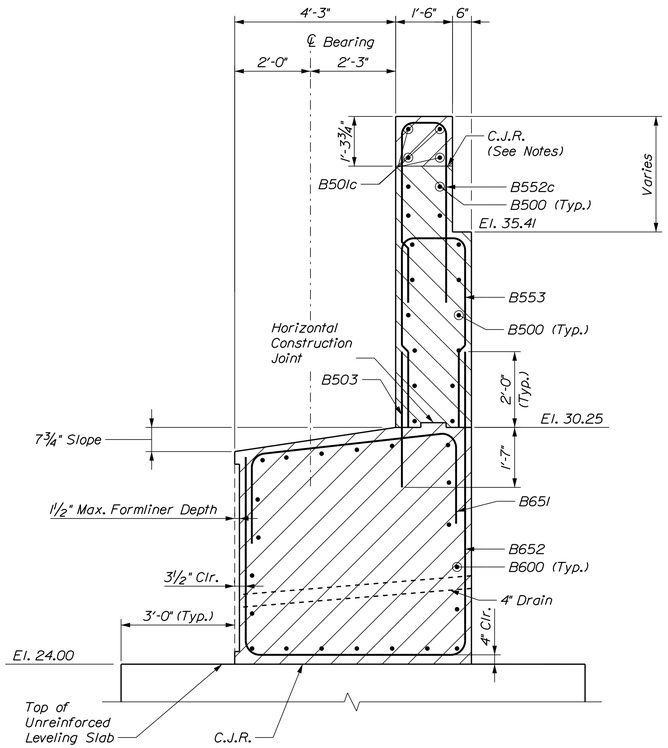
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

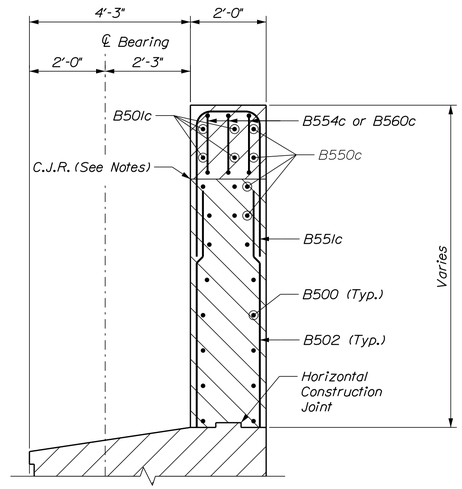
ABUTMENT NO. 2
REINFORCEMENT

SHEET NUMBER
78
OF 163

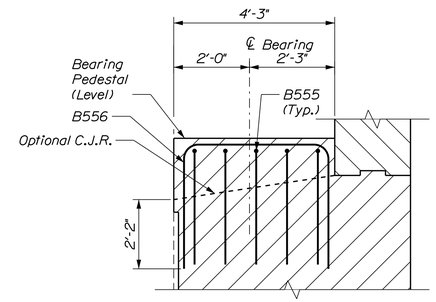
TYLin



TYPICAL ABUTMENT SECTION



BACKWALL SIDEWALK DETAIL



PEDESTAL DETAIL

Notes:

1. For Abutment Notes, see "Abutment No. 1 Plan" sheet.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
W.P. = Working Point

Filename: ...\079_Abut_2_Sections.dgn Username: Division: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

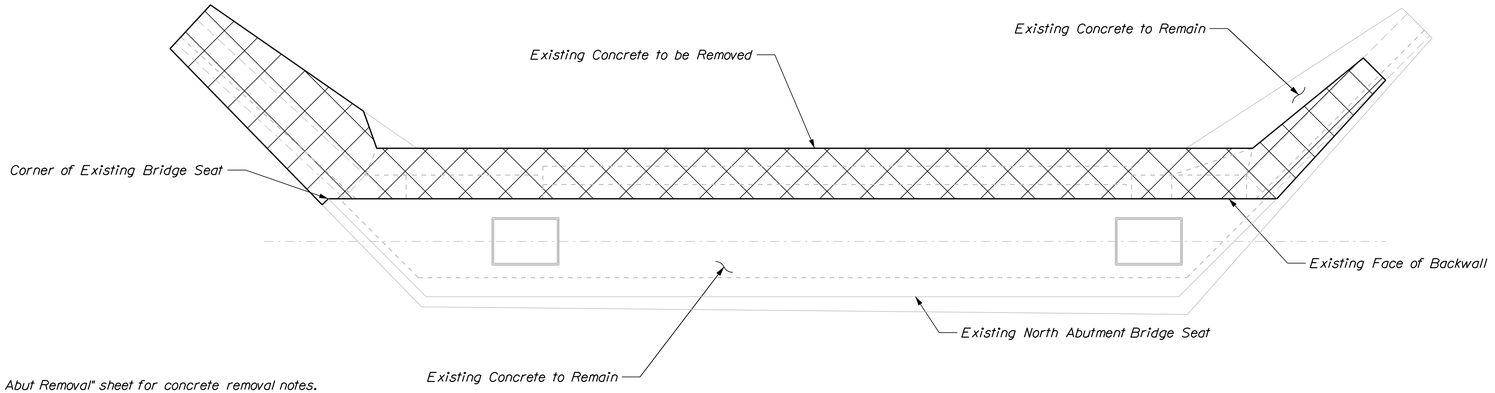
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	S.Morgan	7/20
CHECKED-REVIEWED	R.Kravchuk	7/20
DESIGN2-DETAILED2	B.Toothaker	7/20
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 2
SECTIONS

SHEET NUMBER
79
OF 163

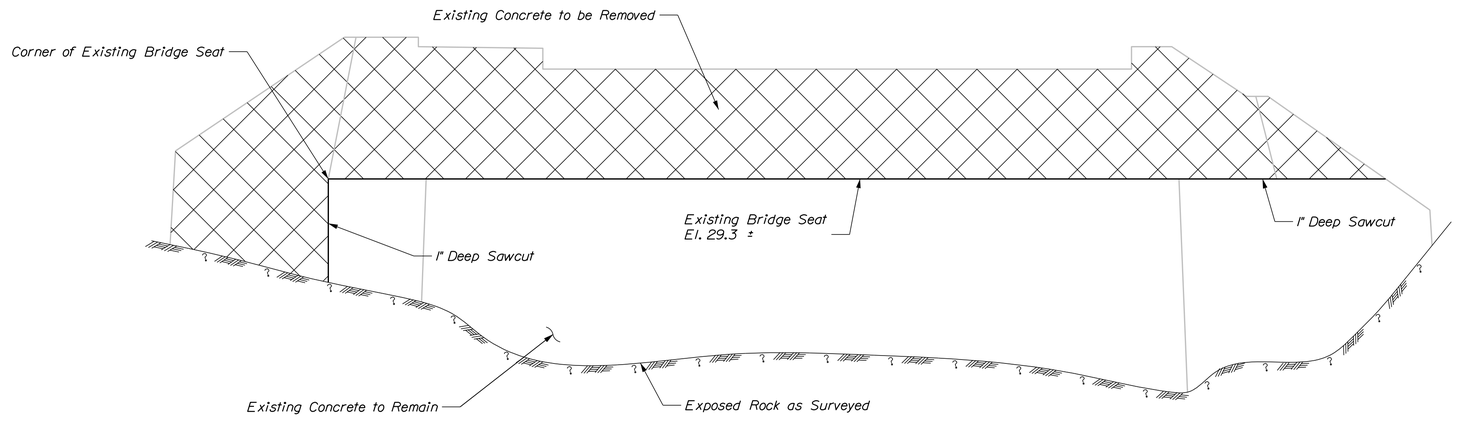
TYLin



EXISTING NORTH ABUTMENT REMOVAL PLAN

Notes:

1. See "Abutment No. 1 Existing Abut Removal" sheet for concrete removal notes.
2. Removal limits for the N.W. Wingwall shall be coordinated to allow construction of proposed Abutment No. 2. The removal limits for this wingwall can be adjusted by the Resident as required for maintenance of traffic.



EXISTING NORTH ABUTMENT REMOVAL ELEVATION

STATE OF MAINE
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BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

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9/28/2022

DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	4/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ABUTMENT NO. 2
EXISTING ABUT. REMOVAL

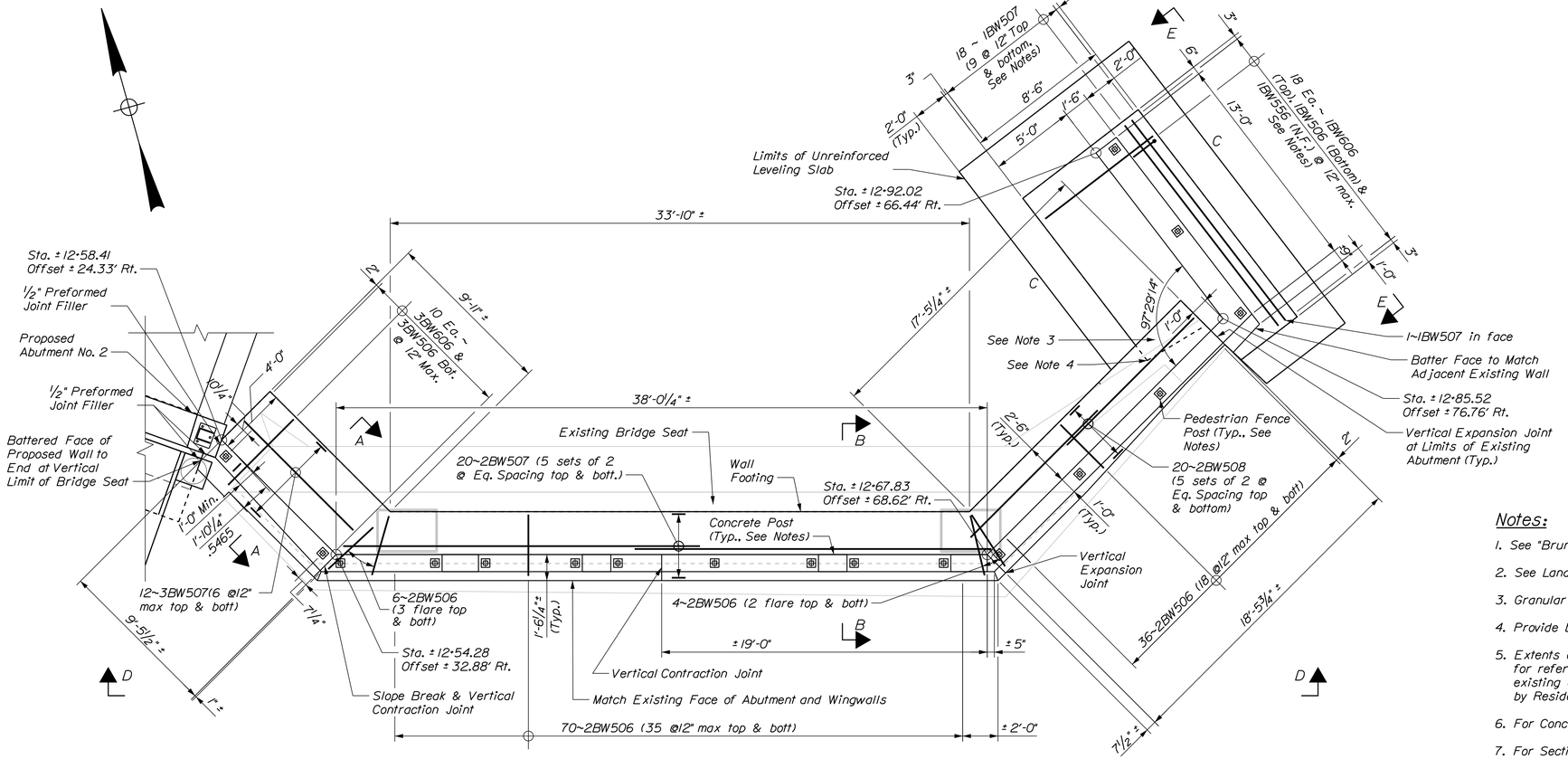
SHEET NUMBER

80

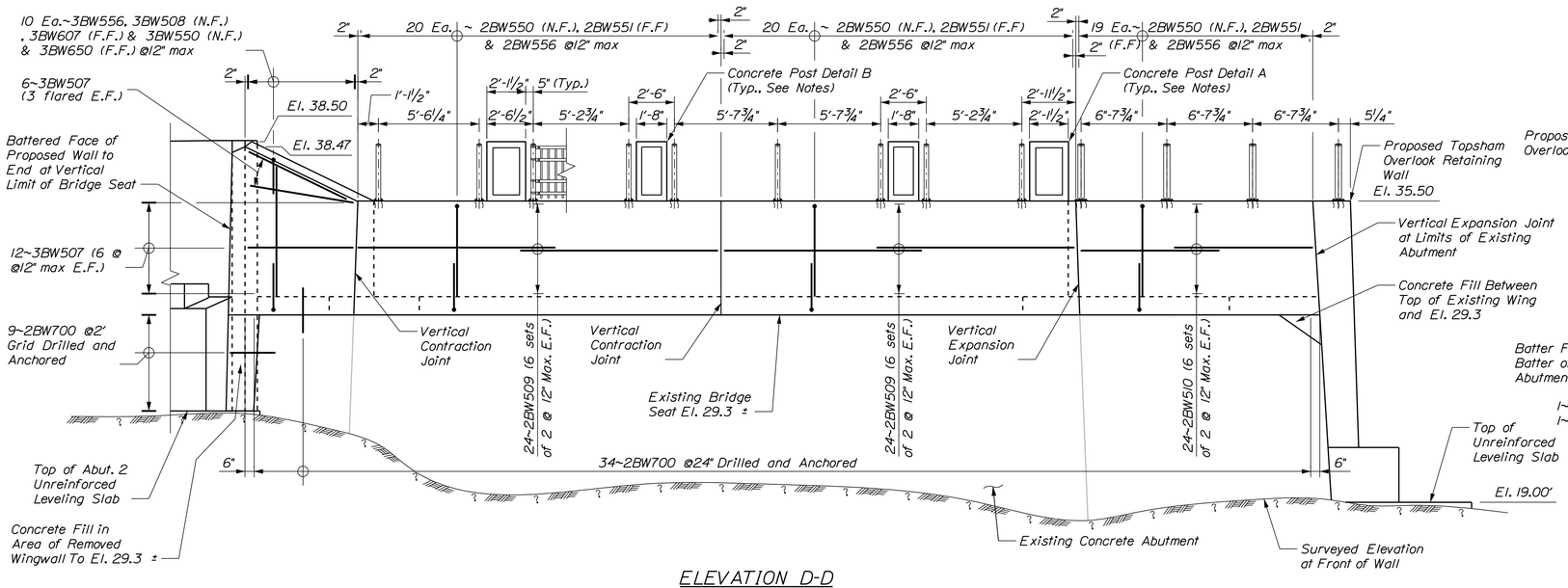
OF 163

TYLin

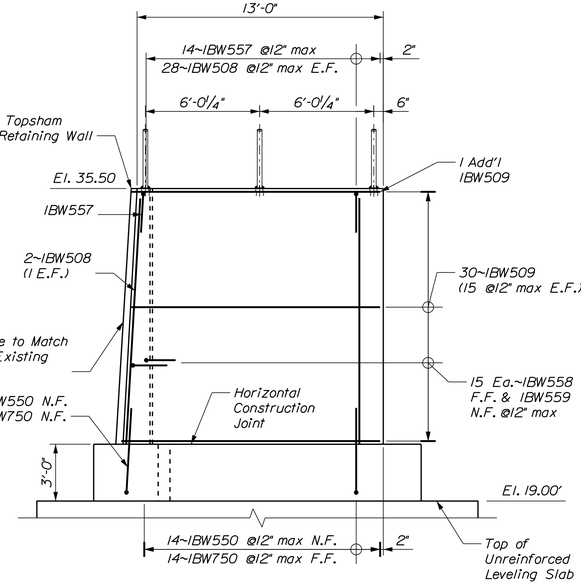
Filename: ...\080_Abut_2_Removal.dgn Division: Username: Date:10/15/2022



TOPSHAM OVERLOOK WALL PLAN



ELEVATION D-D



ELEVATION E-E

Notes:

1. See "Brunswick Overlook Wall" sheet for Overlook Wall Notes.
2. See Landscaping Sheets for Grading and Handrail Details.
3. Granular borrow placed between wall footings in overlap area.
4. Provide bond breaker between existing Abutment and proposed footing.
5. Extents of the existing wingwall shown are approximate and provided for reference only. Footing bars which would conflict with the existing concrete to remain may be cut to fit or shifted, as directed by Resident.
6. For Concrete Post details, see sheet "Overlook Wall Details".
7. For Sections A-A, B-B, and C-C see sheet "Topsham Overlook Wall Sections"

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PROJ. MANAGER	Scott Robins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	7/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

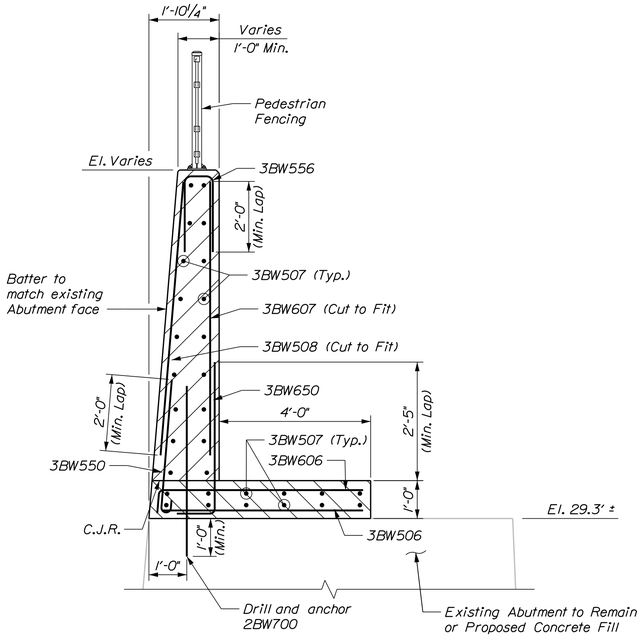
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

TOPSHAM OVERLOOK WALL PLAN

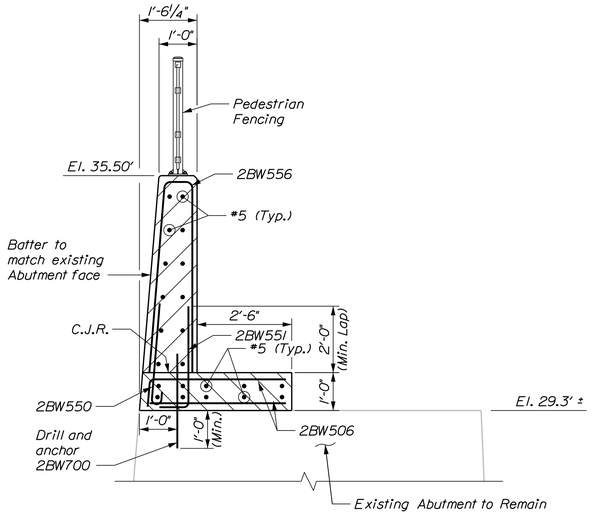
SHEET NUMBER
81
OF 163

TYLin

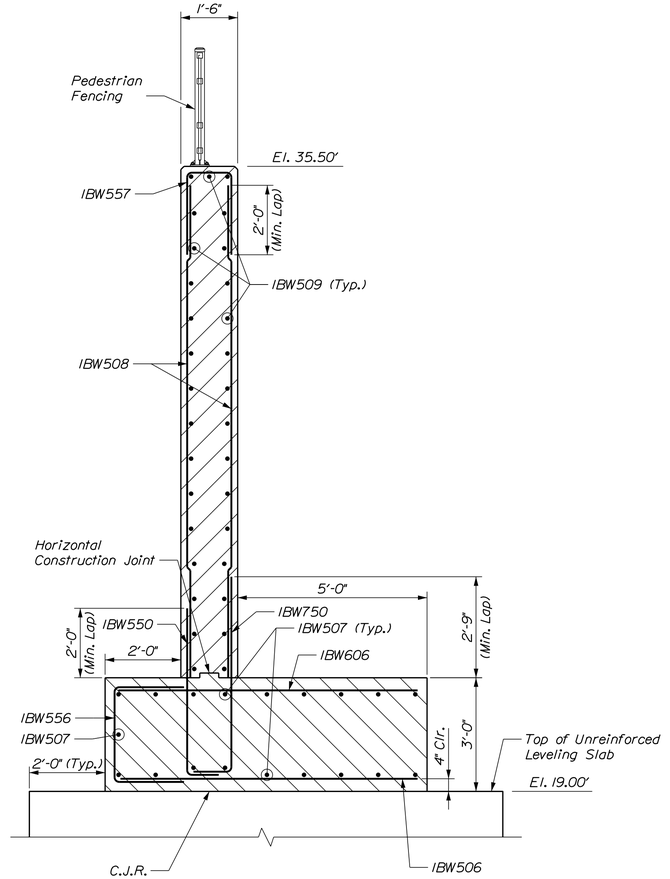
Date:10/15/2022
Username:
Division:
Filename: ...\081_Topsham_Overlook_Wall_1.dgn



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

1. For Topsham Overlook Wall Notes and Details, see "Brunswick Overlook Wall Plan 1" sheet.
2. Earthworks limits not shown for clarity. See sheet "Brunswick Overlook Wall Sections" for similar earthwork limits and details.

LEGEND:

C.J.R. = Construction Joint. Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

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No. 12572
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

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P.E. NUMBER

9/28/2022
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CHECKED-REVIEWED	D.Myers	2/21
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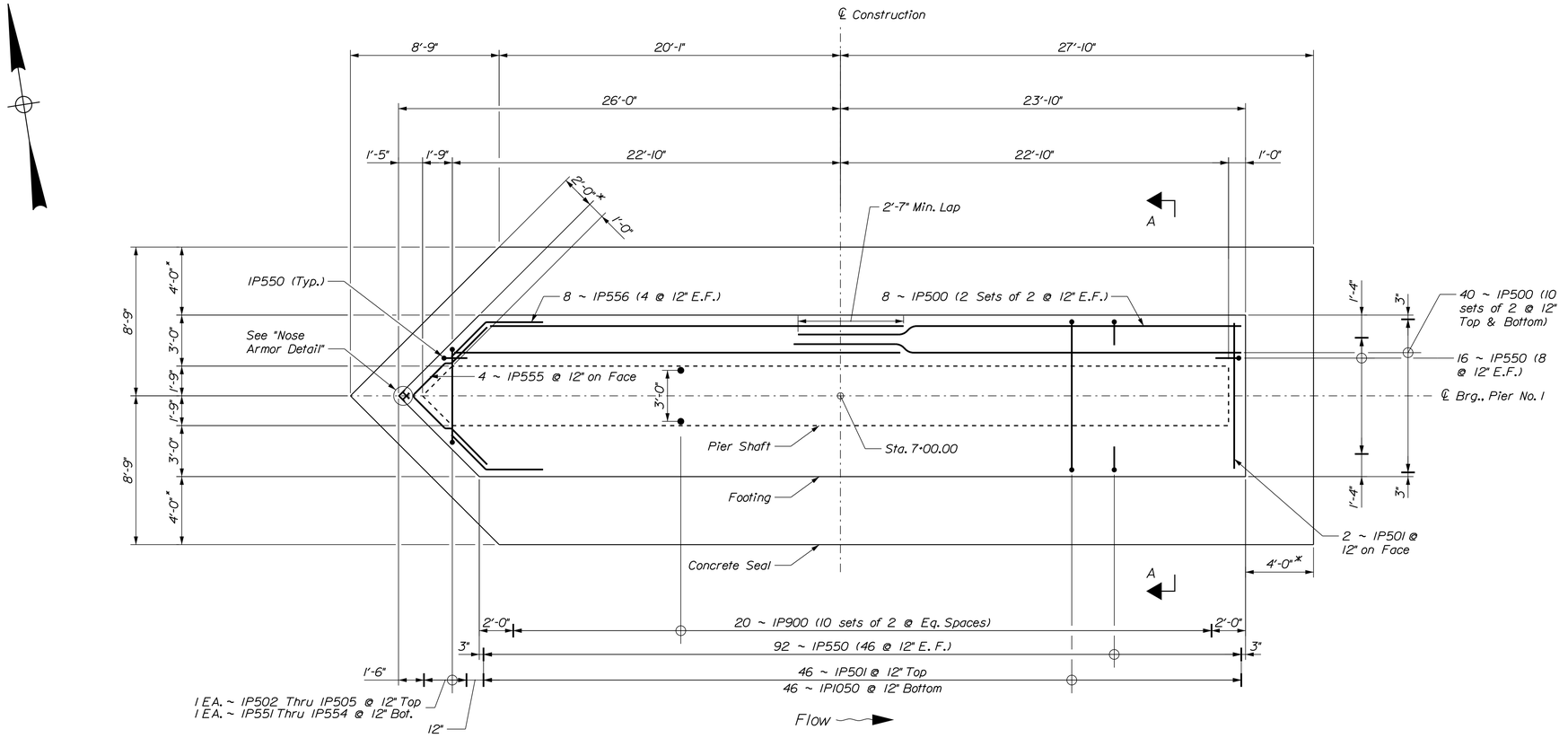
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

TOPSHAM OVERLOOK WALL SECTIONS

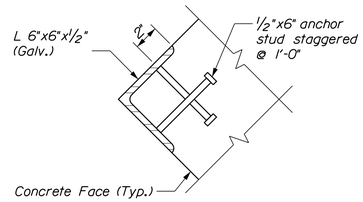
SHEET NUMBER
82
OF 163

Filename: ...\082_Topsham_Overlook_Wall_Sections.dgn Division: Username: Date:10/15/2022



PIER NO. 1 FOOTING PLAN

* See "Seal Cofferdam Notes" Note 11 for seal dimension adjustments.



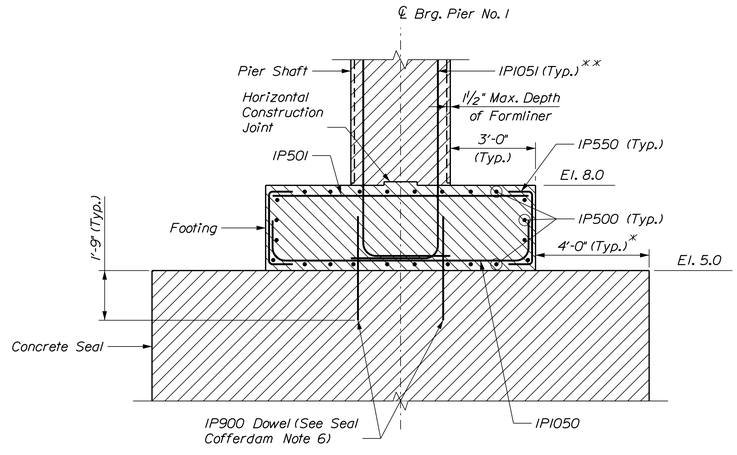
NOSE ARMOR DETAIL

SEAL COFFERDAM NOTES:

1. When sheet piling is used for seal cofferdams, appropriate rolled corners shall be used, and the inside face of the sheet piling shall be at, or outside of, the seal concrete dimensions shown.
2. The seal concrete placement dimensions shown represent the minimum seal size necessary to meet design requirements and are not based on the use of any particular sheet pile section.
3. The horizontal pay limit for seal concrete will be to the dimensions shown on the plans. No additional payment will be made for concrete placed outside of these limits.
4. The depth of the seal at Pier 1 is set for a water elevation of 16.0 and the cofferdam shall be vented at this elevation. The depth of the seal at Pier 2 is set for a water elevation of 16.5 and the cofferdam shall be vented at this elevation. The depth of the seal at Pier 3 is set for a water elevation of 23.0 and the cofferdam shall be vented at this elevation.
5. Concrete seals at Piers 1, 2 and 3 shall be paid under Item 502.24, Structural Concrete Piers (Placed Under Water) and seal concrete shall be Class "A".
6. The method of placing dowels in the seal concrete shall be approved by the Resident. The anchoring material shall be one of the products listed on the MaineDOT Qualified Products List of Grout Materials. Costs shall be incidental to related contract items.
7. Seal concrete shall be placed on bedrock cleaned of weathered rock, loose fractured bedrock, boulders and soil. Where the bedrock surface slope exceeds 4H:1V, the bedrock surface shall be benched in level steps or made completely level. Cofferdam excavation inspection and reporting shall be in accordance with Standard Specifications Section 511 - Cofferdams. At a minimum, the inspection shall include bedrock elevation measurements and sediment measurements, taken at a minimum of 20 evenly distributed plan locations, and a final inspection by the Contractor's divers.
8. Each seal shall be cored full depth in at least 4 locations to ensure that the seal is satisfactorily placed. The final core run shall sample the bedrock interface and a minimum of 1 foot of bedrock. Seal core locations will be approved by the Department. Seal concrete cores will be a minimum 3 inch outer diameter and be stored in boxes and labeled. In the event that voids or other defects are indicated, the Contractor shall correct the defects in a manner approved by the Department. For each core that reveals a defect, 2 additional cores shall be taken in approximately the same area in locations approved by the Department. All core holes shall be filled using non-shrink grout selected from the MaineDOT Qualified Products List of Grout Materials. The cost of coring and repairs will be considered incidental to related pay items.
9. If seal concrete is being placed on exposed bedrock that is not underwater, prior to placing concrete the bedrock subgrade shall be washed with high-pressure water and air.
10. Seal concrete above the normal water line shall have a smooth, regular surface. Cofferdams with an irregular inside surface, such as sand bags, shall have formwork for the seal concrete installed inside the cofferdam. Seal formwork will not be paid for separately, but will be considered incidental to the appropriate cofferdam Pay Item.
11. Seal dimensions denoted with * may be adjusted with approval of the Resident. Seal Lateral offset from edge of footing shall be a constant offset on each face and shall be at a minimum be equal to the seal height in that region of the seal divided by 2.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point



SECTION A-A

* See "Seal Cofferdam Notes" Note 11

** See Sheet "Pier No. 1 Reinforcement" for additional Details.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	D.Myers	7/21
CHECKED-REVIEWED	B.Toothaker	7/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

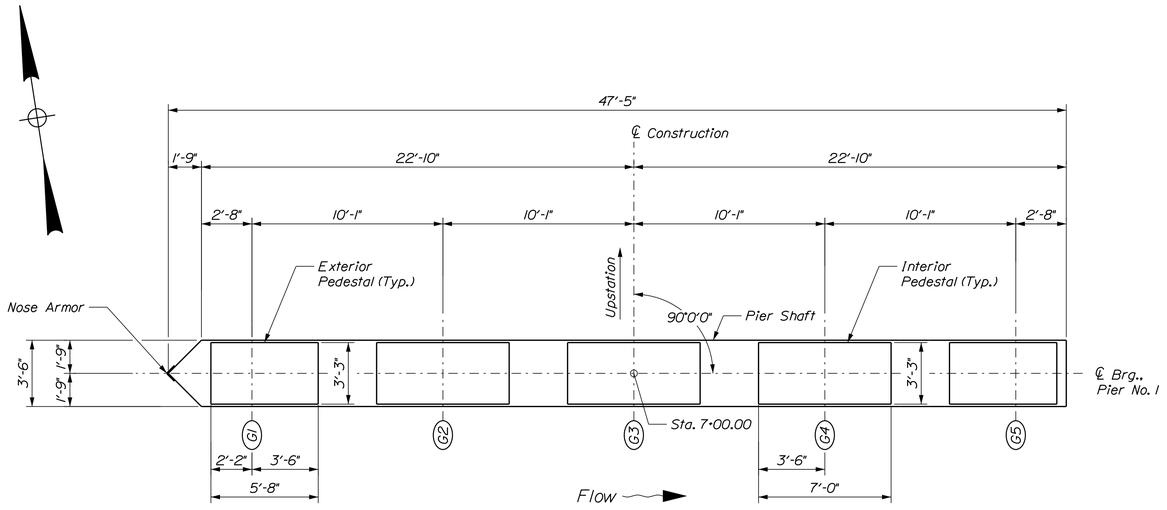
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 1
FOOTING PLAN

SHEET NUMBER
83
OF 163

TYLin

Filename: ...\083_Pier_1_Footing_Plan.dgn Division: Username: Date:10/15/2022



PIER NO. 1 SHAFT PLAN

PIER DESIGN CRITERIA

1. Critical AASHTO Load Combination:
   Pier 1 - Strength I Limit State
   Pier 2 - Strength V Limit State
   Pier 3 - Strength I Limit State

2. Buoyancy: Water level assumed at
   Pier 1 - EL. 19.0 (Q50)
   Pier 2 - EL. 22.5 (Q50)
   Pier 3 - EL. 27.0 (Q50)

3. Stream flow:
   Pier 1 - Velocity of 8 ft/sec Skewed at 60 degrees (Q50).
   Pier 2 - Velocity of 12 ft/sec Skewed at 30 degrees (Q50).
   Pier 3 - Velocity of 12 ft/sec Skewed at 5 degrees (Q50).

4. Wind: 115 mph, Strength III Limit State

5. Ice:
   Pier 1:
   Strength Limit State - Thickness 2 feet, width 4 feet, pressure 200 psi at EL 10.0 (Q1.1) and pressure 100 psi at EL 19.0 (Q50), applied at 90 degree skew to the pier.
   Extreme Limit State - Thickness 3 feet, width 4 feet, pressure 200 psi at EL 10.0 (Q1.1) and pressure 100 psi at EL 19.0 (Q50), applied at 90 degree skew to the pier.
   Pier 2:
   Strength Limit State - Thickness 2 feet, width 4 feet, pressure 200 psi at EL 19.0 (Q1.1) and pressure 100 psi at EL 22.5 (Q50), applied at 30 degree skew to the pier.
   Extreme Limit State - Thickness 3 feet, width 4 feet, pressure 200 psi at EL 19.0 (Q1.1) and pressure 100 psi at EL 22.5 (Q50), applied at 30 degree skew to the pier.
   Pier 3:
   Strength Limit State - Thickness 2 feet, width 4 feet, pressure 200 psi at EL 20.5 (Q1.1) and pressure 100 psi at EL 27.0 (Q50), 30% of nose force applied transverse to pier.
   Extreme Limit State - Thickness 3 feet, width 4 feet, pressure 200 psi at EL 20.5 (Q1.1) and pressure 100 psi at EL 27.0 (Q50), 30% of nose force applied transverse to pier.

PIER NOTES

1. The maximum factored applied footing pressure for:
   Pier No. 1 is 26.7 ksf at the Strength I Limit State.
   Pier No. 2 is 25.8 ksf at the Strength III Limit State.
   Pier No. 3 is 24.6 ksf at the Strength I Limit State.
   The maximum factored footing bearing pressure is taken at the bottom of spread footing and does not include the self-weight of the seal.

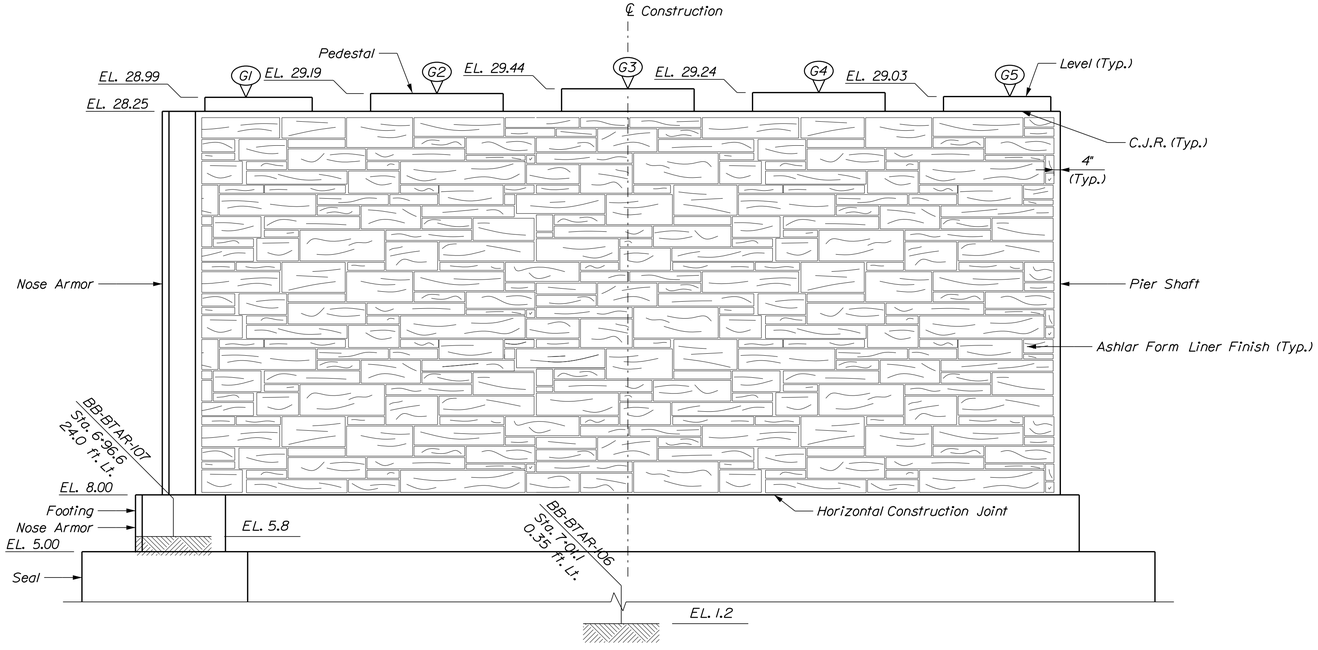
2. Reinforcing steel shall have a minimum concrete cover of 3 inches unless otherwise noted. Minimum concrete cover shall be measured from the deepest point of any form liner used.

3. At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092, "Structural Rock Excavation - Major Structures."

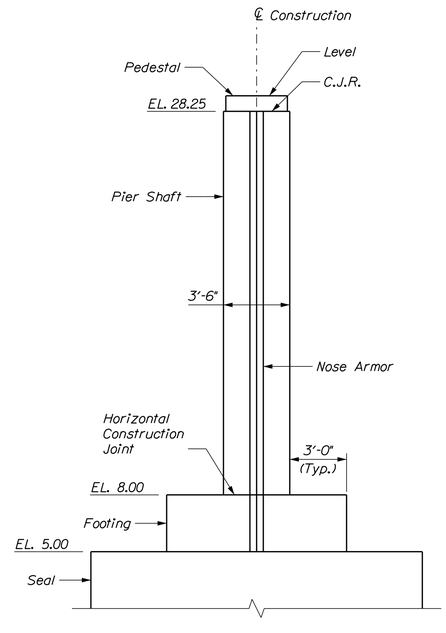
4. Nose armor, including anchor studs, shall be cleaned and galvanized in accordance with Section 506 of the Standard Specifications. All costs for nose armor fabrication and installation shall be incidental to Item 502.239, "Structural Concrete Piers". See "Pier No. 1 Footing Plan" sheet for Nose Armor Detail.

5. Pattern pier shafts as shown on the plans with concrete patterning in accordance with Special Provision 502 Concrete Form Liners.

6. Pedestal Elevations are approximate. The actual elevations shall be adjusted to accommodate the bearings supplied by the contractor. The elevations given assume an overall bearing height of 12" for Piers 1 through 3 for Girders 1 through 5.



PIER NO. 1 ELEVATION



PIER NO. 1 END ELEVATION

Upstream End Shown

LEGEND:

C.J. = Construction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

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P.E. NUMBER

9/28/2022

DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	D.Myers	BY	S.Morgan
CHECKED-REVIEWED	B.Toothaker	DATE	7/21
DESIGN2-DETAILED2	D.Myers	BY	D.Myers
DESIGN3-DETAILED3		DATE	7/21
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 1
SHAFT PLAN & ELEVATION

SHEET NUMBER

84

OF 163

Date:10/15/2022
Username:
Division:
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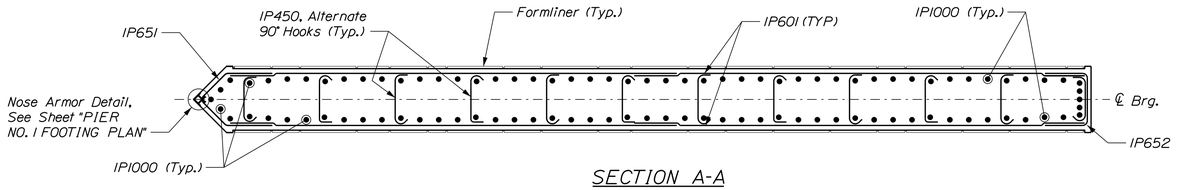
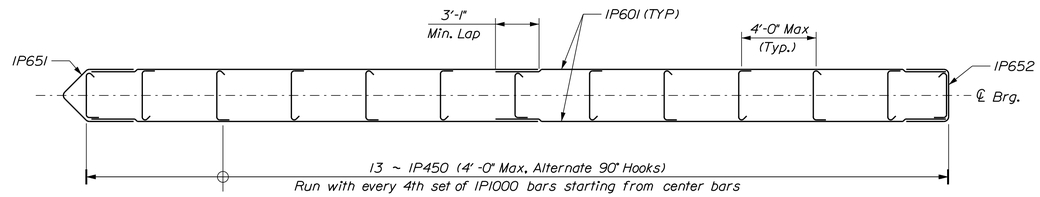


SECTION A-A



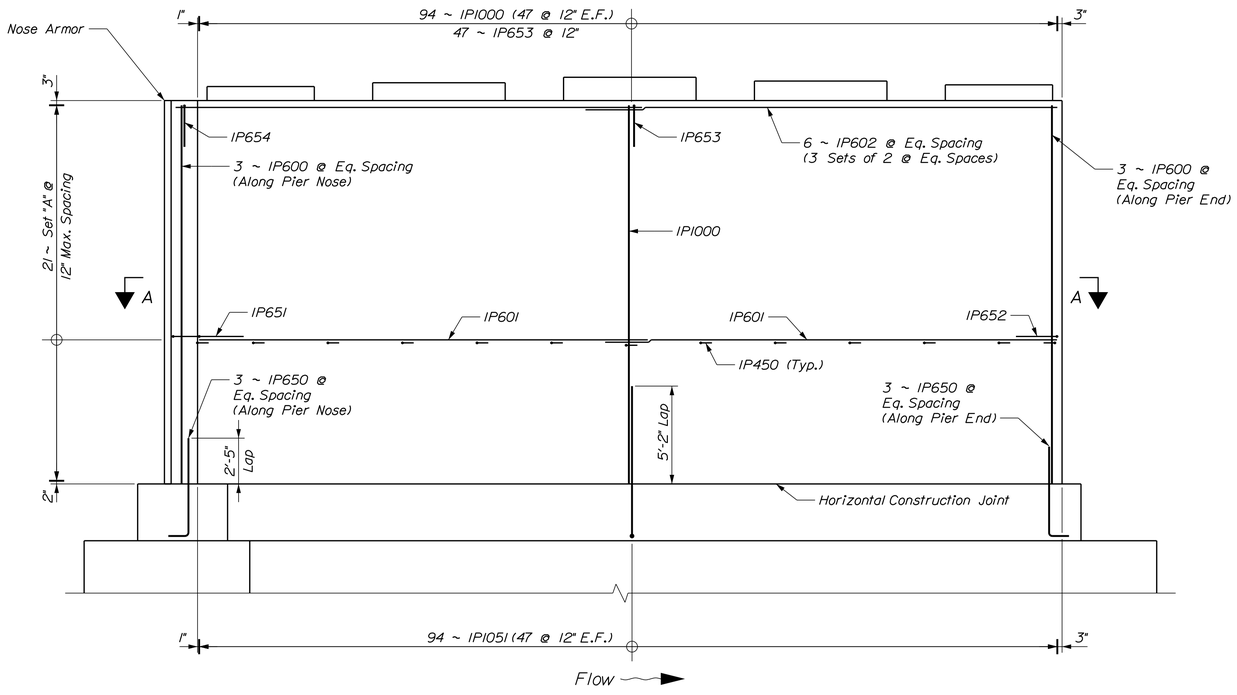
SET "A" REINFORCING STEEL LAYOUT

LEGEND:

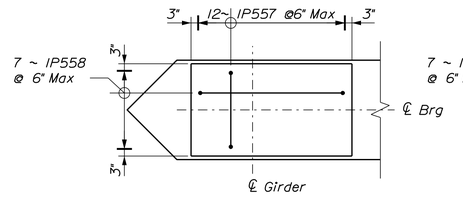
C.J. = Contraction Joint
C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
E.F. = Each Face

SET "A" REINFORCING STEEL

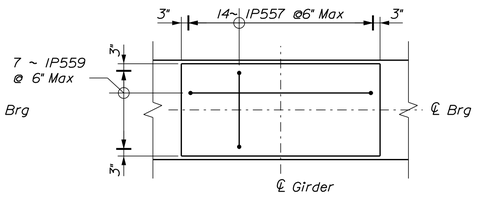
Set "A" Reinforcement Bars Consist of:
4 ~ IP601
1 ~ IP651
1 ~ IP652
13 ~ IP450



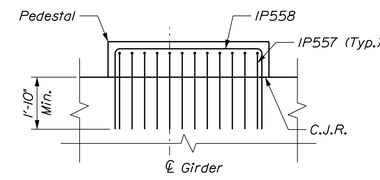
PIER NO. 1 ELEVATION



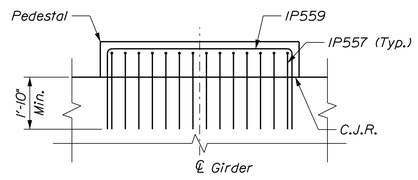
EXTERIOR PEDESTAL PLAN
(Nose end shown, tail end similar)



INTERIOR PEDESTAL PLAN



EXTERIOR PEDESTAL ELEVATION



INTERIOR PEDESTAL ELEVATION

PEDESTAL REINFORCEMENT DETAILS

STATE OF MAINE
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REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

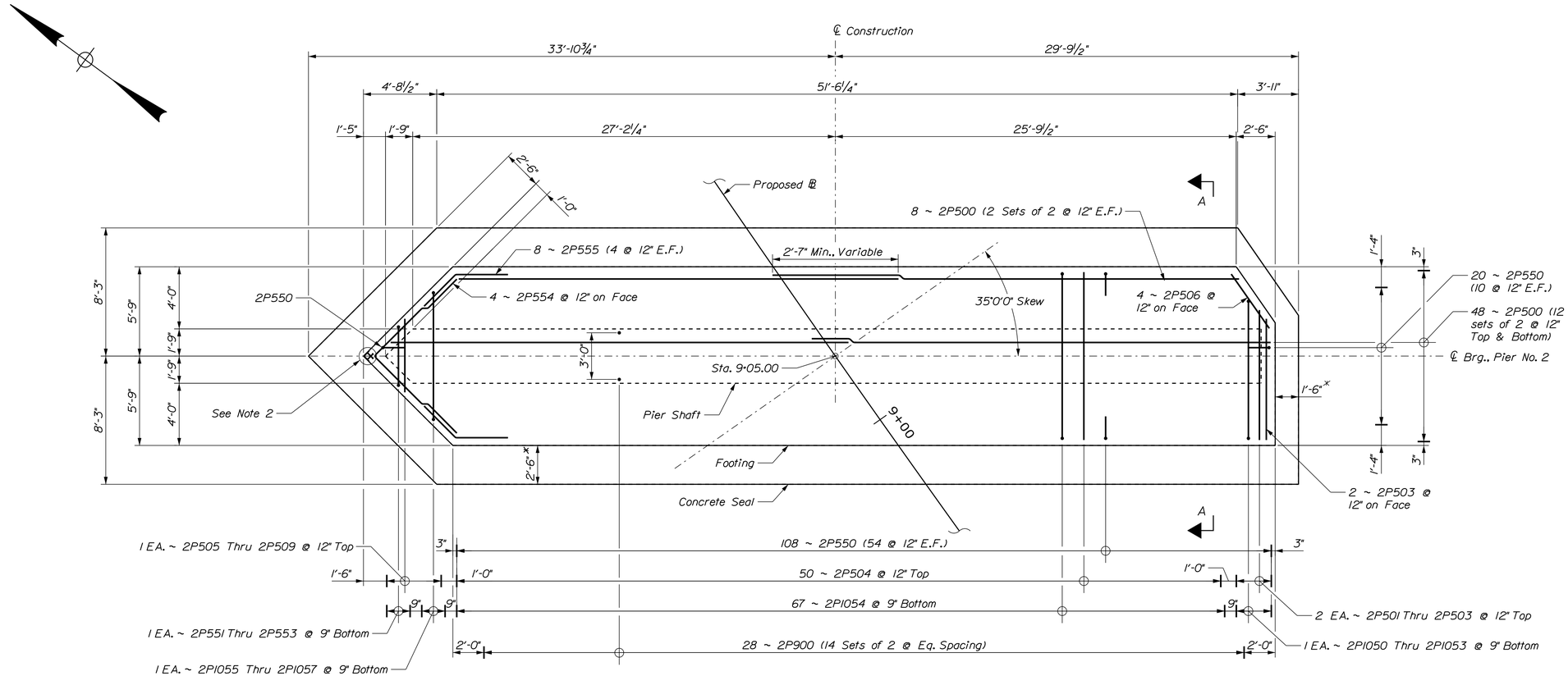
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 1 REINFORCEMENT

SHEET NUMBER
85
OF 163

TYLin

Date:10/15/2022
Username:
Division:
Filename: ...\085_Pier_1_Reinforcement.dgn



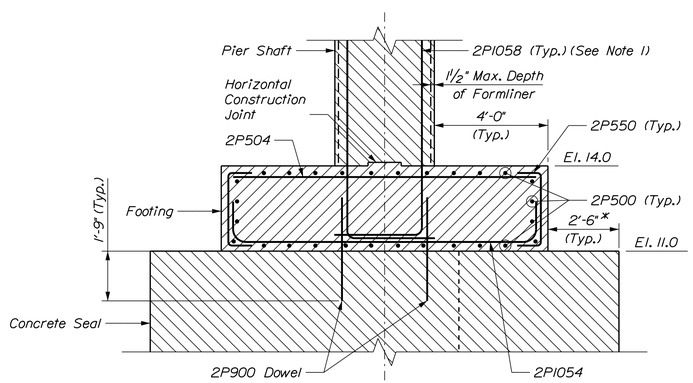
PIER NO. 2 FOOTING PLAN

* See "Seal Cofferdam Notes" Note 11 for seal dimension adjustments.

Flow ~~►

NOTE:

1. See Sheet, "Pier No. 2 Reinforcement" for additional Details.
2. See Sheet, "Pier No. 1 Footing Plan" for Seal Cofferdamn Notes and Nose Armor Details.



SECTION A-A

* See "Seal Cofferdam Notes" Note 11 for seal dimension adjustments.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
W.P. = Working Point

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Robins		
DESIGN-DETAILED	D.Myers	S.Morgan	7/21
CHECKED-REVIEWED	B.Toothaker	D.Myers	7/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 2 FOOTING PLAN

SHEET NUMBER

86

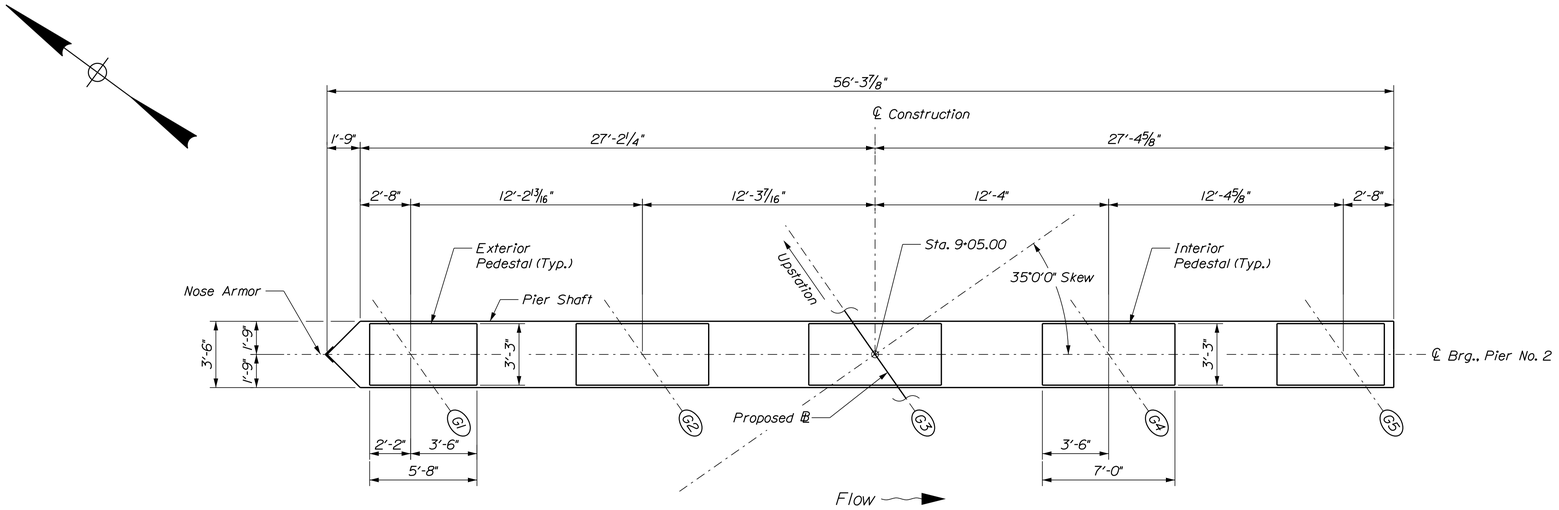
OF 163

Username:

Date:10/15/2022

Division:

Filename: ...\086_Pier_2_Footing_Plan.dgn



PIER NO. 2 SHAFT PLAN

PIER DESIGN CRITERIA

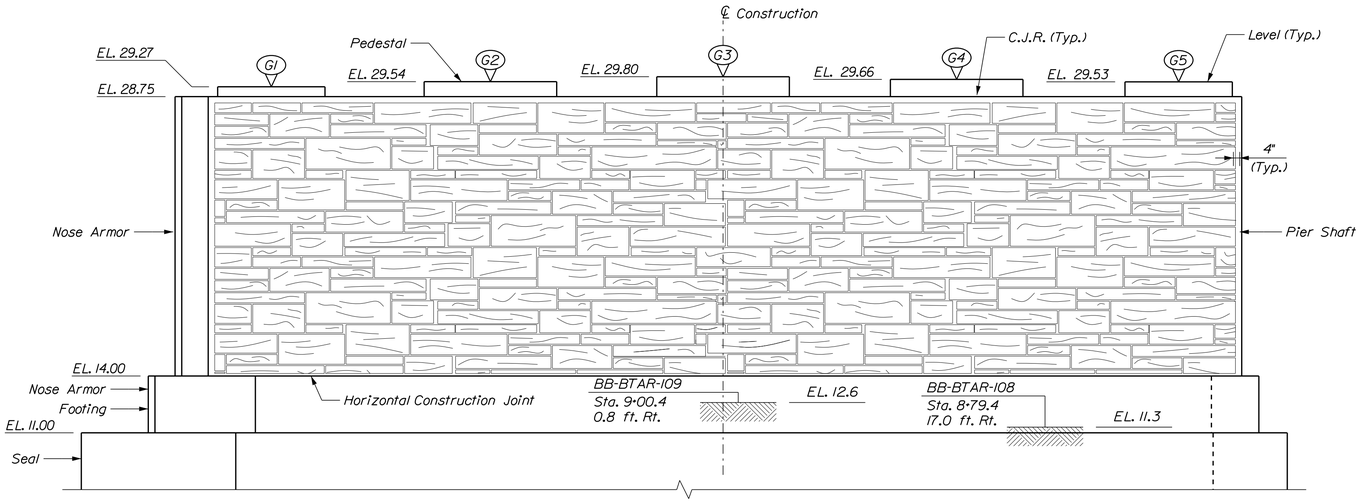
1. Critical AASHTO Load Combination:
   Pier 1 - Extreme Event II Limit State
   Pier 2 - Extreme Event II Limit State
   Pier 3 - Strength I Limit State

2. Buoyancy: Water level assumed at
   Pier 1 - EL. 20.1 (Q50)
   Pier 1 - EL. 23.4 (Q50)
   Pier 1 - EL. 28.0 (Q50)

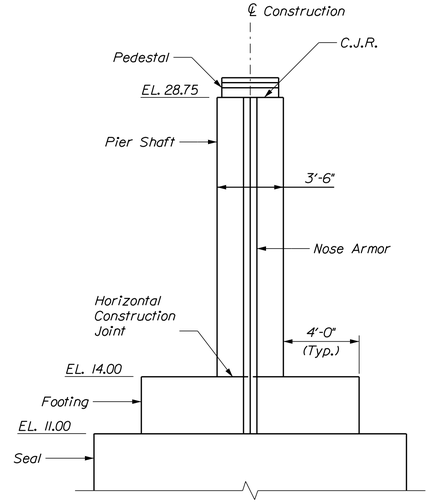
3. Stream flow:
   Pier 1 - Velocity of 9 ft/sec Skewed at 30 degrees (Q50).
   Pier 2 - Velocity of 23.4 ft/sec Skewed at 30 degrees (Q50).
   Pier 1 - Velocity of 16.0 ft/sec Skewed at 5 degrees (Q50).

4. Wind: 115 mph or 0.04 ksf, Strength III Limit State

5. Ice:
   Pier 1:
   Strength Limit State - Thickness 2 feet, pressure 200 psi at EL 11.0 (Q1.1) and pressure 100 psi at EL 20.1 (Q50), applied at 30 degree skew to the pier.
   Extreme Limit State - Thickness 3 feet, pressure 200 psi at EL 11.0 (Q1.1) and pressure 100 psi at EL 20.1 (Q50), applied at 30 degree skew to the pier.
   Pier 2:
   Strength Limit State - Thickness 2 feet, pressure 200 psi at EL 18.0 (Q1.1) and pressure 100 psi at EL 23.4 (Q50), applied at 45 degree skew to the pier.
   Extreme Limit State - Thickness 3 feet, pressure 200 psi at EL 18.0 (Q1.1) and pressure 100 psi at EL 23.4 (Q50), applied at 45 degree skew to the pier.
   Pier 3:
   Strength Limit State - Thickness 2 feet, pressure 200 psi at EL 21.0 (Q1.1) and pressure 100 psi at EL 28.0 (Q50), 30% of nose force applied transverse to pier.
   Extreme Limit State - Thickness 3 feet, pressure 200 psi at EL 21.0 (Q1.1) and pressure 100 psi at EL 28.0 (Q50), 30% of nose force applied transverse to pier.



PIER NO. 2 ELEVATION



PIER NO. 2 END ELEVATION

Upstream End Shown

LEGEND:

C.J. = Construction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers 9/28/2022

P.E. NUMBER 12572

SIGNATURE

DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	S.Morgan	7/21
CHECKED-REVIEWED	D.Myers	7/21
DESIGN2-DETAILED2	D.Myers	
DESIGN3-DETAILED3	B.Toothaker	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

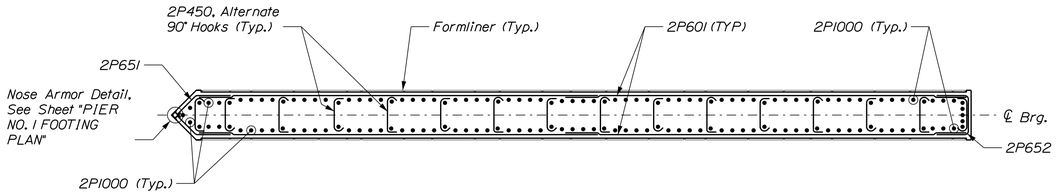
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 2
SHAFT PLAN & ELEVATION

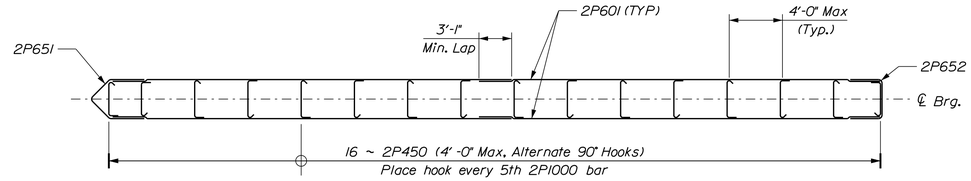
TYLin

SHEET NUMBER
87
OF 163

Date:10/15/2022
Username:
Division:
Filename: ...\087_Pier_2_Plan_Elev.dgn



SECTION A-A



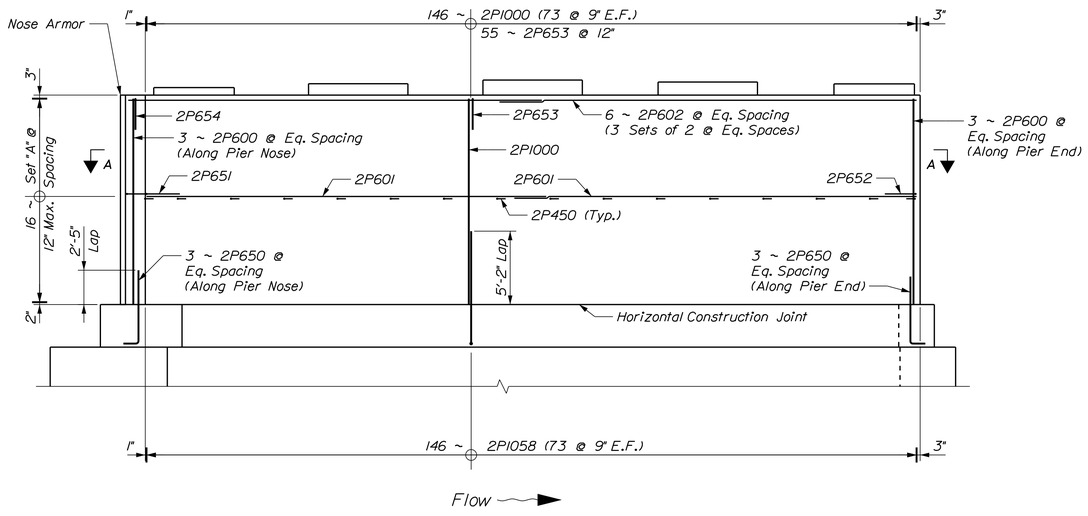
SET "A" REINFORCING STEEL LAYOUT

LEGEND:

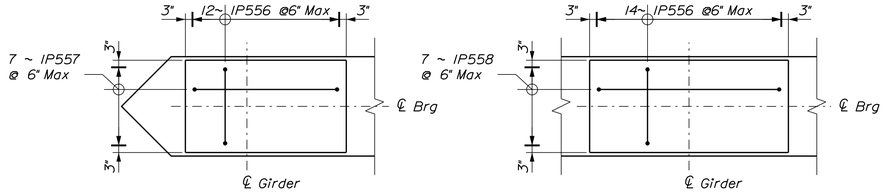
C.J. = Contraction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
E.F. = Each Face

SET "A" REINFORCING STEEL

Set "A" Reinforcement Bars Consist of:
4 ~ 2P601
1 ~ 2P651
1 ~ 2P652
15 ~ 2P450

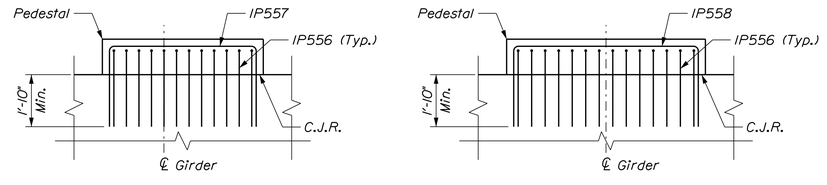


PIER NO. 2 ELEVATION



EXTERIOR PEDESTAL PLAN
(Nose end shown, tail end similar)

INTERIOR PEDESTAL PLAN



EXTERIOR PEDESTAL ELEVATION

INTERIOR PEDESTAL ELEVATION

PEDESTAL REINFORCEMENT DETAILS

C.J. = Contraction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL
ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	D.Myers	J.Legere 7/21
CHECKED-REVIEWED	B.Toothaker	D.Myers 7/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

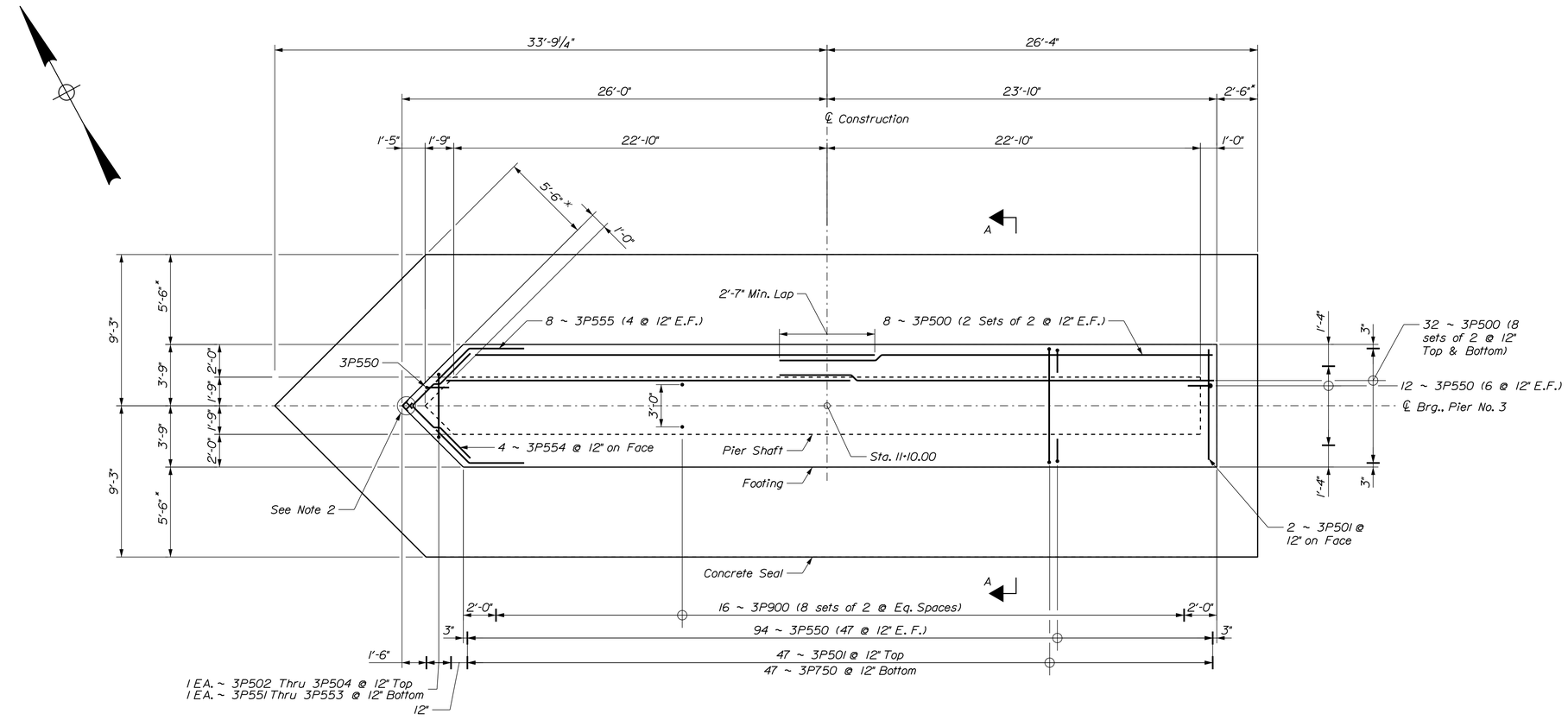
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER CUMBERLAND
BRUNSWICK-TOPSHAM

PIER NO. 2
REINFORCEMENT

SHEET NUMBER
88
OF 163

TYLin

Filename: ...\088_Pier_2_Reinforcement.dgn Division: Username: Date:10/15/2022



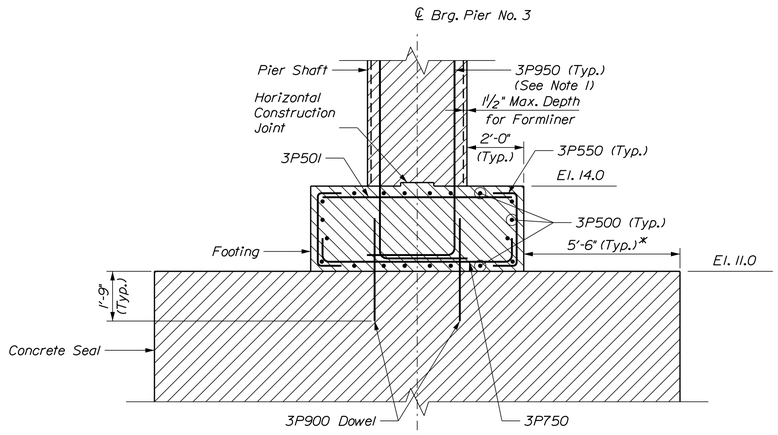
PIER NO. 3 FOOTING PLAN

Flow →

* See "Seal Cofferdam Notes" note II for seal dimension adjustments.

NOTE:

1. See Sheet, "Pier No. 3 Reinforcement" for Additional Details.
2. See Sheet, "Pier No. 1 Footing Plan" for Seal Cofferdamn Notes and Nose Armor Detail.



SECTION A-A

* See "Seal Cofferdam Notes" Note II for seal dimensions adjustments.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
W.P. = Working Point

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

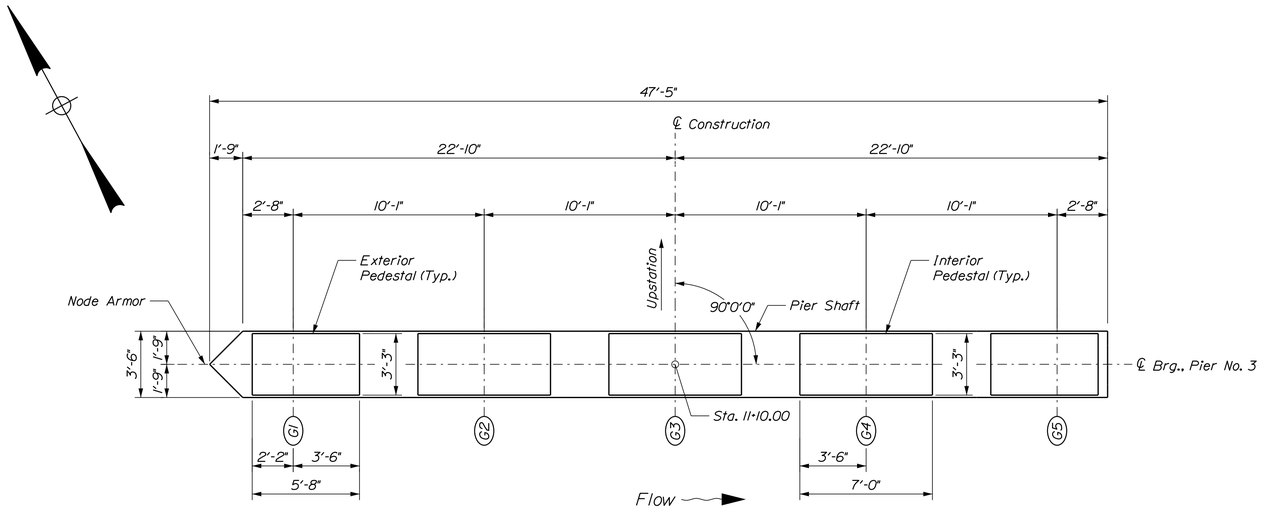
PROJ. MANAGER	Scott Robins	BY	DATE
DESIGN-DETAILED	D.Myers	S.Morgan	7/21
CHECKED-REVIEWED	B.Toothaker	D.Myers	7/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 3 FOOTING PLAN

SHEET NUMBER 89 OF 163

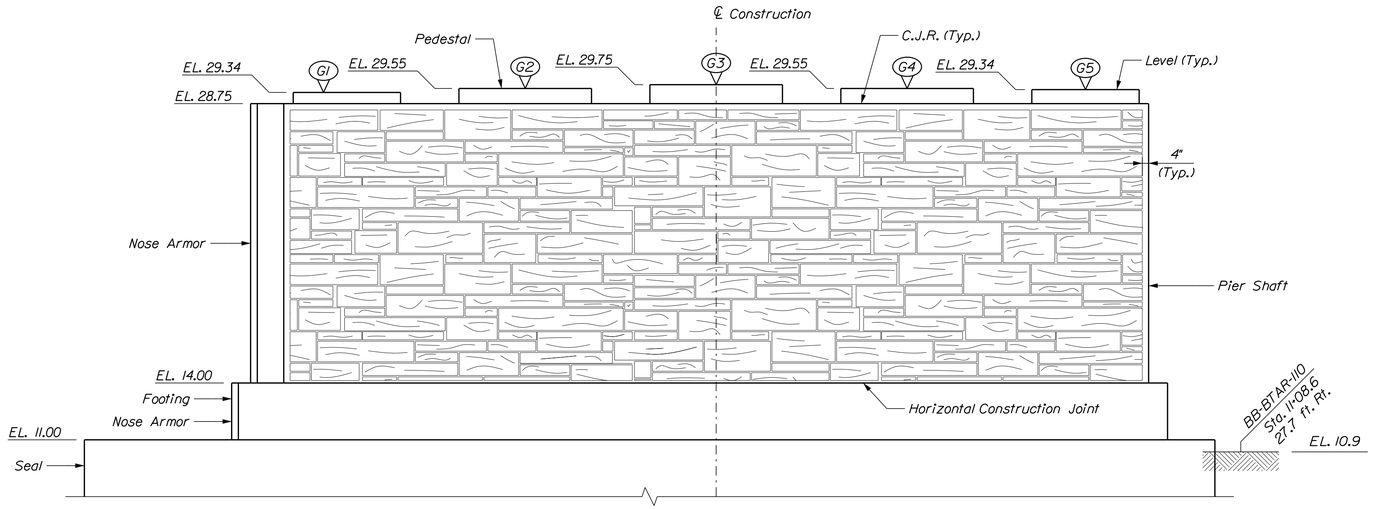
Username: Date:10/15/2022
Division:
Filename: ...\089_Pier_3_Footing_Plan.dgn



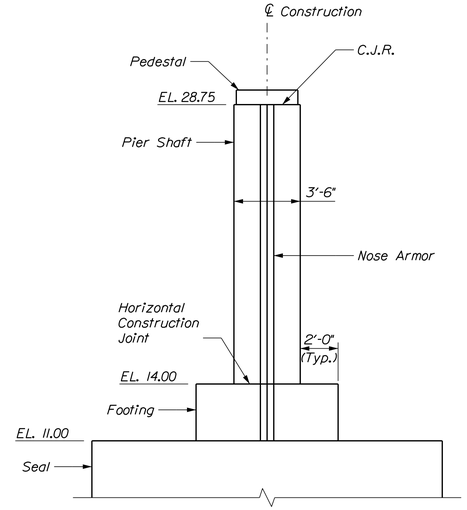
PIER NO. 3 SHAFT PLAN

NOTE:

See Sheet, "Pier No. 1 Footing Plan" for Nose Armor Detail.



PIER NO. 3 ELEVATION



PIER NO. 3 END ELEVATION

Upstream End Shown

LEGEND:

C.J. = Construction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
W.P. = Working Point

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE

12572 — P.E. NUMBER

9/23/2022 — DATE

PROJ. MANAGER	Scott Rollins	BY	DATE
DESIGN-DETAILED	D.Myers	S.Morgan	7/21
CHECKED-REVIEWED	D.Myers	D.Myers	7/21
DESIGN2-DETAILED2	B.Toothaker		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 3 SHAFT PLAN & ELEVATION

SHEET NUMBER

90

OF 163

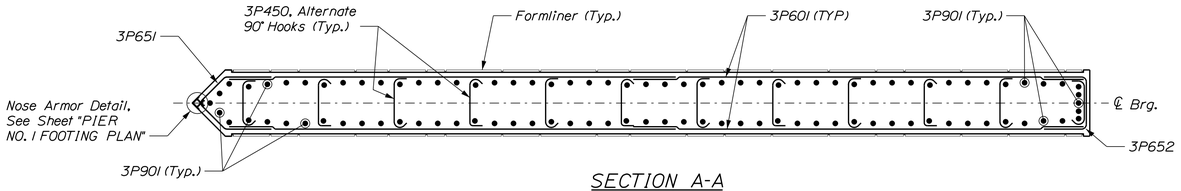
TYLin

Date:10/15/2022

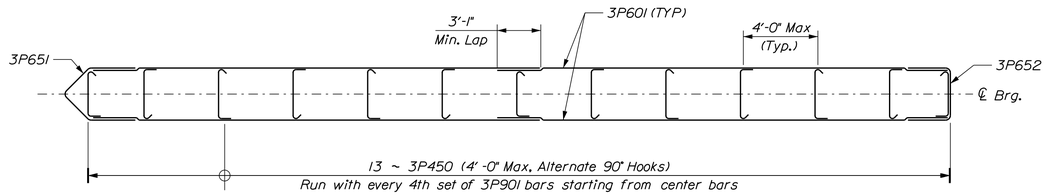
Username:

Division:

Filename: ...\090_Pier_3_Plan_Elev.dgn



SECTION A-A



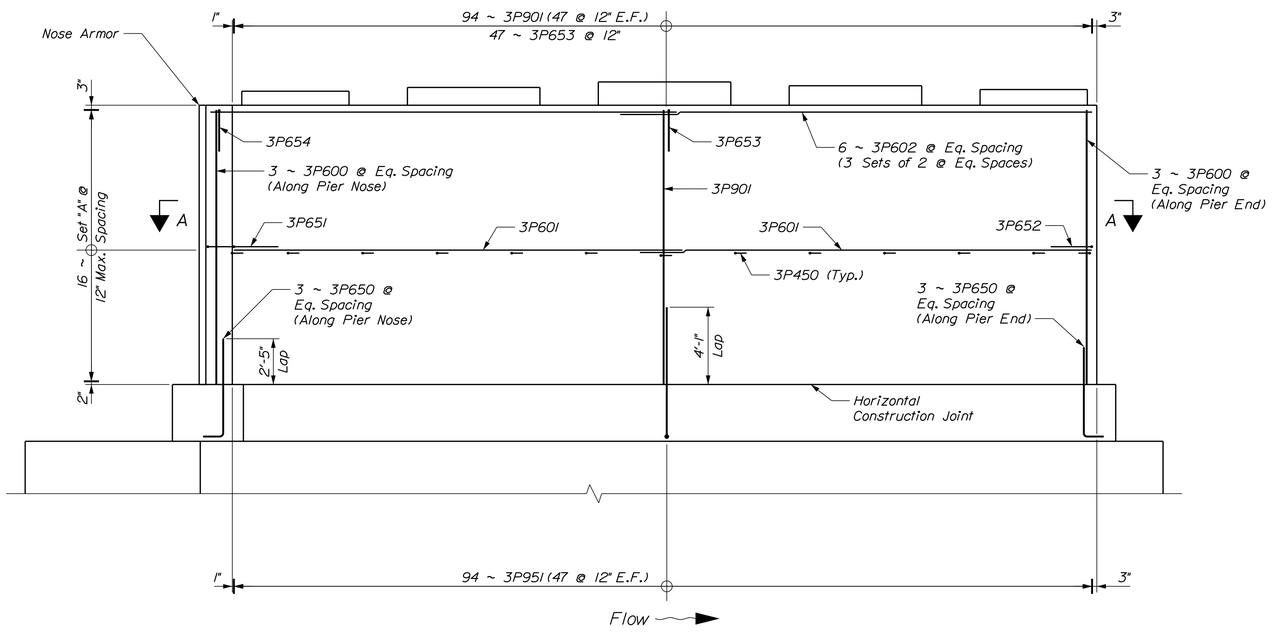
SET "A" REINFORCING STEEL LAYOUT

LEGEND:

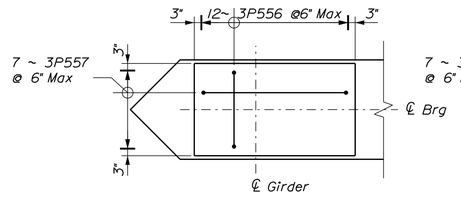
C.J. = Contraction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
E.F. = Each Face

SET "A" REINFORCING STEEL

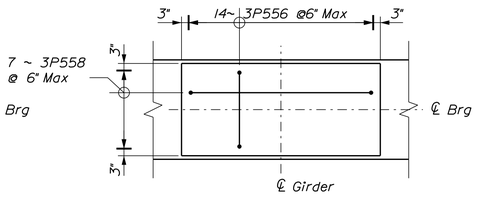
Set "A" Reinforcement Bars Consist of:
13 ~ 3P450
4 ~ 3P601
1 ~ 3P651
1 ~ 3P652



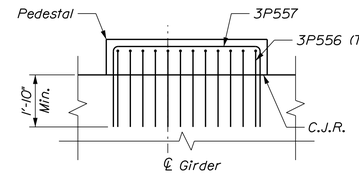
PIER NO. 3 ELEVATION



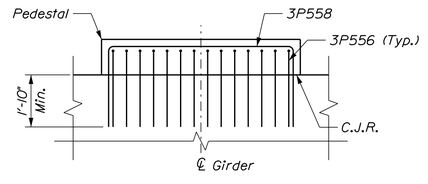
EXTERIOR PEDESTAL PLAN
(Nose end shown, tail end similar)



INTERIOR PEDESTAL PLAN



EXTERIOR PEDESTAL ELEVATION



INTERIOR PEDESTAL ELEVATION

PEDESTAL REINFORCEMENT DETAILS

LEGEND:

C.J. = Contraction Joint
C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL
ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins								
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DESIGN2-DETAILED2									
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REVISIONS 1									
REVISIONS 2									
REVISIONS 3									
REVISIONS 4									
FIELD CHANGES									

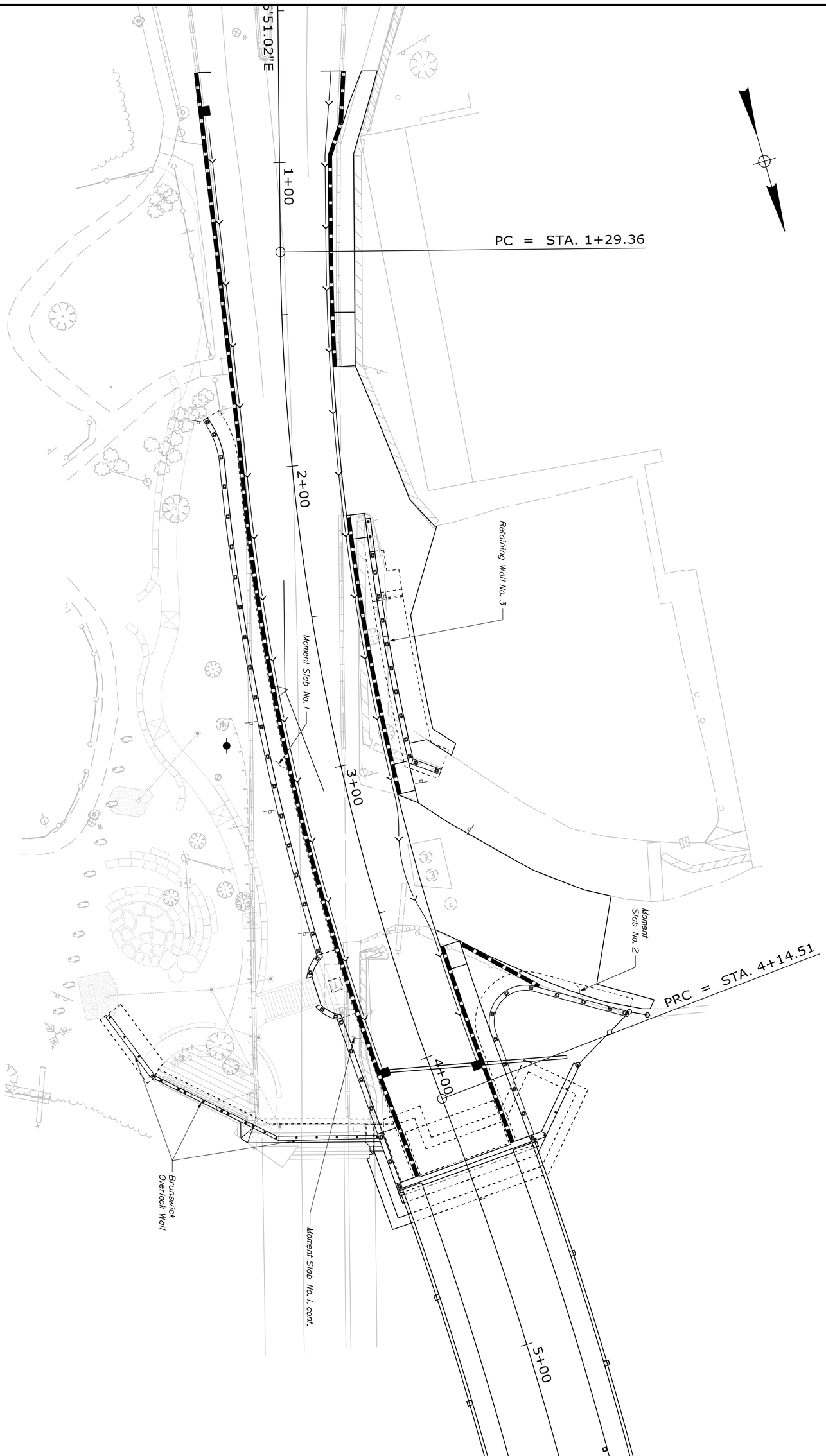
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

PIER NO. 3
REINFORCEMENT

SHEET NUMBER
91
OF 163

TYLin

Filename: ...\091_Pier_3_Reinforcement.dgn Division: Username: Date:10/15/2022



Notes:

1. *See individual retaining wall sheets for retaining wall geometry and details.*
2. *See "Moment Slab" sheets for moment slab geometry and details.*
3. *See "Brunswick Overlook Wall" sheets for overlook wall geometry and details.*

TYLin

SHEET NUMBER 92 OF 163

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL KEY PLAN SHEET 1 OF 2

PROJ. MANAGER	Scott Rollins	BY	DATE
DESIGN-DETAILED	S.Morgan	S.Morgan	7/20
CHECKED-REVIEWED	D.Myers	D.Myers	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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FIELD CHANGES			

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED
PROFESSIONAL ENGINEER

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

BRIDGE NO. 2016 WIN 22603.00 BRIDGE PLANS

Moment Slab No. 4

Retaining Wall No. 1

Retaining Wall No. 2

Moment Slab No. 3

Topsham Overlook Wall

12+00

13+00

14+00

15+00

16+00

PT = STA. 12+67.72

N35°55'46.16"E

IPF

SWEL

ENTR

Notes:

1. See individual retaining wall sheets for retaining wall geometry and details.
2. See "Moment Slab" sheets for moment slab geometry and details.
3. See "Topsham Overlook Wall" sheets for Topsham overlook wall geometry and details.

TYLin

Filename: ...\093_Retaining_Wall_Key_Plan_2.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

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PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED		S.Morgan	7/20
CHECKED-REVIEWED		D.Myers	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

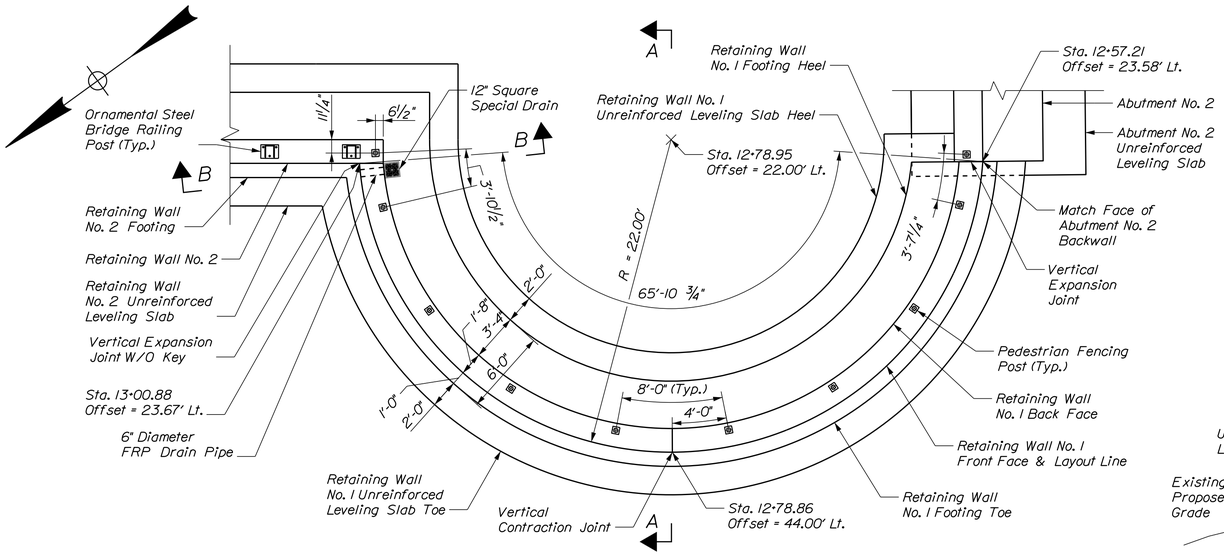
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL KEY PLAN
SHEET 2 OF 2

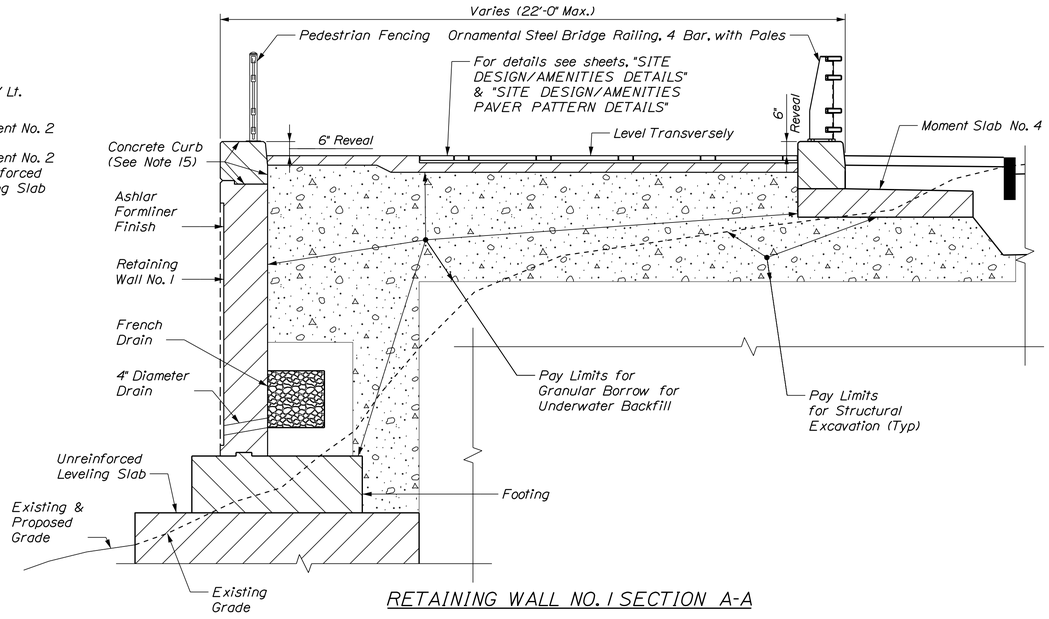
SHEET NUMBER

93

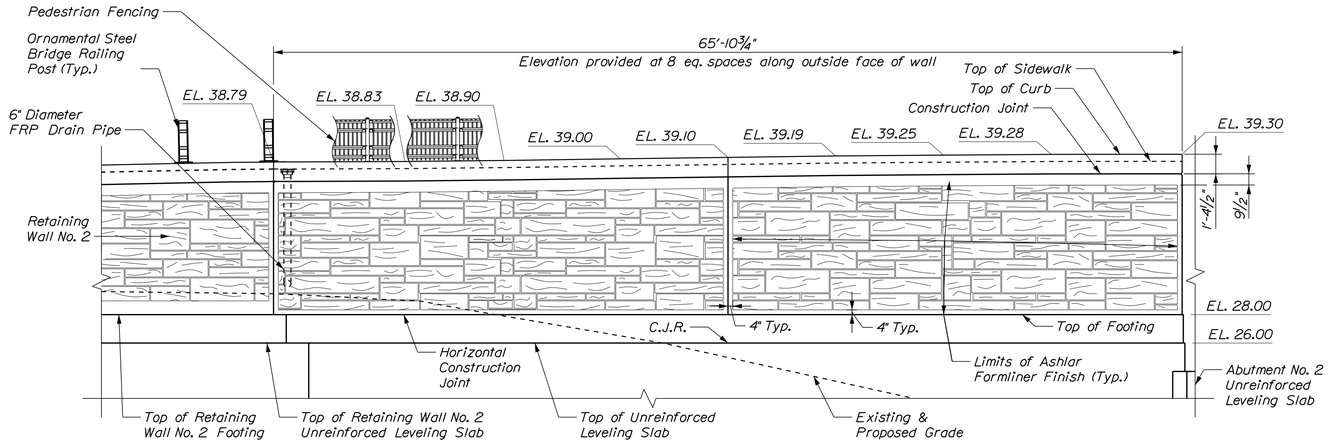
OF 163



PLAN RETAINING WALL NO. 1



RETAINING WALL NO. 1 SECTION A-A



RETAINING WALL NO. 1 DEVELOPED ELEVATION

(DEVELOPED ALONG FACE OF RETAINING WALL NO. 1)

RETAINING WALL NO. 1 SECTION B-B

RETAINING WALL NOTES:

1. The maximum factored applied footing pressure for:
   Retaining Wall No. 1 is 6.3 ksf at the Strength 1 Limit State.
   Retaining Wall No. 2 is 3.5 ksf at the Strength 1 Limit State.
   Retaining Wall No. 3 is 2.6 ksf at the Strength 1 Limit State.
   Retaining Wall No. 4 is 1.9 ksf at the Strength 1 Limit State.
2. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted. Minimum concrete cover shall be measured from the deepest point of any form liner used.
3. Place 4-in. dia. drains in retaining walls at 10-ft maximum spacing. The exact location will be determined by the Resident.
4. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
5. Construct French Drains behind the walls in accordance with Standard Specifications Section 512, French Drains.
6. Retaining walls and their footings shall be backfilled with Granular Borrow. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 1'-6" behind the footing heel in fill areas, unless otherwise noted.
7. When bedrock protrudes above the bottom of footing, the footing may be raised and the vertical reinforcing may be cut in the field with the approval of the Resident. The minimum footing elevations are shown on the Plans and shall not be lowered without prior approval of the Engineer of Record. Payment for adjusting the footing elevations and reinforcing steel will be considered incidental to the related Contract Items. No separate payment will be made.
8. At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092 Structural Rock Excavation - Major Structures.
9. Concrete shall be placed on bedrock cleaned of all weathered rock, loose fractured rock, and soil. The bedrock subgrade shall be confirmed to be relatively level. Where the bedrock slope exceeds 4H:1V, the bedrock surface shall be benched to create level steps or made completely level. The Resident shall approve the bedrock subgrade prior to the placement of the retaining wall concrete.
10. Prior to placing retaining wall concrete, the bedrock subgrade shall be washed with high-pressure water and air.
11. All measurements are along exposed face of wall unless noted otherwise.
12. Pattern retaining walls as shown on the plans with concrete patterning in accordance with Special Provision 502 Concrete Form Liners.
13. Concrete in Retaining Wall No. 1 will be paid under Item 502.219, "Structural Concrete, Abutments and Retaining Walls".
14. Concrete in Retaining Wall No. 2, 3 & 4 will be paid under Item 502.221, "Structural Concrete, Abutments and Retaining Walls".
15. Concrete Curb portion of Retaining Walls will be paid for under Item 502.49 "Structural Concrete Curbs and Sidewalks", and shall be Class "LP" concrete.
16. Unreinforced Leveling Slabs for Retaining Walls will be paid under Item 502.565, "Concrete Fill" and shall be Class "A" concrete.
17. Portions of Unreinforced Leveling Slabs above ground level shall have a smooth regular surface.
18. 12" Special Drain, including 6" diameter FRP pipe, will be paid under item 604.74 "Special Drain".

STATE OF MAINE
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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

	PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	7/20	DESIGN-DETAILED
CHECKED-REVIEWED	B.Toothaker	2/21	CHECKED-REVIEWED
DESIGN2-DETAILED2			DESIGN2-DETAILED2
DESIGN3-DETAILED3			DESIGN3-DETAILED3
REVISIONS 1			REVISIONS 1
REVISIONS 2			REVISIONS 2
REVISIONS 3			REVISIONS 3
REVISIONS 4			REVISIONS 4
FIELD CHANGES			FIELD CHANGES

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 1
PLAN & ELEVATION

SHEET NUMBER

94

OF 163

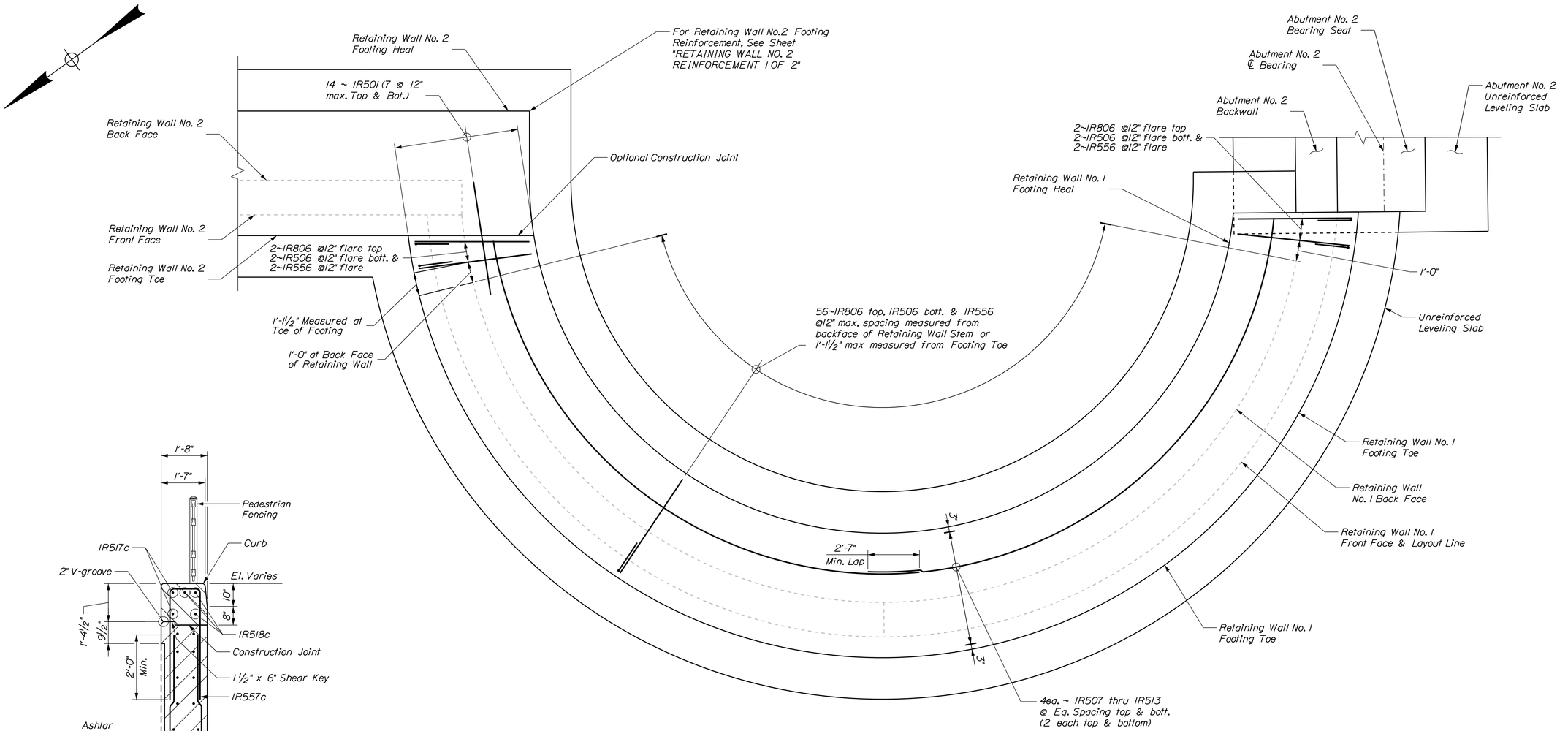
TYLin

Date:10/15/2022

Username:

Division:

Filename: ...\094_Wall_01_Plan_Elev.dgn



RETAINING WALL NO. 1 FOOTING REINFORCEMENT PLAN

RETAINING WALL NO. 1 REINFORCEMENT SECTION

NOTES:

See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min. (Typ.)
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

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BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

DANIEL S. MYERS
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	7/20
CHECKED-REVIEWED	B.Toothaker	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

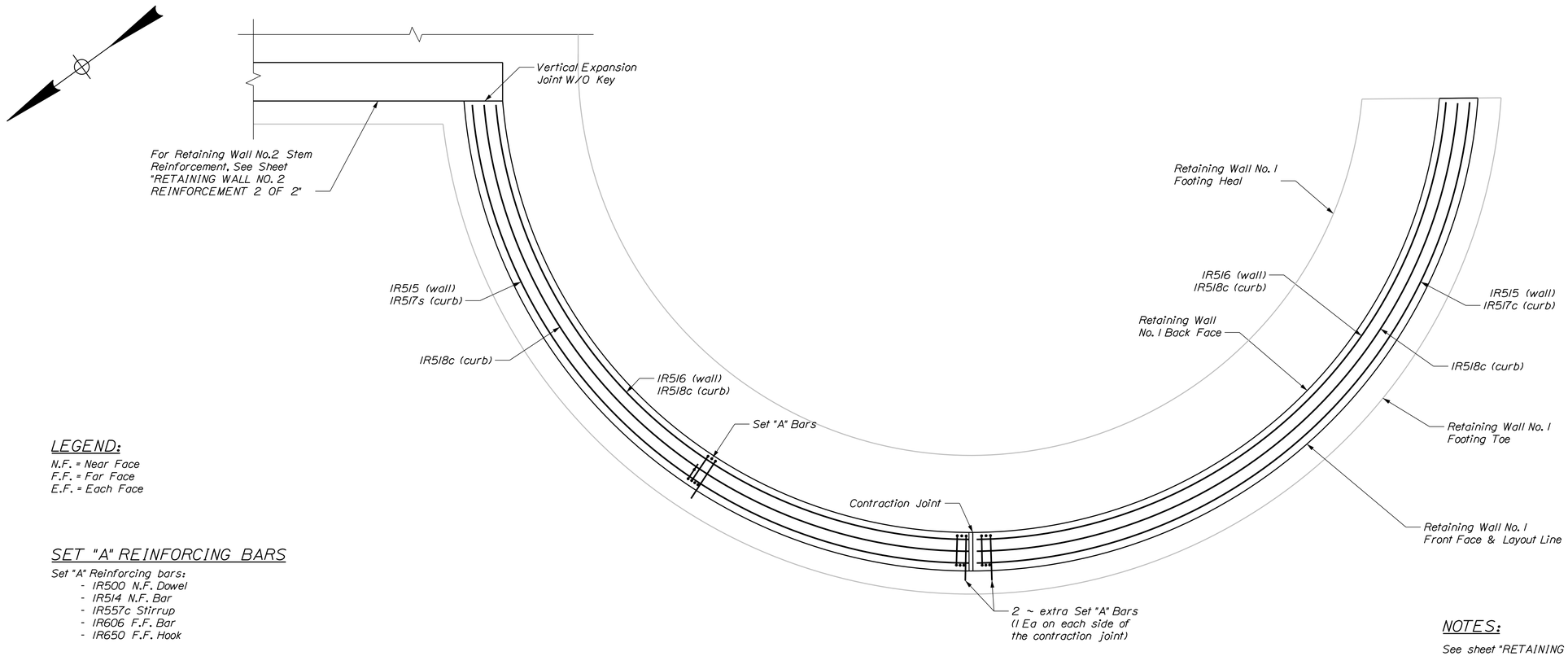
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 1
REINFORCEMENT 1 OF 2

SHEET NUMBER
95
OF 163

TYLin

Filename: ...\095_Wall_01_Reinforcement_1.dgn Division: Username: Date:10/15/2022



LEGEND:

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

SET "A" REINFORCING BARS

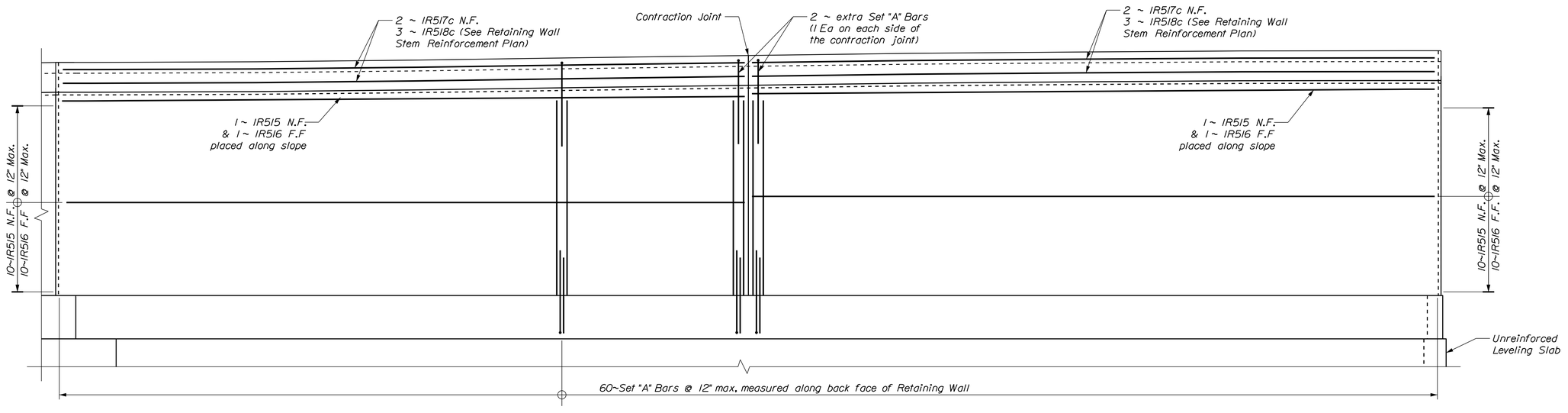
Set "A" Reinforcing bars:

- IR500 N.F. Dowel
- IR514 N.F. Bar
- IR557c Stirrup
- IR606 F.F. Bar
- IR650 F.F. Hook

NOTES:

See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.

RETAINING WALL NO. 1 STEM REINFORCEMENT PLAN



RETAINING WALL NO. 1 REINFORCEMENT DEVELOPED ELEVATION

(Developed along the Front Face of the Retaining Wall)

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	J.Legere	BY	J.Legere
CHECKED-REVIEWED	B.Toothaker	BY	B.Toothaker
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES		DATE	7/20
		DATE	2/21

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 1 REINFORCEMENT 2 OF 2

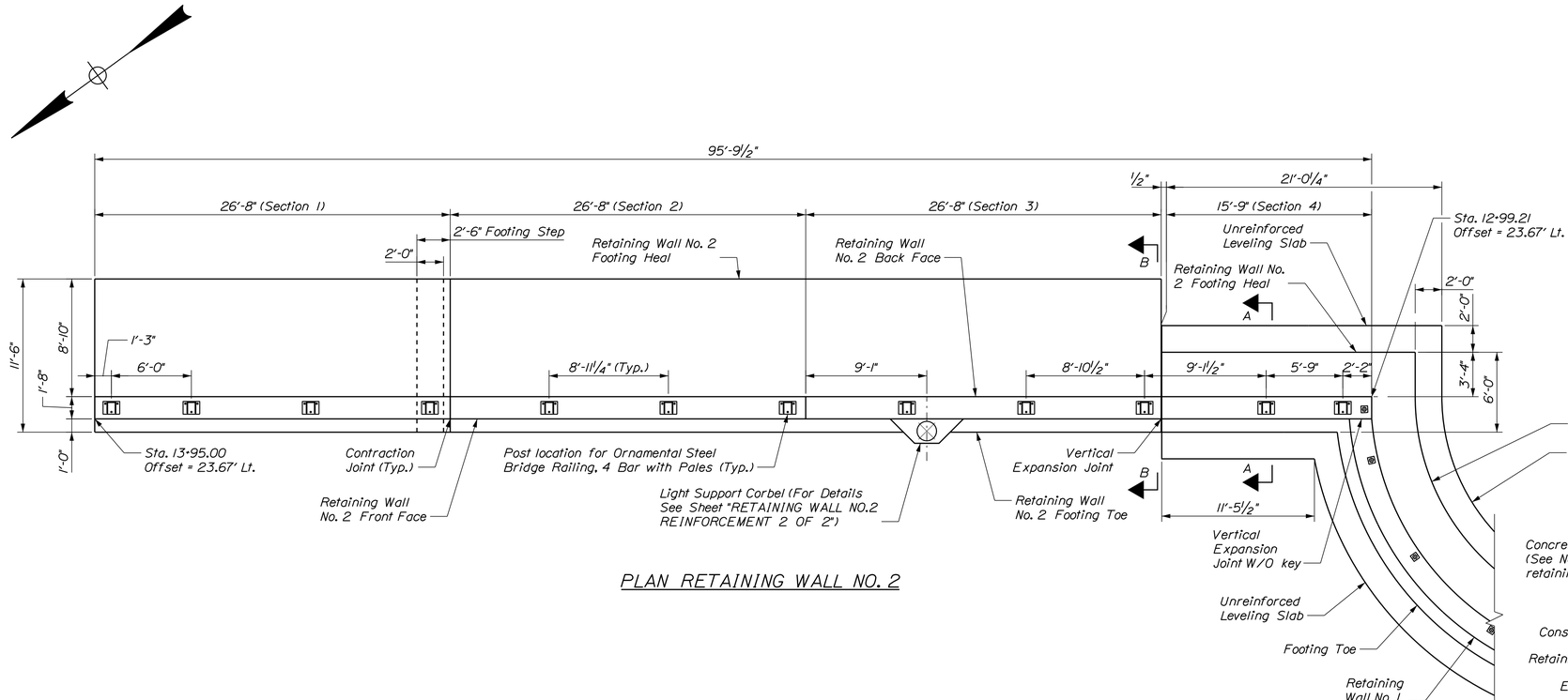
SHEET NUMBER

96

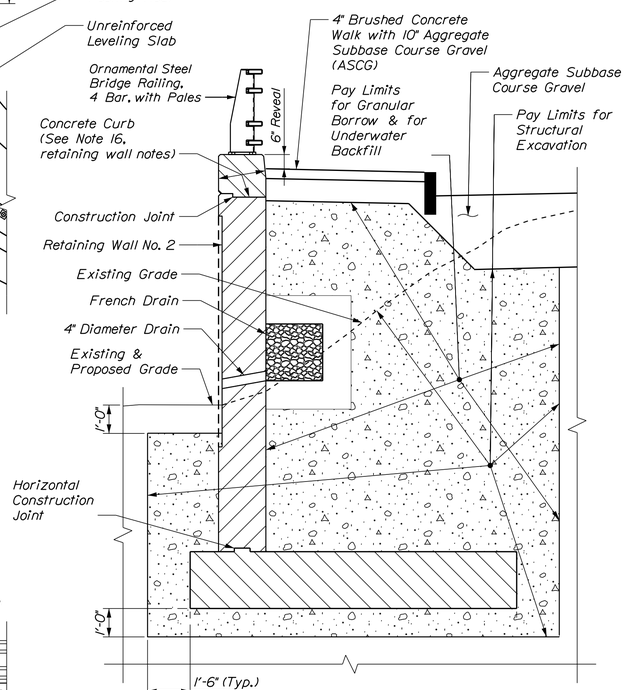
OF 163

TYLin

Username:
Date:10/15/2022
Division:
Filename: ...\096_Wall_01_Reinforcement_2.dgn

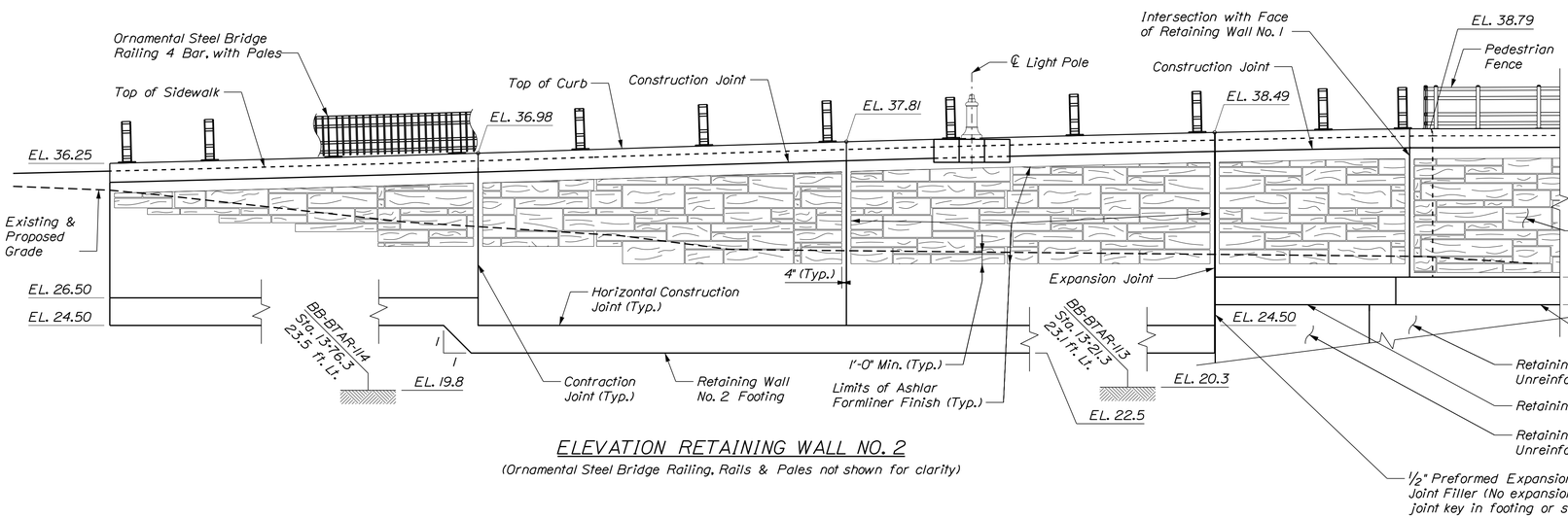


PLAN RETAINING WALL NO. 2



RETAINING WALL NO. 2 SECTION

(Section B-B Shown, Section A-A Similar)



ELEVATION RETAINING WALL NO. 2

(Ornamental Steel Bridge Railing, Rails & Pales not shown for clarity)

NOTES:

1. For retaining wall notes, see sheet "RETAINING WALL NO.1 PLAN & ELEVATION".
2. Structural excavation, granular borrow, and unreinforced leveling slab limits and details not shown for Section A-A, shall be as shown for Retaining Wall No. 1.

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

DANIEL S. MYERS
12572
P.E. NUMBER
9/23/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	05/20
CHECKED-REVIEWED	B.Toothaker	05/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

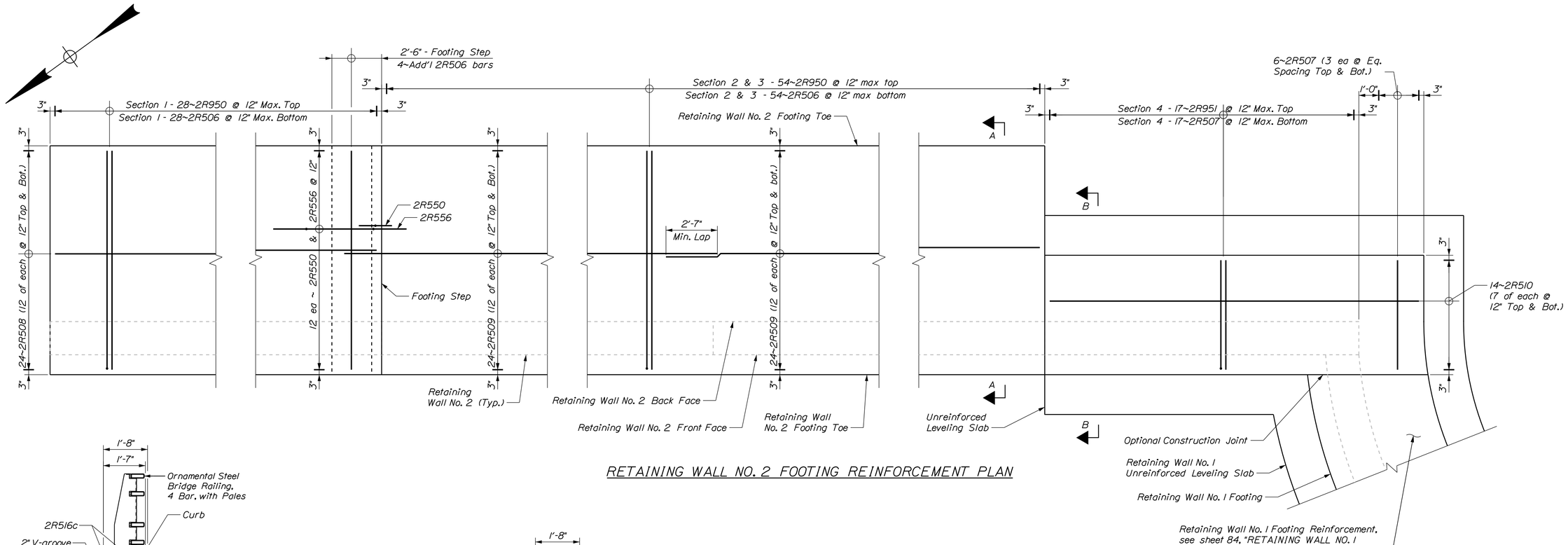
RETAINING WALL NO. 2 PLAN & ELEVATION

SHEET NUMBER

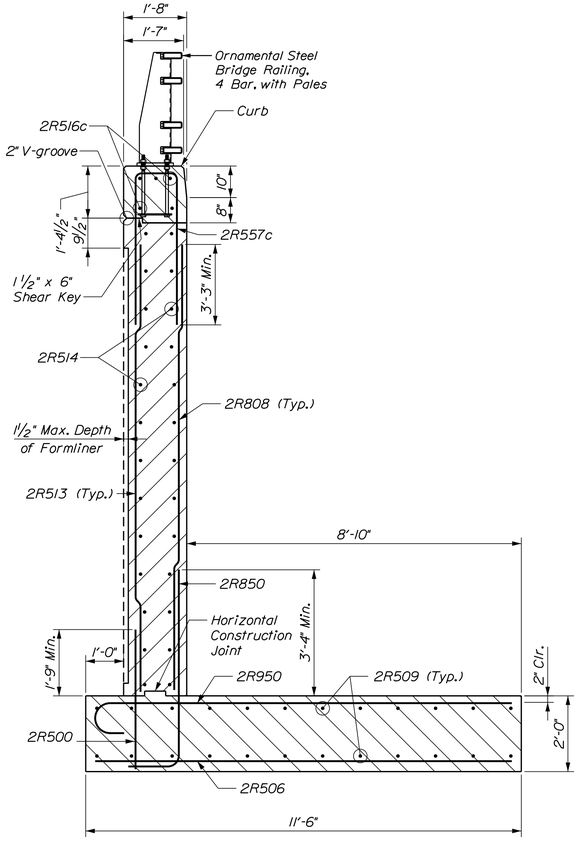
97

OF 163

Filename: ...\097_Wall_02_Plan_Elev.dgn Division: Username: Date:10/15/2022

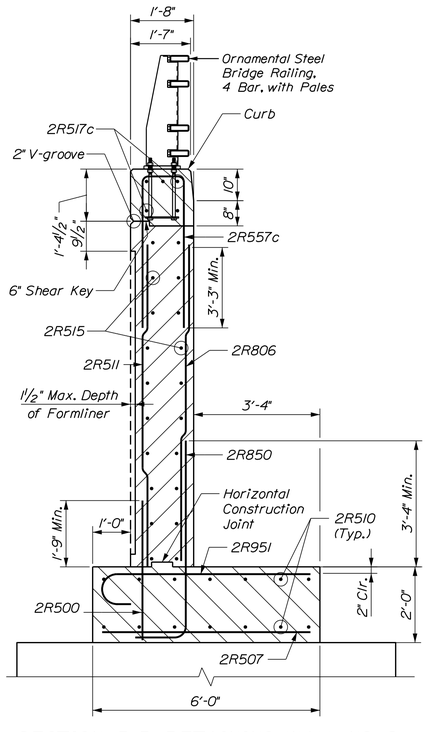


RETAINING WALL NO. 2 FOOTING REINFORCEMENT PLAN



SECTION A-A, RETAINING WALL NO. 2

(Section 3 shown, sections 1 & 2 similar)



SECTION B-B, RETAINING WALL NO. 2

(Section 4 shown)

NOTE:

See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile, Min.
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

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STATE OF MAINE
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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

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P.E. NUMBER

9/28/2022

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		DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	7/20
CHECKED-REVIEWED	B.Toothaker	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

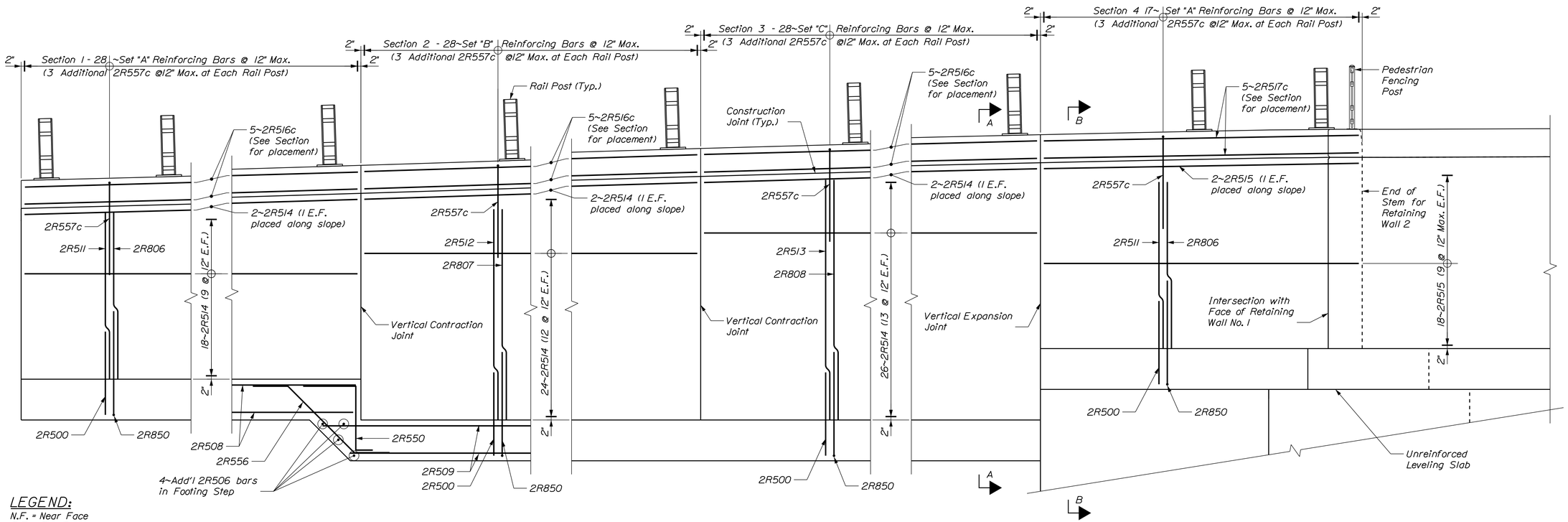
RETAINING WALL NO. 2 REINFORCEMENT 1 OF 2

SHEET NUMBER

98

OF 163

Filename: ...\098_Wall_02_Reinforcement_1.dgn Division: Username: Date:10/15/2022



LEGEND:

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

RETAINING WALL NO. 2 REINFORCEMENT ELEVATION

SET "A" REINFORCING BARS

WALL SECTION 1 & 4:
2R500, 2R511, 2R557c,
2R806, 2R850

SET "B" REINFORCING BARS

WALL SECTION 2:
2R500, 2R512, 2R557c,
2R807, 2R850

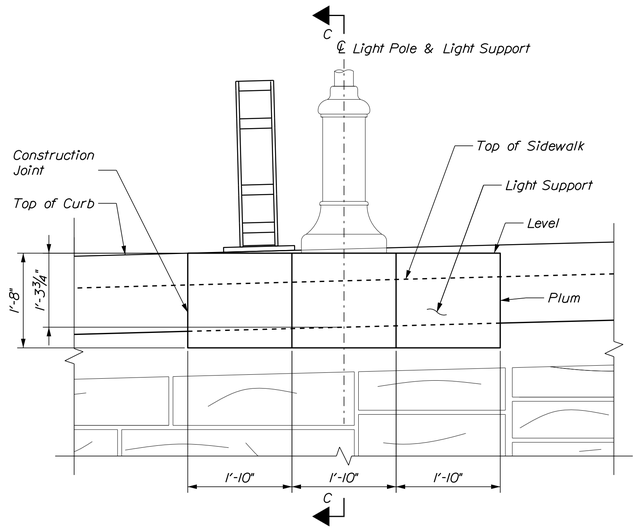
SET "C" REINFORCING BARS

WALL SECTION 3:
2R500, 2R513, 2R557c,
2R808, 2R850

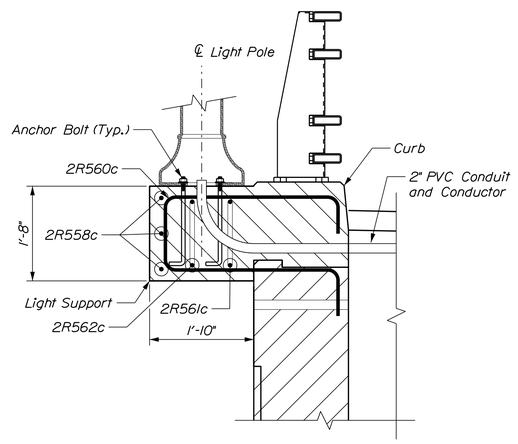
NOTE:

1. For Section A-A & Section B-B see sheet "RETAINING WALL NO. 2 REINFORCEMENT 1 OF 2"

2. See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.

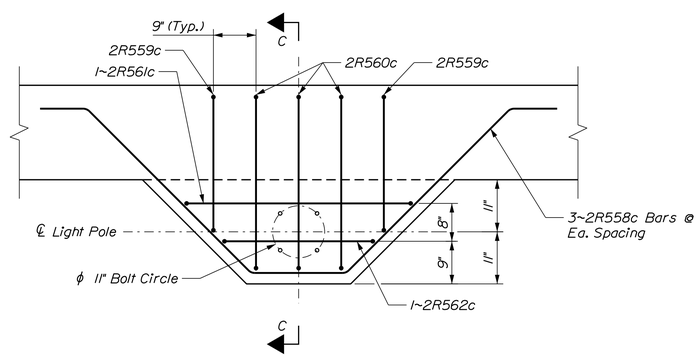


LIGHT SUPPORT ELEVATION



SECTION C-C

Retaining Wall Reinforcement not shown for clarity



LIGHT SUPPORT REINFORCING PLAN

(Curb reinforcing not shown for clarity)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

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BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	J.Legere	BY	DATE
CHECKED-REVIEWED	B.Toothaker	J.Legere	7/20
DESIGN2-DETAILED2		B.Toothaker	2/21
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 2
REINFORCEMENT 2 OF 2

SHEET NUMBER
99
OF 163

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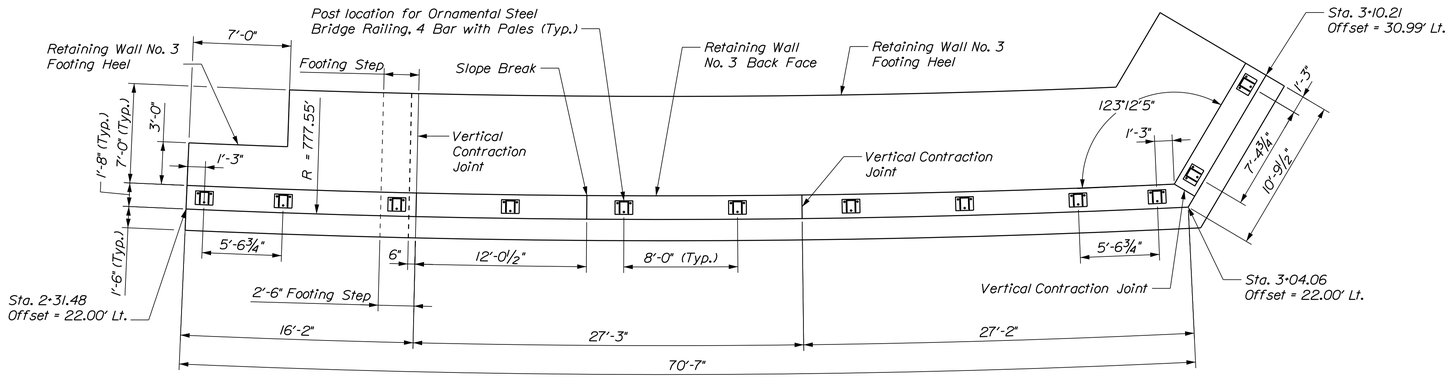
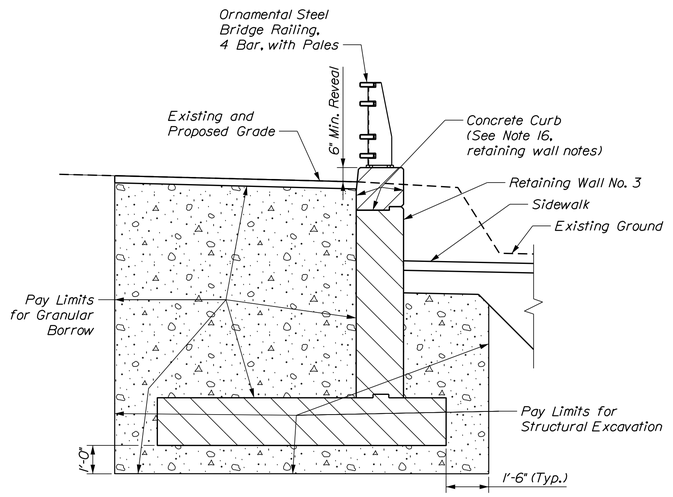
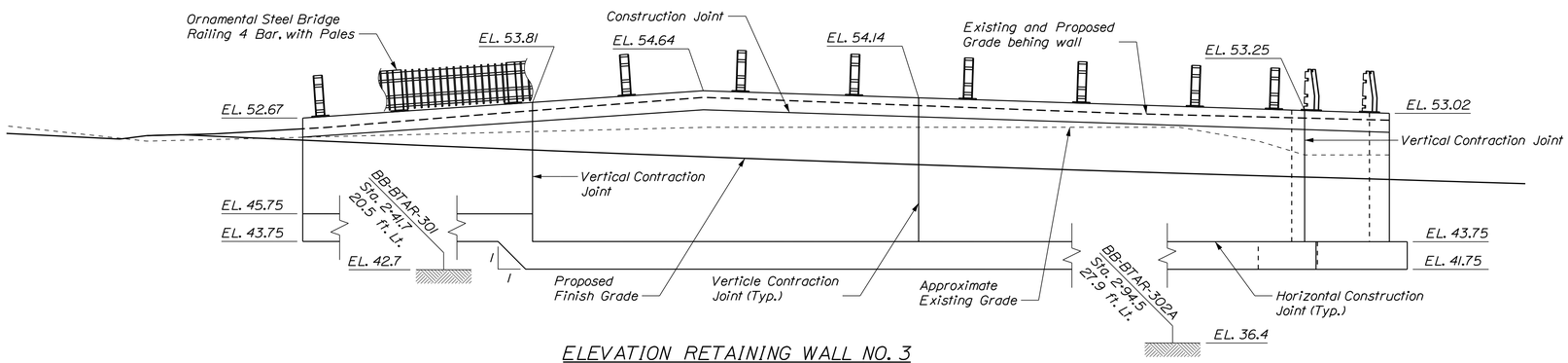
Date:10/15/2022
Username:
Division:
Filename: ...\099_Wall_02_Reinforcement_2.dgn



PLAN RETAINING WALL 3



RETAINING WALL NO. 3 DESIGN SECTION



ELEVATION RETAINING WALL NO. 3

(Ornamental Steel Bridge Railing, Rails & Pales not shown for clarity)

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile, Min.

NOTES:

See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION " for retaining wall notes

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572

P.E. NUMBER

9/23/2022

DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	7/20
CHECKED-REVIEWED	B.Toothaker	2/21
DESIGN2-DETAILED2	J.Legere	
DESIGN3-DETAILED3	B.Toothaker	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

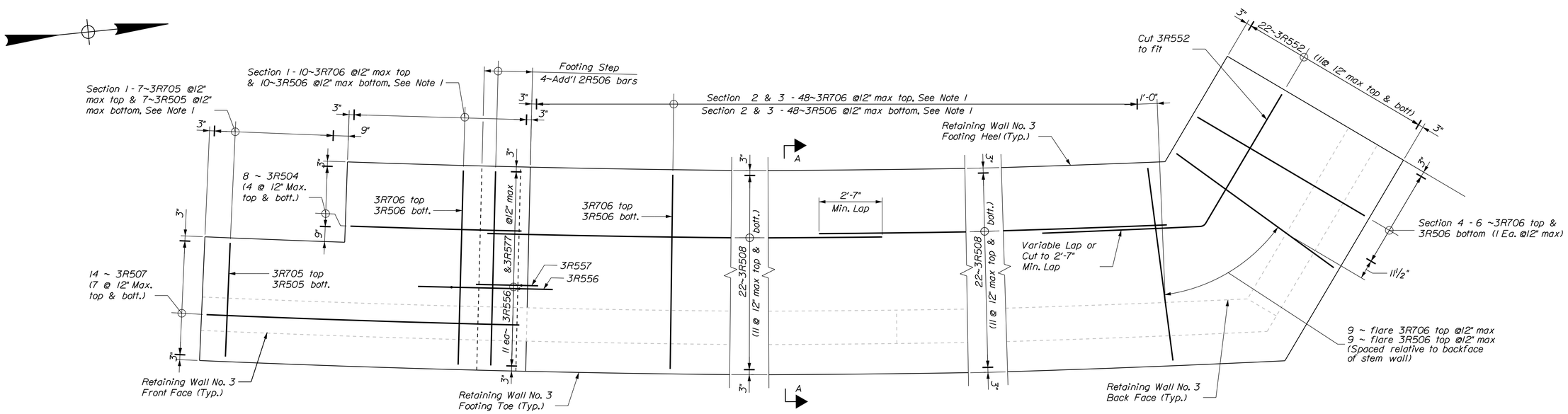
RETAINING WALL NO. 3 PLAN & ELEVATION

SHEET NUMBER

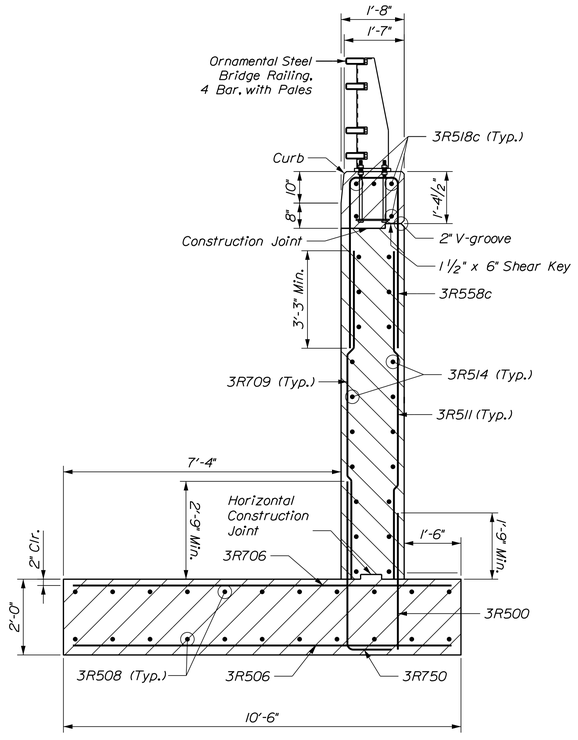
100

OF 163

Filename: ...\100_Wall_03_Plan_Elev.dgn Division: Username: Date:10/15/2022



RETAINING WALL NO. 3 FOOTING REINFORCEMENT PLAN



SECTION A-A, RETAINING WALL NO. 3

(Section 2 shown, sections 1, 3 & 4 similar)

NOTE:

1. See sheet "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.
2. Reinforcement placed radially. Specified spacing of reinforcement is relative to the backface of the retaining wall stem.

STATE OF MAINE
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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE

12572 — P.E. NUMBER

9/23/2022 — DATE

	PROJ. MANAGER	Scott Rollins	
	DESIGN-DETAILED	J.Legere	7/20
	CHECKED-REVIEWED	B.Toothaker	2/21
	DESIGN2-DETAILED2		
	DESIGN3-DETAILED3		
	REVISIONS 1		
	REVISIONS 2		
	REVISIONS 3		
	REVISIONS 4		
	FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 3 REINFORCEMENT 1 OF 2

SHEET NUMBER

101

OF 163

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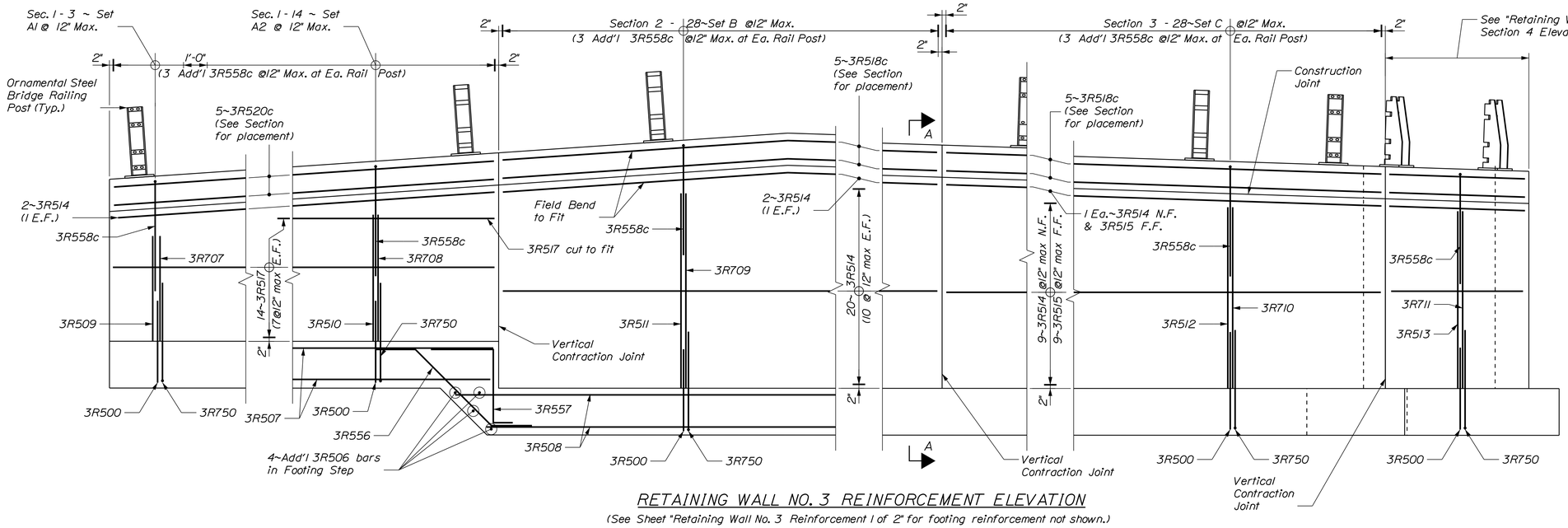
Filename: ...\101_Wall_03_Reinforcement_1.dgn Division: Username: Date:10/15/2022



RETAINING WALL NO. 3 REINFORCEMENT ELEVATION

(See Sheet "Retaining Wall No. 3 Reinforcement 1 of 2" for footing reinforcement not shown.)

SET "A1" REINFORCING BARS

WALL SECTION 1:
3R500, 3R509, 3R558c,
3R707, 3R750

SET "A2" REINFORCING BARS

WALL SECTION 1:
3R500, 3R510, 3R558c,
3R708, 3R750

SET "B" REINFORCING BARS

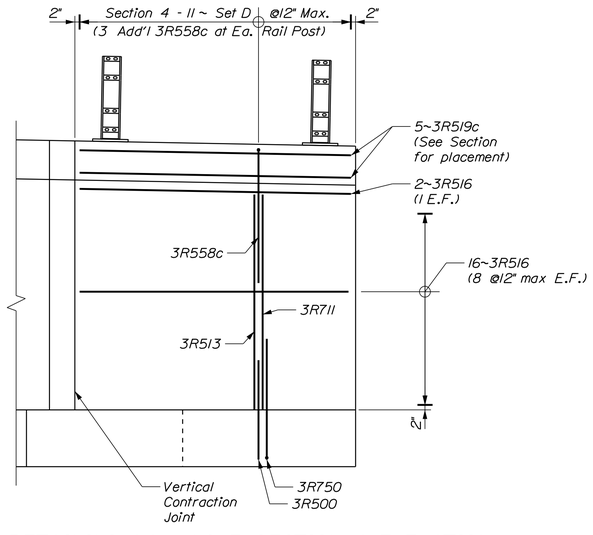
WALL SECTION 2:
3R500, 3R511, 3R558c,
3R709, 3R750

SET "C" REINFORCING BARS

WALL SECTION 3:
3R500, 3R512, 3R558c,
3R710, 3R750

SET "D" REINFORCING BARS

WALL SECTION 4:
3R500, 3R513, 3R558c,
3R711, 3R750



RETAINING WALL NO. 3, SECTION 4 ELEVATION

NOTES:

1. See "RETAINING WALL NO. 1 PLAN & ELEVATION" for retaining wall notes.
2. See "Retaining Wall No. 3 Reinforcement 1" for Section A-A.

LEGEND:

C.J.R. = Construction Joint. Roughen Surface 1/4" profile Min. (Typ.)
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

STATE OF MAINE
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BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE
12572 — P.E. NUMBER
9/28/2022 — DATE

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PROJ. MANAGER	Scott Rollins	
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DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

RETAINING WALL NO. 3
REINFORCEMENT 2 OF 2

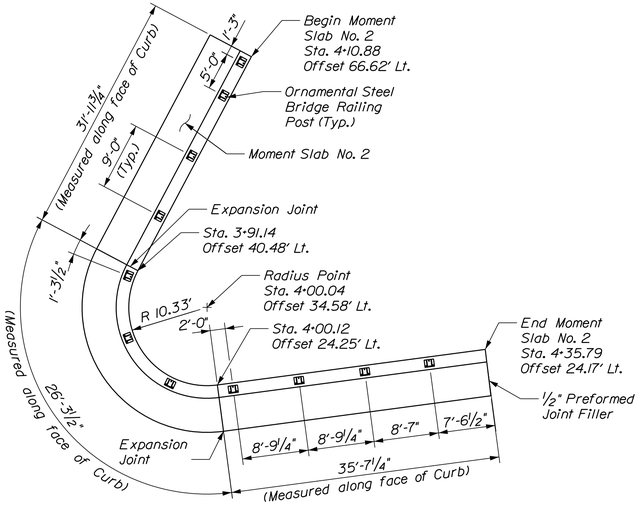
SHEET NUMBER
102
OF 163

TYLin

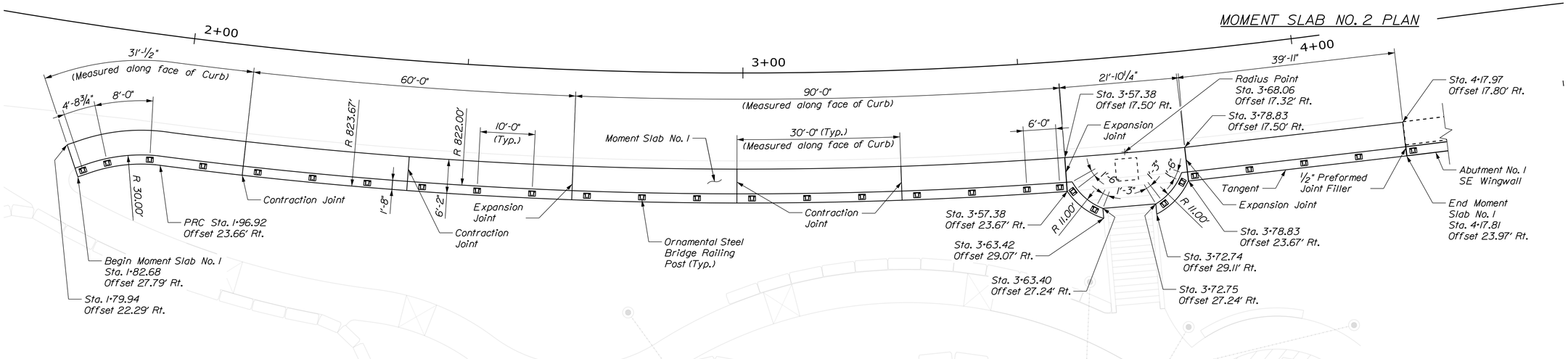
Filename: ...\102_Wall_03_Reinforcement_2.dgn Division: Username: Date:10/15/2022

MOMENT SLAB NOTES:

1. Reinforcing steel shall have a minimum concrete cover of 2 inches in the curb & footings unless otherwise noted.
2. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
3. Moment Slabs shall be backfilled with Aggregate Subbase Course Gravel. Moment Slab footings shall be backfilled with Granular Borrow. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 1'-6" behind the Moment Slab Toe in fill areas, unless otherwise noted.
4. All measurements are along exposed face of wall unless noted otherwise.
5. Concrete in Moment Slab Footings will be paid under Item 502.219, "Structural Concrete, Abutments and Retaining Walls".
6. Concrete in Moment Slab Curbs will be paid for under Item 502.49, "Structural Concrete Curbs and Sidewalks" and shall be Class "LP" concrete.



MOMENT SLAB NO. 2 PLAN



MOMENT SLAB NO. 1 PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Robins		DATE
DESIGN-DETAILED	B.Smith	J.Legere	2/21
CHECKED-REVIEWED	B.Toothaker	D.Myers	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER CUMBERLAND
BRUNSWICK-TOPSHAM

MOMENT SLAB LAYOUT
SHEET 1 OF 2

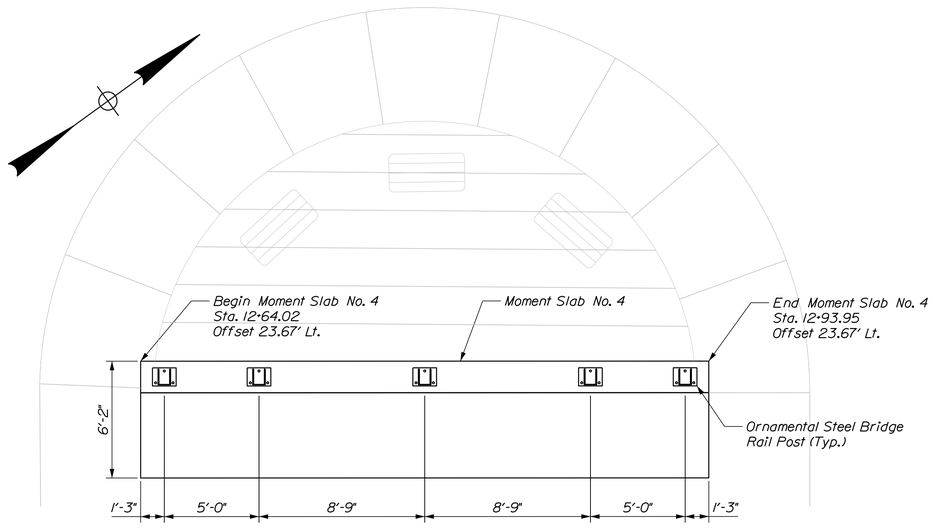
SHEET NUMBER

103

OF 163

TYLin

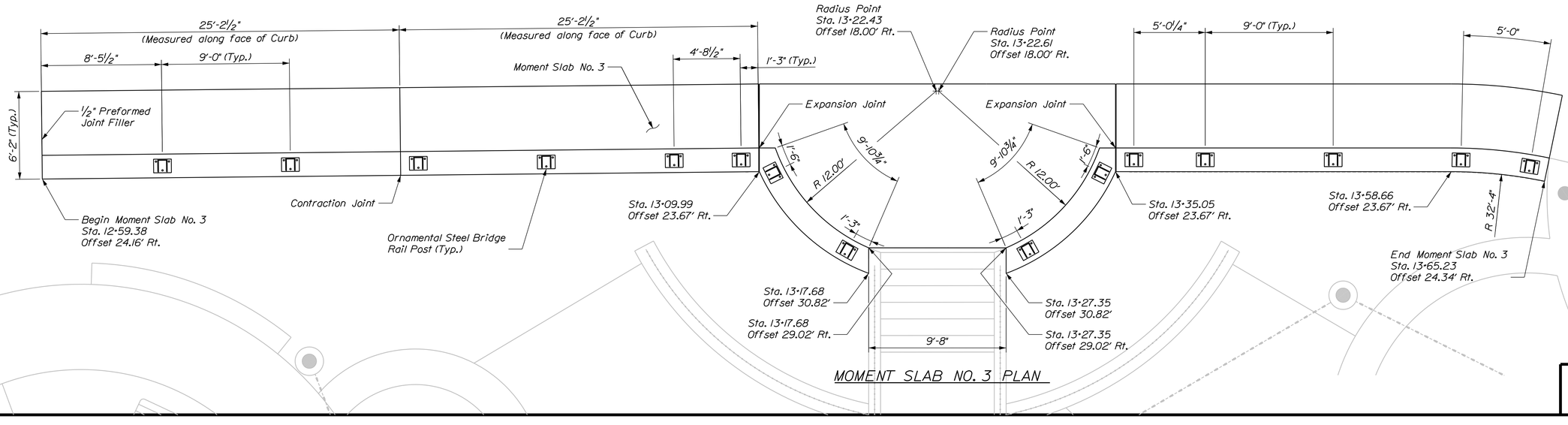
Username:
Date:10/15/2022
Division:
Filename: ...\103_Moment_Slab_Layout_1.dgn



MOMENT SLAB NO. 4 PLAN

13+00

PT = STA. 12+67.72



MOMENT SLAB NO. 3 PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Smith	J.Legere	2/21
CHECKED-REVIEWED	B.Toothaker	D.Myers	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

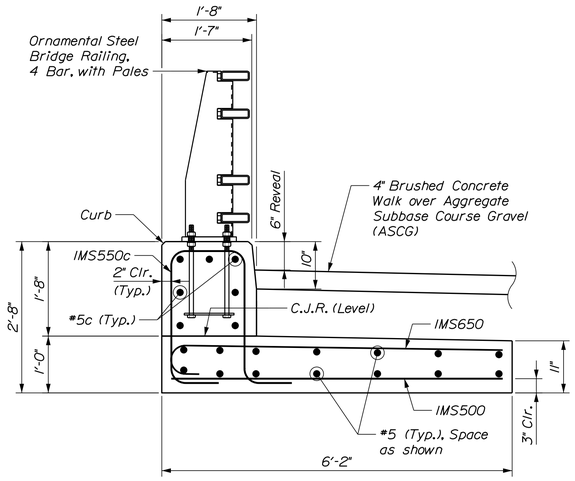
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

MOMENT SLAB LAYOUT
SHEET 2 OF 2

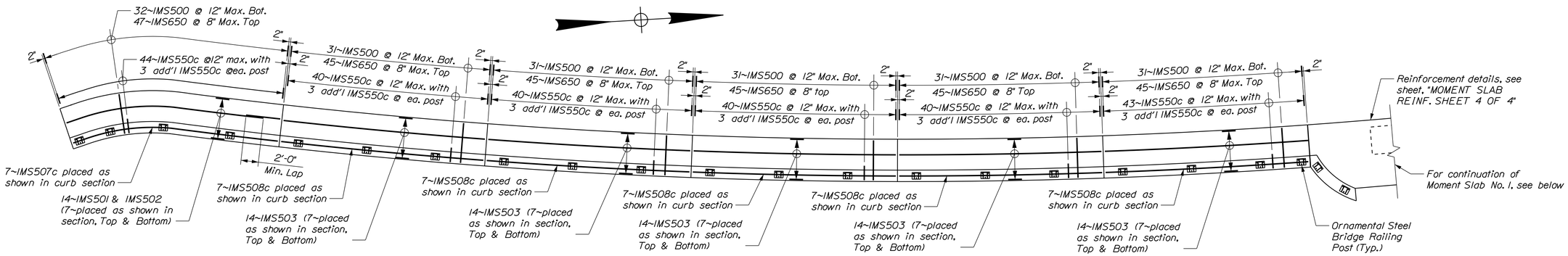
SHEET NUMBER
104
OF 163

TYLin

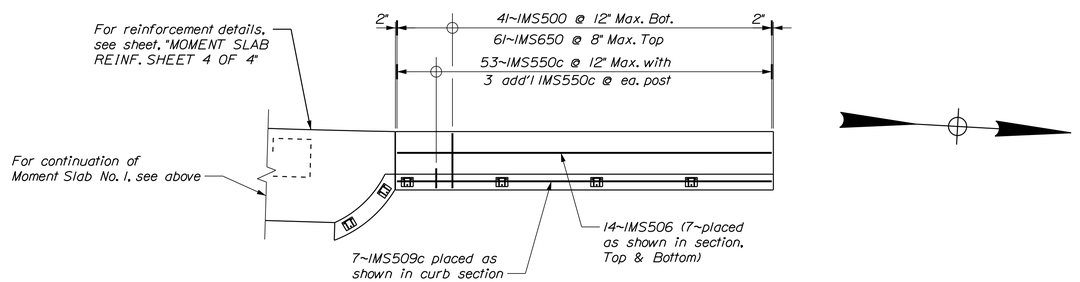
Filename: ...\104_Moment_Slab_Layout_2.dgn Division: Username: Date:10/15/2022



MOMENT SLAB NO. 1 SECTION



MOMENT SLAB NO. 1 REINFORCEMENT PLAN



MOMENT SLAB NO. 1 REINFORCEMENT PLAN, CONT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S Myers

P.E. NUMBER 12572

SIGNATURE

9/28/2022

DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	2/21
CHECKED-REVIEWED	B.Smith / D.Myers	12/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

MOMENT SLAB REINF.
SHEET 1 OF 4

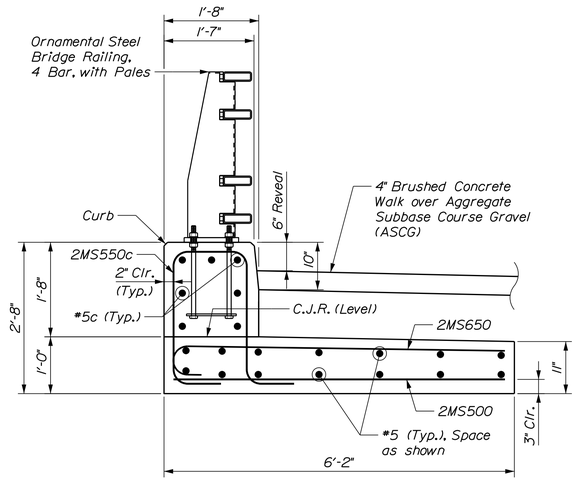
SHEET NUMBER

105

OF 163

TYLin

Filename: ...\105_Moment_Slab_Reinf_1.dgn Division: Username: Date:10/15/2022



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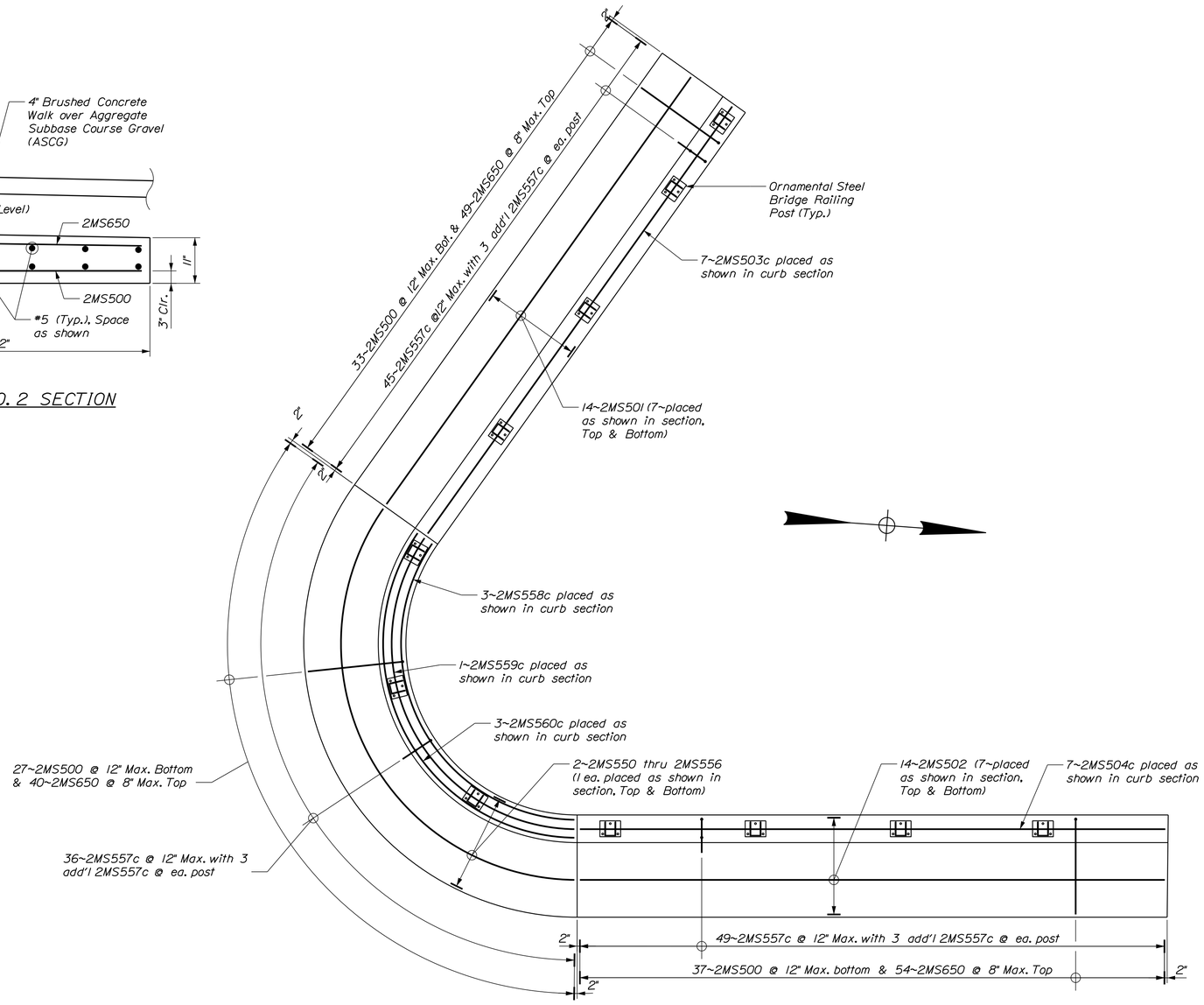

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Username:

Date:10/15/2022

Division:

Filename: ...\106_Moment_Slab_Reinf_2.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Smith	J.Legere	2/21
CHECKED-REVIEWED	D.Myers	D.Myers	12/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

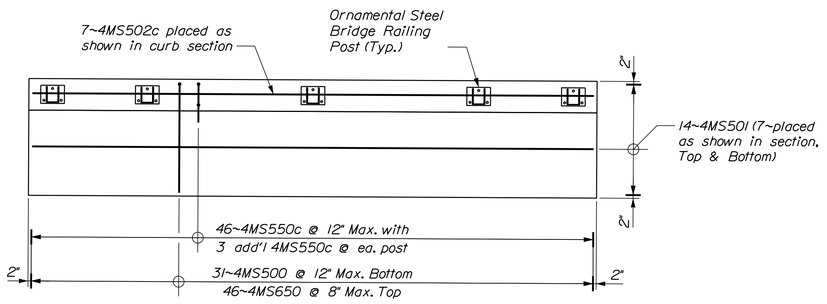
MOMENT SLAB REINF.
SHEET 2 OF 4

SHEET NUMBER

106

OF 163

TYLin



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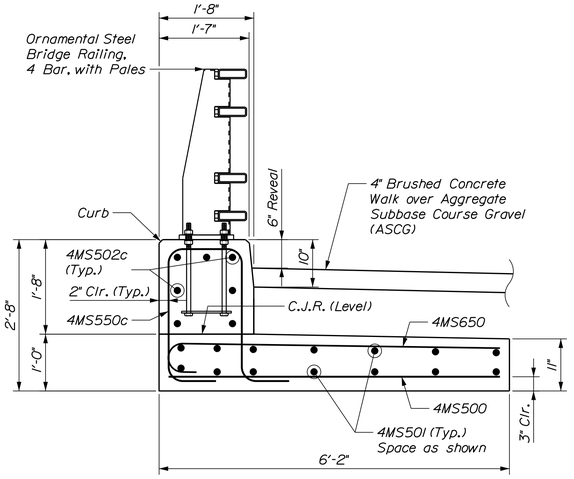

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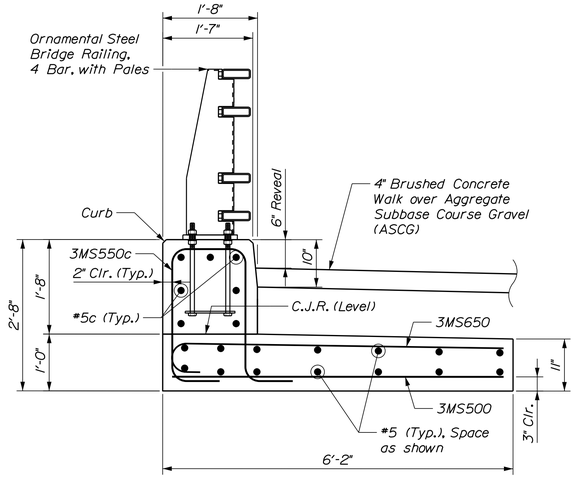

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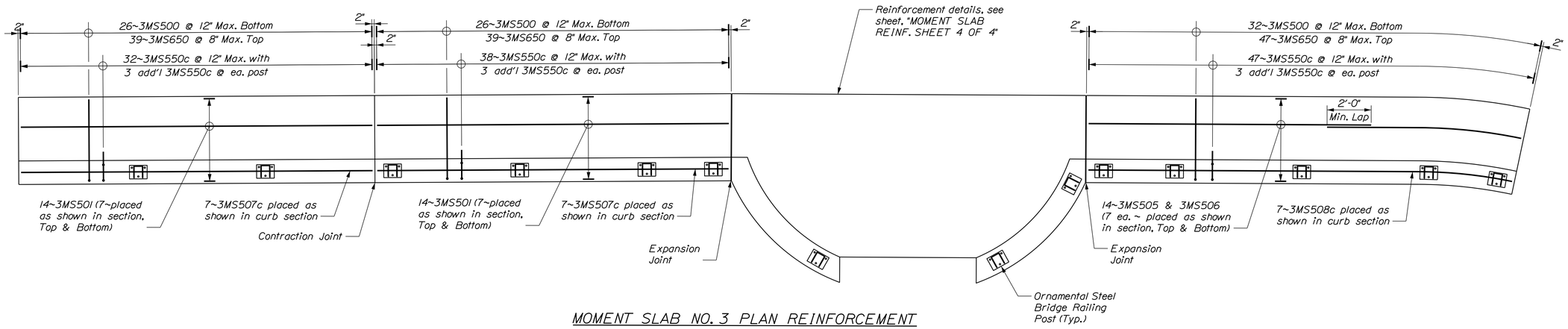


MOMENT SLAB NO. 3 PLAN REINFORCEMENT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	J.Legere 2/21
CHECKED-REVIEWED	B.Toothaker	D.Myers 2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

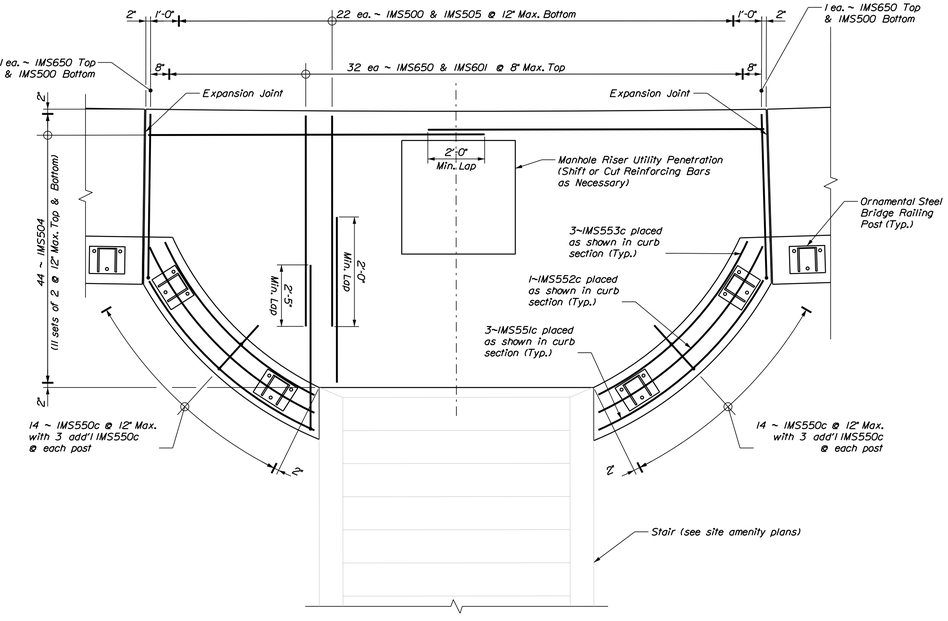
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

MOMENT SLAB REINF.
SHEET 3 OF 4

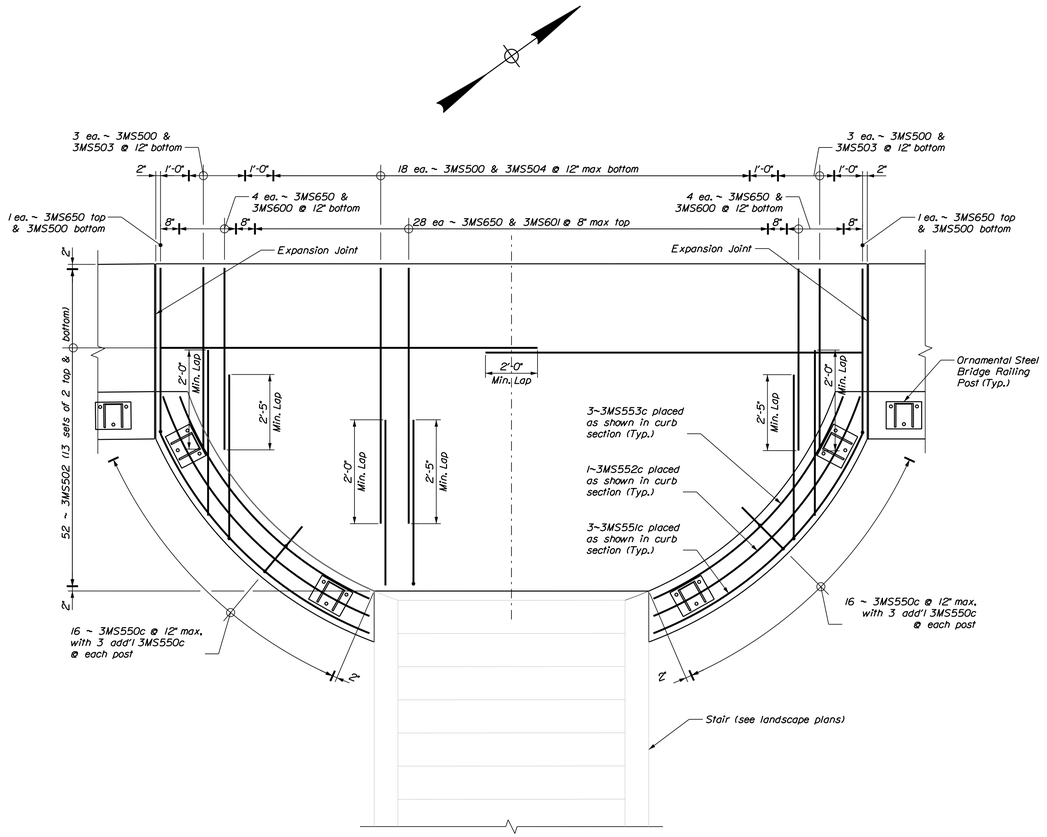
SHEET NUMBER
107
OF 163

TYLin

Filename: ...\107_Moment_Slab_Reinf_3.dgn Division: Username: Date:10/15/2022



MOMENT SLAB NO. 1 BUMPOUT REINFORCEMENT



MOMENT SLAB NO. 3 BUMPOUT REINFORCEMENT

NOTES:

1. For Rail details, see "Ornamental Bridge Rail Details" sheets.

Username: Date:10/15/2022

Division:

Filename: ...\108_Moment_Slab_Reinf_4.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

DANIEL S. MYERS
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins	BY	
DESIGN-DETAILED	B.Smith	J.Legere	7/20
CHECKED-REVIEWED	B.Toothaker	D.Myers	2/21
DESIGN2-DETAILED2			
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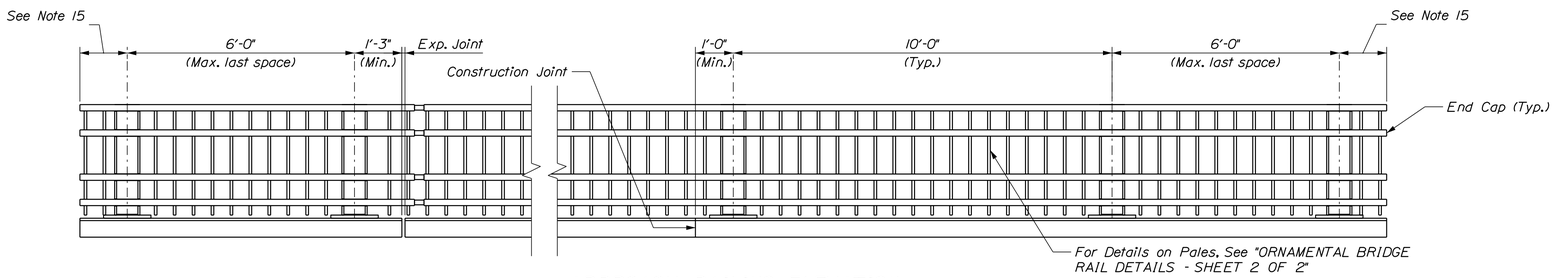
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

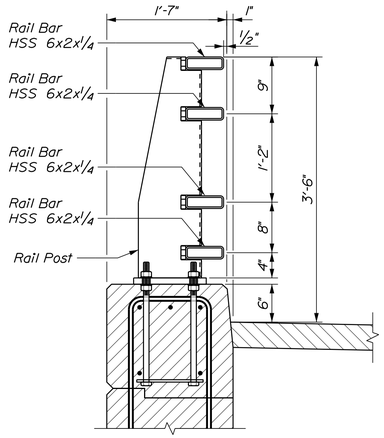
MOMENT SLAB REINF.
SHEET 4 OF 4

SHEET NUMBER
108
OF 163

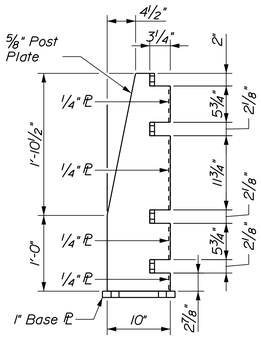
TYLin



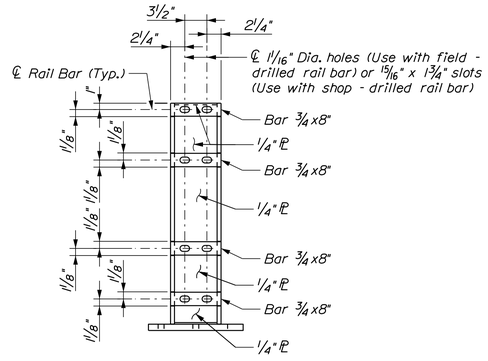
APPROACH RAILING ELEVATION



TYPICAL RAILING SECTION
Pale Panel not shown



RAIL POST SIDE ELEVATION



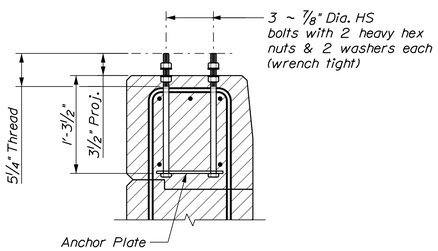
RAIL POST FRONT ELEVATION

RAILING NOTES

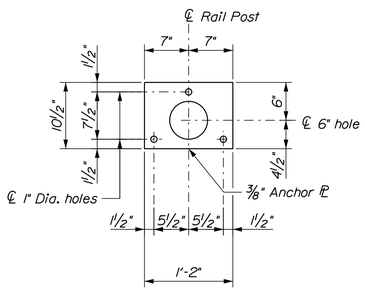
1. All work and materials shall conform to the provisions of section 507 - Railings of the Standard Specifications and Special Provision Section 507, Railings, Ornamental Steel Bridge Railing.
2. Tubing shall meet the longitudinal CVN requirements of 15ft.lb. at 0°F or proportional values of sub-size specimens. Testing shall be done in accordance with ASTM A 673. The "H" frequency shall be used and the material shall be as-rolled.
3. Twenty-five percent of the post-to-base welds in a production lot shall be tested by the Magnetic Particle Method. If rejectable discontinuities are found, another twenty-five percent of that production lot shall be tested. If rejectable discontinuities are found in the second twenty-five percent, all post-to-base welds in that lot shall be tested. Acceptance criteria shall be in accordance with the latest edition of the AWS D1.5 Bridge Welding Code.
4. All exposed cut or sheared edges shall be broken and free of burrs.
5. Rail posts shall set normal to grade unless otherwise shown.
6. Post base plates shall be flat after fabrication.
7. Lengths of rail bar shall be attached to a minimum of 2 rail posts and to at least 4 posts whenever possible.
8. Rail bars shall not be shop spliced.
9. Rail bar expansion joints shall be provided in any bay spanning a wall expansion joint. Expansion joint width shall be one inch at 45°F.
10. All parts except the post anchorage, the reinforcement assembly and the anchor plate shall be galvanized after fabrication in accordance with ASTM A 123, except that hardware shall meet the requirements of either ASTM A 153 or ASTM B 695, Class 50, Type 1. Parts except hardware to be galvanized shall be blast cleaned prior to galvanizing in accordance with SSPC - SP6.
11. Venting and pick-up holes shall be shown on the shop drawings.
12. Anchor bolts may be tack welded to anchorage.
13. Rail posts shall be in place and in proper alignment prior to placing the curb concrete.
14. After installation of the rail bars, the exposed rail bolt threads shall receive two coats of zinc-rich paint.
15. 1'-3" minimum typical at ends. 1'-0" at ends abutting bridge rail concrete posts at ends of bridge.

MATERIALS

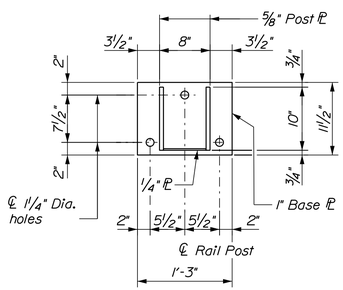
Rail Bars	ASTM A 500, Grade B
Rail Post Plates & Bases	ASTM A 572, Grade 50
Rail Bar Splice Sleeves	ASTM A 572, Grade 50
Anchor & Reinforcement Assemblies	ASTM A 36
Plate Washers	ASTM A 36
Anchor Bolts	ASTM F 3125, Grade A325 or ASTM F 1554, Grade 105
Rail Bolts	ASTM A 36
Nuts for Rail Bolts	ASTM A 563
Splice Bolts	ASTM A 325
Lock Washers	ANSI/ASME B18.21.1-1994



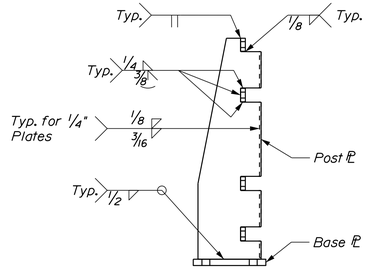
ANCHORAGE DETAIL



ANCHOR PLATE PLAN



RAIL POST PLAN



RAIL POST WELD DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2260(300)
WIN 22603.00
BRIDGE PLANS
BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER
P.E. NUMBER 12572
DATE 9/28/2022
SIGNATURE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	J.Legere	7/20	
CHECKED-REVIEWED	D.Myers	7/20	
DESIGN2-DETAILED2			
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REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

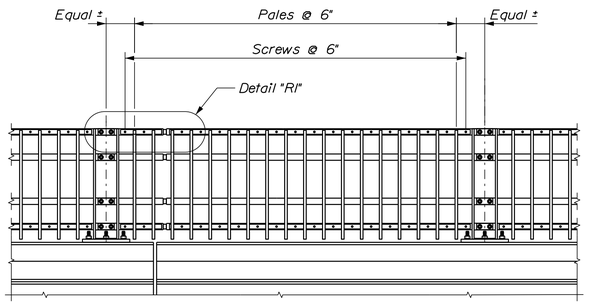
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ORNAMENTAL BRIDGE RAIL DETAILS - SHEET 1 OF 2

SHEET NUMBER 109
OF 163

TYLin

Filename: ...\109_Ornamental_Bridge_Rail_1.dgn Division: Username: Date:10/15/2022



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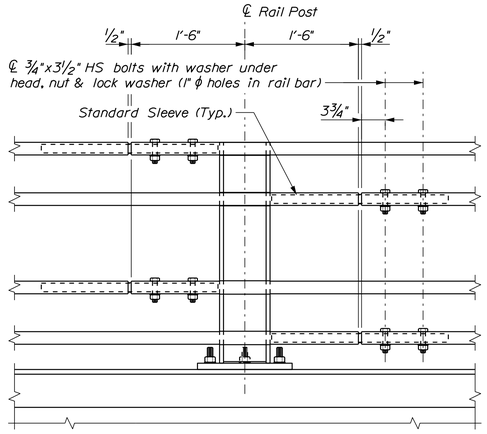
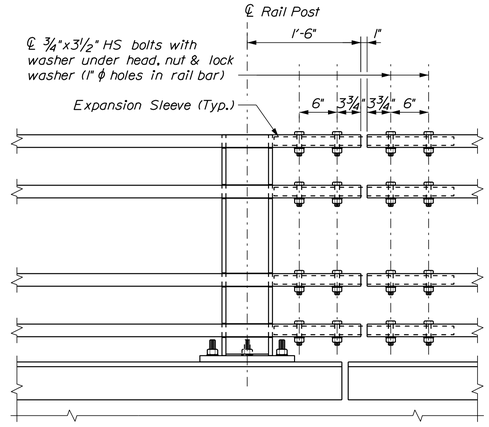


STANDARD SPLICE ELEVATION



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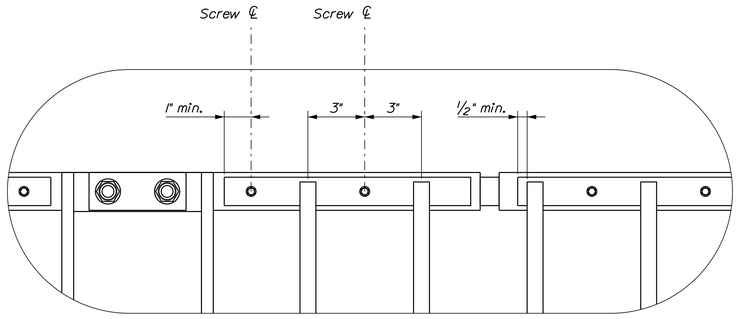
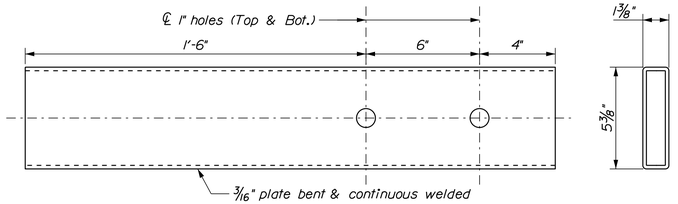
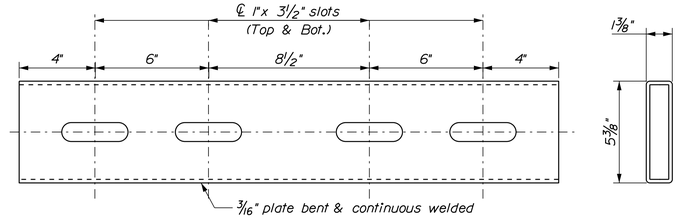


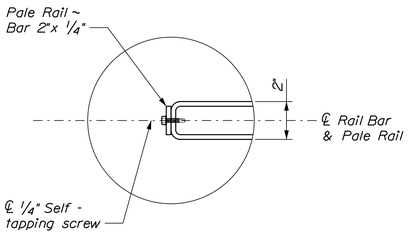
DETAIL "RI"



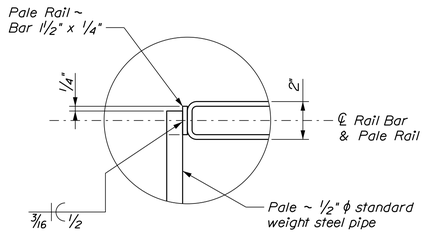
STANDARD SLEEVE DETAILS



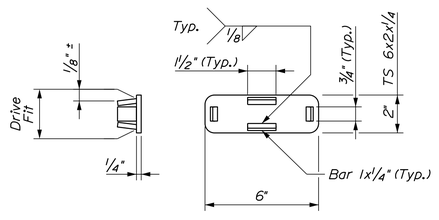
EXPANSION SLEEVE DETAILS



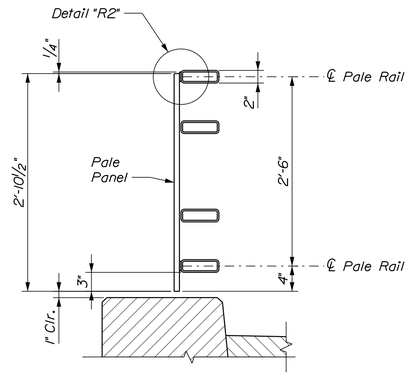
DETAIL "R2"
Between Pales



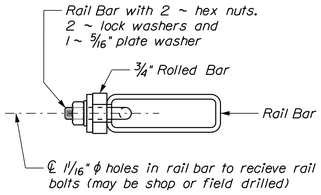
DETAIL "R2"
At Pale



RAIL BAR END CAP



PALE PANEL SECTION



RAIL BAR CONNECTION DETAIL

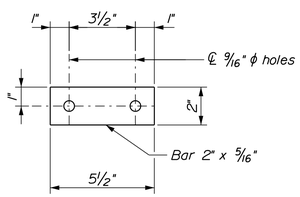
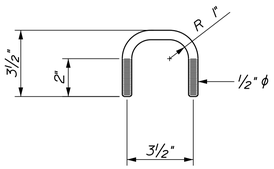


PLATE WASHER DETAIL



RAIL BOLT DETAIL

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STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	7/20
CHECKED-REVIEWED	D.Myers	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

ORNAMENTAL BRIDGE RAIL
DETAILS - SHEET 2 OF 2

SHEET NUMBER
110
OF 163

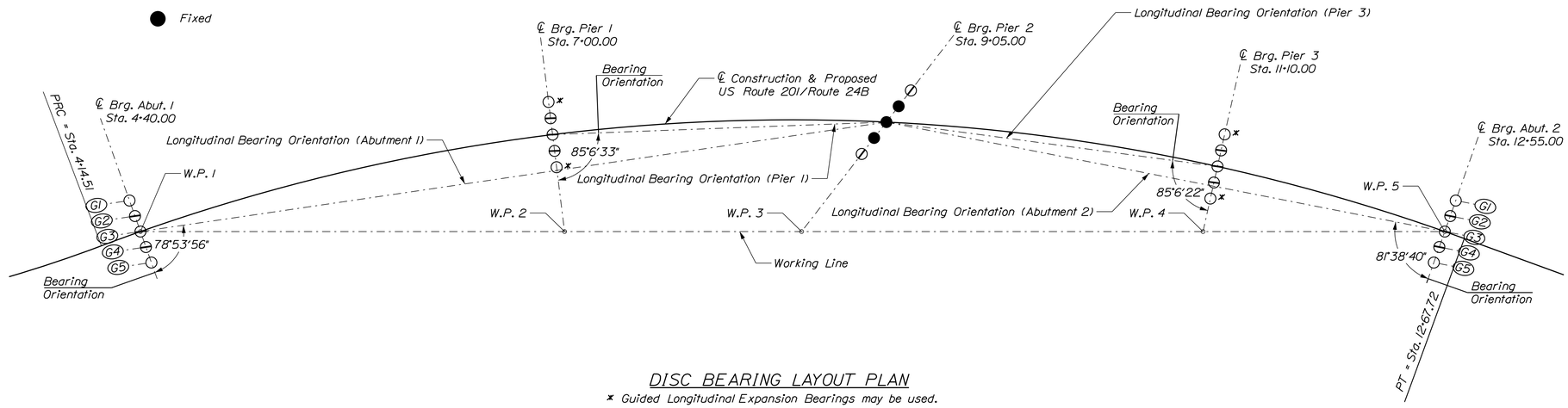
TYLin

Filename: ...\110_Ornamental_Bridge_Rail_2.dgn Division: Username: Date:10/15/2022

Username:
Division:
Filename: ...\111_Bearing_Layout.dgn
Date:10/15/2022

LEGEND:

- Non - Guided Expansion
- Guided Longitudinal Expansion
- Guided Radial Expansion
- Fixed



DISC BEARING LAYOUT PLAN

* Guided Longitudinal Expansion Bearings may be used.

BEARING NOTES:

1. The actual dimension "H" shall be the responsibility of the Contractor. Dimensions and sizes of plates not shown are dependent on design loads, bearing type, capacity, and the manufacturer of the bearings. The shop drawings, prepared by the manufacturer, shall provide all pertinent bearing information. The final bridge seat elevations shall be determined by the Contractor and submitted with the shop drawings for approval prior to construction of the substructure units.
2. Design of the sole plates and masonry plates is the sole responsibility of the bearing manufacturer. Payment will be considered incidental to the disc bearing pay items, no separate payment will be made.
3. Sole plates shall be beveled -0.9% at all bearings. Bearing Sole Plate Bevel is a positive % upstation.
4. The design temperature range shall be 125 °F (-20 °F to 105 °F). Bearings shall be designed with a thermal load factor of 1.0.
5. Strength Limit State rotations shown in the Disc Bearing Design Table do not include an allowance for uncertainties of 0.005 radians, as defined in AASHTO LRFD Bridge Design Specifications, 8th Edition.
6. In the Bearing Setting Corrections Table, a negative dimension (-1⅛) indicates a downstation direction. A positive dimension (+½) indicates an upstation direction.
7. Temperatures shown in the Bearing Setting Corrections Table are those of the steel girders and not necessarily the ambient air temperature.
8. The abbreviation "PTFE" indicates polytetraflouroethylene.
9. All PTFE, including guide and restraint surfaces, shall be unfilled.
10. PTFE minimum bearing pressure shall be 1 ksi under total Service loading.
11. Average compressive stresses on the disc shall be calculated using the minimum plan area of the unstressed disc, excluding the area of any holes.
12. At the Contractor's option, bearing anchorage shall either be anchor rods with washers and double nuts, or anchor bolts with couplers. Anchor rods and anchor bolt couplers shall be cast into substructure unit concrete, field drilling will not be permitted.
13. Anchorage spacing shall be coordinated with the bearing manufacturer and with placement of reinforcing steel.
14. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swedged on the embedded portion of the rod.
15. Heavy hex nuts for anchor rods shall meet the requirements of ASTM A563, Grade D or DH.
16. Anchor bolts shall meet the requirements of ASTM F3125, Type 1.
17. Anchor bolts, rods, washers, nuts, and shear pins shall be galvanized in accordance with ASTM A153. Payment for galvanization will be considered incidental to the disc bearing pay items, no separate payment will be made.
18. All bearing steel, unless otherwise specified, shall meet the requirements of ASTM A709/A709M, Grade 50.
19. All bearing steel, unless otherwise specified, shall be coated in accordance with Standard Specifications Section 506, "Shop Applied Protective Coating - Steel, Hot-Dip Galvanizing".
20. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
21. Bearing installation shall be in strict conformance with the Standard Specifications and the manufacturer's recommendations.
22. Upset anchor rod threads after installation of each bearing.

DISC BEARING DESIGN TABLE

Location	Girder	Bearing Type	Vertical (kips)				Horizontal (kips)						Dim. "H" (in) (Note No. 1)	Design Rotation (radians) (Note No. 5)		Total Long. Movement (in.)
			Strength	Extreme Event	Service		Strength		Extreme Event		Service					
			Total Load	Total Load	Dead Load	Total Load	Longitudinal	Transverse	Longitudinal	Transverse	Longitudinal	Transverse		Dead Load	Live Load	
Abut. No. 1	1 & 5	Non-Guided	780	490	420	575	15 **	15 **	25 *	25 *	10 **	10 **	12	0.015	0.008	5.44
	2, 3, & 4	Guided Longitudinally	730	445	375	530	15 **	25	25 *	90	10 **	20	12	0.014	0.006	5.44
Pier No. 1	1 & 5	Non-Guided	1785	1130	975	1310	20 **	30 **	50 *	50 *	15 **	20 **	12	0.012	0.003	2.4
	2, 3, & 4	Guided Longitudinally	1785	1130	975	1310	20 **	45	60 *	235	15 **	30	12	0.011	0.003	2.4
Pier No. 2	1 & 5	Guided Radially	1240	720	575	880	40	25 **	140	35 *	30	15 **	12	0.011	0.005	-
	2, 3, & 4	Fixed	1240	720	575	880	40	35	140	145	30	25	12	0.011	0.004	-
Pier No. 3	1 & 5	Non-Guided	1135	685	580	815	15 **	20 **	35 *	35 *	15 **	15 **	12	0.01	0.005	2.4
	2, 3, & 4	Guided Longitudinally	1135	685	580	815	15 **	30	35 *	160	15 **	20	12	0.01	0.004	2.4
Abut. No. 2	1 & 5	Non-Guided	300	165	125	210	10 **	10 **	10 *	10 *	10 **	5 **	8	0.012	0.007	4.1
	2, 3, & 4	Guided Longitudinally	355	180	125	240	10 **	10	10 *	35	10 **	10	8	0.012	0.006	4.1

* Horizontal Extreme Event loads for unrestrained directions will equal maximum horizontal load that can be transferred via friction of the sliding surface (values shown are estimated based on a coefficient of friction of 0.05)

** Horizontal loads for unrestrained directions assume no slip of the sliding surface. If maximum horizontal force transmitted via friction of the sliding surface is less, use the friction-based limiting load instead.

BEARING SETTING CORRECTIONS TABLE

	Dimension "X" (in)					
	15° F	30° F	45° F	60° F	75° F	90° F
Abutment No. 1	1 1/8	½	0	-½	-1 1/8	-1 5/8
Pier No. 1	½	¼	0	-¼	-½	-¾
Pier No. 2	0	0	0	0	0	0
Pier No. 3	-½	-¼	0	¼	½	¾
Abutment No. 2	-⅞	-⅜	0	⅜	⅞	1 ¼

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

			DATE
PROJ. MANAGER	Scott Robbins		
DESIGN-DETAILED	B.Smith	B.Smith	4/20
CHECKED-REVIEWED	B.Toothaker	B.Toothaker	4/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BEARING LAYOUT

SHEET NUMBER

111

OF 163

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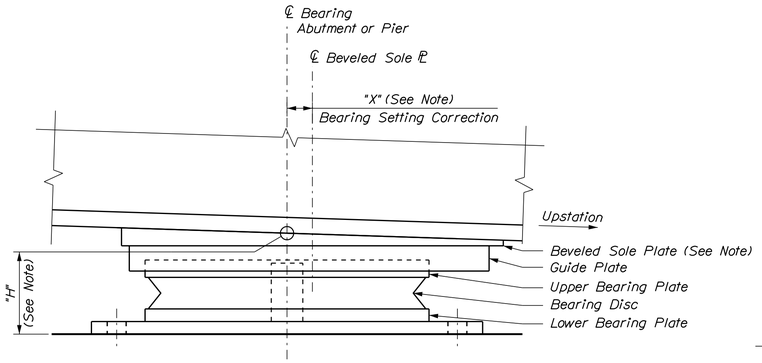

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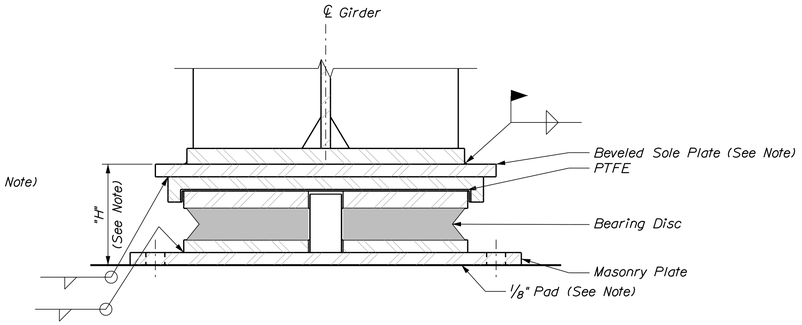
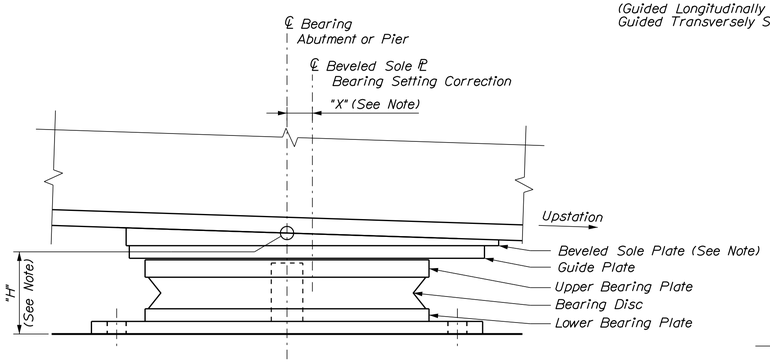


TRANSVERSE SECTION

GUIDED BEARING

(Guided Longitudinally Shown, Guided Transversely Similar)



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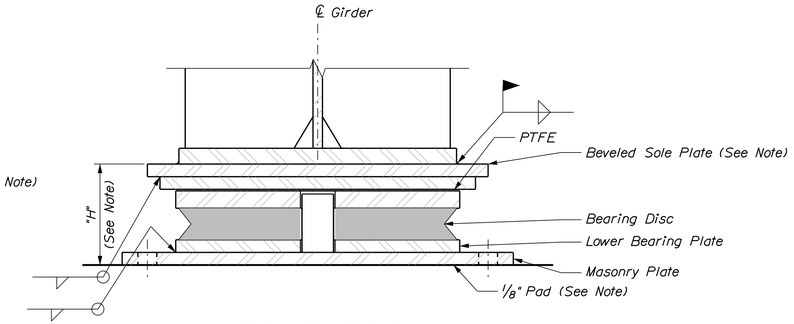

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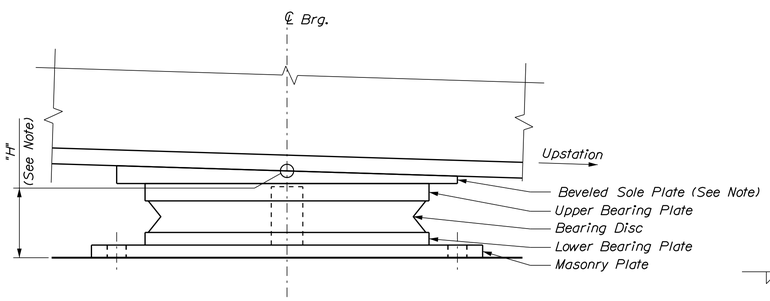
NON-GUIDED BEARING



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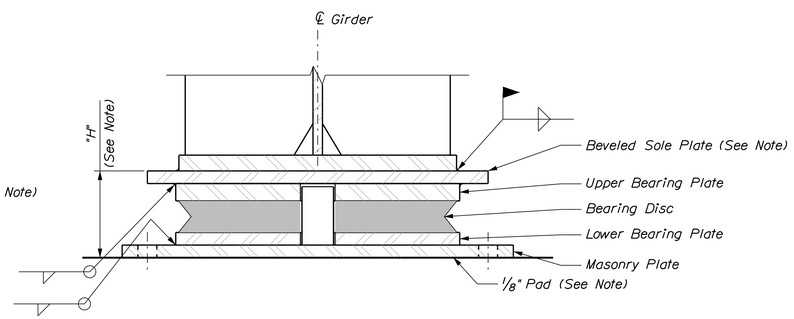

TRANSVERSE SECTION

FIXED BEARING

Note:
See sheet "BEARING LAYOUT" for Bearing notes, setting, and design tables.

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BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

SIGNATURE

12572
P.E. NUMBER

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DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	4/20
CHECKED-REVIEWED	B.Toothaker	4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BEARING DETAILS

SHEET NUMBER
112
OF 163

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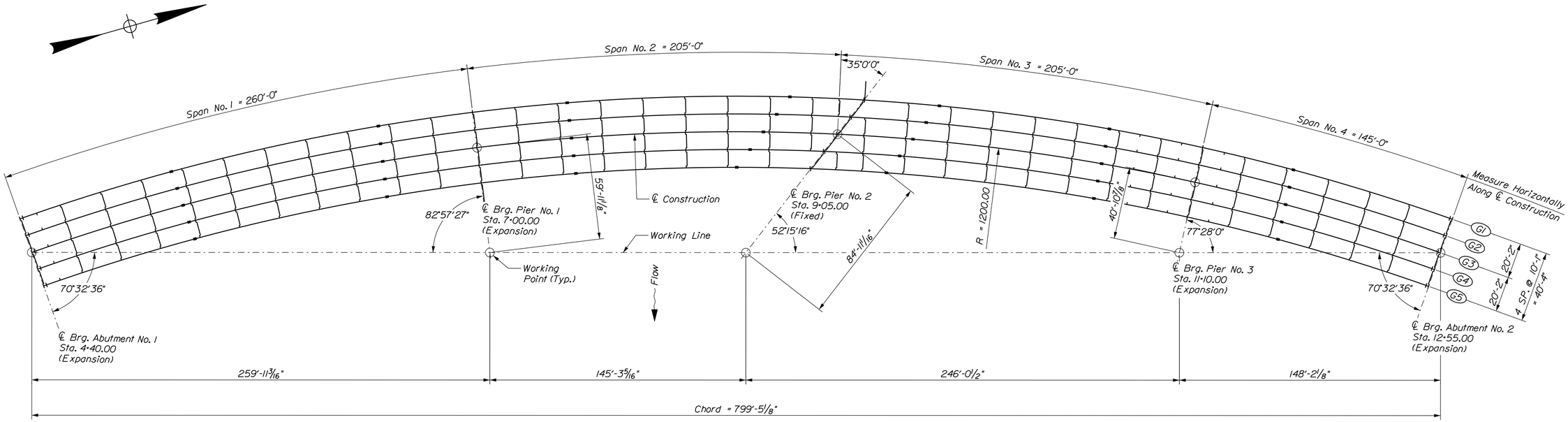

FRAMING PLAN LAYOUT

STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections.
2. 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 1 foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 1 foot of other transverse welds (e.g. connection plates to web welds) on either flange or web.
3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be at least 20 feet in length unless otherwise shown on the Plans.
4. One longitudinal butt weld splice will be allowed in the web of the haunched sections of the girders. Feathered edges between the longitudinal welds and the bottom flanges will not be allowed.
5. Bearing and jacking stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.
6. Intermediate crossframe or diaphragm connection plates may be either plumb or normal to the top flange.
7. All crossframes and diaphragms except those at Pier No. 2 are radial.
8. Structural steel shall be detailed and fabricated for Steel Dead Load Fit.
9. All structural steel shall be ASTM A709, Grade 50 unless otherwise noted.
10. Filler plates may be steel conforming to the requirements of A709, Grade 36.
11. Provide a "drip bar" on the high side of each pier and abutment on all girders in accordance with Standard Detail 504(10).
12. Structural steel was designed with a vertical construction load of 50 lb/sf and a lateral wind velocity of 60 mph.
13. All bolts, nuts, and washers shall be hot dip galvanized in accordance with ASTM A153.
14. Bolted field splice connections shall be made using 7/8" diameter, ASTM F3125 Grade A325 Type 1 high strength bolts. Bolt hole size shall be 15/16" diameter. Bolt threads shall be excluded from the shear plane.
15. Bolted diaphragms or crossframe connections shall be made using 7/8" diameter, ASTM F3125 Grade A325 Type 1 high strength bolts. Hole size shall be 15/16" diameter. The minimum edge distance shall be 1 1/2" unless otherwise shown. Oversized or short-slotted holes are not permitted. Bolt threads shall be excluded from the shear plane of crossframe or diaphragms connections.
16. Ends of girder webs shall be vertical under full dead load.
17. At the Contractor's option, the Diaphragms and Crossframes may be Hot-Dipped Galvanized in accordance with Standard Specifications Section 506, Shop Applied Protective Coating, as approved by the Resident. Payment will be considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied), no separate payment will be made.
18. All web, flange, field splice plates, and crossframe members (including connection plates) in tension or stress reversal areas shall conform to Zone 2 Charpy V-notch impact test requirements of AASHTO M270.
19. Connection plates shall be 5/8" minimum thickness and 11" minimum width and shall be welded to the web and flanges with 5/16" fillet welds on each side. Intermediate stiffeners shall be 5/8" x 7" minimum and shall be welded to the web with 5/16" fillet welds on each side.
20. Cross frames located at abutments shall be fabricated with the stems of T-sections facing away from the backwall.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/23/2022

DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	S.Morgan	4/20
CHECKED-REVIEWED	C.Taylor	4/20
DESIGN2-DETAILED2	D.Myers	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FRAMING LAYOUT PLAN

SHEET NUMBER

113

OF 163

TYLin

Date:10/15/2022

Username:

Division:

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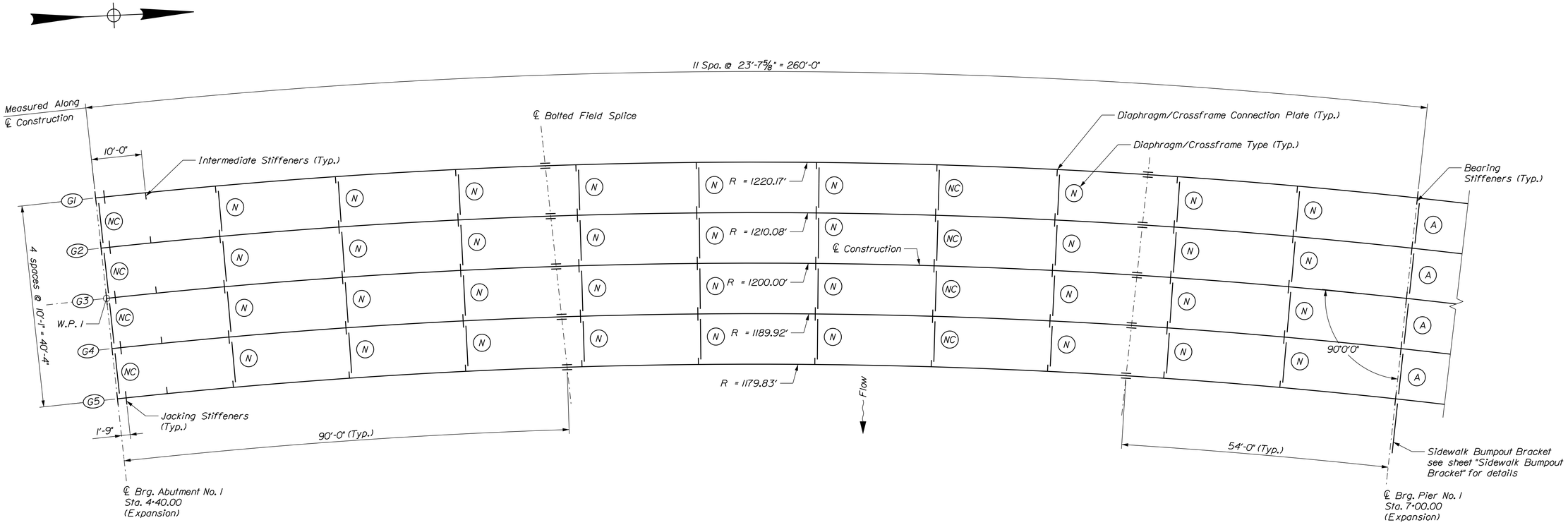

FRAMING PLAN - SPAN NO. 1

Username:

Division:

Date:10/15/2022

Filename: ...\114_Framing_Span_1.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

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DATE

	DATE
BY	
S.Morgan	4/20
D.Myers	4/20

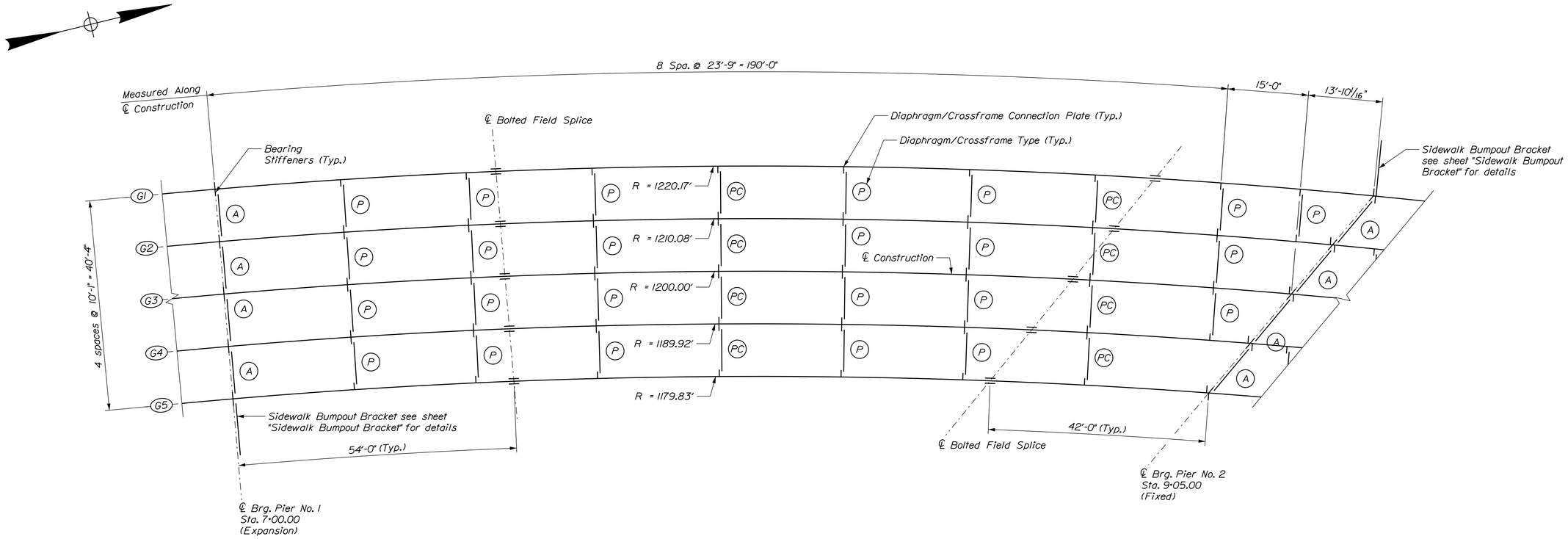
PROJ. MANAGER: Scott Rollins
DESIGN-DETAILED: C.Taylor
CHECKED-REVIEWED: D.Myers
DESIGN2-DETAILED2:
DESIGN3-DETAILED3:
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FRAMING PLAN
SPAN NO. 1

SHEET NUMBER
114
OF 163

TYLin



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Date:10/15/2022

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

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PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	C.Taylor	S.Morgan 4/20
CHECKED-REVIEWED	D.Myers	D.Myers 4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

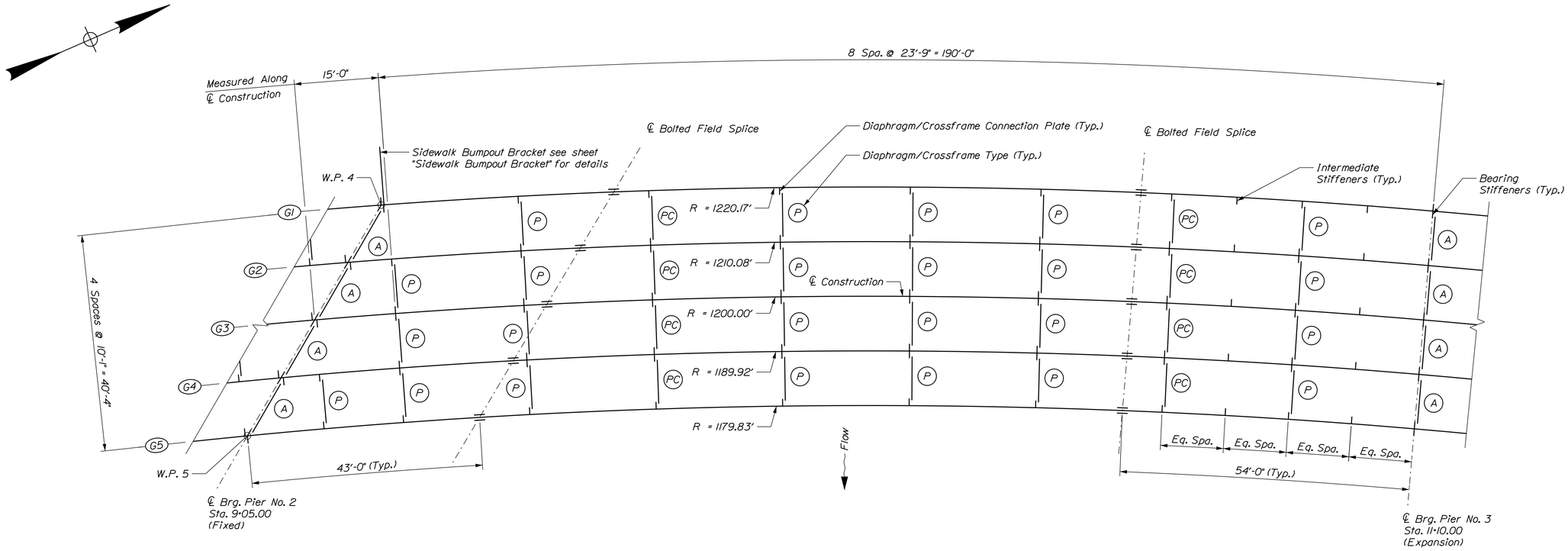
FRAMING PLAN
SPAN NO. 2

SHEET NUMBER

115

OF 163

TYLin



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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

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DATE

	DATE
BY	
S.Morgan	4/20
D.Myers	4/20

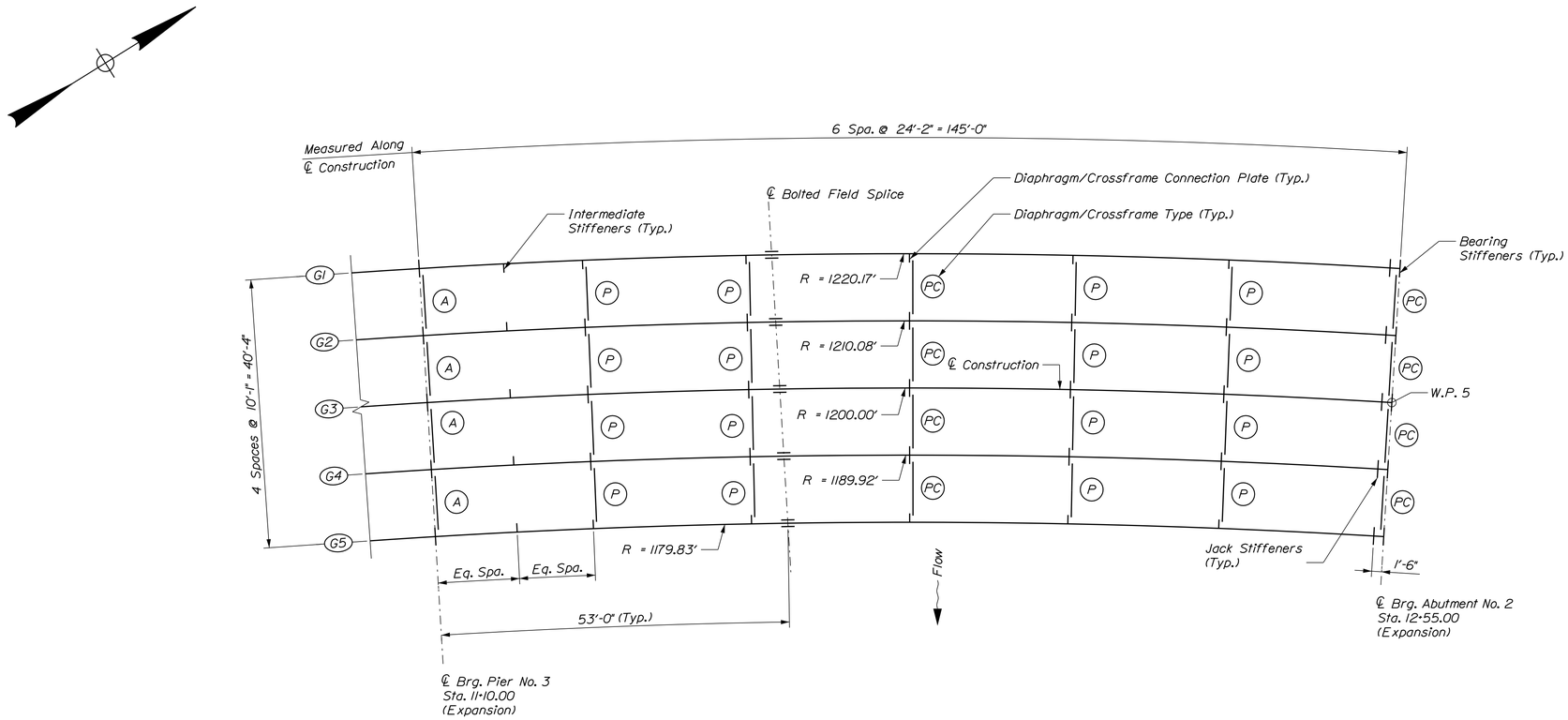
PROJ. MANAGER	Scott Rollins
DESIGN-DETAILED	C.Taylor
CHECKED-REVIEWED	D.Myers
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FRAMING PLAN
SPAN NO. 3

SHEET NUMBER
116
OF 163

TYLin



FRAMING PLAN - SPAN NO. 4

Username:

Date:10/15/2022

Division:

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

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DATE

PROJ. MANAGER	Scott Robins		
DESIGN-DETAILED	C.Taylor	S.Morgan	4/20
CHECKED-REVIEWED	D.Myers	D.Myers	4/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

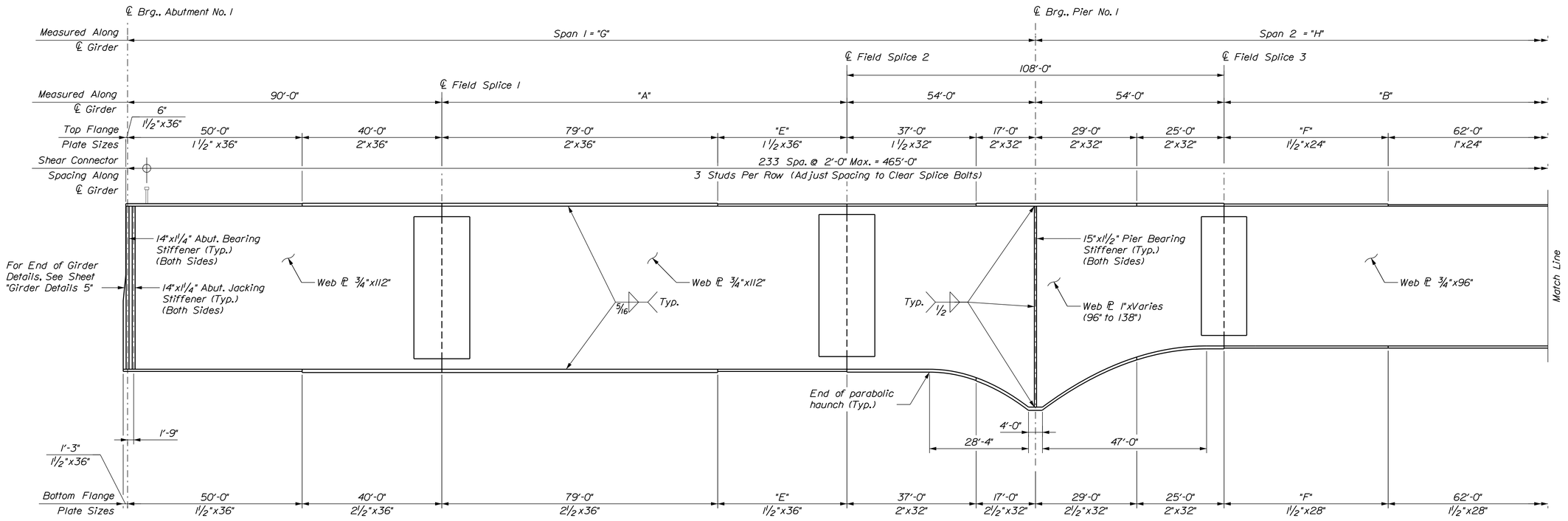
FRAMING PLAN
SPAN NO. 4

TYLin

SHEET NUMBER

117

OF 163



GIRDER ELEVATION
GIRDERS 1 - 2

Intermediate Stiffeners and Connection Plates not Shown for Clarity

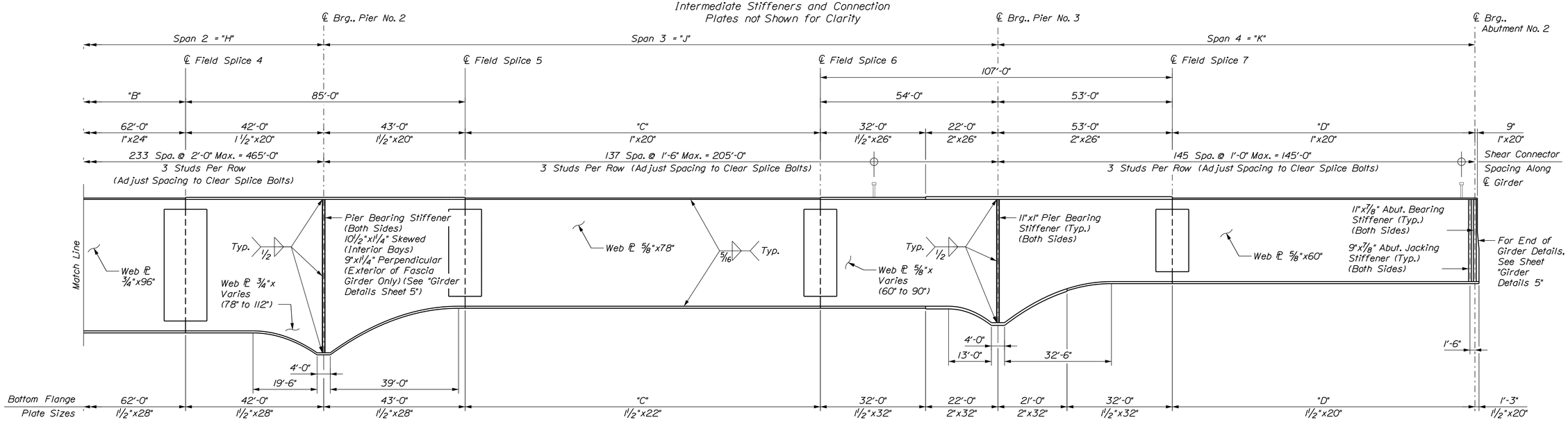


TABLE OF GIRDER DIMENSIONS

Girder	Radius	A	B	C	D	E	F	G	H	J	K
1	1220.17'	120'-4 7/16"	126'-6 1/8"	97'-4 9/16"	94'-5 1/4"	41'-4 7/16"	64'-6 1/8"	264'-4 7/16"	222'-6 1/8"	194'-4 9/16"	147'-5 1/4"
2	1210.08'	118'-2 3/16"	117'-9 1/4"	102'-8 1/16"	93'-2 5/8"	39'-2 3/16"	55'-9 1/4"	262'-2 3/16"	213'-9 1/4"	199'-8 1/16"	146'-2 5/8"
3	1200.00'	116'-0"	109'-0"	108'-0"	92'-0"	37'-0"	-	260'-0"	205'-0"	205'-0"	145'-0"
4	1189.92'	113'-9 3/16"	100'-2 7/16"	113'-4 3/16"	90'-9 3/8"	34'-9 3/16"	-	257'-9 3/16"	196'-2 7/16"	210'-4 3/16"	143'-9 3/8"
5	1179.83'	111'-7 9/16"	91'-4 1/2"	118'-8 13/16"	89'-6 3/4"	32'-7 9/16"	-	255'-7 9/16"	187'-4 1/2"	215'-8 13/16"	142'-6 3/4"

GIRDER ELEVATION
GIRDERS 1 - 2

1548 Studs Per Girder,
3096 Studs Total For Girders 1 - 2

Intermediate Stiffeners and Connection Plates not Shown for Clarity

NOTE:

One longintudinal butt weld splice will be allowed in the web of the haunched sections of the girders. Feather edges between the longitudinal welds and the bottom flanges will not be allowed.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

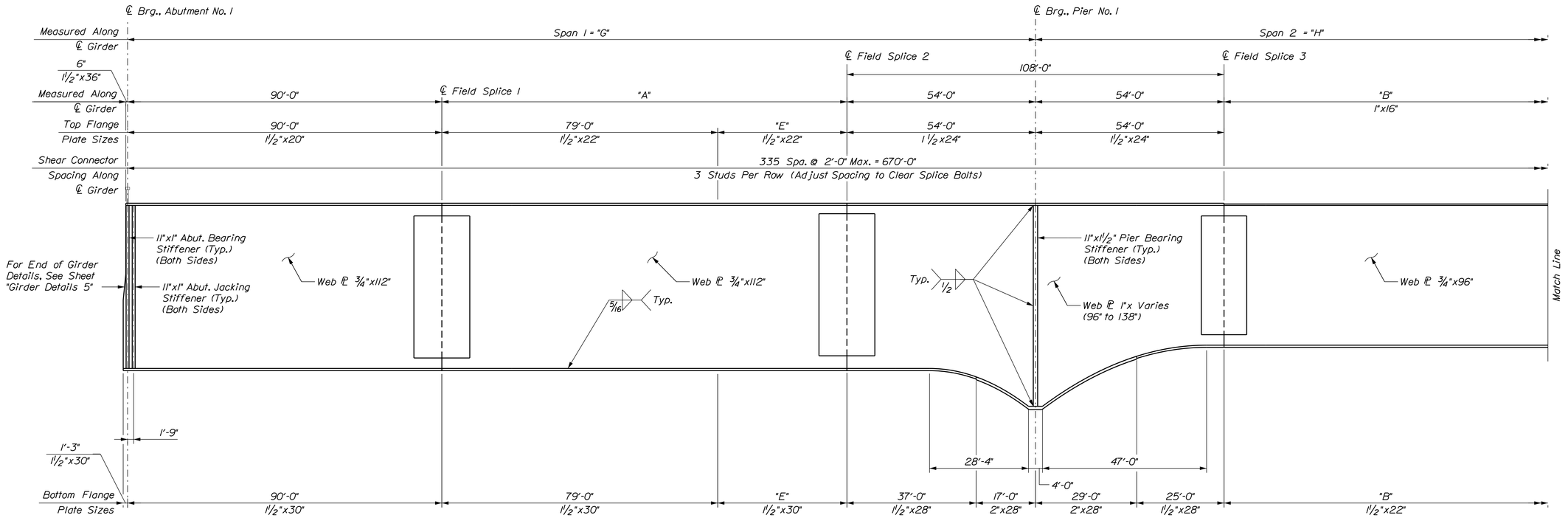
PROJ. MANAGER	Scott Rollins	DATE
DESIGN-DETAILED	C.Taylor	4/20
CHECKED-REVIEWED	D.Myers	4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

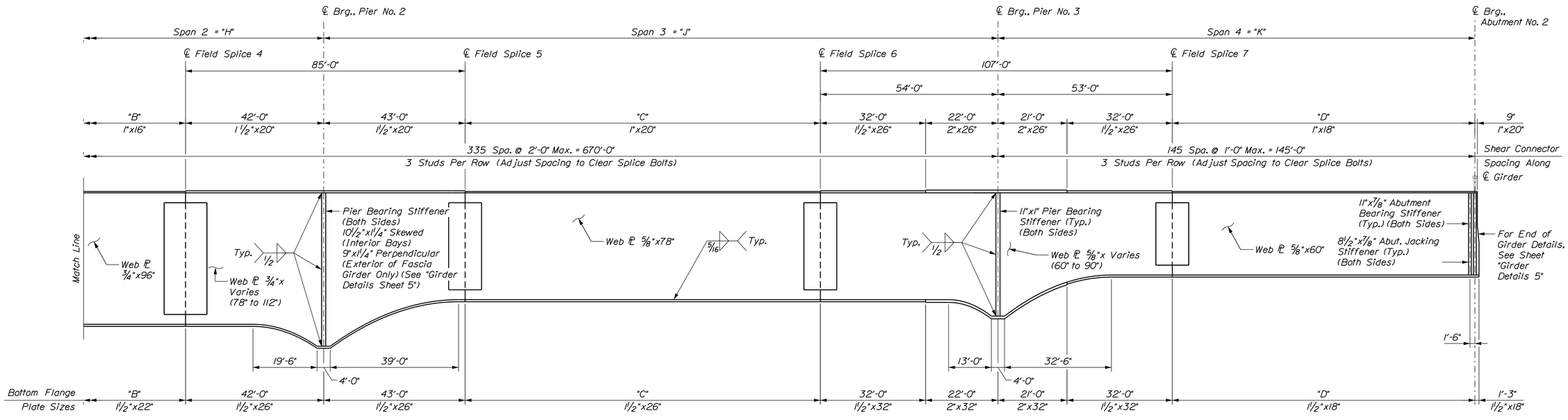
GIRDER ELEVATION
SHEET 1 OF 2

SHEET NUMBER
118
OF 163

Date:10/15/2022
Username:
Division:
Filename: ...\118_Girder_Elev_1.dgn



GIRDER ELEVATION
GIRDERS 3 - 5



GIRDER ELEVATION
GIRDERS 3 - 5

1443 Studs Per Girder,
4329 Studs Total For Girders 3 - 5

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

P.E. NUMBER 12572

DATE 9/23/2022

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	C.Taylor	S.Morgan	4/20
CHECKED-REVIEWED	D.Myers	D.Myers	4/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

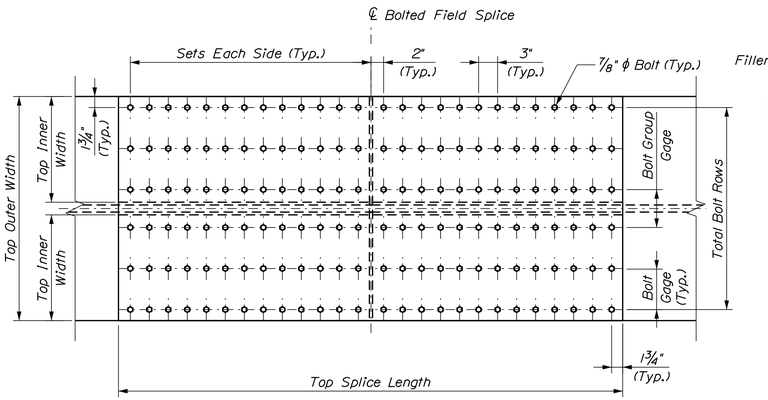
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GIRDER ELEVATION
SHEET 2 OF 2

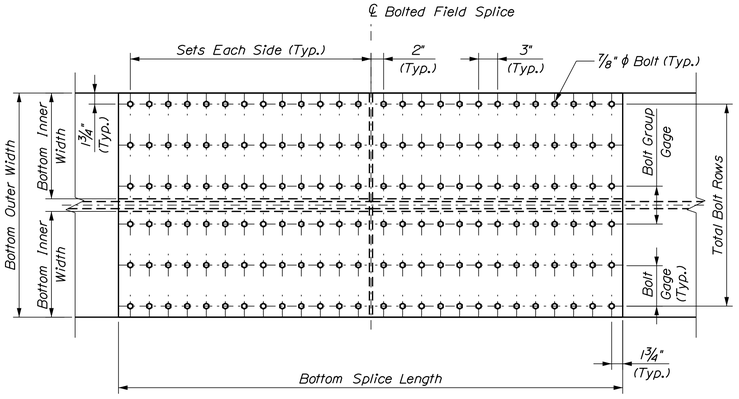
SHEET NUMBER
119
OF 163

TYLin

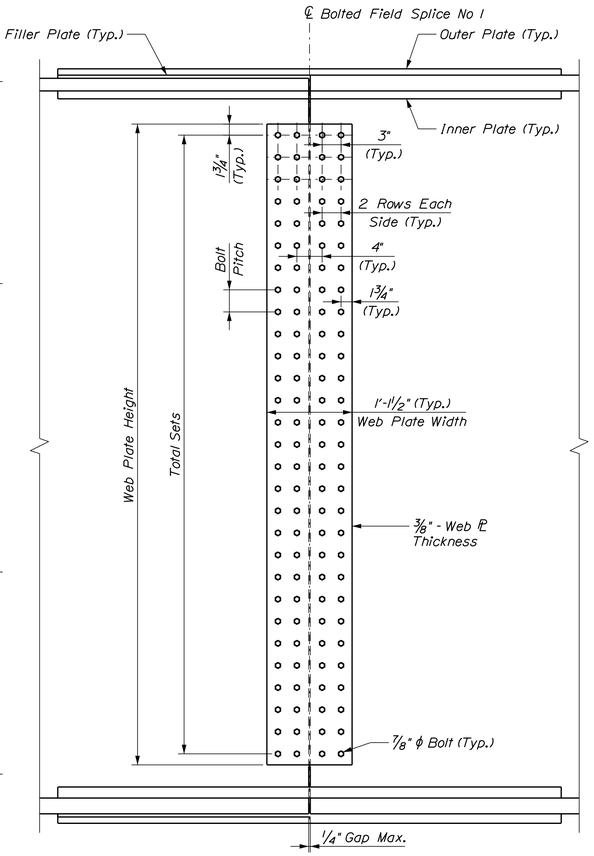
Username:
Division:
Filename: ...\119_Girder_Elev_2.dgn
Date:10/15/2022



BOLTED FIELD SPLICE TOP VIEW



BOLTED FIELD SPLICE BOTTOM VIEW



BOLTED FIELD SPLICE ELEVATION

Top Flange Splice Dimensions

	Top Splice Length		Top Outer Thick		Top Outer Width		Top Inner Thick		Top Inner Width		Total Bolt Rows		Set Each Side		Bolt Gage		Bolt Group Gage		Filler Plate Thick	
Girders	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5
Field Splice 1	67 1/2"	43 1/2"	1 1/4"	1"	36"	20"	1 1/4"	1"	17"	9"	6	6	11	7	6 3/4"	3"	5 1/2"	5"	N/A	N/A
Field Splice 2	49 1/2"	37 1/2"	1 1/4"	1"	32"	22"	1 1/4"	1"	14 3/4"	9 3/4"	6	6	8	6	5 5/8"	3 1/8"	6	6	N/A*	N/A
Field Splice 3	37 1/2"	43 1/2"	1	1"	24"	16"	1"	1"	10 3/4"	6 3/4"	6	4	6	7	3 5/8"	3 1/4"	6	6	1/2"	1/2"
Field Splice 4	37 1/2"	37 1/2"	3/4"	3/4"	20"	16"	3/4"	3/4"	9"	7"	4	4	6	6	5 1/2"	3 1/2"	5 1/2"	5 1/2"	1/2"	1/2"
Field Splice 5	37 1/2"	37 1/2"	3/4"	1"	20"	20"	3/4"	1"	9"	9"	4	4	6	6	5 1/2"	5 1/2"	5 1/2"	5 1/2"	1/2"	1/2"
Field Splice 6	37 1/2"	37 1/2"	3/4"	1"	20"	20"	3/4"	1"	9"	9"	4	4	6	6	5 1/2"	5 1/2"	5 1/2"	5 1/2"	1/2"	1/2"
Field Splice 7	37 1/2"	37 1/2"	3/4"	3/4"	20"	18"	3/4"	3/4"	9"	8"	4	4	6	6	5 1/2"	4 1/2"	5 1/2"	5 1/2"	1"	1/2"

Web Splice Dimensions

	Web Plate Height		Total Sets		Bolt Pitch		Filler Plate Thick	
Girders	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5
Field Splice 1	103 1/4"	103 1/4"	22	22	4 3/4"	4 3/4"	N/A	N/A
Field Splice 2	103 1/4"	103 1/4"	22	22	4 3/4"	4 3/4"	2 x 1/8"	2 x 1/8"
Field Splice 3	88 1/2"	88 1/2"	21	18	4 1/4"	5"	2 x 1/8"	2 x 1/8"
Field Splice 4	88 1/2"	88 1/2"	18	18	5"	5"	N/A	N/A
Field Splice 5	71"	71"	16	16	4 1/2"	4 1/2"	1 x 1/8"	1 x 1/8"
Field Splice 6	71"	71"	16	16	4 1/2"	4 1/2"	N/A	N/A
Field Splice 7	53"	53"	12	12	4 1/2"	4 1/2"	N/A	N/A

Bottom Flange Splice Dimensions

	Bottom Splice Length		Bottom Outer Thick		Bottom Outer Width		Bottom Inner Thick		Bottom Inner Width		Total Bolt Rows		Set Each Side		Bolt Gage		Bolt Group Gage		Filler Plate Thick	
Girders	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5	G1 & G2	G3-G5
Field Splice 1	67 1/2"	43 1/2"	1 1/2"	1"	36"	30"	1 1/2"	1"	17"	14"	6	6	11	7	6 3/4"	5 1/4"	5 1/2"	5 1/2"	N/A	N/A
Field Splice 2	49 1/2"	37 1/2"	1 1/4"	1"	32"	28"	1 1/4"	1"	14 3/4"	12 3/4"	6	6	8	6	5 5/8"	4 5/8"	6	6	1/2"	N/A
Field Splice 3	37 1/2"	43 1/2"	1"	1"	28"	22"	1"	1"	12 3/4"	9 3/4"	6	4	6	7	4 5/8"	6 1/4"	6	6	1/2"	N/A
Field Splice 4	31 1/2"	37 1/2"	1"	1"	28"	22"	1"	1"	13"	10"	6	4	5	6	4 3/4"	6 1/2"	5 1/2"	5 1/2"	N/A	N/A
Field Splice 5	37 1/2"	31 1/2"	1"	1"	22"	26"	1"	1"	10"	12"	4	6	6	5	6 1/2"	4 1/4"	5 1/2"	5 1/2"	N/A	N/A
Field Splice 6	37 1/2"	31 1/2"	1"	1"	22"	26"	1"	1"	10"	12"	4	6	6	5	6 1/2"	4 1/4"	5 1/2"	5 1/2"	N/A	N/A
Field Splice 7	37 1/2"	37 1/2"	1"	1"	20"	18"	1"	1"	9"	8"	4	4	6	6	5 1/2"	4 1/2"	5 1/2"	5 1/2"	N/A	N/A

NOTE:

1. Faying surfaces shall develop a minimum slip coefficient of 0.5 (Class B).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Robins	BY	DATE
DESIGN-DETAILED	C.Taylor	S.Morgan	4/20
CHECKED-REVIEWED	B.Toothaker	B.Toothaker	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

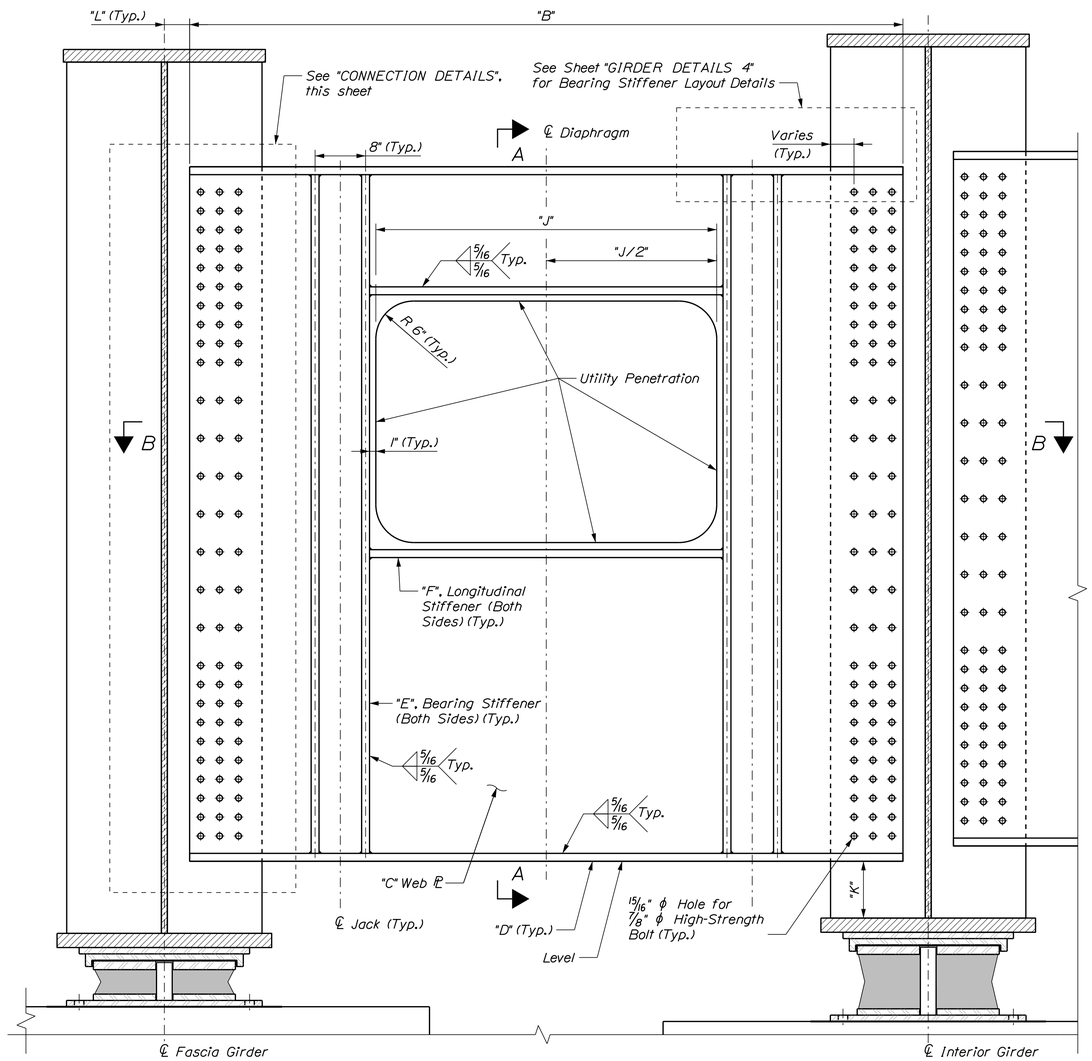
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GIRDER DETAILS
SHEET 1 OF 6

SHEET NUMBER
120
OF 163

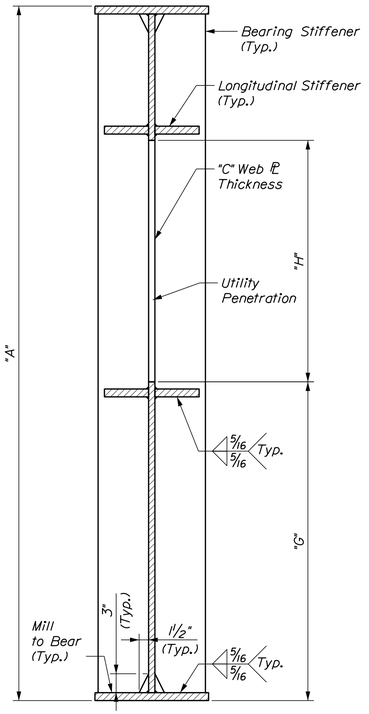
TYLin

Username: Date:10/15/2022
Division:
Filename: ...\106180_28\120_Girder_Det_1.dgn



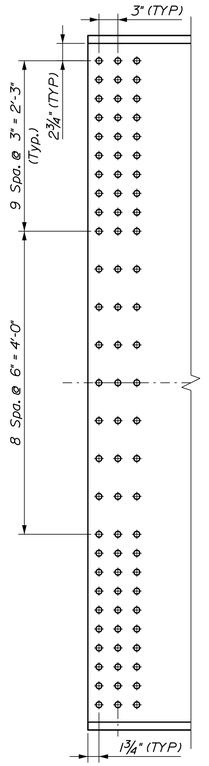
TYPE A DIAPHRAGM

(Pier 1 shown, other locations similar) (Utilities not shown for clarity)



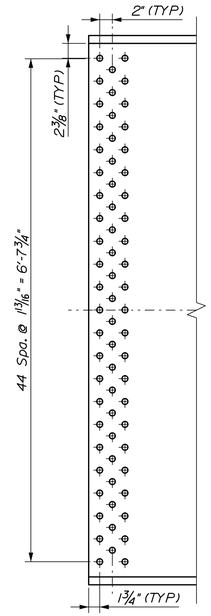
SECTION A-A

(Pier 1 shown, other locations similar)



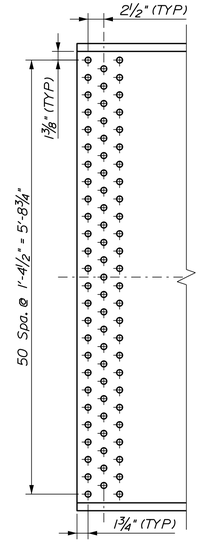
PIER NO. 1 CONNECTION DETAILS

Pier 1 Bolt Pattern



PIER NO. 2 CONNECTION DETAILS

Pier 2 Bolt Pattern

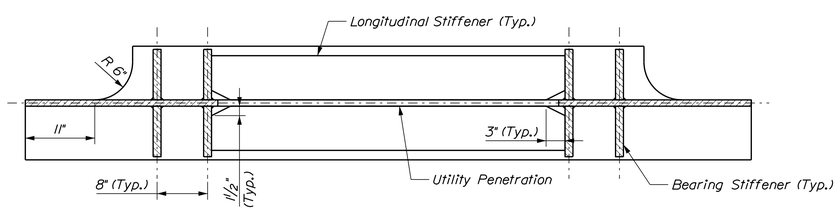


PIER NO. 3 CONNECTION DETAILS

Pier 3 Bolt Pattern

"TYPE A" JACKING DIAPHRAGM - TABLE OF DIMENSIONS BY LOCATION												
Location	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"J/2"	"K"	"L"
Pier 1	9'-2"	9'-7"	1"	1 1/4" x 1'-6"	1 1/4" x 8"	1 1/4" x 7"	4'-2 1/2"	3'-2 1/2"	4'-6"	2'-3"	9"	3"
Pier 2	7'-3"	**	3/4"	1 1/4" x 1'-3"	1 1/4" x 6"	1" x 5"	3'-0"	3'-0"	6'-7"	3'-3 1/2"	9"	3"
Pier 3	6'-2"	9'-7"	3/4"	1 1/4" x 1'-4"	1 1/4" x 7"	1 1/4" x 6"	2'-1"	2'-7"	4'-6"	2'-3"	9"	3"
** - See Table 1 for Pier 2 Dimensions												

TABLE 1	
Pier 2 Location	"B"
Girders 1 & 2	11'-8 7/8"
Girders 2 & 3	11'-9 3/8"
Girders 3 & 4	11'-10"
Girders 4 & 5	11'-10 5/8"



SECTION B-B

(Pier 1 shown, other locations similar)

JACKING LOADS		
Location	Fascia Girder Reaction	Interior Girder Reaction
Pier 1	1238 kips	1553 kips
Pier 2	954 kips	734 kips
Pier 3	1003 kips	766 kips
* See Jacking Notes		

JACKING NOTES:

1. Girder reactions calculated by using a load factor of 1.3 for all permanent loads, load factor of 1.0 for vehicular live loads (including impact), and a load factor of 0.5 for pedestrian loads.

2. It is assumed that all five girders will be jacked concurrently during bearing replacement. Due to the placement of a single jack on each side of each diaphragm. The final design loading for the jacks and diaphragms is taken as the factored exterior girder reaction and half of the factored interior girder reaction, to account for the additional jack which would be provided for interior girders.

Username: Scott Rollins
Date:10/15/2022
Division:
Filename: ...\121_Girder_Det_2.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

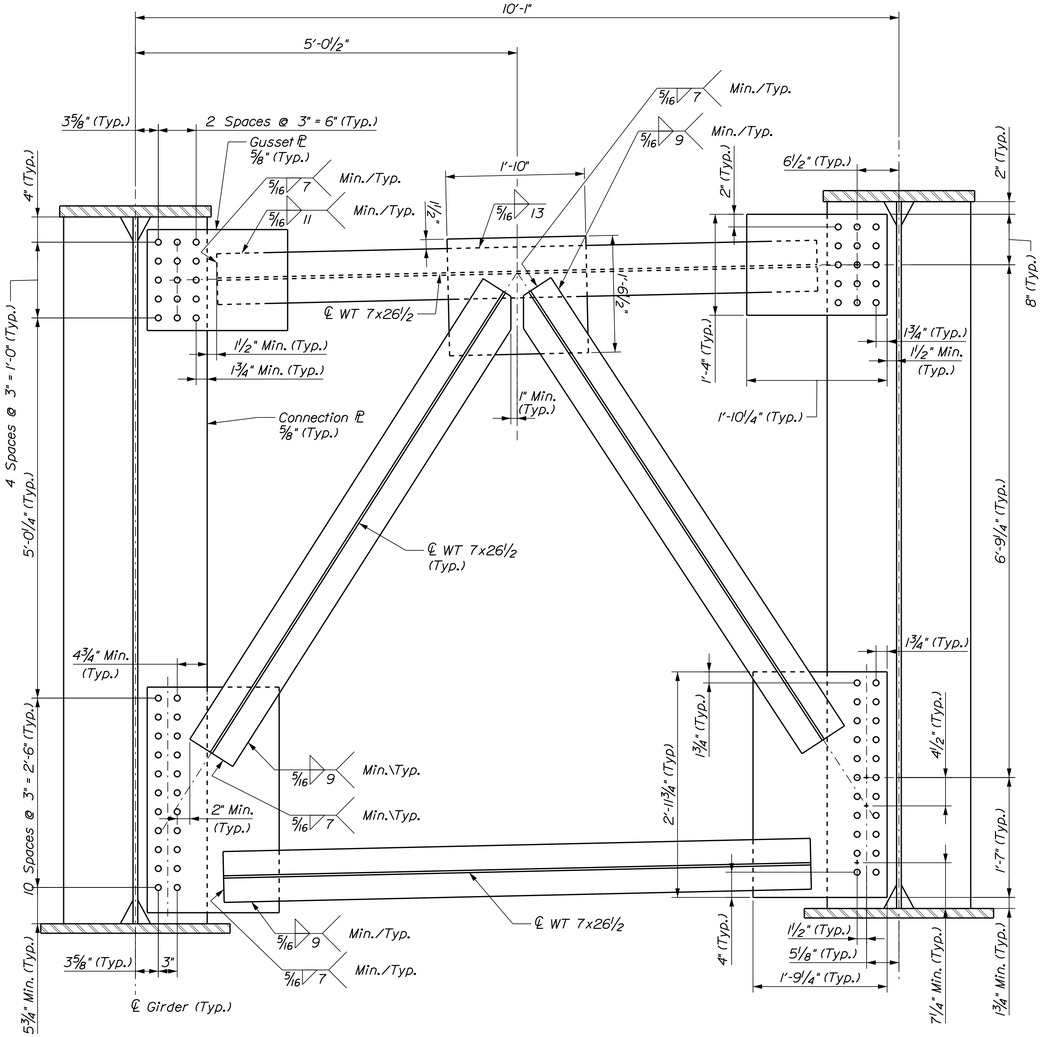
	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	4/20
CHECKED-REVIEWED	B.Toothaker	7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

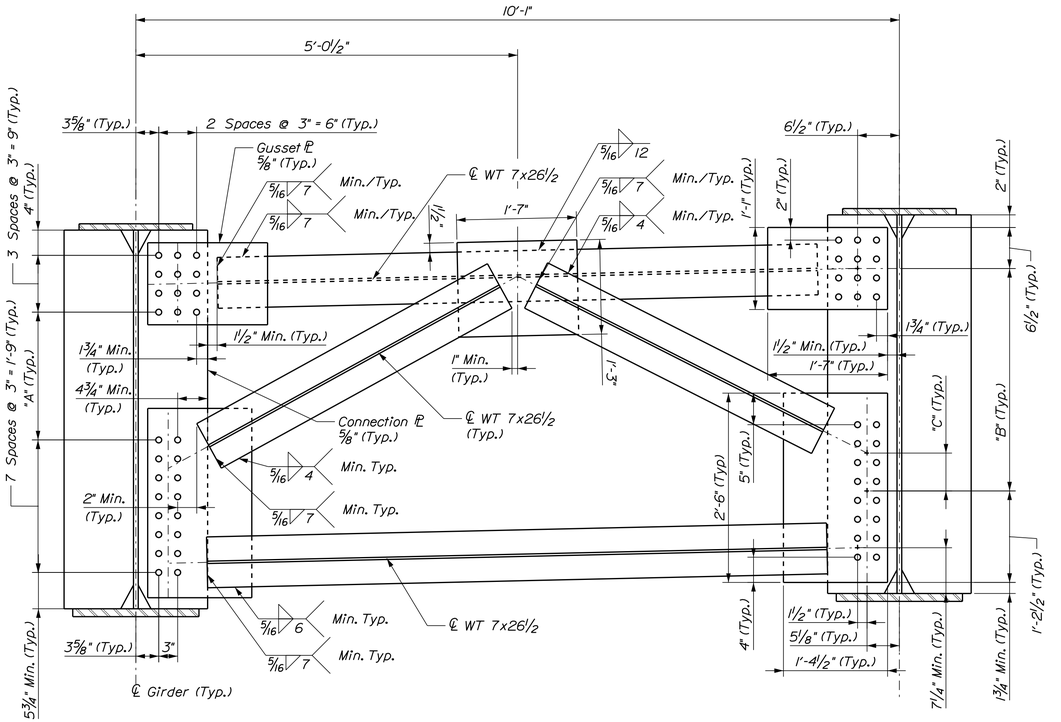
GIRDER DETAILS
SHEET 2 OF 6

SHEET NUMBER
121
OF 163

TYLin



TYPE N CROSSFRAME



TYPE P CROSS FRAME

INTERMEDIATE CROSSFRAMES TABLE OF DIMENSIONS			
Location	"A"	"B"	"C"
Span 2	4'-8 1/4"	5'-11 3/4"	0' - 0"
Span 3	3'-2 1/4"	4'-5 1/4"	0' - 3"
Span 4	1'-8 1/4"	2'-11 1/4"	0' - 6"

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

PROJ. MANAGER	Scott Rollins	BY	DATE
DESIGN-DETAILED	R.Kravchuk	R.Kravchuk	4/20
CHECKED-REVIEWED	B.Toothaker	B.Toothaker	7/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

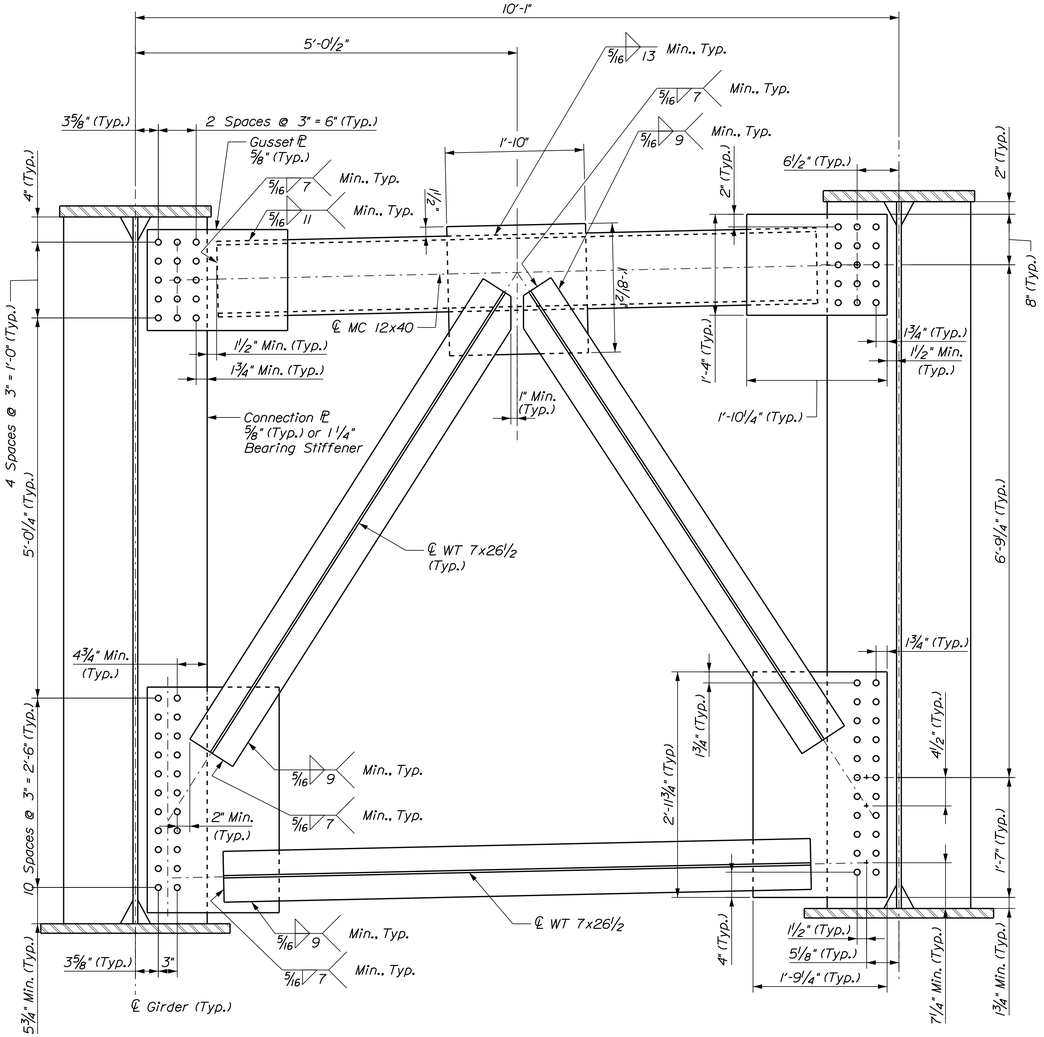
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GIRDER DETAILS
SHEET 3 OF 6

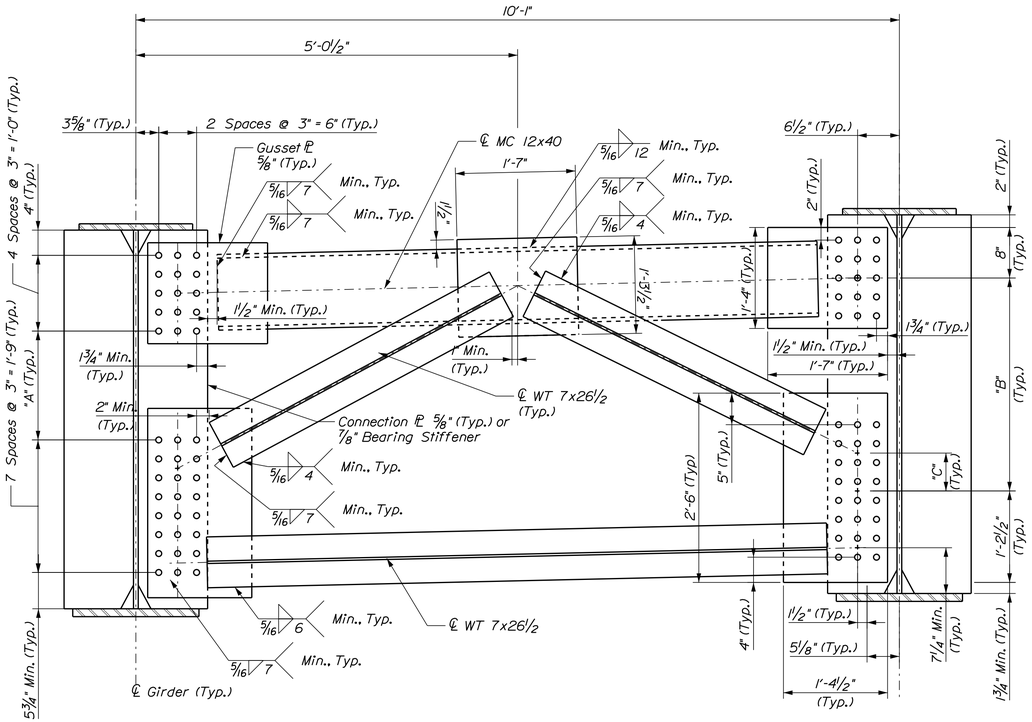
SHEET NUMBER
122
OF 163

TYLin

Username:
Date:10/15/2022
Division:
Filename: ...\122_Girder_Det_3.dgn



TYPE NC CROSSFRAME



TYPE PC CROSS FRAME

NOTES:

See sheet "Framing Layout Plan" for fabrication and detailing notes.

INTERMEDIATE CROSSFRAMES TABLE OF DIMENSIONS

Location	"A"	"B"	"C"
Span 2	4'-5 1/4"	5'-9 3/4"	0' - 0"
Span 3	2'-11 1/4"	4'-3 3/4"	0' - 3"
Span 4	1'-5 1/4"	2'-9 3/4"	0' - 6"

Username: Division:

Date:10/15/2022

Filename: ...\123_Girder_Det_4.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothacker	S.Morgan	6/21
CHECKED-REVIEWED	D.Myers	B.Toothacker	6/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

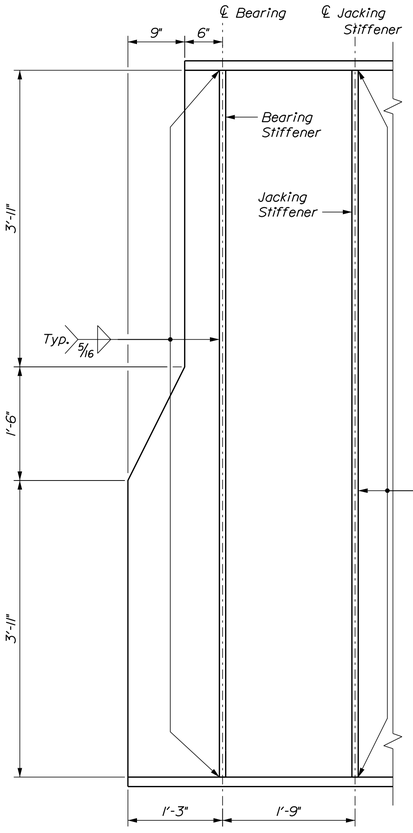
GIRDER DETAILS
SHEET 4 OF 6

SHEET NUMBER

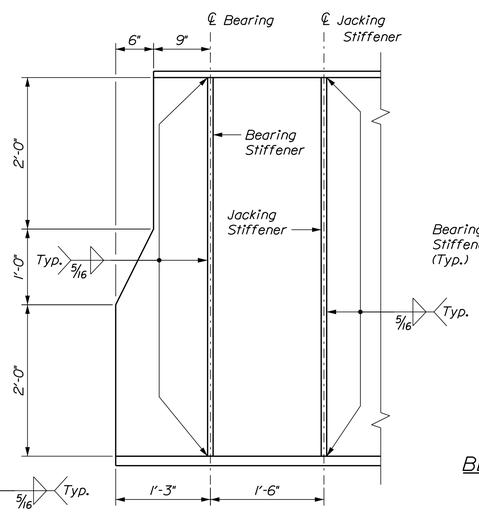
123

OF 163

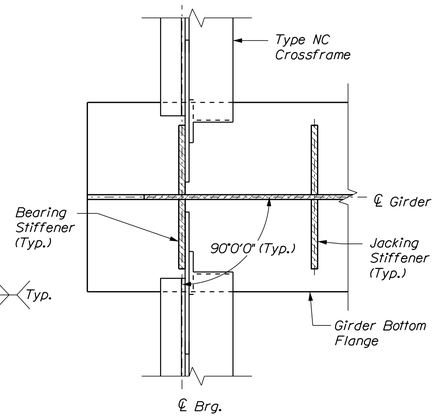
TYLin



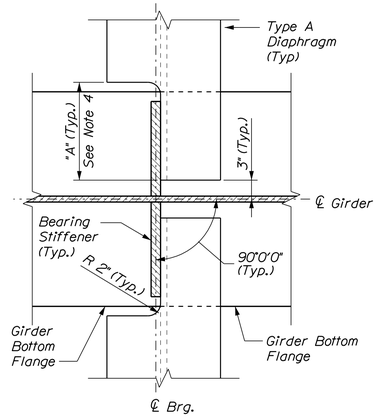
GIRDER END ELEVATION
ABUTMENT NO. 1



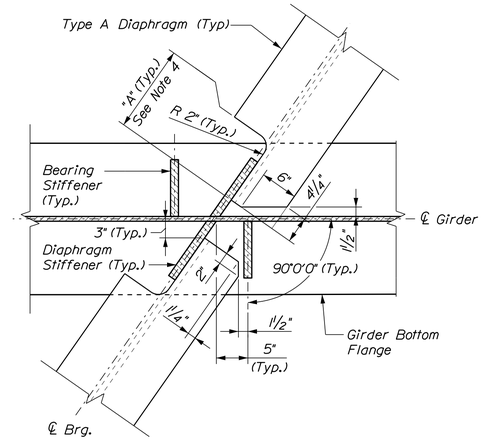
GIRDER END ELEVATION
ABUTMENT NO. 2



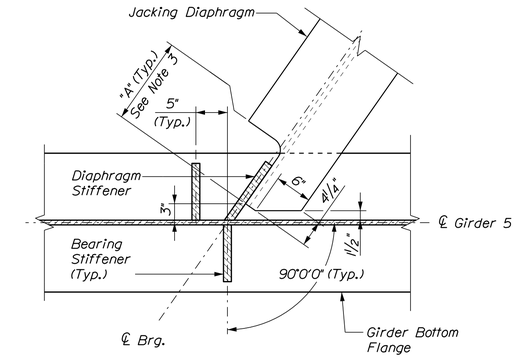
BEARING STIFFENER LAYOUT
-ABUTMENT LOCATIONS-
(Abut. No. 1 Girder 4 shown, other girders & Abutment No. 2 Similar)



BEARING STIFFENER LAYOUT
-PIER 1 & 3 LOCATIONS-
(Pier No. 1 Girder 2 shown, other girders & Pier No. 3 Similar)



BEARING STIFFENER LAYOUT
-PIER 2 LOCATION-
(Girder 4 shown, girders 2 & 3 similar)

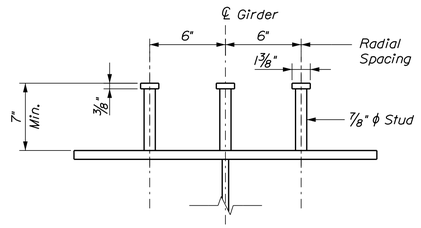


BEARING STIFFENER LAYOUT
-PIER 2 LOCATION-
(Girder 5 shown, Girder 1 similar)

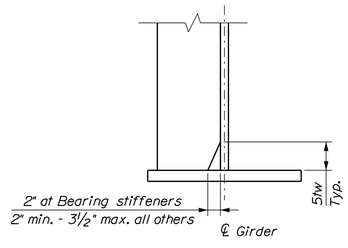
NOTES:

1. Butt welds at web and flange splices shall be ground flush in longitudinal direction of girder.
2. Transverse rows of shear connectors shall be placed radially along curved girders.
3. Shear connectors shall extend vertically beyond haunch stirrups a minimum of 1". Shear connectors are not required to overlap transverse deck reinforcement.
4. See "COPE TABLE" for Pier Diaphram Cope dimension "A".

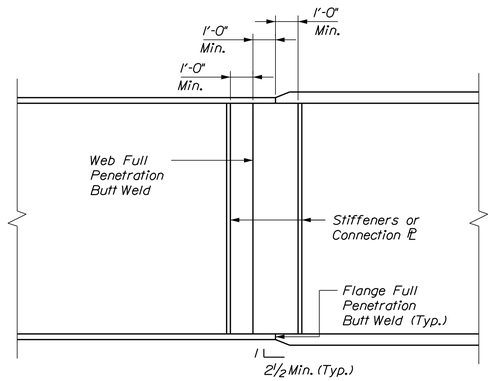
COPE TABLE	
Location	"A"
Pier 1	1'-3 1/2"
Pier 2	11"
Pier 3	11 1/2"



SHEAR CONNECTOR DETAIL



STIFFENER CLIP DETAIL



WELDED SPLICE TRANSITION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	C.Taylor	S.Morgan 4/20
CHECKED-REVIEWED	B.Toothaker	B.Toothaker 7/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

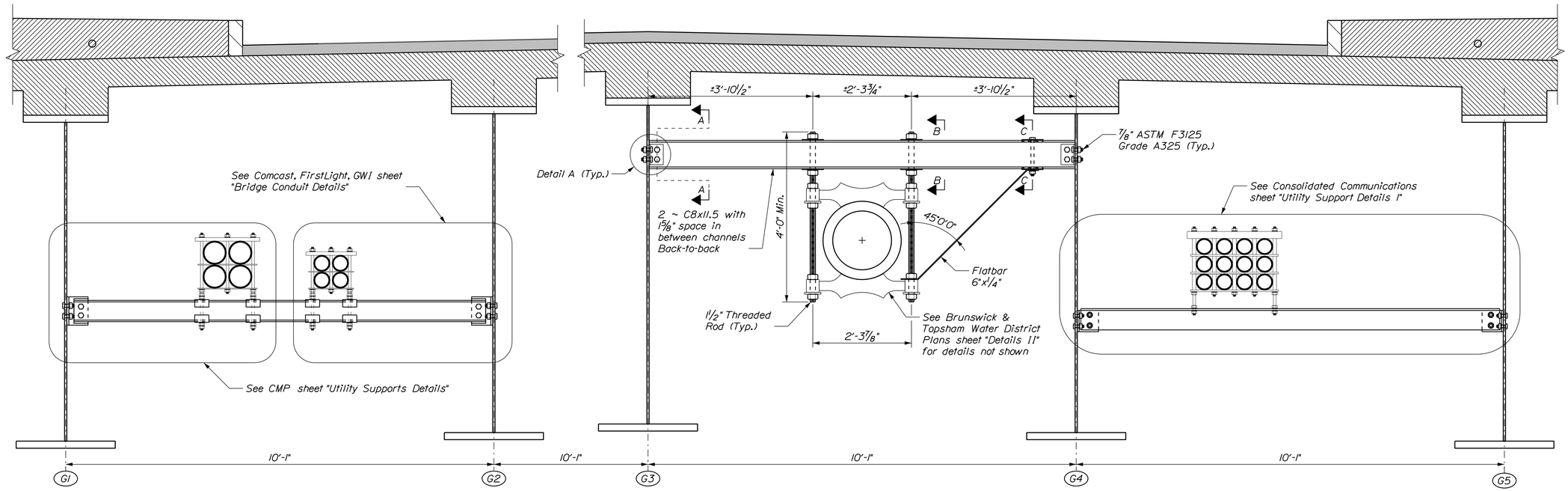
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GIRDER DETAILS
SHEET 5 OF 6

SHEET NUMBER
124
OF 163

TYLin

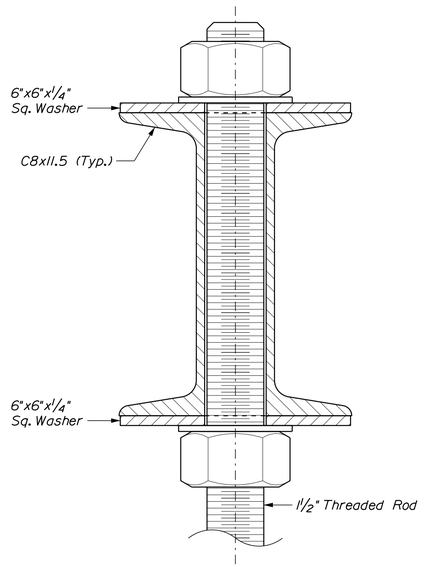
Username:
Date:10/15/2022
Division:
Filename: ...\106180_29\124_Girder_Det_5.dgn



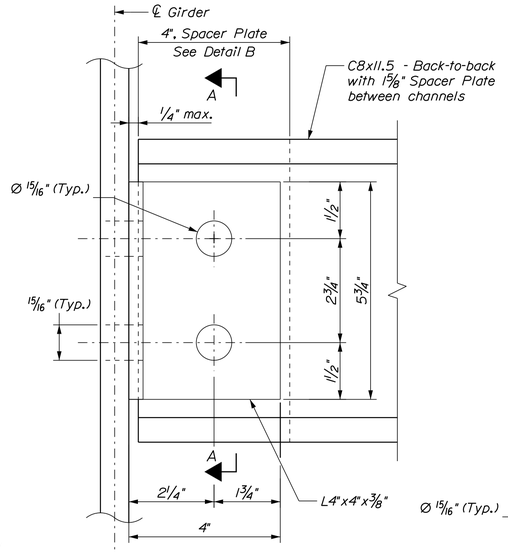
CONDUIT UTILITY SUPPORT

WATERLINE UTILITY SUPPORT

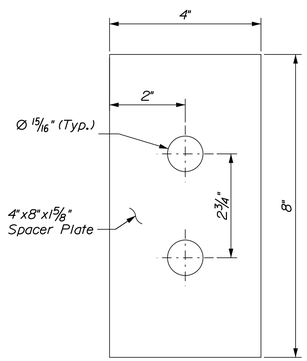
CONDUIT UTILITY SUPPORT



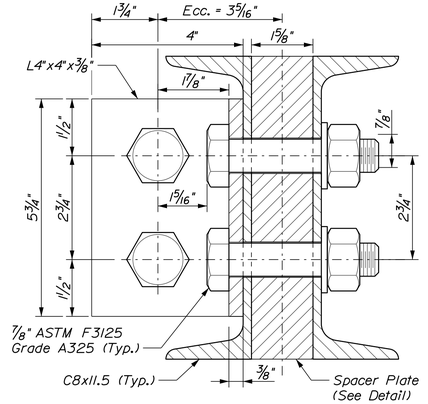
SECTION B-B



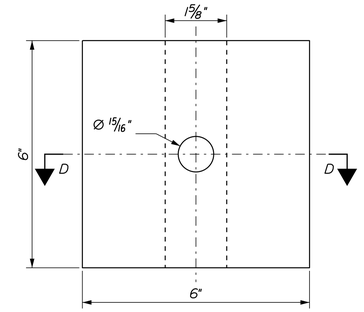
DETAIL A



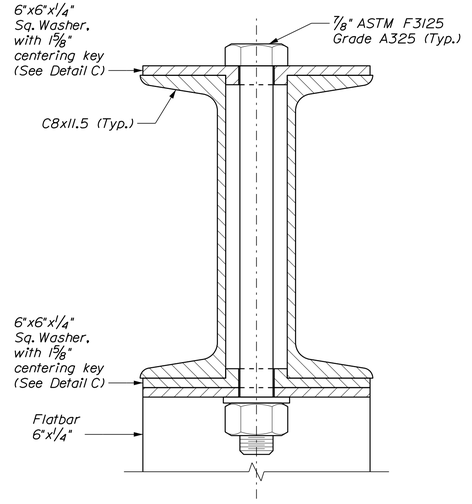
SPACER PLATE DETAIL B



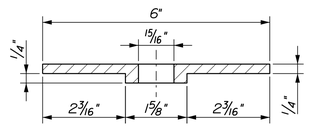
SECTION A-A



DETAIL C



SECTION C-C



SECTION D-D

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins
DESIGN-DETAILED	J.Legere
CHECKED-REVIEWED	D.Myers
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
REVISIONS 1	J.Legere	6/21
REVISIONS 2	D.Myers	6/21
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

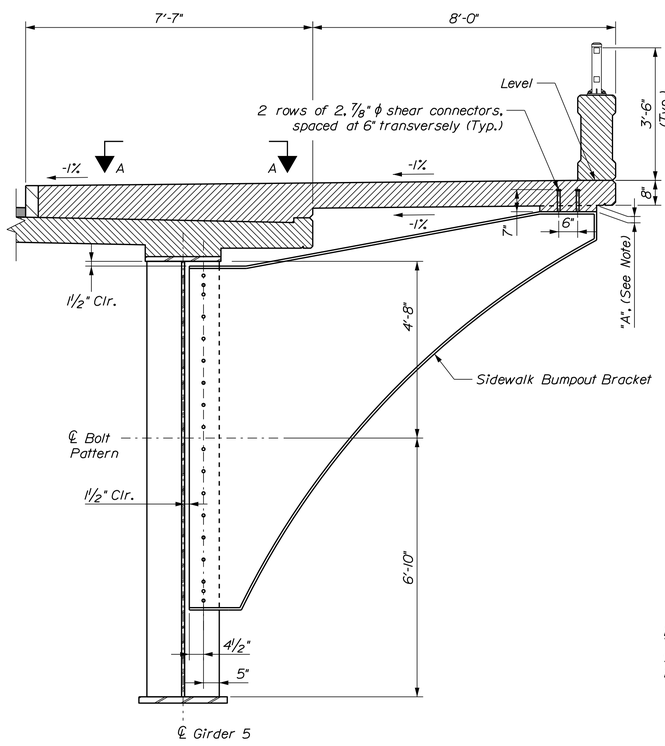
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

GIRDER DETAILS
SHEET 6 OF 6

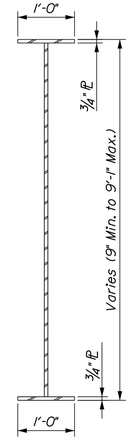
TYLin

SHEET NUMBER
125
OF 163

Date:10/15/2022
Username:
Division:
Filename: ...\125_Girder_Det_6.dgn



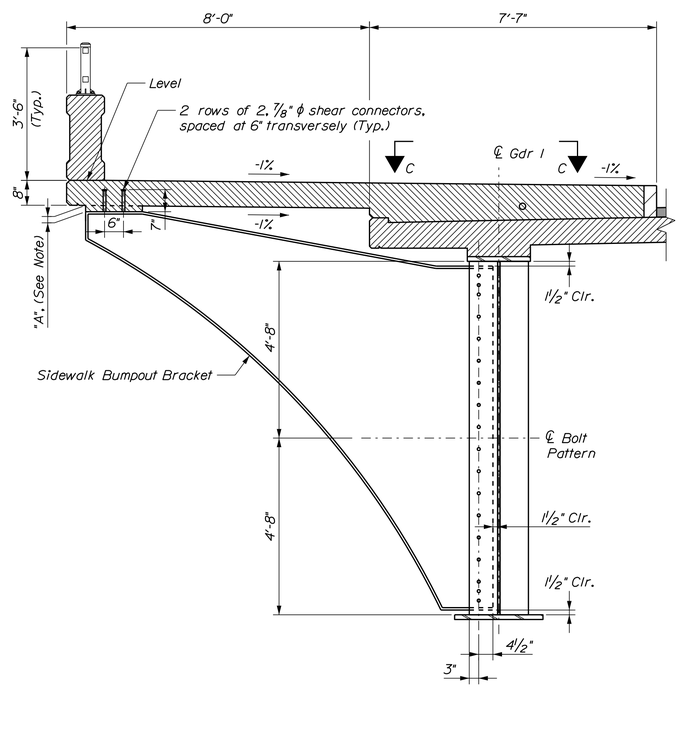
PIER 1 BRACKET ELEVATION



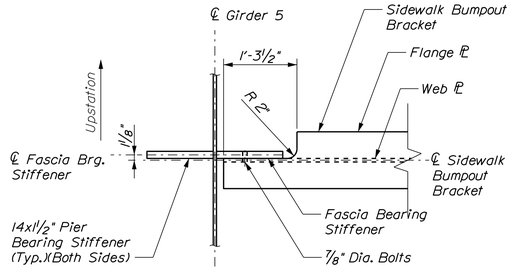
SECTION B-B

Note:

Set dimension "A" to achieve 1% Slope to curb line.

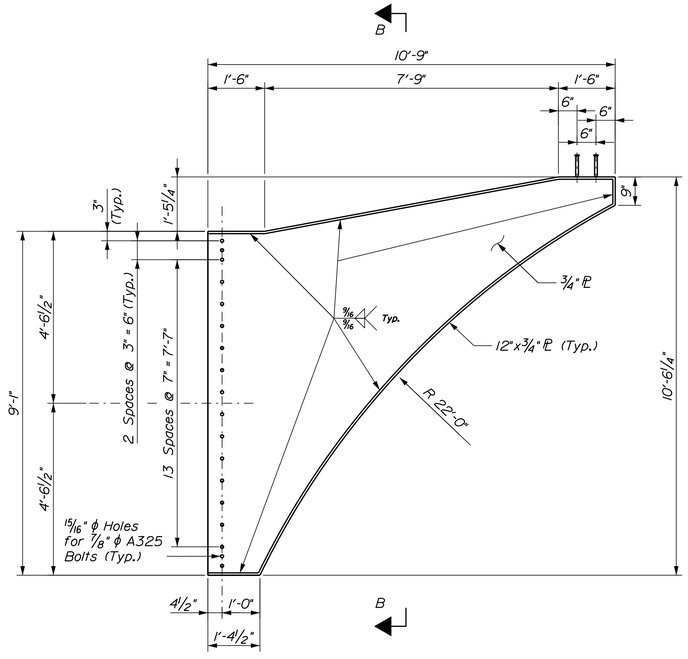


PIER 2 BRACKET ELEVATION

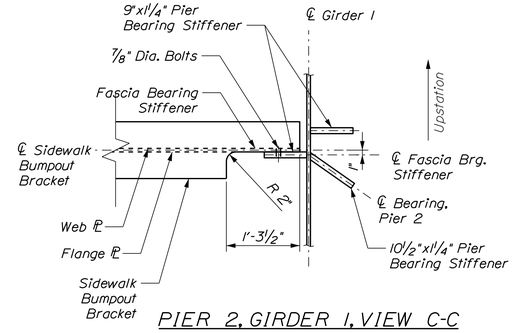


PIER 1, GIRDER 5, VIEW A-A

(Sidewalk and Bridgedeck not shown for clarity)
(Pier 1 Jacking Diaphragm not shown)



SIDEWALK BUMPOUT BRACKET



PIER 2, GIRDER 1, VIEW C-C

(Sidewalk and Bridgedeck not shown for clarity)
(Pier 2 Jacking Diaphragm not shown)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE
12572 — P.E. NUMBER
9/28/2022 — DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	4/20
CHECKED-REVIEWED	D.Myers	4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

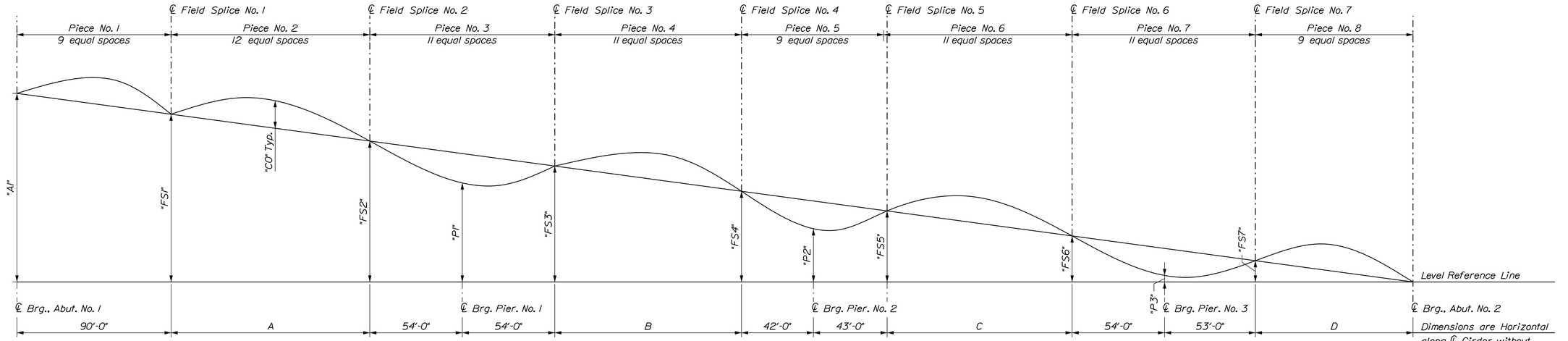
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SIDEWALK BUMPOUT BRACKET

SHEET NUMBER
126
OF 163

TYLin

Filename: ...\126_Girder_Bracket_Det.dgn Division: Username: Date:10/15/2022



CAMBER DIAGRAM

TABLE OF CAMBER DIMENSIONS (Feet-Inches)

Girder	"A1"	"FS1"	"FS2"	"P1"	"FS3"	"FS4"	"P2"	"FS5"	"FS6"	"P3"	"FS7"	A	B	C	D	Girder
G1	7.34	7.63	6.03	5.00	4.29	3.61	3.03	3.13	2.09	1.31	0.92	120'-4 7/16"	126'-6 1/8"	97'-4 9/16"	94'-5 1/4"	G1
G2	7.34	7.51	5.98	5.00	4.31	3.54	3.09	3.06	2.07	1.31	0.93	118'-2 3/16"	117'-9 1/4"	102'-8 1/16"	93'-2 5/8"	G2
G3	7.34	7.42	5.93	5.00	4.34	3.46	3.15	2.99	2.05	1.31	0.95	116'-0"	109'-0"	108'-0"	92'-0"	G3
G4	7.34	7.33	5.89	5.00	4.37	3.40	3.21	2.93	2.04	1.31	0.98	113'-9 3/16"	100'-2 7/16"	113'-4 3/16"	90'-9 3/8"	G4
G5	7.34	7.25	5.85	5.00	4.39	3.35	3.28	2.88	2.03	1.31	1.03	111'-7 9/16"	91'-4 1/2"	118'-8 13/16"	89'-6 3/4"	G5

TABLE OF CAMBER ORDINATES "C0" (Inch)

		Piece No. 1									Piece No. 2												
Girder	Abut. 1	1	2	3	4	5	6	7	8	FS1	1	2	3	4	5	6	7	8	9	10	11	FS2	Girder
G1	0	7/16	15/16	1 3/8	1 9/16	1 5/8	1 1/2	1 3/16	11/16	0	1 1/16	1 15/16	2 9/16	3	3 1/4	3 1/4	3 1/8	2 3/4	2 1/4	1 5/8	1 3/16	0	G1
G2	0	7/16	13/16	1 3/16	1 3/8	1 7/16	1 3/8	1 1/16	5/8	0	15/16	1 11/16	2 5/16	2 11/16	2 7/8	2 7/8	2 11/16	2 7/16	2	1 3/8	3/4	0	G2
G3	0	3/8	3/4	1 1/16	1 1/4	1 5/16	1 1/4	1	9/16	0	7/8	1 1/2	2	2 3/8	2 1/2	2 1/2	2 3/8	2 1/8	1 11/16	1 3/16	5/8	0	G3
G4	0	5/16	11/16	1	1 1/8	1 1/4	1 1/8	15/16	9/16	0	3/4	1 3/8	1 13/16	2 1/8	2 1/4	2 1/4	2 1/8	1 7/8	1 1/2	1 1/16	9/16	0	G4
G5	0	5/16	5/8	15/16	1 1/16	1 1/8	1 1/16	7/8	1/2	0	11/16	1 3/16	1 9/16	1 13/16	1 15/16	1 15/16	1 13/16	1 5/8	1 5/16	15/16	1/2	0	G5

TABLE OF CAMBER ORDINATES "C0" (Inch)

		Piece No. 3										Piece No. 4											
Girder	FS2	1	2	3	4	5	6	7	8	9	10	FS3	1	2	3	4	5	6	7	8	9	10	FS4	Girder
G1	0	-1/2	-1	-1 3/8	-1 11/16	-1 15/16	-2	-1 7/8	-1 11/16	-1 5/16	-3/4	0	-3/16	-3/16	-1/16	1/8	1/4	7/16	1/2	7/16	5/16	3/16	0	G1
G2	0	-7/16	-7/8	-1 5/16	-1 9/16	-1 3/4	-1 13/16	-1 3/4	-1 9/16	-1 3/16	-11/16	0	-1/8	-1/8	-1/16	1/16	3/16	1/4	5/16	1/4	3/16	1/8	0	G2
G3	0	-7/16	-13/16	-1 3/16	-1 7/16	-1 5/8	-1 11/16	-1 5/8	-1 7/16	-1 1/16	-5/8	0	-1/16	-1/16	0	1/8	3/16	1/4	1/4	3/16	3/16	1/16	0	G3
G4	0	-3/8	-13/16	-1 1/8	-1 3/8	-1 9/16	-1 5/8	-1 1/2	-1 5/16	-1	-9/16	0	-1/16	0	1/16	1/8	3/16	1/4	1/4	1/4	3/16	1/8	1/16	0	G4
G5	0	-3/8	-3/4	-1 1/8	-1 15/16	-1 1/2	-1 9/16	-1 7/16	-1 1/4	-15/16	-1/2	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	1/16	0	G5

TABLE OF CAMBER ORDINATES "C0" (Inch)

		Piece No. 5								Piece No. 6											
Girder	FS4	1	2	3	4	5	6	7	FS5	1	2	3	4	5	6	7	8	9	10	FS6	Girder
G1	0	-3/8	-11/16	-15/16	-1 1/16	-1 1/16	-15/16	-3/8	0	11/16	1 5/16	1 3/4	2	2 3/16	2 3/16	2	1 11/16	1 3/16	5/8	0	G1
G2	0	-5/16	-5/8	-13/16	-15/16	-15/16	-7/8	-5/16	0	11/16	1 1/4	1 3/4	2 1/16	2 1/4	2 1/4	2 1/16	1 3/4	1 1/4	11/16	0	G2
G3	0	-5/16	-5/8	-13/16	-15/16	-15/16	-13/16	-5/16	0	11/16	1 5/16	1 13/16	2 1/8	2 5/16	2 3/8	2 3/16	1 7/8	1 3/8	3/4	0	G3
G4	0	-3/8	-11/16	-15/16	-1	-1	-7/8	-5/16	0	3/4	1 3/8	1 15/16	2 5/16	2 1/2	2 9/16	2 3/8	2 1/16	1 1/2	13/16	0	G4
G5	0	-3/8	-11/16	-15/16	-1 1/16	-1 1/16	-15/16	-3/8	0	13/16	1 9/16	2 3/16	2 5/8	2 13/16	2 13/16	2 5/8	2 3/16	1 5/8	7/8	0	G5

TABLE OF CAMBER ORDINATES "C0" (Inch)

		Piece No. 7										Piece No. 8									
Girder	FS6	1	2	3	4	5	6	7	8	9	10	FS7	1	2	3	4	5	6	7	8	Abut. 2	Girder
G1	0	-11/16	-1 5/16	-1 7/8	-2 5/16	-2 9/16	-2 5/8	-2 1/2	-2 1/8	-1 9/16	-13/16	0	1 1/16	1 15/16	2 9/16	2 7/8	2 13/16	2 1/2	1 13/16	1	0	G1
G2	0	-5/8	-1 3/16	-1 11/16	-2 1/8	-2 3/8	-2 1/16	-2 5/16	-1 15/16	-1 7/16	-3/4	0	7/8	1 5/8	2 3/16	2 7/16	2 7/16	2 1/8	1 9/16	13/16	0	G2
G3	0	-9/16	-1 1/8	-1 5/8	-2	-2 1/4	-2 5/16	-2 3/16	-1 7/8	-1 3/8	-3/4	0	3/4	1 7/16	1 15/16	2 3/16	2 3/16	1 7/8	1 3/8	3/4	0	G3
G4	0	-9/16	-1 1/8	-1 5/8	-2	-2 1/4	-2 5/16	-2 3/16	-1 7/8	-1 3/8	-3/4	0	3/4	1 3/8	1 13/16	2 1/16	2	1 13/16	1 5/16	11/16	0	G4
G5	0	-9/16	-1 1/8	-1 5/8	-2 1/16	-2 5/16	-2 3/8	-2 1/4	-1 15/16	-1 7/16	-3/4	0	11/16	1 5/16	1 3/4	1 15/16	1 15/16	1 11/16	1 1/4	11/16	0	G5

NOTE:
Positive camber values are upward.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	7/21
CHECKED-REVIEWED	D.Myers	11/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CAMBER DIAGRAM

TYLin

SHEET NUMBER
127
OF 163

Filename: ...\127_Girder_Camber_Deflections.dgn Division: Username: Date:10/15/2022

TABLE OF DEFLECTIONS (Inch)

Girder	Load	Abut. 1	Piece No. 1									Piece No. 2											
			1	2	3	4	5	6	7	8	FS1	1	2	3	4	5	6	7	8	9	10	11	FS2
G1	Steel Dead Load	0.00	0.63	1.26	1.87	2.43	2.93	3.38	3.77	4.09	4.35	4.55	4.67	4.72	4.70	4.61	4.45	4.23	3.95	3.62	3.23	2.80	2.35
	Fluid Dead Load	0.00	0.74	1.48	2.20	2.84	3.42	3.93	4.37	4.73	5.02	5.23	5.35	5.39	5.35	5.23	5.03	4.77	4.43	4.03	3.58	3.08	2.55
	Superimposed Dead Load	0.00	0.55	1.11	1.65	2.13	2.56	2.94	3.27	3.53	3.74	3.89	3.98	4.00	3.96	3.86	3.70	3.49	3.23	2.93	2.58	2.21	1.82
G2	Steel Dead Load	0.00	0.54	1.09	1.62	2.09	2.53	2.92	3.25	3.53	3.75	3.92	4.01	4.05	4.03	3.95	3.81	3.62	3.38	3.09	2.77	2.40	2.02
	Fluid Dead Load	0.00	0.71	1.41	2.09	2.71	3.26	3.75	4.17	4.51	4.78	4.97	5.08	5.11	5.06	4.94	4.75	4.49	4.17	3.80	3.37	2.90	2.41
	Superimposed Dead Load	0.00	0.48	0.96	1.42	1.84	2.22	2.55	2.84	3.07	3.25	3.38	3.46	3.48	3.44	3.36	3.22	3.04	2.81	2.55	2.25	1.93	1.60
G3	Steel Dead Load	0.00	0.46	0.93	1.38	1.79	2.16	2.50	2.78	3.02	3.21	3.34	3.41	3.44	3.42	3.34	3.22	3.05	2.85	2.60	2.32	2.02	1.70
	Fluid Dead Load	0.00	0.67	1.35	2.00	2.60	3.14	3.61	4.02	4.35	4.60	4.77	4.86	4.88	4.82	4.70	4.51	4.25	3.94	3.58	3.18	2.74	2.28
	Superimposed Dead Load	0.00	0.42	0.84	1.25	1.63	1.97	2.27	2.53	2.75	2.91	3.02	3.08	3.10	3.06	2.98	2.86	2.70	2.49	2.26	2.00	1.72	1.43
G4	Steel Dead Load	0.00	0.39	0.78	1.15	1.50	1.82	2.10	2.34	2.53	2.69	2.79	2.85	2.86	2.84	2.77	2.66	2.52	2.34	2.14	1.90	1.65	1.39
	Fluid Dead Load	0.00	0.65	1.30	1.92	2.50	3.02	3.48	3.87	4.18	4.42	4.57	4.65	4.66	4.59	4.47	4.28	4.03	3.73	3.38	3.00	2.58	2.15
	Superimposed Dead Load	0.00	0.39	0.78	1.16	1.51	1.83	2.11	2.35	2.54	2.69	2.79	2.84	2.85	2.81	2.74	2.62	2.47	2.29	2.07	1.84	1.58	1.31
G5	Steel Dead Load	0.00	0.31	0.63	0.94	1.21	1.47	1.69	1.89	2.04	2.16	2.23	2.27	2.28	2.26	2.20	2.11	1.99	1.85	1.68	1.50	1.30	1.09
	Fluid Dead Load	0.00	0.62	1.24	1.84	2.38	2.88	3.31	3.68	3.98	4.20	4.33	4.40	4.39	4.33	4.20	4.02	3.78	3.50	3.17	2.81	2.43	2.03
	Superimposed Dead Load	0.00	0.37	0.75	1.11	1.44	1.74	2.00	2.22	2.40	2.53	2.62	2.66	2.67	2.63	2.56	2.45	2.31	2.14	1.94	1.72	1.49	1.24

TABLE OF DEFLECTIONS (Inch)

Girder	Load	FS2	Piece No. 3										FS3	Piece No. 4										FS4
			1	2	3	4	5	6	7	8	9	10		1	2	3	4	5	6	7	8	9	10	
G1	Steel Dead Load	2.35	1.89	1.44	0.99	0.57	0.18	-0.17	-0.49	-0.75	-0.98	-1.15	-1.26	-1.33	-1.33	-1.28	-1.20	-1.10	-0.98	-0.86	-0.74	-0.64	-0.53	-0.43
	Fluid Dead Load	2.55	2.03	1.52	1.03	0.58	0.18	-0.17	-0.46	-0.68	-0.84	-0.93	-0.95	-0.90	-0.78	-0.62	-0.45	-0.29	-0.15	-0.06	-0.03	-0.04	-0.08	-0.12
	Superimposed Dead Load	1.82	1.44	1.06	0.71	0.40	0.12	-0.11	-0.29	-0.43	-0.52	-0.57	-0.57	-0.53	-0.45	-0.34	-0.24	-0.13	-0.05	0.01	0.02	0.00	-0.03	-0.06
G2	Steel Dead Load	2.02	1.62	1.23	0.85	0.49	0.15	-0.14	-0.40	-0.62	-0.80	-0.94	-1.02	-1.07	-1.07	-1.04	-0.97	-0.89	-0.81	-0.73	-0.65	-0.57	-0.49	-0.41
	Fluid Dead Load	2.41	1.92	1.43	0.97	0.54	0.17	-0.15	-0.41	-0.61	-0.74	-0.81	-0.81	-0.76	-0.66	-0.53	-0.38	-0.25	-0.16	-0.10	-0.08	-0.08	-0.11	-0.15
	Superimposed Dead Load	1.60	1.27	0.94	0.63	0.36	0.11	-0.10	-0.27	-0.39	-0.48	-0.54	-0.55	-0.54	-0.49	-0.42	-0.35	-0.28	-0.22	-0.18	-0.16	-0.15	-0.14	-0.14
G3	Steel Dead Load	1.70	1.36	1.03	0.71	0.41	0.13	-0.12	-0.33	-0.51	-0.65	-0.75	-0.81	-0.84	-0.83	-0.80	-0.75	-0.70	-0.64	-0.59	-0.53	-0.48	-0.43	-0.37
	Fluid Dead Load	2.28	1.81	1.35	0.91	0.51	0.16	-0.14	-0.38	-0.55	-0.66	-0.71	-0.71	-0.65	-0.56	-0.45	-0.34	-0.24	-0.16	-0.12	-0.10	-0.12	-0.15	-0.18
	Superimposed Dead Load	1.43	1.13	0.84	0.57	0.32	0.10	-0.09	-0.24	-0.35	-0.44	-0.49	-0.51	-0.50	-0.47	-0.43	-0.38	-0.34	-0.30	-0.27	-0.25	-0.24	-0.22	-0.21
G4	Steel Dead Load	1.39	1.12	0.84	0.58	0.33	0.10	-0.09	-0.26	-0.40	-0.50	-0.57	-0.61	-0.62	-0.61	-0.58	-0.55	-0.51	-0.48	-0.44	-0.41	-0.38	-0.35	-0.31
	Fluid Dead Load	2.15	1.71	1.27	0.85	0.48	0.15	-0.13	-0.35	-0.51	-0.61	-0.65	-0.64	-0.59	-0.51	-0.41	-0.32	-0.25	-0.19	-0.15	-0.14	-0.15	-0.17	-0.19
	Superimposed Dead Load	1.31	1.04	0.77	0.51	0.29	0.09	-0.08	-0.21	-0.31	-0.37	-0.41	-0.42	-0.41	-0.38	-0.34	-0.31	-0.28	-0.26	-0.24	-0.23	-0.23	-0.22	-0.22
G5	Steel Dead Load	1.09	0.87	0.65	0.45	0.25	0.08	-0.07	-0.19	-0.29	-0.36	-0.40	-0.42	-0.41	-0.40	-0.37	-0.35	-0.33	-0.31	-0.29	-0.27	-0.26	-0.25	-0.23
	Fluid Dead Load	2.03	1.61	1.19	0.80	0.45	0.14	-0.12	-0.32	-0.46	-0.56	-0.59	-0.59	-0.54	-0.47	-0.40	-0.33	-0.27	-0.23	-0.21	-0.19	-0.19	-0.21	-0.23
	Superimposed Dead Load	1.24	0.98	0.72	0.48	0.27	0.08	-0.07	-0.17	-0.24	-0.28	-0.29	-0.28	-0.26	-0.23	-0.20	-0.17	-0.15	-0.14	-0.13	-0.13	-0.14	-0.15	-0.16

TABLE OF DEFLECTIONS (Inch)

Girder	Load	FS4	Piece No. 5							FS5	Piece No. 6										FS6
			1	2	3	4	5	6	7		1	2	3	4	5	6	7	8	9	10	
G1	Steel Dead Load	-0.43	-0.35	-0.26	-0.17	-0.06	0.08	0.23	0.59	0.77	0.94	1.08	1.18	1.24	1.28	1.28	1.24	1.17	1.07	0.95	0.80
	Fluid Dead Load	-0.12	-0.14	-0.15	-0.13	-0.05	0.09	0.30	0.90	1.25	1.58	1.87	2.08	2.22	2.29	2.29	2.20	2.05	1.83	1.57	1.27
	Superimposed Dead Load	-0.06	-0.09	-0.10	-0.08	-0.03	0.06	0.21	0.60	0.83	1.04	1.23	1.36	1.45	1.50	1.51	1.47	1.38	1.25	1.09	0.90
G2	Steel Dead Load	-0.41	-0.34	-0.26	-0.17	-0.06	0.08	0.23	0.57	0.75	0.91	1.06	1.18	1.27	1.32	1.32	1.29	1.22	1.12	0.99	0.84
	Fluid Dead Load	-0.15	-0.18	-0.18	-0.14	-0.06	0.09	0.31	0.90	1.24	1.57	1.88	2.13	2.32	2.41	2.42	2.35	2.20	1.98	1.69	1.38
	Superimposed Dead Load	-0.14	-0.14	-0.13	-0.09	-0.03	0.05	0.18	0.52	0.71	0.90	1.07	1.21	1.32	1.37	1.39	1.35	1.28	1.16	1.01	0.83
G3	Steel Dead Load	-0.37	-0.31	-0.24	-0.15	-0.05	0.07	0.22	0.56	0.73	0.91	1.07	1.20	1.29	1.35	1.37	1.34	1.28	1.17	1.03	0.86
	Fluid Dead Load	-0.18	-0.20	-0.19	-0.15	-0.06	0.10	0.32	0.92	1.26	1.61	1.94	2.20	2.40	2.51	2.54	2.49	2.35	2.11	1.81	1.47
	Superimposed Dead Load	-0.21	-0.19	-0.16	-0.11	-0.04	0.06	0.19	0.52	0.71	0.90	1.07	1.21	1.32	1.38	1.40	1.38	1.30	1.18	1.02	0.84
G4	Steel Dead Load	-0.31	-0.27	-0.22	-0.14	-0.05	0.07	0.21	0.54	0.72	0.90	1.07	1.21	1.32	1.38	1.40	1.38	1.31	1.20	1.05	0.88
	Fluid Dead Load	-0.19	-0.22	-0.22	-0.17	-0.07	0.10	0.33	0.94	1.29	1.65	1.99	2.27	2.48	2.61	2.65	2.59	2.45	2.20	1.88	1.52
	Superimposed Dead Load	-0.22	-0.20	-0.18	-0.13	-0.05	0.07	0.21	0.59	0.80	1.02	1.21	1.38	1.50	1.57	1.59	1.56	1.48	1.33	1.14	0.93
G5	Steel Dead Load	-0.23	-0.21	-0.17	-0.12	-0.04	0.06	0.20	0.52	0.69	0.89	1.07	1.23	1.35	1.41	1.43	1.40	1.33	1.21	1.06	0.88
	Fluid Dead Load	-0.23	-0.24	-0.22	-0.17	-0.06	0.11	0.34	0.95	1.29	1.68	2.04	2.36	2.60	2.71	2.73	2.66	2.50	2.25	1.93	1.56
	Superimposed Dead Load	-0.16	-0.16	-0.15	-0.11	-0.04	0.07	0.23	0.66	0.90	1.17	1.43	1.65	1.82	1.89	1.90	1.85	1.74	1.56	1.35	1.10

TABLE OF DEFLECTIONS (Inch)

Girder	Load	FS6	Piece No. 7										FS7	Piece No. 8								Abut. 2
			1	2	3	4	5	6	7	8	9	10		1	2	3	4	5	6	7	8	
G1	Steel Dead Load	0.80	0.63	0.46	0.30	0.16	0.05	-0.03	-0.07	-0.08	-0.04	0.01	0.10	0.19	0.28	0.35	0.39	0.38	0.33	0.24	0.13	0.00
	Fluid Dead Load	1.27	0.92	0.60	0.34	0.14	0.03	0.00	0.09	0.28	0.57	0.93	1.34	1.76	2.10	2.30	2.32	2.14	1.80	1.28	0.68	0.00
	Superimposed Dead Load	0.90	0.68	0.46	0.27	0.12	0.03	0.00	0.06	0.19	0.39	0.62	0.89	1.14	1.34	1.45	1.45	1.33	1.12	0.80	0.43	0.00
G2	Steel Dead Load	0.84	0.66	0.48	0.32	0.17	0.05	-0.03	-0.08	-0.09	-0.06	-0.01	0.07	0.16	0.24	0.31	0.34	0.34	0.30	0.22	0.12	0.00
	Fluid Dead Load	1.38	1.03	0.70	0.41	0.19	0.04	-0.01	0.06	0.23	0.50	0.83	1.23	1.62	1.94	2.13	2.15	2.00	1.68	1.20	0.64	0.00
	Superimposed Dead Load	0.83	0.64	0.45	0.27	0.13	0.03	-0.01	0.00	0.08	0.20	0.35	0.54	0.72	0.86	0.94	0.95	0.89	0.75	0.53	0.28	0.00
G3	Steel Dead Load	0.86	0.69	0.51	0.34	0.18	0.06	-0.04	-0.09	-0.11	-0.09	-0.04	0.03	0.12	0.20	0.27	0.31	0.30	0.27	0.20	0.11	0.00
	Fluid Dead Load	1.47	1.12	0.78	0.47	0.22	0.05	-0.02	0.02	0.16	0.40	0.72	1.09	1.47	1.78	1.97	1.99	1.85	1.56	1.11	0.59	0.00
	Superimposed Dead Load	0.84	0.65	0.46	0.29	0.15	0.04	-0.02	-0.03	0.01	0.09	0.20	0.34	0.49	0.61	0.69	0.70	0.66	0.56	0.40	0.21	0.00
G4	Steel Dead Load	0.88	0.70	0.52	0.35	0.19	0.06	-0.04	-0.10	-0.13	-0.11	-0.07	0.00	0.08	0.16	0.22	0.26	0.26	0.23	0.17	0.09	0.00
	Fluid Dead Load	1.52	1.17	0.82	0.51	0.25	0.06	-0.03	-0.02	0.10	0.31	0.60	0.95	1.30	1.58	1.76	1.79	1.67	1.41	1.01	0.54	0.00
	Superimposed Dead Load	0.93	0.72	0.52	0.33	0.17	0.05	-0.02	-0.04	0.00	0.08	0.21	0.35	0.51	0.63	0.71	0.73	0.68	0.58	0.41	0.22	0.00
G5	Steel Dead Load	0.88	0.71	0.53	0.35	0.20	0.06	-0.04	-0.11	-0.14	-0.13	-0.10	-0.04	0.03	0.11	0.17	0.20	0.21	0.19	0.14	0.08	0.00
	Fluid Dead Load	1.56	1.20	0.86	0.54	0.27	0.07	-0.03	-0.04	0.04	0.22	0.48	0.78	1.08	1.33	1.50	1.53	1.43	1.22	0.87	0.46	0.00
	Superimposed Dead Load	1.10	0.85	0.61	0.39	0.19	0.05	-0.02	-0.02	0.05	0.17	0.33	0.52	0.70	0.84	0.92	0.93	0.86	0.73	0.52	0.28	0.00

NOTES:

1. See "Camber Diagram" for piece No. locations and span dimensions.
2. Steel Dead Load Deflection is due to girders and cross frames.
3. Fluid Dead Load Deflection is due to deck concrete, including haunch.
4. Superimposed Dead Load is due to curb, sidewalk, and transition barrier concrete, bridge rail, and pavement.
5. Positive deflections are downward.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

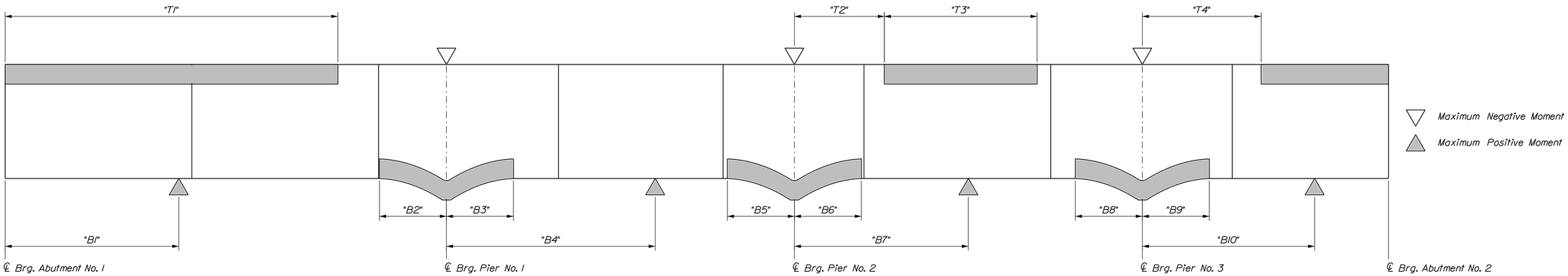
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	7/21
CHECKED-REVIEWED	D.Myers	11/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

DEAD LOAD DEFLECTIONS

SHEET NUMBER
128
OF 163

Date:10/15/2022
Username:
Filename: ...\128_Girder_Dead_Load_Deflections.dgn Division:



GIRDER STRESS DIAGRAM

Shaded areas are always in compression.
Other areas are in tension or have stress reversal.

TABLE OF STRESS DIAGRAM DIMENSIONS *

Girder	"T1"	"T2"	"T3"	"T4"	"B1"	"B2"	"B3"	"B4"	"B5"	"B6"	"B7"	"B8"	"B9"	"B10"
G1	198'-0"	63'-0"	82'-0"	77'-0"	119'-0"	44'-0"	74'-0"	111'-0"	31'-0"	27'-0"	97'-0"	37'-0"	41'-0"	103'-0"
G2	198'-0"	56'-0"	82'-0"	76'-0"	118'-0"	42'-0"	70'-0"	118'-0"	30'-0"	26'-0"	100'-0"	38'-0"	40'-0"	88'-0"
G3	198'-0"	51'-0"	90'-0"	72'-0"	104'-0"	42'-0"	68'-0"	113'-0"	33'-0"	27'-0"	103'-0"	34'-0"	40'-0"	87'-0"
G4	192'-0"	50'-0"	96'-0"	74'-0"	103'-0"	44'-0"	58'-0"	98'-0"	34'-0"	26'-0"	105'-0"	34'-0"	42'-0"	86'-0"
G5	186'-0"	55'-0"	96'-0"	77'-0"	102'-0"	44'-0"	52'-0"	94'-0"	37'-0"	29'-0"	119'-0"	35'-0"	41'-0"	78'-0"

* Measured Horizontally Along Girder, without accounting for vertical profile.

BOTTOM OF SLAB ELEVATIONS

Span No. 1

Horizontal Distance Along Centerline of Girder (FT) from ℄ Brg., Abut. 1

Girder	EL. @ ℄ Brg. @ Abut 1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260
G1	44.50	44.52	44.54	44.55	44.56	44.56	44.54	44.52	44.48	44.43	44.37	44.30	44.22	44.12	44.02	43.90	43.77	43.63	43.49	43.33	43.17	43.01	42.84	42.68	42.52	42.37	42.22
G2	44.70	44.71	44.72	44.73	44.72	44.71	44.69	44.66	44.62	44.57	44.50	44.43	44.34	44.25	44.14	44.02	43.90	43.76	43.62	43.46	43.31	43.15	42.99	42.83	42.68	42.53	42.39
G3	44.90	44.90	44.91	44.90	44.89	44.88	44.85	44.82	44.77	44.72	44.65	44.57	44.49	44.39	44.28	44.16	44.03	43.90	43.75	43.60	43.45	43.30	43.14	42.99	42.84	42.70	-
G4	44.70	44.70	44.69	44.69	44.67	44.65	44.62	44.58	44.54	44.48	44.41	44.33	44.24	44.14	44.02	43.90	43.78	43.64	43.50	43.35	43.20	43.05	42.89	42.75	42.60	42.46	-
G5	44.50	44.49	44.48	44.47	44.45	44.43	44.39	44.35	44.30	44.24	44.16	44.08	43.99	43.89	43.77	43.65	43.52	43.39	43.25	43.10	42.95	42.80	42.65	42.51	42.37	42.23	-

Span No. 2

Horizontal Distance Along Centerline of Girder (FT) from ℄ Brg., Pier. 1

Girder	EL. @ ℄ Brg., @ Pier 1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
G1	42.16	42.03	41.90	41.79	41.68	41.59	41.50	41.43	41.35	41.29	41.22	41.15	41.08	41.00	40.92	40.83	40.74	40.65	40.55	40.46	40.37	40.28	40.21
G2	42.36	42.23	42.11	42.00	41.90	41.80	41.71	41.63	41.56	41.48	41.41	41.34	41.26	41.18	41.09	41.00	40.91	40.82	40.73	40.64	40.56	40.48	-
G3	42.56	42.44	42.32	42.21	42.10	42.01	41.92	41.84	41.76	41.69	41.61	41.53	41.45	41.36	41.27	41.18	41.09	41.00	40.91	40.83	40.75	-	-
G4	42.36	42.24	42.12	42.01	41.91	41.82	41.73	41.65	41.57	41.49	41.41	41.33	41.24	41.15	41.06	40.97	40.87	40.78	40.70	40.62	-	-	-
G5	42.16	42.04	41.92	41.82	41.72	41.63	41.54	41.46	41.38	41.30	41.21	41.12	41.03	40.94	40.85	40.75	40.66	40.58	40.50	-	-	-	-

Span No. 3

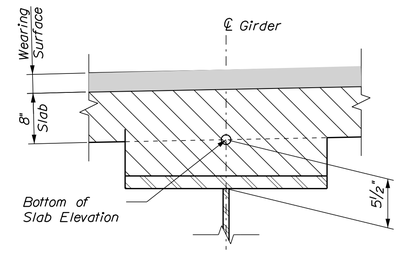
Horizontal Distance Along Centerline of Girder (FT) from ℄ Brg., Pier. 2

Girder	EL. @ ℄ Brg., @ Pier 2	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210
G1	40.19	40.13	40.08	40.03	39.99	39.96	39.91	39.86	39.79	39.71	39.62	39.51	39.39	39.27	39.13	39.00	38.86	38.73	38.62	38.51	-	-
G2	40.45	40.39	40.33	40.29	40.24	40.20	40.16	40.10	40.04	39.97	39.88	39.78	39.67	39.54	39.41	39.28	39.14	39.01	38.89	38.77	-	-
G3	40.72	40.65	40.60	40.55	40.51	40.46	40.42	40.36	40.30	40.23	40.15	40.05	39.95	39.83	39.70	39.56	39.43	39.29	39.16	39.04	38.92	-
G4	40.58	40.52	40.46	40.42	40.38	40.33	40.29	40.24	40.18	40.11	40.03	39.93	39.83	39.71	39.59	39.45	39.31	39.18	39.04	38.91	38.79	38.67
G5	40.44	40.38	40.33	40.29	40.24	40.20	40.16	40.12	40.06	40.00	39.91	39.82	39.72	39.61	39.48	39.35	39.21	39.07	38.92	38.79	38.65	38.53

Span No. 4

Horizontal Distance Along Centerline of Girder (FT) from ℄ Brg., Pier. 3

Girder	EL. @ ℄ Brg., @ Pier 3	10	20	30	40	50	60	70	80	90	100	110	120	130	140	EL. @ ℄ Brg., @ Abut 2
G1	38.47	38.39	38.32	38.27	38.23	38.19	38.16	38.12	38.06	37.99	37.89	37.77	37.63	37.47	37.30	37.16
G2	38.67	38.58	38.51	38.45	38.40	38.36	38.32	38.27	38.21	38.13	38.03	37.91	37.78	37.63	37.47	37.37
G3	38.87	38.78	38.70	38.63	38.58	38.53	38.48	38.43	38.37	38.29	38.19	38.07	37.94	37.80	37.65	37.57
G4	38.67	38.57	38.49	38.42	38.36	38.31	38.26	38.21	38.15	38.06	37.97	37.85	37.72	37.58	37.42	37.37
G5	38.47	38.37	38.29	38.22	38.16	38.11	38.06	38.00	37.93	37.85	37.75	37.63	37.50	37.36	37.20	37.16



BLOCKING DETAIL

Theoretical blocking is 5 ½" at ℄ Brg., Abutments and Piers
(Do not use theoretical blocking to set forms)

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

	DATE
Scott Rollins	
B.Smith	7/21
D.Myers	11/21

PROJ. MANAGER	Scott Rollins
DESIGN-DETAILED	B.Smith
CHECKED-REVIEWED	D.Myers
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER CUMBERLAND
BRUNSWICK-TOPSHAM

GIRDER STRESS DIAGRAM & BOS ELEVATIONS

SHEET NUMBER

129

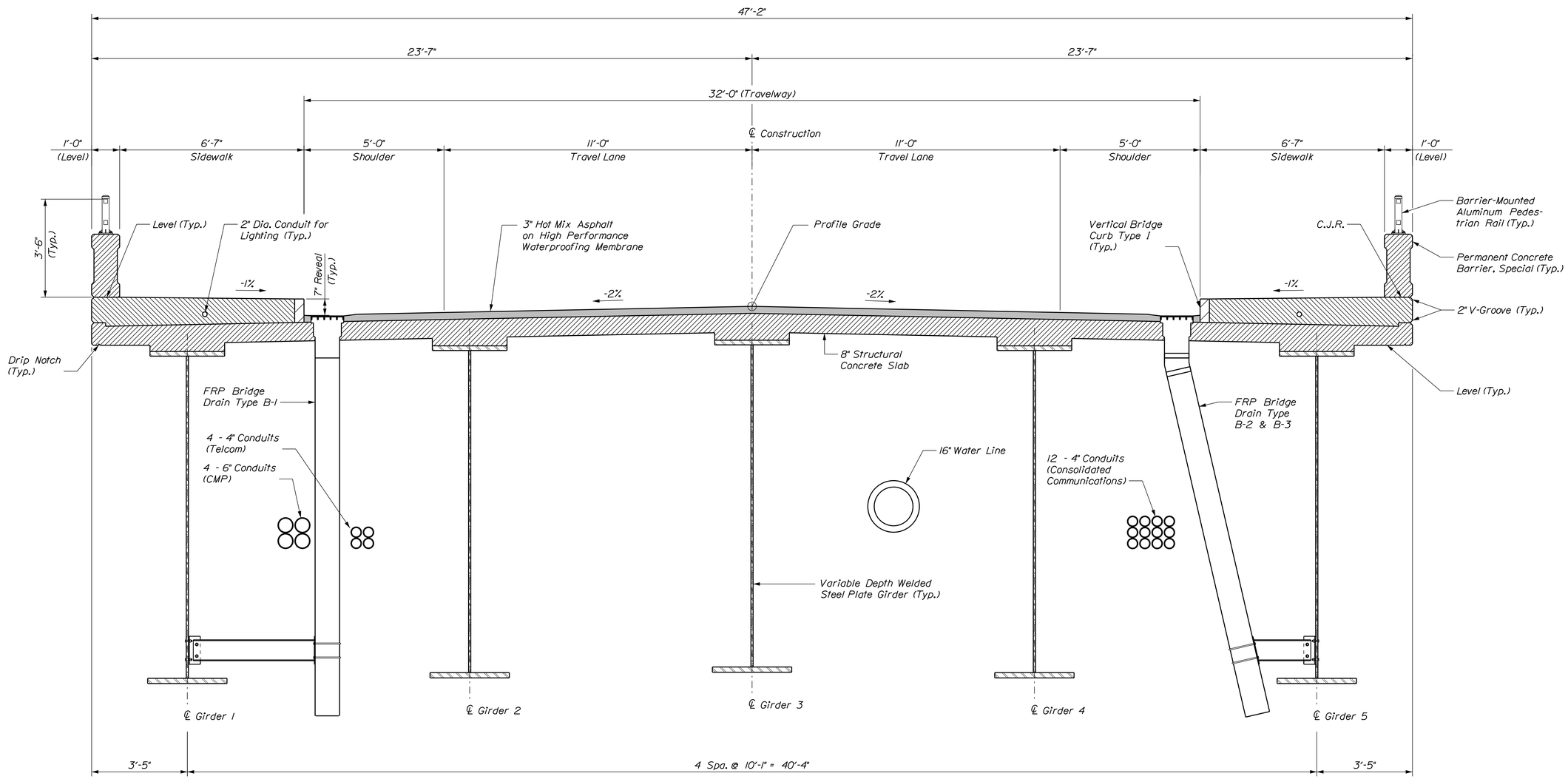
OF 163

Date:10/15/2022

Username:

Division:

Filename: ...\129_Girder_Stress_Diagram.dgn



TRANSVERSE SECTION

SUPERSTRUCTURE NOTES

1. The theoretical blocking used for design of the structure is 5½ inches at the centerline of bearing of the abutments and piers. Refer to Standard Detail 502(03) for blocking details.
2. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. Adjust reinforcing steel to fit around the bridge drains in a manner approved by the Resident. Do not cut transverse reinforcing bars.
4. Form a two-inch V-groove on the fascias at the horizontal joint between the sidewalk and slab and at the horizontal joint between the concrete barrier and the sidewalk.
5. The sidewalk shall include tooled control joints spaced evenly at 6'-0" maximum. Joints shall be perpendicular to the curb line, shall be 1" minimum depth, and shall have a ¼" radius edge minimum. Tooled control joints shall be placed symmetrically on either side of the roadway. (Joint spacing on the inside of the curve will be slightly less than 6'-0").
6. Unless the superstructure slab concrete is placed in one continuous operation, the placements shall follow the Deck Pour Sequence identified on the plans. Successive placements shall proceed from the low end of the placement. Concrete in a placement shall be kept plastic until the entire section has been placed. A minimum of 5 days shall elapse between successive placements. The superstructure slab concrete placement sequence shall be approved by the Resident.
7. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.
8. Permanent Concrete Barrier reinforcing steel shall be stainless steel.
9. The Contractor shall install Permanent Concrete Barrier vertical stirrups, as shown on "Concrete Barrier Details" sheets, prior to the placement of sidewalk concrete.
10. With the exception of localized concrete joint header blockouts, the superstructure slab and backwall concrete shall be in place before the Expansion Device is fixed in position.
11. The use of Precast Concrete Deck Panels will not be allowed on this project.

LEGEND:

C.J.R. = Construction Joint, Roughen Surface ¼" profile Min.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

DANIEL S. MYERS
12572
P.E. NUMBER
9/23/2022
DATE

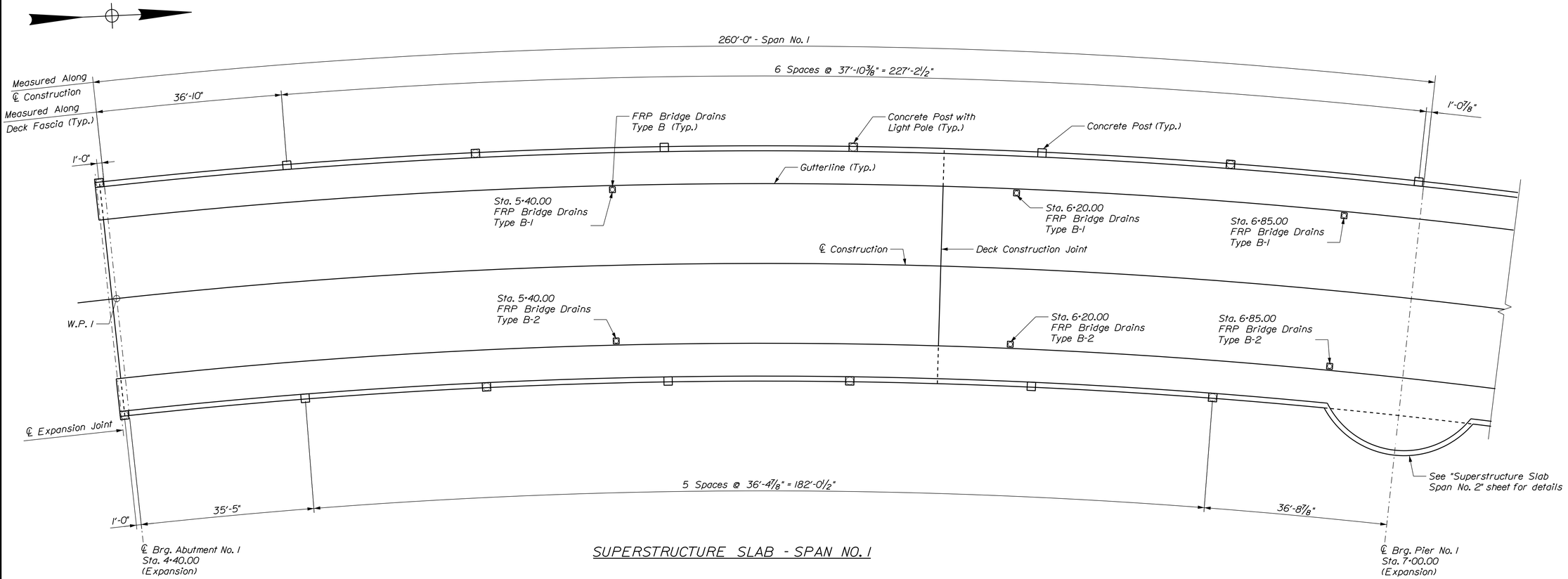
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	C.Taylor	4/20
CHECKED-REVIEWED	D.Myers	4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

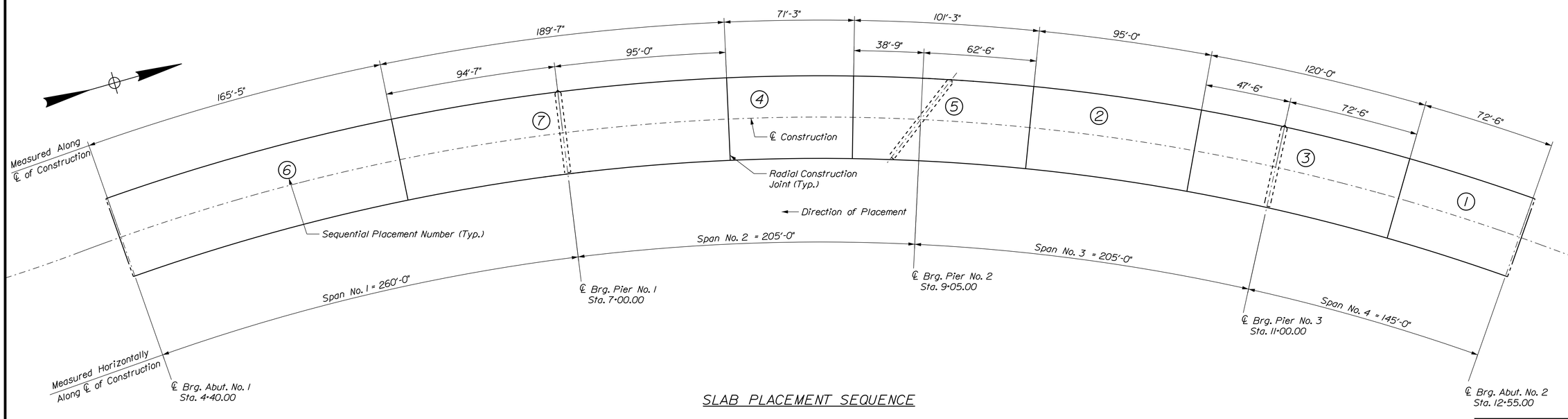
TRANSVERSE SECTION

SHEET NUMBER
130
OF 163

Filename: ...\106180_55\130_Sup_Section.dgn Division: Username: Date:10/15/2022



SUPERSTRUCTURE SLAB - SPAN NO. 1



SLAB PLACEMENT SEQUENCE

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	S.Morgan	4/20
CHECKED-REVIEWED	D.Myers	4/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

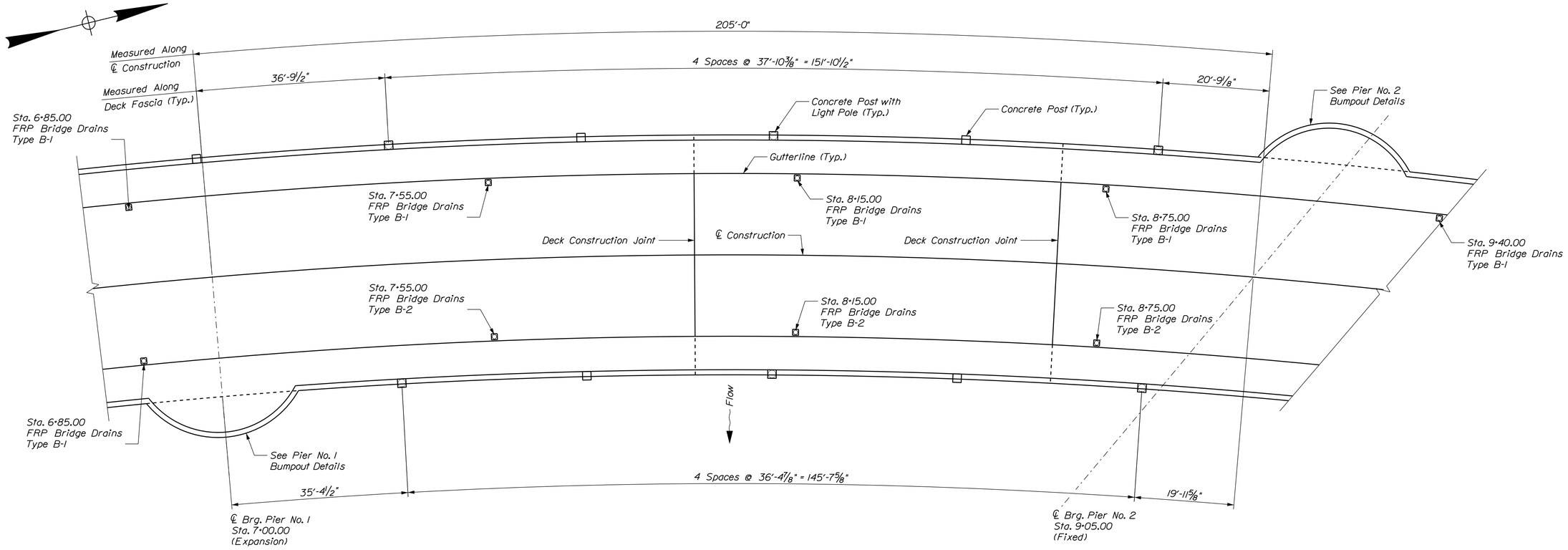
SUPERSTRUCTURE SLAB SPAN NO. 1

SHEET NUMBER

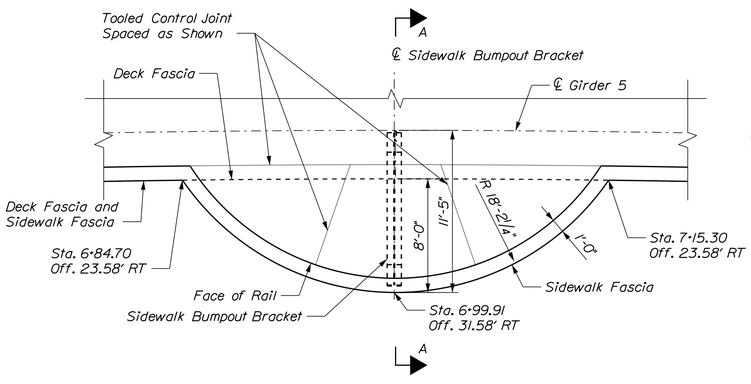
131

OF 163

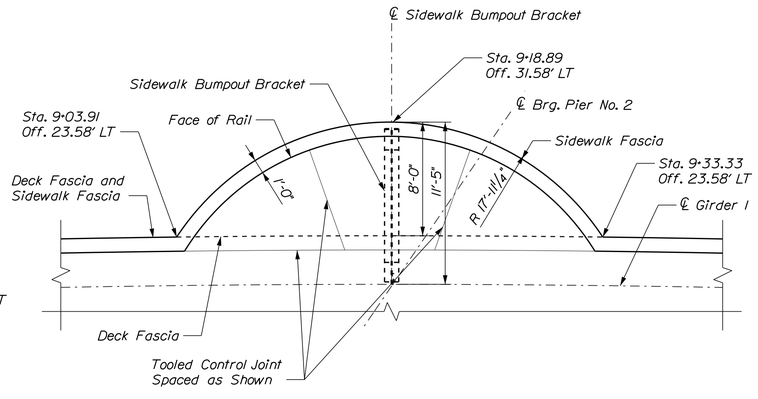
Filename: ...\131_Sup_Slab_Plan_Span_1.dgn Division: Username: Date:10/15/2022



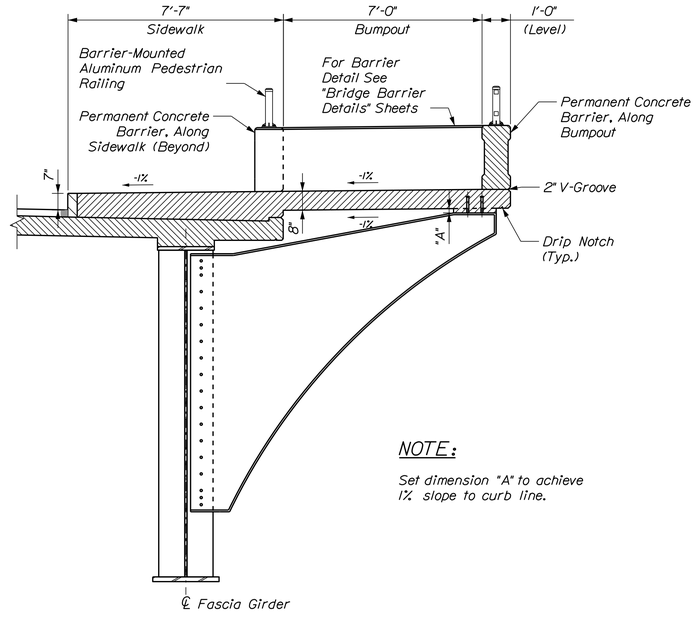
SUPERSTRUCTURE SLAB - SPAN NO. 2



PIER NO. 1 SIDEWALK BUMPOUT PLAN



PIER NO. 2 SIDEWALK BUMPOUT PLAN



SECTION A-A
(Pier No. 1 Shown, Pier No. 2 Similar)
(Bridge rails and rails not shown)

NOTE:
Set dimension "A" to achieve 1% slope to curb line.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2260(300)
WIN 22603.00
BRIDGE PLANS
BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572
SIGNATURE
DATE 9/23/2022

PROJ. MANAGER	Scott Rollins			
DESIGN-DETAILED	S.Morgan	4/20		
CHECKED-REVIEWED	D.Myers	4/20		
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SUPERSTRUCTURE SLAB SPAN NO. 2

SHEET NUMBER 132
OF 163

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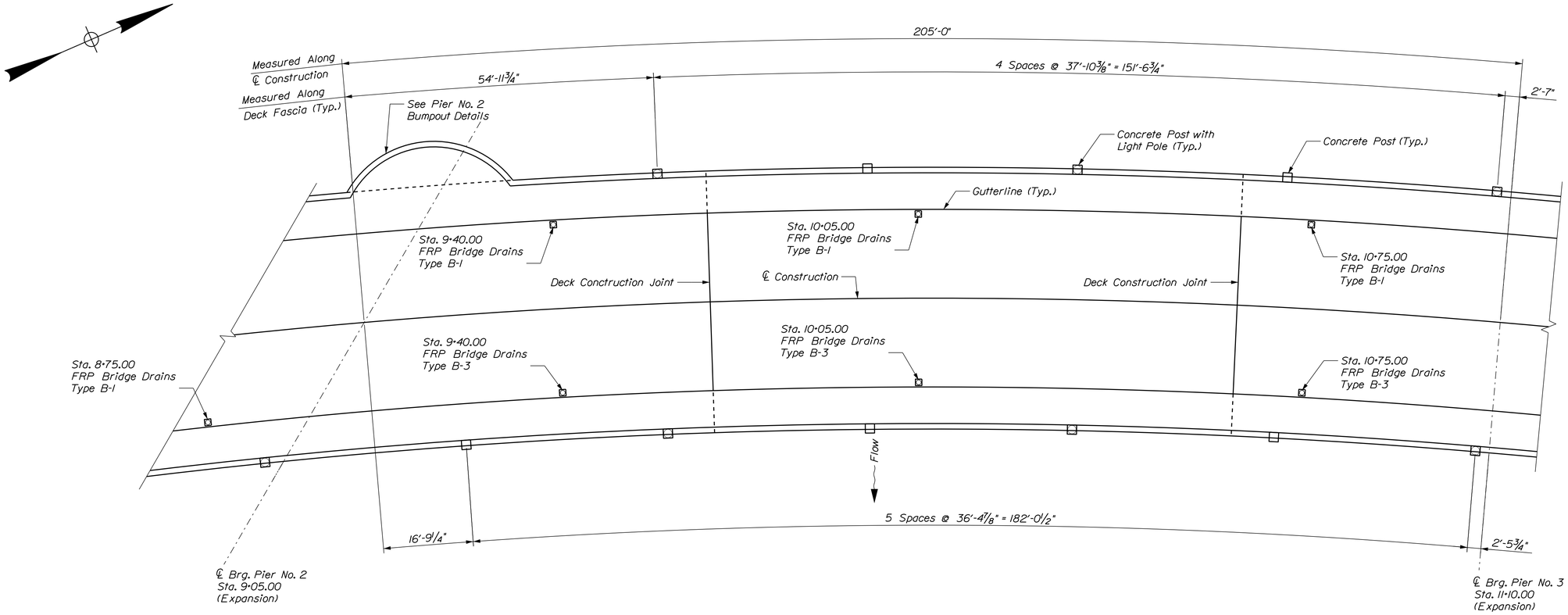
Filename: ...\132_Sup_Slab_Plan_Span_2.dgn Division: Username: Date:10/15/2022



SUPERSTRUCTURE SLAB - SPAN NO. 3

Filename: ...\133_Sup_Slab_Plan_Span_3.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	BY	DATE
Scott Rollins	S.Morgan	4/20
S.Morgan	D.Myers	4/20
D.Myers		

PROJ. MANAGER	Scott Rollins
DESIGN-DETAILED	S.Morgan
CHECKED-REVIEWED	D.Myers
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

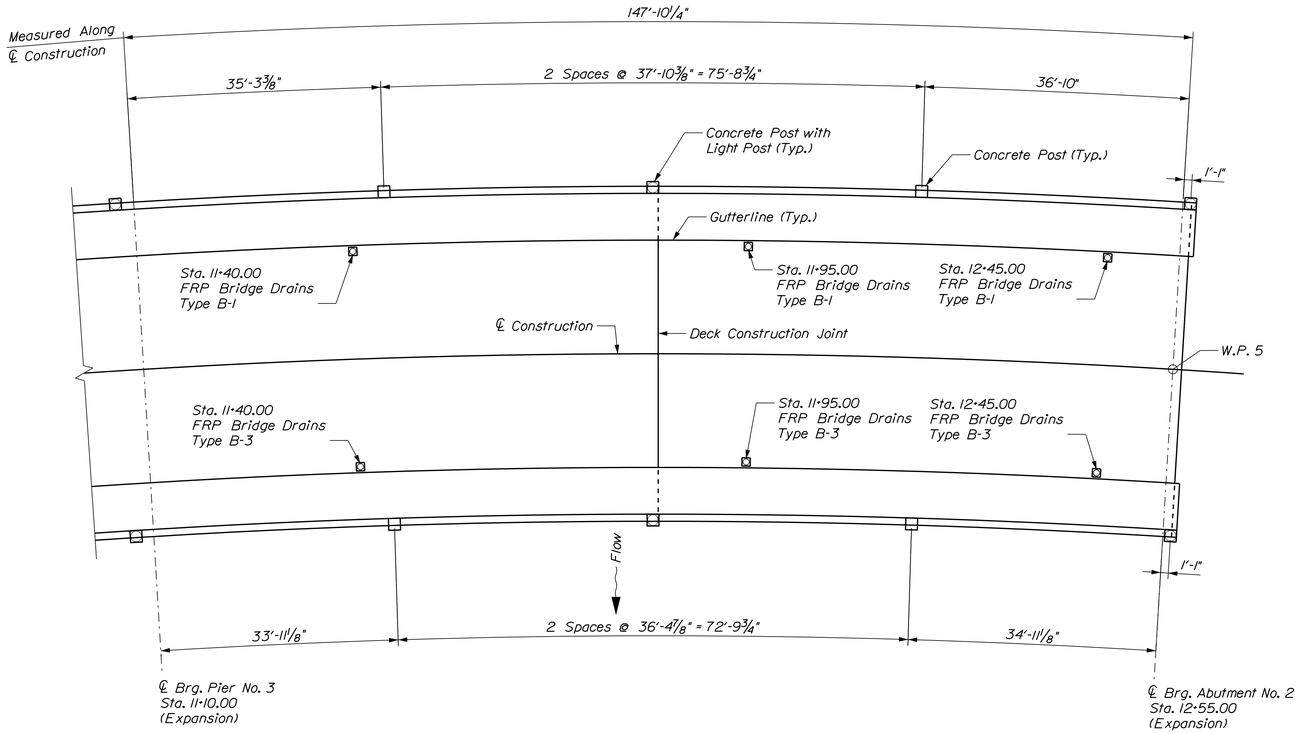
SUPERSTRUCTURE SLAB SPAN NO. 3

SHEET NUMBER

133

OF 163

TYLin



SUPERSTRUCTURE SLAB - SPAN NO. 4

Filename: ...\134_Sup_Slab_Plan_Span_4.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

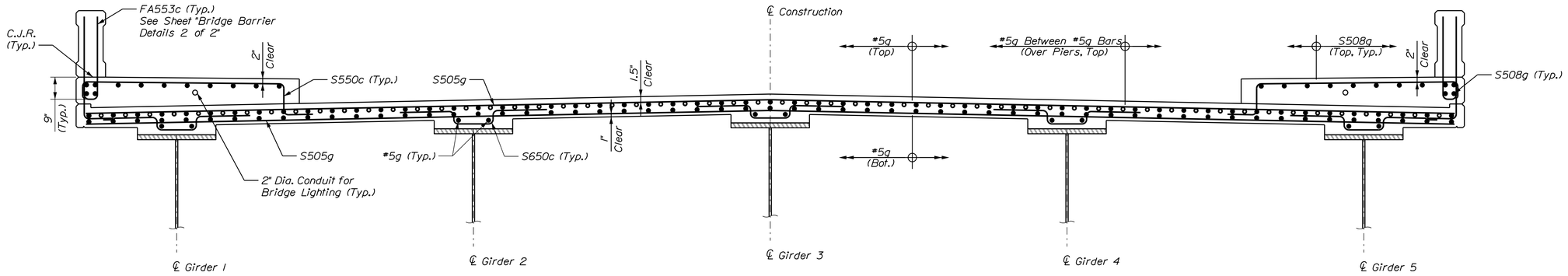
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	S.Morgan	BY	4/20
CHECKED-REVIEWED	D.Myers	S.Morgan	4/20
DESIGN2-DETAILED2		D.Myers	
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SUPERSTRUCTURE SLAB
SPAN NO. 4

SHEET NUMBER
134
OF 163

TYLin



TRANSVERSE REINFORCING SECTION

LEGEND:

C.J.R. = Construction Joint, Roughen Surface 1/4" profile Min. (Typ.)
N.F. = Near Face
F.F. = Far Face

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

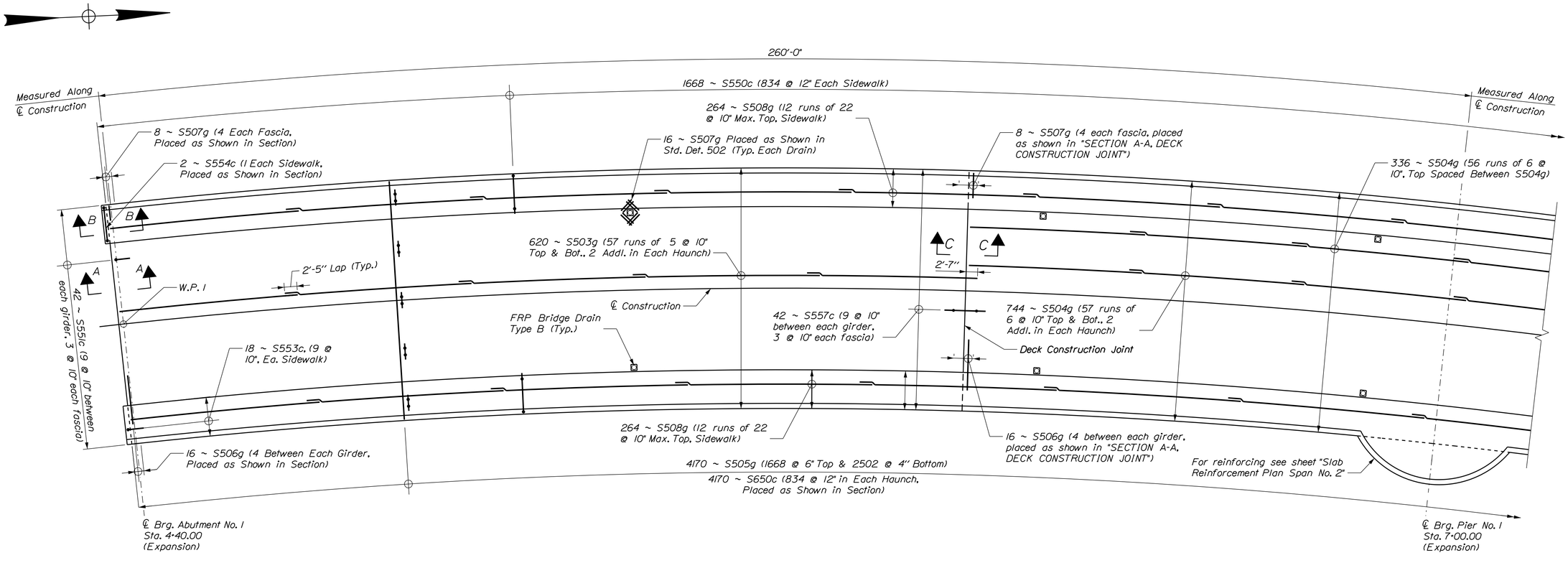
	PROJ. MANAGER	Scott Rollins	
	DESIGN-DETAILED	B.Smith	4/20
	CHECKED-REVIEWED	D.Myers	2/21
	DESIGN2-DETAILED2		
	DESIGN3-DETAILED3		
	REVISIONS 1		
	REVISIONS 2		
	REVISIONS 3		
	REVISIONS 4		
	FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

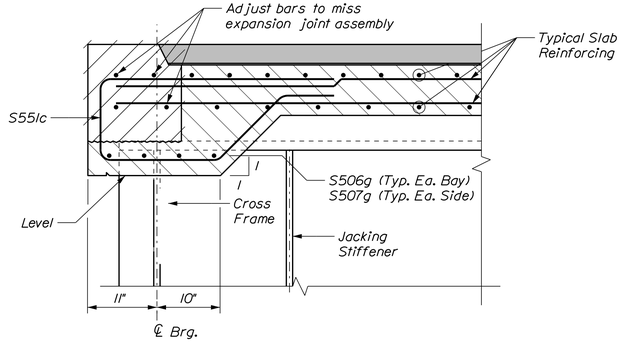
SLAB REINFORCEMENT SECTION

SHEET NUMBER
135
OF 163

Filename: ...\135_Sup_Slab_Reinf_Section.dgn Division: Username: Date:10/15/2022

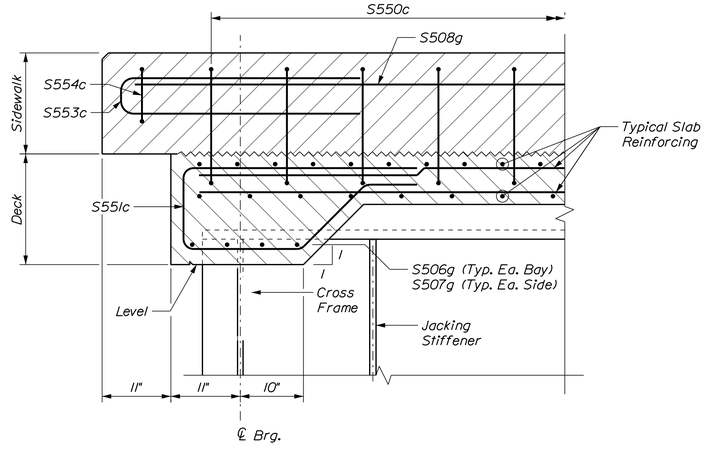


SLAB REINFORCING PLAN 1



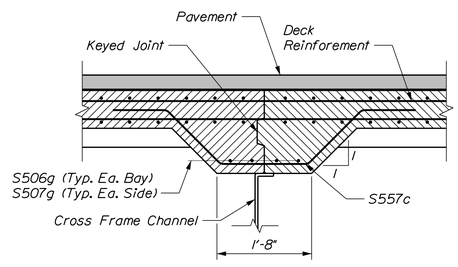
SECTION A-A
ABUTMENT NO. 1 LONGITUDINAL SECTION

(See MaineDOT Standard Details Section 521(02) for full dimensions)
(Joint Armor not shown for clarity)



SECTION B-B
ABUTMENT NO. 1 LONGITUDINAL SECTION AT SIDEWALK

(See MaineDOT Standard Details Section 521(02) for full dimensions)
(Expansion Dam not shown for clarity)



SECTION C-C, DECK CONSTRUCTION JOINT

Flow

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers 9/28/2022

SIGNATURE 12572

P.E. NUMBER 9/28/2022

DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Smith	B.Smith	4/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

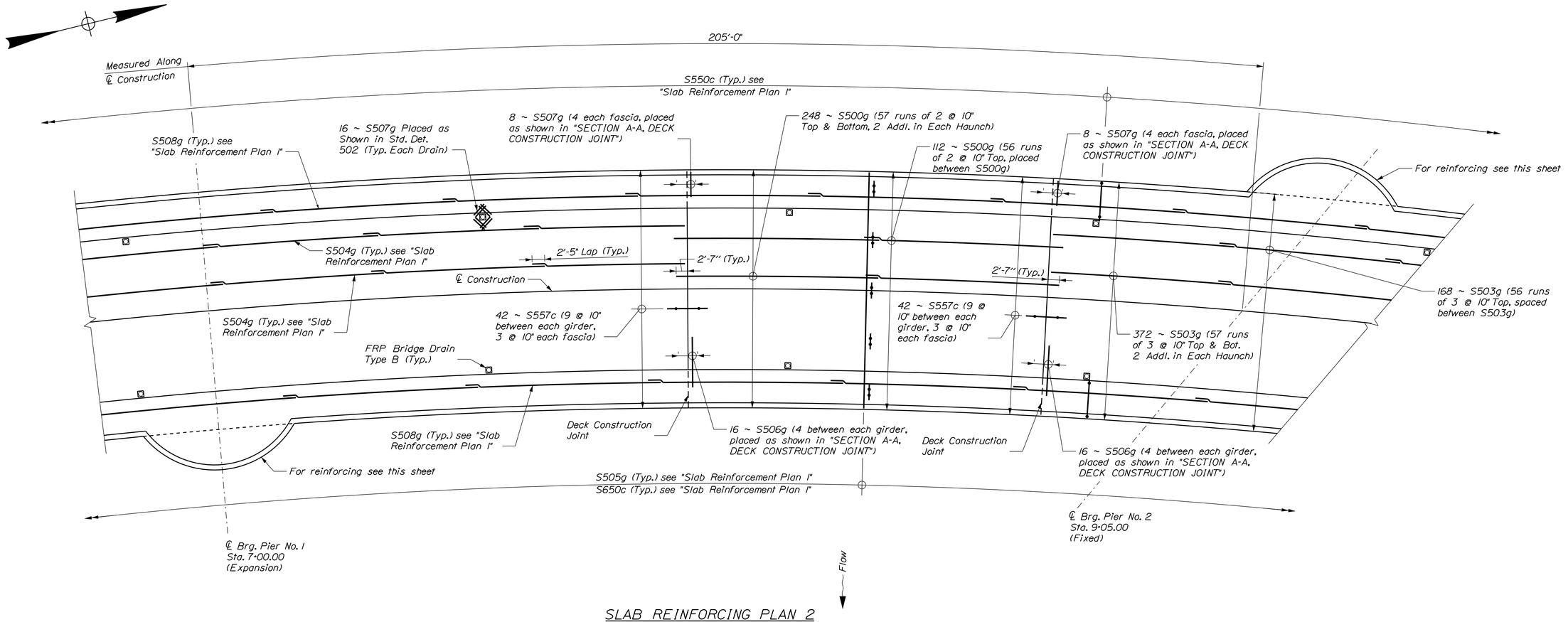
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SLAB REINFORCEMENT PLAN SPAN NO. 1

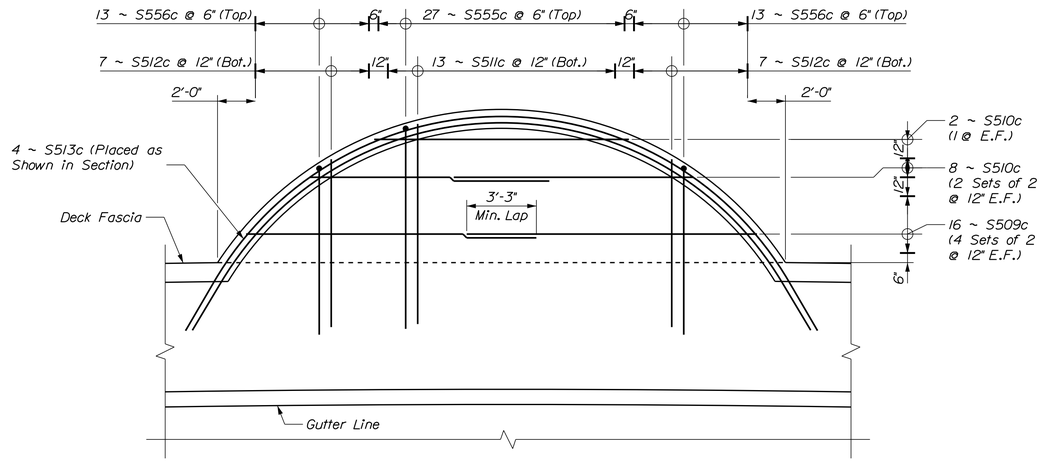
SHEET NUMBER 136 OF 163

TYLin

Filename: ...\136_Sup_Slab_Reinf_Plan_1.dgn Division: Username: Date:10/15/2022

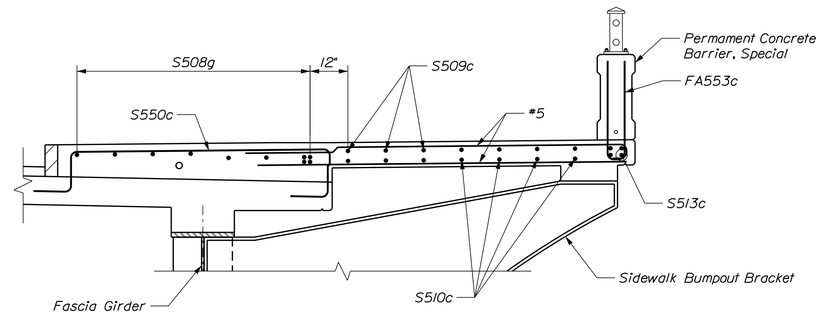


SLAB REINFORCING PLAN 2



BUMPOUT PLAN

(Bumpout at Pier No. 2 Shown, Bumpout at Pier No. 1 Similar)



BUMPOUT SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Smith	B.Smith	4/20
CHECKED-REVIEWED	D.Myers	B.Toothaker	2/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SLAB REINFORCEMENT PLAN SPAN NO. 2

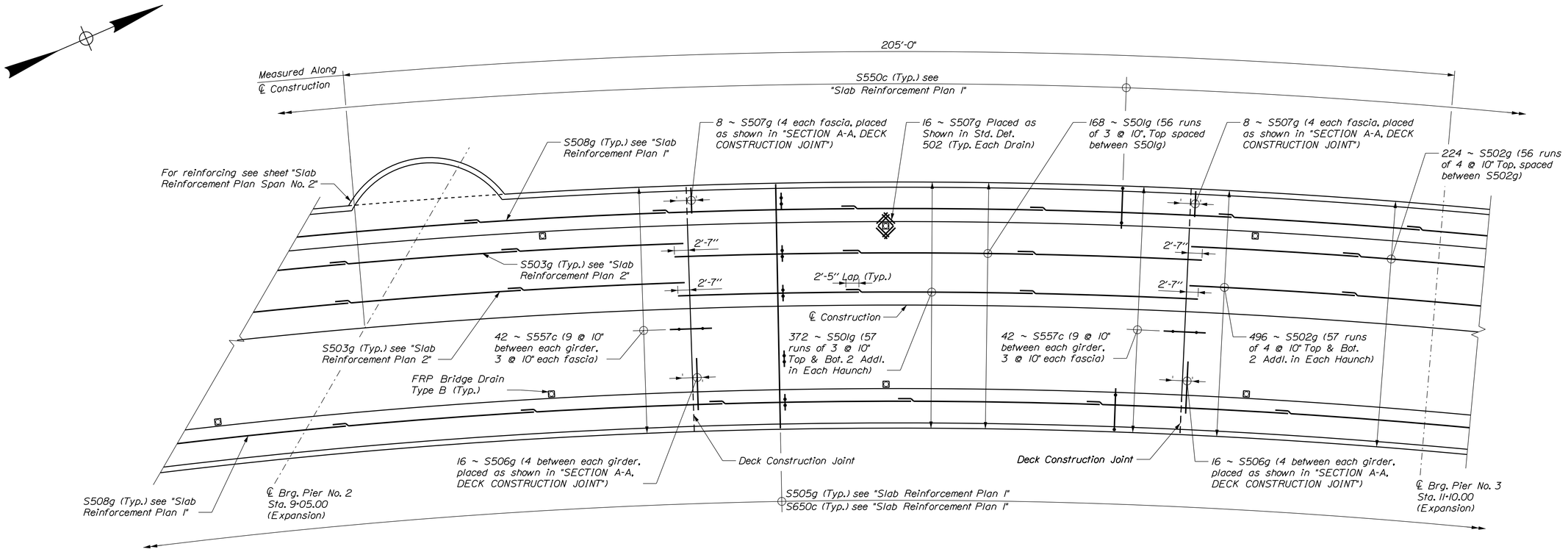
SHEET NUMBER

137

OF 163

TYLin

Filename: ...\137_Sup_Slab_Reinf_Plan_2.dgn Division: Username: Date:10/15/2022



SLAB REINFORCING PLAN 3

Flow

Filename: ...\138_Sup_Slab_Reinf_Plan_3.dgn Division: Username: Date:10/15/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE

12572 — P.E. NUMBER

9/23/2022 — DATE

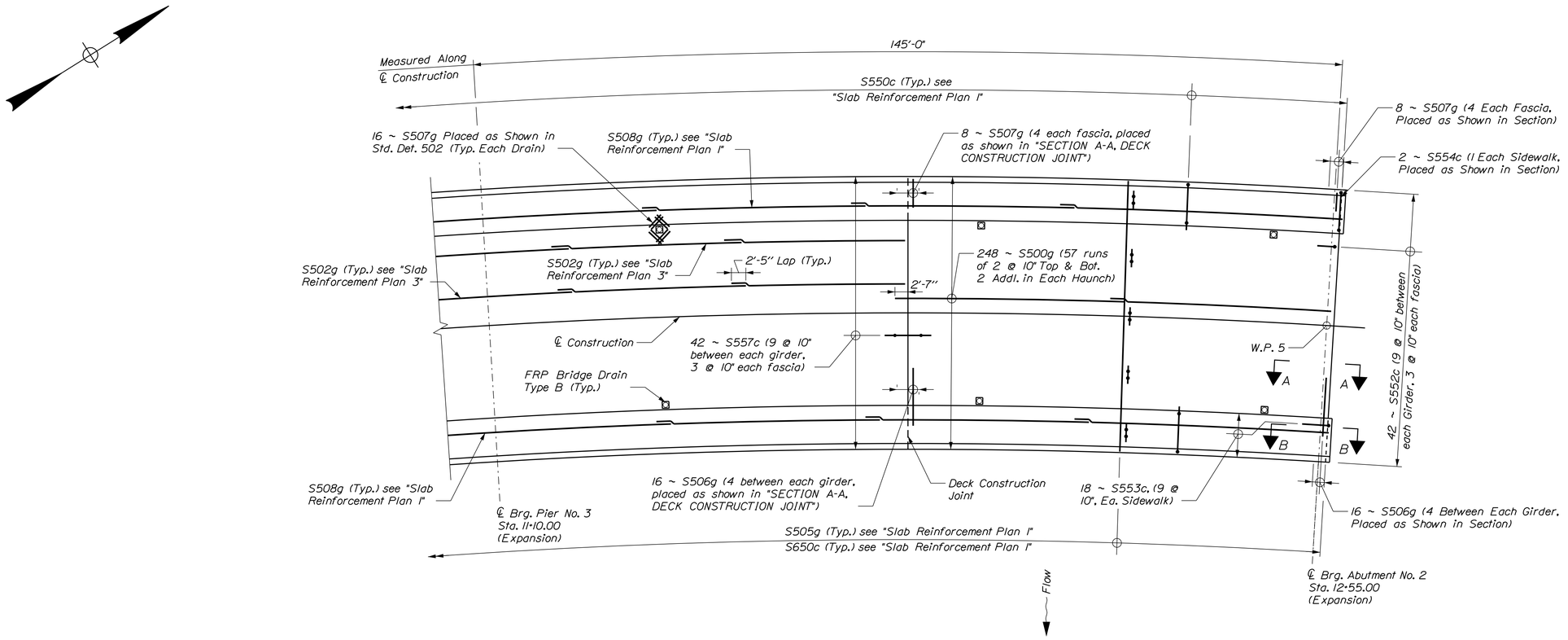
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	4/20
CHECKED-REVIEWED	D.Myers	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

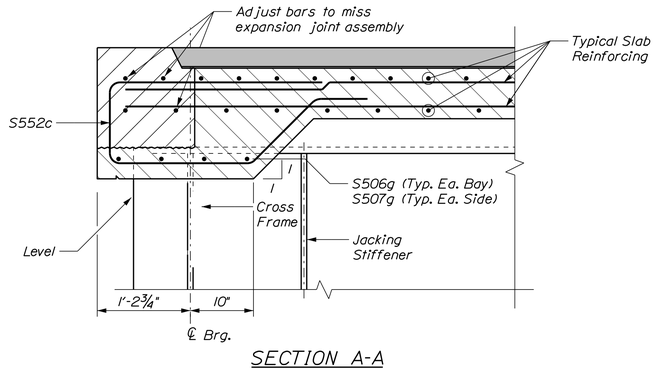
SLAB REINFORCEMENT PLAN
SPAN NO. 3

SHEET NUMBER
138
OF 163

TYLin

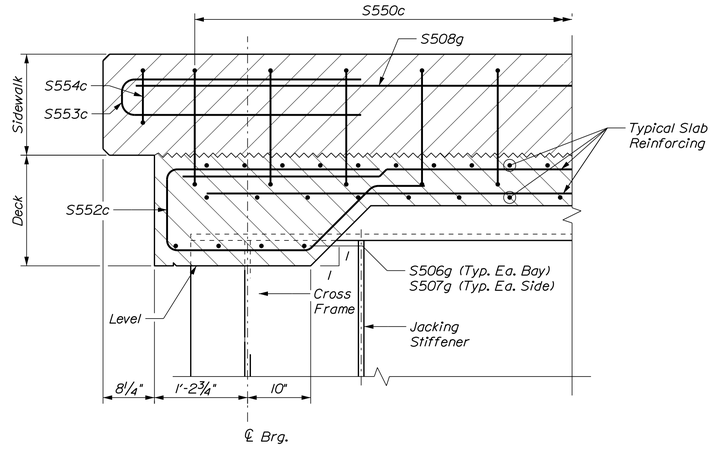


SLAB REINFORCING PLAN 4



SECTION A-A
ABUTMENT NO. 2 LONGITUDINAL SECTION

(See MaineDOT Standard Details Section 521(02) for full dimensions)
(Joint Armor not shown for clarity)



SECTION B-B
ABUTMENT NO. 2 LONGITUDINAL SECTION AT SIDEWALK

(See MaineDOT Standard Details Section 521(02) for full dimensions)
(Expansion Dam not shown for clarity)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Smith	BY	DATE
CHECKED-REVIEWED	D.Myers	B.Smith	4/20
DESIGN2-DETAILED2		B.Toothaker	2/21
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

SLAB REINFORCEMENT PLAN SPAN NO. 4

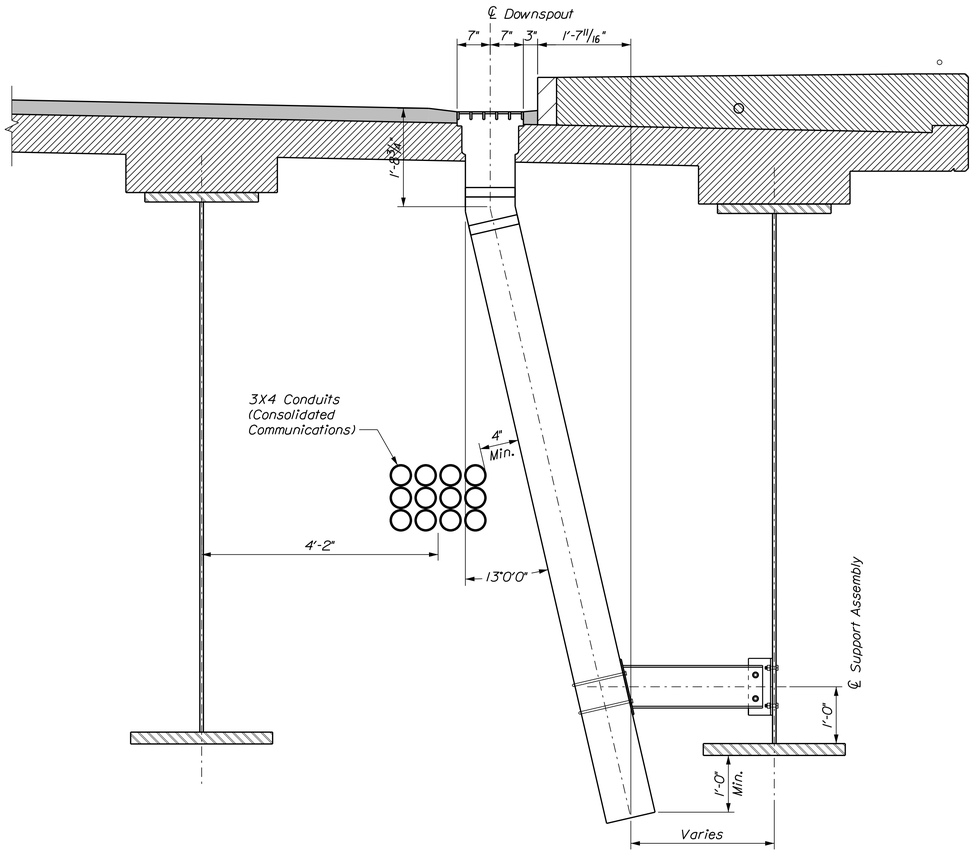
SHEET NUMBER

139

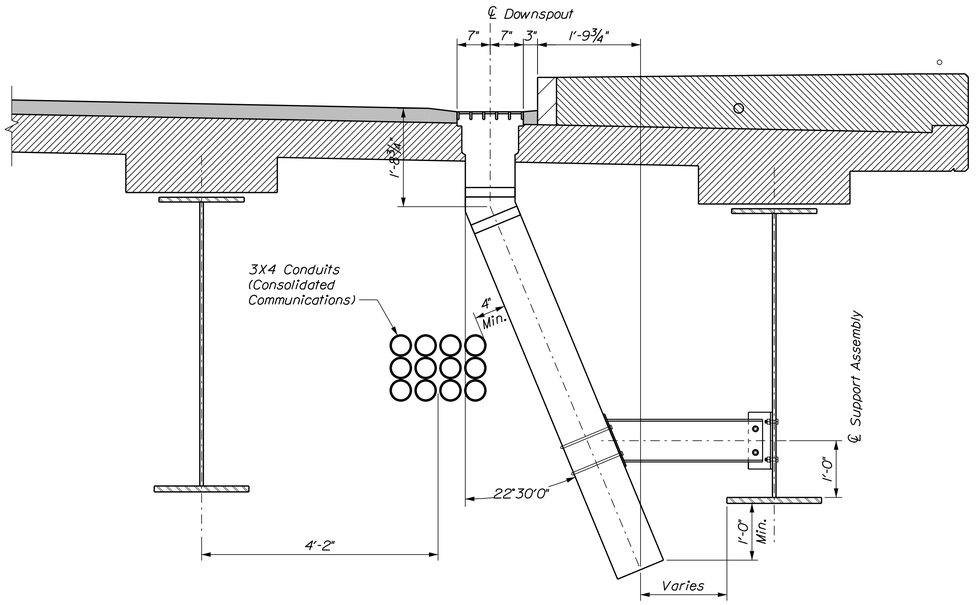
OF 163

TYLin

Filename: ...\139_Sup_Slab_Reinf_Plan_4.dgn Division: Username: Date:10/15/2022



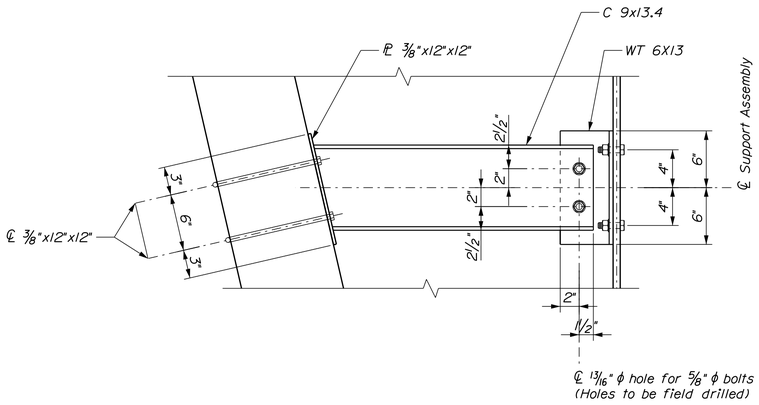
TYPE B-2



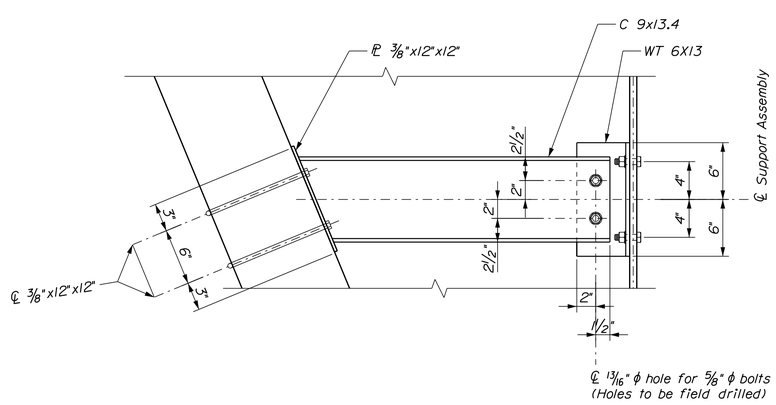
TYPE B-3

NOTE:

Type B-I has a vertical downspout in accordance with SP 502. Typ B-I Support Assembly shall generally be in conformance with the details shown on this sheet but with downspout bracket oriented vetically.



SUPPORT ASSEMBLY DETAIL - TYPE B-2



SUPPORT ASSEMBLY DETAIL - TYPE B-3

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED
PROFESSIONAL
ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

		BY	DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED		S.Morgan	6/21
CHECKED-REVIEWED		D.Myers	6/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

DECK DRAIN DETAILS

SHEET NUMBER

140

OF 163

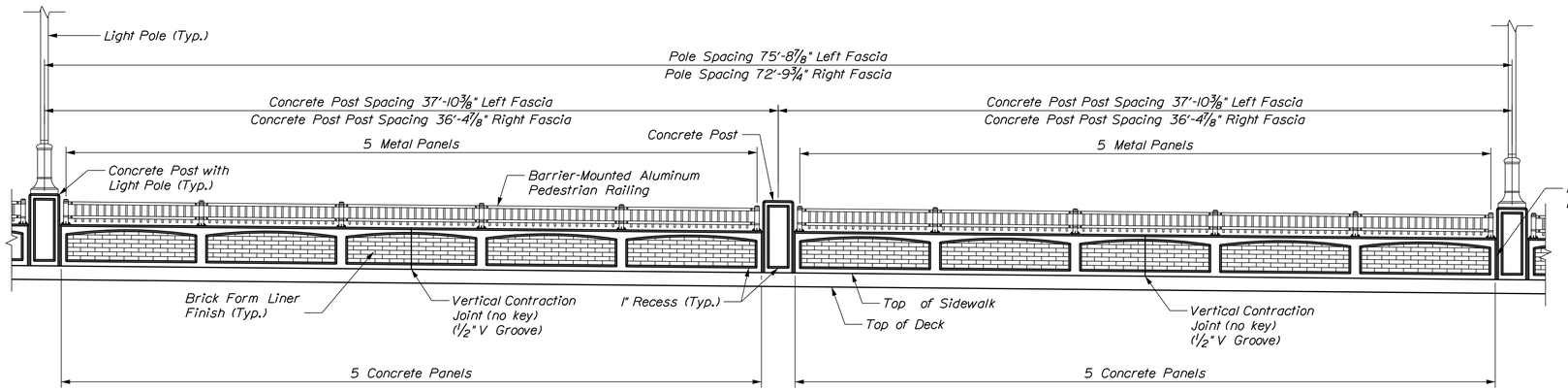
TYLin

Username:

Date:10/15/2022

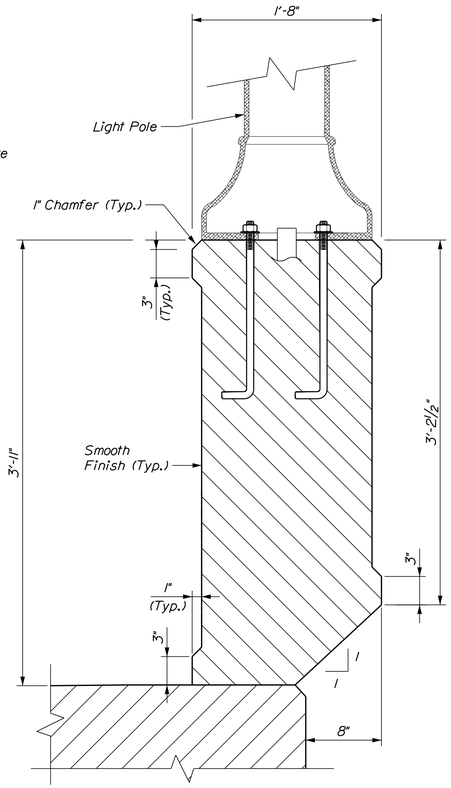
Division:

Filename: ...\140_Deck_Drain_Det_1.dgn

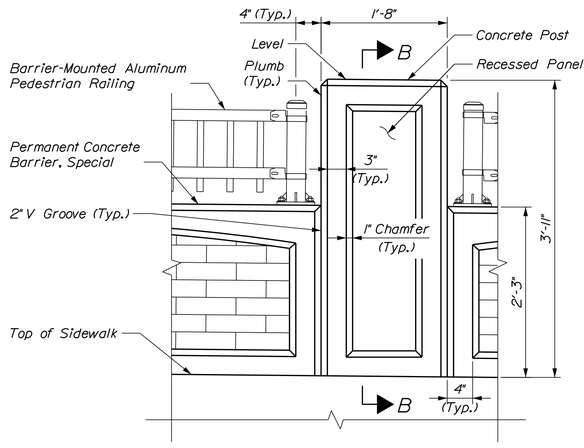


TYPICAL BARRIER ELEVATION

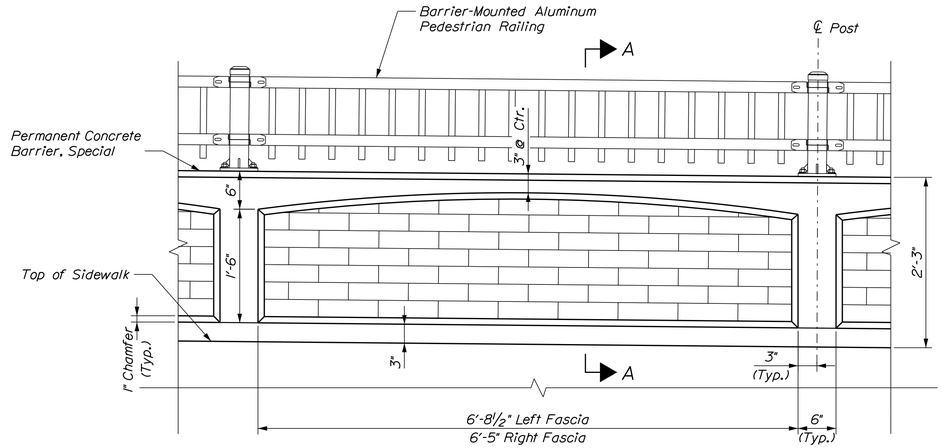
(Interior Elevation Shown. Exterior Elevation similar but without Brick Form Liner finish)



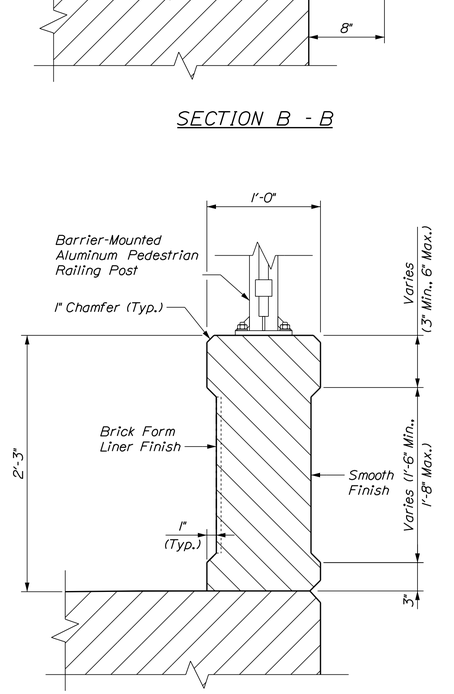
SECTION B - B



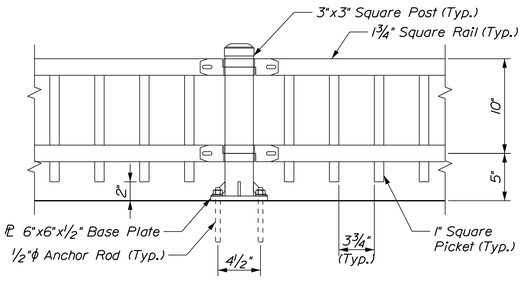
COCNRETE POST ELEVATION



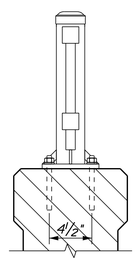
CONCRETE RAIL ELEVATION



SECTION A - A



BARRIER-MOUNTED ALUMINUM PEDESTRIAN RAIL - ELEVATION



BARRIER-MOUNTED ALUMINUM PEDESTRIAN RAIL - SECTION

NOTES:

1. Concrete barrier (including concrete posts) will be paid under Item 526.341, Permanent Concrete Barrier, Special".
2. Pedestrian rail post anchorage shall consist of 4 - ½"ϕ ASTM F1554 Grade 55 anchor rods spaced on a 4½" x 4½" pattern. The anchorage shall be able to develop the full anchor rod capacity. Anchorage details shall be submitted to the Resident for approval.
3. Pattern barrier as shown on the plans with concrete patterning in accordance with Special Provision 502 Concrete Form Liners.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	2/21
CHECKED-REVIEWED	D.Myers	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

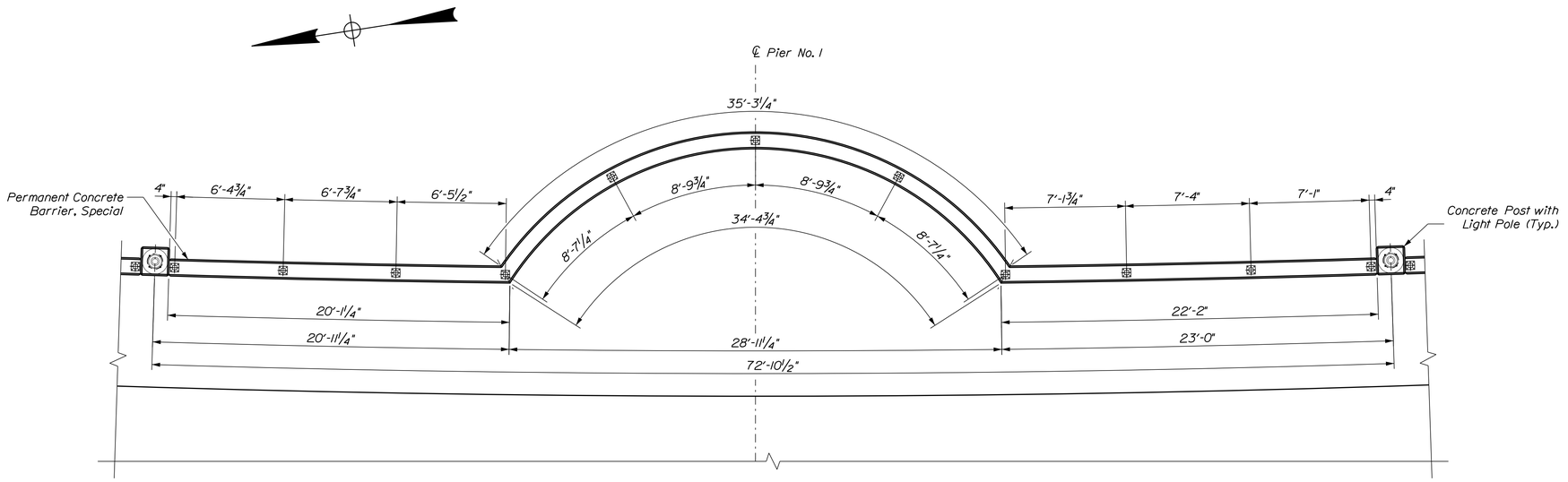
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRIDGE BARRIER DETAILS
SHEET 1 OF 4

SHEET NUMBER
141
OF 163

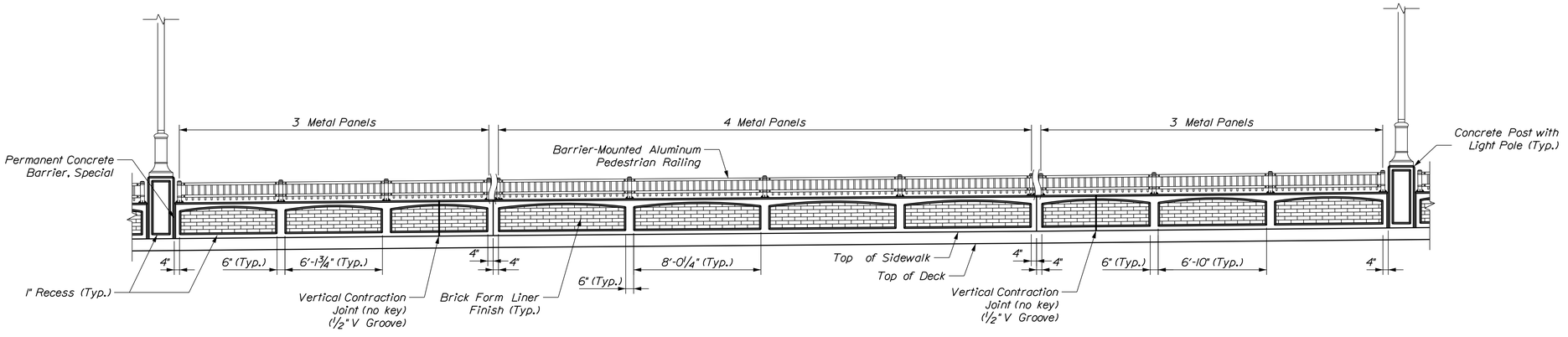
TYLin

Filename: ...\141_Barrier_Det_1.dgn Division: Username: Date:10/15/2022



PIER NO. 1 SIDEWALK BUMPOUT, BRIDGE BARRIER PLAN VIEW

(Post Spacing measured along Barrier ℄)



PIER NO. 1 SIDEWALK BUMPOUT
BRIDGE BARRIER, DEVELOPED ELEVATION

(All measurements along inside face of Barrier). (Interior Elevation Shown. Exterior Elevation similar but without Brick Form Liner finish)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	2/21
CHECKED-REVIEWED	D.Myers	2/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

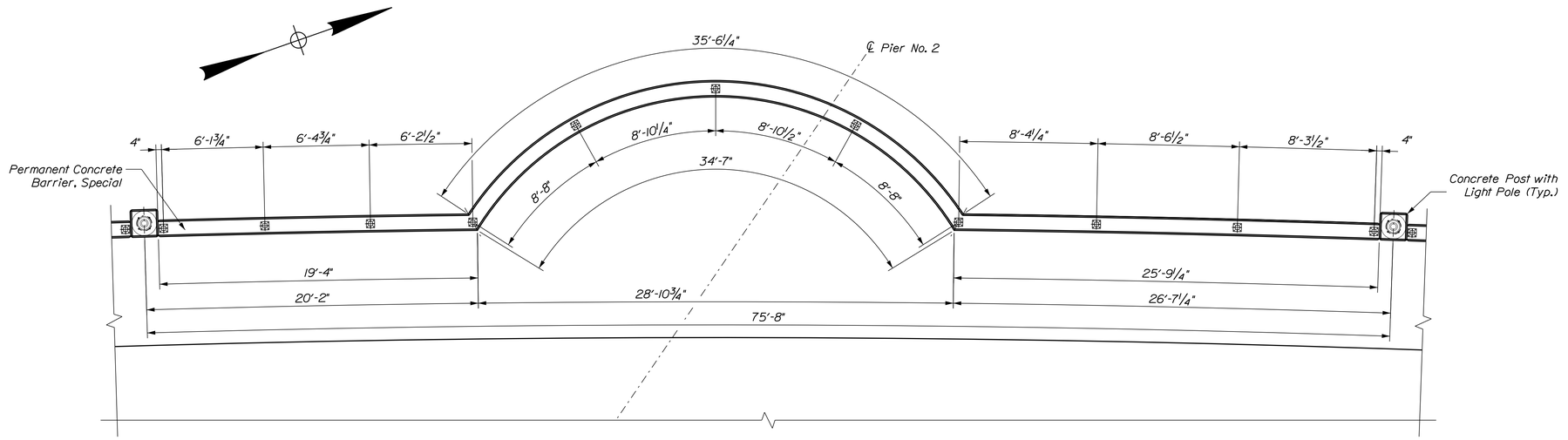
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRIDGE BARRIER DETAILS
SHEET 2 OF 4

SHEET NUMBER
142
OF 163

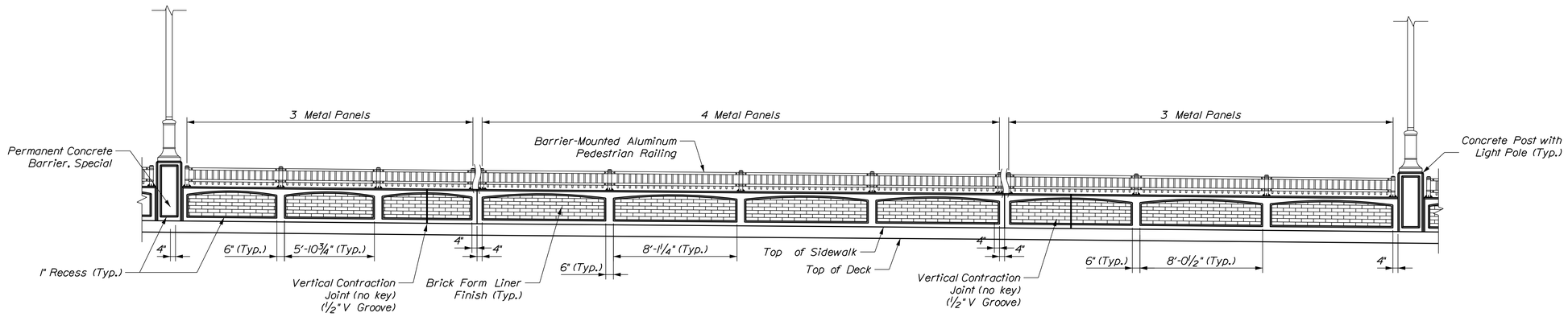
TYLin

Filename: ...\142_Barrier_Det_2.dgn Division: Username: Date:10/15/2022



PIER NO. 2 SIDEWALK BUMPOUT, BRIDGE BARRIER PLAN VIEW

(Post Spacing measured along Barrier ℄)



PIER NO. 2 SIDEWALK BUMPOUT
BRIDGE BARRIER, DEVELOPED ELEVATION

(All measurements along inside face of Barrier), (Interior Elevation Shown, Exterior Elevation similar but without Brick Form Liner finish)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

	PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN2-DETAILED2	DESIGN3-DETAILED3	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
BY	Scott Rollins	J.Legere	D.Myers							
DATE		8/21	11/21							

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRIDGE BARRIER DETAILS
SHEET 3 OF 4

SHEET NUMBER
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OF 163

TYLin

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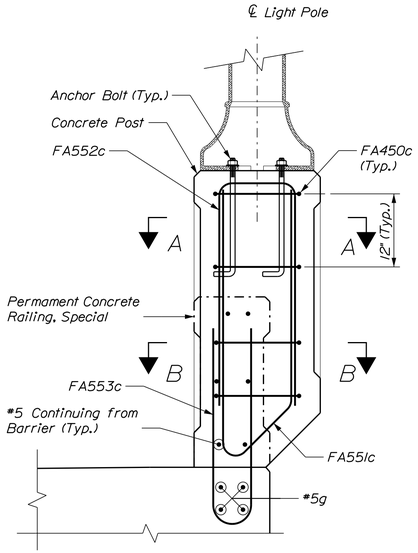
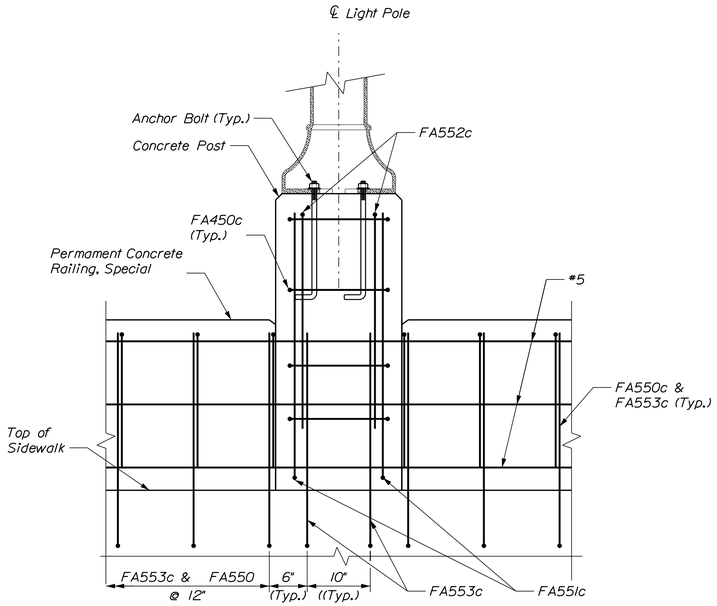
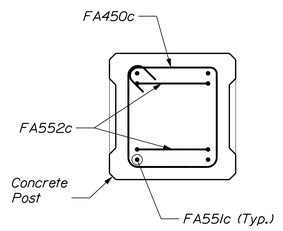


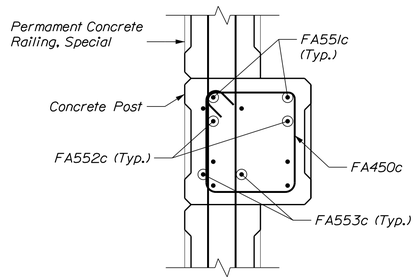
BRIDGE RAIL SECTION



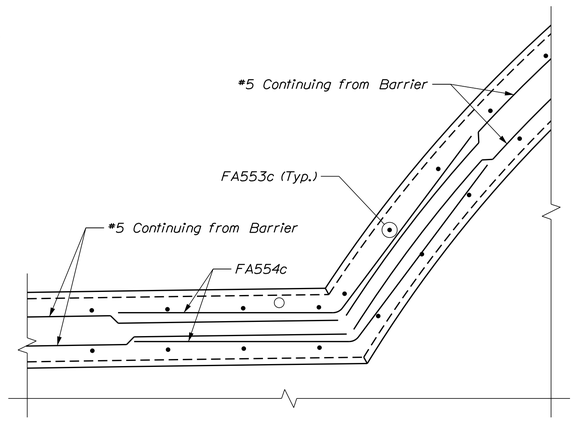
BRIDGE RAIL ELEVATION



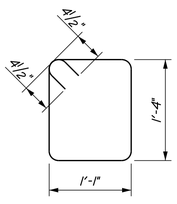
SECTION A-A



SECTION B-B



BUMPOUT CORNER PLAN DETAIL



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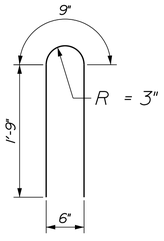

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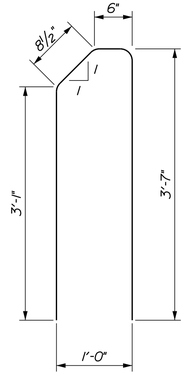

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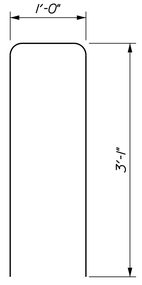

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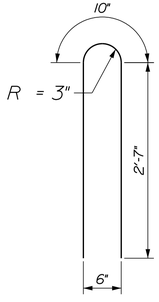

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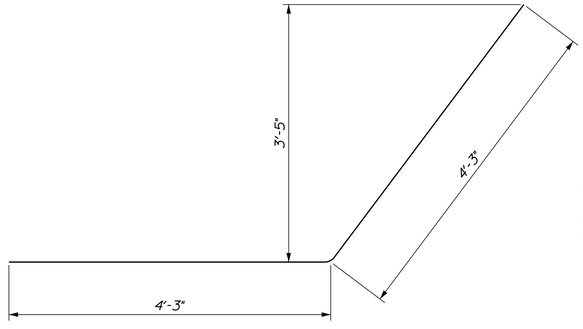


FA554c

Note:

The Contractor is responsible for ensuring that vertical reinforing bars FA553c are installed prior to placement of the sidewalks and bump outs concrete. Payment for these bars will be considered incidental to Item 526.341, Permanent Concrete Barrier, Special.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers — SIGNATURE

12572 — P.E. NUMBER

9/23/2022 — DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	8/21
CHECKED-REVIEWED	D.Myers	11/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

BRIDGE BARRIER DETAILS SHEET 4 OF 4

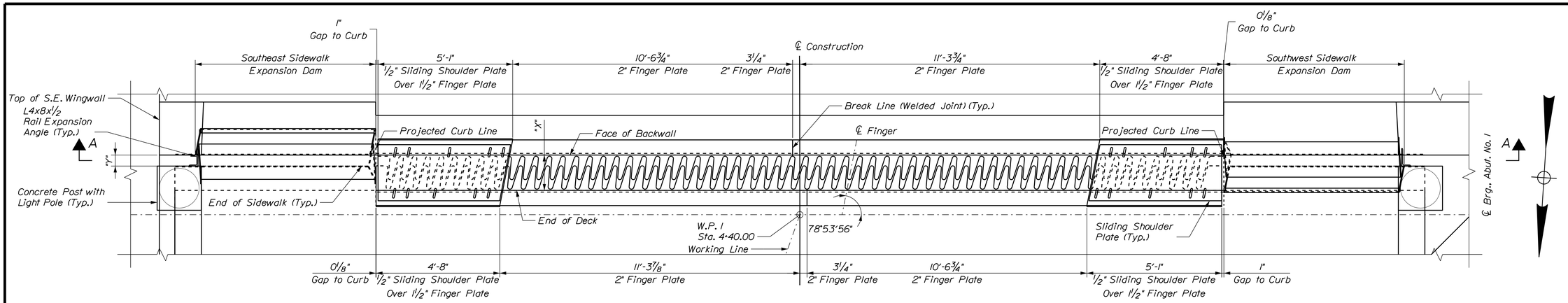
SHEET NUMBER

144

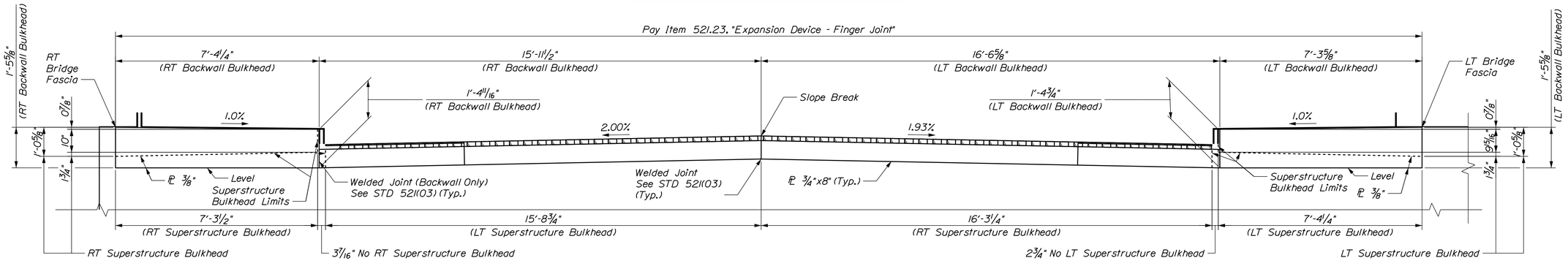
OF 163

TYLin

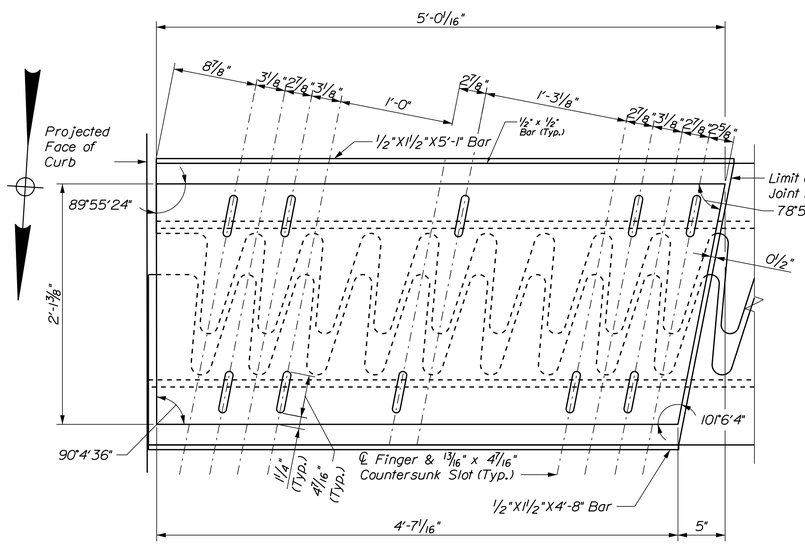
Filename: ...\144_Barrier_Det_4.dgn Division: Username: Date:10/15/2022



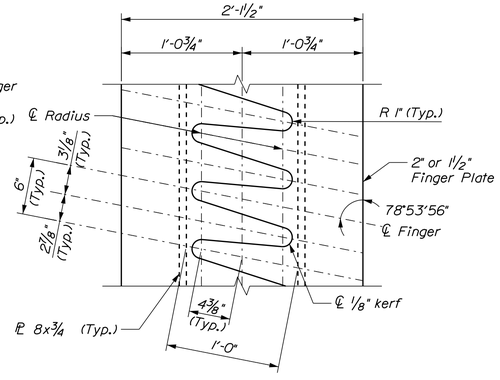
ABUTMENT NO. 1 FINGER JOINT PLAN



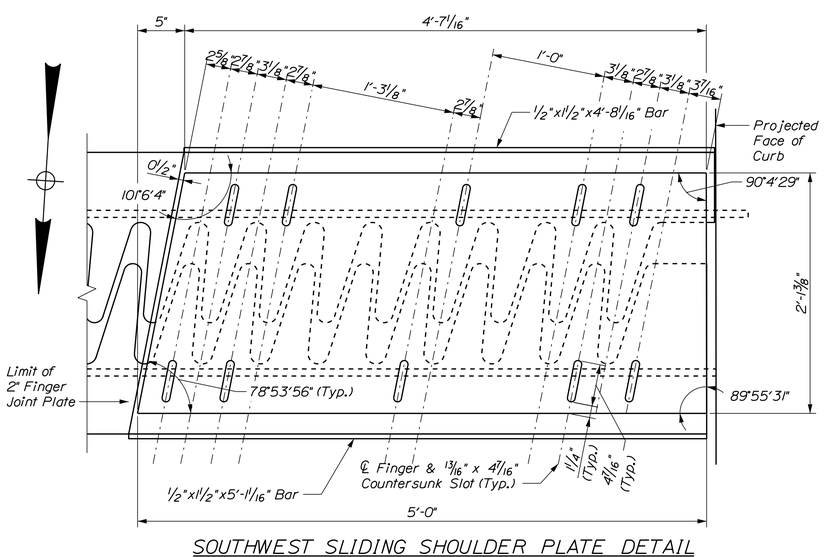
SECTION A-A



SOUTHEAST SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam not Shown for Clarity)



ABUTMENT NO. 1 FINGER CUTTING DETAIL



SOUTHWEST SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam not Shown for Clarity)

NOTES:

1. See Sheet "Finger Joint Details 2" for Sidewalk Expansion Dam Details.
2. See Sheet "Finger Joint Details 5" for Typical Details, Finger Joint Notes, and Setting Tables.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	12/21
CHECKED-REVIEWED	R.Hebert	B.Toothaker	12/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

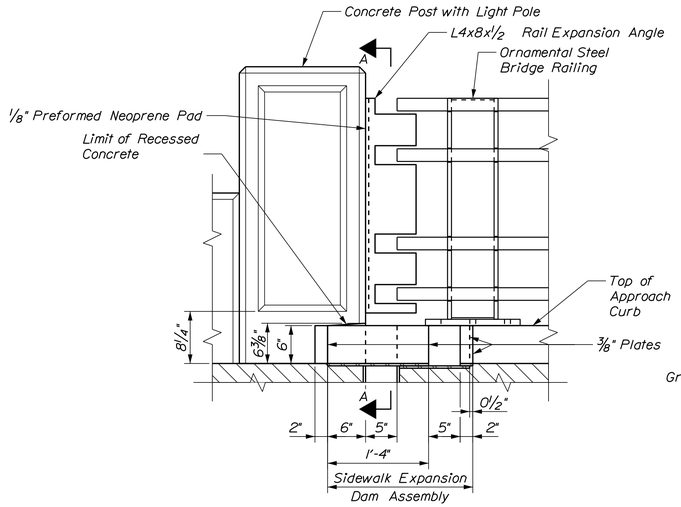
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FINGER JOINT DETAILS SHEET 1 OF 5

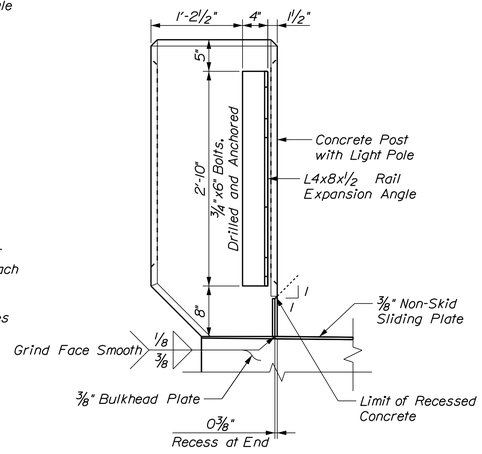
SHEET NUMBER
145
OF 163

TYLin

Date:10/15/2022
Username:
Division:
Filename: ...\145_Sup_Finger_Joint_Det_1.dgn



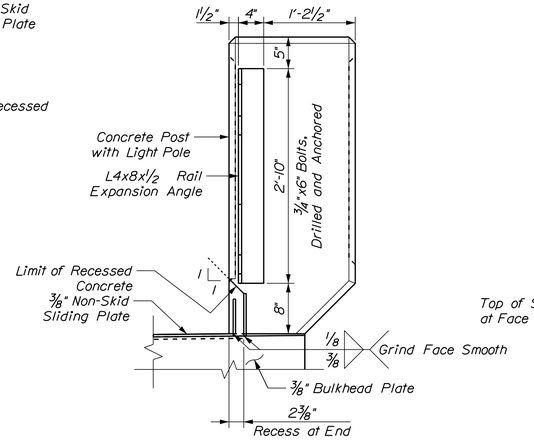
SOUTHEAST RAIL ELEVATION



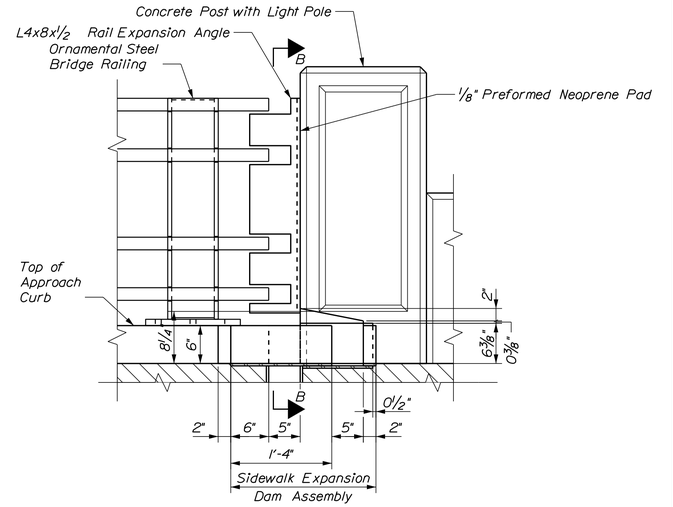
SECTION A-A

NOTES:

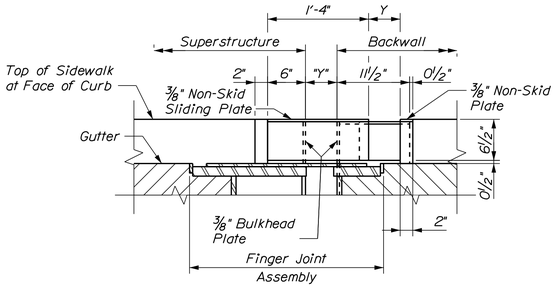
1. See "Finger Joint Details 1" for bulkhead plate layout.
2. See "Finger Joint Details 5" for Typical Details, Finger Joint Notes, and Setting Tables



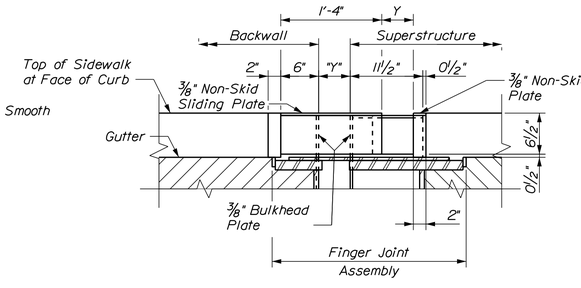
SECTION B-B



SOUTHWEST RAIL ELEVATION



SOUTHEAST CURB ELEVATION



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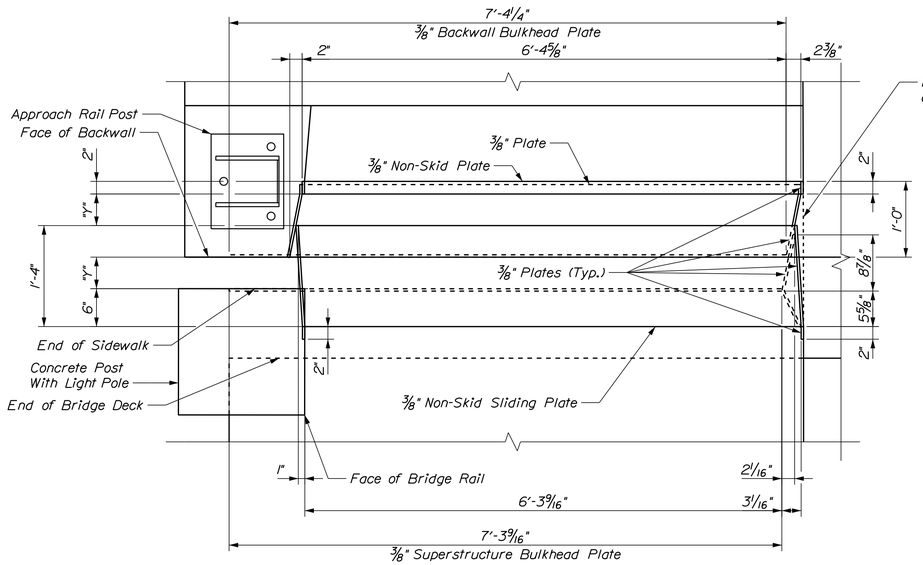
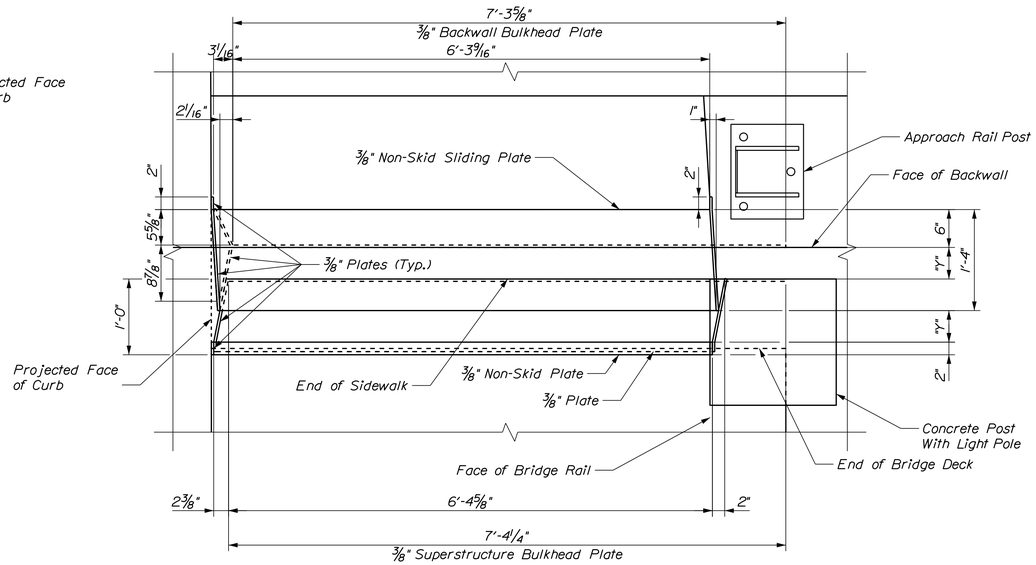


SOUTHEAST SIDEWALK EXPANSION DAM PLAN

(Rail Expansion Angle and Travelway Joint not Shown for Clarity)



SOUTHWEST SIDEWALK EXPANSION DAM PLAN

(Rail Expansion Angle and Travelway Joint not Shown for Clarity)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/28/2022

DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	12/21
CHECKED-REVIEWED	R.Hebert	B.Toothaker	12/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FINGER JOINT DETAILS
SHEET 2 OF 5

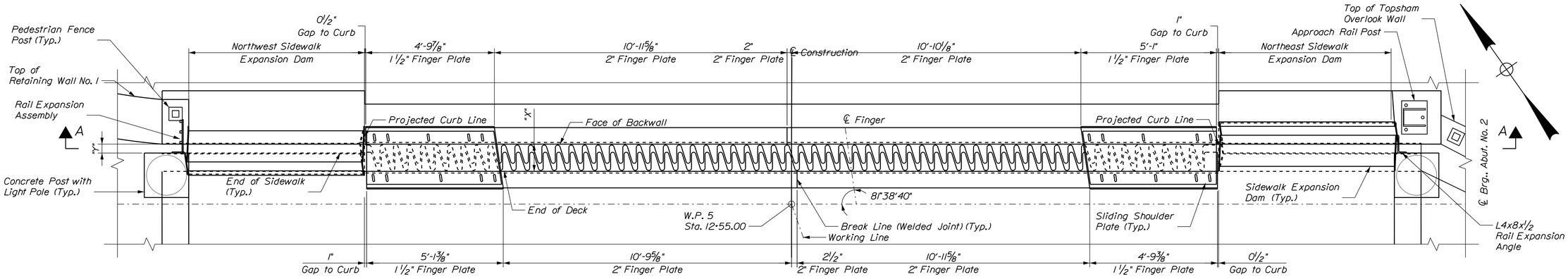
SHEET NUMBER

146

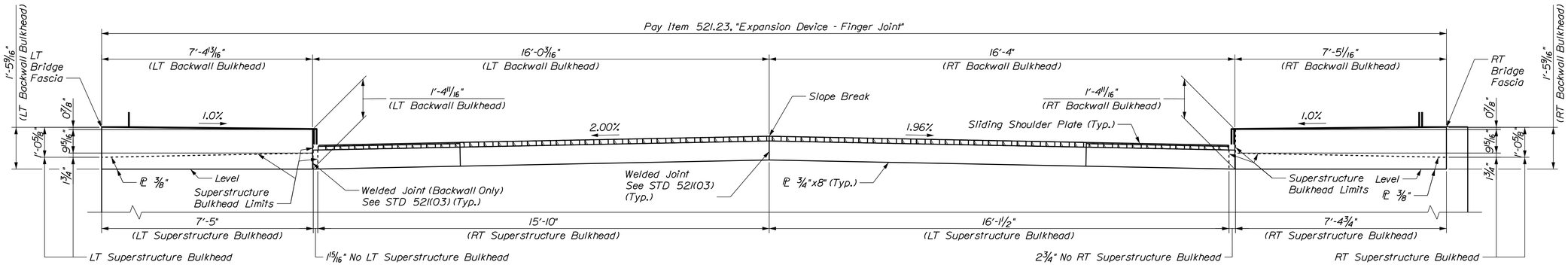
OF 163

TYLin

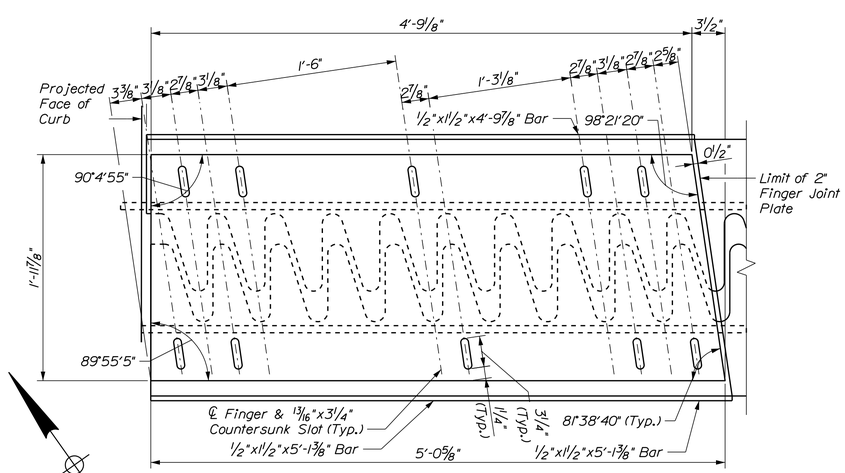
Filename: ...\146_Sup_Finger_Joint_Det_2.dgn Division: Username: Date:10/15/2022



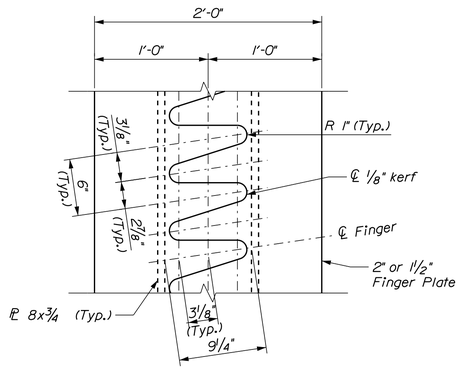
ABUTMENT NO. 2 FINGER JOINT PLAN



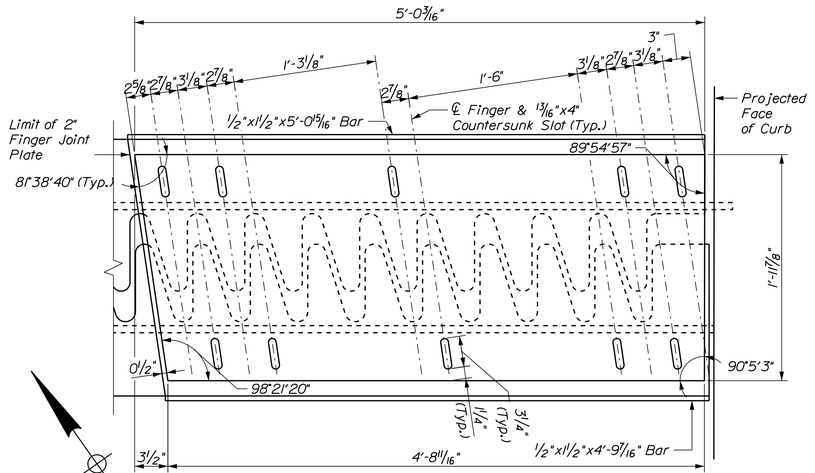
SECTION A-A



NORTHWEST SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam Not Shown for Clarity)



FINGER CUTTING DETAIL



NORTHEAST SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam not Shown for Clarity)

NOTES:

1. See Sheet "Finger Joint Details 4" for Sidewalk Expansion Dam Details.
2. See Sheet "Finger Joint Details 5" for Typical Details, Finger Joint Notes, and Setting Tables.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2260(300)
WIN 22603.00
BRIDGE PLANS
BRIDGE NO. 2016

STATE OF MAINE DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	12/21
CHECKED-REVIEWED	R.Hebert	B.Toothaker	12/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FINGER JOINT DETAILS
SHEET 3 OF 5

SHEET NUMBER
147
OF 163

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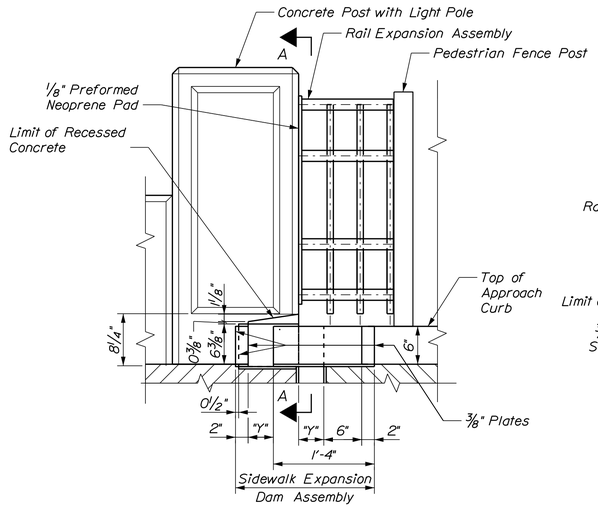
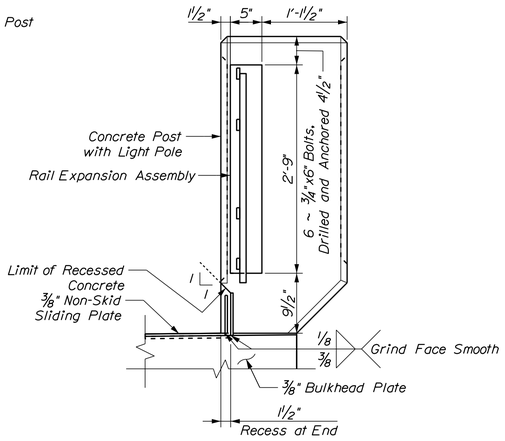
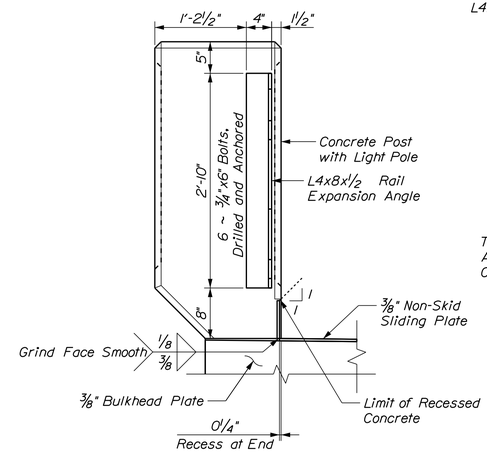


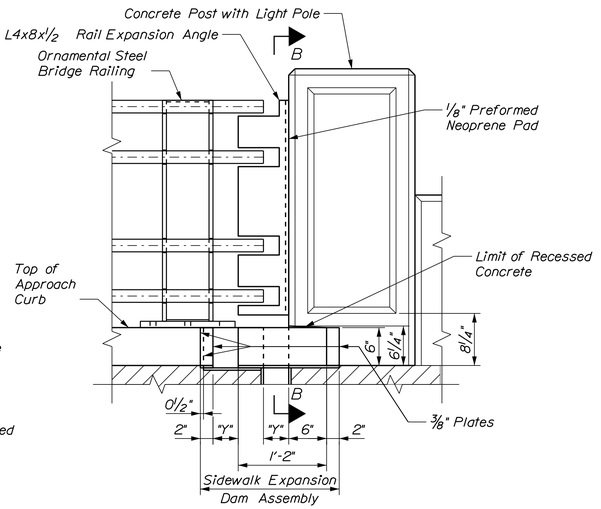
NORTHWEST RAIL ELEVATION



SECTION A-A



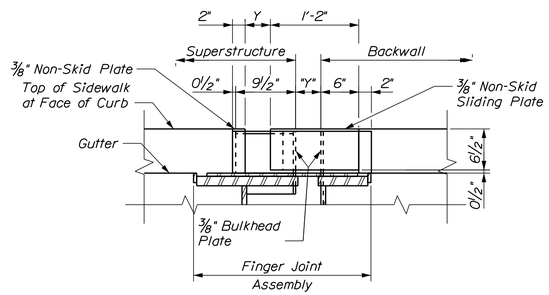
SECTION B-B



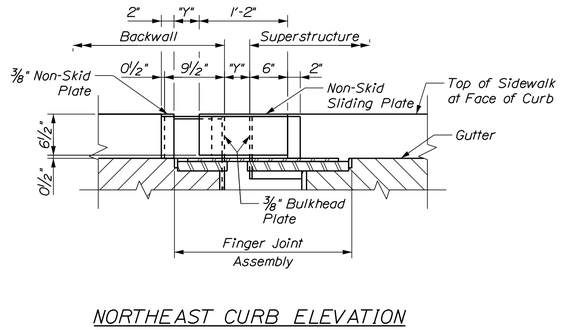
NORTHEAST RAIL ELEVATION

NOTES:

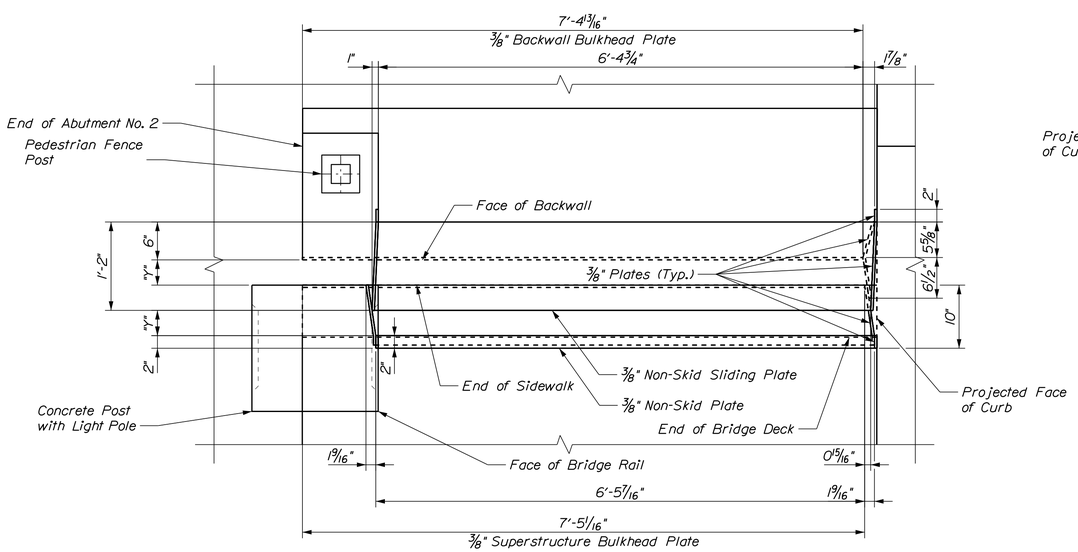
1. See "Finger Joint Details 3" for bulkhead plate layout.
2. See "Finger Joint Details 5" for Typical Details, Finger Joint Notes, and Setting Tables



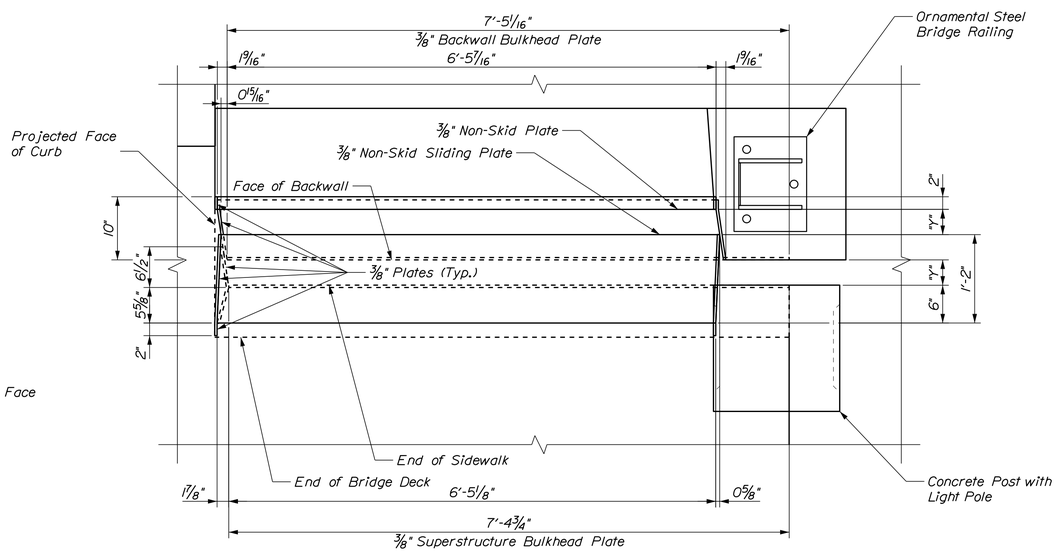
NORTHWEST CURB ELEVATION



NORTHEAST CURB ELEVATION



NORTHWEST SIDEWALK EXPANSION DAM PLAN



NORTHEAST SIDEWALK EXPANSION DAM PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

Daniel S. Myers

SIGNATURE

12572
P.E. NUMBER

9/28/2022
DATE

			DATE
PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	B.Toothaker	S.Morgan	12/21
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FIELD CHANGES			

ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FINGER JOINT DETAILS
SHEET 4 OF 5

SHEET NUMBER

148

OF 163

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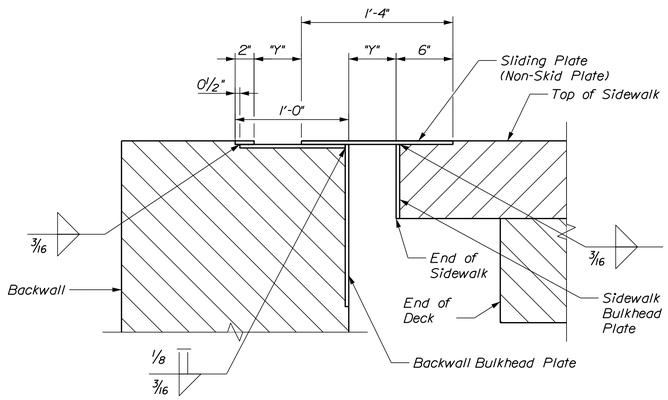
Filename: ...\148_Sup_Finger_Joint_Det_4.dgn Division:

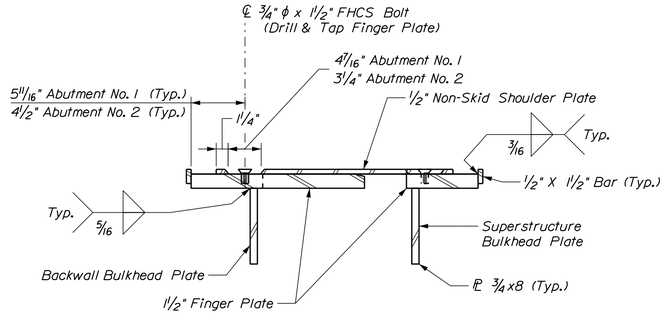
Username:

Date:10/15/2022



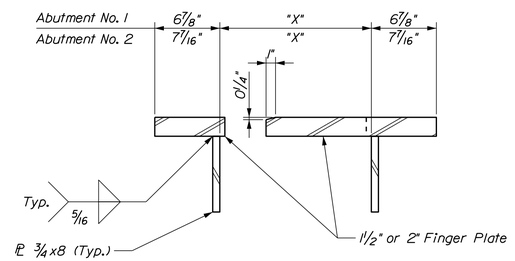
TYPICAL SIDEWALK SECTION

(Southeast Expansion Dam Shown, Other Locations Similar)
All Plates 3/8" Thick



SLIDING SHOULDER PLATE TYPICAL SECTION

(All measurements along angle of finger)



TYPICAL FINGER JOINT SECTION

(All measurements normal to end of deck and bulkhead plates)

NOTES:

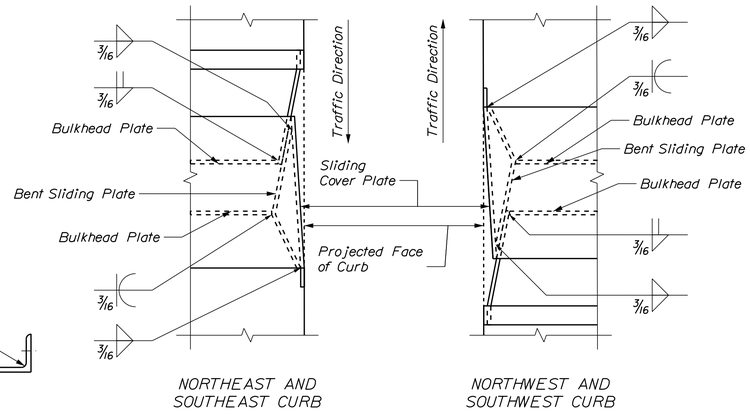
1. See sheets, "Finger Joint Details 1" or "Finger Joint Details 3, for Finger Joint Plan, Finger Joint Elevation, Sliding Shoulder Plate Details, and Finger Joint Cutting Details
2. See sheets "Finger Joint Details 2" or "Finger Joint Details 4", for Sidewalk Expansion Dam Details, Curb Elevations, and Rail Expansion Elevations.
3. Anchor Studs and Adjustment devices shall be installed on finger joint and bulkhead plates in accordance with STD 521(01), 521(04), 521(05), 521(09), & 521(10).
4. Finger joint materials and fabrication shall be in accordance with STD 521(12), and Specifications Section 521.
5. Countersunk bolts shown in Shoulder Plate Details shall be secured in the final position with a threadlocker material, as approved by the Resident. Contersunk bolts shall be secured such that the shoulder plate is allowed to slide with thermal movements and the head of the bolt does not project above the top surface of the plate.
6. Sidewalk expansion dams are detailed and shall be fabricated for the neutral 45°F condition. "X" and "Y" Dimensions shall be adjusted for the ambient temperature at the time of installation. Detail "E" as shown in STD 521(10) will be applicable to all locations with overlapping sliding plates in the sidewalk expansion dams, as detailed in The Plans.
7. Unless noted otherwise, all exposed corners for plates in the sidewalk expansion dam assembly and sliding shoulder plate assembly shall be chamfered 1/4".
8. Only standard details specifically referenced shall be consulted during fabrication and installation. In the event of a discrepancy between referenced details and the Plans, the Plans shall take precedence.
9. Rail Expansion Angle, Rail Expansion Assembly and all materials and work required for fabrication and installation shall be incidental to Item 521.23, "Expansion Device - Finger Joint".
10. Rail Expansion Angle and Rail Expansion Assemblies shall be coated black. All materials and workmanship shall be in accordance with Standard Specification Section 506. Color shall match the adjacent approach rail or pedestrian fence, and shall be approved by the Resident.
11. Neoprene pads for rail expansion devices shall be in accordance with Specification Subsection 711.09.

ABUTMENT NO. 1 FINGER JOINT SETTING TABLE

TEMPERATURE (°F)	DIMENSION "X"	DIMENSION "Y"
5	1'-5 7/16"	6 7/16"
15	1'-5 1/16"	6 1/16"
25	1'-4 11/16"	5 11/16"
35	1'-4 3/8"	5 3/8"
45	1'-4"	5"
55	1'-3 5/8"	4 5/8"
65	1'-3 5/16"	4 5/16"
75	1'-3 15/16"	3 15/16"
85	1'-2 9/16"	3 9/16"

ABUTMENT NO. 2 FINGER JOINT SETTING TABLE

TEMPERATURE (°F)	DIMENSION "X"	DIMENSION "Y"
5	1'-1 5/16"	5 1/16"
15	1'-1 1/16"	4 3/4"
25	1'-0 13/16"	4 1/2"
35	1'-0 1/2"	4 1/4"
45	1'-0 1/4"	4"
55	1'-0"	3 11/16"
65	11 11/16"	3 7/16"
75	11 7/16"	3 3/16"
85	11 3/16"	2 7/8"



NORTHEAST AND SOUTHEAST CURB

NORTHWEST AND SOUTHWEST CURB

DETAIL AT CURB

(All Plates 3/8" Thick)

RAIL EXPANSION ASSEMBLY DETAILS

RAIL EXPANSION ANGLE DETAILS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE
DANIEL S. MYERS
No. 12572
REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
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CHECKED-REVIEWED	R.Hebert	B.Toothaker	12/21
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

FINGER JOINT DETAILS
SHEET 5 OF 5

SHEET NUMBER
149
OF 163

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Username:
Date:10/15/2022
Division:
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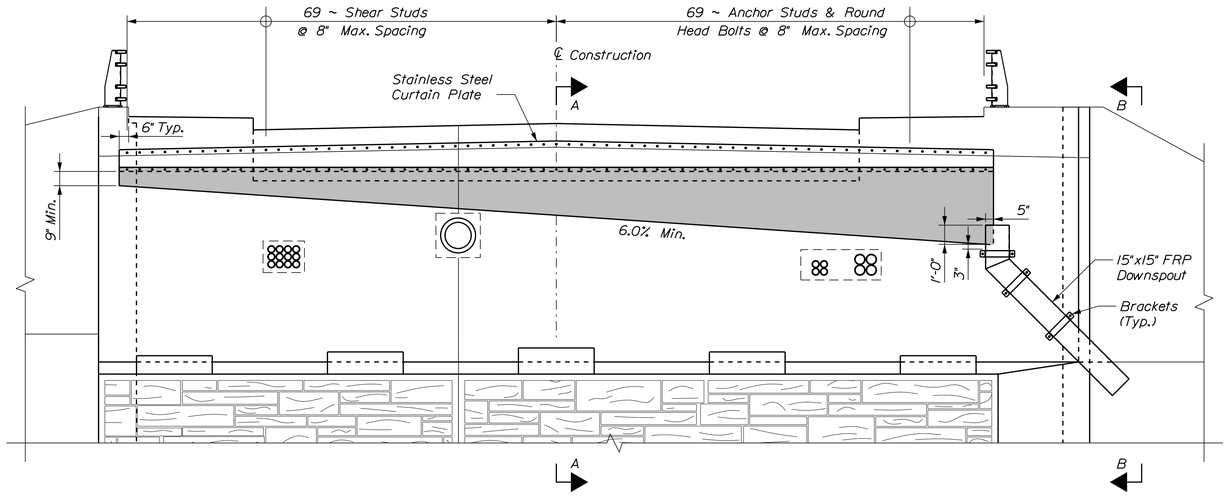
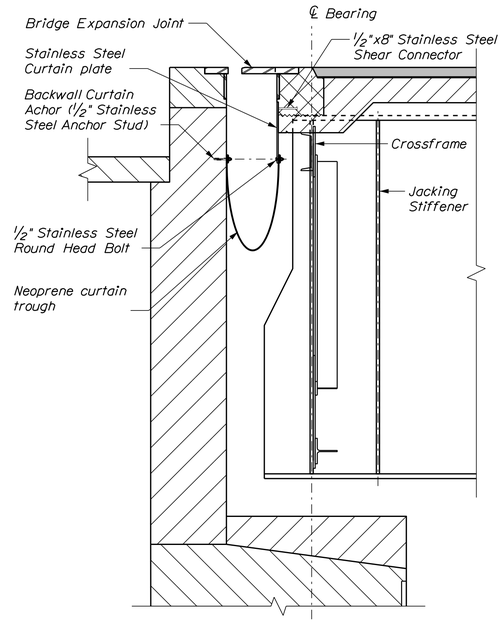


CURTAIN TROUGH ELEVATION ABUTMENT NO. 1

(Section B-B. See sheet "CURTAIN TROUGH DETAILS 2 OF 2")



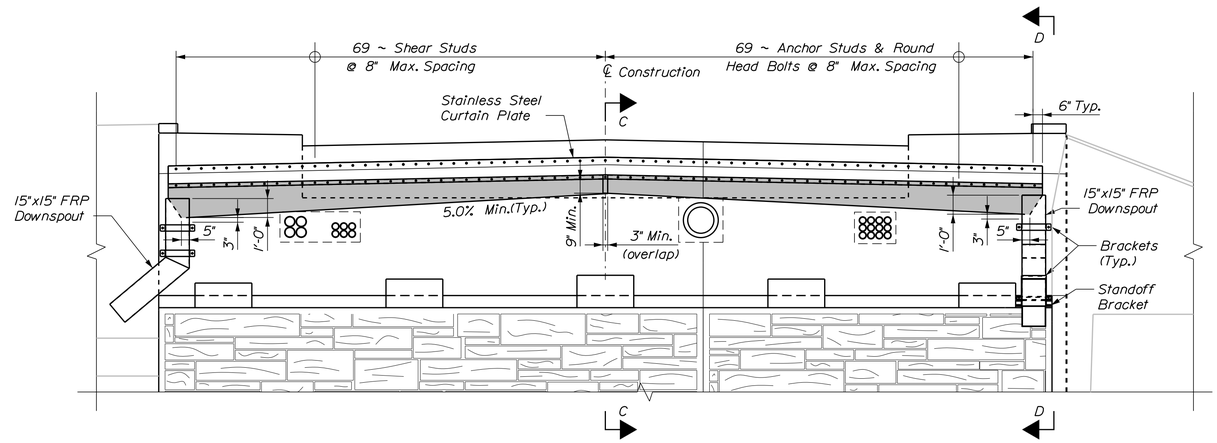
SECTION A-A, ABUTMENT NO.1 AT EXPANSION JOINT

CURTAIN TROUGH NOTE:

Trough shall maintain a minimum clearance of 3" from utility conduits and sheathing when the bridge is in its fully expanded (maximum temperature) condition.

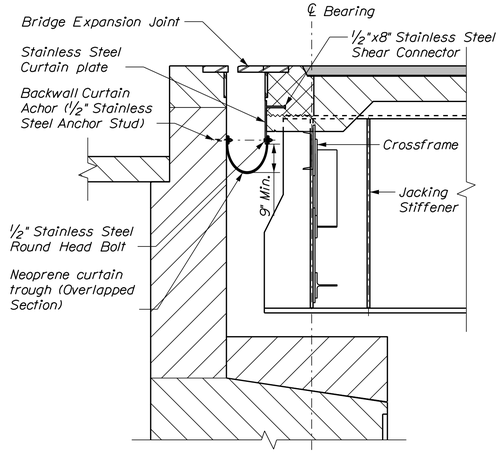
DOWNSPOUT NOTES:

1. *FRP Downspouts shall be designed and detailed based on the dimensions for the downspouts shown, and in accordance with Special Provisions Section 502. Fiber Reinforced Polymer Bridge Drains and Downspouts.*
2. *The exact position of the downspouts shall be determined in the field and shall be coordinated with Curtain Trough Details.*
3. *All plates and bars shall conform to AASHTO M270 Grade 36.*
4. *Brackets shall be galvanized in accordance with AASHTO M111 (ASTM 123) after fabrication.*
5. *All rods and related hardware shall be ASTM A307 and shall be galvanized in accordance with ASTM A153 (AASHTO M232).*
6. *Downspout and all anchor rods and related hardware shall be paid for under Item No. 502.703 FRP Downspout.*
7. *At the contractors option, alternate downspout details and locations may be submitted to the Resident for approval.*



CURTAIN TROUGH ELEVATION ABUTMENT NO. 2

(Section D-D. See sheet "CURTAIN TROUGH DETAILS 2 OF 2")



SECTION C-C, ABUTMENT NO.2 AT EXPANSION JOINT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE · DANIEL S. MYERS No. 12572 · LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/28/2022

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	5/21
CHECKED-REVIEWED	D.Myers	5/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CURTAIN TROUGH DETAILS SHEET 1 OF 2

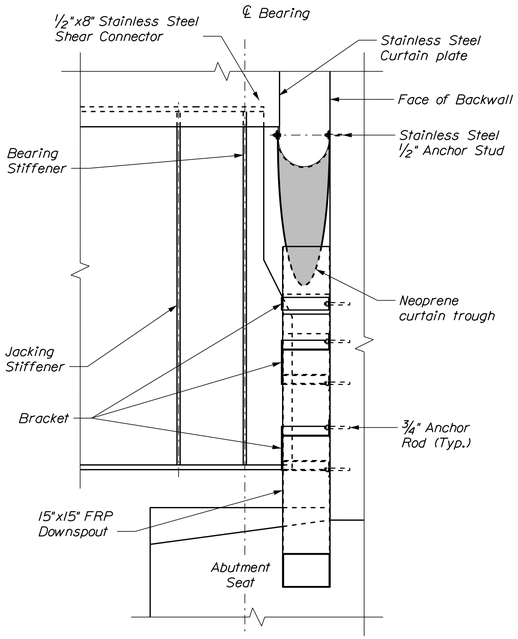
SHEET NUMBER 150 OF 163

TYLin

Date:10/15/2022

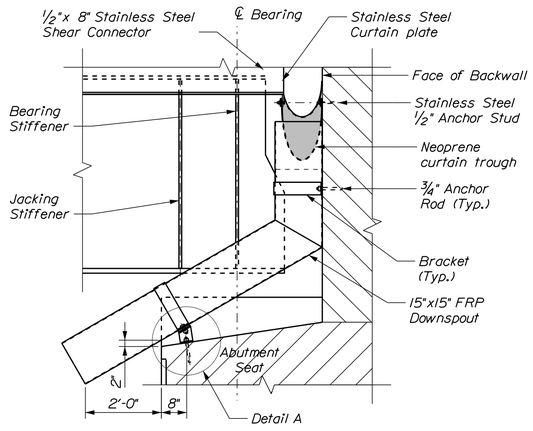
Username:

Filename: ...\150_Sup_Curtain_Trough_Det_1.dgn Division:



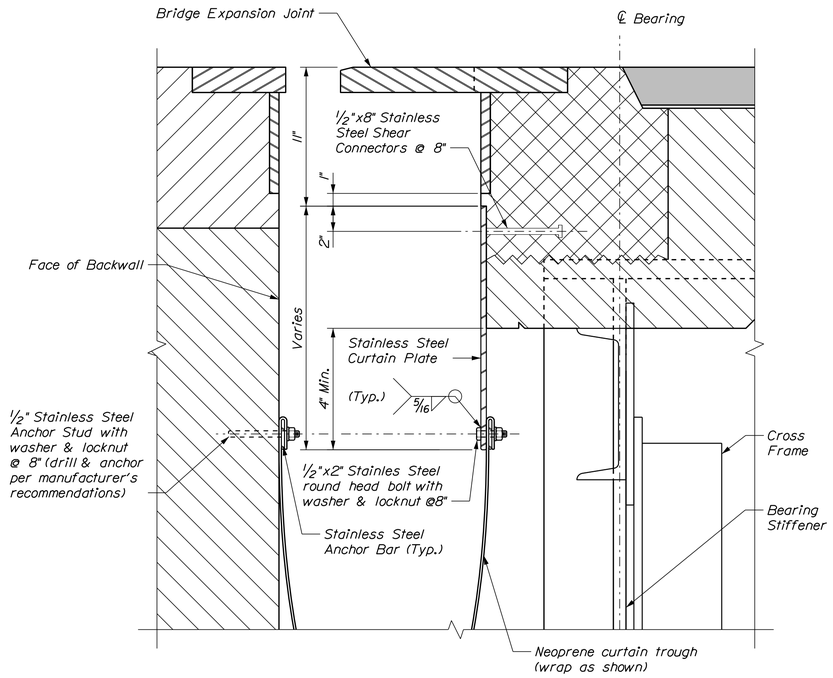
SECTION B-B, ABUTMENT NO.1 DOWNSPOUT ELEVATION

(Section B-B from sheet "CURTAIN TROUGH DETAILS SHEET 1 OF 2")
(Abutment No. 2 South West Downspout Similar)



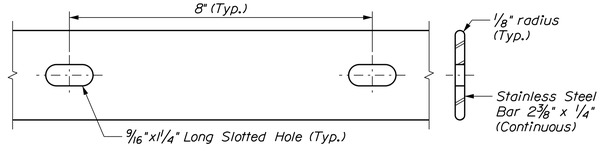
SECTION D-D, ABUTMENT NO.2 DOWNSPOUT ELEVATION

(Section D-D from sheet "CURTAIN TROUGH DETAILS SHEET 1 OF 2")

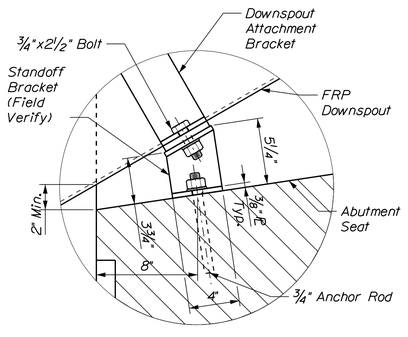


DOWNSPOUT CUTOUT FOR TROUGH - VIEW A-A

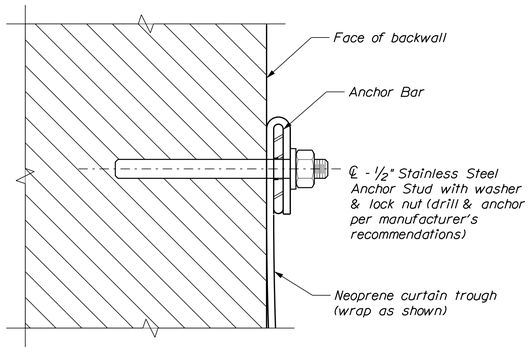
(Abutment 1 shown, Abutment 2 similar)



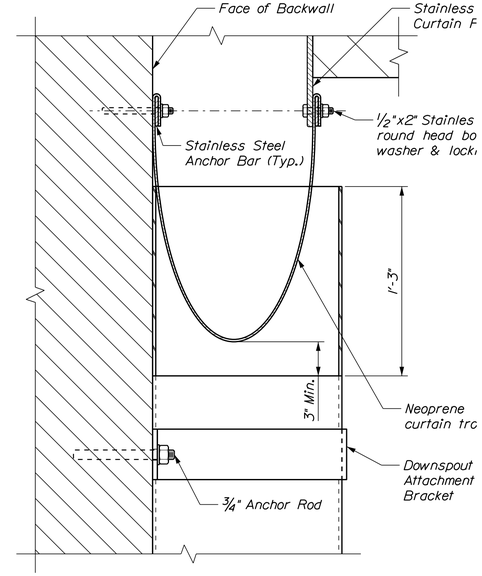
ANCHOR BAR



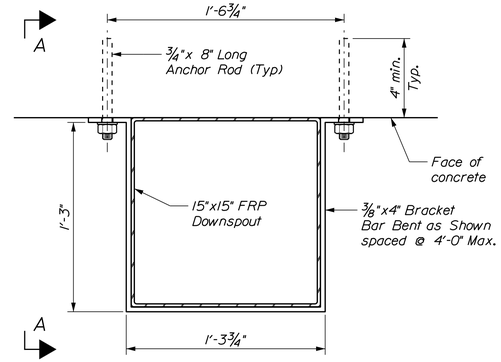
DETAIL A



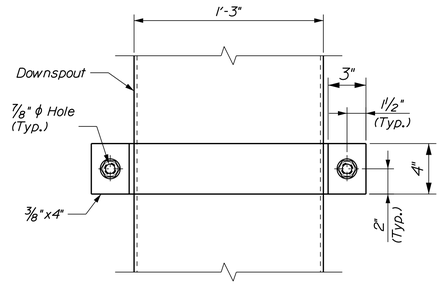
CURTAIN ANCHOR DETAIL



DOWNSPOUT CUTOUT FOR TROUGH - VIEW A-A



DOWNSPOUT ATTACHMENT BRACKET DETAIL



ELEVATION VIEW OF BRACKET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)
WIN 22603.00
BRIDGE NO. 2016
BRIDGE PLANS

STATE OF MAINE DANIEL S. MYERS No. 12572 REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	5/21
CHECKED-REVIEWED	D.Myers	5/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CURTAIN TROUGH DETAILS SHEET 2 OF 2

SHEET NUMBER
151
OF 163

TYLin

Filename: ...\151_Sup_Curtain_Trough_Det_2.dgn Division: Username: Date:10/15/2022

Date:10/15/2022

Username:

Division:

Filename: ...\152_Reinf_Schedule_1.dgn

ABUTMENT NUMBER 1

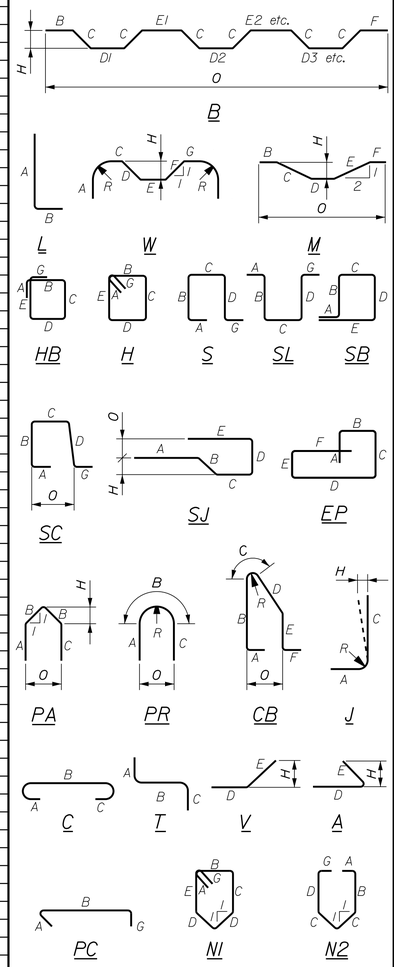
STRAIGHT BARS				BENT BARS															
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
A500	72	3'-7"	VERT. DOWELS	A550	59	12'-11"	L	12'-1"	10"	-	-	-	-	-	-	-	-	-	FOOTING BARS
A501	56	9'-4"	VERT. BACKWALL	A551c	19	13'-11"	S	0"	6'-2"	1'-7"	6'-2"	-	-	0"	-	-	-	-	BACKWALL BARS
A502	66	18'-8"	HORIZ. BACKWALL	A552c	33	11'-9"	S	0"	5'-4"	1'-1"	5'-4"	-	-	0"	-	-	-	-	BACKWALL BARS
A503c	12	18'-8"	HORIZ. BACKWALL	A553	11	6'-7"	S	0"	2'-7"	1'-5"	2'-7"	-	-	0"	-	-	-	-	BACKWALL BARS
A504	48	5'-8"	DIAG. BACKWALL UTILITY PENETRATIONS	A554c	2	9'-11"	S	0"	4'-3"	1'-5"	4'-3"	-	-	0"	-	-	-	-	BACKWALL BARS/SIDEWALK
A505c	5	17'-0"	HORIZ. SE WINGWALL	A555c	3	9'-0"	L	1'-5"	7'-7"	-	-	-	-	-	-	-	-	-	BACKWALL BARS/SIDEWALK
A506	18	9'-0"	VERT. SE WINGWALL	A556	11	7'-2"	CB	0"	2'-7"	10"	1'-2"	2'-7"	0"	-	-	-	1'-5"	4"	BACKWALL BARS
A507	36	11'-9"	VERT. SE WINGWALL	A557c	2	10'-6"	CB	0"	4'-3"	10"	1'-2"	4'-3"	0"	-	-	-	1'-5"	4"	BACKWALL BARS/SIDEWALK
A508	40	17'-0"	HORIZ. SE WINGWALL	A558c	3	11'-8"	L	1'-5"	10'-3"	-	-	-	-	-	-	-	-	-	BACKWALL BARS
A509	16	13'-0"	VERT. SW WINGWALL	A559c	3	8'-10"	L	7'-5"	1'-5"	-	-	-	-	-	-	-	-	-	SIDEWALK BARS
A510	36	15'-1"	HORIZ. SW WINGWALL	A560c	3	5'-1"	S	0"	1'-11"	1'-3"	1'-11"	-	-	0"	-	-	-	-	CURB BARS
A511	2	13'-7"	HORIZ. SW WINGWALL	A561c	3	11'-10"	L	10'-5"	1'-5"	-	-	-	-	-	-	-	-	-	SIDEWALK BARS
A512	2	11'-0"	HORIZ. SW WINGWALL	A562c	3	7'-8"	S	0"	1'-11"	3'-10"	1'-11"	-	-	0"	-	-	-	-	CURB BARS
A513	2	8'-6"	HORIZ. SW WINGWALL	A563	30	10'-8"	S	0"	3'-6"	3'-8"	3'-6"	-	-	0"	-	-	-	-	PEDESTAL BARS
A514	2	5'-11"	HORIZ. SW WINGWALL	A564	25	11'-3"	S	0"	3'-6"	4'-3"	3'-6"	-	-	0"	-	-	-	-	PEDESTAL BARS
A515	2	3'-4"	HORIZ. SW WINGWALL	A565c	24	8'-7"	S	0"	3'-9"	1'-1"	3'-9"	-	-	0"	-	-	-	-	SE WW CURB BARS
A516	9	15'-4"	DIAG. SW WINGWALL	A566	8	10'-10"	S	0"	4'-8"	1'-6"	4'-8"	-	-	0"	-	-	-	-	SW. WINGWALL
A517	9	13'-2"	HORIZ. SW WINGWALL	A567	16	25'-2"	S	0"	11'-10"	1'-6"	11'-10"	-	-	0"	-	-	-	-	SW. WINGWALL
				A568	12	16'-0"	S	0"	7'-3"	1'-6"	7'-3"	-	-	0"	-	-	-	-	SW. WINGWALL
A700	88	25'-3"	HORIZ. FOOTING	A569	10	6'-6"	S	0"	2'-7"	1'-4"	2'-7"	-	-	0"	-	-	-	-	SW. WINGWALL
A701	25	15'-9"	HORIZ. FOOTING																
A702	3	17'-9"	HORIZ. FOOTING	A750	43	18'-11"	L	17'-9"	1'-2"	-	-	-	-	-	-	-	-	-	FOOTING BARS
A703	5	12'-8"	HORIZ. FOOTING	A751	5	14'-9"	V	-	-	-	9'-8"	5'-1"	-	-	1'-10"	-	-	-	SE. WINGWALL FOOTING BARS
A704	3	13'-11"	HORIZ. FOOTING	A752	19	16'-11"	L	15'-9"	1'-2"	-	-	-	-	-	-	-	-	-	SE. WINGWALL FOOTING BARS
A705	35	14'-6"	HORIZ. SE WINGWALL FOOTING	A753	34	17'-11"	L	16'-9"	1'-2"	-	-	-	-	-	-	-	-	-	SW. WINGWALL FOOTING BARS
A706	4	14'-2"	VERT. SW WINGWALL STEP	A754	54	6'-4"	S	0"	1'-2"	4'-0"	1'-2"	-	-	0"	-	-	-	-	FOOTING BARS
A707	21	16'-9"	HORIZ. FOOTING	A755	133	6'-6"	S	0"	1'-2"	4'-2"	1'-2"	-	-	0"	-	-	-	-	FOOTING BARS
A708	42	15'-6"	HORIZ. SW WINGWALL FOOTING	A756	72	11'-11"	L	8'-4"	3'-7"	-	-	-	-	-	-	-	-	-	SW. WINGWALL FOOTING BARS
A709	126	4'-11"	VERT. STEMWALL/SE WW	A757	12	4'-7"	S	0"	1'-2"	2'-3"	1'-2"	-	-	0"	-	-	-	-	SW. WINGWALL STEP BARS
A710	126	11'-1"	VERT. STEMWALL	A758	48	12'-0"	CB	0"	2'-9"	6"	6'-0"	2'-9"	0"	-	-	-	6'-3"	2 5/8"	BRIDGE SEAT BARS
A711	52	13'-11"	VERT. STEMWALL	A759	6	5'-0"	S	0"	1'-2"	2'-8"	1'-2"	-	-	0"	-	-	-	-	BRIDGE SEAT BARS
A712	135	18'-8"	HORIZ. STEMWALL	A760	33	11'-0"	L	9'-4"	1'-8"	-	-	-	-	-	-	-	-	-	BACKWALL BARS
A713	24	9'-4"	VERT. BACKWALL/FOOTING	A761	19	13'-3"	S	0"	3'-7"	6'-1"	3'-7"	-	-	0"	-	-	-	-	STEMWALL BARS
A714	18	14'-6"	VERT. SE WINGWALL	A762	20	12'-0"	SC	0"	7'-0"	1'-5"	3'-7"	-	-	0"	-	-	3'-11"	-	STEMWALL BARS
A715	30	17'-0"	HORIZ. SE WINGWALL	A763	20	7'-2"	V	-	-	-	3'-7"	3'-7"	-	-	2'-7"	-	-	-	STEMWALL BARS
A716	10	12'-4"	VERT. SE WINGWALL	A764	44	8'-1"	S	0"	1'-2"	5'-9"	1'-2"	-	-	0"	-	-	-	-	SE. WINGWALL BARS
A717	9	13'-2"	HORIZ. SW WINGWALL	A765	4	16'-10"	S	0"	7'-9"	1'-4"	7'-9"	-	-	0"	-	-	-	-	SW. WINGWALL BARS
A800	18	9'-0"	VERT. SE WINGWALL	A1050	31	13'-7"	L	10'-10"	2'-9"	-	-	-	-	-	-	-	-	-	SW. WINGWALL DOWELS
A900	33	16'-9"	VERT. SW WINGWALL	A1150	18	19'-4"	L	16'-7"	2'-9"	-	-	-	-	-	-	-	-	-	SE. WINGWALL DOWELS
A901	52	11'-1"	VERT. STEMWALL	A1151	52	12'-2"	L	9'-5"	2'-9"	-	-	-	-	-	-	-	-	-	STEMWALL DOWELS
A1000	43	17'-9"	HORIZ. FOOTING																
A1001	17	16'-9"	HORIZ. FOOTING																
A1002	19	15'-9"	HORIZ. SE WINGWALL																
A1100	16	13'-0"	HORIZ. SW WINGWALL																

ABUTMENT NUMBER 2

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
B500	42	18'-1"	HORIZ. BACKWALL	B550c	8	8'-10"	L	7'-3"	1'-7"	-	-	-	-	-	-	-	-	-	BACKWALL BARS
B501c	12	18'-1"	HORIZ. BACKWALL	B551c	18	10'-2"	S	0"	4'-3"	1'-8"	4'-3"	-	-	0"	-	-	-	-	BACKWALL BARS
B502	38	6'-3"	VERT. BACKWALL	B552c	31	11'-4"	S	0"	5'-1"	1'-2"	5'-1"	-	-	0"	-	-	-	-	BACKWALL BARS
B503	51	3'-7"	VERT. BACKWALL	B553	31	11'-6"	S	0"	4'-11"	1'-8"	4'-11"	-	-	0"	-	-	-	-	APPROACH SEAT
				B554c	3	15'-6"	S	0"	7'-0"	1'-6"	7'-0"	-	-	0"	-	-	-	-	SIDEWALK STIRRUPS
B600	63	18'-1"	HORIZ. STEMWALL	B555	25	10'-0"	S	0"	3'-8"	2'-8"	3'-8"	-	-	0"	-	-	-	-	PEDESTAL BARS
B601	48	5'-8"	DIAG. BACKWALL	B556	20	11'-3"	S	0"	3'-9"	3'-9"	3'-9"	-	-	0"	-	-	-	-	PEDESTAL BARS
				B557	22	8'-2"	S	0"	3'-4"	1'-6"	3'-4"	-	-	0"	-	-	-	-	BACKWALL BARS
				B558c	6	11'-6"	S	0"	5'-0"	1'-6"	5'-0"	-	-	0"	-	-	-	-	BACKWALL BARS
				B559c	2	6'-1"	S	0"	2'-5"	1'-3"	2'-5"	-	-	0"	-	-	-	-	CURB
				B560c	3	17'-2"	S	0"	7'-10"	1'-6"	7'-10"	-	-	0"	-	-	-	-	SIDEWALK STIRRUPS
				B561c	3	6'-1"	S	0"	2'-5"	1'-3"	2'-5"	-	-	0"	-	-	-	-	CURB
				B562	1	15'-4"	S	0"	5'-9"	1'-8"	7'-11"	-	-	0"	-	-	-	-	STEMWALL BARS
				B650	12	11'-10"	S	0"	3'-1"	5'-8"	3'-1"	-	-	0"	-	-	-	-	STEMWALL BARS
				B651	49	10'-9"	CB	0"	2'-5"	5"	5'-6"	2'-5"	0"	-	-	-	5'-9"	2.25"	BRIDGE SEAT BARS
				B652	49	18'-9"	S	0"	5'-1"	5'-9"	7'-11"	-	-	0"	-	-	-	-	STEMWALL BARS
				B653	10	11'-2"	S	0"	3'-1"	5'-0"	3'-1"	-	-	0"	-	-	-	-	STEMWALL BARS

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

TYPE - BENDING DIAGRAMS



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.

GENERAL NOTES

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

   Mark "A0502" = bar size #5
   Mark "P0805" = bar size #8
   Mark "S1150" = bar size #11

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with an 'E' indicate epoxy coating required. Bar marks ending with an 's' indicate stainless steel bar is required. Bar marks ending with a 'g' indicate Glass Fiber Reinforced Polymer (GFRP) bar is required. Bar marks ending with a 'c' indicate Low-Carbon Chromium Bar is required.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/23/2022

DATE

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	B.Smith	12/21
CHECKED-REVIEWED	B.Toothaker	12/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

REINFORCING STEEL SCHEDULE SHEET 1 OF 5

SHEET NUMBER

152

OF 163

TYLin

STRAIGHT BARS

PIER NUMBER 1

MARK	QTY.	LENGTH	LOCATION
IP500	48	25'-7"	HORIZ. FOOTING
IP501	48	9'-0"	HORIZ. FOOTING
IP502	1	7'-6"	HORIZ. FOOTING
IP503	1	5'-9"	HORIZ. FOOTING
IP504	1	4'-0"	HORIZ. FOOTING
IP505	1	2'-3"	HORIZ. FOOTING
IP600	6	20'-0"	VERT. SHAFT
IP601	84	24'-4"	HORZ. SHAFT
IP602	6	24'-11"	HORZ. SHAFT CAP
IP900	20	3'-8"	VERT. FOOTING DOWELS
IP1000	88	20'-0"	VERT. SHAFT

Date:10/15/2022

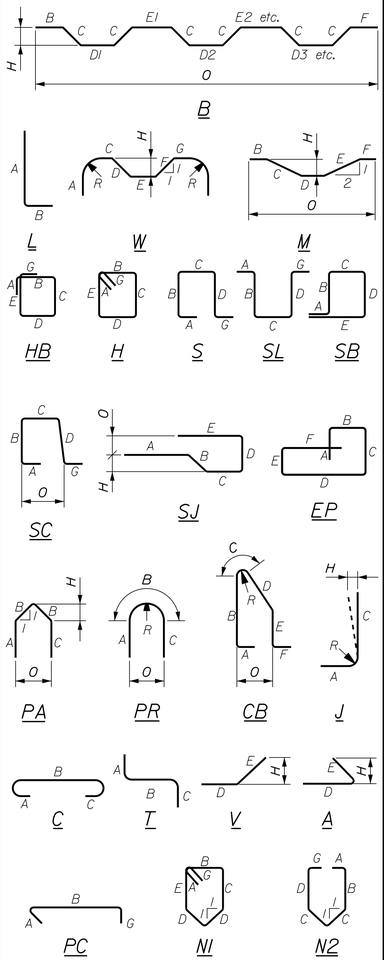
Username:

Division:

Filename: ...\154_Reinf_Schedule_3.dgn

STRAIGHT BARS				BENT BARS															
BRUNSWICK OVERLOOK WALL																			
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
1AW506	29	5'-7"	HORIZ. FOOTING	1AW550	6	4'-5"	C	7"	3'-10"	0"	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW507	2	27'-10"	HORIZ. FOOTING	1AW551	6	5'-10"	C	7"	5'-3"	0"	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW508	2	28'-6"	HORIZ. FOOTING	1AW552	18	3'-1"	C	7"	2'-6"	0"	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW509	2	29'-1"	HORIZ. FOOTING	1AW553	8	5'-4"	V	-	-	-	2'-8"	2'-8"	-	-	1'-3"	-	-	-	FOOTING
1AW510	2	29'-8"	HORIZ. FOOTING	1AW556	12	7'-2"	S	0"	3'-1"	1'-0"	3'-1"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW511	2	30'-4"	HORIZ. FOOTING	1AW557	11	5'-2"	S	0"	2'-2"	10"	2'-2"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW512	2	30'-11"	HORIZ. FOOTING	1AW558	11	5'-0"	S	0"	2'-2"	8"	2'-2"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW513	2	31'-7"	HORIZ. FOOTING																
1AW514	1	5'-6"	VERTICAL WALL	1AW650	6	4'-10"	L	3'-10"	1'-0"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW515	1	5'-9"	VERTICAL WALL	1AW651	6	6'-3"	L	5'-3"	1'-0"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW516	1	6'-0"	VERTICAL WALL	1AW652	18	4'-3"	L	3'-3"	1'-0"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW517	1	6'-3"	VERTICAL WALL																
1AW518	1	6'-6"	VERTICAL WALL	2AW550	94	4'-2"	L	3'-4"	10"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW519	1	6'-9"	VERTICAL WALL	2AW555	46	3'-7"	C	7"	3'-0"	0"	-	-	-	-	-	-	-	-	FOOTING
1AW520	1	7'-0"	VERTICAL WALL	2AW556	47	5'-10"	S	0"	2'-7"	8"	2'-7"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW521	1	7'-3"	VERTICAL WALL	2AW557	12	10'-11"	S	0"	5'-3"	5"	5'-3"	-	-	0"	-	-	-	-	POST STIRRUPS
1AW522	1	7'-6"	VERTICAL WALL	2AW558	8	5'-10"	HB	7"	1'-9"	7"	1'-9"	7"	-	7"	-	-	-	-	POST STIRRUPS
1AW523	1	7'-9"	VERTICAL WALL	2AW559	8	5'-0"	HB	7"	1'-4"	7"	1'-4"	7"	-	7"	-	-	-	-	POST STIRRUPS
1AW524	1	8'-0"	VERTICAL WALL																
1AW525	1	8'-3"	VERTICAL WALL	3AW550	52	5'-7"	L	4'-9"	10"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1AW526	1	8'-6"	VERTICAL WALL	3AW556	28	7'-1"	S	0"	2'-4"	2'-5"	2'-4"	-	-	0"	-	-	-	-	FOOTING STIRRUPS
1AW527	1	8'-9"	VERTICAL WALL	3AW557	13	7'-8"	S	0"	3'-3"	1'-2"	3'-3"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW528	1	9'-0"	VERTICAL WALL	3AW558	13	10'-4"	S	0"	4'-7"	1'-2"	4'-7"	-	-	0"	-	-	-	-	WALL STIRRUPS
1AW529	1	9'-3"	VERTICAL WALL	3AW559	12	3'-5"	V	-	-	-	1'-1"	2'-4"	-	-	1'-1"	-	-	-	WALL BARS
1AW530	1	9'-6"	VERTICAL WALL																
1AW531	1	9'-9"	VERTICAL WALL																
1AW532	1	10'-11"	VERTICAL WALL																
1AW533	1	11'-2"	VERTICAL WALL																
1AW534	1	11'-5"	VERTICAL WALL																
1AW535	1	11'-8"	VERTICAL WALL																
1AW536	8	32'-5"	HORIZ. WALL																
1AW537	2	28'-5"	HORIZ. WALL																
1AW538	2	24'-4"	HORIZ. WALL																
1AW539	2	20'-3"	HORIZ. WALL																
1AW540	2	16'-1"	HORIZ. WALL																
1AW541	2	12'-1"	HORIZ. WALL																
1AW542	2	7'-11"	HORIZ. WALL																
1AW543	2	3'-10"	HORIZ. WALL																
1AW544	2	33'-3"	HORIZ. WALL																
1AW545	3	6'-0"	HORIZ. WALL																
1AW606	29	5'-7"	HORIZ. FOOTING																
1AW607	1	5'-6"	VERTICAL WALL																
1AW608	1	5'-9"	VERTICAL WALL																
1AW609	1	6'-0"	VERTICAL WALL																
1AW610	1	6'-3"	VERTICAL WALL																
1AW611	1	6'-6"	VERTICAL WALL																
1AW612	1	6'-9"	VERTICAL WALL																
1AW613	1	7'-0"	VERTICAL WALL																
1AW614	1	7'-3"	VERTICAL WALL																
1AW615	1	7'-6"	VERTICAL WALL																
1AW616	1	7'-9"	VERTICAL WALL																
1AW617	1	8'-0"	VERTICAL WALL																
1AW618	1	8'-3"	VERTICAL WALL																
1AW619	1	8'-6"	VERTICAL WALL																
1AW620	1	8'-9"	VERTICAL WALL																
1AW621	1	9'-0"	VERTICAL WALL																
1AW622	1	9'-3"	VERTICAL WALL																
1AW623	1	9'-6"	VERTICAL WALL																
1AW624	1	9'-9"	VERTICAL WALL																
1AW625	1	10'-11"	VERTICAL WALL																
1AW626	1	11'-2"	VERTICAL WALL																
1AW627	1	11'-5"	VERTICAL WALL																
1AW628	1	11'-8"	VERTICAL WALL																
1AW700	67	2'-6"	VERTICAL DOWEL																
2AW500	11	3'-4"	HORIZ. FOOTING																
2AW506	46	3'-0"	HORIZ. FOOTING																
2AW507	8	45'-6"	HORIZ. FOOTING																
2AW508	12	22'-5"	HORIZ. WALL																
2AW509	4	22'-9"	HORIZ. WALL																
2AW700	47	2'-6"	VERTICAL DOWEL																
3AW506	56	8'-0"	HORIZ. FOOTING																
3AW507	38	14'-10"	HORIZ. FOOTING																
3AW508	52	8'-4"	VERTICAL WALL																
3AW509	48	13'-8"	HORIZ. WALL																
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	R	LOCATION

TYPE - BENDING DIAGRAMS



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.

GENERAL NOTES

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

   Mark "A0502" = bar size #5
   Mark "P0805" = bar size #8
   Mark "S1150" = bar size #11

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with an "E" indicate epoxy coating required. Bar marks ending with an "s" indicate stainless steel bar is required. Bar marks ending with a "g" indicate Glass Fiber Reinforced Polymer (GFRP) bar is required. Bar marks ending with a "c" indicate Low-Carbon Chromium Bar is required.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572

SIGNATURE

DATE 9/23/2022

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	J.Legere	DATE	8/21
CHECKED-REVIEWED	B.Toothaker	BY	J.Legere
DESIGN2-DETAILED2	B.Toothaker	DATE	12/21
DESIGN3-DETAILED3		BY	B.Toothaker
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

REINFORCING STEEL SCHEDULE SHEET 3 OF 5

SHEET NUMBER 154

OF 163

Date:10/15/2022

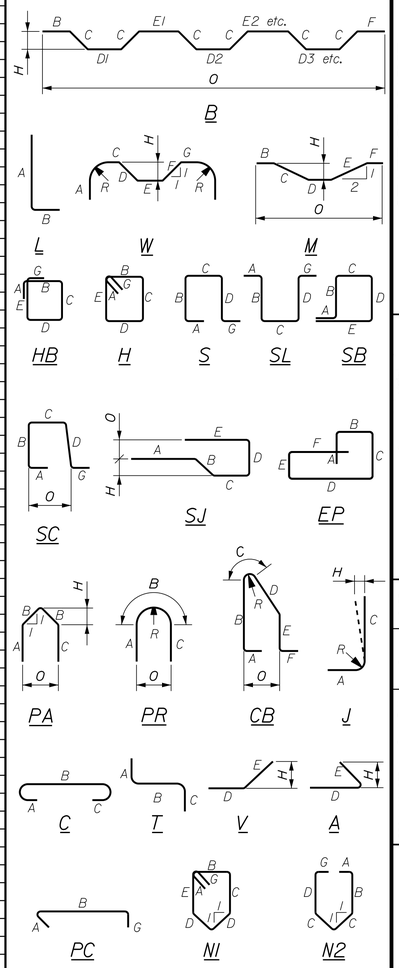
Username:

Division:

Filename: ...\155_Reinf_Schedule_4.dgn

STRAIGHT BARS				BENT BARS														
TOPSHAM OVERLOOK WALL																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
1BW506	18	8'-0"	HORIZ. FOOTING	1BW550	15	5'-7"	L	4'-9"	10"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
1BW507	19	16'-3"	HORIZ. FOOTING	1BW556	18	4'-1"	S	0"	10"	2'-5"	10"	-	-	0"	-	-	-	-	FOOTING STIRRUPS
1BW508	30	13'-2"	VERTICAL WALL	1BW557	15	5'-6"	S	0"	2'-2"	1'-2"	2'-2"	-	-	0"	-	-	-	-	WALL STIRRUPS
1BW509	31	12'-8"	HORIZ. WALL	1BW558	15	3'-4"	L	2'-4"	1'-0"	-	-	-	-	-	-	-	-	-	WALL HOOKS
				1BW559	15	5'-7"	L	3'-6"	2'-1"	-	-	-	-	-	-	-	-	-	WALL HOOKS
1BW606	18	8'-0"	HORIZ. FOOTING																
				1BW750	15	6'-8"	L	5'-6"	1'-2"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
2BW506	116	3'-7"	HORIZ. FOOTING																
2BW507	20	20'-10"	HORIZ. FOOTING	2BW550	59	3'-5"	C	7"	2'-10"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
2BW508	20	10'-6"	HORIZ. FOOTING	2BW551	59	3'-8"	L	2'-10"	10"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
2BW509	48	11'-2"	HORIZ. WALL	2BW556	59	10'-8"	SC	0"	5'-0"	8"	5'-0"	-	-	0"	-	-	1'-1"	-	WALL STIRRUPS
2BW510	24	10'-4"	HORIZ. WALL	2BW557	12	10'-11"	S	0"	5'-3"	5"	5'-3"	-	-	0"	-	-	-	-	POST STIRRUPS
				2BW558	8	5'-10"	HB	7"	1'-9"	7"	1'-9"	7"	-	7"	-	-	-	-	POST STIRRUPS
2BW700	43	2'-6"	VERTICAL FOOTING DOWEL	2BW559	12	5'-0"	HB	7"	1'-4"	7"	1'-4"	7"	-	7"	-	-	-	-	POST STIRRUPS
3BW506	10	5'-5"	HORIZ. FOOTING	3BW550	10	4'-2"	C	7"	3'-7"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
3BW507	30	8'-8"	HORIZ. FOOTING	3BW556	10	4'-8"	S	0"	2'-0"	8"	2'-0"	-	-	0"	-	-	-	-	WALL STIRRUPS
3BW508	10	8'-3"	VERTICAL WALL																
				3BW650	10	5'-6"	L	4'-6"	1'-0"	-	-	-	-	-	-	-	-	-	FOOTING HOOKS
3BW606	10	5'-5"	HORIZ. FOOTING																
3BW607	10	8'-3"	VERTICAL WALL																
MOMENT SLAB NUMBER 1																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
IMS500	252	5'-10"	HORIZ. FOOTING BOTTOM	IMS550c	328	7'-5"	S	10"	2'-3"	1'-3"	2'-3"	10"	-	-	-	-	-	-	CURB STIRRUP
IMS501	14	30'-1"	HORIZ. FOOTING TOP & BOTTOM	IMS551c	6	7'-11"	PR	0"	7'-11"	0"	-	-	-	-	-	-	7'-9"	12'-5"	CURB
IMS502	14	4'-11"	HORIZ. FOOTING TOP & BOTTOM	IMS552c	2	8'-5"	PR	0"	8'-5"	0"	-	-	-	-	-	-	8'-3"	11'-10"	CURB
IMS503	70	29'-6"	HORIZ. FOOTING TOP & BOTTOM	IMS553c	6	7'-8"	PR	0"	7'-8"	0"	-	-	-	-	-	-	7'-6"	11'-3"	CURB
IMS504	44	11'-11"	HORIZ. FOOTING TOP & BOTTOM																
IMS505	22	7'-5"	HORIZ. FOOTING BOTTOM	IMS650	367	6'-5"	C	7"	5'-10"	0"	-	-	-	-	-	-	-	-	FOOTING HOOK
IMS506	14	39'-6"	HORIZ. FOOTING TOP & BOTTOM																
IMS507c	7	30'-1"	HORIZ. CURB																
IMS508c	35	29'-8"	HORIZ. CURB																
IMS509c	7	39'-6"	HORIZ. CURB																
IMS601	32	7'-10"	HORIZ. FOOTING TOP																
MOMENT SLAB NUMBER 2																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
2MS500	97	5'-10"	HORIZ. FOOTING BOTTOM	2MS550	2	22'-11"	PR	0"	22'-11"	0"	-	-	-	-	-	-	18'-9"	10'-8"	FOOTING TOP & BOTTOM
2MS501	14	31'-7"	HORIZ. FOOTING TOP & BOTTOM	2MS551	2	24'-2"	PR	0"	24'-2"	0"	-	-	-	-	-	-	19'-9"	11'-2"	FOOTING TOP & BOTTOM
2MS502	14	35'-3"	HORIZ. FOOTING TOP & BOTTOM	2MS552	2	25'-11"	PR	0"	25'-11"	0"	-	-	-	-	-	-	21'-2"	12'-0"	FOOTING TOP & BOTTOM
2MS503c	7	31'-7"	HORIZ. CURB	2MS553	2	28'-3"	PR	0"	28'-3"	0"	-	-	-	-	-	-	23'-1"	13'-1"	FOOTING TOP & BOTTOM
2MS504c	7	35'-3"	HORIZ. CURB	2MS554	2	30'-8"	PR	0"	30'-8"	0"	-	-	-	-	-	-	25'-0"	14'-2"	FOOTING TOP & BOTTOM
				2MS555	2	33'-0"	PR	0"	33'-0"	0"	-	-	-	-	-	-	26'-11"	15'-3"	FOOTING TOP & BOTTOM
				2MS556	2	35'-4"	PR	0"	35'-4"	0"	-	-	-	-	-	-	28'-10"	16'-3"	FOOTING TOP & BOTTOM
				2MS557c	130	7'-5"	S	10"	2'-3"	1'-3"	2'-3"	10"	-	-	-	-	-	-	CURB STIRRUP
				2MS558c	3	22'-11"	PR	0"	22'-11"	0"	-	-	-	-	-	-	18'-9"	10'-8"	CURB
				2MS559c	1	24'-2"	PR	0"	24'-2"	0"	-	-	-	-	-	-	19'-9"	11'-2"	CURB
				2MS560c	3	25'-3"	PR	0"	25'-3"	0"	-	-	-	-	-	-	20'-8"	11'-8"	CURB
				2MS650	143	6'-5"	C	7"	5'-10"	0"	-	-	-	-	-	-	-	-	FOOTING HOOK
MOMENT SLAB NUMBER 3																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
3MS500	110	5'-10"	HORIZ. FOOTING BOTTOM	3MS550c	149	7'-5"	S	10"	2'-3"	1'-3"	2'-3"	10"	-	-	-	-	-	-	CURB STIRRUP
3MS501	28	24'-10"	HORIZ. FOOTING TOP & BOTTOM	3MS551c	6	10'-5"	PR	0"	10'-5"	0"	-	-	-	-	-	-	10'-2"	13'-5"	CURB
3MS502	52	13'-5"	HORIZ. FOOTING TOP & BOTTOM	3MS552c	2	10'-11"	PR	0"	10'-11"	0"	-	-	-	-	-	-	10'-7"	12'-10"	CURB
3MS503	6	6'-5"	HORIZ. FOOTING BOTTOM	3MS553c	6	10'-0"	PR	0"	10'-0"	0"	-	-	-	-	-	-	9'-9"	12'-4"	CURB
3MS504	18	9'-2"	HORIZ. FOOTING BOTTOM																
3MS505	14	13'-2"	HORIZ. FOOTING TOP & BOTTOM	3MS650	110	6'-5"	C	7"	5'-10"	0"	-	-	-	-	-	-	-	-	FOOTING HOOK
3MS506	14	20'-0"	HORIZ. FOOTING TOP & BOTTOM																
3MS507c	14	24'-10"	HORIZ. CURB																
3MS508c	7	29'-10"	HORIZ. CURB																
3MS600	8	6'-5"	HORIZ. FOOTING BOTTOM																
3MS601	18	9'-7"	HORIZ. FOOTING BOTTOM																
MOMENT SLAB NUMBER 4																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
4MS500	31	5'-10"	HORIZ. FOOTING BOTTOM	4MS550c	46	7'-5"	S	10"	2'-3"	1'-3"	2'-3"	10"	-	-	-	-	-	-	CURB STIRRUP
4MS501	14	29'-8"	HORIZ. FOOTING TOP & BOTTOM																
4MS502c	7	29'-8"	HORIZ. CURB	4MS650	46	6'-5"	C	7"	5'-10"	0"	-	-	-	-	-	-	-	-	FOOTING HOOK
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	R	LOCATION

TYPE - BENDING DIAGRAMS



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.

GENERAL NOTES

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

   Mark "A0502" = bar size #5
   Mark "P0805" = bar size #8
   Mark "S1150" = bar size #11

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with an "E" indicate epoxy coating required. Bar marks ending with an "s" indicate stainless steel bar is required. Bar marks ending with a "g" indicate Glass Fiber Reinforced Polymer (GFRP) bar is required. Bar marks ending with a "c" indicate Low-Carbon Chromium Bar is required.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

	P.E. NUMBER	SIGNATURE	DATE
Daniel S. Myers	12572		9/23/2022

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	J.Legere	8/21
CHECKED-REVIEWED	B.Toolhaker	12/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

REINFORCING STEEL SCHEDULE SHEET 4 OF 5

SHEET NUMBER

155

OF 163

Date:10/15/2022

Username:

Division:

Filename: ...\156_Reinf_Schedule_5.dgn

STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION
IR500	62	3'-6"	VERTICAL WALL DOWEL
IR501	14	5'-6"	HORIZ. FOOTING DOWEL
IR506	60	5'-6"	HORIZ. FOOTING
IR507	4	34'-9"	HORIZ. FOOTING
IR508	4	33'-5"	HORIZ. FOOTING
IR509	4	31'-10"	HORIZ. FOOTING
IR510	4	30'-4"	HORIZ. FOOTING
IR511	4	28'-11"	HORIZ. FOOTING
IR512	4	27'-3"	HORIZ. FOOTING
IR513	4	25'-11"	HORIZ. FOOTING
IR514	62	8'-8"	VERTICAL WALL
IR515	22	32'-0"	HORIZ. WALL
IR516	22	30'-4"	HORIZ. WALL
IR517c	4	32'-0"	HORIZ. CURB
IR518c	6	30'-4"	HORIZ. CURB
IR606	62	8'-8"	VERTICAL WALL
IR806	60	5'-6"	HORIZ. FOOTING

BENT BARS

RETAINING WALL NUMBER 1

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
IR556	60	3'-2"	S	0"	10"	1'-6"	10"	-	-	0"	-	-	-	-	FOOTING
IR557c	62	10'-2"	S	0"	4'-6"	1'-2"	4'-6"	-	-	0"	-	-	-	-	WALL
IR650	62	5'-3"	L	4'-3"	1'-0"	-	-	-	-	-	-	-	-	-	WALL DOWEL

RETAINING WALL NUMBER 2

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
2R550	12	6'-9"	T	2'-7"	3'-4"	10"	-	-	-	-	-	-	-	-	FOOTING
2R556	12	9'-11"	M	-	2'-7"	4'-9"	2'-7"	0"	0"	-	3'-4"	-	-	-	FOOTING
2R557c	137	12'-9"	S	0"	5'-10"	1'-1"	5'-10"	-	-	0"	-	-	-	-	CURB
2R558c	3	11'-6"	W	0"	-	10"	4'-1"	1'-8"	4'-1"	10"	2'-11"	-	-	0"	LIGH CORBEL - HORZ.
2R559c	2	7'-10"	S	10"	2'-5"	1'-4"	2'-5"	-	-	10"	-	-	-	-	LIGHT CORBEL - STIRRUPS
2R560c	3	9'-2"	S	10"	3'-1"	1'-4"	3'-1"	-	-	10"	-	-	-	-	LIGHT CORBEL - STIRRUPS
2R561c	1	11'-4"	H	6"	1'-2"	4'-0"	1'-2"	4'-0"	-	6"	-	-	-	-	LIGHT CORBEL - STIRRUPS
2R562c	1	8'-8"	H	6"	1'-2"	2'-8"	1'-2"	2'-8"	-	6"	-	-	-	-	LIGHT CORBEL - STIRRUPS
2R850	101	6'-5"	L	5'-1"	1'-4"	-	-	-	-	-	-	-	-	-	WALL DOWEL
2R950	82	12'-3"	C	1'-3"	11'-0"	0"	-	-	-	-	-	-	-	-	FOOTING
2R951	17	6'-9"	C	1'-3"	5'-6"	0"	-	-	-	-	-	-	-	-	FOOTING

RETAINING WALL NUMBER 3

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
3R552	22	19'-2"	V	-	-	-	8'-0"	11'-2"	-	-	9'-5"	-	-	-	FOOTING
3R556	11	9'-11"	W	-	2'-7"	4'-9"	2'-7"	0"	0"	-	3'-4"	-	-	6'-8"	FOOTING
3R557	11	6'-10"	T	2'-8"	3'-4"	10"	-	-	-	-	-	-	-	-	FOOTING
3R558c	120	13'-3"	S	0"	6'-0"	1'-3"	6'-0"	-	-	0"	-	-	-	-	CURB
3R750	84	5'-6"	L	4'-4"	1'-2"	-	-	-	-	-	-	-	-	-	WALL DOWEL

MARK	QTY.	LENGTH	LOCATION
3R500	84	3'-6"	VERTICAL WALL DOWEL
3R504	8	8'-4"	HORIZ. FOOTING
3R505	7	5'-8"	HORIZ. FOOTING
3R506	77	9'-8"	HORIZ. FOOTING
3R507	14	15'-4"	HORIZ. FOOTING
3R508	44	26'-6"	HORIZ. FOOTING
3R509	3	4'-6"	VERTICAL WALL
3R510	14	5'-5"	VERTICAL WALL
3R511	28	8'-4"	VERTICAL WALL
3R512	28	7'-9"	VERTICAL WALL
3R513	11	7'-7"	VERTICAL WALL
3R514	34	26'-9"	HORIZ. WALL
3R515	10	26'-1"	HORIZ. WALL
3R516	18	9'-6"	HORIZ. WALL
3R517	14	15'-9"	HORIZ. WALL
3R518c	10	26'-9"	HORIZ. CURB
3R519c	5	9'-6"	HORIZ. CURB
3R520c	5	15'-9"	HORIZ. CURB
3R705	7	5'-8"	HORIZ. FOOTING
3R706	73	9'-8"	HORIZ. FOOTING
3R707	17	4'-6"	VERTICAL WALL
3R708	14	5'-5"	VERTICAL WALL
3R709	28	8'-4"	VERTICAL WALL
3R710	28	7'-9"	VERTICAL WALL
3R711	11	7'-7"	VERTICAL WALL

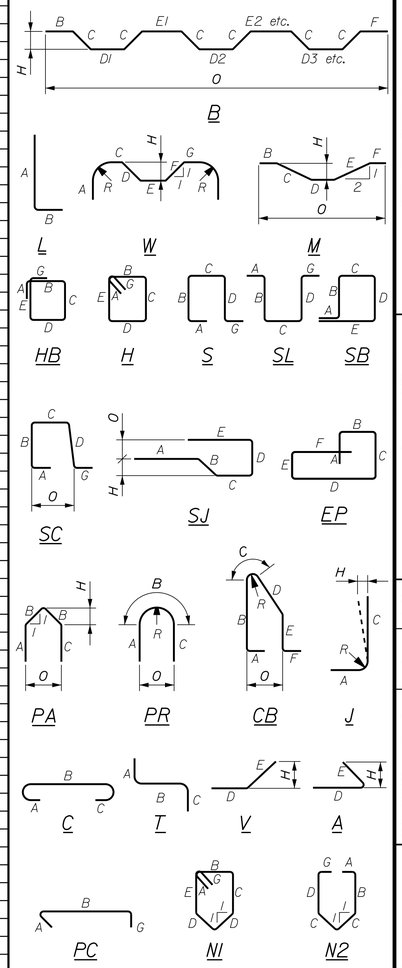
SUPERSTRUCTURE / DECK

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O	R	LOCATION
S550c	1668	11'-0"	S	10"	1'-3"	6'-10"	1'-3"	-	-	10"	-	-	-	-	SIDEWALK STIRRUP
S551c	38	7'-8"	SJ	10"	1'-3"	1'-5"	1'-1"	3'-1"	-	-	10"	-	3"	-	SOUTH DECK END
S552c	42	8'-2"	SJ	10"	1'-3"	1'-8"	1'-1"	3'-4"	-	-	10"	-	3"	-	NORTH DECK END
S553c	32	9'-1"	PR	4'-3"	7"	4'-3"	-	-	-	-	-	-	4"	2"	LONG. SIDEWALK END BARS
S554c	4	9'-3"	HB	0"	10"	6"	6'-7"	6"	-	10"	-	-	-	-	TRANS. SIDEWALK END BARS
S555c	54	11'-11"	C	7"	11'-4"	0"	-	-	-	-	-	-	-	-	TRANS. BUMPOUT
S556c	52	10'-6"	C	7"	9'-11"	0"	-	-	-	-	-	-	-	-	TRANS. BUMPOUT
S557c	52	5'-8"	W	0"	-	10"	1'-3"	1'-6"	1'-3"	10"	10"	-	-	0"	DECK CONSTR. JT.
S650c	6240	4'-2"	SL	1'-0"	6"	1'-2"	6"	-	-	1'-0"	-	-	-	-	HAUNCH

MARK	QTY.	LENGTH	LOCATION
S500g	608	40'-2"	LONGITUDINAL POUR 1 & 4
S501g	540	35'-8"	LONGITUDINAL POUR 2
S502g	720	32'-4"	LONGITUDINAL POUR 3
S503g	1160	36'-5"	LONGITUDINAL POUR 5 & 6
S504g	1080	34'-3"	LONGITUDINAL POUR 7
S505g	4170	46'-10"	TRANSVERSE TOP AND BOTTOM
S506g	128	9'-8"	TRANSVERSE END BEAM INTERIOR & CNST. JTS.
S507g	448	3'-0"	TRANSVERSE END BEAM EXTERIOR, DRAINS, & CONST. JTS.
S508g	528	40'-3"	LONGITUDINAL SIDEWALK & BUMPOUT
S509c	32	15'-11"	LONGITUDINAL BUMPOUT
S510c	20	12'-8"	LONGITUDINAL BUMPOUT
S511c	26	10'-7"	TRANSVERSE BUMPOUT
S512c	28	9'-2"	TRANSVERSE BUMPOUT
S513c	8	42'-5"	SIDEWALK BUMPOUT

MARK	QTY.	LENGTH	LOCATION

TYPE - BENDING DIAGRAMS



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.

GENERAL NOTES

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

   Mark "A0502" = bar size #5
   Mark "P0805" = bar size #8
   Mark "S1150" = bar size #11

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with an "E" indicate epoxy coating required. Bar marks ending with an "s" indicate stainless steel bar is required. Bar marks ending with a "g" indicate Glass Fiber Reinforced Polymer (GFRP) bar is required. Bar marks ending with a "c" indicate Low-Carbon Chromium Bar is required.

TYLin

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 12572 — SIGNATURE — DATE 9/23/2022

	BY	DATE
PROJ. MANAGER	Scott Rollins	
DESIGN-DETAILED	D.Myers	12/21
CHECKED-REVIEWED	B.Toothaker	12/21
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

REINFORCING STEEL SCHEDULE SHEET 5 OF 5

SHEET NUMBER 156

OF 163

Filename: ...\106273_4\157_Lighting_01.DGN Division: Username: Date:10/15/2022

CURVE DATA #1
PI = 2+73.46
D = 7°09'43.1"
Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

PC = STA. 1+29.36
PRCC = STA. 4+14.51
Match Line STA. 6+00
N15°36'51.02"E

STA. 3+78.35, LT
P3-A2-12
2-Inch Lighting Conduit Run
Under Sidewalk On Grade
STA. 3+78.37, 25.72 RT
P10-A2-10
STA. 3+20.04, RT
P8-A2-12
STA. 3+08.26, LT
P1-A2-10
2-Inch Lighting Conduit Run
In Sidewalk on Bridge
Expansion Joint
See Lighting Note 15
P5-A1-10
P7-A1-12
P9-A1-10
SJB-8
P16-A1-12
SJB-9
P14-A1-10
SJB-11
SJB-10
P12-A1-12
Expansion Joint
See Lighting Note 15
STA. 3+74.42, 35.80 RT
PB P1-B1-14
STA. 3+38.30, 44.47 RT
PB P3-B1-14
(See Lighting Note 21)
STA. 3+69.41, 60.52 RT
PB P2-B1-14
(See Lighting Note 21)
Remove Existing Bridge Electric
Service, See Lighting Detail Sheet.
Existing Utility
Pole, Retain
Cap Conduit
See Lighting Note 14
STA. 2+61.75, RT
P6-A3-10
STA. 2+03.49, RT
P4-A3-12
STA. 1+45.40, RT
P2-A3-10
STA. 1+83.34, 29.46 RT
PB P7-B1-14
Existing Utility Pole
and Luminaire to Remain
Existing Utility
Pole, Retain
STA. 2+16.70, 39.00 RT
PB P6-B1-14
(See Lighting Note 21)
STA. 2+57.46, 48.18 RT
PB P5-B1-14
(See Lighting Note 21)
STA. 2+94.05, 42.94 RT
PB P4-B1-14
(See Lighting Note 21)

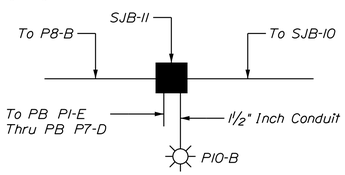
0+00 1+00 2+00 3+00 4+00 5+00

LEGEND

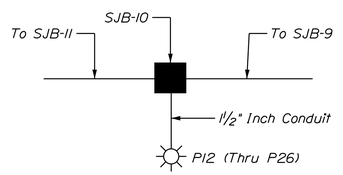
- Conduit
- Light Fixture and Pole
- Junction Box or Handhole (Refer to Note)
- P2-A3-10 P2 = Pole Number A3 = Pole Type 10 = Cir. No.
- PB Indicates Pole Located in Brunswick Park

For Lighting Notes See Sheet "Lighting Notes, Schedules, & Details".

WIRE SCHEDULE
A 3 #10 & #10 GR.
B 3 #8 & #8 GR.
C 2 #1/0; 2 #3; 3 #8; 3 #10; #1/0 GR.
J 2 #1/0; 2 #3; 3 #10; #1/0 GR.



DETAIL AT SJB-11
See Note 16, Lighting Notes, & Details Sheet



DETAIL AT SJB-3 THRU SJB-10
See Note 16, Lighting Notes, & Details Sheet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE
DANIEL S. MYERS
No. 12572
LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers
SIGNATURE
12572
P.E. NUMBER
9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	C. Anderson	P. McClure	7/20
CHECKED-REVIEWED	S.Ficker		8/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

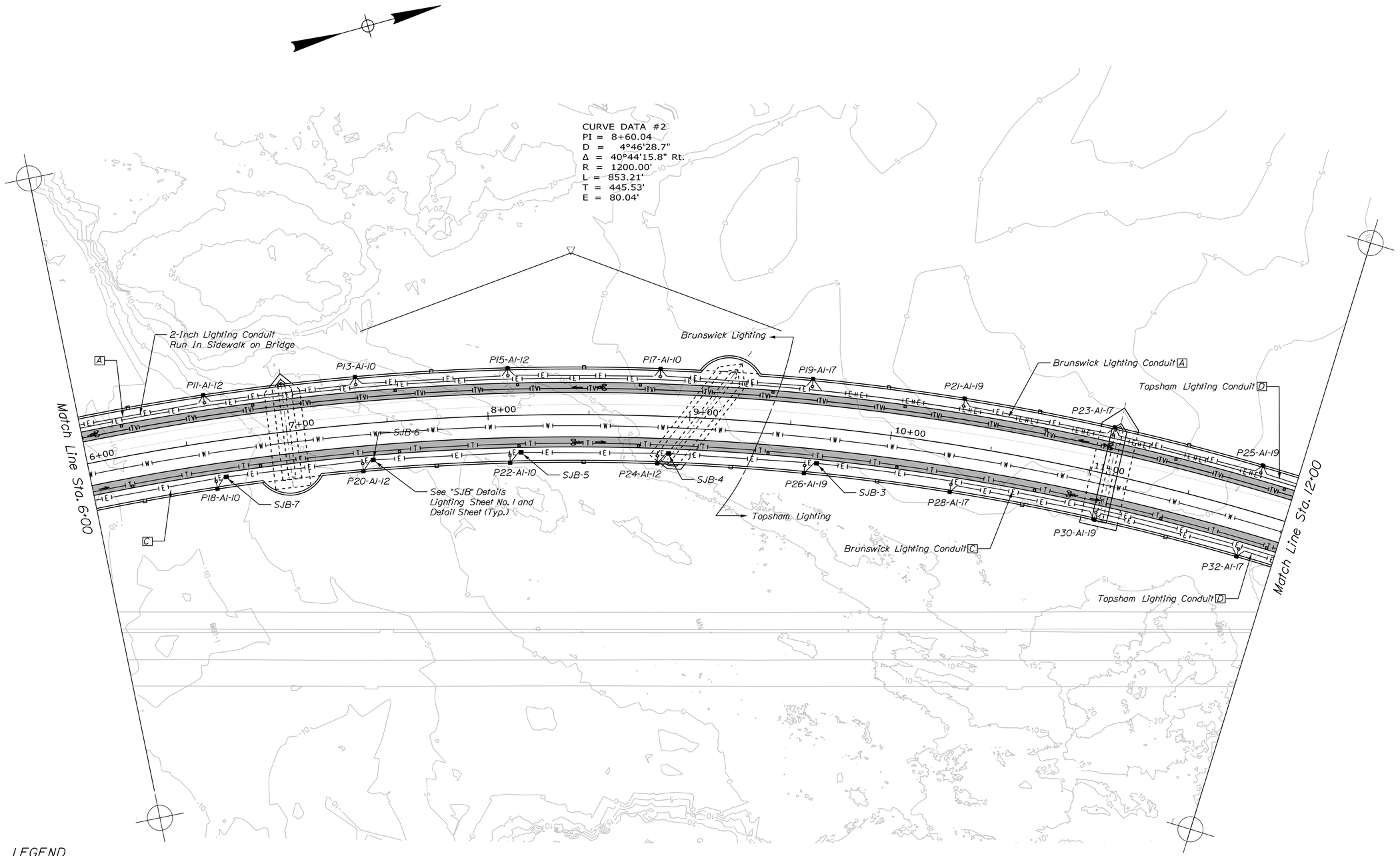
LIGHTING PLAN

SHEET NUMBER
157
OF 163

TYLin

Filename: ...\106273_5\158_Lighting_02.DGN Division: Username: Date:10/15/2022

CURVE DATA #2
PI = 8+60.04
D = 4°46'28.7"
Δ = 40°44'15.8" Rt.
R = 1200.00'
L = 853.21'
T = 445.53'
E = 80.04'



LEGEND

- Conduit
- Light Fixture and Pole
- Junction Box or Handhole (Refer to Note)

P2-A3-10 P2 = Pole Number A3 = Pole Type 10 = Cir. No.

For Lighting Notes See Sheet "Lighting Notes, Schedules, & Details".

WIRE SCHEDULE
A 3 #10 & #10 GR.
B 3 #8 & #8 GR.
C 2 #1/0, 2 #2, 3 #8, 3 #10, #1/0 GR.
D 3 #12 & #12 GR.

PLAN
25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

DANIEL S. MYERS No. 12572 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
12572
P.E. NUMBER
9/28/2022
DATE

	BY	DATE
Scott Rollins		
PROJ. MANAGER	C.Anderson	7/20
DESIGN-DETAILED	P.McClure	8/20
CHECKED-REVIEWED	S.Ficker	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

LIGHTING PLAN

SHEET NUMBER
158
OF 163

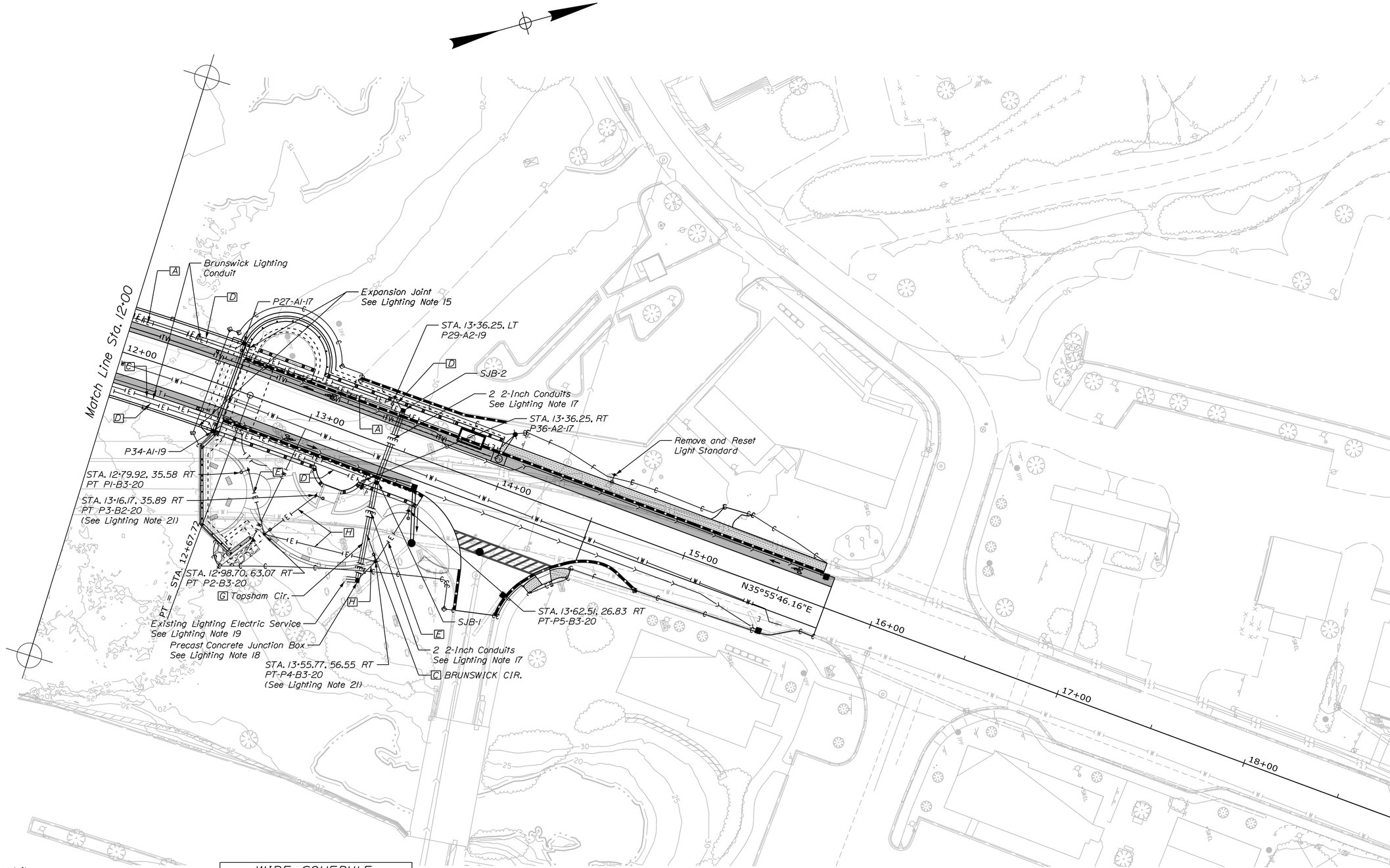
TYLin

Username:

Date:10/15/2022

Division:

Filename: ...\106273_3\159_Lighting_03.DGN



LEGEND

- Conduit
- Light Fixture and Pole
- Junction Box or Handhole (Refer to Note)
- P2-A3-10 — P2 = Pole Number A3 = Pole Type 10 = Cir. No.
- PT — Indicates Pole Located in Topsham Park

For Lighting Notes See Sheet "Lighting Notes, Schedules, & Details".

WIRE SCHEDULE

A	3 #10 & #10 GR.
B	3 #8 & #8 GR.
C	2 #1/0, 2 #2, 3 #8, 3 #10, #1/0 GR.
D	3 #12 & #12 GR.
E	2 #12 & #12 GR.
G	6 #12 & #12 GR.
H	2 #6, 2 #10, 2 #12 & #6 GR.

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016 — BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

12572
P.E. NUMBER

9/23/2022
DATE

PROJ. MANAGER	Scott Rollins		
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DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

LIGHTING PLAN

SHEET NUMBER

159

OF 163

TYLin

GENERAL NOTES - LIGHTING

1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO LOCATE ALL EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA AND TAKE ALL NECESSARY PRECAUTIONS FOR PROTECTION OF THESE UTILITIES. ANY DAMAGE TO UNDERGROUND UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER, WITH NO COST TO THE DEPARTMENT.

2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), THE TOWNS OF BRUNSWICK AND TOPSHAM REQUIREMENTS, AND APPLICABLE ITEMS IN THE THE MOST RECENT MAINE DEPT. OF TRANSPORTATION (MEDOT) SPECIFICATIONS FOR MISCELLANEOUS CONSTRUCTION (SECTIONS 626, 634 AND 715); SPECIAL PROVISIONS; AND STANDARD DETAILS FOR DIVISION 600 MISCELLANEOUS CONTRUCTION, UNLESS NOTED OTHERWISE.

3. ALL LIGHT POLE FOUNDATIONS SHALL BE 18-INCH DIAMETER, 6-FT. 6-INCHES DEEP AND CONSTRUCTED IN ACCORDANCE WITH MEDOT STANDARD DETAIL 626 (01).

4. ALL LIGHT POLE FOUNDATIONS SHALL HAVE A GROUND ROD, LOCATED IMMEDIATELY ADJACENT TO THE FOUNDATION, THAT IS BONDED TO THE POLE GROUNDING CONDUCTOR. ALL GROUND RODS SHALL BE 3/4-INCH DIAMETER, 10-FT. LONG WITH TOP OF ROD SET 1-FT. BELOW FINISH GRADE WHERE ROD IS PLACED. IN GENERAL, UNLESS OTHERWISE NOTED, THE TOP SURFACE OF ALL POLE FOUNDATIONS SHALL BE SET 2-INCHES ABOVE FINISH GRADE WHERE POLE IS PLACED.

5. THE CONTRACTOR SHALL FIELD VERIFY FINAL POLE LOCATIONS TO AVOID SUB-SURFACE UTILITIES, NATURAL AND BUILT SITE FEATURES SUCH AS BUT NOT LIMITED TO SIDEWALKS, DRAINAGE STRUCTURES, GUARD RAILS, AND SUCH FEATURES THAT WOULD INTERFERE WITH THE INSTALLATION OF PROPER POLE FOUNDATIONS. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO ENSURE THAT HE IS FULLY AWARE OF THE SITE CONDITIONS WHICH MAY AFFECT HIS MEANS AND METHODS OF CONSTRUCTION.

6. WHERE CONDUIT IS RUN UNDER EXISTING PAVEMENT THE CONTRACTOR SHALL UTILIZE THE DIRECTIONAL BORING OR JACKING METHOD FOR CONDUIT INSTALLATION TO AVOID DISTURBING EXISTING PAVEMENT.

7. WHERE LIGHTING CONDUIT IS REQUIRED TO PASS OVER DRAINAGE CULVERTS AND THE SPECIFIED BURIAL DEPTH OF CONDUIT CANNOT BE MAINTAINED THE CONTRACTOR SHALL PROVIDE CONCRETE PROTECTION OF CONDUIT IN ACCORDANCE WITH NEC TABLE 300.5.

8. IN GENERAL, THE SCOPE OF WORK WILL INCLUDE THE INSTALLATION OF A COMPLETE SYSTEM OF BURIED CONDUIT, CONDUIT ENCASED IN POURED IN PLACE CONCRETE, CONDUCTORS, HANDHOLES (WHERE REQUIRED) AND PRE-CAST OR CAST-IN-PLACE REINFORCED CONCRETE POLE FOUNDATIONS WITH ANCHOR BOLTS, ELECTRIC SERVICE, POLES AND LUMINAIRES.

9. THE CONTRACTOR WILL COORDINATE THIS WORK WITH ALL OTHER CONTRACTORS WORKING ON THIS PROJECT.

10. INSTALLATION OF ALL UNDERGROUND CONDUIT WILL COMPLY WITH MAINE DOT STANDARD DETAIL 626.

11. ANCHOR BOLT PATERN FOR POLES SHALL BE COORDINATED WITH APPROVED POLE SHOP DRAWINGS, SHALL BE HOT DIP GALVANIZED, DIAMETER AND LENGTH AS RECOMMENDED AND SUPPLIED BY POLE MANUFACTURER.

12. WHEREVER MANUFACTURERS NAMES AND CATALOG NUMBERS ARE NOTED, THEY ARE NOTED TO ESTABLISH THE QUALITY, PERFORMANCE AND FEATURES REQUIRED. IT IS NOT THE INTENT TO RESTRICT MATERIALS TO THAT MANUFACTURER. ALTERNATE MANUFACTURERS OF EQUAL QUALITY, PERFORMANCE AND FEATURES WILL BE ACCEPTABLE IF IN THE JUDGEMENT OF THE DEPARTMENT THE PROPOSED PRODUCT IS EQUAL TO THOSE SPECIFIED.

13. NOTE NOT USED

14. TURN CONDUIT OUT OF BASE 2 FT. AND CAP FOR FUTURE USE.

15. PROVIDE EXPANSION AND DEFLECTION FITTINGS IN CONDUITS CROSSING EXPANSION JOINTS. FITTINGS SHALL BE OZ/GEDNEY CATALOG NUMBERS AXB-8-200 AND DX-200. SEE DETAIL SHEET.

16. WEATHERPROOF CAST IRON, HOT DIP GALVANIZED JUNCTION BOX (SJB), HOPE ELECTRICAL #H58-241208. PROVIDE GROUNDING LUG ATTACHED TO INTERIOR OF BOX AND EXTRA FLEXIBLE, BRAIDED TINED COPPER GROUNDING STRAP ATTACHED TO COVER. PROVIDE DRILLED AND TAPPED CONDUIT OPENINGS FOR CONDUITS, AND GALVANIZED CHECKERED COVER. PAYMENT SHALL BE MADE UNDER HIGHWAY LIGHTING AND PARK LIGHTING SYSTEM ITEMS.

17. (2) 2-INCH CONDUITS (BRUNSWICK LIGHTING AND TOPSHAM LIGHTING). PROVIDE ONE SPARE CONDUIT UNDER ROADWAY BETWEEN SIDEWALK JUNCTION BOXES, BETWEEN SIDEWALK JUNCTION BOX AND HAND HOLE, AND HAND HOLE TO SERVICE.

18. PRECAST CONCRETE HAND HOLE TIER 22 24 X 36 X 18 SET ON A BASE OF 18-INCHES OF CRUSHED STONE. BOX MUST BE TIER 22 RATED (RATED FOR 22,000 LBS.). PAYMENT SHALL BE MADE UNDER ITEM 626.11, PRECAST CONCRETE JUNCTION BOX.

19. EXISTING, TOWN OF TOPSHAM STREET LIGHTING ELECTRIC SERVICE. SEE DETAIL FOR SERVICE UPGRADE.

20. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW INSULATION.

21. PROVIDE ONE EACH HUBBELL EXTRA HEAVY DUTY NEMA 5-20R (GF5362SG) AND NEMA 6-20R (HBL8400) RECEPTACLE WITH EXTRA DUTY WEATHERPROOF WHILE IN-USE COVER MOUNTED ON POLE IMMEDIATELY ABOVE POLE BASE. WIRE 6-20R RECEPTACLE THROUGH HUBBELL GFHW23005 HARD WIRED GFCI. MOUNT GFCI IN POLE BASE SUCH THAT IT IS ACCESSIBLE THROUGH HAND HOLE IN BASE.

22. ANY CONDUIT RUN IN AREAS OF VEHICULAR TRAFFIC SHALL BE CONCRETE ENCASED, INCLUDING THE ABUTMENT OVERLOOK / PLAZA AREAS IN TOPSHAM BETWEEN STA. 12+50 AND 13+90, RIGHT.

POLE SCHEDULE

TYPE	MANUFACTURER	LUMINAIRE	POLE/BASE/ARM/HEIGHT	LOCATIONS	AO SET	QUANTITY
A1	HOLOPHANE	GSLF2-P20-30K-AS-2-B-L3-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/14 Ft.	ON BRIDGE	2	24 EA
A2	HOLOPHANE	GSLF2-P20-30K-AS-2-B-L3-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/18 Ft.	ON GRADE	2	6 EA
A3	HOLOPHANE	GSLF2-P20-30K-AS-2-B-L4-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/18 Ft.	STA. 1+45 TO 2+63	2	3 EA
B1	HOLOPHANE	GSLF2-P20-30K-AS-2-B-L2-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/12 Ft.	BRUNSWICK PARK	2	6 EA
B2	HOLOPHANE	GSLF2-P50-30K-AS-2-B-L3-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/12 Ft.	BRUN/TOP PARK	8	2 EA
B3	HOLOPHANE	GSLF2-P20-30K-AS-2-B-L3-AO	L5J/ROCKFORD HARBOR/SL BISHOPS CROOK/12 Ft.	TOPSHAM PARK	1	4 EA

NOTE: ALL POLES ON PROJECT SHALL BE PROVIDED WITH A POLE TOP WEATHERPROOF IN-USE GFCI RECEPT CONNECTED TO POLE LIGHTING CIRCUIT, AND A FLAGPOLE HOLDER.

ABBREVIATIONS

A	AMPERE
BR	BRIDGE
BRUN	BRUNSWICK
CIR	CIRCUIT
CMP	CENTRAL MAINE POWER
DEPT	DEPARTMENT
ENCL	ENCLOSURE
FT	FOOT
GR	GROUND
JB	JUNCTION BOX
LTG	LIGHTING
MAG	MAGNETICALLY
MCB	MAIN CIRCUIT BREAKER
NO	NUMBER
P	POLE
PROT	PROTECTOR
PVC	POLYVINYL CHLORIDE
RECPT	RECEPTACLE
SET	SETTING
STA	STATION
SJB	SIDEWALK JB
TOP	TOPSHAM
TYP	TYPICAL
V	VOLT
w/	WITH
X-WALK	CROSSWALK

PANEL LT
120/240 V_50A MCB_GROUND BUS_3R ENCL.
22K AIC @ 240V SPLIT BUS W/CONTACTOR

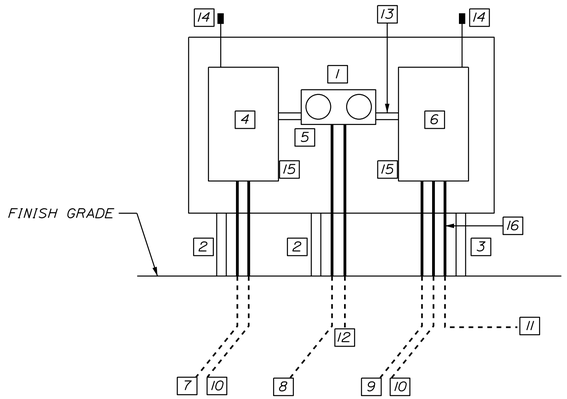
CIRCUIT USE	A/POLE	CIRCUIT NUMBER		A/POLE	CIRCUIT USE
SURGE PROT. **	30/2	1	2	15/1	CONTROL CIRCUIT
SURGE PROT. **	------	3	4	20/1	120V RECPT.
240V RECPT.	20/2	5	6	20/1	SPARE
	------	7	8	20/1	SPARE
		50A/2P MAG. HELD *** CONTACTOR			
SURGE PROT. **	30/2	9	10	20/1	EAST SIDE RECPT. *
SURGE PROT. **	------	11	12	20/1	EAST SIDE RECPT. *
EAST SIDE RECPT. *	20/1	13	14	20/1	WEST SIDE RECPT. *
WEST SIDE RECPT. *	20/1	15	16	20/1	WEST SIDE RECPT. *
BR. & ROAD LTG.	20/1	17	18	20/1	X-WALK LIGHTS *
BR. & ROAD LTG.	20/1	19	20	20/1	PARK LTG.
SPARE	20/1	21	22	20/1	SPARE
SPARE	20/1	23	24	20/1	SPARE
SPACE ------	20/1	25	26	20/1	SPACE ------
SPACE ------	20/1	27	28	20/1	SPACE ------
SPACE ------	20/1	29	30	20/1	SPACE ------

NOTES
* INDICATES EXISTING CIRCUIT, RECONNECT TO THIS PANEL
** SURGE PROTECTOR, DELTA LA 302, MOUNT BELOW PANEL
*** WITH 120 V COIL

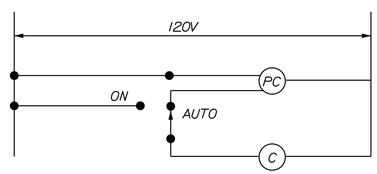
PANEL LB
120/240 V_50A MCB_GROUND BUS_3R ENCL.
22K AIC @ 240V SPLIT BUS W/CONTACTOR

CIRCUIT USE	A/POLE	CIRCUIT NUMBER		A/POLE	CIRCUIT USE
SURGE PROT. **	30/2	1	2	15/1	CONTROL CIRCUIT
SURGE PROT. **	------	3	4	20/1	120V RECPT.
240V RECPT.	20/2	5	6	20/1	SPARE
	------	7	8	20/1	SPARE
		50A/2P MAG. HELD *** CONTACTOR			
SURGE PROT. **	30/2	9	10	20/1	BR. & ROAD LTG.
SURGE PROT. **	------	11	12	20/1	BR. & ROAD LTG.
	20/1	13	14	20/1	PARK LTG.
	20/1	15	16	20/1	
	20/1	17	18	20/1	
	20/1	19	20	20/1	
SPARE	20/1	21	22	20/1	SPARE
SPARE	20/1	23	24	20/1	SPARE
SPACE ------	20/1	25	26	20/1	SPACE ------
SPACE ------	20/1	27	28	20/1	SPACE ------
SPACE ------	20/1	29	30	20/1	SPACE ------

NOTES
** SURGE PROTECTOR, DELTA LA 302, MOUNT BELOW PANEL
*** WITH 120 V COIL



LIGHTING SERVICE DETAIL



(PC) PHOTOCONTROL

(C) LIGHTING CONTACTOR

1. PRESSURE TREATED 5/4 LUMBER EQUIPMENT BOARD
2. EXISTING PRESSURE TREATED POST
3. NEW PRESSURE TREATED POST, MATCH EXISTING
4. BRUNSWICK LIGHTING PANEL (LB)
5. 2 GANG METER SOCKET W/BYPASS PER CMP SPEC.
6. TOPSHAM LIGHTING PANEL (LT)
7. 2-INCH PVC CONDUIT, BRUNSWICK LTG. CIR. VIA HANDHOLE
8. EXTEND EXISTING 2-INCH PVC SERVICE CONDUIT, PROVIDE (3) #2 & (1) #8 GROUNDING CONDUCTOR FROM TRANSFORMER TO METER SOCKET
9. 2-INCH PVC CONDUIT, TOPSHAM LTG. CIR. VIA HANDHOLE
10. SPARE 2-INCH PVC CONDUIT TO HANDHOLE
11. 2-INCH PVC CONDUIT, EXISTING TOPSHAM RECPT. CIR.
12. 3/4-INCH CONDUIT, (1) #6 GROUNDING ELECTRODE CONDUCTOR, CONNECT TO (2) 3/4-INCH X 10 FT. COPPER CLAD GROUND RODS SPACED 20 FT. APART. SET TOP OF RODS AT 1 FT. BELOW GRADE. CONNECTION TO GROUND RODS SHALL UTILIZE THERMOFUSION METHOD.
13. CONNECTION FROM LOAD SIDE OF CMP METER TO LINE SIDE OF PANELBOARD MAIN CIRCUIT BREAKER, NEUTRAL BUS & GROUND BUS. 1-1/2-INCH CONDUIT (3) #6 & (1) #8 GROUND (TYPICAL FOR TWO)
14. PHOTOCONTROL, STEM & SWIVEL MOUNT, 120V, INTERMATIC K4221C OR APPROVED EQUAL
15. "AUTO" "ON" SELECTOR SWITCH, LOCATE ADJACENT TO LIGHTING PANEL
16. PROVIDE SLIP RISERS IN ALL CONDUITS ENTERING SERVICE EQUIPMENT.

AUTO / ON — 3-WAY SWITCH, HUBBELL HBL2123 IN WEATHERPROOF BOX WITH LOCKING COVER

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE PLANS

BRIDGE NO. 2016

STATE OF MAINE — DANIEL S. MYERS No. 12572 — REGISTERED PROFESSIONAL ENGINEER

Daniel S. Myers
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REVISIONS 1	7/20	P.McClure
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REVISIONS 3		
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FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

LIGHTING NOTES, SCHEDULES & DETAILS

SHEET NUMBER
160
OF 163

TYLin

Date:10/15/2022
Username:
Division:
Filename: ...\160_LightingNotes_01.dgn

ELECTRIC SERVICE DEMOLITION

Front View - Existing Topsham Lighting Service

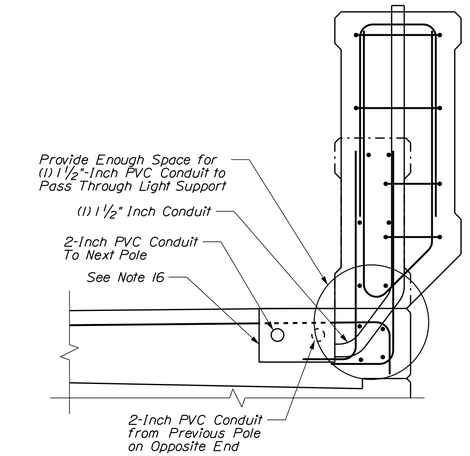
Rear View - Existing Topsham Lighting Service

EXISTING TOPSHAM ELECTRIC DEMOLITION NOTES

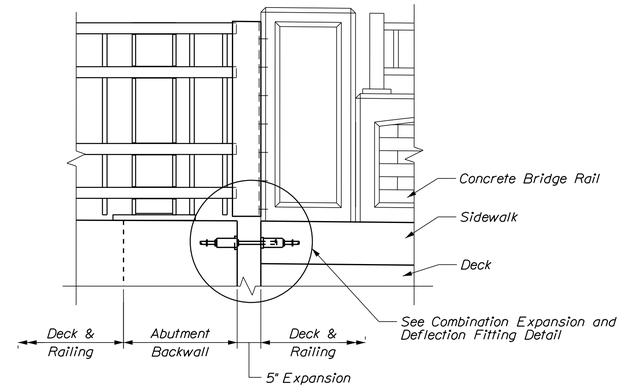
1. Arrange Disconnection of Service by CMP & Remove Service Conductors from Meter to Transformer.
2. Remove Meter Socket following Removal of Meter by CMP.
3. Remove Existing Panelboard & Protect Existing Branch Circuit Conductors for Reconnection to new Panelboard.
4. Remove Lighting Contactor on Rear of Equipment Board.
5. Remove Pressure Treated Lumber Equipment Board.
6. Protect Pressure Treated Posts for Reuse in-place for Construction of new Service Equipment Mounting Board.

EXISTING BRUNSWICK ELECTRIC SERVICE DEMOLITION

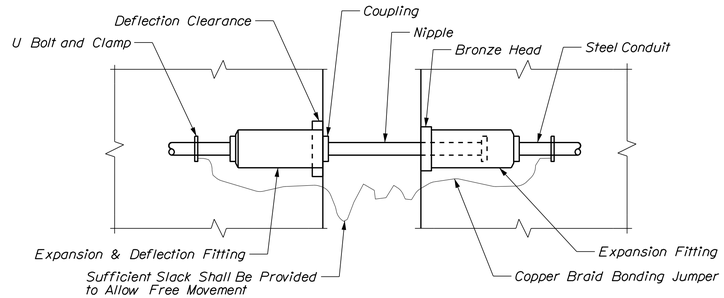
1. Existing CMP Meter, make Arrangements with CMP for Removal of Meter and Disconnection of Service at Riser Pole when Service is no longer required.
2. Remove Service Conductors from CMP Meter to Point of Termination at CMP Riser Pole. Remove Service Conduit.
3. Remove Existing Lighting Contactor and Photocontrol.
4. Remove Lighting Branch Circuit Conduit and Conductors.
5. Remove Existing Composite Hand Hole and Underground Conduits which interfere with New Park area Construction.
6. Remove Pressure Treated Wood Post.



DETAIL FOR INSTALLATION OF SJB-3 THRU SJB-10



ELEVATION OF RAIL EXPANSION AT BRIDGE JOINT



COMBINATION EXPANSION AND DEFLECTION FITTING

See Lighting Note 15 For Fitting Specifications.

This Detail is Typical for Locations Between Adjacent Spans and Between Span and Abutment.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)

WIN 22603.00

BRIDGE NO. 2016

BRIDGE PLANS

STATE OF MAINE — DANIEL S. MYERS No. 12572 — LICENSED PROFESSIONAL ENGINEER

Daniel S. Myers

SIGNATURE

12572

P.E. NUMBER

9/23/2022

DATE

PROJ. MANAGER	Scott Rollins		
DESIGN-DETAILED	C.Anderson	P.McClure	7/20
CHECKED-REVIEWED	S.Ficker	C.Anderson	8/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

LIGHTING DETAILS

SHEET NUMBER

161

OF 163

TYLin

Username:
Division:
Date:10/15/2022
Filename: ...\161_Light_Support_Details.dgn

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Username: Benjamin.Singer Date:10/13/2021 Division: ROW

PLAN LEGEND

	Existing	Proposed
Town, County, State		
Approx. Property Lines	P.L.	
Existing Right of Way		
Limits of Wrought Portion	L.O.W.P.	
Control Of Access	C.O.A.	
New Right of Way		
New Easement		
New Temporary Rights		
New R/W Within Existing R/W		
New R/W Along Existing R/W		
Building		
Trees	Conifer / Deciduous	
Tree Line		
Water Edge		
Ledge	Rock/Boulder	Flag Pole
Fence	CHAIN LINK / BARB WIRE / STOCKADE	
Sign	Well / Mailbox	
Clearing Limit Line	CLL	
Sanitary Sewer		
Telephone Line	T	T
Electric Line	E	E
Water Line	W	W
Underdrain Line		
Gas Line	G	G
Guardrail		
Culvert		
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		
Curbing		
Cut Line	C C C	
Fill Line	F F F	
Stonewall		
Retaining Wall		
Baseline	10+00 / 11+00 / 12+00	
Monument		
Traverse Point		
Iron Rod Found	IRF	
Pipe Found	IPF	
Replacement Pin Set		

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY OF _____

RECEIVED _____, 20____

AT _____HRS. _____ MINS. ____.M.
AND RECORDED IN
PLAN BOOK
(OR FILE NO.)_____, PAGE _____

ATTEST: _____
REGISTRAR

BROOKFIELD WHITE PINE HYDRO LLC
PARCEL NO. (2)
LAND = 0.25± AC. (UPLAND)
LAND = 0.50± AC. (OTHER)
TOTAL LAND = 0.75± AC. (HWY. EASE.)
TEMP. CONST. RIGHTS = 0.59± AC. (6)
TOTAL AREA = VAST HOLDINGS

WATERFRONT, MAINE BRUNSWICK LLC
PARCEL NO. (1)
LAND = 1,692± S.F. (EASE. FOR HIGHWAY PURPOSES)
CONST. & MAINT. EASE. = 236± S.F. (1)
TEMP. CONST. RIGHTS = 1,579± S.F. (1)
TOTAL AREA = 4.98± AC.

CURVE DATA #1
PI = 2+73.46
D = 7°09'43"
Δ = 20°25'21" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

PC = STA. 1+29.36

PLAN OF PROPERTY
CABOT MILL
FOR WATERFRONT, MAINE
BY WRIGHT PIERCE
DATED JUNE 26, 1986
LAST REVISED ON DECEMBER 15, 1989
PROJECT NO. 5863
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 183, PAGE 69

2-STORY BRICK COMMERCIAL BUILDING

4-STORY BRICK COMMERCIAL BUILDING

NEW R.O.W. & P/O T.C.R TO RUN ALONG BASE OF RET. WALL

ACCESS EASEMENT TO LAND N/F OF WATERFRONT, MAINE BRUNSWICK LLC

ACCESS EASEMENT TO LAND N/F OF BROOKFIELD WHITE PINE HYDRO LLC

BROOKFIELD WHITE PINE HYDRO LLC

APPROX. FERC PROJECT P.L. = STA. 4+14.51

LOCATION BOUNDARY

FISH LADDER

APPROX. SHORELINE LOCATION IN 1930

ANDROSCOGGIN RIVER (TIDAL) FLOW

GRID NORTH
MAINE 2000 WEST ZONE

CENTRAL MAINE POWER CO. EASE. (SEE SHEET 2)

SHAD ISLAND

LEDGE OUTCROPPING SUBJECT TO SEASONAL FLOODING

APPROXIMATE SPRINGTIME EXTENTS OF SHAD ISLAND (FROM AERIAL PHOTOS)

0.32± AC. AREA OF SEASONAL FLOODING

0.05± AC. INTERTIDAL

0.07± AC. INTERTIDAL

0.25± AC. UPLAND

0.26± AC.

HIGH WATER (APPROXIMATE)

LOW WATER (APPROXIMATE)

990± S.F.

710± S.F.

978± S.F. PAESC EASE. UPLAND

1,573± S.F.

1,579± S.F. EASE. LIMITS

1,692± S.F. (TOTAL = 149'±)

236± S.F.

250± S.F. TEMP. CONST. LTS.

CONST. & MAINT. EASE. LIMITS

TEMP. CONST. LIMITS

LIMITS OF WROUGHT PORTION

L.O.W.P.

TEMPORARY CONSTRUCTION LIMITS

TEMPORARY

CONST. LIMITS

BURIED SLAB FOR RET. WALL

RETAINING WALL

TWIN WALL

STATE HIGHWAY "17" / U.S. ROUTE 201 / ROUTE 24B / MAINE STREET
PRESENT BRIDGE LOCATION

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

CURVE DATA #2
PI = 8+60.04
D = 4°46'29"
Δ = 40°44'16" Rt.
R = 1200.00'
L = 853.21'
T = 445.53'
E = 80.04'

CUMBERLAND COUNTY
TOWN OF BRUNSWICK
TOWN OF TOPSHAM
SAGADAHOC COUNTY

BEGIN P.L. STA. 1+00

N15°36'51"E 285.15'

TOWN OF BRUNSWICK

TOWN OF BRUNSWICK BOOK 553, PAGE 81 C.C.R.D., 1888

APPROX. LOCATION OF BOOK 474, PAGE 50, C.C.R.D.

AREA LEASED TO THE TOWN OF BRUNSWICK

CONC.

PLAN
MAINE HIGHWAY COMMISSION, BRIDGE DIVISION BRUNSWICK-TOPSHAM BRIDGE OVER ANDROSCOGGIN RIVER BETWEEN THE TOWNS OF BRUNSWICK, CUMBERLAND COUNTY AND TOPSHAM, SAGADAHOC COUNTY SURVEY PLAN DATED FEB. 3, 1930

APPROXIMATE BRIDGE LOCATION PRIOR TO 1932

CONSERVATION EASEMENT
UNIFORM CONSERVATION EASEMENT ACT
MAINE REVISED STATUTES OF 1989
TITLE 33, M.R.S.A. SECTION 476 ET SEQ.
SEE BK. 9398 PG. 256

EXISTING R/W REFERENCES

BRUNSWICK
ROUTE 201/MAINE STREET
S.H.C. FILE NO. 3-54 (1931)
D.O.T. FILE NO. 3-141 (1960)
SHEET NO. 1

TOPSHAM
ROUTE 201/MAIN STREET
S.H.C. FILE NO. 12-5 (1931)
S.H.C. FILE NO. 12-5A (1932)
D.O.T. FILE NO. 12-108 (2001)
SHEET NO. 1

BROOKFIELD WHITE PINE HYDRO LLC

PLAN
THE BRUNSWICK ELECTRIC LIGHT & POWER CO. BY PERRY H. RICHARDSON, C.E.
DATE - JUNE 1909 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 11, PAGE 8

WATERPOWER SURVEY CABOT MFG. CO. & PEJEPSCOT PAPER CO. AND CENTRAL MAINE POWER CO. NEW ENGLAND PUBLIC SERVICE CO. DATE - JUNE 10, 1930 PLAN NO. 153-16 ON FILE AT THE TOWN OF BRUNSWICK PUBLIC WORKS

SITE PLAN - PROPOSED IMPROVEMENTS TOWN OF BRUNSWICK 250TH ANNIVERSARY SCENIC RIVERVIEW PARK OVERLOOKING THE ANDROSCOGGIN RIVER OWNER - TOWN OF BRUNSWICK BY - ALICE M. GOODWIN, PUBLIC WORKS DEPARTMENT DATE - OCTOBER 26, 1992 LAST REVISION DATE - SEPTEMBER 24, 1997 DRAWING NO. 92-09

PLAN
BY LOCKWOOD, GREENE & CO. JOB 5382E PLAN NO. A101
ON FILE AT THE TOWN OF BRUNSWICK PUBLIC WORKS

PLAN
EXHIBIT K SHEET 1 DETAIL MAP DAM & POWERHOUSE AREA BRUNSWICK PROJECT - CENTRAL MAINE POWER COMPANY DATE - SEPTEMBER 30, 1997 LAST REVISION DATE - JUNE 25, 1981 FERC NO. 2284-36

BRUNSWICK PROJECT PLAN, DETAIL MAP, DAM & POWERHOUSE AREA, CENTRAL MAINE POWER COMPANY BY ORLAND E. BEAN, P.L.S., DATED MARCH 26, 1999
PLAN BOOK 199, PAGE 185, C.C.R.D. & PLAN BOOK 34, PAGE 50, S.C.R.D.

FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER

BRIDGE NO. 2016 WIN 022603.00

ITEM	CHECKED	TECH
EXISTING CONDITION PLAN	C.W.K.	G.L.L.
FINAL RIGHT OF WAY	G.L.L.	B.S.
AREAS	G.L.L.	B.S.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460

BRUNSWICK / TOPSHAM
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK ____ PAGE ____ COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	10-04-21	38731	17
		COND.	10-04-21	2021R	08608

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "17"
U.S. ROUTE 201 / ROUTE 24B
BRUNSWICK / TOPSHAM
CUMBERLAND / SAGADAHOC COUNTY
FEDERAL AID PROJECT NO. STP-2260(300)

OCTOBER 2020	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-654
SCALE 1" = 25'	SHEET 1 OF 2	D.O.T. FILE NO. 12-141

SHEET NUMBER
162
OF 163

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: ROW Username: Benjamin.Singer Date:10/13/2021

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Sanitary Sewer	S	Traveled Way	
Existing Right of Way		Trees Conifer / Deciduous		Telephone Line	T	Ditch	
Limits of Wrought Portion	L.O.W.P.	Tree Line / Bush Line		Electric Line	E	Catch Basin	
Control Of Access	C.O.A.	Water Edge		Water Line	W	Manhole	
New Right of Way		Ledge / Rock/Boulder / Flag Pole		Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK / BARB WIRE / STOCKADE		Gas Line	G	Utility Pole	
New Temporary Rights		Sign / Well / Mailbox		Guardrail		Fire Hydrant	
New R/W Within Existing R/W				Culvert		Curbing	

Cut Line C–C–C · Fill Line F–F–F · Stonewall · Retaining Wall · Baseline 10+00 11+00 12+00 · Monument · Traverse Point · Iron Rod Found ● IRF · Pipe Found ● IPF · Replacement Pin Set

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY OF _____

RECEIVED _____, 20____

AT _____HRS. _____ MINS. ____.M.
AND RECORDED IN
PLAN BOOK
(OR FILE NO.)_____, PAGE _____

ATTEST: _____
REGISTRAR

SHAD ISLAND

APPROXIMATE SHORELINE SUMMER THROUGH WINTER (FROM AERIAL PHOTOS)

P.L. (APPROX.)

GERARD A. POLIQUIN
SUZANNE T. POLIQUIN

CENTRAL MAINE POWER CO. EASEMENT SEE S.C.R.D. 1910/9, 1910/316, & 2434/8

GRID NORTH
MAINE 2000 WEST ZONE

TEMPORARY CONSTRUCTION LIMITS

TOWN OF TOPSHAM

1.5-STORY HOUSE

L.O.W.P.

BROOKFIELD WHITE
PINE HYDRO LLC

CUMBERLAND COUNTY / TOWN OF BRUNSWICK / TOWN OF TOPSHAM / SAGADAHOC COUNTY

PRIORITY PROPERTIES, LLC
PARCEL NO. (3)
LAND = 0.13± AC. (UPLAND)
LAND = 0.46± AC. (OTHER)
TOTAL LAND = 0.59± AC. (HWY. EASE.)
CONST. & MAINT. EASE. = 116± S.F. (1)
TEMP. CONST. RIGHTS = 1.06± AC. (2)
TOTAL AREA = 2.64± AC. (CALC.)

2.5-STORY HOUSE

0.06± AC. PONDING AREA

311'±

658.67'

157'±

853.21'

701.05'

240'±

1,549± S.F.

LEDGE OUTCROPPING SUBJECT TO SEASONAL FLOODING

0.33± AC. PONDING AREA

113.21'

0.13± AC. SEASONAL FLOODING

0.88± AC.

CONST. & MAINT. EASE. LIMITS (RET. WALL/ FOOTING) 116± S.F.

46.59'

32.56'

A.T.M. BUILDING

CENTRAL MAINE POWER CO. ACCESS EASE. SEE S.C.R.D. 1910/9

SUMMER STREET

0.18± AC.

292'±

46'±

66'±

97'±

PRESENT BRIDGE LOCATION

STATE HIGHWAY "17" / U.S. ROUTE 201
ROUTE 24B / MAIN STREET

LIMITS OF WROUGHT PORTION

S.H.C. FILE NO. 12-5A

S.H.C. FILE NO. 12-5A

CURVE DATA #2
PI = 8+60.04
D = 4°46'29"
Δ = 40°44'16" Rt.
R = 1200.00'
L = 853.21'
T = 445.53'
E = 80.04'

ANDROSCOGGIN RIVER (TIDAL) Flow

APPROXIMATE HIGH WATER

APPROX. LOC. - DOWNSTREAM FACE OF FORMER TIMBER CRIB & ROCK FILLED DAM

APPROX. LOCATION - FERC PROJECT BOUNDARY - AS SHOWN ON PLAN

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

GREAT BOWDOIN MILL PHASE II SUBDIVISION REVISIONS LOTS 4, 5, 6, 7 & 8 FOR BOWDOIN MILL ASSOCIATES, LLC BY ROBERT M. SPIVEY DATE - OCTOBER 2, 2008 PROJECT NO. 592 SAGADAHOC COUNTY REGISTRY OF DEEDS PLAN BOOK 46, PAGE 71

GREAT BOWDOIN MILL PHASE II SUBDIVISION LOTS 4, 5, 6, 7 & 8 FOR BOWDOIN MILL ASSOCIATES, LLC BY ROBERT M. SPIVEY DATE - NOVEMBER 12, 2002 PROJECT NO. 592 SAGADAHOC COUNTY REGISTRY OF DEEDS PLAN BOOK 38, PAGE 65

EXHIBIT A
PROPERTY INITIALLY SUBJECT TO THE DECLARATION OF EASEMENTS, COVENANTS AND RESTRICTIONS OF BOWDOIN MILL ASSOCIATES, LLC, FOR BOWDOIN MILL ASSOCIATES, LLC BY BRIAN SMITH SURVEYING, INC. DATE - FEBRUARY 27, 2001 JOB NO. 98-75 SAGADAHOC COUNTY REGISTRY OF DEEDS PLAN BOOK 36, PAGE 35

EXISTING R/W REFS.

BRUNSWICK
ROUTE 201/MAINE STREET
S.H.C. FILE NO. 3-54 (1931)
D.O.T. FILE NO. 3-141 (1960)
SHEET NO. 1

TOPSHAM
ROUTE 201/MAIN STREET
S.H.C. FILE NO. 12-5 (1931)
S.H.C. FILE NO. 12-5A (1932)
D.O.T. FILE NO. 12-108 (2001)
SHEET NO. 1

APPROXIMATE LOCATION FERC PROJECT BOUNDARY AS SHOWN ON PLAN

BOWDOIN MILL ASSOCIATES, LLC
ITEM NO. (4)
TEMP. CONST. RIGHTS = 0.07± AC. (3)
TOTAL AREA = 5± AC. (TOWN)

PT = STA. 12+67.72

TEMP. CONST. LIMITS

EXIST. DRAIN

TEMP. CONST. EASE. LTS.

748± S.F.

908± S.F.

EXISTING STORM SEWER OUTLET PIPE SEE D.O.T. FILE NO. 12-108

BOOK 1526, PAGE 63 LOT 2 PARCELS TWO

APPROX. LOCATION FERC PROJECT BOUNDARY

GRANNY HOLE STREAM

50' RIGHT OF WAY

EASEMENT TO C.M.P. CO. (LOC. APPROX.)

3 MAIN STREET, LLC

1.5-STORY OFFICE BUILDING

2-STORY COMMERCIAL BUILDING

PLAN OF LAND FOR SOCONY-VACUUM OIL COMPANY, INC. BY H. I. JORDAN DATE - DECEMBER 1938 S.C.R.D. PLAN BOOK 4, PAGE 37

UTILITY AND DEMOLITION PLAN GATEWAY BUILDING FOR PRIORITY PROPERTIES, LLC BY SITELINES P.A. DATE - JUNE 23, 2005 JOB NO. 997

FORMER LOC. OF SUMMER STREET EXT. F/K/A WHITE STREET DISCONTINUED BY TOWN OF TOPSHAM ON JUNE 6, 2002

CENTRAL MAINE POWER CO. EASE. SEE S.C.R.D. 1910/318

NOTE: PURSUANT TO AN AGREEMENT BETWEEN CENTRAL MAINE POWER CO. AND BOWDOIN MILL ASSOCIATES, LLC DATED DECEMBER 4, 2001 AND RECORDED AT S.C.R.D. BOOK 2434, PAGE 8, ANY CONSTRUCTION CAN'T TAKE PLACE UNTIL THE CONVEYANCE

STATE OF MAINE BK 1993, PG 239, S.C.R.D. 2001

N35°55'46"E 232.28'

14+00 15+00 16+00 END B.L.

D.O.T. FILE NO. 12-108

STATE OF MAINE BOOK 176, PAGE 66 S.C.R.D. 1931

ITEM	CHECKED
EXISTING CONDITION PLAN	G.L.L.
FINAL RIGHT OF WAY	B.S.
AREAS	B.S.
TECH	G.L.L. C.W.K. G.L.L. G.L.L.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
BRUNSWICK / TOPSHAM
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	10-04-21	38731	17
		COND.	10-04-21	2021R	08608

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "17"
U.S. ROUTE 201 / ROUTE 24B
BRUNSWICK / TOPSHAM
CUMBERLAND / SAGADAHOC COUNTY
FEDERAL AID PROJECT NO. STP-2260(300)

OCTOBER 2020	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-654
SCALE 1" = 25'	SHEET 2 OF 2	D.O.T. FILE NO. 12-141

SHEET NUMBER
163
OF 163

FRANK J. WOOD BRIDGE
BRIDGE NO. 2016 WIN 022603.00

Filename: ...\MSTA\T-1_UGenPlan1.dgn Username: sjwilliams Division: UTILITIES Date:12/28/2021

NOTES

1. Other proposed utilities not shown for clarity, see MaineDOT WIN 22603.00 Contract Plans for other details.

2. See Special Provision Section 910 for further details.

CURVE DATA #1
PI = 2+73.46
D = 7°09'43.1"
Δ = 20°25'20.6" Lt.
R = 800.00'
L = 285.15'
T = 144.10'
E = 12.88'

PC = STA. 1+29.36

PRC = STA. 4+14.51

℄ Brg. Abut. 1
Sta. 4+40.00

℄ Construction Proposed
US Route 201/Route 24

Match Line Sta. 6+00

0+00
1+00
2+00
3+00
4+00
5+00

N15°36'51.02"E

← To Brunswick

(12) - 4" IPS/XW Fiberglass
Conduits Under Bridge

(12) - 4" PVC Conduits
Concrete Encased

Adjust Manhole to Grade
Consolidated Communications
Tie-In at Existing MH
Sta. 3+68.03
Offset 20.53' Rt.

PLAN

25 0 25 50
Scale of Feet

Stantec

Stantec Consulting Services Inc.
2211 CONGRESS ST., PORTLAND, ME 04102
Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9284
LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER
01-03-2022
DATE

PROJ. MANAGER	SCOTT ROLLINS	BY	DATE
DESIGN-DETAILED	J. BURKE	J. BURKE	11/2021
CHECKED-REVIEWED	S. WILLIAMS	T. MERRITT	12/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

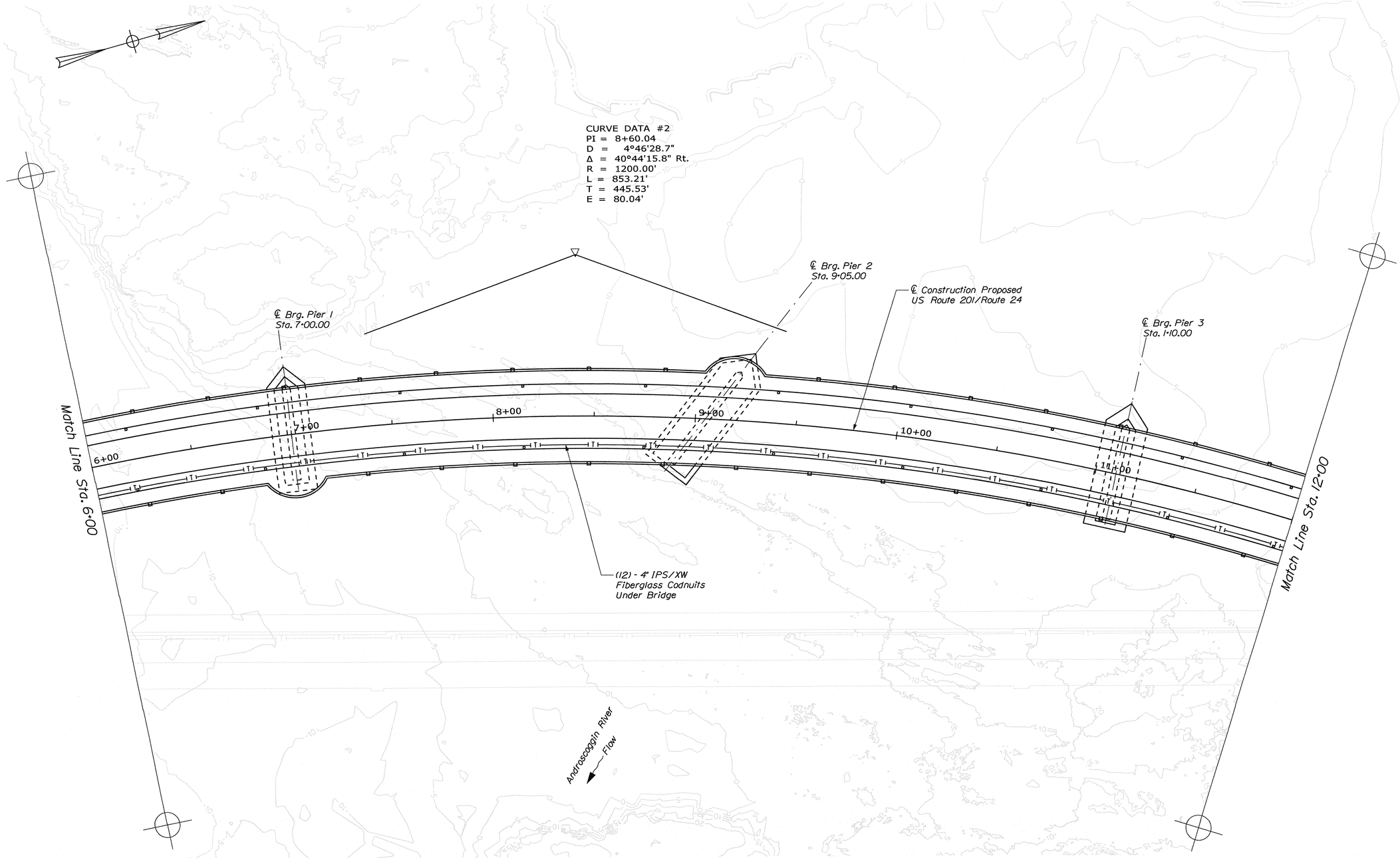
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONDUIT LAYOUT PLAN 1

SHEET NUMBER
T-1
OF T-7

Filename: ...\MSTA\T-2_UGenPlan2.dgn Username: sjwilliams Division: UTILITIES Date:12/28/2021

CURVE DATA #2
PI = 8+60.04
D = 4°46'28.7"
Δ = 40°44'15.8" Rt.
R = 1200.00'
L = 853.21'
T = 445.53'
E = 80.04'



PLAN

25 0 25 50
Scale of Feet

Stantec

Stantec Consulting Services Inc.
2211 CONGRESS ST., PORTLAND, ME 04102
Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9204
REGISTERED PROFESSIONAL ENGINEER

Timothy M. Merritt
SIGNATURE
9204
P.E. NUMBER
01-03-2022
DATE

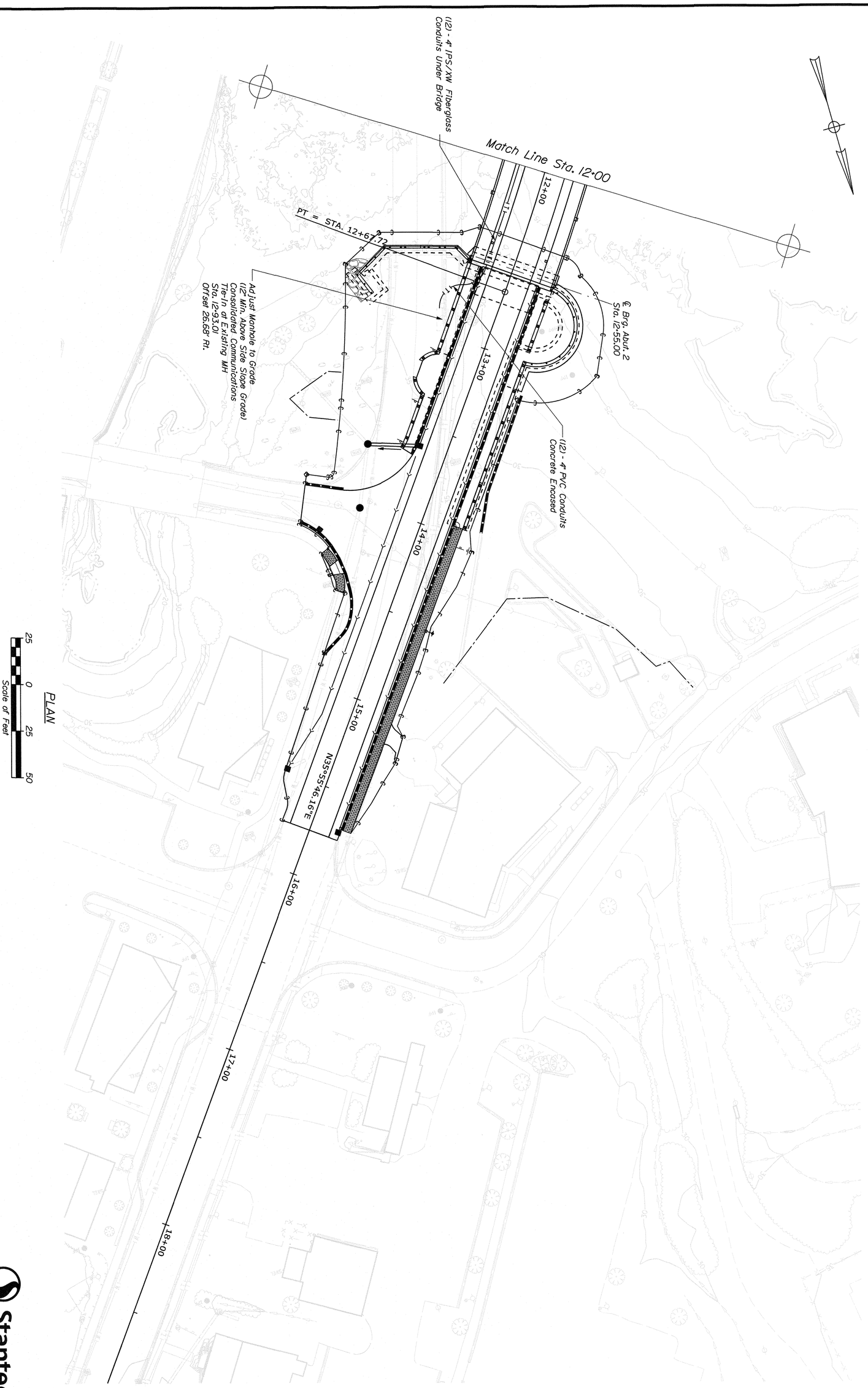
PROJ. MANAGER	SCOTT ROLLINS	
DESIGN-DETAILED	J. BURKE	11/2021
CHECKED-REVIEWED	S. WILLIAMS	11/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONDUIT LAYOUT PLAN 2

SHEET NUMBER
T-2
OF T-7

Filename: ...\MSTA\T-3_UGenPlan3.dgn Division: UTILITIES Username: sjwilliams Date:12/28/2021



Stantec

SHEET NUMBER T-3 OF T-7

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

CONDUIT LAYOUT PLAN 3

		BY	DATE
PROJ. MANAGER	SCOTT ROLLINS		
DESIGN-DETAILED	J. BURKE	J. BURKE	11/2021
CHECKED-REVIEWED	S. WILLIAMS	T. MERRITT	12/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

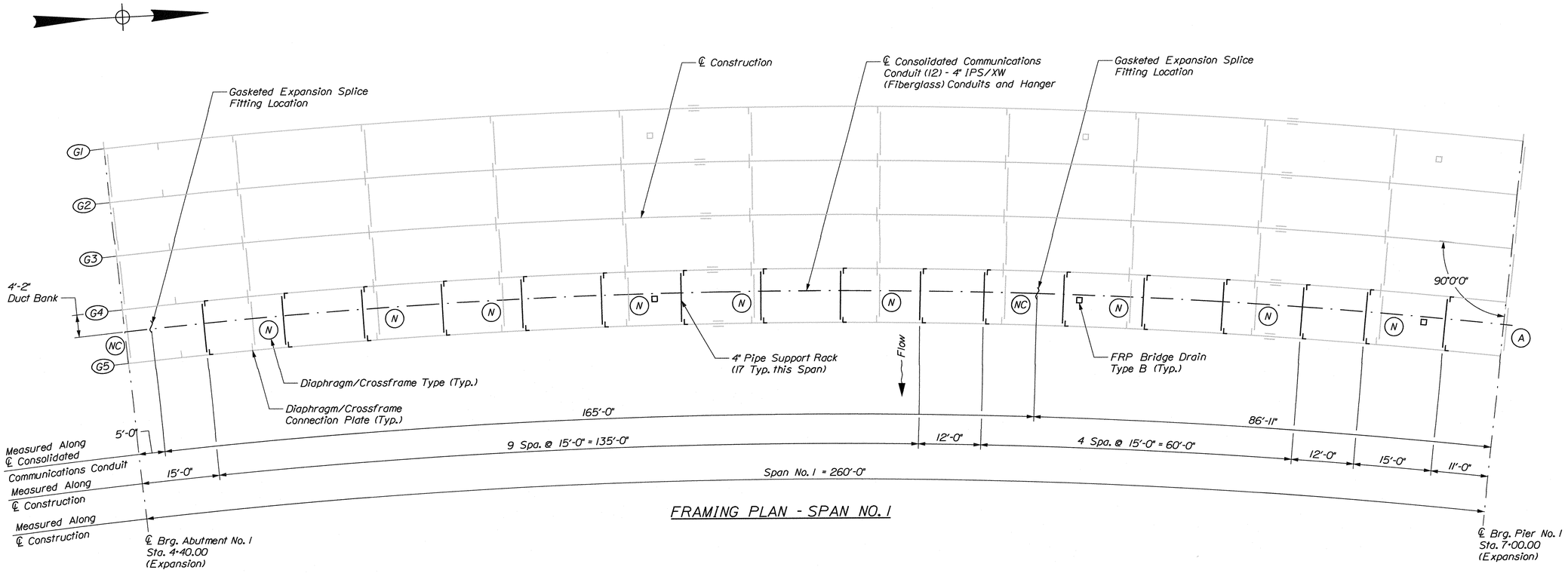
SIGNATURE
P.E. NUMBER 9294
DATE 01-03-2022

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9294
LICENSED
PROFESSIONAL ENGINEER

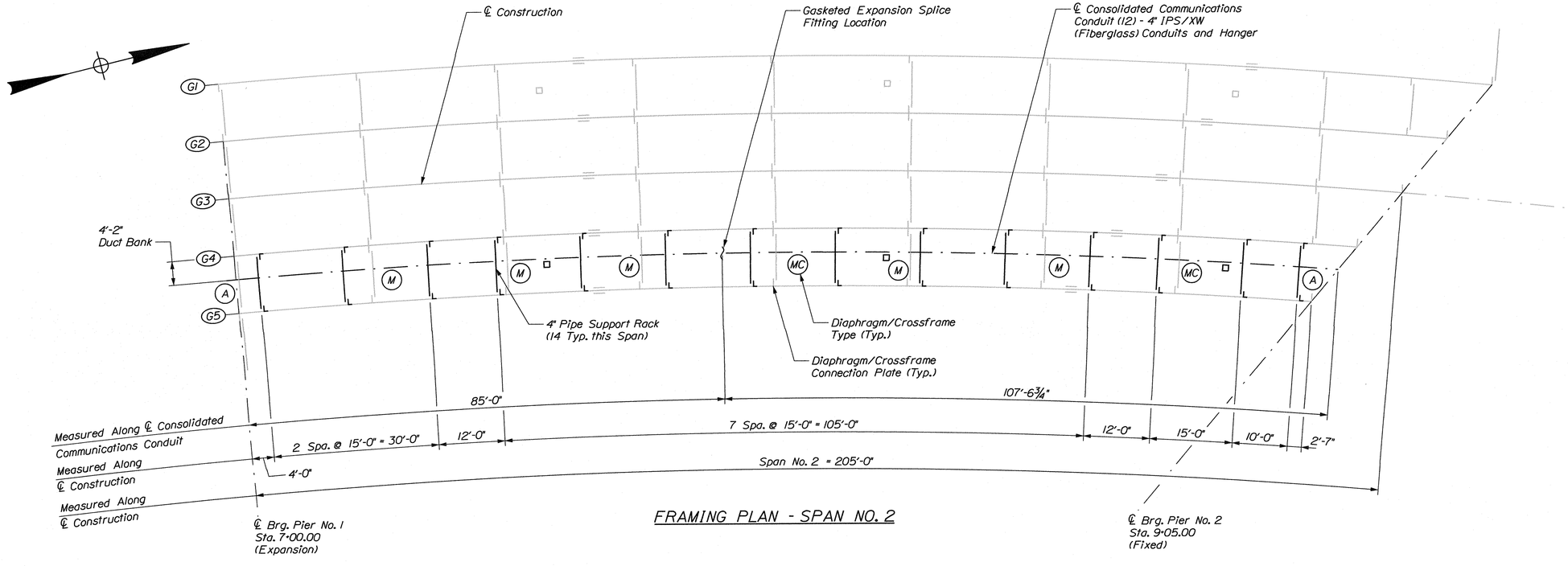
Stantec Consulting Services Inc.
2211 CONGRESS ST., PORTLAND, ME 04102
Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339



FRAMING PLAN - SPAN NO. 1



FRAMING PLAN - SPAN NO. 2

Stantec

Stantec Consulting Services Inc.
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Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9234
REGISTERED PROFESSIONAL ENGINEER

Timothy W. Merritt
SIGNATURE
9234
P.E. NUMBER
01-03-2022
DATE

	BY	DATE
PROJ. MANAGER	SCOTT ROLLINS	
DESIGN-DETAILED	J. BURKE	11/2021
CHECKED-REVIEWED	S. WILLIAMS	11/2021
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
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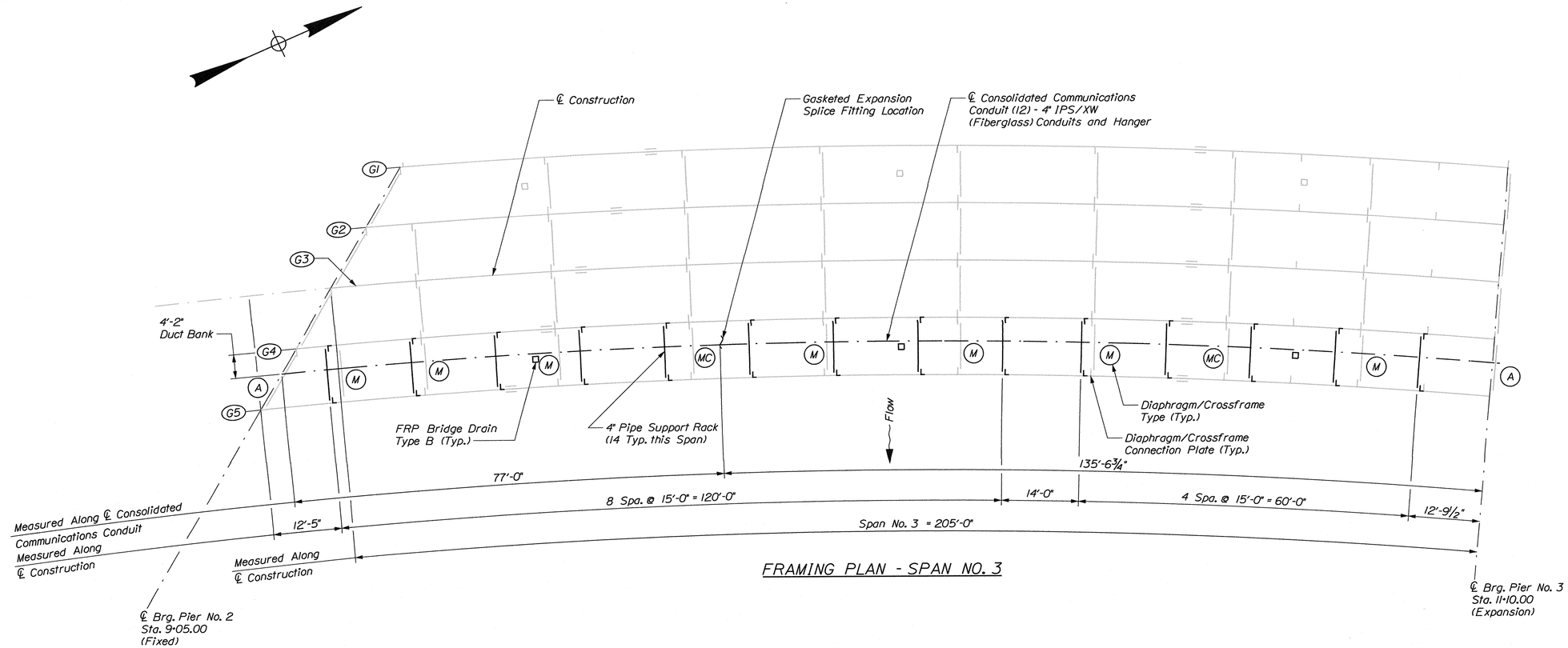
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

UTILITY SUPPORT PLAN 1

SHEET NUMBER
T-4
OF T-7

Filename: ...\MSTANT-4_UFraming_Span_1_2.dgn Division: UTILITIES Username: sjwilliams Date:12/28/2021



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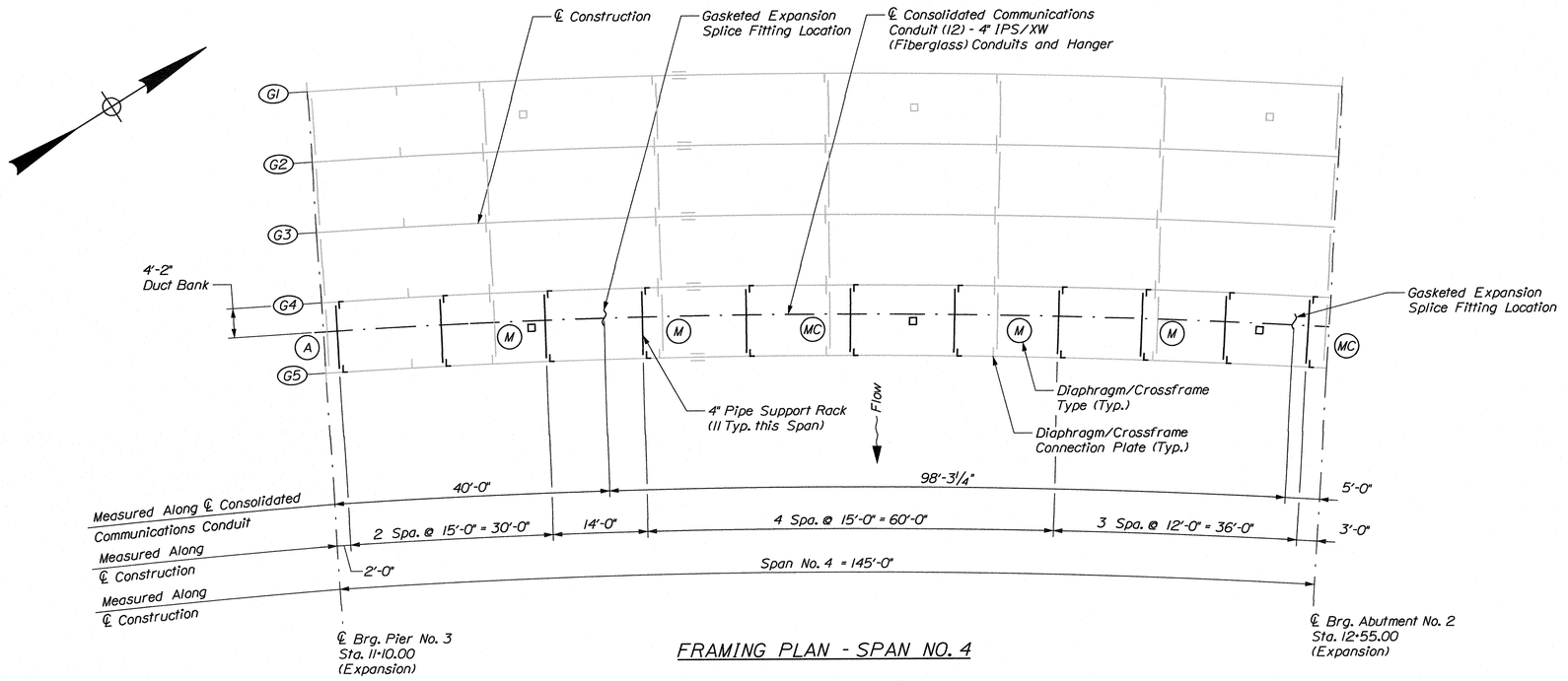


FRAMING PLAN - SPAN NO. 4

Stantec

Stantec Consulting Services Inc.
2211 CONGRESS ST., PORTLAND, ME 04102
Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER 179450339

STATE OF MAINE — TIMOTHY W. MERRITT No. 9294 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE

P.E. NUMBER 9294

DATE 01-03-2022

	DATE	BY
PROJ. MANAGER	SCOTT ROLLINS	
DESIGN-DETAILED	11/2021	J. BURKE
CHECKED-REVIEWED	11/2021	T. MERRITT
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

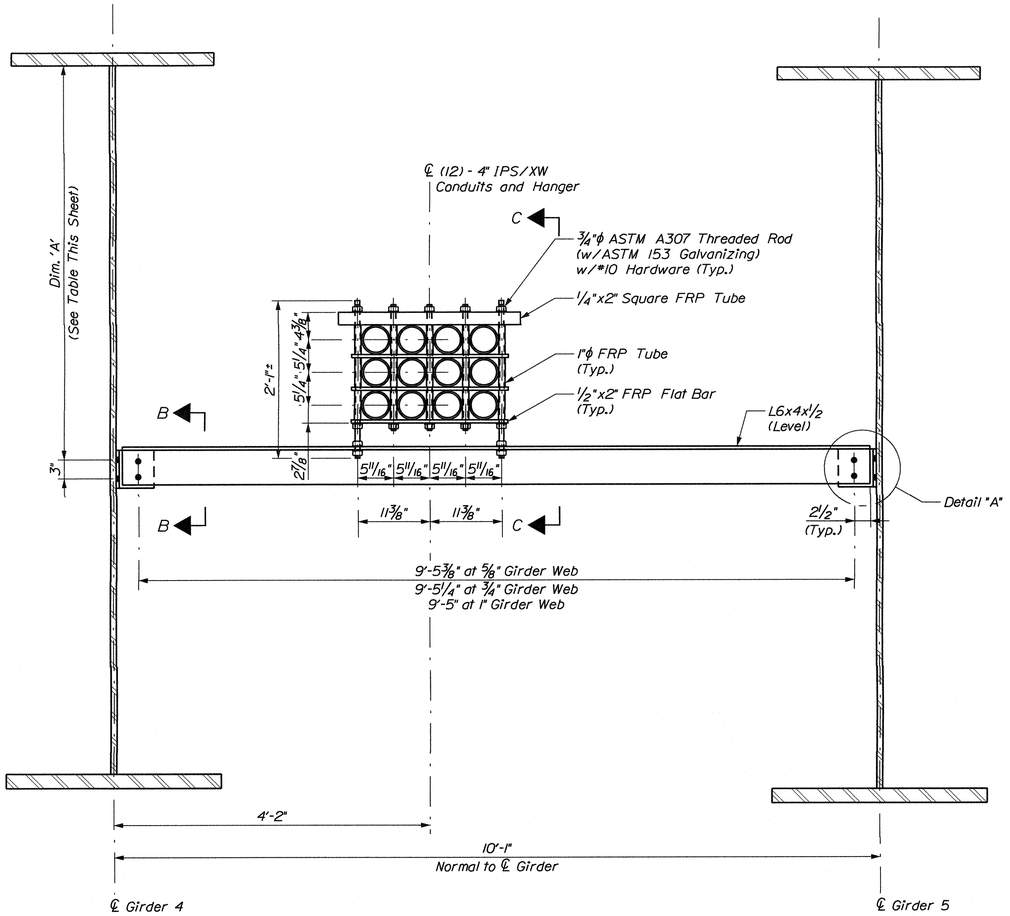
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

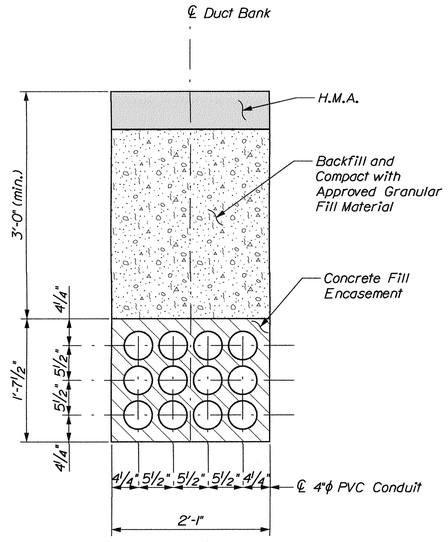
UTILITY SUPPORT PLAN 2

SHEET NUMBER T-5

OF T-7

Filename: ...\MST\T-5_UFraming_Span_3_4.dgn Division: UTILITIES Username: sjwilliams Date:12/28/2021





SECTION - APPROACH CONDUIT TRENCH

NOTES

1. Consolidated Communications fiberglass conduits stop at the end of the bridge approach slab at Abutment No. 1, 1 foot beyond the backwall at Abutment No. 2 and shall be encased in concrete beyond this limit. After entering the concrete they shall be housed in 4" PVC conduits and sealed. Total Consolidated Communications run per conduit manhole to manhole is approximately 918 feet.

2. All conduits located under the bridge shall be run in free air and suspended by their individual rack assemblies and shall be of the type specified on the drawings.

3. All sleeves running through the abutment backwalls shall be cast-in-place or run through existing block-outs then sealed off with a waterproof mortar when completed.

4. Conduits run under the bridge shall have expansion joints as shown.

5. These drawings are based on available bridge design drawings. Contractor shall verify all dimensions before fabrication and installation of conduits and supports.

6. Fiberglass duct supports are designed for a maximum cable load of 8.0 lbs per foot per 4" duct and a duct self-weight of 2.4 lbs per foot and hanger weight of 26.6 lbs. The total unfactored conduit load at a support is 1.9 Kips maximum.

7. 4" straight couplings shall be installed as required.

8. The Contractor is required to comply with all nationally accepted safety practices, OSHA and any other safety requirements imposed by the Owner, Agency or any other parties which may have jurisdiction over safety.

9. All connections between duct sections, expansion joints, adapters and couplings are to be bonded. Refer to manufacturer's instructions for bonding procedures.

10. Cap the ends of the ducts if the underground portion of the work is not done at the same time as the bridge portion.

11. All attachment rods, spacer rods, nuts, lock and flat washers to be zinc coated.

12. This design is for the express purpose for use on the bridge over the Androscoggin River in Brunswick-Topsham, Maine.

13. See MaineDOT WIN 22603.00 Contract Plans for additional bridge and approach roadway details.

NOTES

1. Hanger Assembly to be Set Level.

2. All Hardware and Rods to be Hot Dip Galvanized.

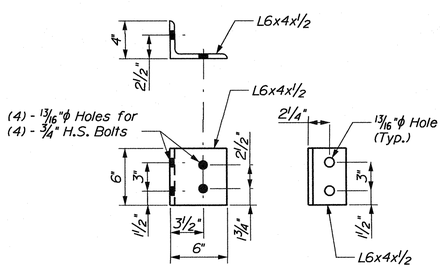
3. See MaineDOT WIN 22603.00 Contract Plans for Bridge Drain Details.

4. Extra Threaded Rod Length Included to Accommodate Field Adjustment.

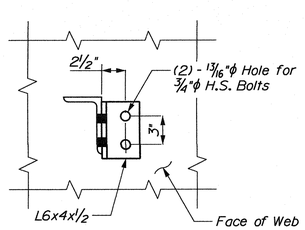
Dim. 'A'	Span No.
6'-5"	1
5'-8"	2
4'-11"	3
4'-2"	4

*Elevation Change to Occur Between the Last Utility Supports in Each Span at the Piers.

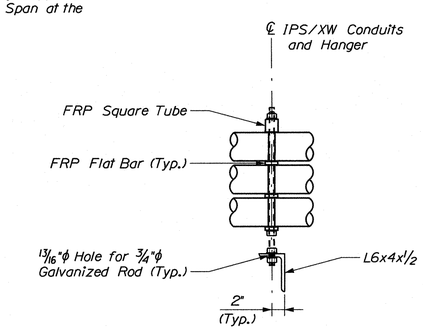
TYPICAL UTILITY SUPPORT



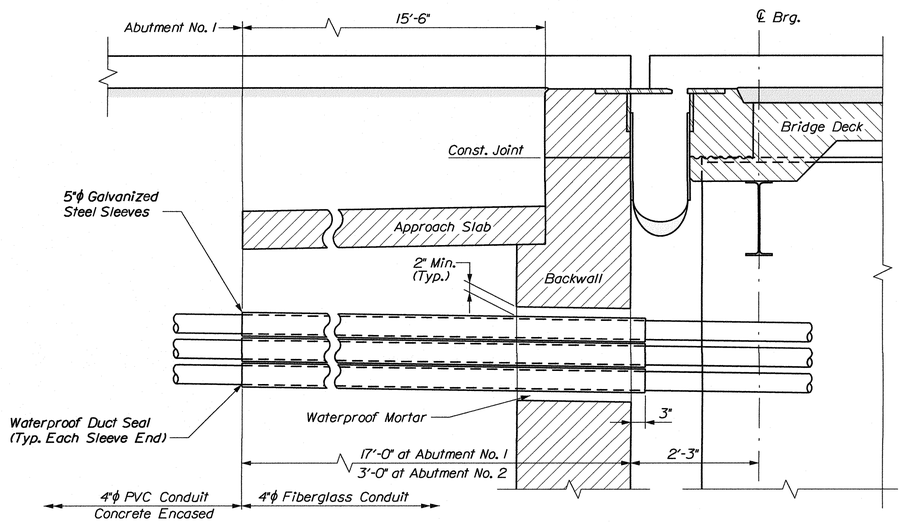
DETAIL "A"



SECTION B-B



SECTION C-C



TYPICAL SECTION AT ABUTMENT
(Abutment No. 1 Shown, Abutment No. 2 begin Concrete Encased Conduit 1 foot beyond Backwall)

Stantec

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CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9294
LICENSED PROFESSIONAL ENGINEER

P.E. NUMBER 9294
SIGNATURE
01-03-2022
DATE

	DATE	BY
PROJ. MANAGER SCOTT ROLLINS		
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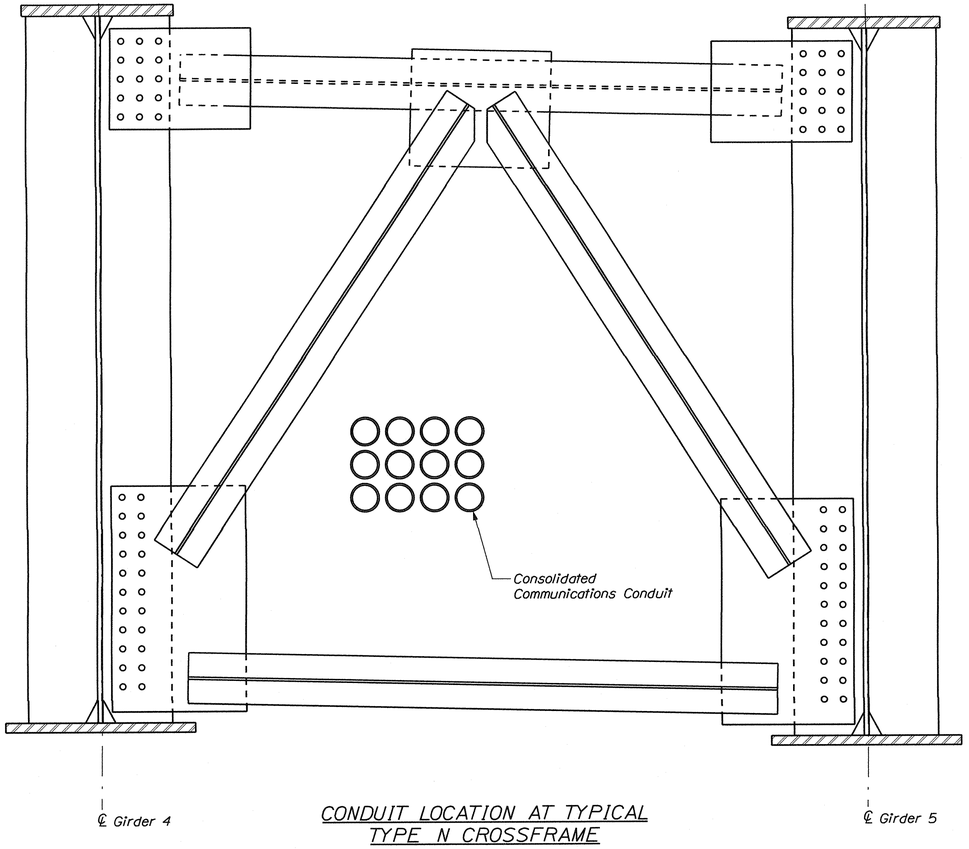
FIELD CHANGES		

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

UTILITY SUPPORT DETAILS 1

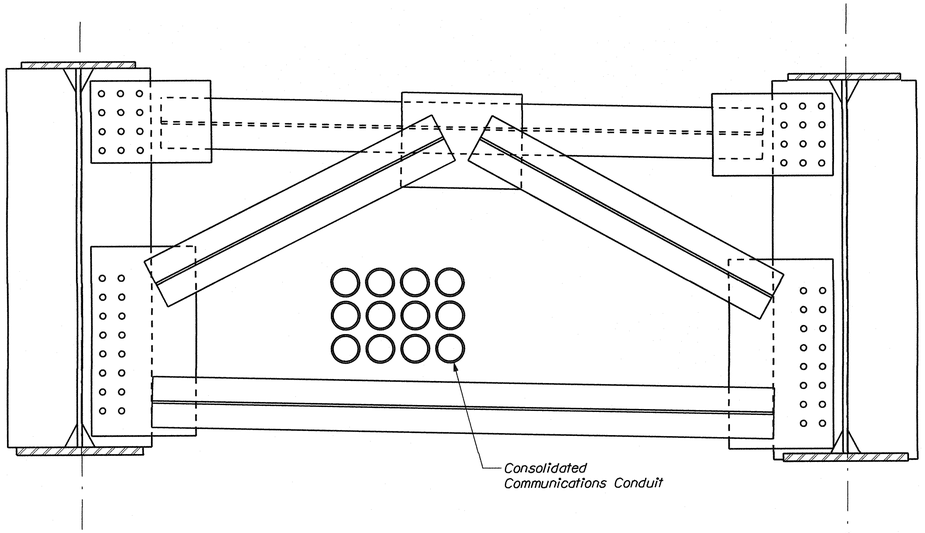
SHEET NUMBER
T-6
OF T-7

Filename: ...\MSTAT-6_USupport_Det1.dgn Division: UTILITIES Username: sjwilliams Date:1/3/2022



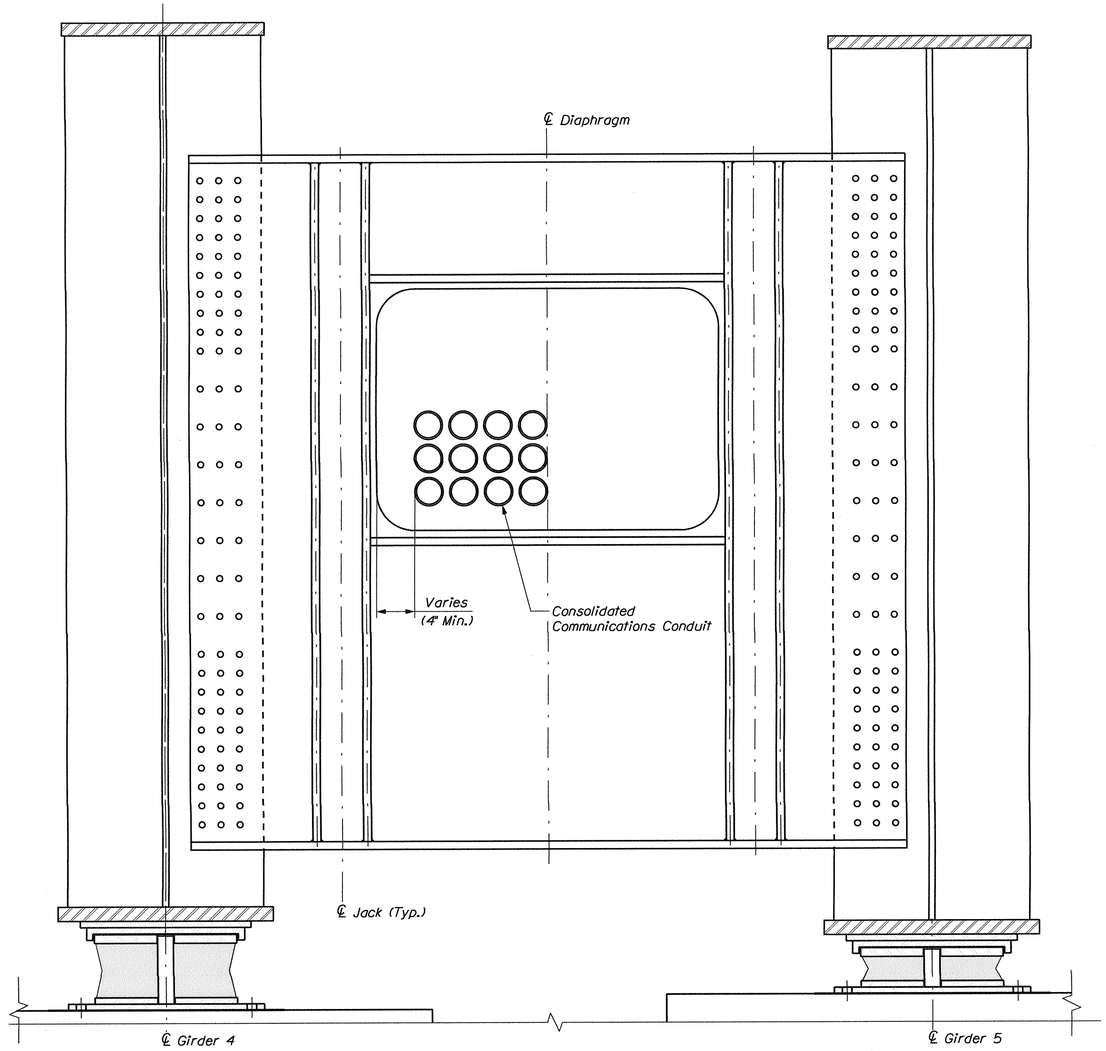
℄ Girder 4 ℄ Girder 5

CONDUIT LOCATION AT TYPICAL
TYPE N CROSSFRAME
(Type N Shown, Type NC similar)



℄ Girder 4 ℄ Girder 5

CONDUIT LOCATION AT TYPICAL
TYPE M CROSS FRAME
(Type M Shown, Type MC similar)



CONDUIT LOCATION AT TYPICAL
TYPE A DIAPHRAGM

NOTES

1. Duct bank only passes through diaphragm locations without any support.
2. See MaineDOT WIN 22603.00 Contract Plans for details not shown here.

Stantec

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CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
179450339

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9294
PROFESSIONAL ENGINEER

Timothy W. Merritt
SIGNATURE
9294
P.E. NUMBER
11-03-2022
DATE

PROJ. MANAGER	SCOTT ROLLINS	BY	DATE
DESIGN-DETAILED	J. BURKE	J. BURKE	11/2021
CHECKED-REVIEWED	S. WILLIAMS	T. MERRITT	11/2021
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1		1	
REVISIONS 2		2	
REVISIONS 3		3	
REVISIONS 4		4	
FIELD CHANGES			

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

UTILITY SUPPORT DETAILS 2

SHEET NUMBER
T-7
OF T-7

Filename: ...\MSTA\T-7_USupport_Det2.dgn Division: UTILITIES Username: sjwilliams Date:12/28/2021

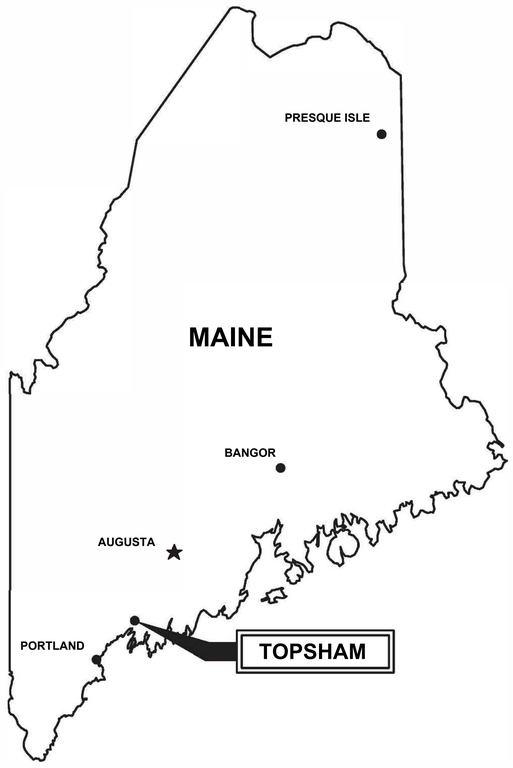
BID SET No. _____

BRUNSWICK & TOPSHAM WATER DISTRICT

CONTRACT DRAWINGS FOR

FRANK J. WOOD BRIDGE WATER MAIN CROSSING

NOVEMBER 2021

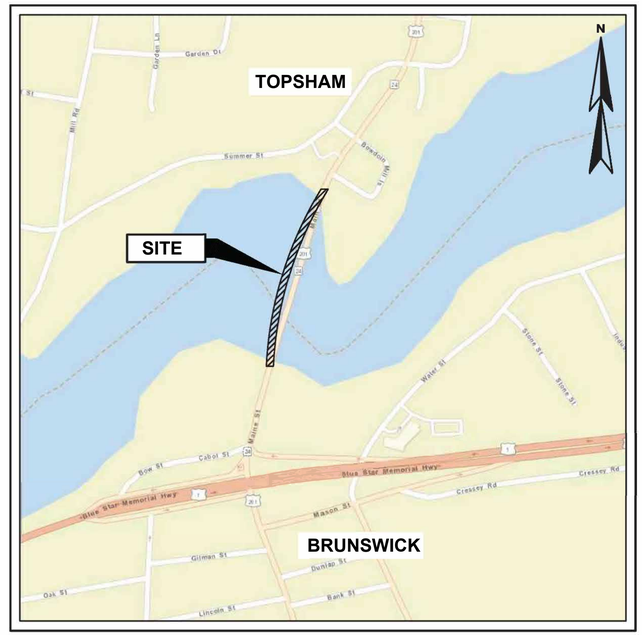


DRAWING INDEX

GENERAL	
---	COVER SHEET
CIVIL	
C-1	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C-2	PLAN AND PROFILE I - STA. 0+00 TO STA. 4+00
C-3	PLAN AND PROFILE II - STA. 4+00 TO STA. 9+00
C-4	PLAN AND PROFILE III - STA. 9+00 TO STA. 14+00
C-5	PLAN AND PROFILE IV - STA. 14+00 TO STA. 17+00
C-6	BRIDGE ABUTMENT PROFILE - BRUNSWICK
C-7	BRIDGE ABUTMENT PROFILE - TOPSHAM
C-8	TEMPORARY WATER MAIN - FORT ANDROSS
C-9	DETAILS I
C-10	DETAILS II

STATE OF MAINE
DARRIN D. LARY
No. 10749
LICENSED PROFESSIONAL ENGINEER

11/8/21



LOCATION PLAN

FOR REVIEW 09-3-2021

FOR BIDDING 11-8-2021

WP PROJECT No.

LAST SAVED BY: WILLIAM.EDGAR 12/14/2021 10:29 AM

J:\ENG\WE\BRUNSWICKTOPSHAMWD\20562-BRIDGEWATERMAINDESIGN\DRAWINGS\CW\20562-CS-GENERALNOTES.DWG | 20562-CS-ECN&D | 1:10.1236477 | --- | 12/14/2021 10:30:57 AM | WILLIAM.EDGAR

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

2. BELOW GRADE UTILITY INFORMATION IS BASED ON INFORMATION PROVIDED BY EACH UTILITY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND IS NOT COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY REPRESENTATIVE PRIOR TO COMMENCING WORK. ADDITIONAL TEST PITS, BEYOND THOSE SHOWN, MAY BE REQUIRED. UTILITY CONTACTS ARE AS FOLLOWS:

DIG SAFE:
TEL: 1-888-344-7233

CABLE TELEVISION:
SPECTRUM
1-207-620-3416

GAS:
SUMMIT NATURAL GAS
2 DELORME DR., SUITE 100
YARMOUTH, ME 04096
1-207-621-8000

WATER:
BRUNSWICK & TOPSHAM WATER DISTRICT (BTWD)
PO BOX 489
TOPSHAM, ME, 04086
207-729-9956

TOWN:
TOWN OF TOPSHAM
100 MAIN STREET
TOPSHAM, ME, 04086
207-725-5821

ELECTRIC:
CENTRAL MAINE POWER
83 EDISON DRIVE
AUGUSTA, ME 04336
TEL. 207-721-8087

TELEPHONE:
CONSOLIDATED COMM. OF N. NEW ENGLAND CO., LLC
5 DAVIS FARM ROAD
PORTLAND, ME 04103
207-272-7538

SEWER:
BRUNWICK SEWER DISTRICT
10 PINE TREE ROAD
BRUNSWICK, ME, 04011
207-729-0148

TOWN:
TOWN OF BRUNSWICK
85 UNION STREET
BRUNSWICK, ME, 04011
207-725-6100

3. ALL EXISTING STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. EXISTING DRAINAGE STRUCTURES SHOWN ON PLANS THAT ARE PLUGGED OR FULL OF SAND AND ARE NOT BEING REPLACED WITH A NEW DRAINAGE STRUCTURE ARE TO BE CLEANED BY CONTRACTOR AND THE MATERIAL DISPOSED OF PER CITY ORDINANCE.

4. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE CONTRACTOR'S EXCAVATIONS SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACK FILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.

5. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO CMP OR FAIRPOINT/CONSOLIDATED COMMUNICATIONS, RESPECTIVELY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.

6. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

7. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO MAINE DEPARTMENT OF TRANSPORTATION (MDOT).

8. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO ENGINEER FOR REVIEW FOR CONFORMANCE WITH PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND GRADES AS SHOWN ON THE DRAWINGS.

9. THE ENGINEER SHALL PROVIDE THE NECESSARY HORIZONTAL CONTROL POINTS FOR THE CONTRACTOR AND THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THIS INFORMATION THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL ELEVATION REFERENCE INFORMATION PRIOR TO USE IN CONSTRUCTION.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF EROSION. ALL DISTURBED EARTH SURFACES ARE TO BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL IS TO BE IN A MANNER THAT WILL MINIMIZE EROSION. MATERIALS AND METHODS USED FOR TEMPORARY EROSION CONTROL SHALL BE AS SPECIFIED BY THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PREPARED BY THE MAINE SOIL AND WATER CONSERVATION COMMISSION.

11. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF SUBSTANTIAL COMPLETION OF THE PROJECT WILL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

12. ALL TRENCHES SHALL BE BACKFILLED AND CLOSED AT THE END OF EACH WORK DAY. THE USE OF BARRICADES AND STEEL PLATES SHALL BE CONSIDERED BY THE OWNER, ENGINEER, AND CITY ON A CASE BY CASE BASIS IF REQUESTED BY THE CONTRACTOR.

13. ALL VEGETATED AREAS THAT ARE EXCAVATED, FILLED OR OTHERWISE DISTURBED BY THE CONTRACTOR AND ARE NOT TO BE PAVED OR OTHERWISE DEVELOPED SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED AT NO ADDITIONAL EXPENSE TO THE OWNER.

14. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT, WITH EXCESS MATERIAL DISPOSED OF. THESE PROVISIONS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO PROPERLY DISPOSE OF AND REPLACE ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACK FILLING. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT DOCUMENTS.

15. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED. TREES TO BE REMOVED ARE TO HAVE THE STUMPS REMOVED AND THE RESULTING PIT SHALL BE LOAMED AND SEEDED.

16. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN LAY DOWN AREA.

17. INITIAL PAVING SHALL BE CONDUCTED WITHIN ONE WEEK OF COMPLETION OF PLACEMENT OF FINAL BACKFILL WITHIN TRAVEL LANES UNLESS OTHERWISE AUTHORIZED BY ENGINEER. INITIAL PAVEMENT SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR FOR A MINIMUM PERIOD OF 2 MONTHS BEFORE FINAL PAVEMENT IS PLACED. FINAL PAVEMENT MAY BE PLACED OVER THE INITIAL PAVING PROVIDED INITIAL PAVING COURSE IS IN GOOD REPAIR. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND SHIMMING THE INITIAL PAVEMENT AS NECESSARY TO ACCEPT THE FINAL PAVING COURSE. IF CONDITIONS WARRANT, THE CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE INITIAL PAVING PRIOR TO FINAL PAVING.

18. IN THE EVENT THAT DISCREPANCIES OR CONFLICTS BETWEEN MDOT SPECIFICATIONS, SPECIAL PROVISIONS, AND PLANS OCCUR WITH THE WATER UTILITIES SPECIFICATIONS, SPECIAL PROVISIONS AND PLANS, MDOT OR MORE RESTRICTIVE SHALL PREVAIL.

19. ALL REFERENCES TO "ENGINEER" IN FRANK J. WOOD BRIDGE WATER MAIN CROSSING PLANS SHALL REFER TO REPRESENTATIVE DESIGNATED BY THE BRUNSWICK AND TOPSHAM WATER DISTRICT, NOT MAINE DEPARTMENT OF TRANSPORTATION ENGINEER.

CIVIL DEMOLITION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. THE OWNER RESERVES THE RIGHT TO RETAIN ANY SUCH PIPING, EQUIPMENT AND MATERIALS DESIGNATED FOR DEMOLITION FOR HIS USE. SUCH MATERIALS TO BE RETAINED SHALL BE PROPERLY STORED IN AN ON-SITE LOCATION. COORDINATE LOCATION AND MATERIALS TO BE SALVAGED WITH THE OWNER/ENGINEER.

2. THE CONTRACTOR SHALL KEEP A RECORD OF DEMOLITION AS PART OF THE PROJECT RECORD DOCUMENTS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE DISPOSAL OF FLOWS RESULTING FROM PRECIPITATION AND HIS DEWATERING OPERATIONS.

SITE GRADING NOTES

1. ALL ROAD AND PARKING AREA SURFACES SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED.

2. ALL AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 4 INCHES OF SOIL SHALL BE LOAM.

3. CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT, AS DETERMINED BY THE ENGINEER.

4. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS AND PLANT DRIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.

5. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINE GRADING WITH THE ENGINEER.

SITE LAYOUT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS. THE ENGINEER WILL PROVIDE PROJECT BENCHMARKS THAT DEFINE THE HORIZONTAL CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING AND RESETTING ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY HIS OPERATIONS. THIS WORK SHALL BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OF MAINE, AT NO ADDITIONAL COST TO THE OWNER.

3. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

SURVEY NOTES

1. THE VERTICAL DATUM SHOWN IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).

2. SURVEY BASE PLAN IS BASED ON SURVEY DATA PROVIDED BY TY_LIN. HORIZONTAL DATUM IS STATE PLANE COORDINATES, NAD83, MAINE 2000 WEST.

PIPELINE GENERAL NOTES

1. THE LOCATIONS OF ALL EXISTING DRAINS, SEWERS, WATER MAINS, POWER LINES, TELEPHONE CABLES AND OTHER UTILITIES ARE APPROXIMATE ONLY. FIELD LOCATIONS SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO STARTING THE WORK.

2. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.

3. ANY UNDERGROUND STRUCTURES, CABLES, AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATIONS SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. DAMAGE TO ANY SUCH STRUCTURES, CABLES, AND PIPELINES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNERS OF THE STRUCTURES, CABLES, AND PIPELINES.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE NEW WATER MAIN. LAYOUT SHALL BE REVIEWED AND ACCEPTED BY THE WATER DISTRICT AND ENGINEER. THE NEW WATER MAIN MUST BE LOCATED WITHIN THE RIGHTS-OF-WAY SHOWN ON THE DRAWINGS.

5. MINIMUM DEPTH OF COVER SHALL BE 5'-0" AND MAXIMUM DEPTH OF COVER SHALL BE 6'-0" UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THE NEW MAIN SHALL GENERALLY FOLLOW THE GROUND CONTOUR, HOWEVER, ABRUPT CHANGES IN GRADE SHALL BE AVOIDED. AT LOCAL HIGH POINTS OR WHERE AIR RELEASE VALVES ARE SHOWN, THE CONTRACTOR SHALL SLOPE NEW MAIN AS NEEDED TO MAINTAIN HIGH POINT AT AIR RELEASE VALVE. DUE TO UTILITY CONFLICTS THE DEPTH OF COVER SHALL NOT BE LESS THAN 4'-0" AND 2" RIGID BOARD INSULATION SHALL BE USED AS DETAILED. RIGID BOARD INSULATION SHALL BE 40PSI COMPRESSIVE STRENGTH, DOW STYROFOAM HIGHLOAD 40, CERTIFOAM 40 OR EQUAL.

6. NEW HYDRANTS SHALL BE FIELD LOCATED AND INSPECTED BY THE BTWD.

7. ALL BENDS, TEES, REDUCERS, HYDRANTS AND PLUGS SHALL BE RESTRAINED BY USING CONCRETE THRUST BLOCKS AND GRIP-RINGS OR OTHER METHOD AS SHOWN ON THE DRAWINGS. ANCHOR TEES SHALL BE USED FOR ALL HYDRANT BRANCHES.

8. TEST PRESSURES FOR THE COMBINATION PRESSURE AND LEAKAGE TESTS SHALL BE 150 PSI. TEST DURATION SHALL BE TWO HOURS.

9. CONNECTIONS TO EXISTING WATER MAIN SHALL BE COORDINATED WITH BTWD.

10. ALL WATER MAINS THAT ARE TO BE LEFT IN PLACE SHALL BE CAPPED WITH A M.J. CAP OR PLUG.

11. BELOW GRADE UTILITY INFORMATION IS BASED ON RECORD DRAWINGS. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN.

12. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED. AT NO ADDITIONAL COST TO THE OWNER THE CONTRACTOR SHALL REPAIR OR COORDINATE WITH THE RESPECTIVE UTILITY ON DAMAGE TO EXISTING UTILITIES.

13. SUITABLE EXCAVATED MATERIALS MAY BE INCORPORATED INTO THE PROJECT. THIS PROVISION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO REMOVE AND DISPOSE OF ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING.

14. PLANNED SHUTDOWNS OF 8 HOURS, OR LESS ARE ACCEPTABLE WITH A MINIMUM OF 72 HOURS NOTICE TO THE DISTRICT FOR COORDINATION.

15. CONTRACTOR SHALL INSTALL 18" OF DI PIPE STUB BETWEEN TEE AND GATE VALVE FITTINGS AT THE INTERCONNECTION CLUSTERS NOTED IN THE PLANS.

CIVIL ABBREVIATIONS

&	AND
DIA	DIAMETER
#, NO	NUMBER
APP'D	APPROVED
BLDG	BUILDING
CB	CATCH BASIN
CEN	CENTER
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
COR	CORNER
CY	CUBIC YARD
DEMO	DEMOLITION
DMH	DRAIN MANHOLE
DI	DUCTILE IRON
DR	DRAIN
DWG	DRAWING
EL	ELEVATION
EMH	ELECTRIC MANHOLE
FM	FORCE MAIN
FT	FEET
G	GAS
HYD	HYDRANT
IN	INCH
INF	INFLUENT
INV	INVERT
IRF	IRON ROD FOUND
LBS	POUNDS
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MW	MONITORING WELL
N	NORTH
NGVD	NATIONAL GEODETIC VERTICAL DATUM
N/A	NOT AVAILABLE/APPLICABLE
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PC	PERFORATED CLAY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PS	PRIMARY SLUDGE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REQ'D	REQUIRED
S	SLOPE, SEWER
SD	STORM DRAIN
SF	SQUARE FEET
SMH	SANITARY SEWER MANHOLE
SQ	SQUARE
SS	SANITARY SEWER
STA	STATION
T, XFMR	TRANSFORMER
TBM	TEMPORARY BENCH MARK
THK	THICKNESS
TOS	TOP OF STRUCTURE
TYP	TYPICAL
UD	UNDERDRAIN
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
VC	VITRIFIED CLAY
W/	WITH
W	POTABLE WATER

LEGEND

EXISTING		PROPOSED
	PROPERTY/ROW LINE	
	SETBACK LINE	
	EASEMENT LINE	
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURBING	
	EDGE OF GRAVEL	
	EDGE OF CONCRETE	
122	CONTOUR	123
	BUILDING	
	STONEWALL	
	TREELINE	
	CHAIN LINK FENCE	
	STOCKADE FENCE	
	BARB WIRE FENCE	
	RETAINING WALL	
	GUARDRAIL	
8" S	SEWER	8"S
4" FM	SEWER FORCE MAIN	4"FM
4" G	GAS	4"G
4" W	WATER	8"W
15" SD	STORM DRAIN	15"SD
6" UD	UNDERDRAIN	6"UD
12" CMP	CULVERT	12" CMP
UGE	UNDERGROUND ELECTRIC	UGE
OHE	OVERHEAD ELECTRIC	OHE
	IRON PIPE/REBAR	
	DRILLHOLE	
	MONUMENT	
	SURVEY CONTROL POINT	
124.6	SPOT ELEVATION	134.5
SMH	SEWER MANHOLE	SMH
DMH	DRAINAGE MANHOLE	DMH
CB CB	CATCH BASIN	CB CB
EMH	ELECTRIC MANHOLE	EMH
TMH	TELEPHONE MANHOLE	TMH
	GATE VALVE	
	CURB STOP	
	YARD HYDRANT	
	HYDRANT	
	UTILITY POLE	
	UTILITY POLE W/ GUY	
	UTILITY POLE W/ LIGHT	
	LIGHT POLE	
	BOLLARD	
	FLAGPOLE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	SHRUB	
	EDGE OF WATER	
	STREAM	
	EDGE OF WETLANDS	
	FLOODPLAIN	
	WETLANDS	
	DRAINAGE FLOW	
	DRAINAGE SWALE	
	PAVEMENT MARKINGS	
	SIGN	
MB	MAILBOX	
	TEMPORARY BENCH MARK	
TP-2	TEST PIT	
B-3	TEST BORING	
P-4	TEST PROBE	
MW	MONITORING WELL	
	LIMIT OF WORK	
	SILT FENCE	
	RIPRAP	
	RAILROAD	
	MATCHLINE	
	ROCK OUTCROP	

NO	REVISIONS	APP'D	DATE
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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 10-4-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE — DARRIN D. DAVIS — No. 10749 — LICENSED PROFESSIONAL ENGINEER — 12/14/21

WRIGHT-PIERCE
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11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

GENERAL NOTES, LEGEND AND ABBREVIATIONS

DRAWING
C-1

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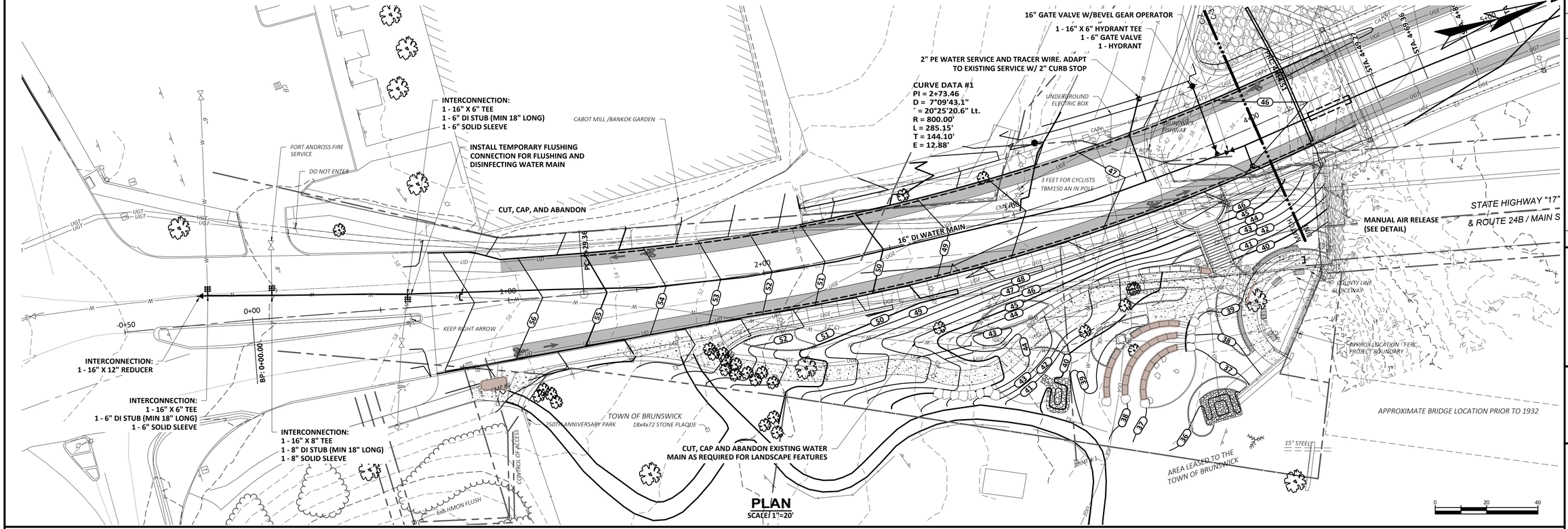

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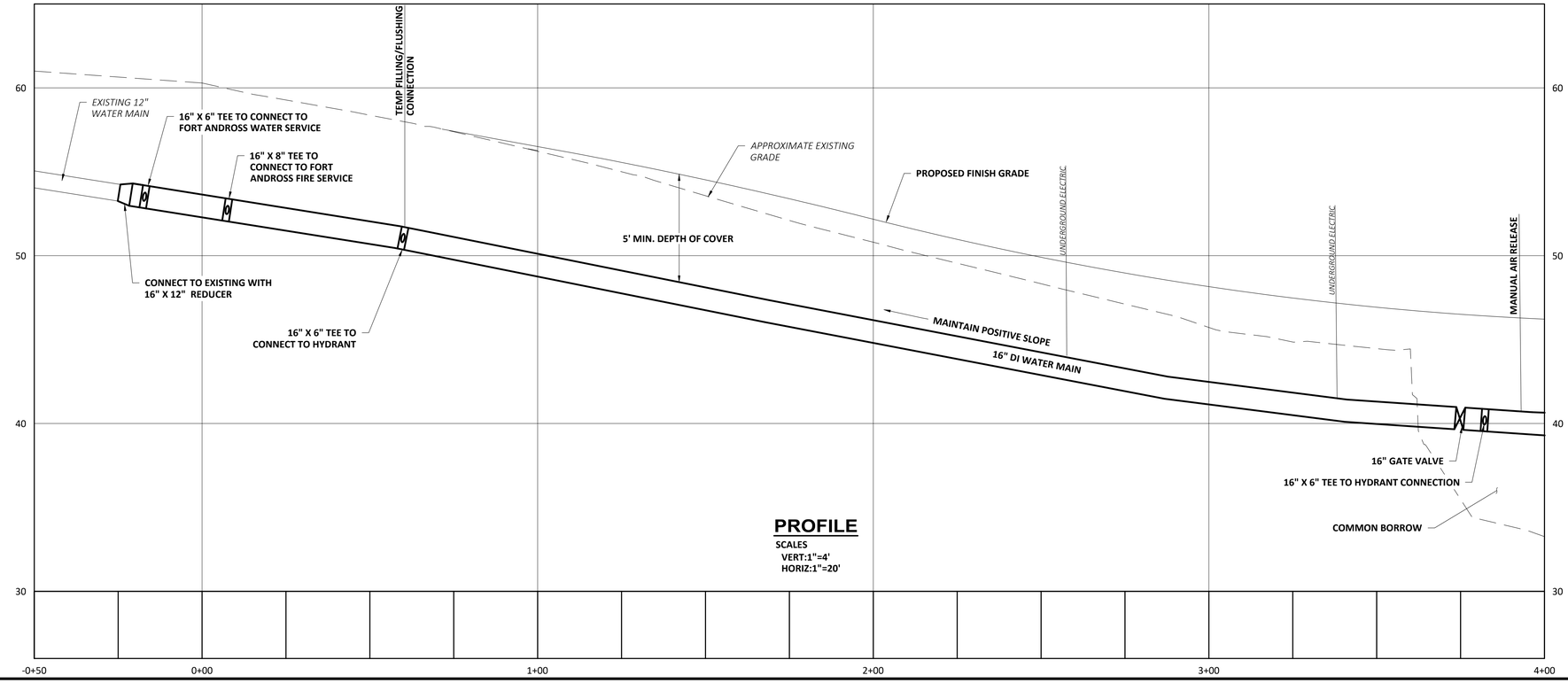

PROFILE
SCALES
VERT:1"=4'
HORIZ:1"=20'

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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE · DARRIN D. LARY No. 10749 · REGISTERED PROFESSIONAL ENGINEER · 11/8/21

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TOPSHAM-BRUNSWICK, MAINE

PLAN AND PROFILE I
STA. 0+00 TO STA. 4+00

DRAWING
C-2

J:\ENG\WE\BRUNSWICKTOPSHAMWD\20562-BRIDGEWATERMAINDESIGN\DRAWINGS\CIV\20562-CS-PLANPROFILE_I.DWG | P&P_I | 1:10.1234677 | ---- | 10/5/2021 10:17:38 AM | WILLIAM.EDGAR

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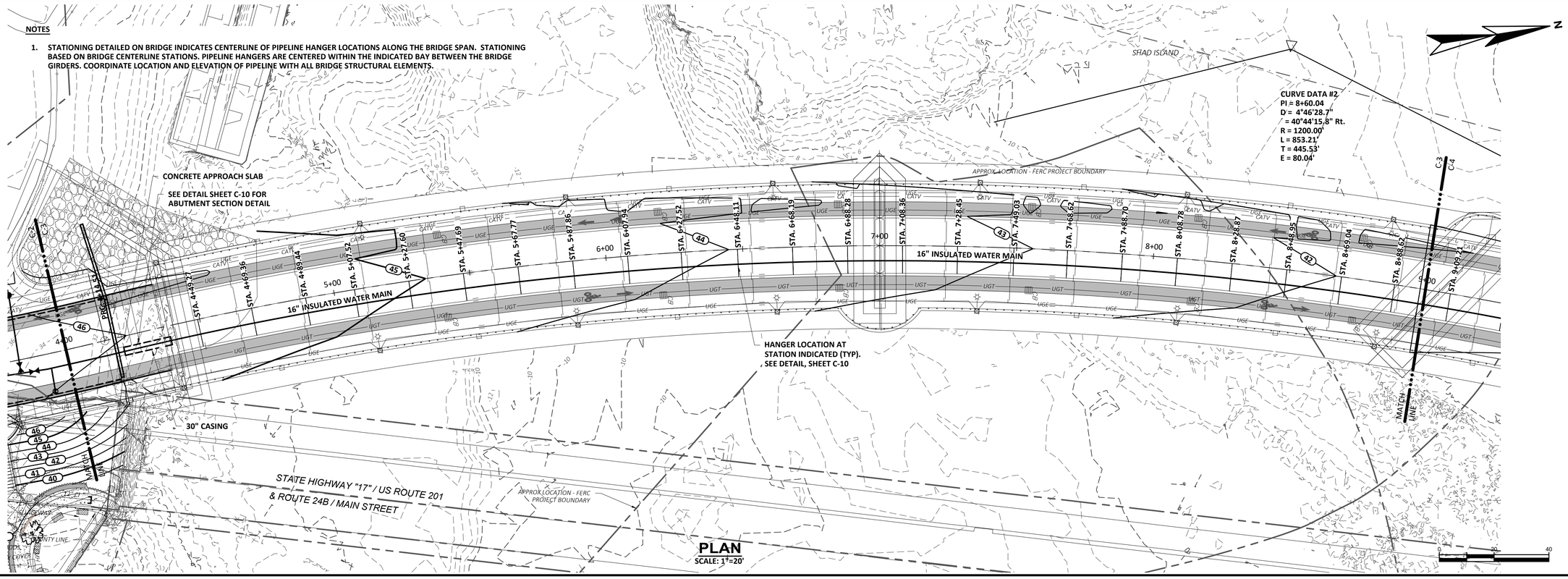
NOTES

1. STATIONING DETAILED ON BRIDGE INDICATES CENTERLINE OF PIPELINE HANGER LOCATIONS ALONG THE BRIDGE SPAN. STATIONING BASED ON BRIDGE CENTERLINE STATIONS. PIPELINE HANGERS ARE CENTERED WITHIN THE INDICATED BAY BETWEEN THE BRIDGE GIRDERS. COORDINATE LOCATION AND ELEVATION OF PIPELINE WITH ALL BRIDGE STRUCTURAL ELEMENTS.



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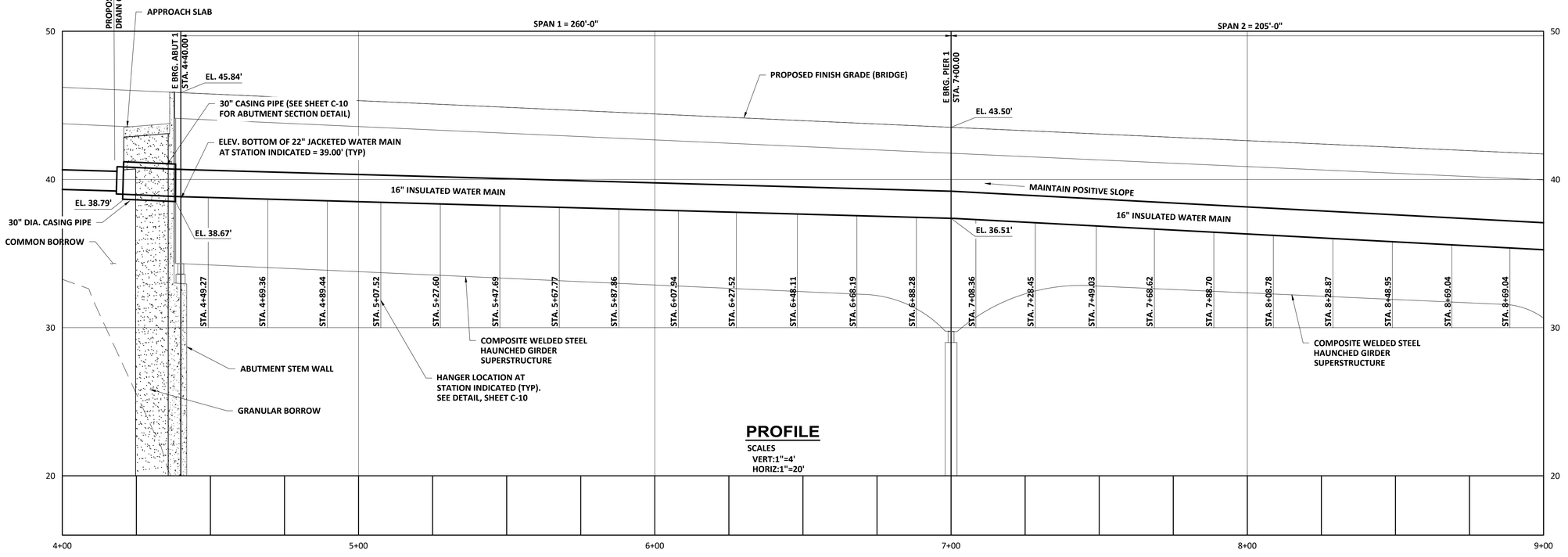

PROFILE
SCALES
VERT:1"=4'
HORIZ:1"=20'

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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE
DARRIN D. LARY
No. 10749
REGISTERED PROFESSIONAL ENGINEER
11/8/21

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BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
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TOPSHAM-BRUNSWICK, MAINE

PLAN AND PROFILE II
STA. 4+00 TO STA. 9+00

DRAWING
C-3

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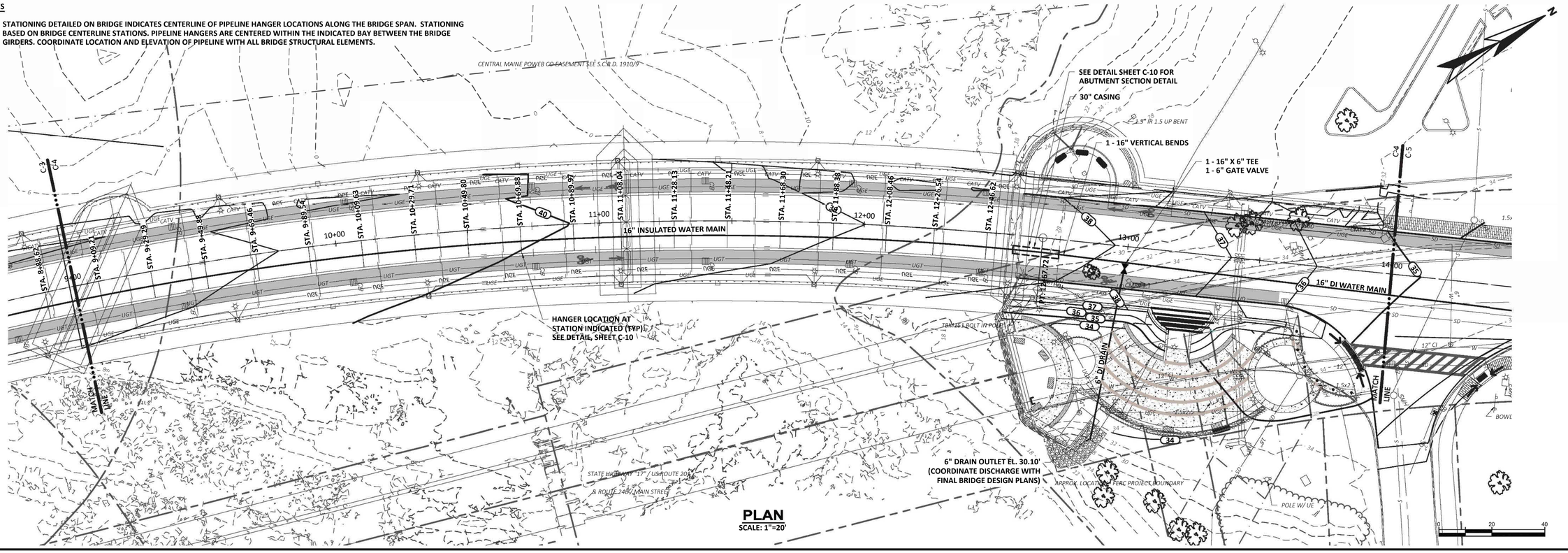
LAST SAVED BY: WILLIAM.EDGAR 10/5/2021 10:27 AM

NOTES

1. STATIONING DETAILED ON BRIDGE INDICATES CENTERLINE OF PIPELINE HANGER LOCATIONS ALONG THE BRIDGE SPAN. STATIONING BASED ON BRIDGE CENTERLINE STATIONS. PIPELINE HANGERS ARE CENTERED WITHIN THE INDICATED BAY BETWEEN THE BRIDGE GIRDERS. COORDINATE LOCATION AND ELEVATION OF PIPELINE WITH ALL BRIDGE STRUCTURAL ELEMENTS.



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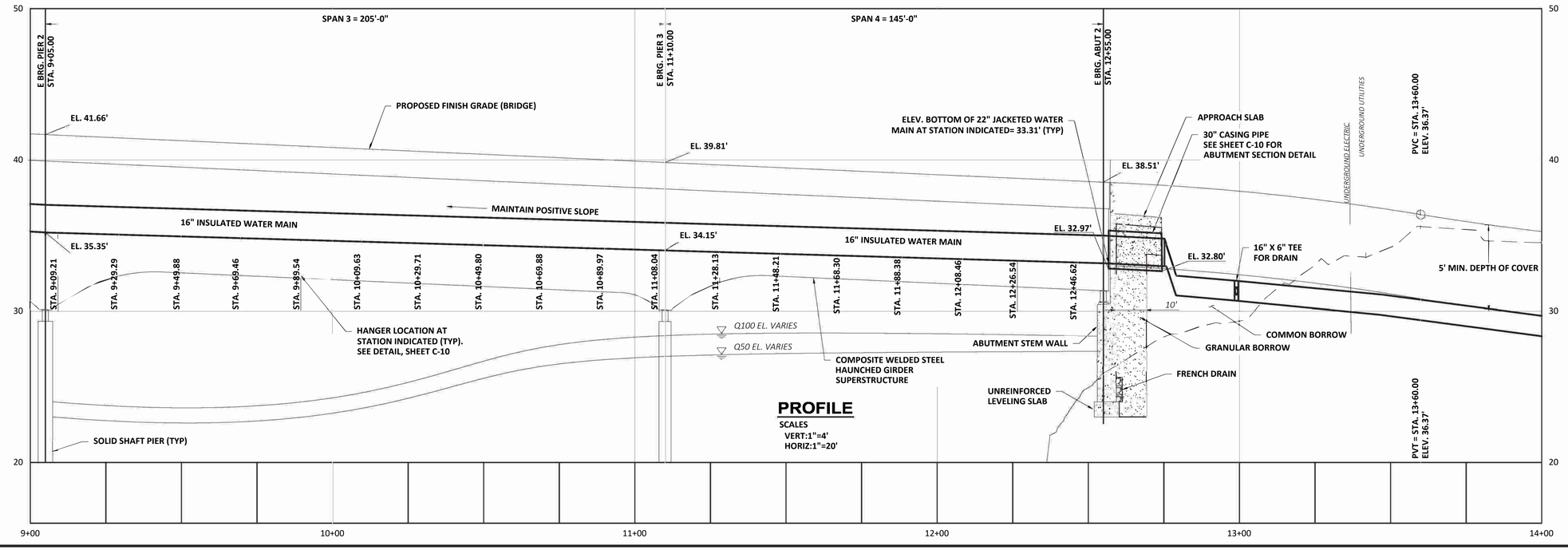

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HORIZ:1"=20'

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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD:
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE — DARRIN D. LARSEN — No. 10749 — REGISTERED PROFESSIONAL ENGINEER

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FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

PLAN AND PROFILE III
STA. 9+00 TO STA. 14+00

DRAWING
C-4

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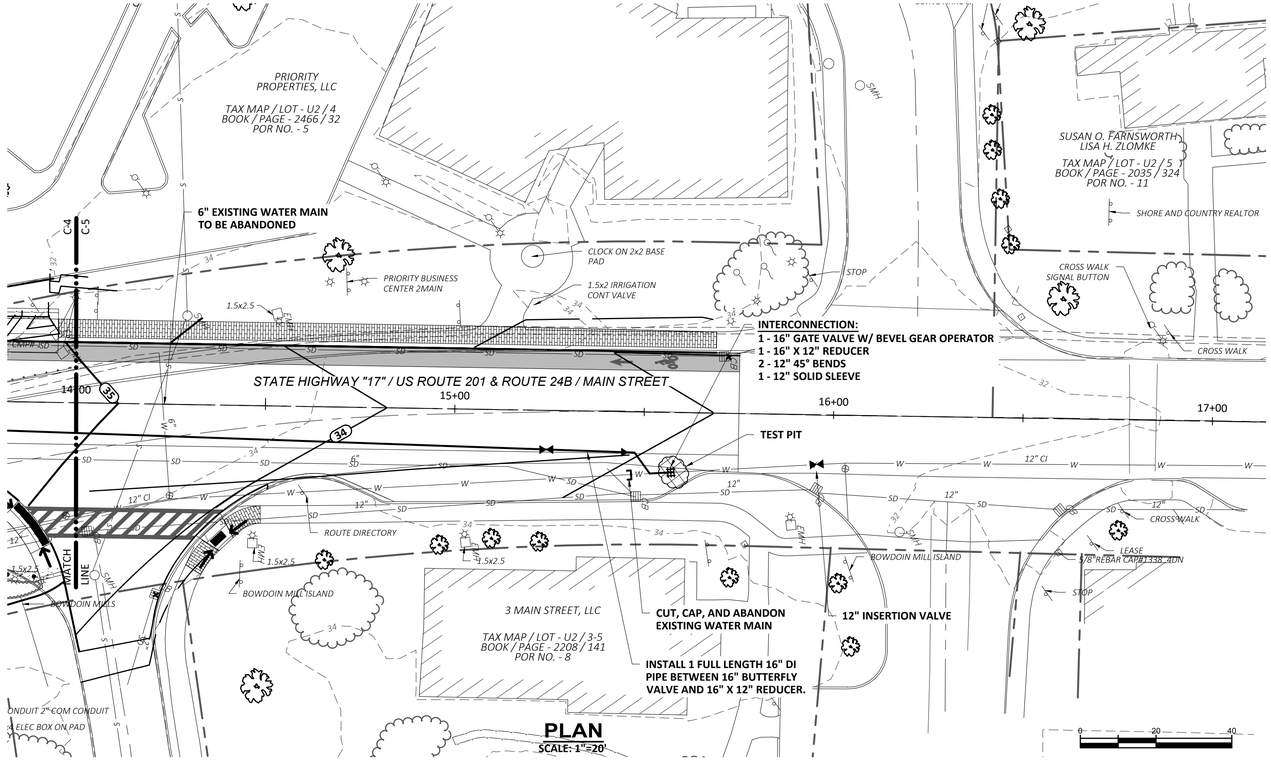

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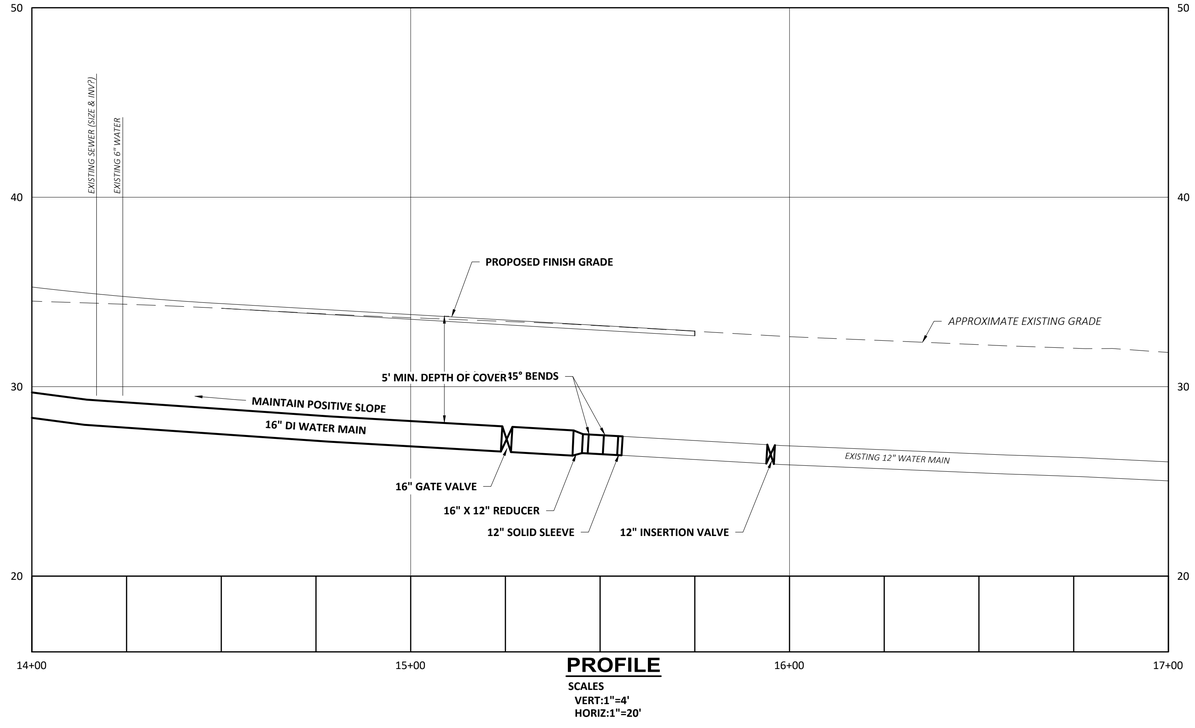

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HORIZ:1"=20'

NO	REVISIONS	APP'D	DATE
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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE
DARRIN D. LAPOF
No. 10749
LICENSED PROFESSIONAL ENGINEER
11/8/21

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WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

PLAN AND PROFILE IV
STA. 14+00 TO STA. 17+00

DRAWING
C-5

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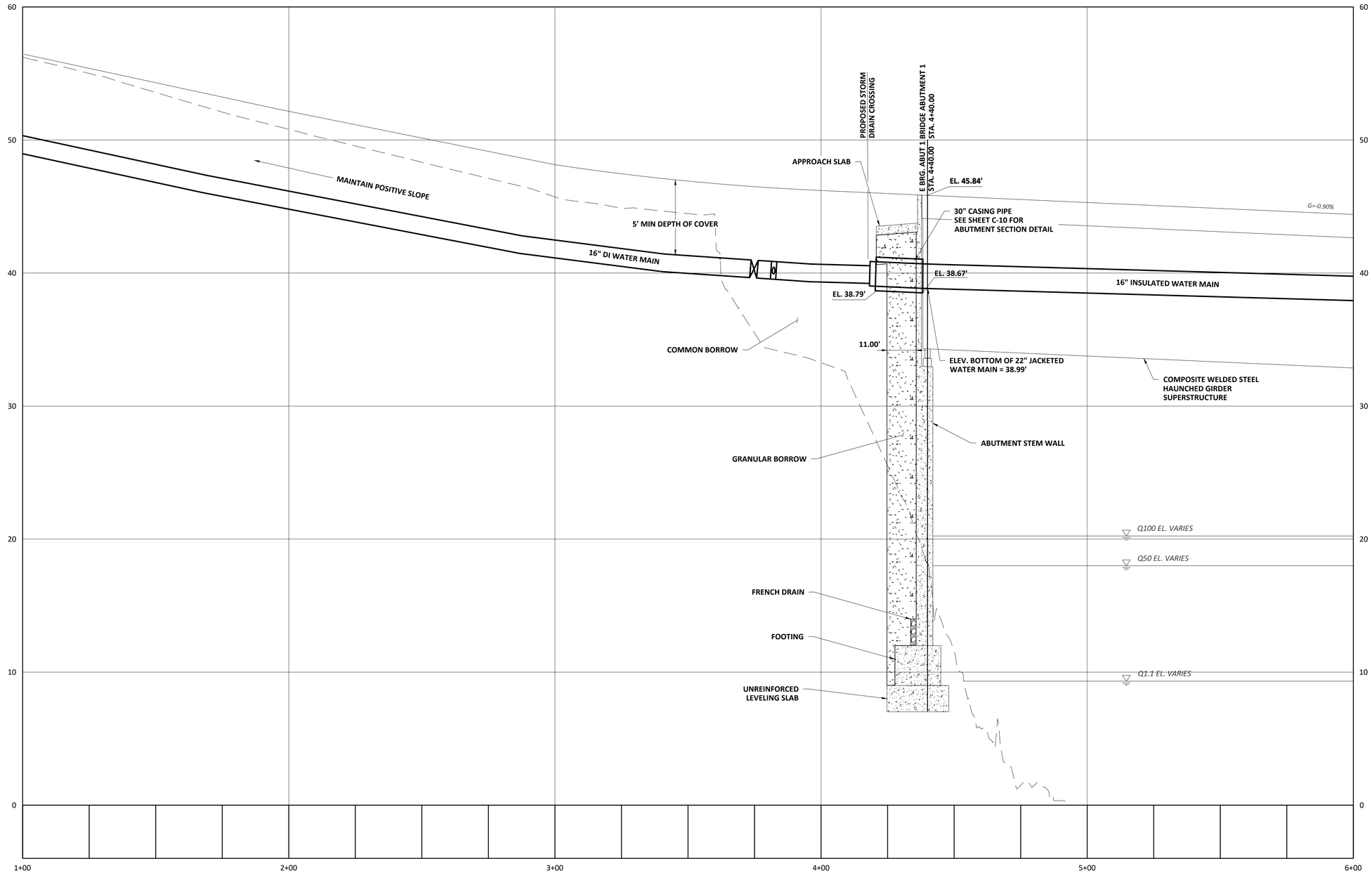

BRUNSWICK PROFILE
SCALE: 1"=20'

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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE DARRIN D. LAR No. 10749 LICENSED PROFESSIONAL ENGINEER
11/8/21

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FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

BRIDGE ABUTMENT PROFILE - BRUNSWICK

DRAWING
C-6

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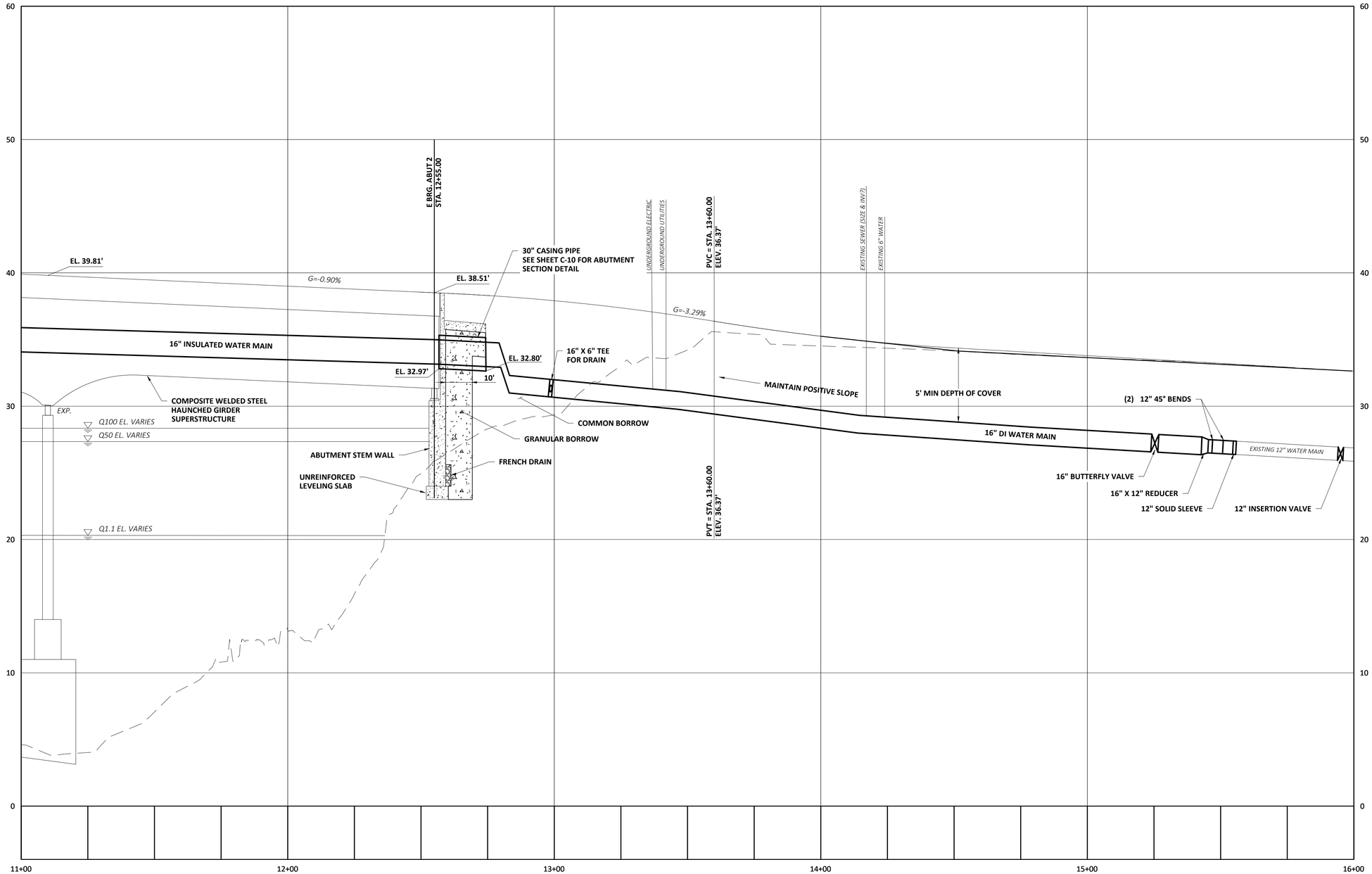

TOPSHAM PROFILE

SCALE: 1"=20'

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NO	REVISIONS	APP'D	DATE
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PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE
DARRIN D. LAR
No. 10749
LICENSED PROFESSIONAL ENGINEER
11/8/21

WRIGHT-PIERCE
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BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

BRIDGE ABUTMENT PROFILE - TOPSHAM

DRAWING
C-7

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LAST SAVED BY: WILLIAM.EDGAR 10/5/2021 10:01 AM

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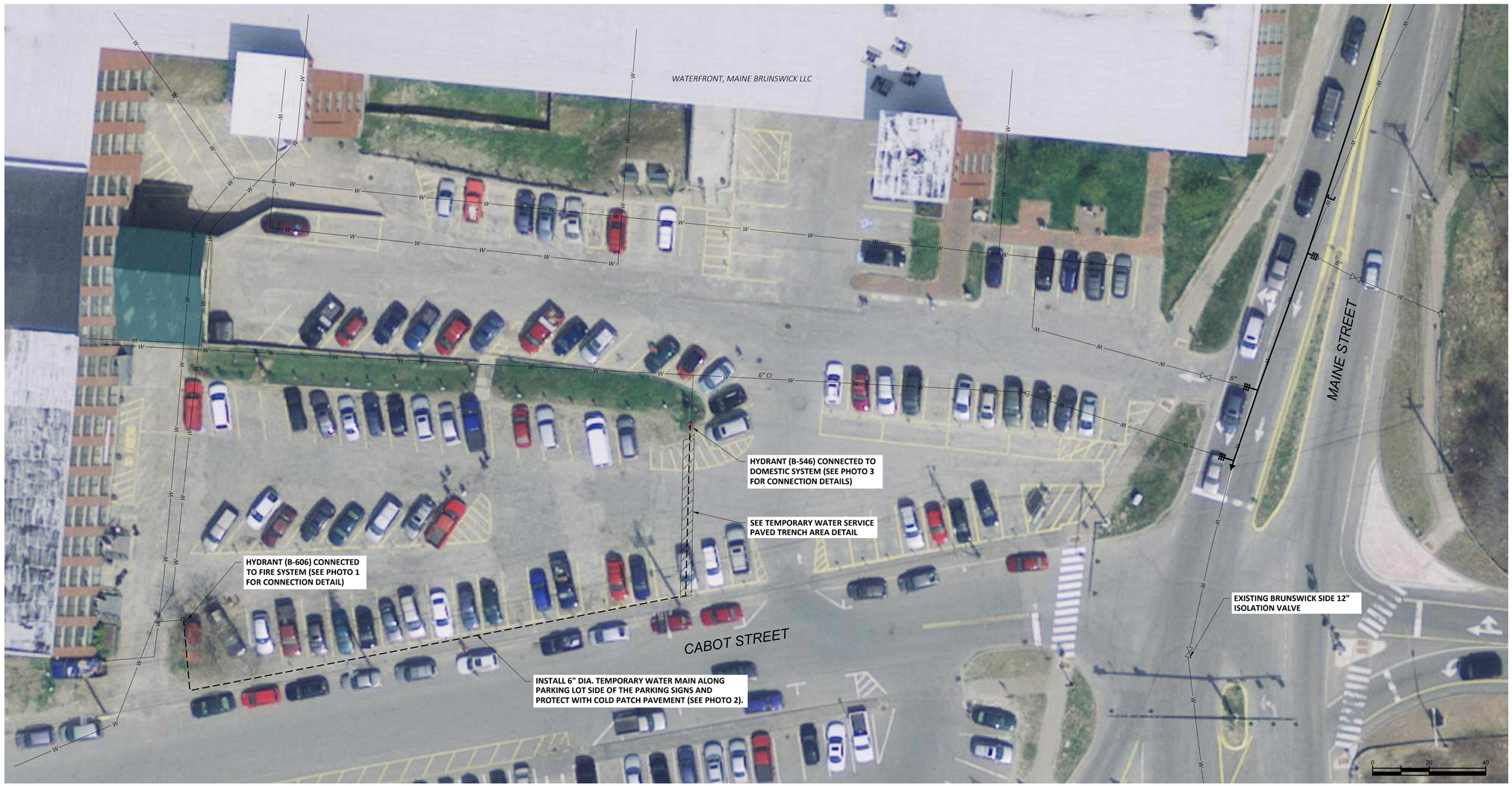

TEMPORARY WATER MAIN PLAN
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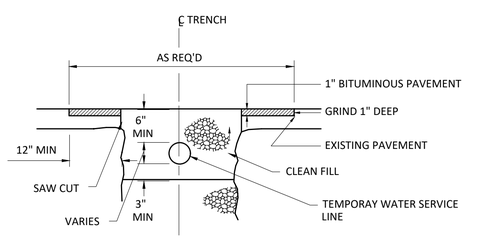


TEMPORARY WATER SERVICE PAVED TRENCH AREA DETAIL
SCALE: NTS

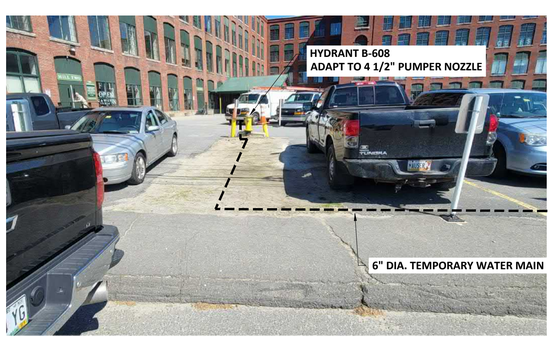


PHOTO 1 - HYDRANT (B-608) CONNECTION
N.T.S.

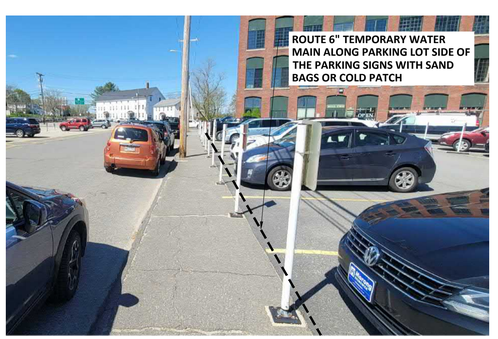


PHOTO 2 - TEMPORARY WATER MAIN LOCATION
N.T.S.

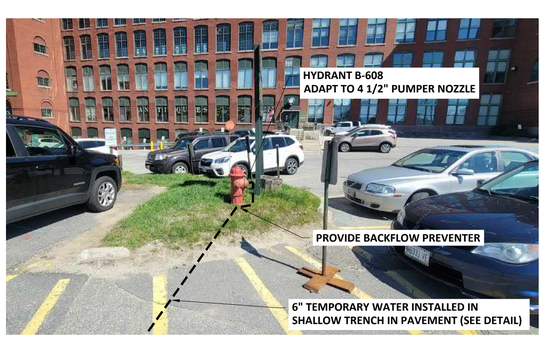


PHOTO 3 - HYDRANT (B-546) CONNECTION
N.T.S.

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE
DARRIN D. LAKY
No. 10749
REGISTERED PROFESSIONAL ENGINEER
CIVIL
10/8/21

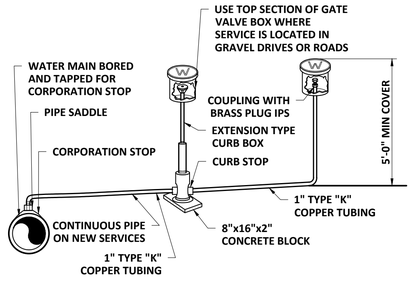
WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

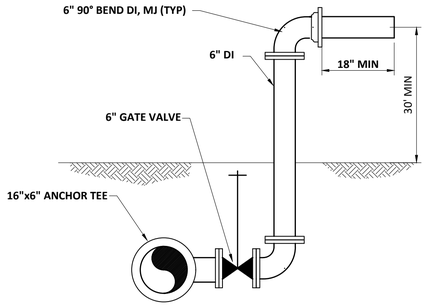
TEMPORARY WATER MAIN - FORT ANDROSS

DRAWING
C-8

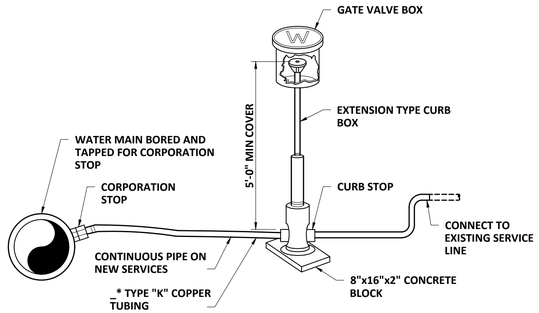
LAST SAVED BY: WILLIAM.EDGAR 10/5/2021 9:44 AM



MANUAL AIR RELEASE ASSEMBLY
NTS

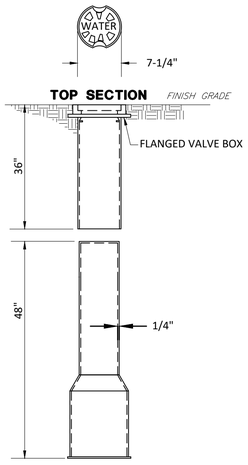


TEMPORARY FLUSHING CONNECTION DETAIL
NTS



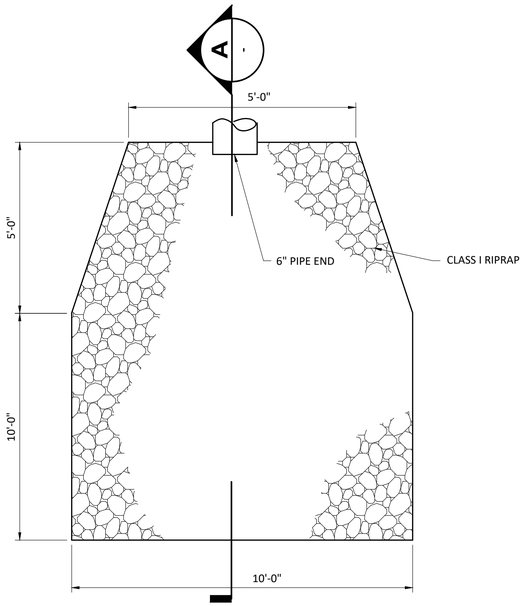
WATER SERVICE CONNECTION
NTS

NOTES:
1. LOCATE THE TOP OF VALVE BOX COVERS 3"-6" BELOW FINISHED GRADE IF LOCATED IN GRAVEL SHOULDERS TO PREVENT DAMAGE DURING PLOWING.
2. CONTRACTOR SHALL CONFIRM ALL FIELD LOCATIONS OF CURB STOPS WITH OWNER.

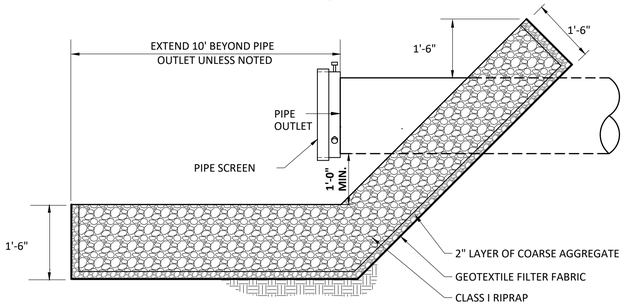


BELLED BASE SECTION

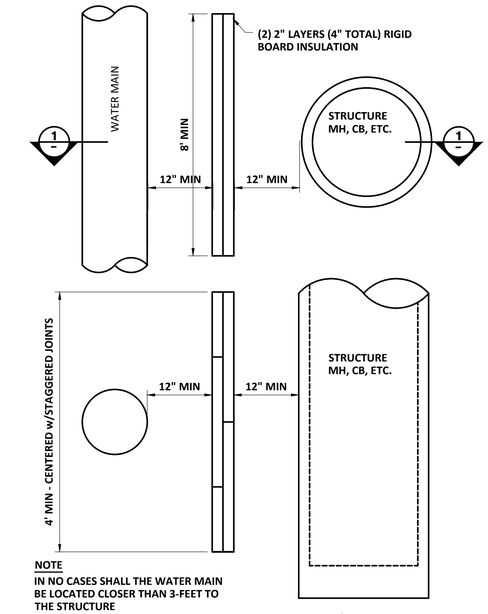
2-PIECE SLIDING VALVE BOX
NTS



DRAIN OUTLET APRON
NTS



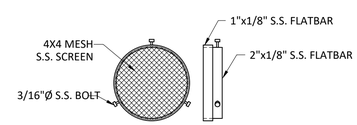
DRAIN OUTLET APRON SECTION A
NTS



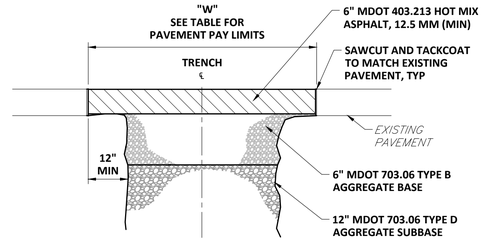
NOTE
IN NO CASES SHALL THE WATER MAIN BE LOCATED CLOSER THAN 3-FEET TO THE STRUCTURE

SECTION 1 -
SCALE: NTS

WATER MAIN-STRUCTURE INSULATION DETAIL
NTS



PIPE SCREEN DETAIL
NTS



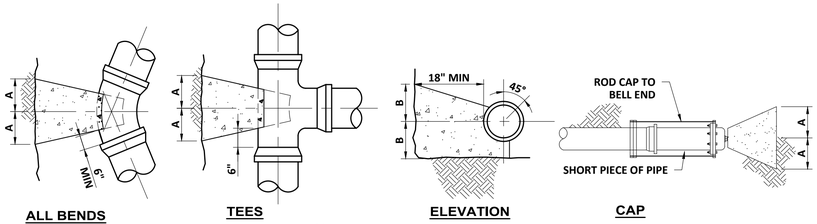
PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' - 10' DEEP)
6" - 15"	7'-0"
16" - 21"	8'-0"

"W" SHALL BE INCREASED BY 1'-0" FOR TRENCHES 10' - 15', AND BY 2'-0" FOR TRENCHES 15' - 20' DEEP.

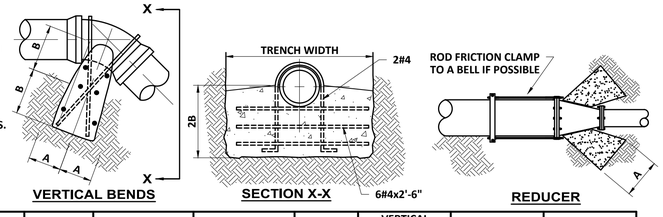
TEMPORARY WATER MAIN TRENCH PAVING
NTS

PAVEMENT NOTES:

1. WHEREVER PAVEMENT IS DISTURBED ALONG ANY STATE OR STATE AID ROADWAY, THE MINIMUM WIDTH OF PAVEMENT THAT SHALL BE REPLACED MUST BE AT LEAST 2' WIDE. ALL DISTURBED PAVEMENT AREAS SHALL BE REMOVED BY MACHINE CUTTING STRAIGHT EDGES THAT RUN PARALLEL TO THE ℄ OF THE ROADWAY.
2. WHEN OVERLAY ABUTS GRAVEL SHOULDER, THE SHOULDER SHALL BE BROUGHT TO THE AGGREGATE GRADE WITH BASE TYPE A.
3. WHEN PAVEMENT OVERLAY AND TRENCH PATCH ABUTS PAVEMENT, PAVED DRIVES, OR ENTRANCES, THE EXISTING PAVEMENT IS TO BE GROUND 1"± TO CREATE A SMOOTH TRANSITION BETWEEN THE EXISTING SURFACE AND THE NEW PAVEMENT.

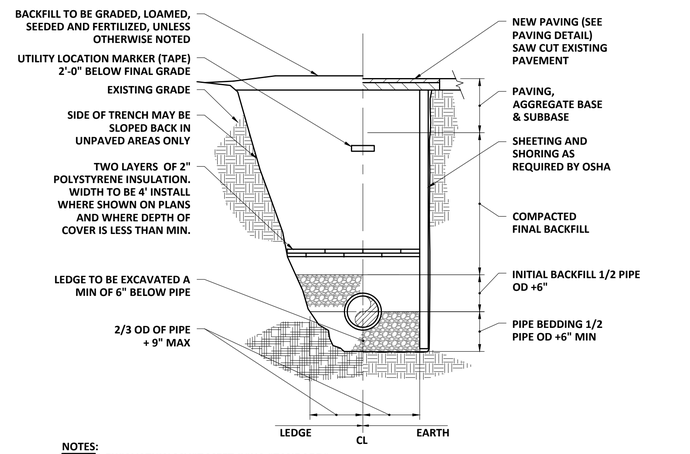


NOTES:
1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 2000 PSF AND TEST PRESSURES OF 180 PSI.
2. ALL BENDS, TEES, WYES, HYDS. & DEAD ENDS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS.
3. RODDING MAY BE REQUIRED



PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		VERTICAL BEND (DOWN)		PLUG		REDUCER	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
4"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	24"	21"	12"	12"	12"	12"
6"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	24"	21"	12"	12"	12"	12"
8"	20"	15"	14"	12"	9"	9"	9"	6"	18"	12"	33"	24"	14"	14"	18"	12"
10"	21"	21"	18"	15"	15"	9"	9"	9"	20"	18"	40"	27"	16"	16"	20"	18"
12"	27"	24"	23"	15"	15"	12"	12"	9"	25"	18"	48"	30"	18"	18"	25"	18"
16"	37"	30"	30"	21"	21"	15"	13"	12"	32"	24"	57"	36"	22"	22"	32"	24"

THRUST BLOCKS
NTS



NOTES:
1. ALL EXCAVATION MUST MEET OSHA STANDARDS.
2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100' AND WHERE SHOWN ON PLANS TO PREVENT TRENCH GROUNDWATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.

PIPE TRENCH
NTS

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE DARRIN D. LAR No. 10749 LICENSED PROFESSIONAL ENGINEER 8/21

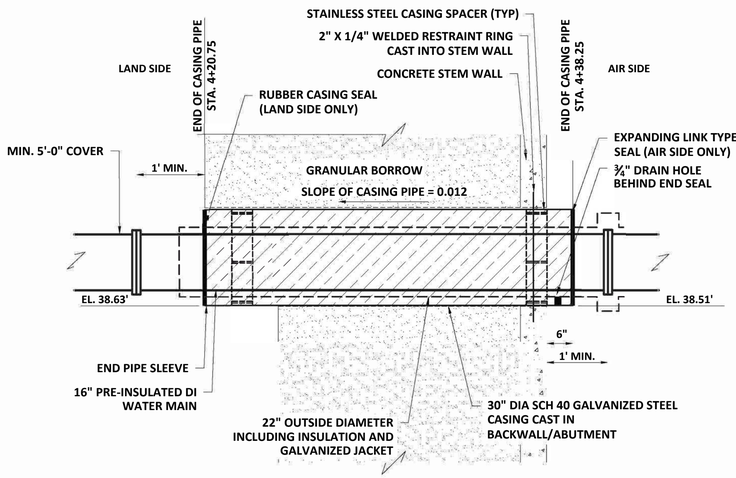
WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

DETAILS I

DRAWING
C-9

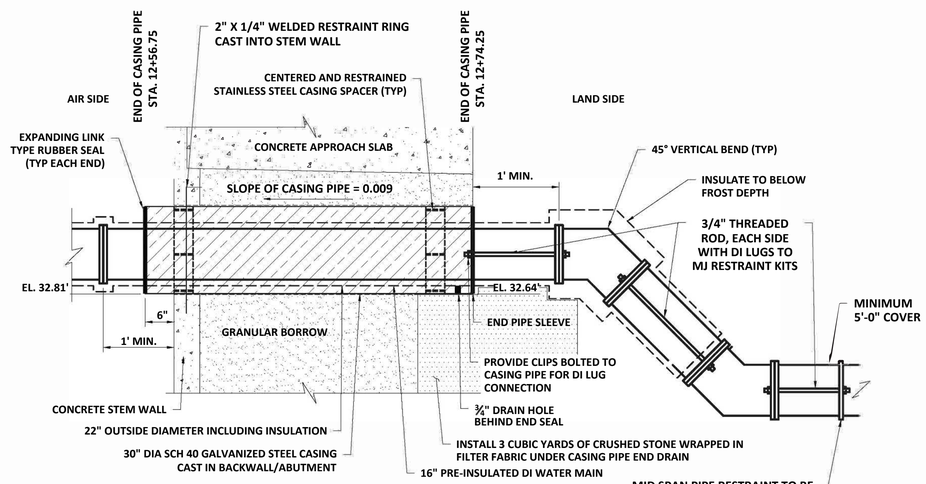
J:\ENG\WE\BRUNSWICKTOPSHAMWD\20562-BRIDGEWATERMAINDESIGN\DRAWINGS\CIV\20562-CS-DETAILS1.DWG | Details1(22x34) | 1:10.12364677 | — | 10/5/2021 10:19:53 AM | WILLIAM.EDGAR



ABUTMENT SECTION - BRUNSWICK

SCALE: NTS

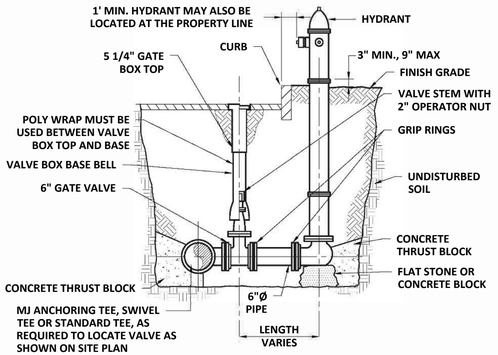
NOTES:
1. CENTER FULL LENGTH OF PIPE WITHIN CASING PIPE. NO JOINTS ALLOWED WITHIN CASING.



ABUTMENT SECTION - TOPSHAM

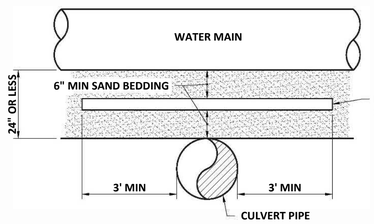
SCALE: NTS

NOTES:
1. CENTER FULL LENGTH OF PIPE WITHIN CASING PIPE. NO JOINTS ALLOWED WITHIN CASING.



FIRE HYDRANT

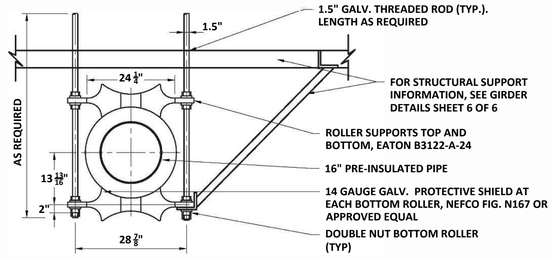
SCALE: NTS



NOTE:
INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

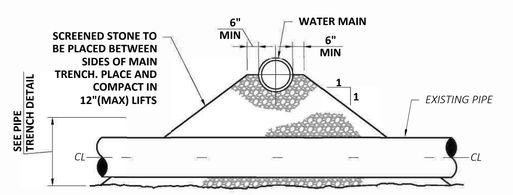
CULVERT CROSSING DETAIL

SCALE: NTS



WATER MAIN ADJUSTABLE ROLLER SUPPORT

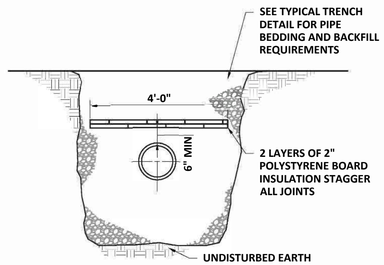
SCALE: NTS



NOTE:
JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE.

PIPE CROSSING DETAIL

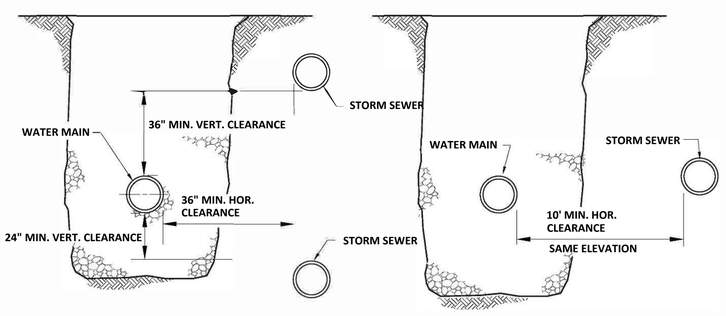
SCALE: NTS



NOTE:
TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN 5 FEET OR AS DIRECTED BY THE ENGINEER

TRENCH PIPE INSULATION DETAIL

SCALE: NTS



TRENCH PIPE CLEARANCE DETAIL

NTS

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

PROJECT NO: 20562
DESIGNED: D.LAR
CAD COORD: W.EDG
CAD: W.EDG
CHECKED: R.DAV
DATE: 9-21-2021
APPROVED: D.LAR
DATE: 11-8-2021
SUBMISSION: 100% BID DOCUMENTS

STATE OF MAINE DARRIN D. LARY No. 10749 REGISTERED PROFESSIONAL ENGINEER

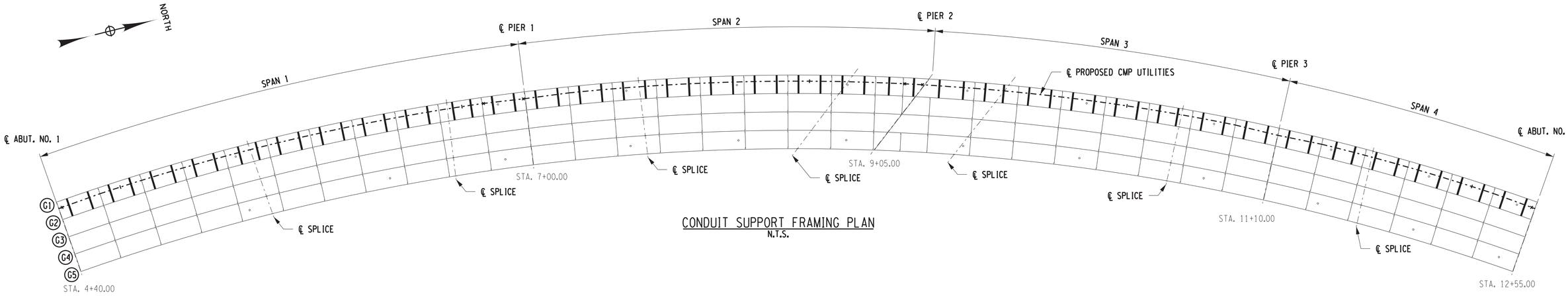
WRIGHT-PIERCE
207.725.8721 | www.wright-pierce.com
11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086

BRUNSWICK-TOPSHAM WATER DISTRICT
FRANK J. WOOD BRIDGE
WATER MAIN CROSSING
TOPSHAM-BRUNSWICK, MAINE

DETAILS II

DRAWING
C-10

LAST SAVED BY: WILLIAM.EDGAR 10/5/2021 9:44 AM
J:\ENG\WE\BRUNSWICKTOPSHAMWD\20562-BRIDGEWATERMAINDESIGN\DRAWINGS\CW\20562-CS-DETAILSII.DWG | Details II (22x34) | 1:10.1236467 | ---- | 10/5/2021 10:20:02 AM | WILLIAM.EDGAR



CONDUIT SUPPORT FRAMING PLAN
N.T.S.

ESTIMATE OF QUANTITES | BILL OF MATERIALS

ITEM NO. - DESCRIPTION	UNIT	ITEM QTY.	COMPONENT	NO.	LENGTH	QUANTITY
604.18 - ADJUST MANHOLE OR CATCH BASIN TO GRADE	LS	1	VAULT FRAME & COVER ADJUSTMENT	1	-	1
604.158 - UTILITY VAULT (CMP)	LS	1	6'X12'X7' PRECAST VAULT	1	-	1
			4/0 BARE COPPER GROUND WIRE	1	45	45.0
			GROUNDING CLAMP	3	-	-
			5/8" X 8' GROUND ROD	3	-	-
845.10 - STRUCTURAL STEEL UTILITY SUPPORT (ELEC. & COMM.)	LS	0.5	C6x10.5 (H.D.G.)	136	9'-8 1/4"	13,834 LB
			C7x9.8 (H.D.G.)	272	4"	889 LB
			WT6x26.5 (H.D.G.)	136	8"	2,403 LB
			SPACER PLATES (H.D.G.) (7"x4"x3/8")	272	-	810 LB
			GALV. A325 BOLTS - 7/8" DIA.	816	VARIES	-
			GALV. STEEL PIPE SLEEVE (8")	8	22'-3"	178'
910.301 - SPECIAL WORK - UTILITY CONDUIT (CMP - BRIDGE ONLY)	LS	1	6" SCH. 40 PVC CONDUIT	4	855.65'	3,422.6'
			CONDUIT SUPPORT FRAME 2 VERT. x 2 HORIZ.	68	-	-
			EXPANSION JOINTS	20	-	-
			WOBBLE COUPLINGS (6")	24	-	-
			1" GASKETS (ID=6",OD=8)	16	-	
			WATERPROOF MORTAR	10 CF	-	-
910.301 - SPECIAL WORK - UTILITY CONDUIT (CMP - APPROACH ONLY)	LS	1	6" SCH. 40 PVC CONDUIT	4	111.3	445.2
			6" SCH. 40 PVC CONDUIT	4	87.8	351.2
			6" SCH. 40 PVC CONDUIT	2	19.9	39.8
			6"SCH. 40 PVC CONDUIT	2	188.6	377.2
			CONDUIT SUPPORT FRAME 2 VERT. x 2 HORIZ.	82	-	-
			FILL CLASS CONCRETE	30	-	-
			ELECTRIC WARNING TAPE	1	407	407.0
			GRAVEL BORROW BACKFILL	110 CY	-	-

DRAWING CONTENTS

E1	CONDUIT SUPPORT FRAMING PLAN
E2	SPAN 1 CONDUIT SUPPORTS
E3	SPAN 2 CONDUIT SUPPORTS
E4	SPAN 3 CONDUIT SUPPORTS
E5	SPAN 4 CONDUIT SUPPORTS
E6	CONDUIT SUPPORT DETAILS
E7	ABUTMENT PENATRATION DETAILS
E8	CONDUIT PROFILE
E9	SOUTH APPROACH DUCT BANK
E10	NORTH APPROACH DUCT BANK
E11	DUCT BANK CONSTRUCTION DETAILS

NOTES:
1. ALL CONDUIT SHALL BE 6" DIAMETER, ID, SW FIBERGLASS CONDUIT.
2. ALL CONDUIT COUPLINGS, DUCT SUPPORTS, STEEL PIPE SLEEVES, BRACING, WATERPROOF MORTAR AND OTHER MISCELLANEOUS HARDWARE ON THE BRIDGE SHALL BE INCLUDED IN THE LUMP SUM COST OF THE BRIDGE CONDUIT.
3. THESE DRAWINGS ARE BASED ON AVAILABLE BRIDGE DESIGN DRAWINGS. CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE INSTALLATION OF CONDUITS AND SUPPORTS.
4. ALL CONDUIT ON APPROACHES SHALL BE SCH. 40 PVC.
5. ALL CONNECTIONS BETWEEN DUCT SECTIONS, EXPANSION JOINTS, ADAPTERS AND COUPLINGS ARE TO BE BONDED. REFER TO MANUFACTURER'S INSTRUCTIONS FOR BONDING PROCEDURES.
6. CAP THE ENDS OF THE DUCTS IF UNDERGROUND PORTION OF WORK IS NOT DONE AT THE SAME TIME AS THE BRIDGE PORTION.

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

THE USER OF THIS DRAWING IS ADVISED THAT THE SPECIFIC SCALES SHOWN FOR PLAN VIEWS, SECTIONS, AND DETAILS REFLECT THE ORIGINAL 11" x 17" DRAWING SIZE AND PHYSICALLY SCALE 200% LARGER THAN INDICATED.

STATE OF MAINE
STEPHEN J. GAUTHIER
No. 9210
LICENSED
PROFESSIONAL ENGINEER

CLIENT
CENTRAL MAINE POWER

ENGINEER
LaBella
Powered by partnership.
300 STATE STREET
ROCHESTER, NY 14614
P: (585) 454-6110
F: (585) 454-3066
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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	1	11

FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER
PROJECT NO. 2211957
BRIDGE NO. 2016
DATE 12/22/2021

CMP UTILITY SUPPORTS

CONDUIT SUPPORT FRAMING PLAN

PREPARED BY JCY
DRAWING NO. E-1

FILE NAME = \\cash.lab\P\AVA\Power\Misc\2211957 - Frank J Wood Bridge CMP Conduit\Drawings\Utility Support.dgn
DATE/TIME = 12/27/2021 8:27:38 AM
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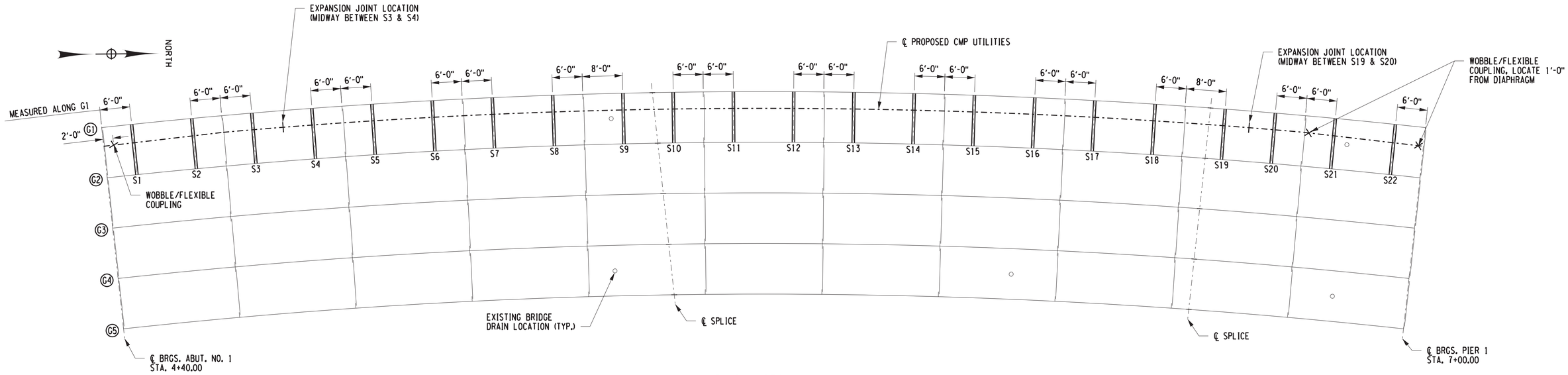
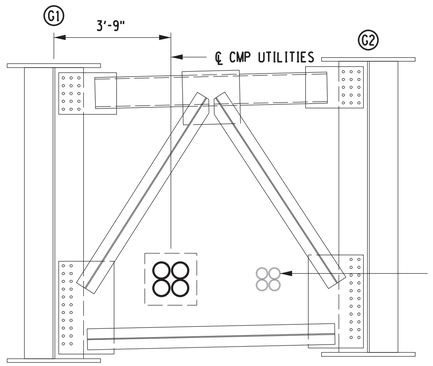
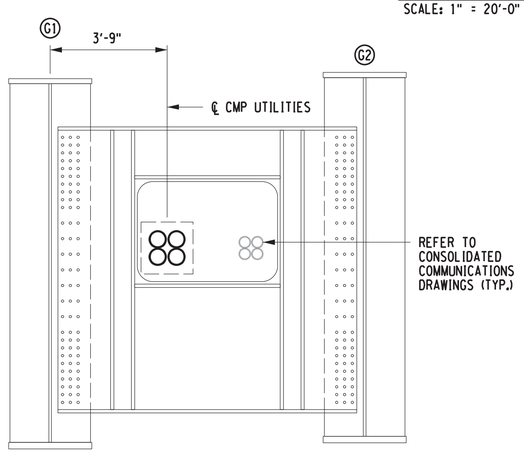


PLAN - SPAN 1
SCALE: 1" = 20'-0"



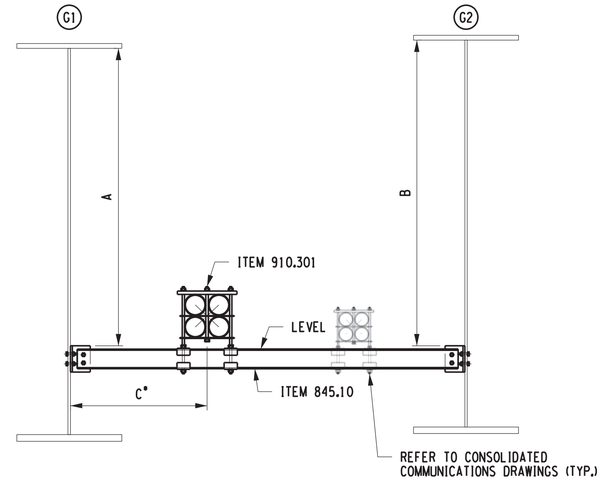
ABUT. NO. 1 DIAPHRAGM
N.T.S.



PIER 1 JACKING DIAPHRAGM
N.T.S.

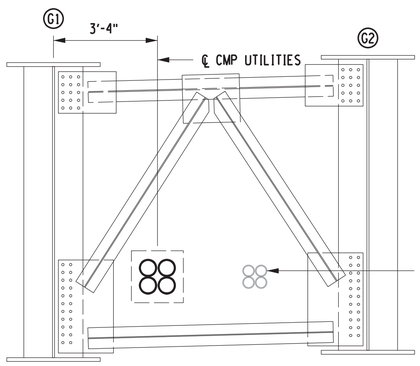
SPAN 1
SUPPORT LOCATION TABLE

SUPPORT	A (G1, in)	B (G2, in)	C (in)
S1	90.40	92.89	43.91
S2	90.10	92.77	41.40
S3	89.95	92.74	39.62
S4	89.95	92.80	39.62
S5	89.82	92.76	39.62
S6	89.57	92.63	39.62
S7	89.45	92.60	39.62
S8	89.45	92.66	39.62
S9	89.45	92.73	39.62
S10	89.45	92.78	39.62
S11	89.45	92.81	39.62
S12	89.45	92.81	39.62
S13	89.57	92.90	39.62
S14	89.82	93.09	39.62
S15	89.95	93.13	39.62
S16	89.95	93.01	39.62
S17	89.95	92.92	39.62
S18	89.95	92.86	39.62
S19	89.95	92.71	39.50
S20	89.95	92.56	39.50
S21	85.54	88.03	41.28
S22	76.70	79.13	43.78



SUPPORT LOCATION DETAIL
N.T.S.

* MEASURED FROM INSIDE FACE OF WEB TO CENTERLINE OF UTILITIES



TYPICAL SPAN 1 INTERIOR DIAPHRAGM
ONE SHOWN, REST SIMIAL
N.T.S.

NOTE:
REFER TO CONTRACT PLAN GIRDER DETAILS FOR DIAPHRAGM DETAILS

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

THE USER OF THIS DRAWING IS ADVISED THAT THE SPECIFIC SCALES SHOWN FOR PLAN VIEWS, SECTIONS, AND DETAILS REFLECT THE ORIGINAL 11" x 17" DRAWING SIZE AND PHYSICALLY SCALE 200% LARGER THAN INDICATED.

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	2	11

FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER
PROJECT NO. 2211957
BRIDGE NO. 2016
DATE 10/26/2021

CMP UTILITY SUPPORTS

PLAN - SPAN 1

PREPARED BY JCY
DRAWING NO. E-2

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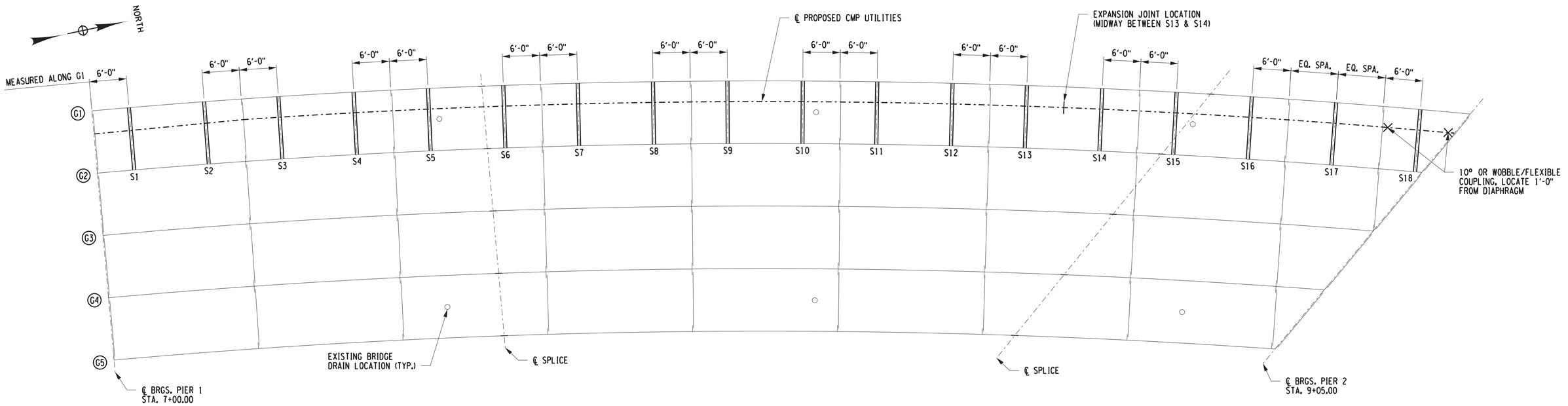
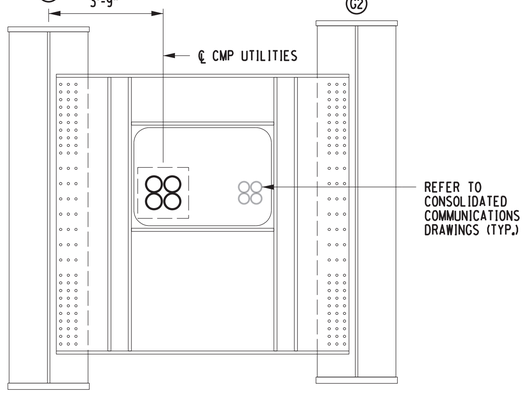
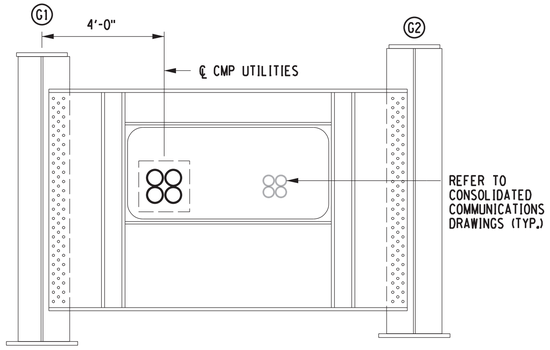


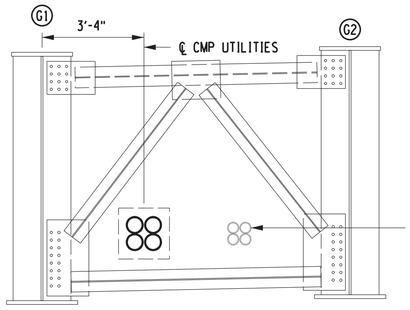
PLAN - SPAN 2
SCALE: 1/16" = 1'-0"



PIER 1 JACKING DIAPHRAGM
N.T.S.



PIER 2 JACKING DIAPHRAGM
N.T.S.



TYPICAL SPAN 2 INTERIOR DIAPHRAGM
ONE SHOWN, REST SIMILAR
N.T.S.

NOTE:
REFER TO CONTRACT PLAN GIRDER DETAILS FOR DIAPHRAGM DETAILS

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

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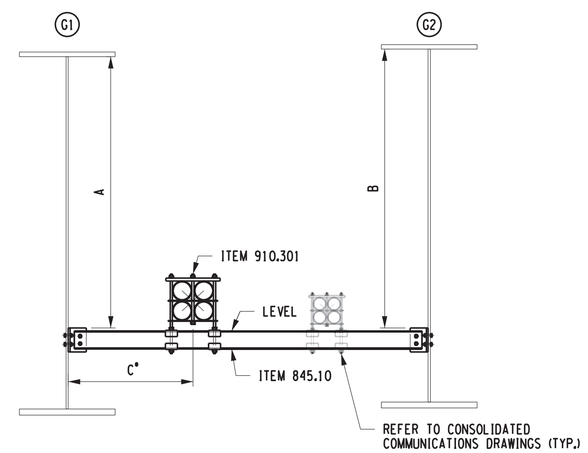
SPAN 2
SUPPORT LOCATION TABLE

SUPPORT	A (G1, in)	B (G2, in)	C (in)
S1	73.78	76.15	43.79
S2	76.78	79.09	41.28
S3	78.26	80.54	39.50
S4	78.26	80.54	39.50
S5	78.38	80.66	39.50
S6	78.63	80.91	39.62
S7	78.76	81.04	39.62
S8	78.76	81.04	39.62
S9	78.88	81.19	39.62
S10	79.13	81.50	39.62
S11	79.26	81.69	39.62
S12	79.26	81.75	39.62
S13	79.26	81.78	39.62
S14	79.26	81.78	39.62
S15	79.13	81.65	39.62
S16	78.88	81.40	39.62
S17	78.76	81.28	39.62
S18	69.29	72.11	39.60



SUPPORT LOCATION DETAIL
N.T.S.

• MEASURED FROM INSIDE FACE OF WEB TO CENTERLINE OF UTILITIES

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	3	11

FRANK J. WOOD BRIDGE
OVER ANDROSCOGGIN RIVER

PROJECT NO. 2211957

BRIDGE NO. 2016

DATE 10/26/2021

CMP UTILITY SUPPORTS

PLAN - SPAN 2

PREPARED BY JCY

DRAWING NO. E-3

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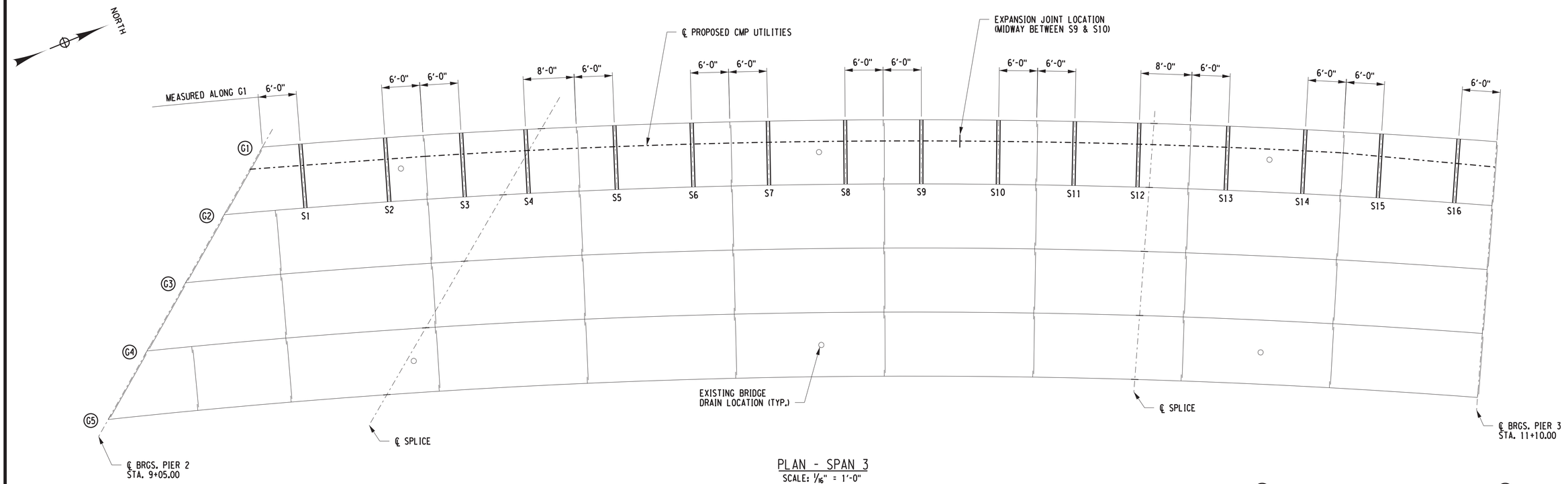
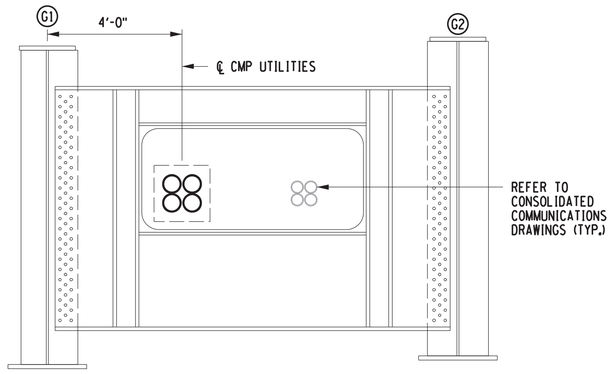
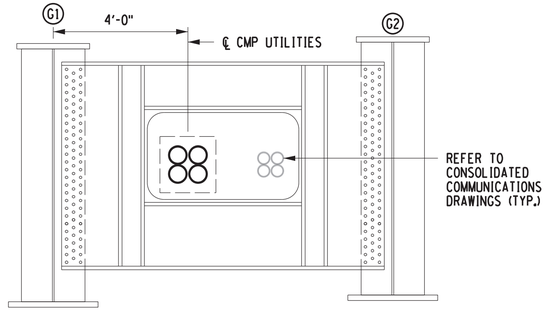


PLAN - SPAN 3
SCALE: 1/16" = 1'-0"



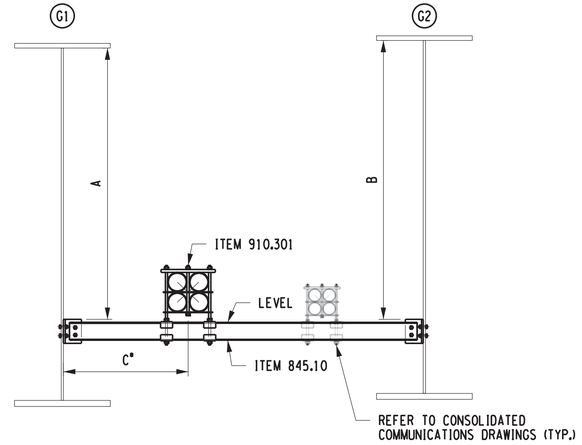
PIER 2 JACKING DIAPHRAGM
N.T.S.



PIER 3 JACKING DIAPHRAGM
N.T.S.

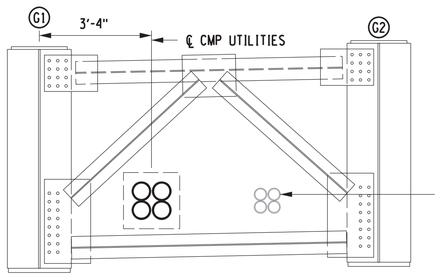
SPAN 3
SUPPORT LOCATION TABLE

SUPPORT	A (G1, in)	B (G2, in)	C (in)
S1	60.83	63.84	40.13
S2	61.96	64.80	40.18
S3	62.59	65.33	39.62
S4	62.81	65.49	39.62
S5	62.97	65.55	39.69
S6	62.97	65.43	39.69
S7	62.97	65.31	39.69
S8	62.97	65.19	39.69
S9	62.97	65.13	39.69
S10	62.97	65.13	39.69
S11	62.85	65.01	39.69
S12	62.64	64.80	39.69
S13	62.47	64.63	39.69
S14	62.47	64.63	39.69
S15	59.43	61.65	42.21
S16	53.27	55.61	46.23



SUPPORT LOCATION DETAIL
N.T.S.

• MEASURED FROM INSIDE FACE OF WEB TO CENTERLINE OF UTILITIES



TYPICAL SPAN 3 INTERIOR DIAPHRAGM
ONE SHOWN, REST SIMILAR
N.T.S.

NOTE:
REFER TO CONTRACT PLAN GIRDER DETAILS FOR DIAPHRAGM DETAILS

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	4	11

FRANK J. WOOD BRIDGE
OVER ANDROSCOGGIN RIVER

PROJECT NO. 2211957

BRIDGE NO. 2016

DATE 10/26/2021

CMP UTILITY SUPPORTS

PLAN - SPAN 3

PREPARED BY JCY

DRAWING NO. E-4

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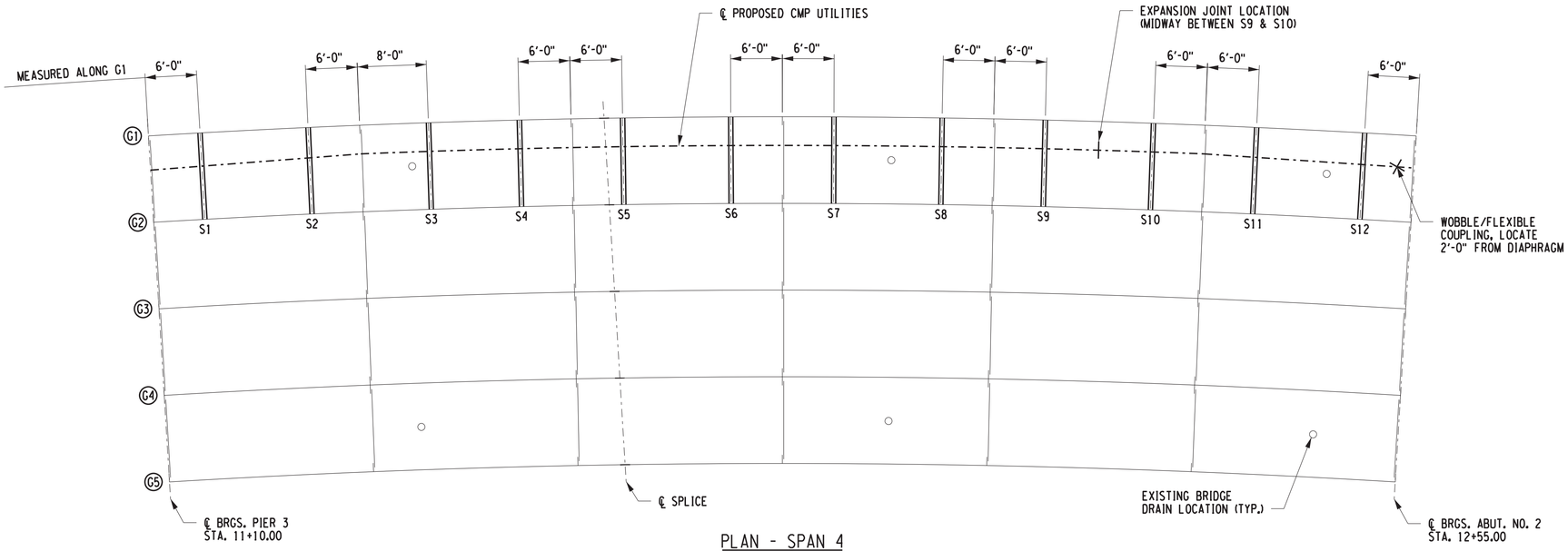
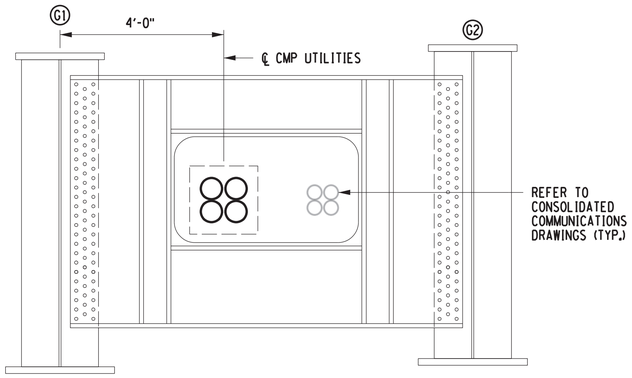
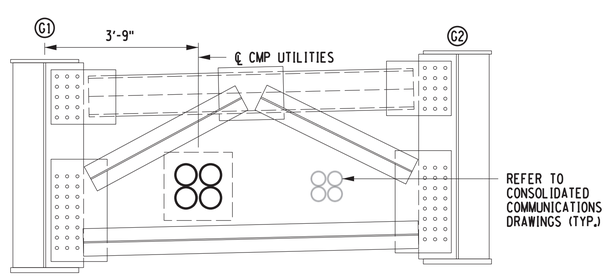


PLAN - SPAN 4
SCALE: 1/16" = 1'-0"



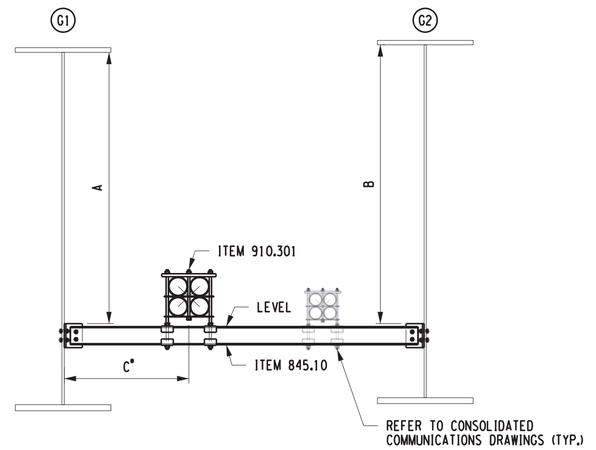
PIER 3 JACKING DIAPHRAGM
N.T.S.



ABUT. NO. 2 DIAPHRAGM
N.T.S.

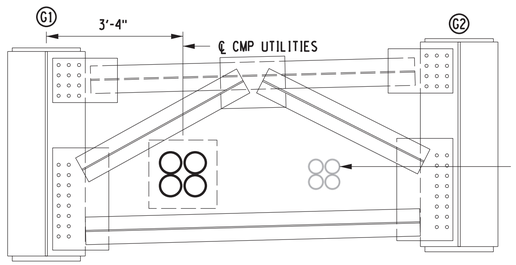
SPAN 4
SUPPORT LOCATION TABLE

SUPPORT	A (G1, in)	B (G2, in)	C (in)
S1	49.35	51.78	46.28
S2	47.49	49.98	42.19
S3	45.83	48.42	39.69
S4	44.79	47.50	39.69
S5	44.43	47.19	39.69
S6	44.89	47.65	39.69
S7	45.11	47.87	39.69
S8	45.11	47.87	39.69
S9	45.11	47.84	39.69
S10	45.11	47.78	39.69
S11	45.15	47.76	41.45
S12	45.24	47.79	44.01



SUPPORT LOCATION DETAIL
N.T.S.

• MEASURED FROM INSIDE FACE OF WEB TO CENTERLINE OF UTILITIES



TYPICAL SPAN 4 INTERIOR DIAPHRAGM
ONE SHOWN, REST SIMILAR
N.T.S.

NOTE:
REFER TO CONTRACT PLAN GIRDER DETAILS FOR DIAPHRAGM DETAILS

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	5	11

FRANK J. WOOD BRIDGE
OVER ANDROSCOGGIN RIVER

PROJECT NO. 2211957

BRIDGE NO. 2016

DATE 10/26/2021

CMP UTILITY SUPPORTS

PLAN - SPAN 4

PREPARED BY JCY

DRAWING NO. E-5

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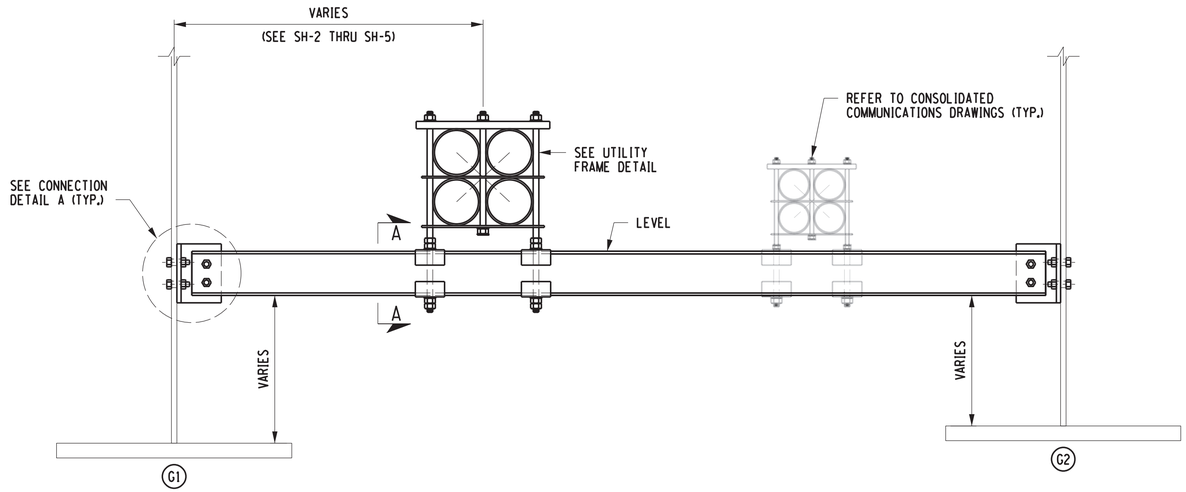
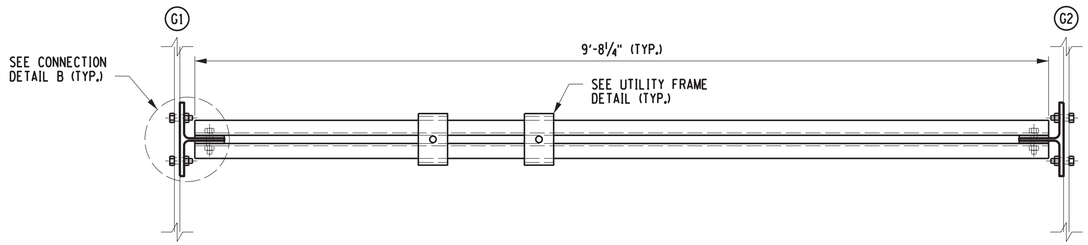
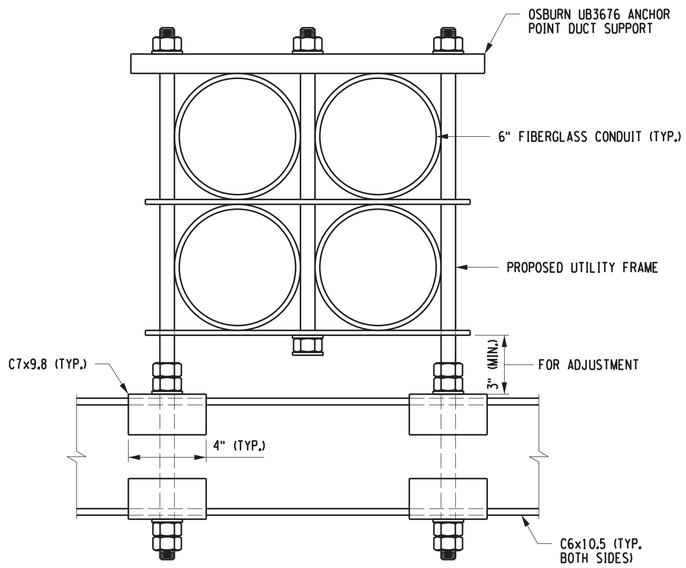


UTILITY SUPPORT ELEVATION
N.T.S.



UTILITY SUPPORT PLAN
N.T.S.



UTILITY FRAME DETAIL
N.T.S.

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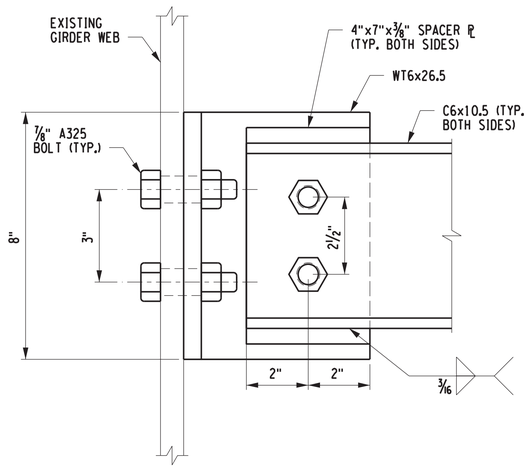
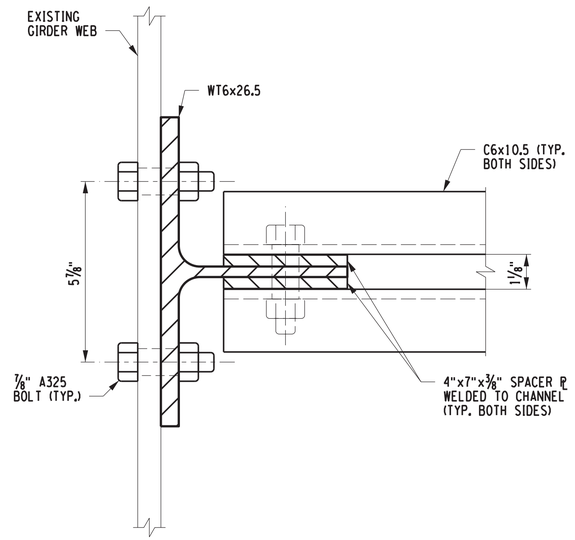
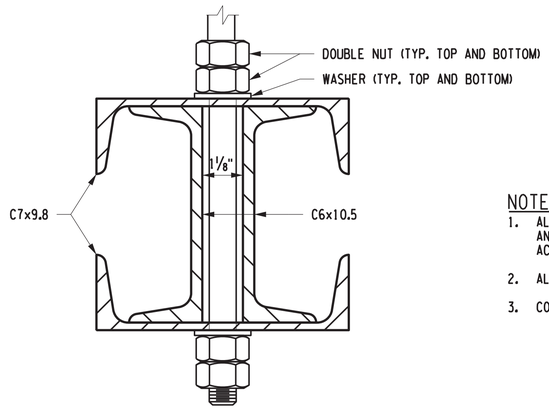


CONNECTION DETAIL A
N.T.S.



CONNECTION DETAIL B
N.T.S.



SECTION A-A
N.T.S.

NOTES:

1. ALL STEEL SHALL BE ASTM A709 GRADE 50 AND HOT DIPPED GALVANIZED AND PAID FOR UNDER ITEM 845.10. GALVANIZING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 506.
2. ALL BOLTS SHALL BE ⅞" A325 TYPE I GALVANIZED.
3. CONDUITS AND UTILITY FRAMES PAID FOR UNDER ITEM 910.301.

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	6	11
FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER	PROJECT NO. 2211957	
BRIDGE NO. 2016	DATE 10/26/2021	
CMP UTILITY SUPPORTS DETAILS	PREPARED BY JCY	
	DRAWING NO. E-6	

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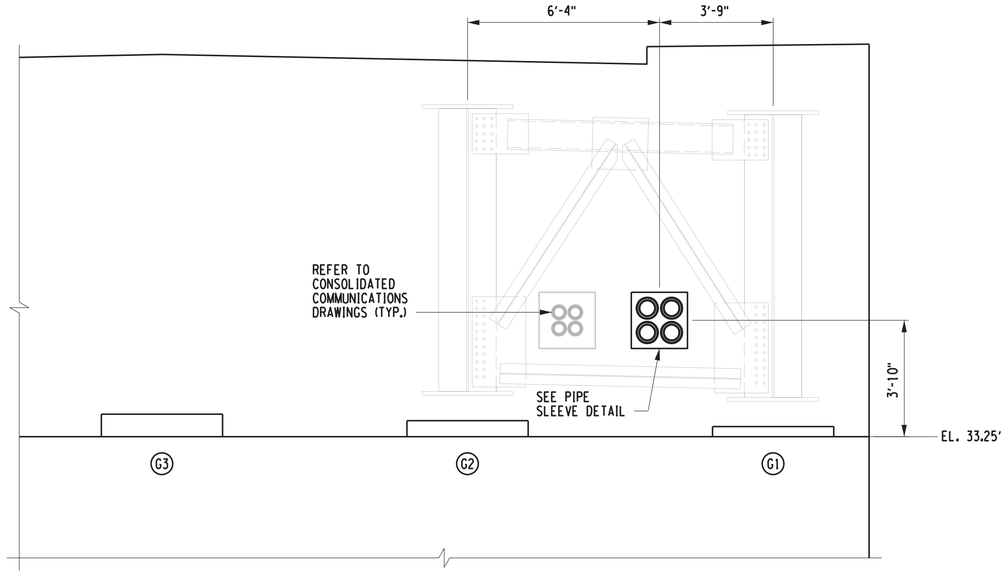
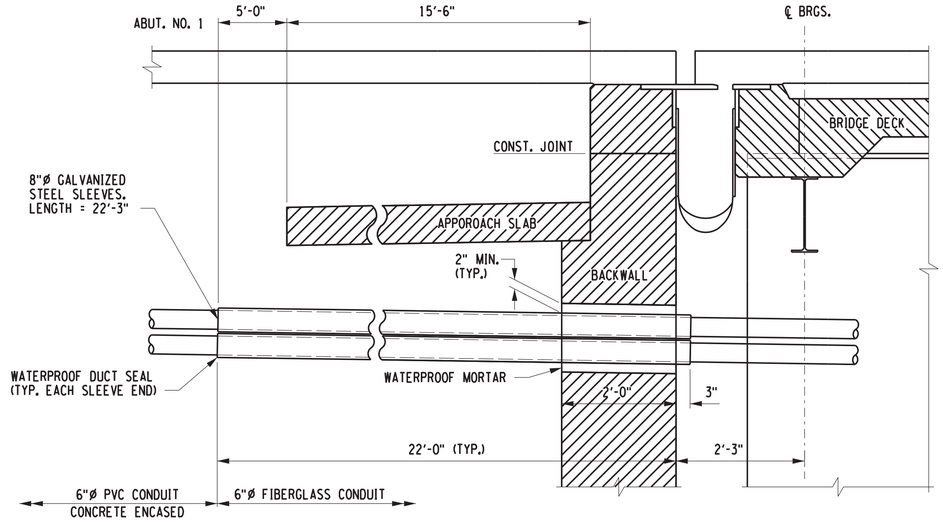
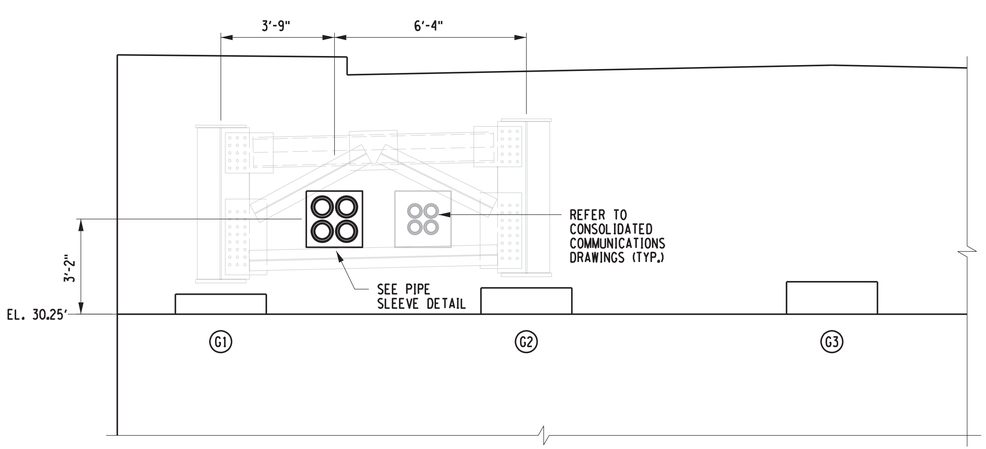


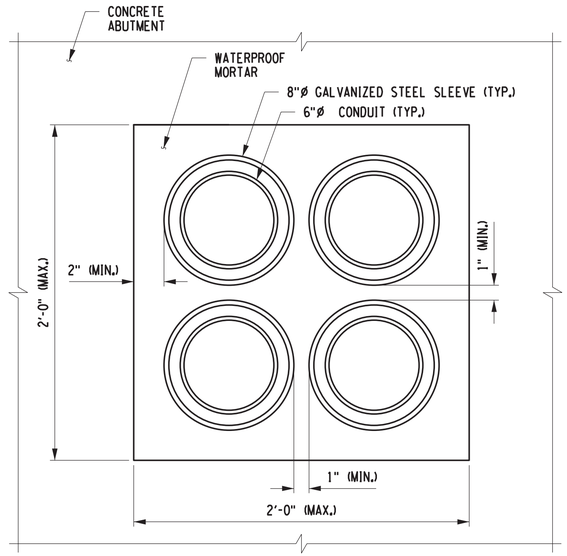
UTILITY PENETRATION ELEVATION - ABUTMENT NO. 1
SCALE: 1" = 5'-0"



TYPICAL SECTION AT ABUTMENT
(ABUT. NO. 1 SHOWN, ABUT. NO. 2 BEGIN CONCRETE ENCASED CONDUIT 1' BEYOND BACKWALL)
N.T.S.



UTILITY PENETRATION ELEVATION - ABUTMENT NO. 2
SCALE: 1" = 5'-0"



PIPE SLEEVE DETAIL
N.T.S.

NOTE:
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ENLARGED DRAWING

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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	7	11

FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER
PROJECT NO. 2211957
BRIDGE NO. 2016
DATE 10/26/2021

CMP UTILITY SUPPORTS

ABUTMENT UTILITY PENETRATIONS

PREPARED BY JCY

DRAWING NO. E-7

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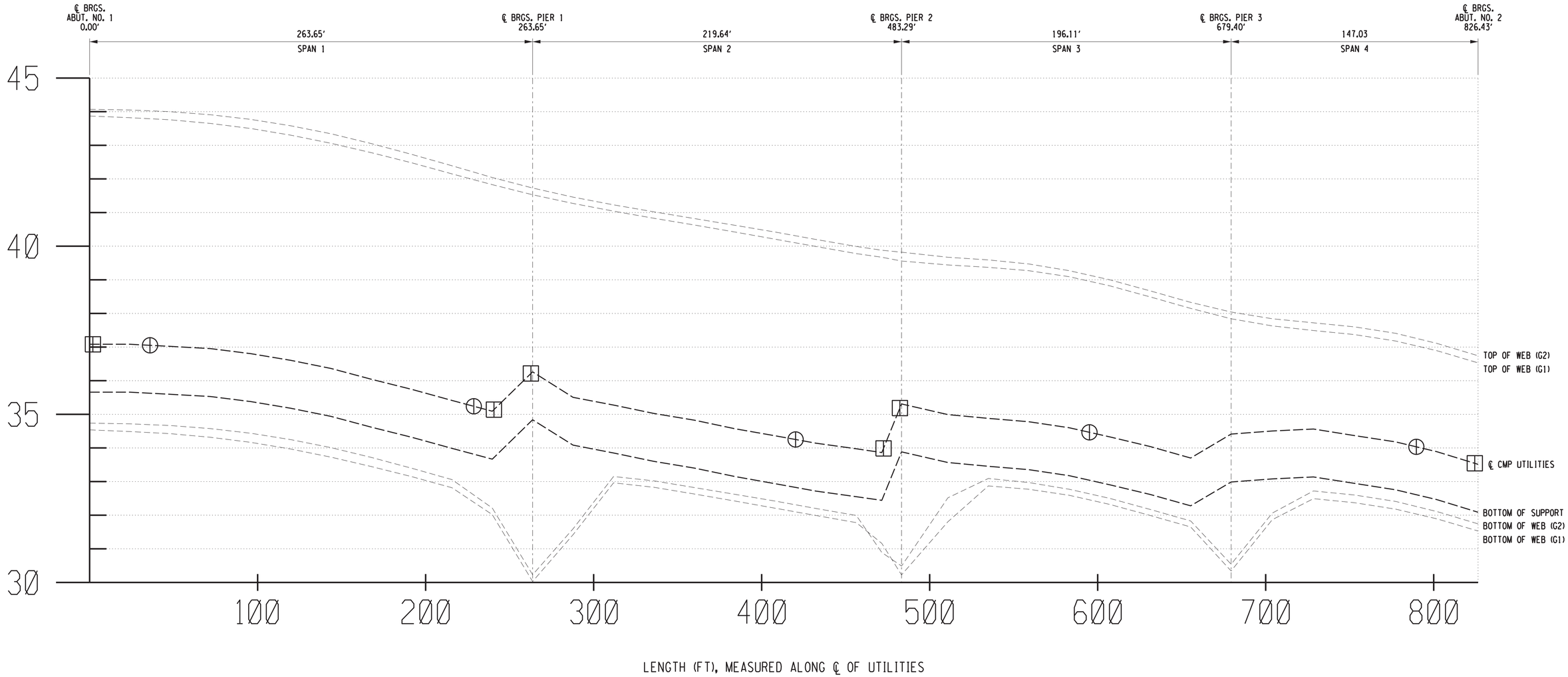

= WOBBLE COUPLING

= EXPANSION JOINT

ENLARGED DRAWING

THE ORIGINAL SIZE OF THIS DRAWING WAS 11" x 17" (ANSI SIZE 'B'). IT HAS BEEN ENLARGED 200% TO 22" x 34" (ANSI SIZE 'D').

THE USER OF THIS DRAWING IS ADVISED THAT THE SPECIFIC SCALES SHOWN FOR PLAN VIEWS, SECTIONS, AND DETAILS REFLECT THE ORIGINAL 11" x 17" DRAWING SIZE AND PHYSICALLY SCALE 200% LARGER THAN INDICATED.

STATE OF MAINE
STEPHEN GAUTHIER
No. 9210
LICENSED
PROFESSIONAL ENGINEER

CLIENT
CENTRAL MAINE POWER

ENGINEER
LaBella
Powered by partnership.
300 STATE STREET
ROCHESTER, NY 14614
P: (585) 454-6110
F: (585) 454-3066
www.labellapc.com
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CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	8	11
FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER	PROJECT NO. 2211957	
BRIDGE NO. 2016	DATE 10/26/2021	
CMP UTILITY SUPPORTS	PREPARED BY JCY	
CONDUIT PROFILE	DRAWING NO. E-8	

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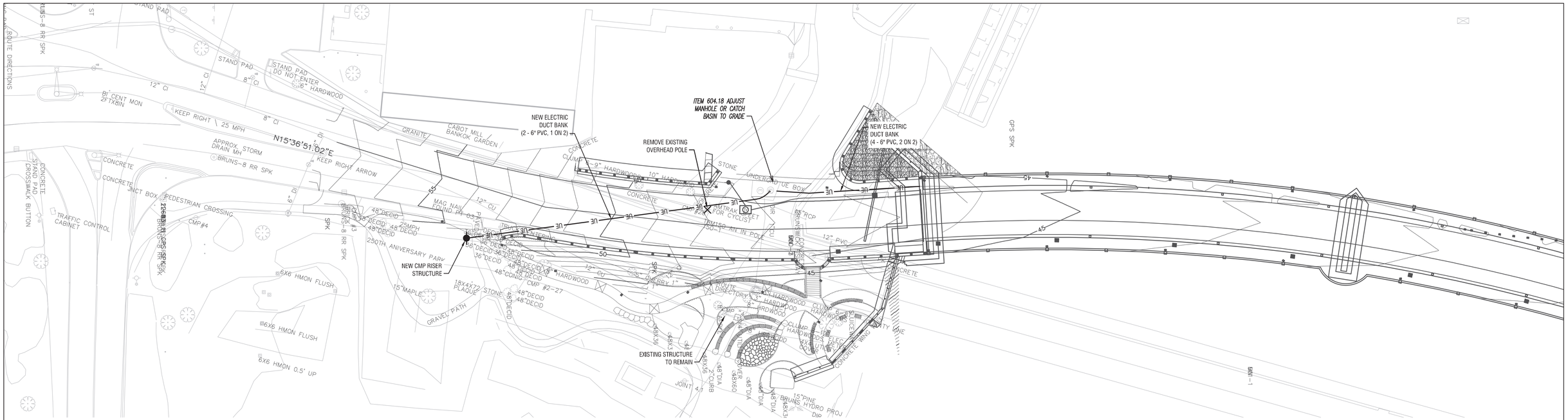

ENLARGED DRAWING

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FILE NAME = $FILE$
DATE/TIME = $DATE$
USER = $USER$

STATE OF MAINE
STEVEN M. LONGWORTH
No. 13388
LICENSED PROFESSIONAL ENGINEER

CLIENT
CENTRAL MAINE POWER

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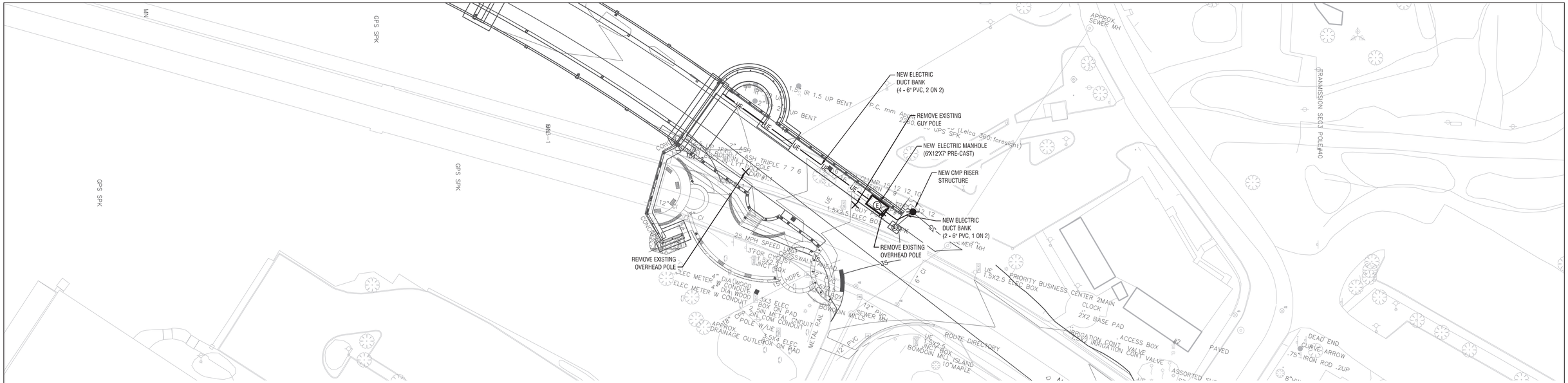
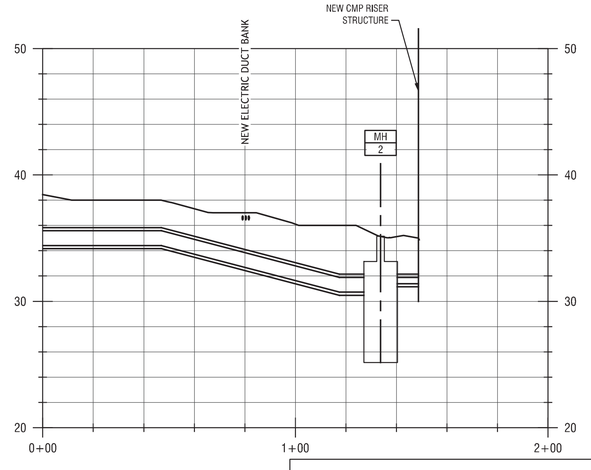
CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	9	11
FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER	PROJECT NO. 2211957	
BRIDGE NO. 2016	DATE 10/04/2021	
	PREPARED BY ACS	
CMP DUCT BANK SOUTH APPROACH DUCT BANK PLAN & PROFILE	DRAWING NO. E-9	





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0' 30' 60' 90'
HORIZONTAL SCALE

0' 6' 12' 18'
VERTICAL SCALE

FILE NAME = $FILE$
DATE/TIME = $DATE$
USER = $USER$

STATE OF MAINE
STEVEN M. LONGWAY
No. 13388
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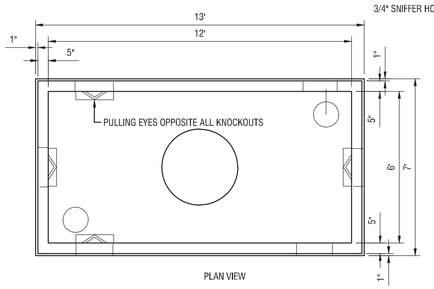
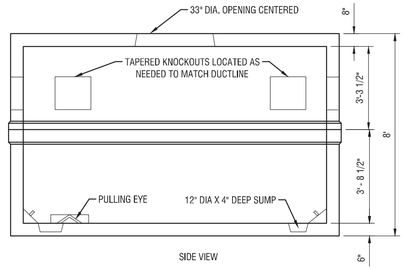
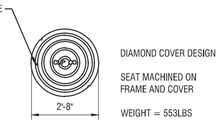
CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	10	11
FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER	PROJECT NO. 2211957	
BRIDGE NO. 2016	DATE 10/04/2021	
	PREPARED BY ACS	
CMP DUCT BANK NORTH APPROACH DUCT BANK PLAN & PROFILE	DRAWING NO. E-10	



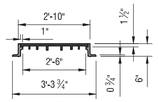
PLAN VIEW



SIDE VIEW



TOP VIEW



SECTION VIEW

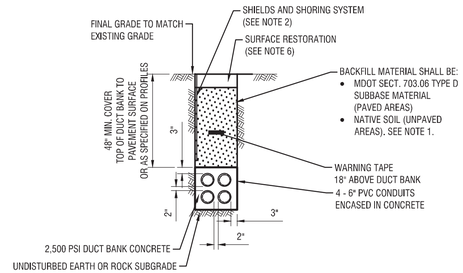
BRICK AS REQUIRED TO REACH FINISHED GRADE

COVER DETAIL

NTS

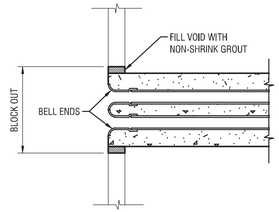
NOTES:

1. VAULT SHALL BE DESIGNED TO WITHSTAND H20 WHEEL LOAD WITH 6 INCHES OF OVERBURDEN. THE DESIGN SHALL ALSO COMPLY WITH THE STRENGTH REQUIREMENTS OF THE NATIONAL ELECTRIC SAFETY CODE SECTION 323A. PROVIDE SHOP DRAWINGS STAMPED BY A STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER UPON REQUEST.
2. JOINTS SEALED WITH ASPHALT.
3. MOUNTINGS FOR CABLE RACKS ETC. TO BE FIELD LOCATED.
4. MANHOLE SHALL BE SET ON A SUITABLE GRAVEL BASE.
5. CABLES ARE TO BE RACKED ALONG ONE WALL ONLY.



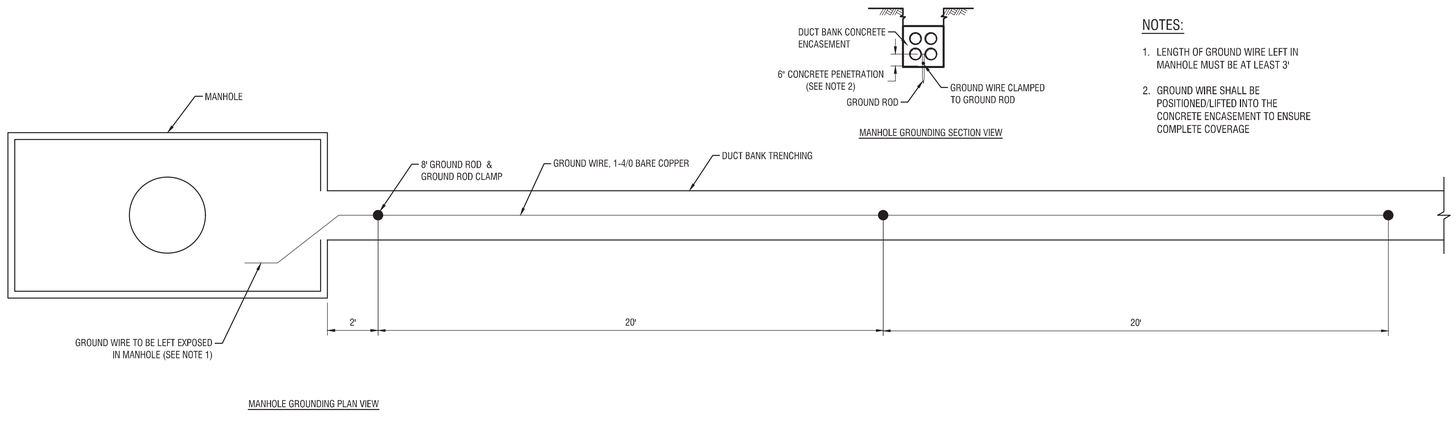
NOTES:

1. IF EXCAVATED EARTH IS FOUND TO BE UNSUITABLE FOR BACKFILL, USE BANKRUN GRAVEL.
2. SHIELDS AND SHORING SYSTEM TO BE IN ACCORDANCE WITH MDOT SPECIFICATIONS AND OSHA REQUIREMENTS.
3. BOND BREAKER TO BE INSTALLED BETWEEN ALL EXISTING AND PROPOSED DUCT BANKS ALONG THE ENTIRE LENGTH OF NEW CONSTRUCTION.
4. ALL SWEEPS AND BENDS 45 DEGREES OR GREATER SHALL BE GALVANIZED STEEL.
5. RADIUS FOR ALL BENDS SHALL BE MINIMUM 36". 90 DEGREE BENDS SHALL HAVE MIN. RADIUS OF 48"
6. CONDUIT SHALL BE CLEANED AND CHECKED WITH A BRUSH-MANDREL-BRUSH CONFIGURATION AFTER INSTALLATION AND PRIOR TO INSTALLING CABLE. THE MINIMUM MANDREL SIZE PERMITTED IS 1/2" LESS IN DIAMETER THAN THE DUCT. THE CIRCULAR WIRE BRUSH SHOULD HAVE THE SAME DIAMETER AS THE DUCT
7. INTERMEDIATE AND BASE SPACERS SHALL BE USED AT 5' INTERVALS ALONG THE COMPLETE DISTANCE OF CONSTRUCTION



CONNECTION NOTES:

1. THE TERMINATION OF CONDUIT INTO THE STRUCTURE MUST BE WATER TIGHT.
2. BELL-ENDS SHALL BE INSTALLED AT ALL LOCATIONS WHERE NEW DUCT BANK ENTERS EXISTING STRUCTURE.
3. ALL VOIDS BETWEEN DUCTS AND STRUCTURE SHALL BE FILLED WITH NON-SHRINK GROUT. THE INSIDE SURFACE OF THE MANHOLE WALL SHALL BE FINISHED FLUSH WITH THE BELL ENDS.
4. CENTER ALL DUCT TERMINATIONS IN THE ENDWALLS.
5. THE MANHOLE ENDWALLS ARE THE PREFERRED LOCATIONS FOR DUCT TERMINATIONS.
6. NEW DUCT TERMINATIONS SHALL BE LOCATED SO AS NOT TO INTERFERE WITH EXISTING DUCTS AND CABLES.
7. NUMBER AND SIZE OF CONDUIT VARY AT EACH INSTALLATION, SEE TYPICAL DUCT BANK DETAIL FOR CONDUIT LAYOUT.



MANHOLE GROUNDING PLAN VIEW

MANHOLE GROUNDING SECTION VIEW

NOTES:

1. LENGTH OF GROUND WIRE LEFT IN MANHOLE MUST BE AT LEAST 3'
2. GROUND WIRE SHALL BE POSITIONED/LIFTED INTO THE CONCRETE ENCASEMENT TO ENSURE COMPLETE COVERAGE

ENLARGED DRAWING

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FILE NAME = $FILE$
DATE/TIME = $DATE$
USER = $USER$

STATE OF MAINE
STEVEN M. LONGWAY
No. 13388
LICENSED
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CLIENT

CENTRAL MAINE POWER

ENGINEER

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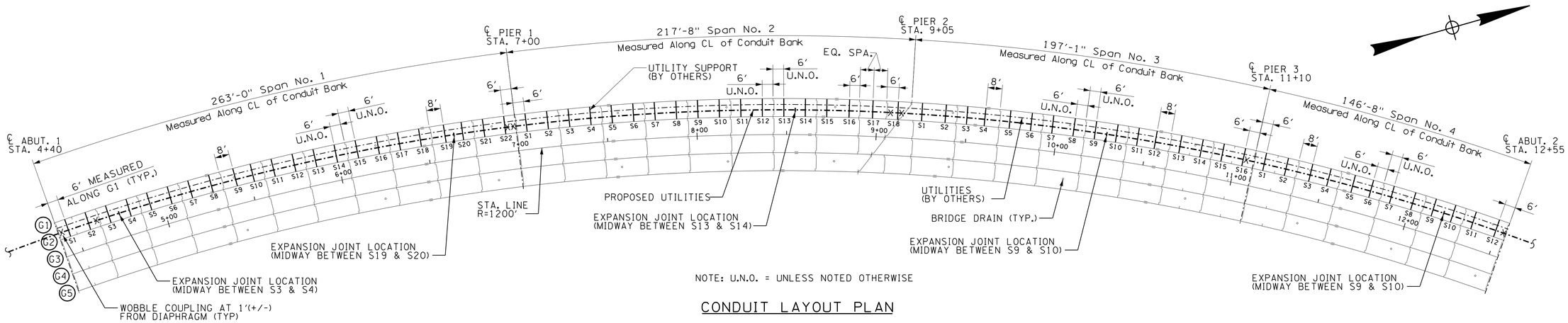
CONTRACT NO.	SHEET NO.	TOTAL SHEETS
MDOT PROJECT NO. STP-2260(300)X	11	11
FRANK J. WOOD BRIDGE OVER ANDROSCOGGIN RIVER	PROJECT NO. 2211957	
BRIDGE NO. 2016	DATE 10/04/2021	
CMP DUCT BANK	PREPARED BY ACS	
DUCT BANK CONSTRUCTION DETAILS	DRAWING NO. E-11	



NOTE: U.N.O. = UNLESS NOTED OTHERWISE

CONDUIT LAYOUT PLAN

DRAWING CONTENTS

U-1 - BRIDGE CONDUIT LAYOUT PLAN
U-2 - BRIDGE CONDUIT DETAILS
U-3 - ABUTMENT UTILITY PENETRATIONS
U-4 - BRIDGE CONDUIT PROFILE
U-5 - SOUTH APPROACH SITE PLAN
U-6 - NORTH APPROACH SITE PLAN
U-7 - SITE DETAILS

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604.158	UTILITY VAULT (GWI, COMCAST & FIRSTLIGHT)	EA	2
845.10	STRUCTURAL STEEL UTILITY SUPPORT - ELEC. & COMM.	LS	0.5
910.301	SPECIAL WORK - UTILITY CONDUIT (GWI, COMCAST & FIRSTLIGHT - BRIDGE ONLY)	LS	1
910.301	SPECIAL WORK - UTILITY CONDUIT (GWI, COMCAST & FIRSTLIGHT - APPROACH ONLY)	LS	1

BILL OF MATERIALS

ITEM NO.	COMPONENT	NO.	LENGTH	UNIT	QUANTITY
845.10	C6x10.5 STEEL STRUTS & CONNECTIONS	SEE CMP DRAWINGS			
	C7x9.8	136	4"	LBS	445
	PIPE SLEEVE (6")	4	3.0'	LF	12
	PIPE SLEEVE (6")	4	22.25'	LF	89
910.301 (BRIDGE)	4" DIA. FIBERGLASS CONDUIT	4	856'	LF	3424
	DUCT SUPPORTS	68	-	EA	68
	EXPANSION JOINTS	20	-	EA	20
	WOBBLE COUPLINGS (4")	36	-	EA	36
	WATERPROOF MORTAR	-	-	CF	13
910.301 (APPROACHES)	4" DIA. PVC CONDUIT	4	260'	LF	1040

NOTES:

1. ALL BRIDGE CONDUIT SHALL BE 4" DIAMETER, ID, SW FIBERGLASS CONDUIT.
2. ALL CONDUIT COUPLINGS, DUCT SUPPORTS, BRACING, WATERPROOF MORTAR AND OTHER MISCELLANEOUS HARDWARE ON THE BRIDGE SHALL BE INCLUDED IN THE LUMP SUM COST OF THE BRIDGE CONDUIT.
3. THESE DRAWINGS ARE BASED ON AVAILABLE BRIDGE DESIGN DRAWINGS. CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE INSTALLATION OF CONDUITS AND SUPPORTS.
4. ALL CONDUIT ON APPROACHES SHALL BE SCH. 40 PVC.
5. ALL CONNECTIONS BETWEEN DUCT SECTIONS, EXPANSION JOINTS, ADAPTERS AND COUPLINGS ARE TO BE WATERTIGHT AND SHALL MEET THE REQUIREMENTS OF THE UTILITY COMPANY.
6. CAP THE ENDS OF THE DUCTS IF UNDERGROUND PORTION OF WORK IS NOT DONE AT THE SAME TIME AS THE BRIDGE PORTION.

NO.	DATE:	DESCRIPTION
1		
2		
3		

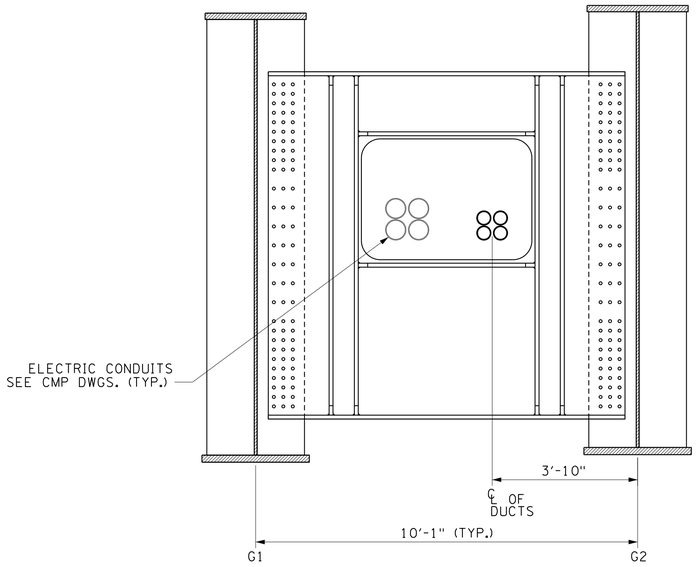
REVISIONS

DATE

T.Y. Lin
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: BRIDGE CONDUIT LAYOUT PLAN
PROJECT NAME: FRANK J. WOOD BRIDGE ANDROSCOGGIN RIVER
CLIENT: COMCAST, FIRSTLIGHT, GWI

PROJECT NO.: 412088.0X	PROJ. MGR.: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: MDM
DRAWING NO.: U-1	
SHEET NO.: 1 of 7	



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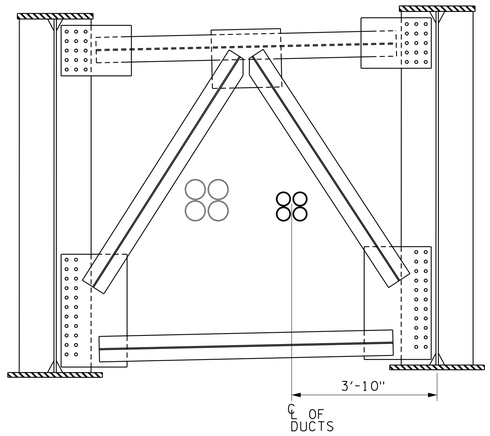
@ PIERS 1, 2 & 3



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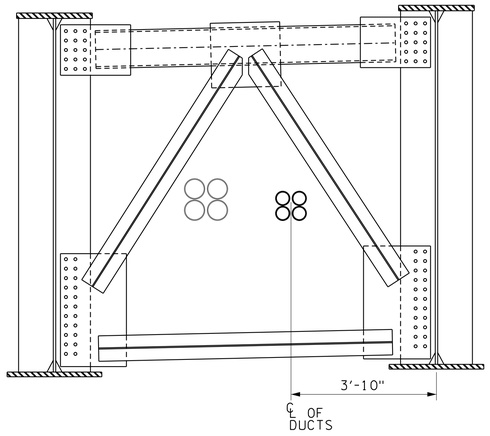

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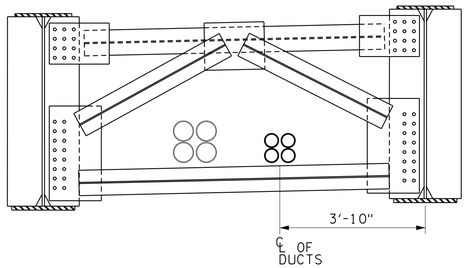
@ SPAN ABUTMENT 1



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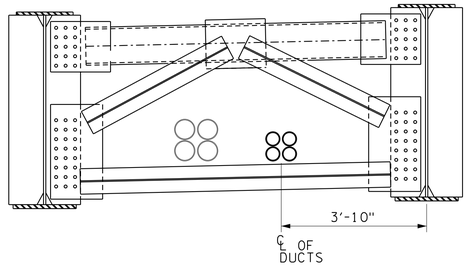

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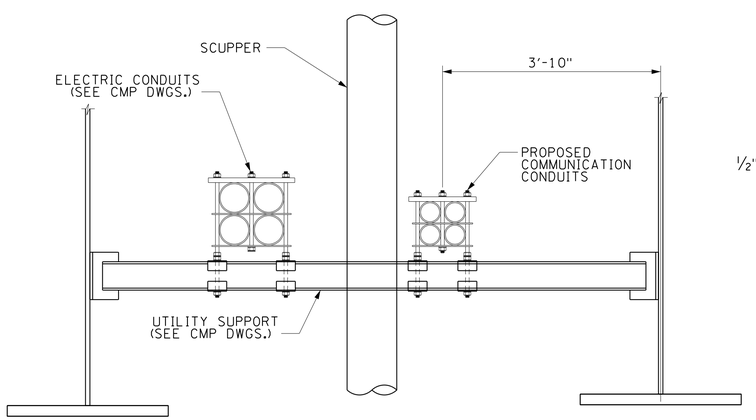
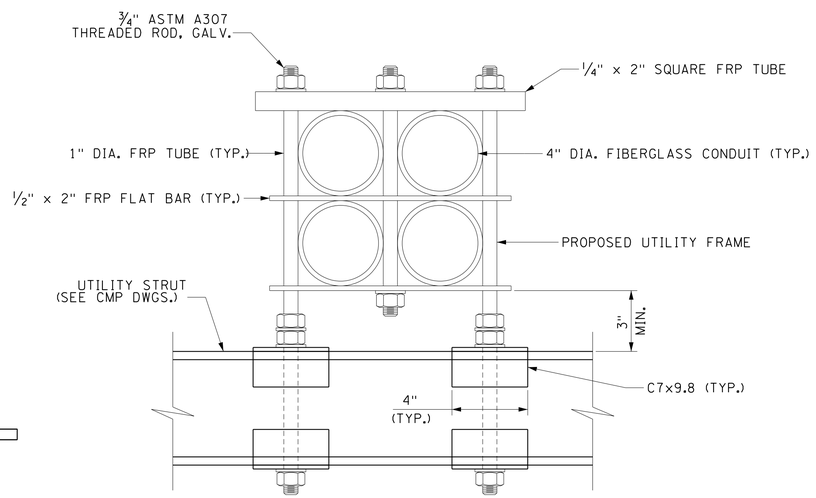


UTILITY SUPPORT ELEVATION



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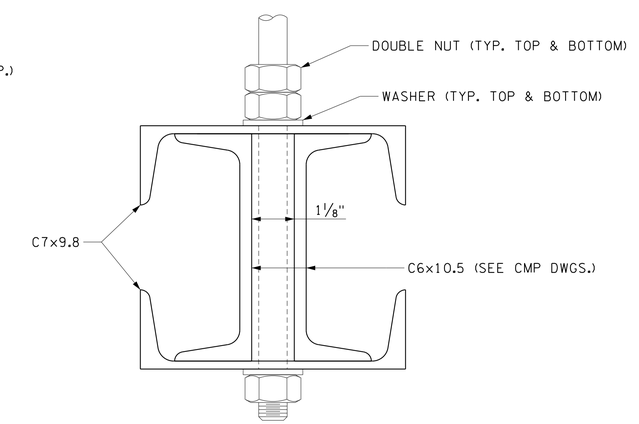


SECTION THRU UTILITY FRAME

NOTES:

1. ALL STEEL SHALL BE ASTM A709 GRADE 50 AND HOT DIPPED GALVANIZED.

NO.	DATE:	DESCRIPTION
3		
2		
1		

REVISIONS

DATE

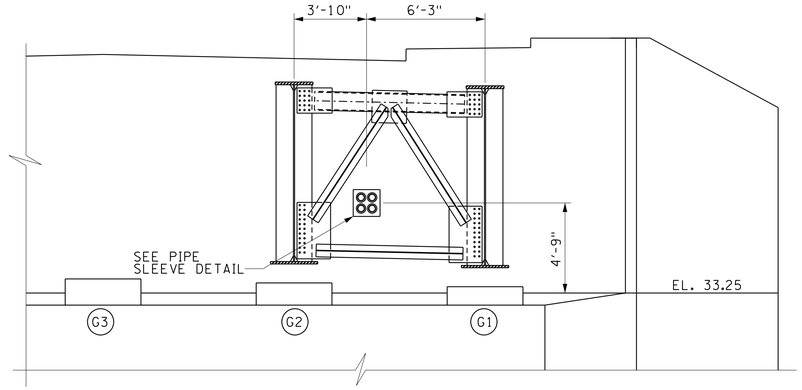
TYLin
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: BRIDGE CONDUIT DETAILS

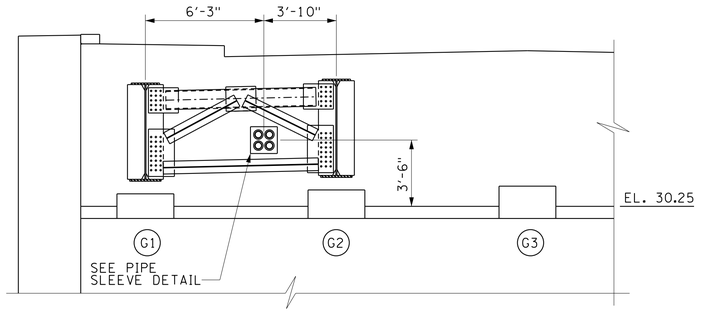
PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

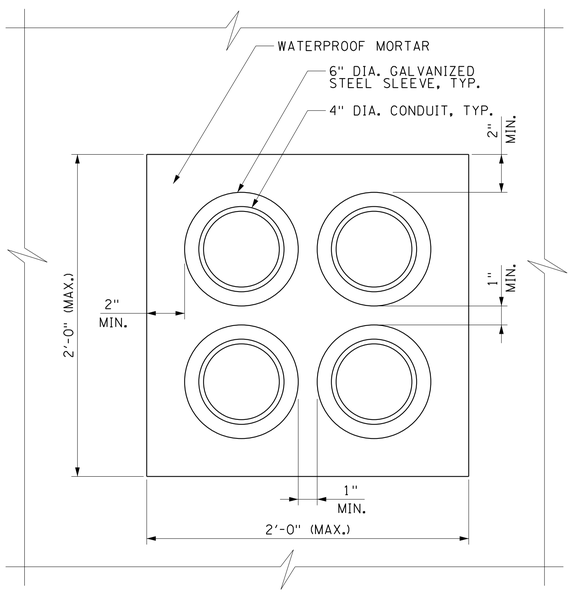
PROJECT NO: 412088.0X	PROJ. MGR: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: MDM
DRAWING NO: U-2	
SHEET NO. 2 of 7	



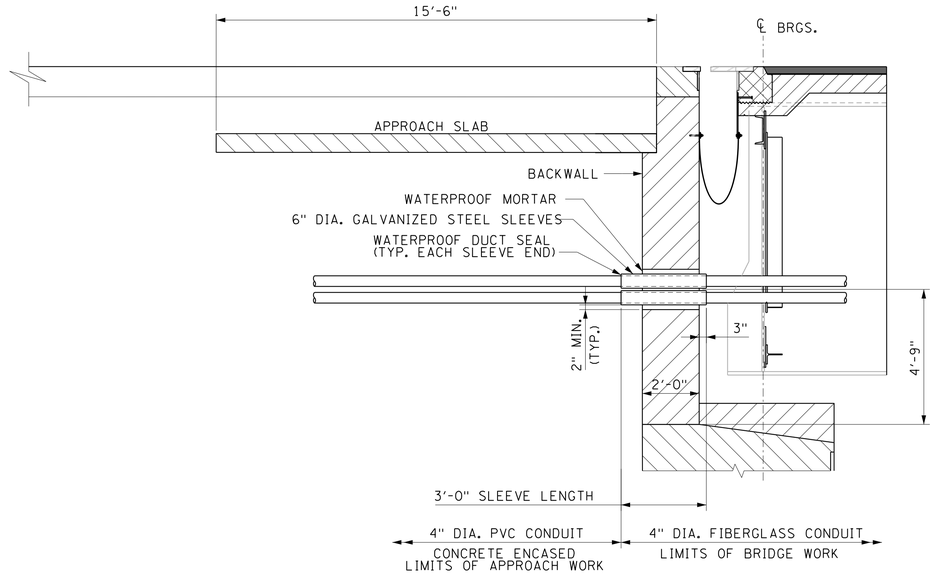
UTILITY PENETRATION ELEVATION - ABUTMENT NO. 1



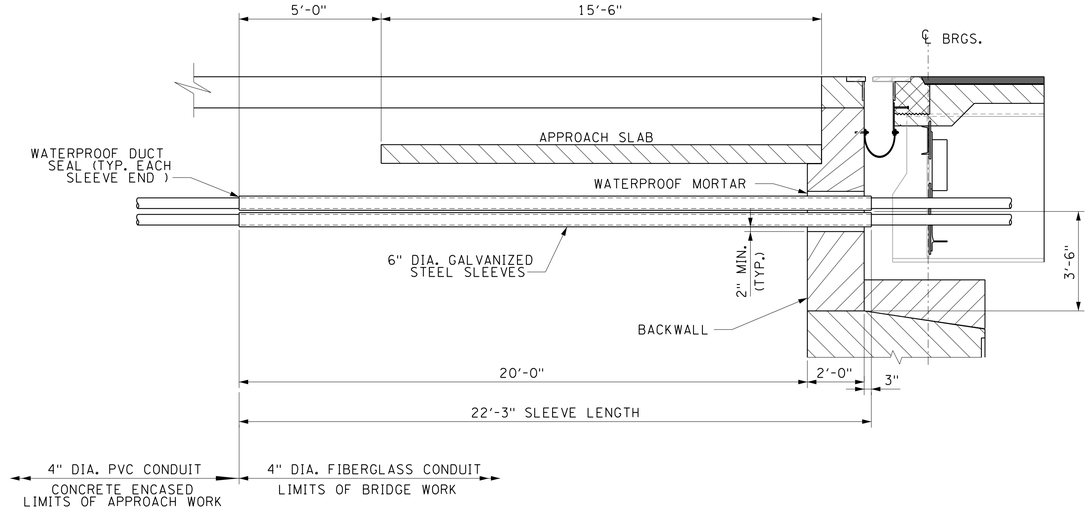
UTILITY PENETRATION ELEVATION - ABUTMENT NO. 2



PIPE SLEEVE DETAIL



SECTION THRU ABUTMENT NO. 1



SECTION THRU ABUTMENT NO. 2

NO.	DATE:	DESCRIPTION
3		
2		
1		

REVISIONS

DATE

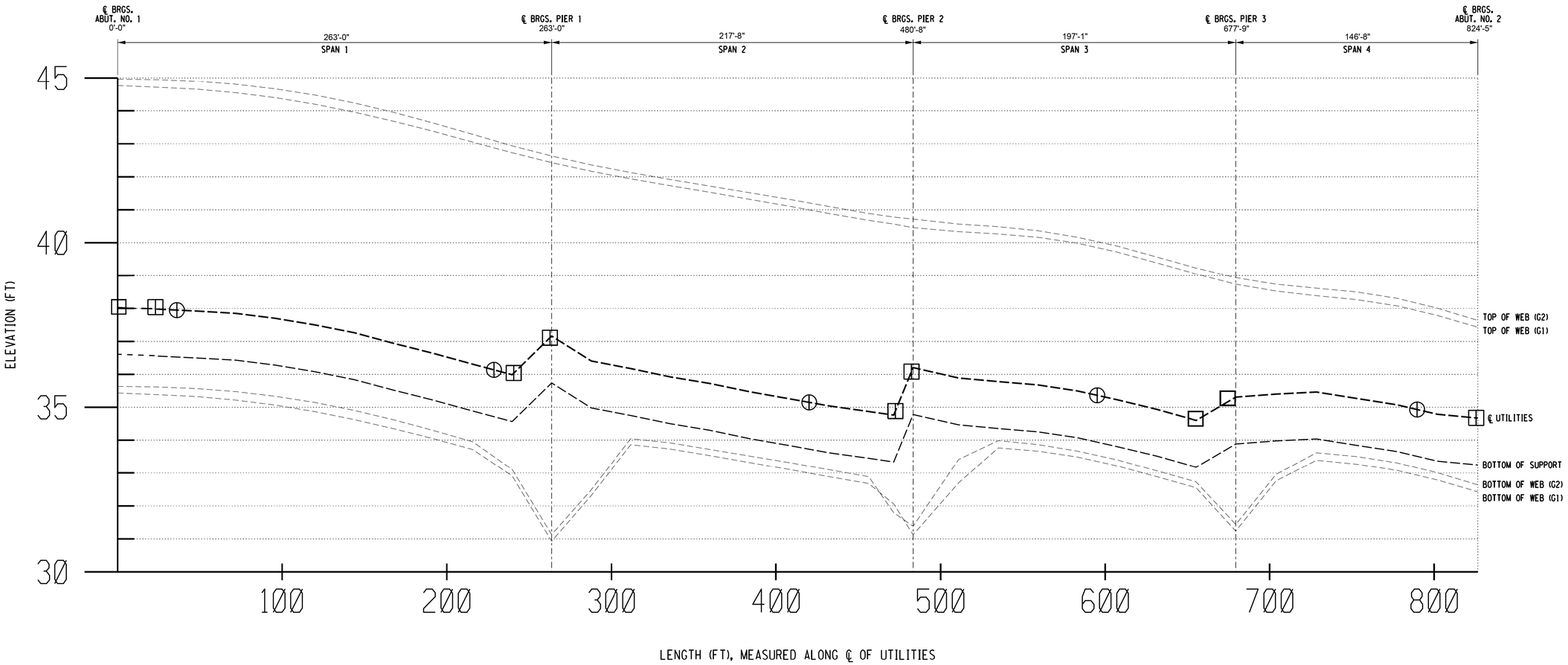
LaBella
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: ABUTMENT UTILITY PENETRATIONS

PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

PROJECT NO: 412088.0X	PROJ. MGR: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: MDM
DRAWING NO: U-3	
SHEET NO. 3 of 7	



NO.	DATE:	DESCRIPTION
3		
2		
1		

REVISIONS

DATE

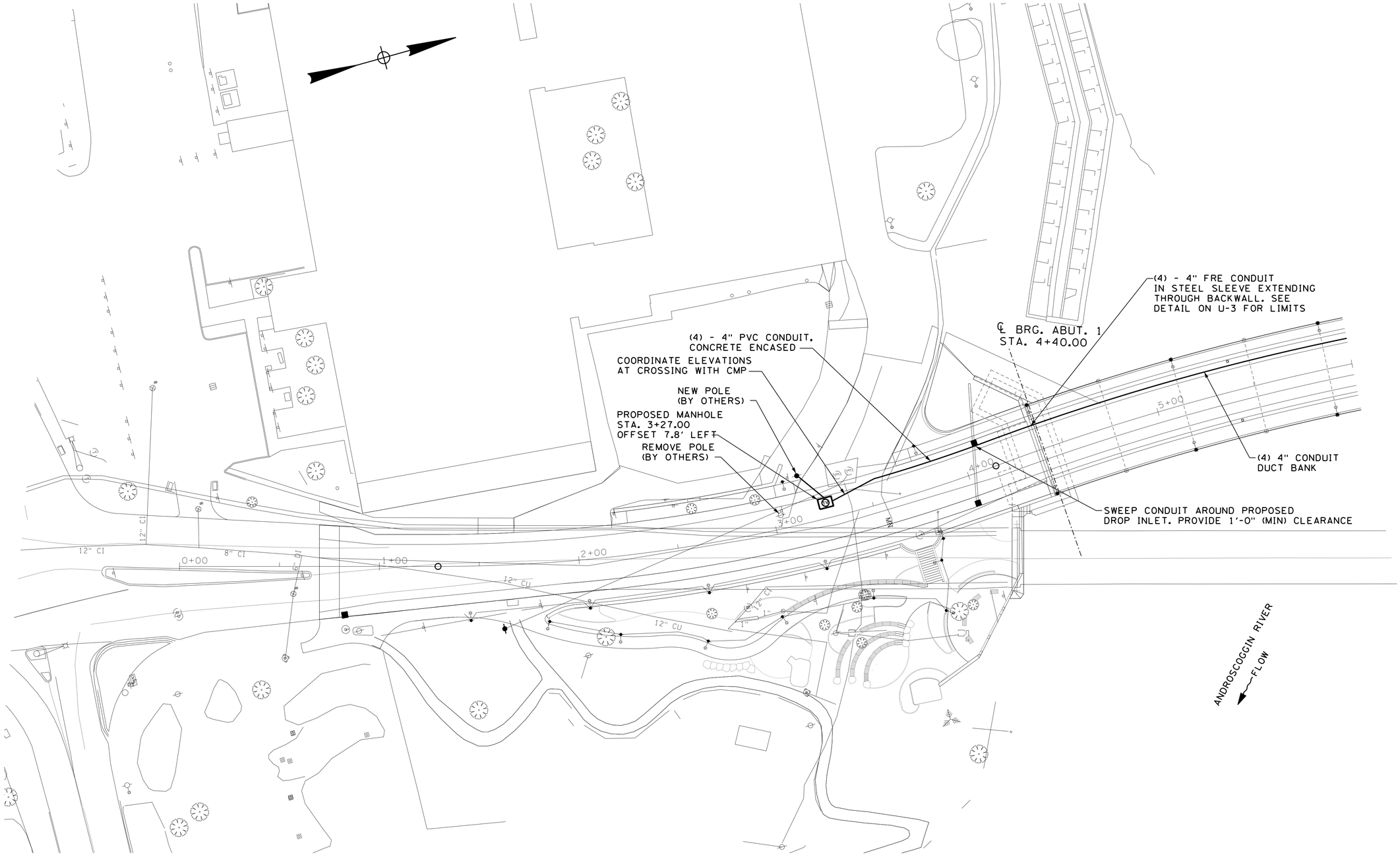
TYLin
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: BRIDGE CONDUIT PROFILE

PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

PROJECT NO.: 412088.0X	PROJ. MGR.: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: MDM
DRAWING NO.: U-4	
SHEET NO.: 4 of 7	



PLAN

25 0 25 50

SCALE OF FEET

3					
2					
1					
NO.	DATE:	DESCRIPTION			
REVISIONS					

DATE

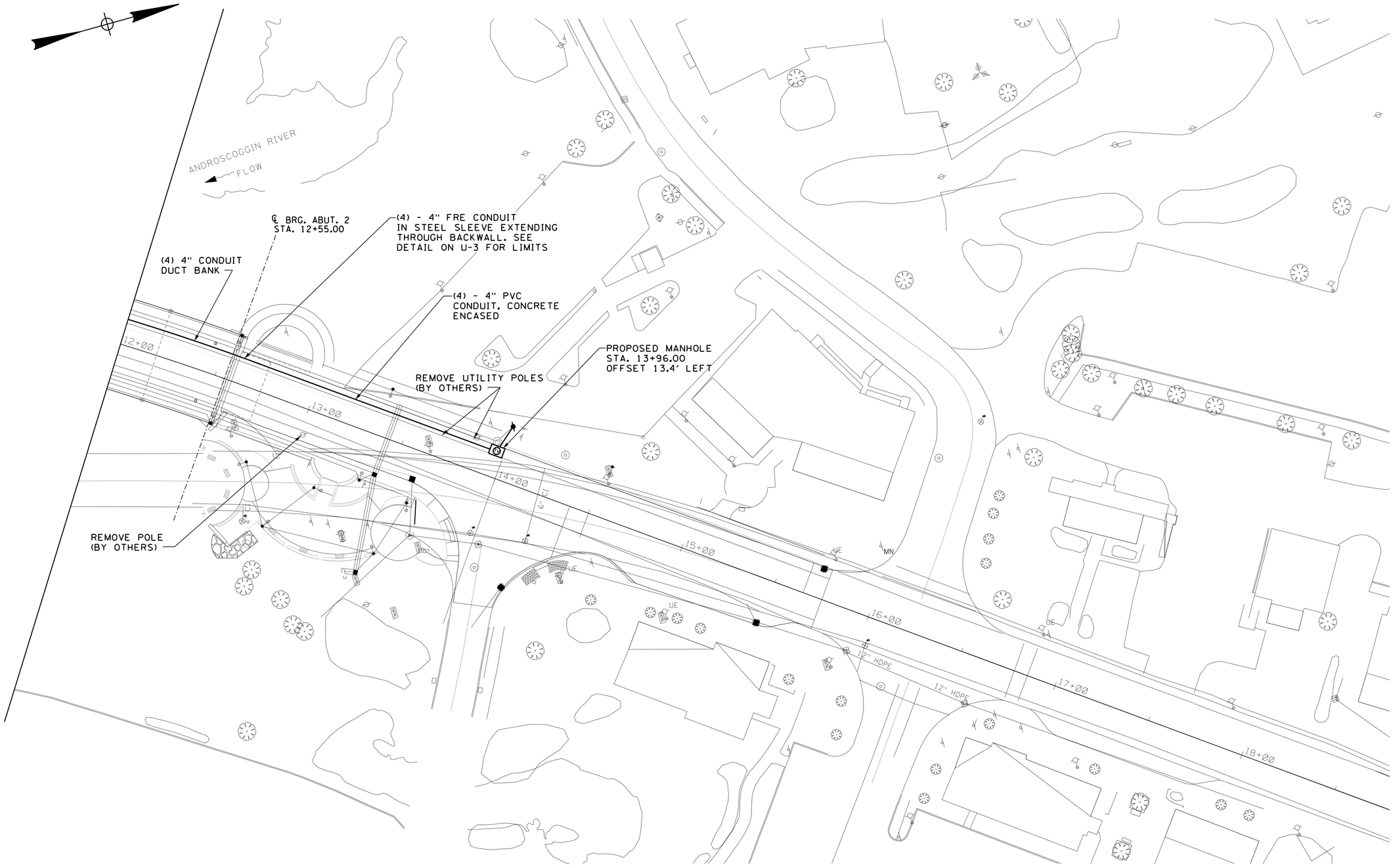
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: SOUTH APPROACH SITE PLAN

PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

PROJECT NO.: 412088.0X	PROJ. MGR.: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: JRK
DRAWING NO.: U-5	
SHEET NO.: 5 of 7	



PLAN

25 0 25 50

SCALE OF FEET

NO.	DATE:	DESCRIPTION
3		
2		
1		

REVISIONS

DATE

FirstLight

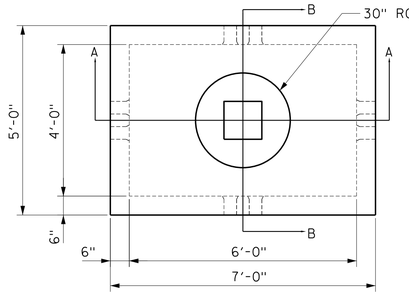
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: NORTH APPROACH SITE PLAN

PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

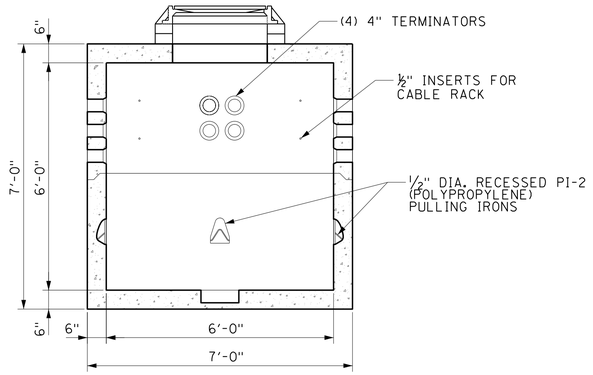
PROJECT NO.: 412088.0X	PROJ. MGR.: DB
DATE: DEC. 2021	DRWN. BY.: RPK
SCALE: AS NOTED	CHKD. BY.: JRK
DRAWING NO.: U-6	
SHEET NO.: 6 of 7	



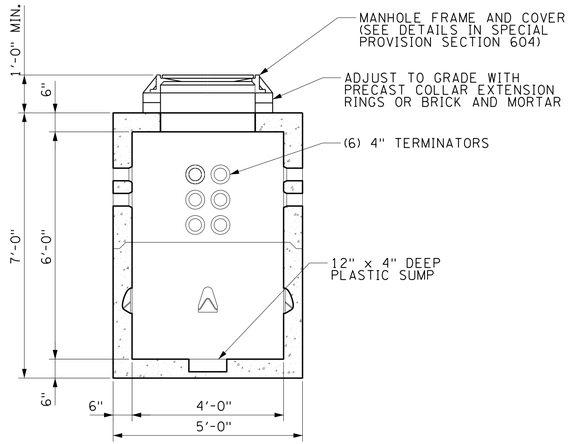
PLAN

NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN LOADING: AASHTO HS20-44, 0 TO 5 FEET COVER.
3. STEEL REINFORCEMENT CONFORMS TO ASTM A615, GRADE 60.

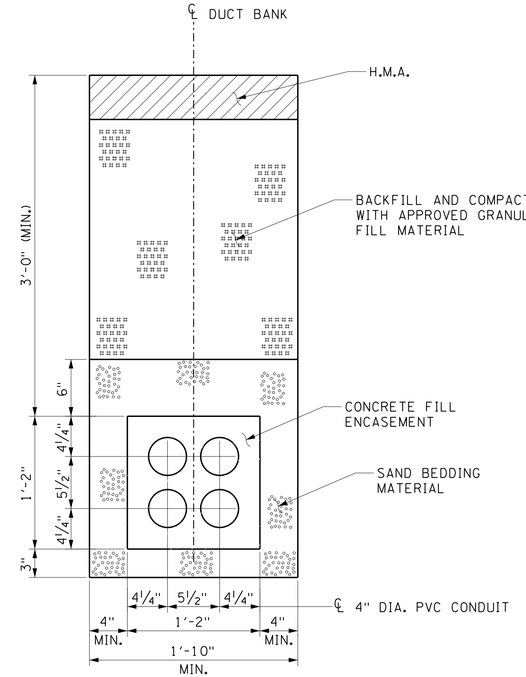


SECTION A-A
OPPOSITE SIDE SIMILAR



SECTION B-B
OPPOSITE SIDE SIMILAR

VAULT 4' X 6' X 6' (MH-466)



SECTION - APPROACH CONDUIT TRENCH

NO.	DATE	DESCRIPTION
1		
2		
3		

REVISIONS

DATE

FirstLight
255 EAST AVENUE
ROCHESTER, NY 14604
(585) 512-2000

DRAWING TITLE: SITE DETAILS

PROJECT NAME: FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER

CLIENT: COMCAST, FIRSTLIGHT, GWI

PROJECT NO: 412088.0X	PROJ. MGR: DB
DATE: DEC. 2021	DRWN. BY: RPK
SCALE: AS NOTED	CHKD. BY: JRK
DRAWING NO: U-7	
SHEET NO. 7 of 7	