

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

DESIGN LOADING

Live Load HL - 93 Modified for Strength 1

TRAFFIC DATA

Current (2020) AADT 1860
Future (2040) AADT 2050
DHV - % of AADT 10%
Design Hour Volume 205
Heavy Trucks (% of AADT) 10%
Heavy Trucks (% of DHV) 4%
Directional Distribution (% of DHV) 61%
18 kip Equivalent P 2.0 142
18 kip Equivalent P 2.5 136
Design Speed (mph) 25

HYDROLOGIC DATA

Drainage Area 1508 sq mi
Design Discharge (Q50) 32,533 cfs
Check Discharge (Q100) 35,478 cfs
Headwater Elevation (Q1.1) 194.73 ft
Headwater Elevation (Q10) 199.33 ft
Headwater Elevation (Q25) 200.44 ft
Headwater Elevation (Q50) 201.22 ft
Headwater Elevation (Q100) 201.85 ft
Discharge Velocity (Q1.1) 3.68 fps
Discharge Velocity (Q10) 5.32 fps
Discharge Velocity (Q25) 5.70 fps
Discharge Velocity (Q50) 5.97 fps
Discharge Velocity (Q100) 6.25 fps

MATERIALS

Concrete:
Curbs & Sidewalks Class "LP"
Seals Class "S"
All Other Class "A"

Reinforcing Steel:
Plain Reinforcing Steel ASTM A 615/A 615M, Grade 60
Stainless Reinforcing Steel ASTM A 955, Grade 75
Glass Fiber Reinforced Polymer (GFRP) CSA S807-10, ACI 440.1R-15

Structural Steel:
All Material (except as noted) ASTM A 709, Grade 50W (unpainted)
High Strength Bolts ASTM F 3125, Grade A325, Type 3

BASIC DESIGN STRESSES

Concrete, Class "A" $f'c = 4,000$ psi
Concrete, Class "LP" $f'c = 5,000$ psi
Plain Reinforcing Steel $f_y = 60,000$ psi
Stainless Reinforcing Steel $f_y = 75,000$ psi
Glass Fiber Reinforced Polymer:
#5 Bar $f_{fu} = 100,000$ psi
#6 Bar $f_{fu} = 100,000$ psi
#7 Bar $f_{fu} = 95,000$ psi
Minimum Elastic Modulus $E_f = 6,150,000$ psi
Minimum Nominal Design Tensile Strain $\epsilon_{fu} = 1.226\%$
Structural Steel:
ASTM A 709, Grade 50W $F_y = 50,000$ psi
ASTM F 3125, Grade A325, Type 3 $F_u = 120,000$ psi

MATTAWAMKEAG
PENOBSCOT COUNTY
MATTAWAMKEAG BRIDGE
OVER
MATTAWAMKEAG RIVER
U.S. ROUTE 2
FEDERAL AID PROJECT NO. 2262701
PROJECT LENGTH 0.190 mi.
BRIDGE NO. 2522

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
General Notes	3
General Plans	4-5
Profiles	6-7
Boring Location Plan	8
Interpretive Subsurface Profile	9
Boring Logs	10-11
Typical Sections	12
Cross Sections	13-23
Abutment No. 1	24-29
Abutment No. 2	30-35
Abutment Details	36
Pier Notes	37
Pier No. 1	38-39
Pier No. 2	40-41
Bearing Details	42
Framing Plans	43-44
Structural Steel Details	45-48
Superstructure Plans	49-50
Superstructure Reinforcing	51-52
Superstructure Details	53-54
Abutment No. 1 Finger Joint	55
Bridge Drain Details	56
Steel Approach Railing Details	57
Reinforcing Schedules	58-60
Right of Way Maps (Created under WIN 023234.00)	61-62
Sewer Replacement Plans and Details	63-69

UTILITIES

Versant Power
Fairpoint Communications
Town of Mattawamkeag
Spectrum

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one - way traffic and a separated sidewalk on a temporary bridge using temporary traffic signals.

PROJECT LOCATION:	Mattawamkeag Bridge #2522 in Mattawamkeag carrying U.S. Route 2 over Mattawamkeag River, located 0.18 miles south of Route 157 Lat./Long. 45°31'08" N 68°21'13" W
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Replacement of Mattawamkeag Bridge #2522 in Mattawamkeag with associated approach work.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: 8-21-2020
CHIEF ENGINEER: 8-18-2020

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PAUL T. GATLEY
No. 776
LICENSED PROFESSIONAL ENGINEER

PROJECT INFORMATION

PROGRAM	BRIDGE
PROJECT MANAGER	ANDREW LATHE
DESIGNER	ASHLEY STEPHENS, P.E.
CONSULTANT	HNTB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

MATTAWAMKEAG
MATTAWAMKEAG BRIDGE

TITLE SHEET

2262701

WIN 023234.01

SHEET NUMBER

1

OF 69

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.13	Removing Existing Railing Retained By Department	706	LF
202.19	Removing Existing Bridge (2432 CY)	1	LS
202.202	Removing Pavement Surface	1,450	SY
203.20	Common Excavation	2,200	CY
203.2312	Health and Safety Plan	1	LS
203.2333	Disposal/Treatment of Special Excavation	40	TON
203.25	Granular Borrow	870	CY
203.33	Special Fill - Streambed Material	12	CY
203.35	Crushed Stone ¾ Inch	262	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	2,340	CY
304.10	Aggregate Subbase Course - Gravel	1,150	CY
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Polymer Modified)	516	TON
403.209	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Sidewalks, Drives, Islands, & Incidentals)	61	TON
403.211	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)	40	TON
403.2131	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course, Polymer Modified)	370	TON
409.15	Bituminous Tack Coat, Applied	346	GAL
461.131	Temporary Pavement	220	TON
501.237	Hydroacoustic Monitoring and Attenuation	1	LS
501.239	Dynamic Loading Test - Providing For	2	EA
501.50	Steel H-Beam Piles 89 lb/ft, Delivered	979	LF
501.501	Steel H-Beam Piles 89 lb/ft, In Place	979	LF
501.90	Pile Tips	28	EA
501.91	Pile Splices	28	EA
501.92	Pile Driving Equipment Mobilization	1	LS
502.219	Structural Concrete Abutments and Retaining Walls (370 CY)	1	LS
502.239	Structural Concrete Piers (350 CY)	1	LS
502.24	Structural Concrete Piers Placed Under Water	770	CY
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (470 CY)	1	LS
502.31	Structural Concrete Approach Slab (30 CY)	1	LS
502.49	Structural Concrete Curbs and Sidewalks (130 CY)	1	LS
502.77	Fiber Reinforced Polymer Bridge Drain - Type: E	4	EA
503.12	Reinforcing Steel, Fabricated and Delivered	60,000	LB
503.13	Reinforcing Steel, Placing	60,000	LB
503.26	Stainless Steel Reinforcement, Fabricated and Delivered	44,000	LB
503.27	Stainless Steel Reinforcement, Placing	44,000	LB
504.702	Structural steel fabricated and delivered, welded (722,000 LB)	1	LS
504.71	Structural steel erection (722,000 LB)	1	LS
505.08	Shear Connectors (6,570 EA)	1	LS
507.0821	Steel Bridge Rail, 3 Bar (409 LF)	1	LS
507.0831	Steel Bridge Rail, 4 Bar (409 LF)	1	LS
508.14	High Performance Waterproofing Membrane (1,570 SY)	1	LS
510.12	Special Detour, 12 Foot Roadway With Vehicular and Pedestrian Traffic Separated	1	LS
511.07	Cofferdam: Abutment 1	1	LS
511.07	Cofferdam: Pier 1	1	LS
511.07	Cofferdam: Pier 2	1	LS
511.07	Cofferdam: Abutment 2	1	LS
512.081	French Drains (111 LF)	1	LS
515.21	Protective Coating for Concrete Surfaces (882 SY)	1	LS
520.22	Expansion Device - Compression Seal (45 LF)	1	EA
521.23	Expansion Device - Finger Joint (46 LF)	1	EA
523.52	Bearing Installation	24	EA
523.5551	Pot or Disc Bearings, Fixed	6	EA
523.5552	Pot or Disc Bearings, Expansion	18	EA
526.301	Temporary Concrete Barrier - Type I (40 LF)	1	LS
527.34	Work Zone Crash Cushions	4	UN
530.30	Glass Fiber Reinforced Polymer, Fabricated and Delivered	139,300	LF
530.31	Glass Fiber Reinforced Polymer, Placing	139,300	LF
603.179	18" Culvert Pipe Option III	160	LF
604.072	Catch Basin Type A1-C	1	EA
604.092	Catch Basin Type B1-C	1	EA
604.16	Alter Catch Basin to Manhole	1	EA
604.18	Adjusting Manhole or Catch Basin to Grade	5	EA
605.09	6" Underdrain Type B	250	LF
605.10	6" Underdrain Outlet	50	LF
606.1301	31" W-Beam Guardrail - Mid-Way Splice (Steel Post, 8" Offset Blocks, Single Faced)	260	LF
606.1304	31" W-Beam Guardrail - Mid-Way Splice (Steel Post, 8" Offset Blocks, Over 15' Radius)	25	LF
606.1305	31" W-Beam Guardrail - Mid-Way Splice Flared Terminal	3	EA
606.1721	Bridge Transition Type I	4	EA
606.259	Anchorage Assembly	1	EA
606.353	Reflectorized Flexible Guardrail Marker	8	EA
607.24	Remove and Reset Fence	25	LF
608.26	Curb Ramp Detectable Warning Field	45	SF
609.11	Vertical Curb Type I	100	LF
609.12	Vertical Curb Type I - Circular	11	LF
609.221	Terminal Curb Type I	51	LF
609.222	Terminal Curb Type I - Circular	50	LF
609.31	Curb Type 3	100	LF
609.38	Reset Curb Type I	200	LF

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
610.08	Plain Riprap	1348	CY
610.18	Stone Ditch Protection	17	CY
610.212	Streambed Rock Features	6	CY
613.319	Erosion Control Blanket	64	SY
615.07	Loam	110	CY
618.13	Seeding Method Number 1	6	UN
618.14	Seeding Method Number 2	7	UN
619.12	Mulch	12	UN
620.58	Erosion Control Geotextile	1,470	SY
620.60	Separation Geotextile	400	SY
623.10	Remove and Reset Memorial	1	LS
626.21	Metallic Conduit	20	LF
626.22	Non-metallic Conduit	420	LF
627.733	4" White or Yellow Painted Pavement Marking Line	3,050	LF
627.75	White or Yellow Pavement and Curb Marking	200	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	1,600	LF
629.05	Hand Labor, Straight Time	50	HR
631.10	Air Compressor (Including Operator)	20	HR
631.11	Air Tool (Including Operator)	20	HR
631.12	All Purpose Excavator (Including Operator)	20	HR
631.172	Truck - large (Including Operator)	20	HR
634.160	Highway Lighting	1	LS
634.210	Conventional Light Standards	4	EA
639.18	Field Office, Type A	1	EA
643.72	Temporary Traffic Signal	1	LS
645.292	Regulatory, Warning, Confirmation and Route Marker Assembly Signs Type II	17	SF
652.312	Type III Barricades	6	EA
652.33	Drum	40	EA
652.34	Cone	40	EA
652.35	Construction Signs	340	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	450	HR
656.75	Temporary Soil Erosion and Water Pollution Control	1	LS
659.10	Mobilization	1	LS

SEWER ESTIMATE			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.15	Removing Existing Manhole or Catch Basin	2	EA
202.61	Remove Storm Drain or Sewer Pipe	1	LS
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size, Polymer Modified	20	TON
604.183	Modify Existing Manhole or Catch Basin	1	EA
655.201	Electrical Work	1	LS
801.03	Test Pits	4	EA
801.071	Temporary Sewer Bypass	1	LS
812.163	Modify Sewer Manhole, Adjust Frame & Cover	3	EA
822.321	4 Inch Class 52 Ductile Iron Pipe	80	LF
822.321	4 Inch Class 52 Ductile Iron Pipe on Bridge Insulated	200	LF
822.33	6 Inch Class 52 Ductile Iron Pipe	50	LF
822.33	6 Inch Class 52 Ductile Iron Pipe on Bridge Insulated	230	LF
822.38	Sewer Force Main Relocation Sta. 2+00	1	EA
823.3411	Air Release Valve, Manual Release System	1	LS
827.302	Unsuitable Soil Excavation - Below Grade	50	CY
827.331	Trench Insulation, 2" Rigid	300	SY
832.07	Owners Testing Allowance	1	LS



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701
WIN
023234.01
BRIDGE NO. 2522
BRIDGE PLANS

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
ESTIMATED QUANTITIES

SHEET NUMBER
2
OF 69

GENERAL CONSTRUCTION NOTES

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

2. For easements, construction limits and right of way lines, refer to Right of Way Maps.

3. Place a 24" wide strip of Temporary Erosion Control Blanket on the sideslopes along the top of riprap and behind the wingwalls.

4. Unless otherwise noted, all embankment material placed below EL 201.22 and beyond the abutment backfill limits shown on the "Abutment Details" sheet shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Material for Underwater Backfill.

5. The clearing limits as shown on the Plans are approximate. The exact limits will be established in the field by the Resident. Single trees and stump removal shall be considered clearing. Payment for clearing will be considered incidental to Contract Items.

6. Clearing limits shall be 10' beyond and parallel to the construction slope lines or as shown on the plans unless otherwise authorized by the Resident.

7. Loam shall be placed to a nominal depth of 2" on all new or reconstructed sideslopes or as directed by the Resident.

8. A MASH Compliant guardrail end treatment shall be installed concurrently with the placement of each section of end beam guardrail.

9. Extended Use Erosion Control Blankets, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion. Payment will be made under the appropriate Contract Items.

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

All exposed surfaces of concrete curbs and sidewalks,
Fascias down to the drip notch,
Top of abutment backwalls and to one foot below the top of
backwalls on the back side, wingwalls top face and roadway face
to one foot below roadway grade.

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

12. 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 lifespan.

13. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on the designer'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.

14. The project geotechnical report titled: Geotechnical Design Report, Mattawamkeag Bridge No. 2522, Route 2 over Mattawamkeag River, MaineDOT WIN 23234.01, Mattawamkeag, Maine, dated July 10, 2020 may be accessed at the MaineDOT web address.

15. 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 Bidder's or Contractor's interpretations 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 boring locations.

16. 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 MaineDOT provided estimated quantities, except as follows:

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

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

c. If a design change results in changes to estimated quantities for Lump Sum pay items, price and adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.

17. No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.

18. Paved entrances shall be constructed with 2" hot mix asphalt and 12" Aggregate Subbase Course Gravel.

19. Remove and reset, and remove and dispose of signs shall be performed in accordance with section 645 - Highway Signing and as directed by the Resident. Payment will be incidental to related Contract Items.

20. All existing Type I curb deemed to be in good condition by the Resident shown to be removed and reset shall be placed in the proposed locations before any new Type I curb is placed.

21. ROW maps were created under WIN 023234.00.

22. Temporary pavement ramps shall be constructed to meet the following criteria:

a. For roadways with speed limits equaling or exceeding 50 mph, temporary ramps shall be constructed at a length of eight feet per inch of transition depth.

b. For roadways with speed limits less than 50 mph, temporary ramps shall be constructed at a length of four feet per inch of transition depth.

c. Materials, placement, maintenance, and removal shall be incidental to contract items.

23. Temporary pavement installed to protect FRP drains shall be installed for the full length and width of the shoulders.

BRIDGE LIGHTING NOTES

1. Scope of work: install lighting on bridge as shown on these plans. Re-install existing lighting control cabinet and install new conduit, wiring, light standards, LED luminaires and related hardware.

2. The Contractor shall notify utility companies at least 48 hours before any operations are conducted that potentially could conflict with aerial utilities.

3. Re-install existing lighting control cabinet next to proposed stub pole at Sta. 13+80.00 Rt. Lighting control cabinet shall be co-located with sewer force main control cabinets. See sheets C-3, C-5 and E-1 for additional details.

4. Fixture voltage shall be 120 volts.

5. All exposed steel fittings and hardware shall be galvanized except non-conductive bushings, which shall be used for connection of rigid metal conduit to aluminum cabinets.

6. All conduit within bridge sidewalk or buried off the bridge shall be 2" PVC schedule 40 conduit and all buried conduit under pavement shall be 2" PVC schedule 80 conduit installed via directional drilling. All exposed conduit shall be galvanized rigid metal conduit.

7. Pull wire shall be installed in all conduit and payment shall be considered incidental to 626 items.

8. All galvanized rigid metal conduit threads shall have non-metallic insulated bushing. Payment shall be considered incidental to Item 626.21 Metallic Conduit.

9. All secondary lighting circuit wiring shall be #10 AWG or larger THWN stranded copper.

10. Light standards shall be 28' round tapered aluminum 4-bolt anchor base poles. Pole base diameter shall be 8" minimum. Taper rate shall be approximately 0.14 in./ft. Wall thickness shall be determined by the manufacturer, subject to approval of MaineDOT, based on calculations done in accordance with the latest revision of AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals".

11. All lighting fixtures shall be gasketed, and shall have surge protection, a double fuse kit. Payment shall be considered incidental to the 634 items.

12. Lighting fixtures on conventional light standards shall be attached with a minimum length horizontal arm at the top of light standard. The arm shall be 2" nominal diameter. Mounting height shall be 29' above road grade, unless otherwise noted. Orientation shall be as indicated on the plans.

13. Luminaires on conventional light standards shall be IES full cutoff light emitting diode (LED) fixtures, IES Distribution Type 2. LED modules shall be ip66 rated. Luminaires shall be American Electric Lighting "autobahn" series ATB0 fixtures. Catalog Numbers: ATB0 20BLEDE53 MVOLT R2 4K BK X X UMR-XX A0.

14. All field wiring shall be neatly bundled and clearly identified with permanent, legible, weatherproof tags securely attached to each cable.

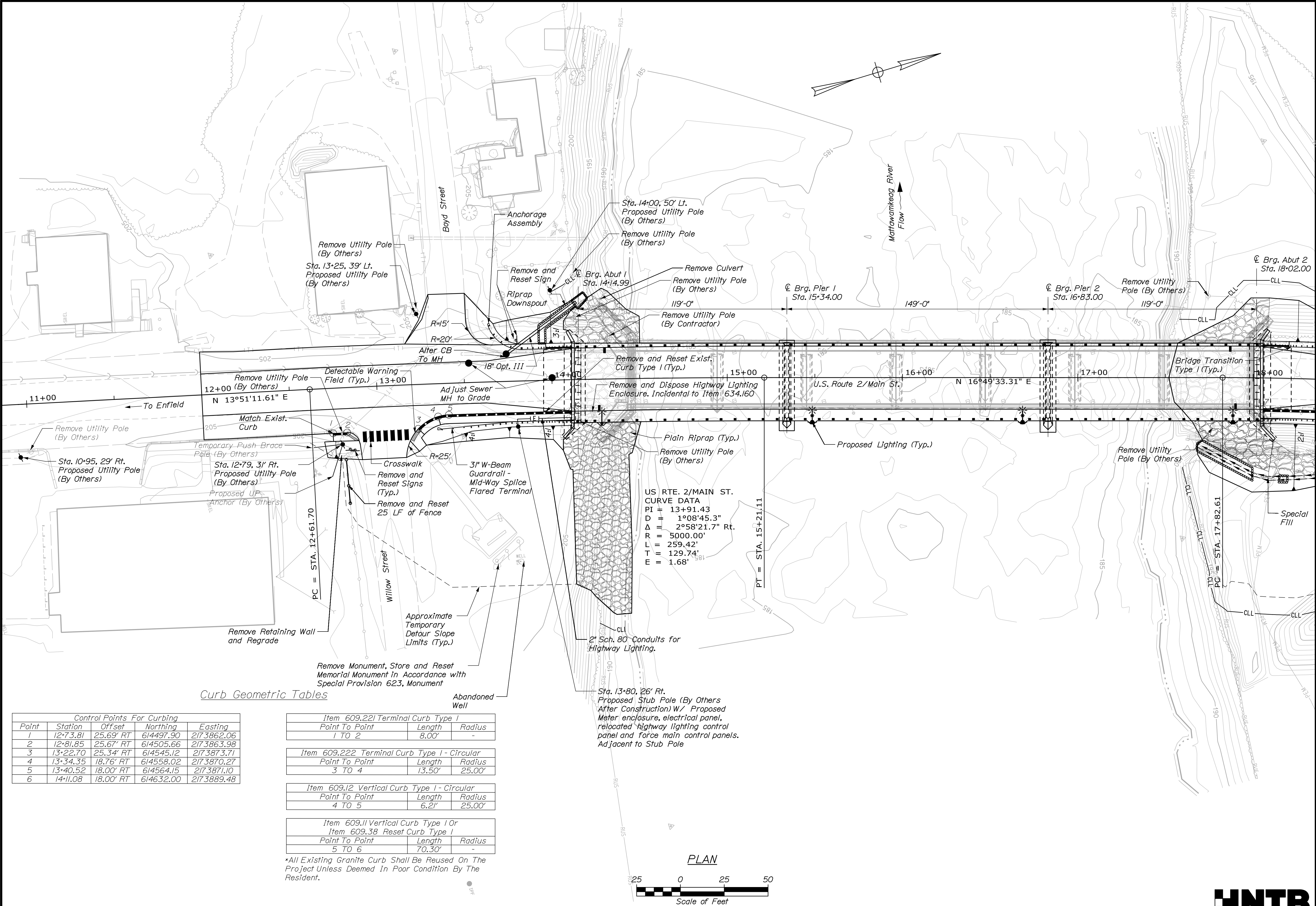
15. Upon completion of this project, the contractor shall furnish to MaineDOT a set of as-built lighting plans for future reference and system maintenance. This work shall be considered incidental to Item 634.160 Highway Lighting.

Date:7/15/2020

Username:

Division:

Filename: 004_General Plan_01.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701

WIN
023234.01
BRIDGE NO. 2522
BRIDGE PLANS

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY

GENERAL PLAN 1

SHEET NUMBER
4
OF 69

HNTB

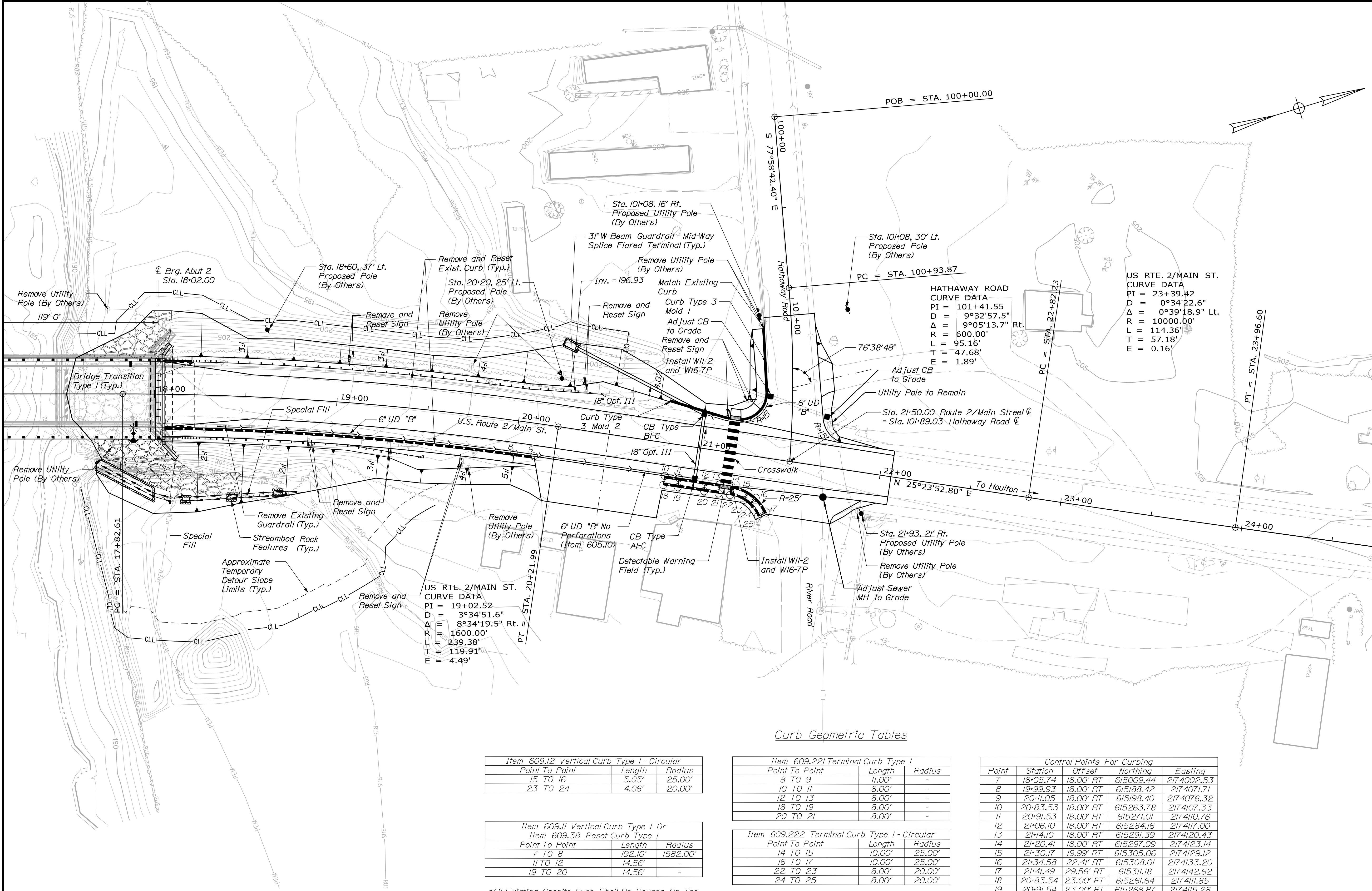
PROJ. MANAGER	ANDY LATHE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	C. HENCK	P. BISHOP	7/20			
CHECKED-REVIEWED	L. DRISCOLL	A. STEPHENS	7/20			
DESIGN-DETAILED						
DESIGN-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

Date: 8/11/2020

Username:

Division:

Filename: 005_General Plan_02.dgn



Curb Geometric Tables

Item 609.12 Vertical Curb Type I - Circular			
Point To Point	Length	Radius	
15 TO 16	5.05'	25.00'	
23 TO 24	4.06'	20.00'	

Item 609.11 Vertical Curb Type I Or Item 609.38 Reset Curb Type I		
Point To Point	Length	Radius
7 TO 8	192.10'	1582.00'
11 TO 12	14.56'	-
19 TO 20	14.56'	-

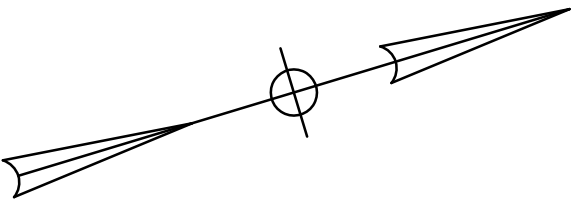
Item 609.221 Terminal Curb Type I			
Point To Point	Length	Radius	
8 TO 9	11.00'	-	
10 TO 11	8.00'	-	
12 TO 13	8.00'	-	
18 TO 19	8.00'	-	
20 TO 21	8.00'	-	

Item 609.222 Terminal Curb Type I - Circular			
Point To Point	Length	Radius	
14 TO 15	10.00'	25.00'	
16 TO 17	10.00'	25.00'	
22 TO 23	8.00'	20.00'	
24 TO 25	8.00'	20.00'	

Control Points For Curbing				
Point	Station	Offset	Northing	Easting
7	18+05.74	18.00' RT	615009.44	2174002.53
8	19+99.93	18.00' RT	615188.42	2174071.71
9	20+11.05	18.00' RT	615198.40	2174076.32
10	20+83.53	18.00' RT	615263.78	2174107.33
11	20+91.53	18.00' RT	615271.01	2174110.76
12	21+06.10	18.00' RT	615284.16	2174117.00
13	21+14.10	18.00' RT	615291.39	2174120.43
14	21+20.41	18.00' RT	615297.09	2174123.14
15	21+30.17	19.99' RT	615305.06	2174129.12
16	21+34.58	22.41' RT	615308.01	2174133.20
17	21+41.49	29.56' RT	615311.18	2174142.62
18	20+83.54	23.00' RT	615261.64	2174111.85
19	20+91.54	23.00' RT	615268.87	2174115.28
20	21+06.10	23.00' RT	615282.02	2174121.53
21	21+14.10	23.00' RT	615289.25	2174124.96
22	21+20.42	23.00' RT	615294.96	2174127.66
23	21+28.20	24.58' RT	615301.31	2174132.42
24	21+31.76	26.52' RT	615303.69	2174135.71
25	21+37.28	32.25' RT	615306.22	2174143.25

*All Existing Granite Curb Shall Be Reused On The Project Unless Deemed In Poor Condition By The Resident.

PLAN



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
GENERAL PLAN 2

SHEET NUMBER
5
OF 69

PROJ. MANAGER
ANDY LATHE
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

DATE
7/20
7/20

BY
P. Bishop
A. Stephens

SIGNATURE

P.E. NUMBER

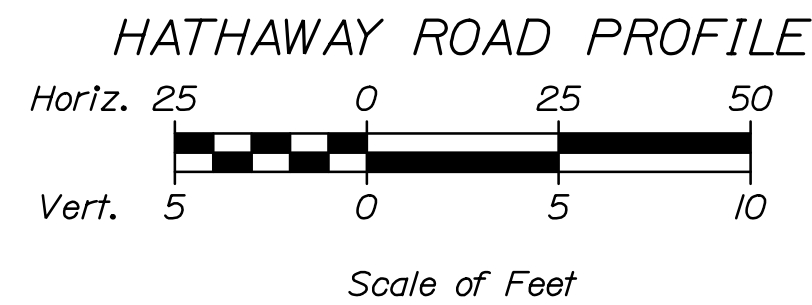
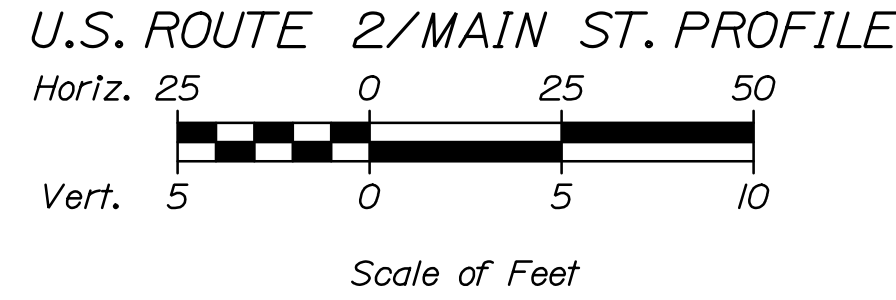
DATE

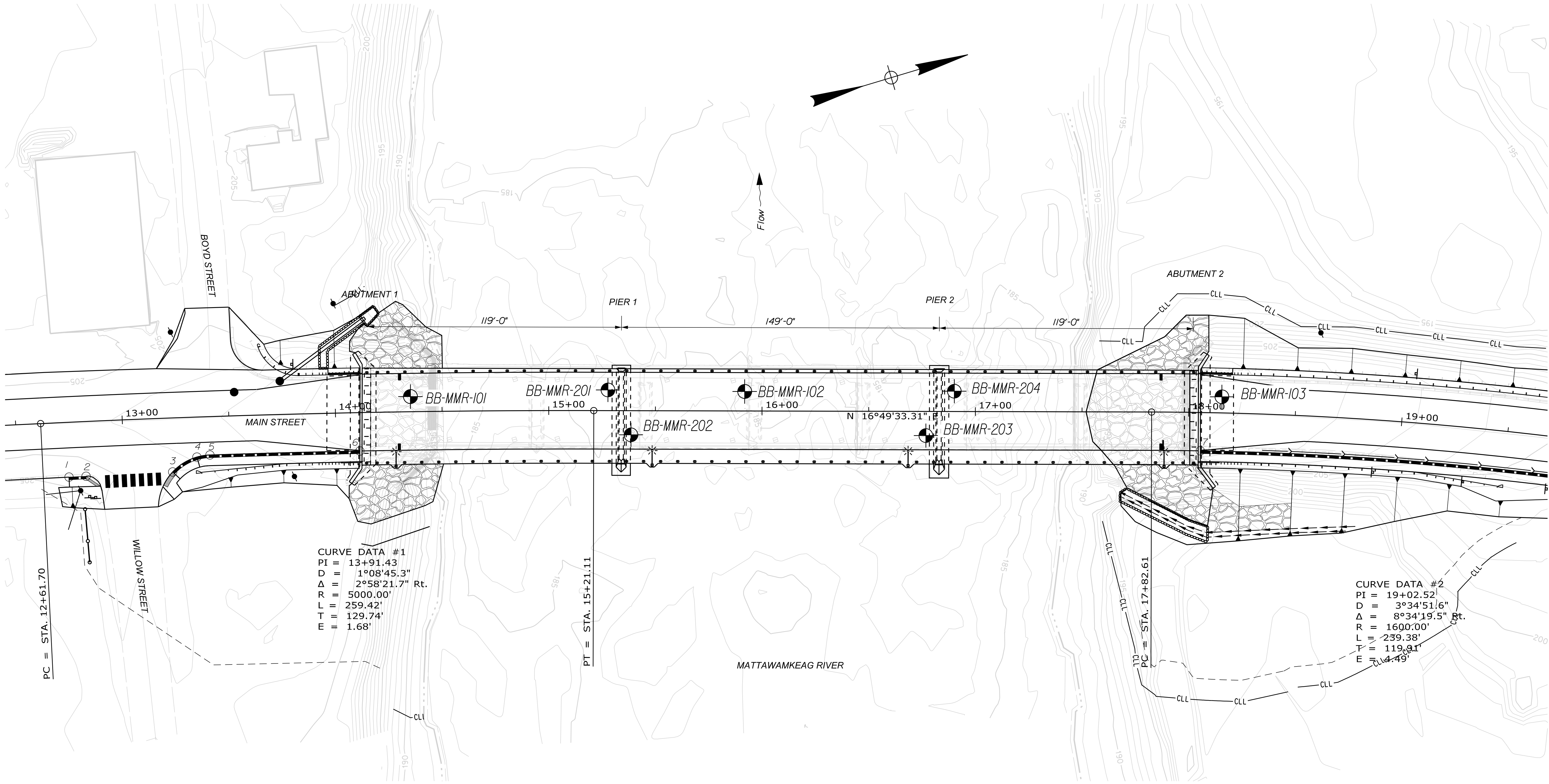
BRIDGE NO. 2522

WIN
023234.01

BRIDGE PLANS

Filename: 007_Profile.dan





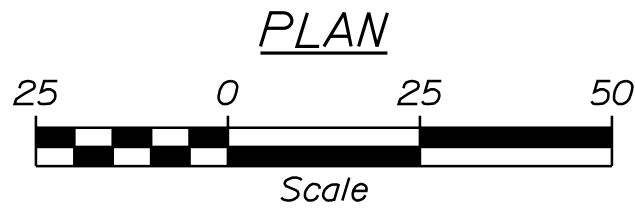
NOTES

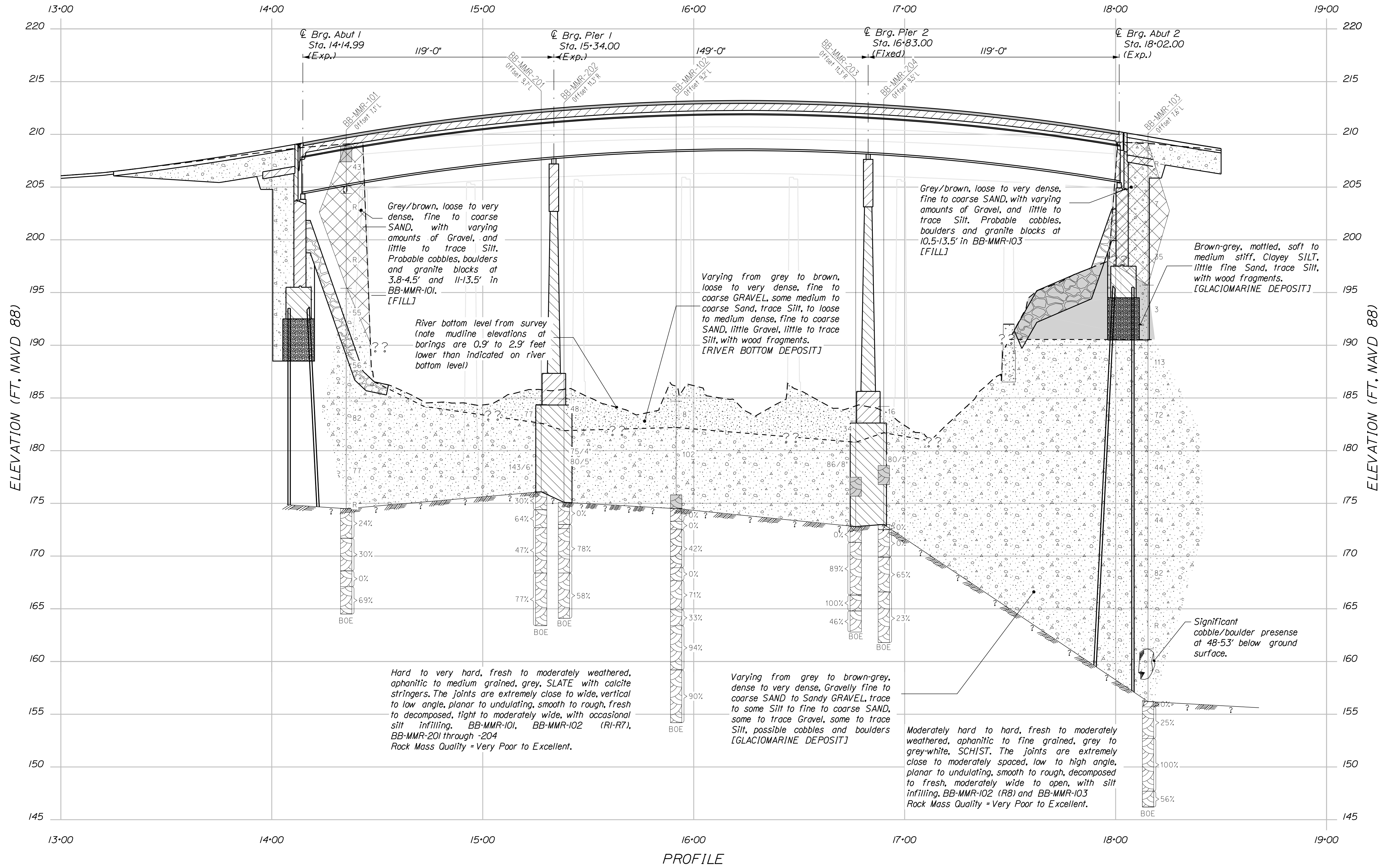
1) Base map developed from electronic files (Alignment.dgn, Bridge.dgn, Highway.dgn, Contours.dgn, Plan.dgn, Points.dgn, and Topo.dgn) provided by HNTB on April 22, 2019, May 6, 2019, and May 1, 2020.

2) The as-drilled locations of the borings were surveyed by a MaineDOT survey crew and provided to GZA in an electronic file (Borings.dgn).

BORING LOCATION PLAN LEGEND

- BB-MMR-103 Indicates borings performed by New England Boring Contractors of Hermon, Maine between May 22, and 24, 2018 and observed by GZA personnel.
- BB-MMR-204 Indicates borings performed by New England Boring Contractors of Hermon, Maine between September 25, and October 1, 2019 and observed by GZA personnel.

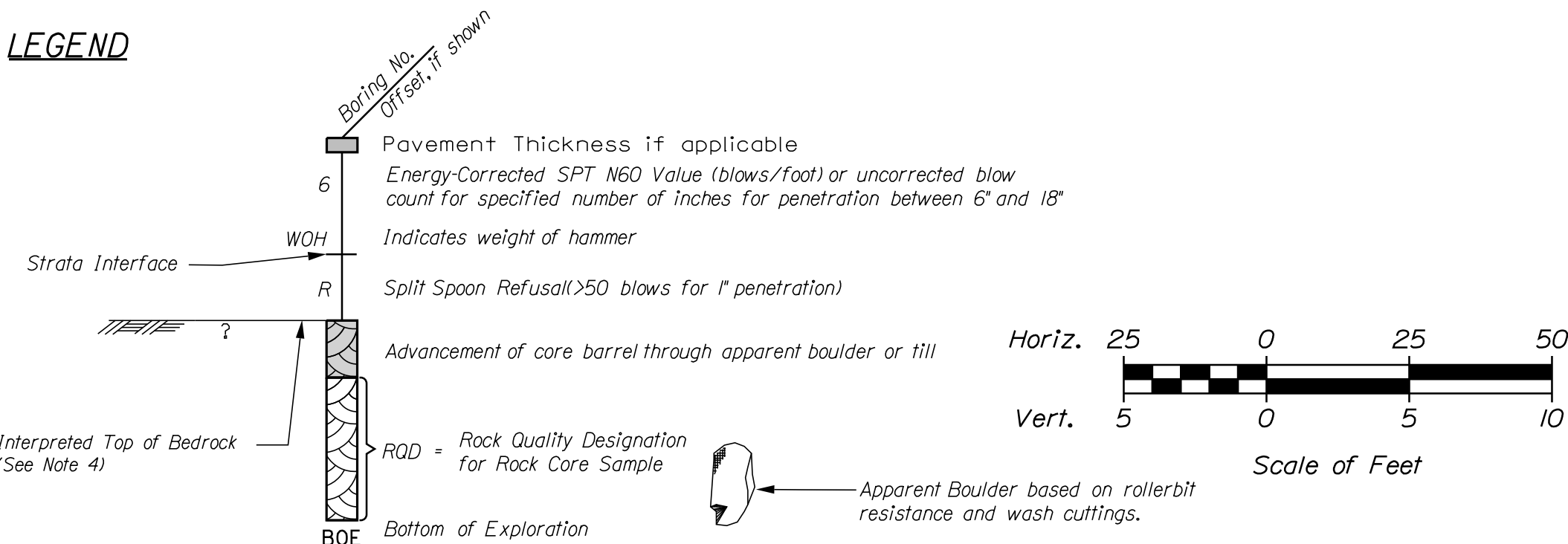




NOTES

- 1) Base map developed from electronic files provided by HNTB on May 1, 2020 (File included Profile.dgn)
- 2) The as-drilled boring locations were surveyed by a MaineDOT survey crew and provided to GZA in an electronic file (Borings.dgn).
- 3) BB-MMR-100 and BB-MMR-200 series bridge borings were performed by New England Boring Contractors and observed by GZA personnel between May 22 and 24, 2018 and September 25 to October 1, 2019 respectively.
- 4) 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 rock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

LEGEND



Maine Department of Transportation				Project: Mattawaqueog Bridge #232 Route 2 Over Mattawaqueog River Mattawaqueog, Maine		Boring No.: BB-MMR-101	
Soil/Rock Exploration Log US CUSTOMARY UNITS				Location:		WIN: 23234.00	
Driller: New England Boring Contractors				Elevation (ft.): 208.9		Ager D/OD: SSA	
Operator: Brod Evans				Datum: NAD83 BS		Sampler: Standard Split Spoon	
Logged By: E. Friesle				Rig Type: Mobile B-53		Hammer: W/F/gli	
Date Start/Finish: 5-22-18 / 5-22-18				Drilling Method: Spl & Wash		Core Barrel: NO	
Boring Location: NH4662.0, E2173671.8				Casing D/OD: 5/5.5", 4/4.5", 3/3.5"		Water Level: 10.4	
Penetration Efficiency Factor: 0.677				Automatic ☐ Hydraulic ☐ Pump & Control ☐			
Options: C-1 - Soil Seal Sample M-1 - Unconsolidated Soil Sample Attempt N-1 - New Well Log Series M-1 - Unconsolidated Fine Sand Test Sample Attempt M-1 - Fine Sand Seal Test M-1 - Rock Seal Test M-1 - Rock Seal Test				S-1 - Rock Core Sample S-2 - Solid Stem Auger S-3 - Hollow Stem Auger S-4 - Hollow Stem Auger S-5 - Hollow Stem Auger S-6 - Hollow Stem Auger S-7 - Hollow Stem Auger S-8 - Hollow Stem Auger S-9 - Hollow Stem Auger S-10 - Hollow Stem Auger S-11 - Hollow Stem Auger S-12 - Hollow Stem Auger S-13 - Hollow Stem Auger S-14 - Hollow Stem Auger S-15 - Hollow Stem Auger S-16 - Hollow Stem Auger S-17 - Hollow Stem Auger S-18 - Hollow Stem Auger S-19 - Hollow Stem Auger S-20 - Hollow Stem Auger S-21 - Hollow Stem Auger S-22 - Hollow Stem Auger S-23 - Hollow Stem Auger S-24 - Hollow Stem Auger S-25 - Hollow Stem Auger S-26 - Hollow Stem Auger S-27 - Hollow Stem Auger S-28 - Hollow Stem Auger S-29 - Hollow Stem Auger S-30 - Hollow Stem Auger S-31 - Hollow Stem Auger S-32 - Hollow Stem Auger S-33 - Hollow Stem Auger S-34 - Hollow Stem Auger S-35 - Hollow Stem Auger S-36 - Hollow Stem Auger S-37 - Hollow Stem Auger S-38 - Hollow Stem Auger S-39 - Hollow Stem Auger S-40 - Hollow Stem Auger S-41 - Hollow Stem Auger S-42 - Hollow Stem Auger S-43 - Hollow Stem Auger S-44 - Hollow Stem Auger S-45 - Hollow Stem Auger S-46 - Hollow Stem Auger S-47 - Hollow Stem Auger S-48 - Hollow Stem Auger S-49 - Hollow Stem Auger S-50 - Hollow Stem Auger S-51 - Hollow Stem Auger S-52 - Hollow Stem Auger S-53 - Hollow Stem Auger S-54 - Hollow Stem Auger S-55 - Hollow Stem Auger S-56 - Hollow Stem Auger S-57 - Hollow Stem Auger S-58 - Hollow Stem Auger S-59 - Hollow Stem Auger S-60 - Hollow Stem Auger S-61 - Hollow Stem Auger S-62 - Hollow Stem Auger S-63 - Hollow Stem Auger S-64 - Hollow Stem Auger S-65 - Hollow Stem Auger S-66 - Hollow Stem Auger S-67 - Hollow Stem Auger S-68 - Hollow Stem Auger S-69 - Hollow Stem Auger S-70 - Hollow Stem Auger S-71 - Hollow Stem Auger S-72 - Hollow Stem Auger S-73 - Hollow Stem Auger S-74 - Hollow Stem Auger S-75 - Hollow Stem Auger S-76 - Hollow Stem Auger S-77 - Hollow Stem Auger S-78 - Hollow Stem Auger S-79 - Hollow Stem Auger S-80 - Hollow Stem Auger S-81 - Hollow Stem Auger S-82 - Hollow Stem Auger S-83 - Hollow Stem Auger S-84 - Hollow Stem Auger S-85 - Hollow Stem Auger S-86 - Hollow Stem Auger S-87 - Hollow Stem Auger S-88 - Hollow Stem Auger S-89 - Hollow Stem Auger S-90 - Hollow Stem Auger S-91 - Hollow Stem Auger S-92 - Hollow Stem Auger S-93 - Hollow Stem Auger S-94 - Hollow Stem Auger S-95 - Hollow Stem Auger S-96 - Hollow Stem Auger S-97 - Hollow Stem Auger S-98 - Hollow Stem Auger S-99 - Hollow Stem Auger S-100 - Hollow Stem Auger S-101 - Hollow Stem Auger S-102 - Hollow Stem Auger S-103 - Hollow Stem Auger S-104 - Hollow Stem Auger S-105 - Hollow Stem Auger S-106 - Hollow Stem Auger S-107 - Hollow Stem Auger S-108 - Hollow Stem Auger S-109 - Hollow Stem Auger S-110 - Hollow Stem Auger S-111 - Hollow Stem Auger S-112 - Hollow Stem Auger S-113 - Hollow Stem Auger S-114 - Hollow Stem Auger S-115 - Hollow Stem Auger S-116 - Hollow Stem Auger S-117 - Hollow Stem Auger S-118 - Hollow Stem Auger S-119 - Hollow Stem Auger S-120 - Hollow Stem Auger S-121 - Hollow Stem Auger S-122 - Hollow Stem Auger S-123 - Hollow Stem Auger S-124 - Hollow Stem Auger S-125 - Hollow Stem Auger S-126 - Hollow Stem Auger S-127 - Hollow Stem Auger S-128 - Hollow Stem Auger S-129 - Hollow Stem Auger S-130 - Hollow Stem Auger S-131 - Hollow Stem Auger S-132 - Hollow Stem Auger S-133 - Hollow Stem Auger S-134 - Hollow Stem Auger S-135 - Hollow Stem Auger S-136 - Hollow Stem Auger S-137 - Hollow Stem Auger S-138 - Hollow Stem Auger S-139 - Hollow Stem Auger S-140 - Hollow Stem Auger S-141 - Hollow Stem Auger S-142 - Hollow Stem Auger S-143 - Hollow Stem Auger S-144 - Hollow Stem Auger S-145 - Hollow Stem Auger S-146 - Hollow Stem Auger S-147 - Hollow Stem Auger S-148 - Hollow Stem Auger S-149 - Hollow Stem Auger S-150 - Hollow Stem Auger S-151 - Hollow Stem Auger S-152 - Hollow Stem Auger S-153 - Hollow Stem Auger S-154 - Hollow Stem Auger S-155 - Hollow Stem Auger S-156 - Hollow Stem Auger S-157 - Hollow Stem Auger S-158 - Hollow Stem Auger S-159 - Hollow Stem Auger S-160 - Hollow Stem Auger S-161 - Hollow Stem Auger S-162 - Hollow Stem Auger S-163 - Hollow Stem Auger S-164 - Hollow Stem Auger S-165 - Hollow Stem Auger S-166 - Hollow Stem Auger S-167 - Hollow Stem Auger S-168 - Hollow Stem Auger S-169 - Hollow Stem Auger S-170 - Hollow Stem Auger S-171 - Hollow Stem Auger S-172 - Hollow Stem Auger S-173 - Hollow Stem Auger S-174 - Hollow Stem Auger S-175 - Hollow Stem Auger S-176 - Hollow Stem Auger S-177 - Hollow Stem Auger S-178 - Hollow Stem Auger S-179 - Hollow Stem Auger S-180 - Hollow Stem Auger S-181 - Hollow Stem Auger S-182 - Hollow Stem Auger S-183 - Hollow Stem Auger S-184 - Hollow Stem Auger S-185 - Hollow Stem Auger S-186 - Hollow Stem Auger S-187 - Hollow Stem Auger S-188 - Hollow Stem Auger S-189 - Hollow Stem Auger S-190 - Hollow Stem Auger S-191 - Hollow Stem Auger S-192 - Hollow Stem Auger S-193 - Hollow Stem Auger S-194 - Hollow Stem Auger S-195 - Hollow Stem Auger S-196 - Hollow Stem Auger S-197 - Hollow Stem Auger S-198 - Hollow Stem Auger S-199 - Hollow Stem Auger S-200 - Hollow Stem Auger S-201 - Hollow Stem Auger S-202 - Hollow Stem Auger S-203 - Hollow Stem Auger S-204 - Hollow Stem Auger S-205 - Hollow Stem Auger S-206 - Hollow Stem Auger S-207 - Hollow Stem Auger S-208 - Hollow Stem Auger S-209 - Hollow Stem Auger S-210 - Hollow Stem Auger S-211 - Hollow Stem Auger S-212 - Hollow Stem Auger S-213 - Hollow Stem Auger S-214 - Hollow Stem Auger S-215 - Hollow Stem Auger S-216 - Hollow Stem Auger S-217 - Hollow Stem Auger S-218 - Hollow Stem Auger S-219 - Hollow Stem Auger S-220 - Hollow Stem Auger S-221 - Hollow Stem Auger S-222 - Hollow Stem Auger S-223 - Hollow Stem Auger S-224 - Hollow Stem Auger S-225 - Hollow Stem Auger S-226 - Hollow Stem Auger S-227 - Hollow Stem Auger S-228 - Hollow Stem Auger S-229 - Hollow Stem Auger S-230 - Hollow Stem Auger S-231 - Hollow Stem Auger S-232 - Hollow Stem Auger S-233 - Hollow Stem Auger S-234 - Hollow Stem Auger S-235 - Hollow Stem Auger S-236 - Hollow Stem Auger S-237 - Hollow Stem Auger S-238 - Hollow Stem Auger S-239 - Hollow Stem Auger S-240 - Hollow Stem Auger S-241 - Hollow Stem Auger S-242 - Hollow Stem Auger S-243 - Hollow Stem Auger S-244 - Hollow Stem Auger S-245 - Hollow Stem Auger S-246 - Hollow Stem Auger S-247 - Hollow Stem Auger S-248 - Hollow Stem Auger S-249 - Hollow Stem Auger S-250 - Hollow Stem Auger S-251 - Hollow Stem Auger S-252 - Hollow Stem Auger S-253 - Hollow Stem Auger S-254 - Hollow Stem Auger S-255 - Hollow Stem Auger S-256 - Hollow Stem Auger S-257 - Hollow Stem Auger S-258 - Hollow Stem Auger S-259 - Hollow Stem Auger S-260 - Hollow Stem Auger S-261 - Hollow Stem Auger S-262 - Hollow Stem Auger S-263 - Hollow Stem Auger S-264 - Hollow Stem Auger S-265 - Hollow Stem Auger S-266 - Hollow Stem Auger S-267 - Hollow Stem Auger S-268 - Hollow Stem Auger S-269 - Hollow Stem Auger S-270 - Hollow Stem Auger S-271 - Hollow Stem Auger S-272 - Hollow Stem Auger S-273 - Hollow Stem Auger S-274 - Hollow Stem Auger S-275 - Hollow Stem Auger S-276 - Hollow Stem Auger S-277 - Hollow Stem Auger S-278 - Hollow Stem Auger S-279 - Hollow Stem Auger S-280 - Hollow Stem Auger S-281 - Hollow Stem Auger S-282 - Hollow Stem Auger S-283 - Hollow Stem Auger S-284 - Hollow Stem Auger S-285 - Hollow Stem Auger S-286 - Hollow Stem Auger S-287 - Hollow Stem Auger S-288 - Hollow Stem Auger S-289 - Hollow Stem Auger S-290 - Hollow Stem Auger S-291 - Hollow Stem Auger S-292 - Hollow Stem Auger S-293 - Hollow Stem Auger S-294 - Hollow Stem Auger S-295 - Hollow Stem Auger S-296 - Hollow Stem Auger S-297 - Hollow Stem Auger S-298 - Hollow Stem Auger S-299 - Hollow Stem Auger S-300 - Hollow Stem Auger S-301 - Hollow Stem Auger S-302 - Hollow Stem Auger S-303 - Hollow Stem Auger S-304 - Hollow Stem Auger S-305 - Hollow Stem Auger S-306 - Hollow Stem Auger S-307 - Hollow Stem Auger S-308 - Hollow Stem Auger S-309 - Hollow Stem Auger S-310 - Hollow Stem Auger S-311 - Hollow Stem Auger S-312 - Hollow Stem Auger S-313 - Hollow Stem Auger S-314 - Hollow Stem Auger S-315 - Hollow Stem Auger S-316 - Hollow Stem Auger S-317 - Hollow Stem Auger S-318 - Hollow Stem Auger S-319 - Hollow Stem Auger S-320 - Hollow Stem Auger S-321 - Hollow Stem Auger S-322 - Hollow Stem Auger S-323 - Hollow Stem Auger S-324 - Hollow Stem Auger S-325 - Hollow Stem Auger S-326 - Hollow Stem Auger S-327 - Hollow Stem Auger S-328 - Hollow Stem Auger S-329 - Hollow Stem Auger S-330 - Hollow Stem Auger S-331 - Hollow Stem Auger S-332 - Hollow Stem Auger S-333 - Hollow Stem Auger S-334 - Hollow Stem Auger S-335 - Hollow Stem Auger S-336 - Hollow Stem Auger S-337 - Hollow Stem Auger S-338 - Hollow Stem Auger S-339 - Hollow Stem Auger S-340 - Hollow Stem Auger S-341 - Hollow Stem Auger S-342 - Hollow Stem Auger S-343 - Hollow Stem Auger S-344 - Hollow Stem Auger S-345 - Hollow Stem Auger S-346 - Hollow Stem Auger S-347 - Hollow Stem Auger S-348 - Hollow Stem Auger S-349 - Hollow Stem Auger S-350 - Hollow Stem Auger S-351 - Hollow Stem Auger S-352 - Hollow Stem Auger S-353 - Hollow Stem Auger S-354 - Hollow Stem Auger S-355 - Hollow Stem Auger S-356 - Hollow Stem Auger S-357 - Hollow Stem Auger S-358 - Hollow Stem Auger S-359 - Hollow Stem Auger S-360 - Hollow Stem Auger S-361 - Hollow Stem Auger S-362 - Hollow Stem Auger S-363 - Hollow Stem Auger S-364 - Hollow Stem Auger S-365 - Hollow Stem Auger S-366 - Hollow Stem Auger S-367 - Hollow Stem Auger S-368 - Hollow Stem Auger S-369 - Hollow Stem Auger S-370 - Hollow Stem Auger S-371 - Hollow Stem Auger S-372 - Hollow Stem Auger S-373 - Hollow Stem Auger S-374 - Hollow Stem Auger S-375 - Hollow Stem Auger S-376 - Hollow Stem Auger S-377 - Hollow Stem Auger S-378 - Hollow Stem Auger S-379 - Hollow Stem Auger S-380 - Hollow Stem Auger S-381 - Hollow Stem Auger S-382 - Hollow Stem Auger S-383 - Hollow Stem Auger S-384 - Hollow Stem Auger S-385 - Hollow Stem Auger S-386 - Hollow Stem Auger S-387 - Hollow Stem Auger S-388 - Hollow Stem Auger S-389 - Hollow Stem Auger S-390 - Hollow Stem Auger S-391 - Hollow Stem Auger S-392 - Hollow Stem Auger S-393 - Hollow Stem Auger S-394 - Hollow Stem Auger S-395 - Hollow Stem Auger S-396 - Hollow Stem Auger S-397 - Hollow Stem Auger S-398 - Hollow Stem Auger S-399 - Hollow Stem Auger S-400 - Hollow Stem Auger S-401 - Hollow Stem Auger S-402 - Hollow Stem Auger S-403 - Hollow Stem Auger S-404 - Hollow Stem Auger S-405 - Hollow Stem Auger S-406 - Hollow Stem Auger S-407 - Hollow Stem Auger S-408 - Hollow Stem Auger S-409 - Hollow Stem Auger S-410 - Hollow Stem Auger S-411 - Hollow Stem Auger S-412 - Hollow Stem Auger S-413 - Hollow Stem Auger S-414 - Hollow Stem Auger S-415 - Hollow Stem Auger S-416 - Hollow Stem Auger S-417 - Hollow Stem Auger S-418 - Hollow Stem Auger S-419 - Hollow Stem Auger S-420 - Hollow Stem Auger S-421 - Hollow Stem Auger S-422 - Hollow Stem Auger S-423 - Hollow Stem Auger S-424 - Hollow Stem Auger S-425 - Hollow Stem Auger S-426 - Hollow Stem Auger S-427 - Hollow Stem Auger S-428 - Hollow Stem Auger S-429 - Hollow Stem Auger S-430 - Hollow Stem Auger S-431 - Hollow Stem Auger S-432 - Hollow Stem Auger S-433 - Hollow Stem Auger S-434 - Hollow Stem Auger S-435 - Hollow Stem Auger S-436 - Hollow Stem Auger S-437 - Hollow Stem Auger S-438 - Hollow Stem Auger S-439 - Hollow Stem Auger S-440 - Hollow Stem Auger S-441 - Hollow Stem Auger S-442 - Hollow Stem Auger S-443 - Hollow Stem Auger S-444 - Hollow Stem Auger S-445 - Hollow Stem Auger S-446 - Hollow Stem Auger S-447 - Hollow Stem Auger S-448 - Hollow Stem Auger S-449 - Hollow Stem Auger S-450 - Hollow Stem Auger S-451 - Hollow Stem Auger S-452 - Hollow Stem Auger S-453 - Hollow Stem Auger S-454 - Hollow Stem Auger S-455 - Hollow Stem Auger S-456 - Hollow Stem Auger S-457 - Hollow Stem Auger S-458 - Hollow Stem Auger S-459 - Hollow Stem Auger S-460 - Hollow Stem Auger S-461 - Hollow Stem Auger S-462 - Hollow Stem Auger S-463 - Hollow Stem Auger S-464 - Hollow Stem Auger S-465 - Hollow Stem Auger S-466 - Hollow Stem Auger S-467 - Hollow Stem Auger S-468 - Hollow Stem Auger S-469 - Hollow Stem Auger S-470 - Hollow Stem Auger S-471 - Hollow Stem Auger S-472 - Hollow Stem Auger S-473 - Hollow Stem Auger S-474 - Hollow Stem Auger S-475 - Hollow Stem Auger S-476 - Hollow Stem Auger S-477 - Hollow Stem Auger S-478 - Hollow Stem Auger S-479 - Hollow Stem Auger S-480 - Hollow Stem Auger S-481 - Hollow Stem Auger S-482 - Hollow Stem Auger S-483 - Hollow Stem Auger S-484 - Hollow Stem Auger S-485 - Hollow Stem Auger S-486 - Hollow Stem Auger S-487 - Hollow Stem Auger S-488 - Hollow Stem Auger S-489 - Hollow Stem Auger S-490 - Hollow Stem Auger S-491 - Hollow Stem Auger S-492 - Hollow Stem Auger S-493 - Hollow Stem Auger S-494 - Hollow Stem Auger S-495 - Hollow Stem Auger S-496 - Hollow Stem Auger S-497 - Hollow Stem Auger S-498 - Hollow Stem Auger S-499 - Hollow Stem Auger S-500 - Hollow Stem Auger S-501 - Hollow Stem Auger S-502 - Hollow Stem Auger S-503 - Hollow Stem Auger S-504 - Hollow Stem Auger S-505 - Hollow Stem Auger S-506 - Hollow Stem Auger S-507 - Hollow Stem Auger S-508 - Hollow Stem Auger S-509 - Hollow Stem Auger S-510 - Hollow Stem Auger S-511 - Hollow Stem Auger S-512 - Hollow Stem Auger S-513 - Hollow Stem Auger S-514 - Hollow Stem Auger S-515 - Hollow Stem Auger S-516 - Hollow Stem Auger S-517 - Hollow Stem Auger S-518 - Hollow Stem Auger S-519 - Hollow Stem Auger S-520 - Hollow Stem Auger S-521 - Hollow Stem Auger S-522 - Hollow Stem Auger S-523 - Hollow Stem Auger S-524 - Hollow Stem Auger S-525 - Hollow Stem Auger S-526 - Hollow Stem Auger S-527 - Hollow Stem Auger S-528 - Hollow Stem Auger S-529 - Hollow Stem Auger S-530 - Hollow Stem Auger S-531 - Hollow Stem Auger S-532 - Hollow Stem Auger S-533 - Hollow Stem Auger S-534 - Hollow Stem Auger S-535 - Hollow Stem Auger S-536 - Hollow Stem Auger S-537 - Hollow Stem Auger S-538 - Hollow Stem Auger S-539 - Hollow Stem Auger S-540 - Hollow Stem Auger S-541 - Hollow Stem Auger S-542 - Hollow Stem Auger S-543 - Hollow Stem Auger S-544 - Hollow Stem Auger S-545 - Hollow Stem Auger S-546 - Hollow Stem Auger S-547 - Hollow Stem Auger S-548 - Hollow Stem Auger S-549 - Hollow Stem Auger S-550 - Hollow Stem Auger S-551 - Hollow Stem Auger S-552 - Hollow Stem Auger S-553 - Hollow Stem Auger S-554 - Hollow Stem Auger S-555 - Hollow Stem Auger S-556 - Hollow Stem Auger S-557 - Hollow Stem Auger S-558 - Hollow Stem Auger S-559 - Hollow Stem Auger S-560 - Hollow Stem Auger S-561 - Hollow Stem Auger S-562 - Hollow Stem Auger S-563 - Hollow Stem Auger S-564 - Hollow Stem Auger S-565 - Hollow Stem Auger S-566 - Hollow Stem Auger S-567 - Hollow Stem Auger S-568 - Hollow Stem Auger S-569 - Hollow Stem Auger S-570 - Hollow Stem Auger S-571 - Hollow Stem Auger S-572 - Hollow Stem Auger S-573 - Hollow Stem Auger S-574 - Hollow Stem Auger S-575 - Hollow Stem Auger S-576 - Hollow Stem Auger S-577 - Hollow Stem Auger S-578 - Hollow Stem Auger S-579 - Hollow Stem Auger S-580 - Hollow Stem Auger S-581 - Hollow Stem Auger S-582 - Hollow Stem Auger S-583 - Hollow Stem Auger S-584 - Hollow Stem Auger S-585 - Hollow Stem Auger S-586 - Hollow Stem Auger S-587 - Hollow Stem Auger S-588 - Hollow Stem Auger S-589 - Hollow Stem Auger S-590 - Hollow Stem Auger S-591 - Hollow Stem Auger S-592 - Hollow Stem Auger S-593 - Hollow Stem Auger S-594 - Hollow Stem Auger S-595 - Hollow Stem Auger S-596 - Hollow Stem Auger S-597 - Hollow Stem Auger S-598 - Hollow Stem Auger S-599 - Hollow Stem Auger S-600 - Hollow Stem Auger S-601 - Hollow Stem Auger S-602 - Hollow Stem Auger S-603 - Hollow Stem Auger S-604 - Hollow Stem Auger S-605 - Hollow Stem Auger S-606 - Hollow Stem Auger S-607 - Hollow Stem Auger S-608 - Hollow Stem Auger S-609 - Hollow Stem Auger S-610 - Hollow Stem Auger S-611 - Hollow Stem Auger S-612 - Hollow Stem Auger S-613 - Hollow Stem Auger S-614 - Hollow Stem Auger S-615 - Hollow Stem Auger S-616 - Hollow Stem Auger S-617 - Hollow Stem Auger S-618 - Hollow Stem Auger S-619 - Hollow Stem Auger S-620 - Hollow Stem Auger S-621 - Hollow Stem Auger S-622 - Hollow Stem Auger S-623 - Hollow Stem Auger S-624 - Hollow Stem Auger S-625 - Hollow Stem Auger S-626 - Hollow Stem Auger S-627 - Hollow Stem Auger S-628 - Hollow Stem Auger S-629 - Hollow Stem Auger S-630 - Hollow Stem Auger S-631 - Hollow Stem Auger S-632 - Hollow Stem Auger S-633 - Hollow Stem Auger S-634 - Hollow Stem Auger S-635 - Hollow Stem Auger S-636 - Hollow Stem Auger S-637 - Hollow Stem Auger S-638 - Hollow Stem Auger S-639 - Hollow Stem Auger S-640 - Hollow Stem Auger S-641 - Hollow Stem Auger S-642 - Hollow Stem Auger S-643 - Hollow Stem Auger S-644 - Hollow Stem Auger S-645 - Hollow Stem Auger S-646 - Hollow Stem Auger S-647 - Hollow Stem Auger S-648 - Hollow Stem Auger S-649 - Hollow Stem Auger S-650 - Hollow Stem Auger S-651 - Hollow Stem Auger S-652 - Hollow Stem Auger S-653 - Hollow Stem Auger S-654 - Hollow Stem Auger S-655 - Hollow Stem Auger S-656 - Hollow Stem Auger S-657 - Hollow Stem Auger S-658 - Hollow Stem Auger S-659 - Hollow Stem Auger S-660 - Hollow Stem Auger S-661 - Hollow Stem Auger S-662 - Hollow Stem Auger S-663 - Hollow Stem Auger S-664 - Hollow Stem Auger S-665 - Hollow Stem Auger S-666 - Hollow Stem Auger S-667 - Hollow Stem Auger S-668 - Hollow Stem Auger S-669 - Hollow Stem Auger S-670 - Hollow Stem Auger S-671 - Hollow Stem Auger S-672 - Hollow Stem Auger S-673 - Hollow Stem Auger S-674 - Hollow Stem Auger S-675 - Hollow Stem Auger S-676 - Hollow Stem Auger S-677 - Hollow Stem Auger S-678 - Hollow Stem Auger S-679 - Hollow Stem Auger S-680 - Hollow Stem Auger S-681 - Hollow Stem Auger S-682 - Hollow Stem Auger S-683 - Hollow Stem Auger S-684 - Hollow Stem Auger S-685 - Hollow Stem Auger S-686 - Hollow Stem Auger S-687 - Hollow Stem Auger S-688 - Hollow Stem Auger S-689 - Hollow Stem Auger S-690 - Hollow Stem Auger S-691 - Hollow Stem Auger S-692 - Hollow Stem Auger S-693 - Hollow Stem Auger S-694 - Hollow Stem Auger S-695 - Hollow Stem Auger S-696 - Hollow Stem Auger S-697 - Hollow Stem Auger S-698 - Hollow Stem Auger S-699 - Hollow Stem Auger S-700 - Hollow Stem Auger S-701 - Hollow Stem Auger S-702 - Hollow Stem Auger S-703 - Hollow Stem Auger S-704 - Hollow Stem Auger S-705 - Hollow Stem Auger S-706 - Hollow Stem Auger S-707 - Hollow Stem Auger S-708 - Hollow Stem Auger S-709 - Hollow Stem Auger S-710 - Hollow Stem Auger S-711 - Hollow Stem Auger S-712 - Hollow Stem Auger S-713 - Hollow Stem Auger S-714 - Hollow Stem Auger S-715 - Hollow Stem Auger S-716 - Hollow Stem Auger S-717 - Hollow Stem Auger S-718 - Hollow Stem Auger S-719 - Hollow Stem Auger S-720 - Hollow Stem Auger S-721 - Hollow Stem Auger S-722 - Hollow Stem Auger S-723 - Hollow Stem Auger S-724 - Hollow Stem Auger S-725 - Hollow Stem Auger S-726 - Hollow Stem Auger S-727 - Hollow Stem Auger S-728 - Hollow Stem Auger S-729 - Hollow Stem Auger S-730 - Hollow Stem Auger S-731 - Hollow Stem Auger S-732 - Hollow Stem Auger S-733 - Hollow Stem Auger S-734 - Hollow Stem Auger S-735 - Hollow Stem Auger S-736 - Hollow Stem Auger S-737 - Hollow Stem Auger S-738 - Hollow Stem Auger S-739 - Hollow Stem Auger S-740 - Hollow Stem Auger S-741 - Hollow Stem Auger S-742 - Hollow Stem Auger S-743 - Hollow Stem Auger S-744 - Hollow Stem Auger S-745 - Hollow Stem Auger S-746 - Hollow Stem Auger S-747 - Hollow Stem Auger S-748 - Hollow Stem Auger S-749 - Hollow Stem Auger S-750 - Hollow Stem Auger S-751 - Hollow Stem Auger S-752 - Hollow Stem Auger S-753 - Hollow Stem Auger S-754 - Hollow Stem Auger S-755 - Hollow Stem Auger S-756 - Hollow Stem Auger S-757 - Hollow Stem Auger S-758 - Hollow Stem Auger S-759 - Hollow Stem Auger S-760 - Hollow Stem Auger S-761 - Hollow Stem Auger S-762 - Hollow Stem Auger S-763 - Hollow Stem Auger S-764 - Hollow Stem Auger S-765 - Hollow Stem Auger S-766 - Hollow Stem Auger S-767 - Hollow Stem Auger S-768 - Hollow Stem Auger S-769 - Hollow Stem Auger S-770 - Hollow Stem Auger S-771 - Hollow Stem Auger S-772 - Hollow Stem Auger S-773 - Hollow Stem Auger S-774 - Hollow Stem Auger S-775 - Hollow Stem Auger S-776 - Hollow Stem Auger S-777 - Hollow Stem Auger S-778 - Hollow Stem Auger S-779 - Hollow Stem Auger S-780 - Hollow Stem Auger S-781 - Hollow Stem Auger S-782 - Hollow Stem Auger S-783 - Hollow Stem Auger S-784 - Hollow Stem Auger S-785 - Hollow Stem Auger S-786 - Hollow Stem Auger S-787 - Hollow Stem Auger S-788 - Hollow Stem Auger S-789 - Hollow Stem Auger S-790 - Hollow Stem Auger S-791 - Hollow Stem Auger S-792 - Hollow Stem Auger S-793 - Hollow Stem Auger S-794 - Hollow Stem Auger S-795 - Hollow Stem Auger S-796 - Hollow Stem Auger S-797 - Hollow Stem Auger S-798 - Hollow Stem Auger S-799 - Hollow Stem Auger S-800 - Hollow Stem Auger S-801 - Hollow Stem Auger S-802 - Hollow Stem Auger S-803 - Hollow Stem Auger S-804 - Hollow Stem Auger S-805 - Hollow Stem Auger S-806 - Hollow Stem Auger S-807 - Hollow Stem Auger S-808 - Hollow Stem Auger S-809 - Hollow Stem Auger S-810 - Hollow Stem Auger S-811 - Hollow Stem Auger S-812 - Hollow Stem Auger S-813 - Hollow Stem Auger S-814 - Hollow Stem Auger S-815 - Hollow Stem Auger S-816 - Hollow Stem Auger S-817 - Hollow Stem Auger S-818 - Hollow Stem Auger S-819 - Hollow Stem Auger S-820 - Hollow Stem Auger S-821 - Hollow Stem Auger S-822 - Hollow Stem Auger S-823 - Hollow Stem Auger S-824 - Hollow Stem Auger S-825 - Hollow Stem Auger S-826 - Hollow Stem Auger S-827 - Hollow Stem Auger S-828 - Hollow Stem Auger S-829 - Hollow Stem Auger S-830 - Hollow Stem Auger S-831 - Hollow Stem Auger S-832 - Hollow Stem Auger S-833 - Hollow Stem Auger S-834 - Hollow Stem Auger S-835 - Hollow Stem Auger S-836 - Hollow Stem Auger S-837 - Hollow Stem Auger S-838 - Hollow Stem Auger S-839 - Hollow Stem Auger S-840 - Hollow Stem Auger S-841 - Hollow Stem Auger S-842 - Hollow Stem Auger S-843 - Hollow Stem Auger S-844 - Hollow Stem Auger S-845 - Hollow Stem Auger S-846 - Hollow Stem Auger S-847 - Hollow Stem Auger S-848 - Hollow Stem Auger S-849 - Hollow Stem Auger S-850 - Hollow Stem Auger S-851 - Hollow Stem Auger S-852 - Hollow Stem Auger S-853 - Hollow Stem Auger S-854 - Hollow Stem Auger S-855 - Hollow Stem Auger S-856 - Hollow Stem Auger S-857 - Hollow Stem Auger S-858 - Hollow Stem Auger S-859 - Hollow Stem Auger S-860 - Hollow Stem Auger S-861 - Hollow Stem Auger S-862 - Hollow Stem Auger S-863 - Hollow Stem Auger S-864 - Hollow Stem Auger S-865 - Hollow Stem Auger S-866 - Hollow Stem Auger S-867 - Hollow Stem Auger S-868 - Hollow Stem Auger S-869 - Hollow Stem Auger S-870 - Hollow Stem Auger S-871 - Hollow Stem Auger S-872 - Hollow Stem Auger S-873 - Hollow Stem Auger S-874 - Hollow Stem Auger S-875 - Hollow Stem Auger S-876 - Hollow Stem Auger S-877 - Hollow Stem Auger S-878 - Hollow Stem Auger S-879 - Hollow Stem Auger S-880 - Hollow Stem Auger S-881 - Hollow Stem Auger S-882 - Hollow Stem Auger S-883 - Hollow Stem Auger S-884 - Hollow Stem Auger S-885 - Hollow Stem Auger S-886 - Hollow Stem Auger S-887 - Hollow Stem Auger S-888 - Hollow Stem Auger S-889 - Hollow Stem Auger S-890 - Hollow Stem Auger S-891 - Hollow Stem Auger S-892 - Hollow Stem Auger S-893 - Hollow Stem Auger S-894 - Hollow Stem Auger S-895 - Hollow Stem Auger S-896 - Hollow Stem Auger S-897 - Hollow Stem Auger S-898 - Hollow Stem Auger S-899 - Hollow Stem Auger S-900 - Hollow Stem Auger S-901 - Hollow Stem Auger S-902 - Hollow Stem Auger S-903 - Hollow Stem Auger S-904 - Hollow Stem Auger S-905 - Hollow Stem Auger S-906 - Hollow Stem Auger S-907 - Hollow Stem Auger S-908 - Hollow Stem Auger S-909 - Hollow Stem Auger S-910 - Hollow Stem Auger S-911 - Hollow Stem Auger S-912 - Hollow Stem Auger S-913 - Hollow Stem Auger S-914 - Hollow Stem Auger S-915 - Hollow Stem Auger S-916 - Hollow Stem Auger S-917 - Hollow Stem Auger S-918 - Hollow Stem Auger S-919 - Hollow Stem Auger S-920 - Hollow Stem Auger S-921 - Hollow Stem Auger S-922 - Hollow Stem Auger S-923 - Hollow Stem Auger S-924 - Hollow Stem Auger S-925 - Hollow Stem Auger S-926 - Hollow Stem Auger S-927 - Hollow Stem Auger S-928 - Hollow Stem Auger S-929 - Hollow Stem Auger S-930 - Hollow Stem Auger S-931 - Hollow Stem Auger S-932 - Hollow Stem Auger S-933 - Hollow Stem Auger S-934 - Hollow Stem Auger S-935 - Hollow Stem Auger S-936 - Hollow Stem Auger S-937 - Hollow Stem Auger S-938 - Hollow Stem Auger S-939 - Hollow Stem Auger S-940 - Hollow Stem Auger S-941 - Hollow Stem Auger S-942 - Hollow Stem Auger S-943 - Hollow Stem Auger S-944 - Hollow Stem Auger S-945 - Hollow Stem Auger S-946 - Hollow Stem Auger S-947 - Hollow Stem Auger S-948 - Hollow Stem Auger S-949 - Hollow Stem Auger S-950 - Hollow Stem Auger S-951 - Hollow Stem Auger S-952 - Hollow Stem Auger S-953 - Hollow Stem Auger S-954 - Hollow Stem Auger S-955 - Hollow Stem Auger S-956 - Hollow Stem Auger S-957 - Hollow Stem Auger S-958 - Hollow Stem Auger S-959 - Hollow Stem Auger S-960 - Hollow Stem Auger S-961 - Hollow Stem Auger S-962 - Hollow Stem Auger S-963 - Hollow Stem Auger S-964 - Hollow Stem Auger S-965 - Hollow Stem Auger S-966 - Hollow Stem Auger S-967 - Hollow Stem Auger S-968 - Hollow Stem Auger S-969 - Hollow Stem Auger S-970 - Hollow Stem Auger S-971 - Hollow Stem Auger S-972 - Hollow Stem Auger S-973 - Hollow Stem Auger S-974 - Hollow Stem Auger S-975 - Hollow Stem Auger S-976 - Hollow Stem Auger S-977 - Hollow Stem Auger S-978 - Hollow Stem Auger S-979 - Hollow Stem Auger S-980 - Hollow Stem Auger S-981 - Hollow Stem Auger S-982 - Hollow Stem Auger S-983 - Hollow Stem Auger S-984 - Hollow Stem Auger S-985 - Hollow Stem Auger S-986 - Hollow Stem Auger S-987 - Hollow Stem Auger S-988 - Hollow Stem Auger S-989 - Hollow Stem Auger S-990 - Hollow Stem Auger S-991 - Hollow Stem Auger S-992 - Hollow Stem Auger S-993 - Hollow Stem			

[illegible][illegible]

Maine Department of Transportation				Project:		Boring No.:	
SoilRock_ExpLogation Log				Location:		BB-MMR-102	
US CUSTOMARY UNITS				Maine		23234.00	
Driver: New England Boring Contractors				Elevation (ft):	84.7	Age:	0/0/0
Operator: Brad Enos				Diagram:	NWD 88	Sampler:	Standard Splitpoon
Logged By: E. Franks				Rig Type:	Mobile B-55	Hammer:	WT/FSH
Date Started/Fin: 5-24-18 / 5-24-18				Digging Method:	Drive/Split & Wash	Core Barrel:	NQ
Boring Location: NH4882.8, E217384.5				Coring D/ID:	4/4.5", 3"/3.5"	Water Level:	---
Hammer Efficiency Factor: 0.677				Normal Type:	Automatic	Rage & Calibrated	---
1 - Soil Seep Sample				1 - Post-Tested For the following test results:			
2 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
3 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
4 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
5 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
6 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
7 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
8 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
9 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
10 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
11 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
12 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
13 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
14 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
15 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
16 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
17 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
18 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
19 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
20 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
21 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
22 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
23 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
24 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
25 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
26 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
27 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
28 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
29 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
30 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
31 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
32 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
33 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
34 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
35 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
36 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
37 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
38 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
39 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
40 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
41 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
42 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
43 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
44 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
45 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
46 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
47 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
48 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
49 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
50 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
51 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
52 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
53 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
54 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
55 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
56 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
57 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
58 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
59 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
60 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
61 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
62 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
63 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
64 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
65 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
66 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
67 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
68 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
69 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
70 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
71 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
72 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
73 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
74 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
75 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
76 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
77 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
78 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
79 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
80 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
81 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
82 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
83 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
84 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
85 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
86 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
87 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
88 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
89 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
90 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
91 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
92 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
93 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
94 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
95 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
96 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
97 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
98 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
99 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
100 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
101 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
102 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
103 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
104 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
105 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
106 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
107 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
108 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
109 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
110 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
111 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
112 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
113 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
114 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
115 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
116 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
117 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
118 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
119 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
120 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
121 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
122 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
123 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
124 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
125 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
126 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
127 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
128 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
129 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
130 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
131 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
132 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
133 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
134 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
135 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
136 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
137 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
138 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
139 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
140 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
141 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
142 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
143 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
144 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
145 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
146 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
147 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
148 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
149 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
150 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
151 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
152 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
153 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
154 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
155 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
156 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
157 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
158 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
159 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
160 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
161 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
162 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
163 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
164 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
165 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
166 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
167 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
168 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
169 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
170 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
171 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
172 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
173 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
174 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
175 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
176 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
177 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
178 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
179 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
180 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
181 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
182 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
183 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
184 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
185 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
186 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
187 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
188 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
189 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
190 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
191 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
192 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
193 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
194 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
195 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
196 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
197 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
198 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
199 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
200 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
201 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
202 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
203 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
204 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
205 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
206 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
207 - 1/2" Split Stem Sampler				S _u - Undrained Shear Strength (lb/ft ²)			
208 - 1/2" Split Stem Sampler				S _u - Und			

Maine Department of Transportation										Project: Mattheusweg Bridge #2522 Route 2 Over Mattheusweg River Mattheusweg, Maine		Boring No.: BB-MMR-204	
Soil/Rock Exploration Log										W/C: 23234.00			
US CUSTOMARY UNITS													
Driver: New England Boring Contractors		Elevation (ft.): 184.2		Datum: NAVD 85		Sampler: Automatic Splitpoint							
Operator: Tom Sheahan		Bq. Type: Truck Model 8-53		Hammer: W1/ft		Standard: 30							
Logged By: B. Woodman		Drilling Method: Driver/Spk/Whn		Core Barrel: NX		Water Level: * River							
Date Start/Finish: 9/26/19-9/27/19		Casing Ø/ID: 4" / 3"		Automatic ☐ Hydraulic ☐ Riggs & Cathart ☐									
Boring Location: NHM9073, E2173942.6		Hammer Type: * Test Hammer		* Test Hammer		* Test Hammer							
Hammer Efficiency Factor: .837		* Test Hammer		* Test Hammer		* Test Hammer							
* T - Split Splice Sample		* T - Split Splice Sample		* T - Split Splice Sample		* T - Split Splice Sample							
* U - Unconsolidated Soil (per Sample Interval)		* U - Unconsolidated Soil (per Sample Interval)		* U - Unconsolidated Soil (per Sample Interval)		* U - Unconsolidated Soil (per Sample Interval)							
* V - This Test Was Done		* V - This Test Was Done		* V - This Test Was Done		* V - This Test Was Done							
* W - Unconsolidated Soil (per Sample Interval)		* W - Unconsolidated Soil (per Sample Interval)		* W - Unconsolidated Soil (per Sample Interval)		* W - Unconsolidated Soil (per Sample Interval)							
* X - This Test Was Done		* X - This Test Was Done		* X - This Test Was Done		* X - This Test Was Done							
* Y - This Test Was Done		* Y - This Test Was Done		* Y - This Test Was Done		* Y - This Test Was Done							
* Z - This Test Was Done		* Z - This Test Was Done		* Z - This Test Was Done		* Z - This Test Was Done							
* AA - This Test Was Done		* AA - This Test Was Done		* AA - This Test Was Done		* AA - This Test Was Done							
* AB - This Test Was Done		* AB - This Test Was Done		* AB - This Test Was Done		* AB - This Test Was Done							
* AC - This Test Was Done		* AC - This Test Was Done		* AC - This Test Was Done		* AC - This Test Was Done							
* AD - This Test Was Done		* AD - This Test Was Done		* AD - This Test Was Done		* AD - This Test Was Done							
* AE - This Test Was Done		* AE - This Test Was Done		* AE - This Test Was Done		* AE - This Test Was Done							
* AF - This Test Was Done		* AF - This Test Was Done		* AF - This Test Was Done		* AF - This Test Was Done							
* AG - This Test Was Done		* AG - This Test Was Done		* AG - This Test Was Done		* AG - This Test Was Done							
* AH - This Test Was Done		* AH - This Test Was Done		* AH - This Test Was Done		* AH - This Test Was Done							
* AI - This Test Was Done		* AI - This Test Was Done		* AI - This Test Was Done		* AI - This Test Was Done							
* AJ - This Test Was Done		* AJ - This Test Was Done		* AJ - This Test Was Done		* AJ - This Test Was Done							
* AK - This Test Was Done		* AK - This Test Was Done		* AK - This Test Was Done		* AK - This Test Was Done							
* AL - This Test Was Done		* AL - This Test Was Done		* AL - This Test Was Done		* AL - This Test Was Done							
* AM - This Test Was Done		* AM - This Test Was Done		* AM - This Test Was Done		* AM - This Test Was Done							
* AN - This Test Was Done		* AN - This Test Was Done		* AN - This Test Was Done		* AN - This Test Was Done							
* AO - This Test Was Done		* AO - This Test Was Done		* AO - This Test Was Done		* AO - This Test Was Done							
* AP - This Test Was Done		* AP - This Test Was Done		* AP - This Test Was Done		* AP - This Test Was Done							
* AQ - This Test Was Done		* AQ - This Test Was Done		* AQ - This Test Was Done		* AQ - This Test Was Done							
* AR - This Test Was Done		* AR - This Test Was Done		* AR - This Test Was Done		* AR - This Test Was Done							
* AS - This Test Was Done		* AS - This Test Was Done		* AS - This Test Was Done		* AS - This Test Was Done							
* AT - This Test Was Done		* AT - This Test Was Done		* AT - This Test Was Done		* AT - This Test Was Done							
* AU - This Test Was Done		* AU - This Test Was Done		* AU - This Test Was Done		* AU - This Test Was Done							
* AV - This Test Was Done		* AV - This Test Was Done		* AV - This Test Was Done		* AV - This Test Was Done							
* AW - This Test Was Done		* AW - This Test Was Done		* AW - This Test Was Done		* AW - This Test Was Done							
* AX - This Test Was Done		* AX - This Test Was Done		* AX - This Test Was Done		* AX - This Test Was Done							
* AY - This Test Was Done		* AY - This Test Was Done		* AY - This Test Was Done		* AY - This Test Was Done							
* AZ - This Test Was Done		* AZ - This Test Was Done		* AZ - This Test Was Done		* AZ - This Test Was Done							
* BA - This Test Was Done		* BA - This Test Was Done		* BA - This Test Was Done		* BA - This Test Was Done							
* BB - This Test Was Done		* BB - This Test Was Done		* BB - This Test Was Done		* BB - This Test Was Done							
* BC - This Test Was Done		* BC - This Test Was Done		* BC - This Test Was Done		* BC - This Test Was Done							
* BD - This Test Was Done		* BD - This Test Was Done		* BD - This Test Was Done		* BD - This Test Was Done							
* BE - This Test Was Done		* BE - This Test Was Done		* BE - This Test Was Done		* BE - This Test Was Done							
* BF -													

Sample Information										Visual Description and Remarks		Laboratory Testing Results AASHTO and Unified Class.			
Sample No.	Pen (ft.)	Pen (in.)	Pen (mm)	Pen (ft.)	Pen (in.)	Pen (mm)	Pen (ft.)	Pen (in.)	Pen (mm)	Pen (ft.)	Pen (in.)	Pen (mm)	Pen (ft.)	Pen (in.)	Pen (mm)
10	24/6	0.0	2.0	4-2-8-25	10	16	5								
20	5/2	5.0	5.4	80/5"	--										
R1	22/19	7.5	9.1	--	NK										
30															
R3	25/17	11.5	11.5	RQD = 0%											
R4	40/35	13.8	16.9	RQD = 65%											
R5	57/55	16.9	21.7	RQD = 23%											

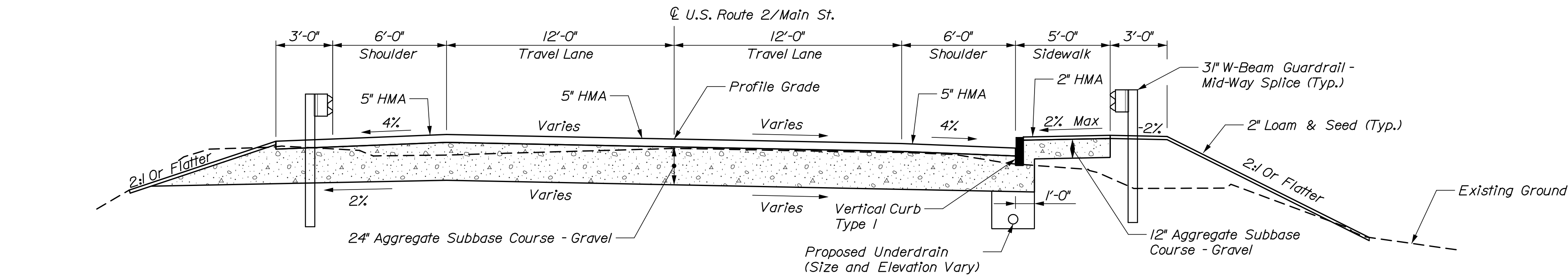
11 OF 69	SHEET NUMBER	MATTAWAMKEAG BRIDGE NO. 2522 ROUTE 2 OVER MATTAWAMKEAG RIVER MATTAWAMKEAG, ME PENOBSCOT COUNTY					PROJ. MANAGER		BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		BORING LOGS 2					DESIGN-DETAILED	--	--	SIGNATURE	
							CHECKED-REVIEWED	--	--		
							DESIGN2-DETAILED2				
					REVISIONS 1						
					REVISIONS 2						
					REVISIONS 3						
					REVISIONS 4					DATE	
					FIELD CHANGES						
Bridge NO. 2522											
WIN											
23234.01											
BRIDGE PLANS											

Date:7/10/2020

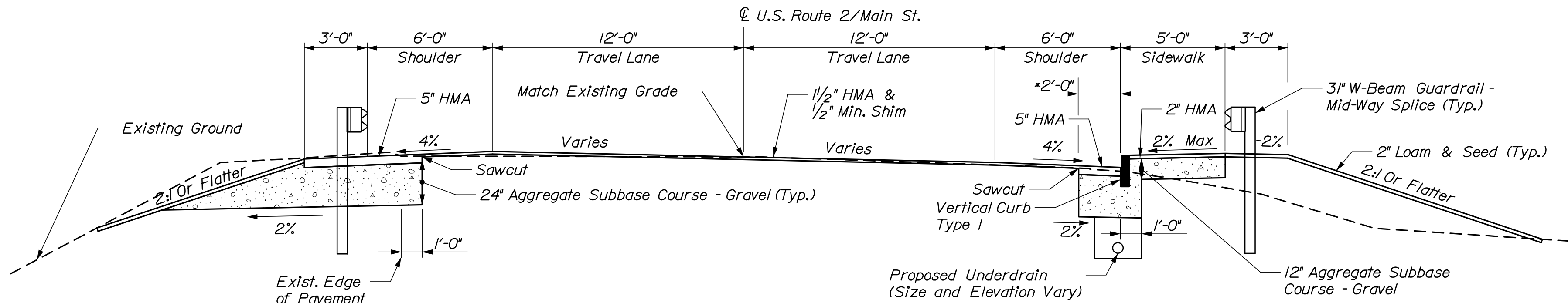
Username:

Division:

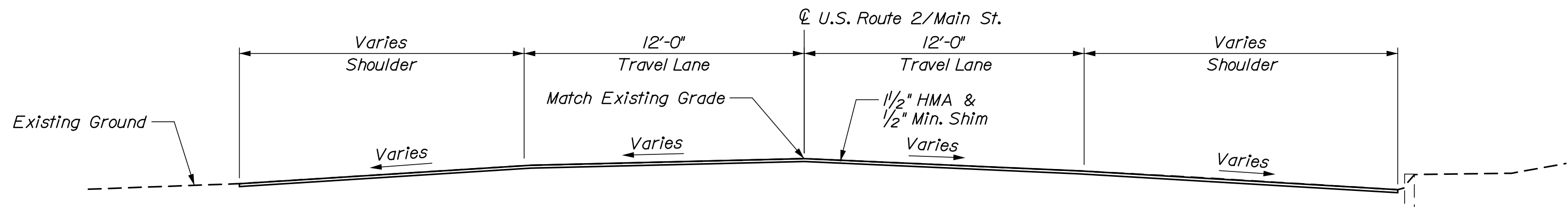
Filename: 012_TypicalSections.dgn



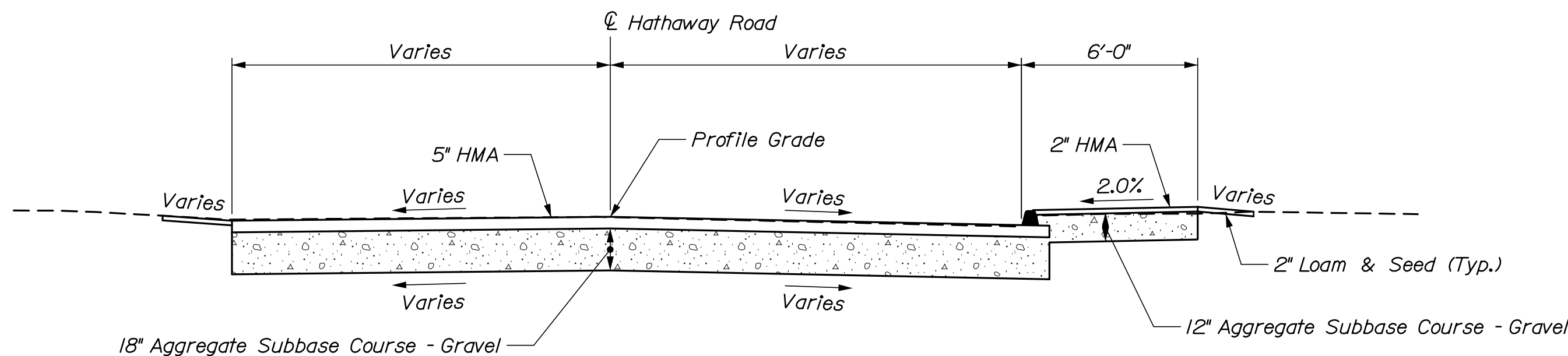
TYPICAL APPROACH SECTION
Full Construction



TYPICAL APPROACH SECTION
Shoulder Reconstruction With
Variable Depth Mill, Shim & 1 1/2" Overlay



TYPICAL APPROACH SECTION
Variable Depth Mill, Shim & 1 1/2" Overlay



HATHAWAY ROAD

US Route 2/Main Street Superelevation Table					
Lt. Shoulder	Lt. Travelway	Station	Rt. Travelway	Rt. Shoulder	
Match Existing	Existing	12+00.00	Match Existing	Existing	
-7.4%	-1.8%	12+25.00	-3.3%	-6.0%	
-6.3%	-2.5%	12+50.00	-2.5%	-6.9%	
-7.2%	-2.5%	12+75.00	-2.5%	-7.1%	
-6.5%	-2.5%	13+00.00	-2.5%	-4.5%	
-6.2%	-2.5%	13+25.00	-2.0%	-4.0%	
-4.9%	-2.0%	13+50.00	-2.0%	-4.0%	
-4.0%	-2.0%	13+75.00	-2.0%	-4.0%	
-4.0%	-2.0%	14+00.00	-2.0%	-4.0%	
-2.0%	-2.0%	14+25.00	-2.0%	-2.0%	
-2.0%	-2.0%	18+00.00	-2.0%	-2.0%	
-4.0%	-0.6%	18+25.00	-2.0%	-4.0%	
-4.0%	1.4%	18+50.00	-2.0%	-4.0%	
-4.0%	2.2%	18+75.00	-2.2%	-4.0%	
-4.0%	2.2%	20+00.00	-2.2%	-4.0%	
-4.0%	0.8%	20+25.00	-2.0%	-4.0%	
-4.0%	-0.6%	20+50.00	-2.0%	-4.0%	
-4.0%	-2.0%	20+75.00	-2.0%	-4.0%	
-4.0%	-2.0%	21+00.00	-2.5%	-4.0%	
-4.0%	-2.0%	21+25.00	-2.5%	-5.0%	
-4.0%	-2.0%	21+50.00	-2.5%	-6.0%	
-4.0%	-2.0%	21+75.00	-2.5%	-7.0%	
Match Existing		22+00.00	Match Existing		

- NOTES:
- The pavement, base and subbase depths as shown on the plans are intended to be nominal.
 - When superelevation exceeds the slope of the low side shoulder, the low side shoulder's pavement shall have the same cross slope as the travel way.
 - Crowns for both normal and superelevation sections for all courses of subbase and pavement shall be straight, unless otherwise noted on the plans.
 - The algebraic difference between shoulder and travel lane cross slopes "rollover" shall not exceed 8%.

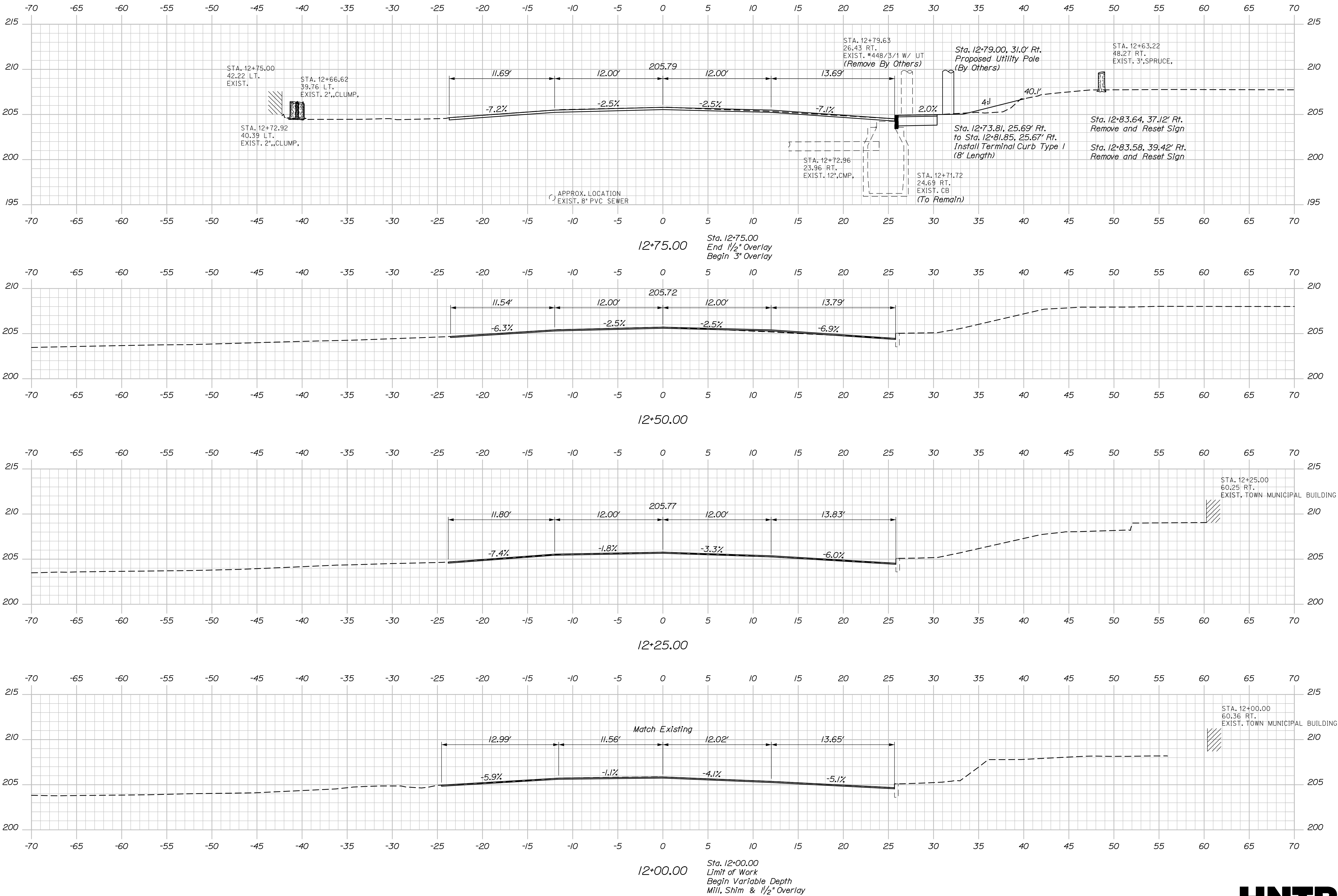
PROJ. MANAGER	CHECKED	REVIEWED	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
C. Hainick	P. Bishop	A. Stephens	7/20	7/20				
L. Driscoll								
DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED						
REVISIONS 1	REVISIONS 2	REVISIONS 3						
REVISIONS 4	FIELD CHANGES							

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



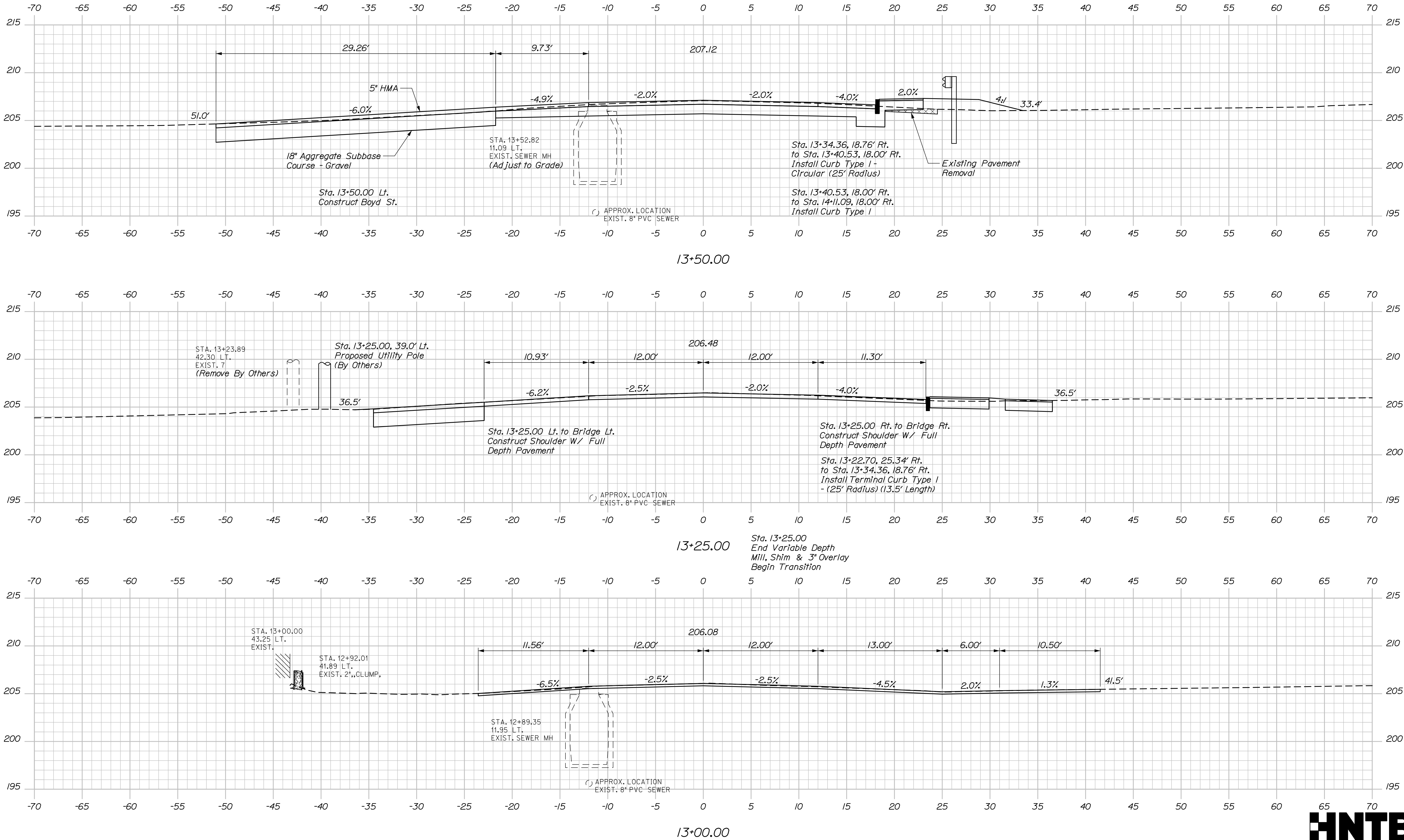
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2262701				WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS		
	2262701				WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS		
	2262701				WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS		
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY												SHEET NUMBER	
CROSS SECTIONS MAIN STREET/U.S. ROUTE 2												13	
												OF 69	

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



Sta. 13+00.00 to Sta. 13+50.00

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	P. Bishop A. Stephens	7/20 7/20			

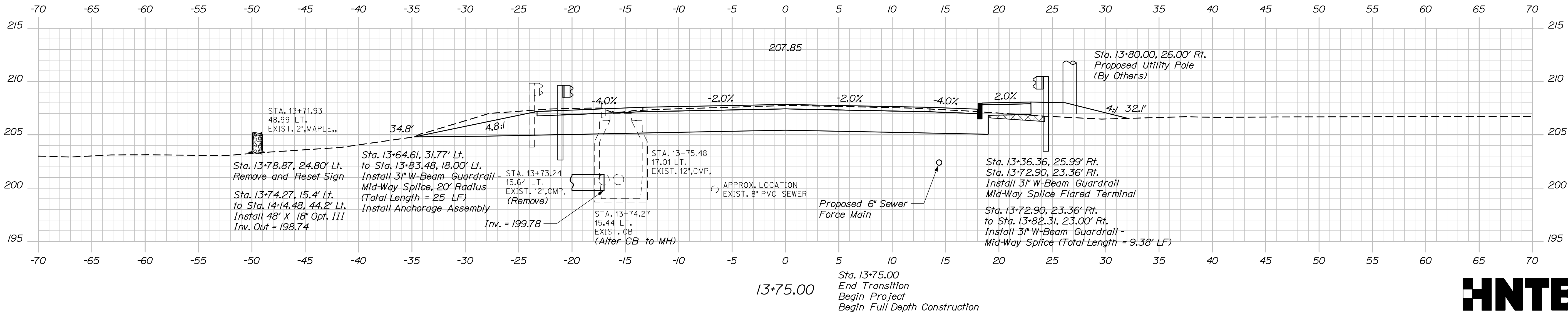
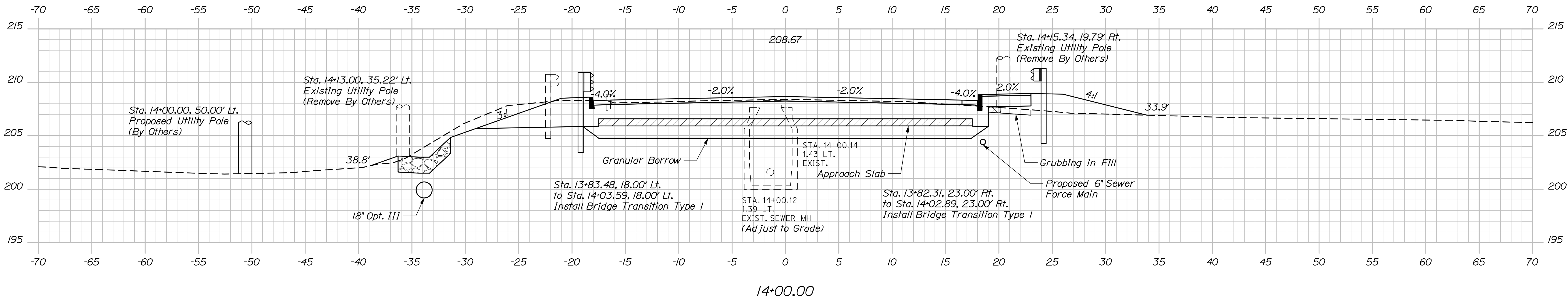
MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
CROSS SECTIONS
MAIN STREET/U.S. ROUTE 2

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



Sta. 13+75.00 to Sta. 14+00.00

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
2262701	
WIN	023234.01
BRIDGE NO. 2522	
BRIDGE PLANS	

SIGNATURE	
P.E. NUMBER	
DATE	

DATE	7/20
BY	P. Bishop
PROJ. MANAGER	C. Helmick
CHECKED-DETAILED	L. Driscoll
DESIGNED-DETAILED	
DESIGNS-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

MATTAWAMKEAG BRIDGE	PENOBSCOT COUNTY	
MATTAWAMKEAG RIVER		
MATTAWAMKEAG		
CROSS SECTIONS		
MAIN STREET/U.S. ROUTE 2		

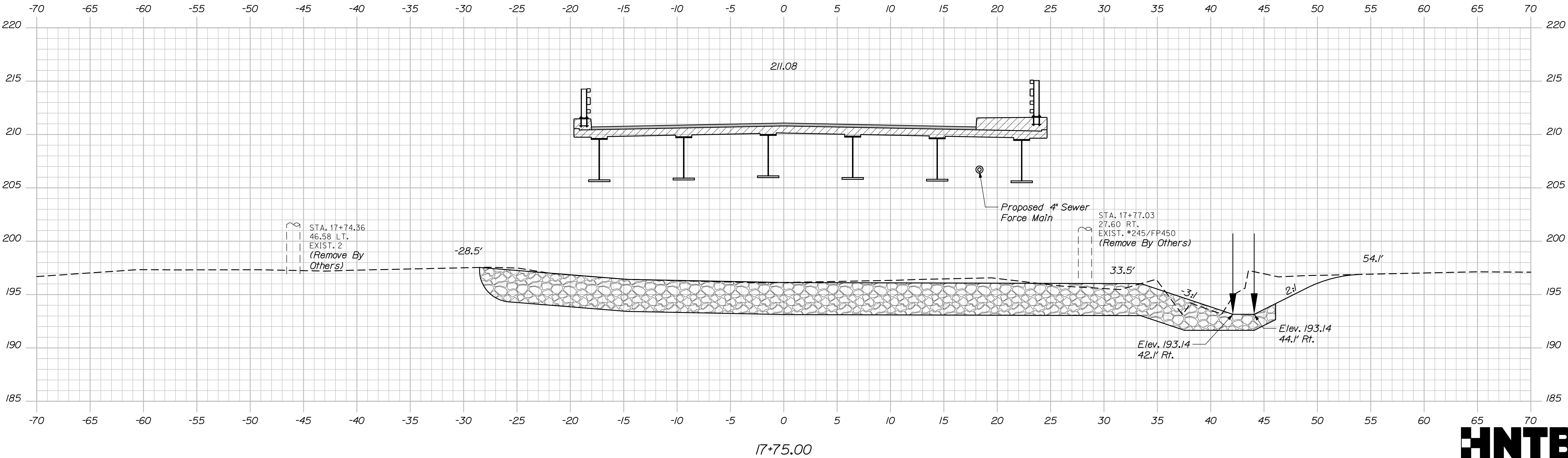
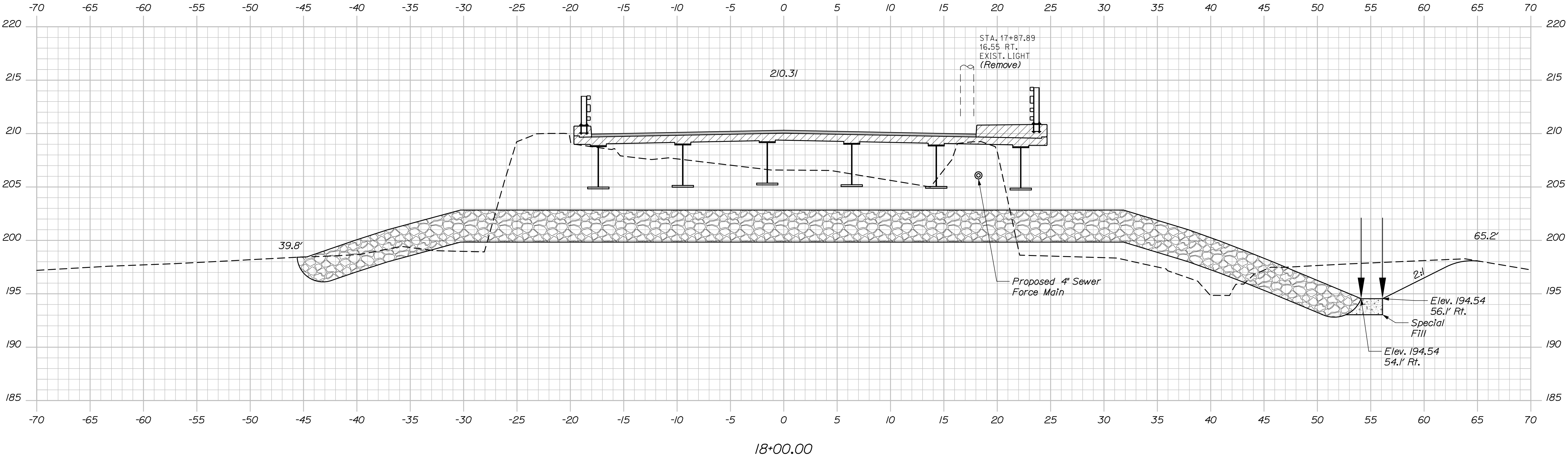
SHEET NUMBER
15
OF 69

Username:

Date:7/10/2020

Division:

Filename: Xsect.dgn



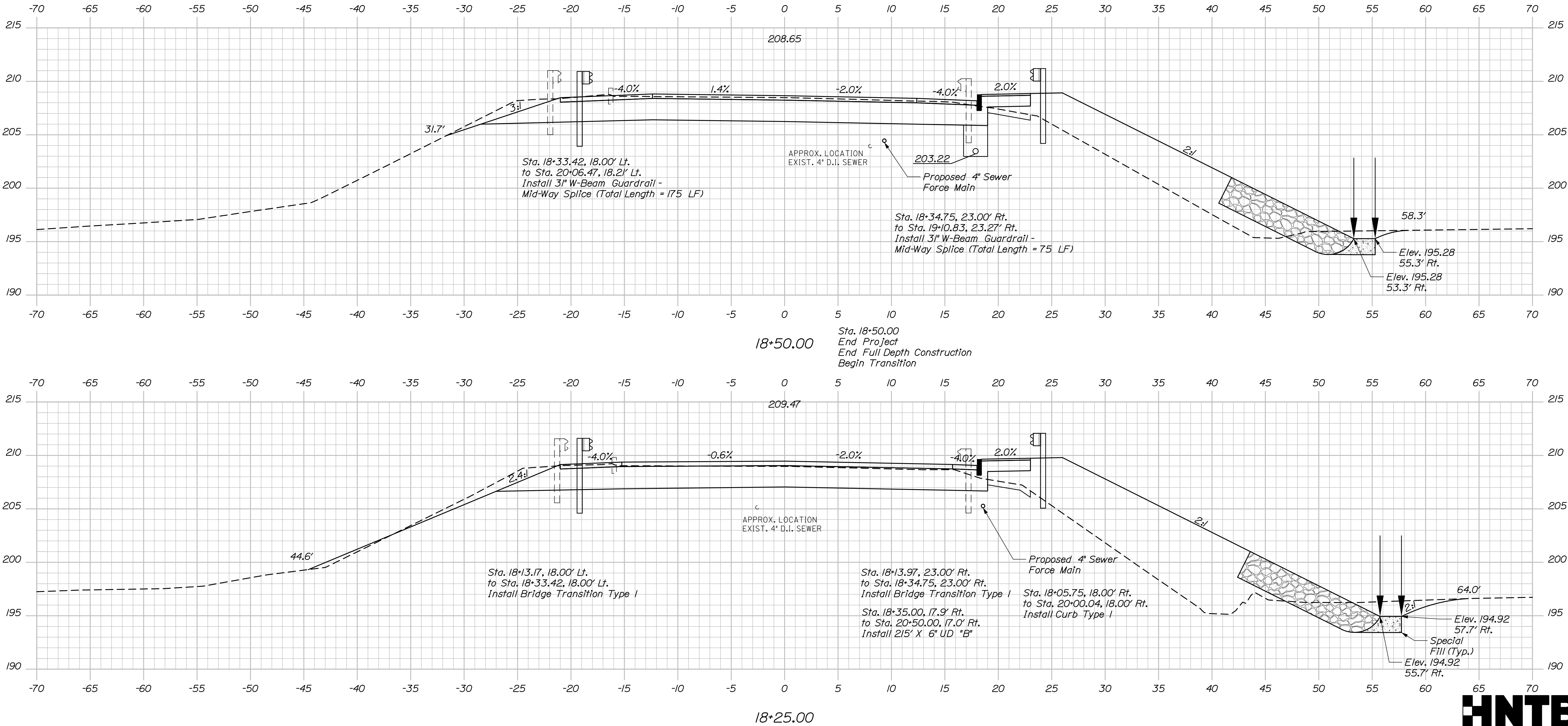
PROJ. MANAGER	CHECKED	REVIEWED	BY	DATE
C. Hainick	P. Bishop	A. Stephens		7/20
L. Driscoll				7/20
DESIGN-DETAILED	DESIGN-REVIEWED	DESIGN-DETAILED	SIGNATURE	
REVISIONS 1	REVISIONS 2	REVISIONS 3	P.E. NUMBER	
REVISIONS 4	REVISIONS 5	REVISIONS 6	DATE	
FIELD CHANGES				

Date:8/11/2020

Username:

Division:

Filename: Xsect.dgn



Sta. 18+25.00 to Sta. 18+50.00

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
2262701	
WIN	023234.01
BRIDGE NO. 2522	BRIDGE PLANS

PROJ. MANAGER	BY	DATE	SIGNATURE
Andy LaThe	P. Bishop	7/20	
C. Helmick	A. Stephens	7/20	
L. Driscoll			
DESIGN-DETAILED	DESIGN-REVIEWED	DESIGN-APPROVED	P.E. NUMBER
REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4
FIELD CHANGES	DATE		

MATTAWAMKEAG BRIDGE	MATTAWAMKEAG RIVER
MATTAWAMKEAG	PENOBSCOT COUNTY
CROSS SECTIONS	
MAIN STREET/U.S. ROUTE 2	

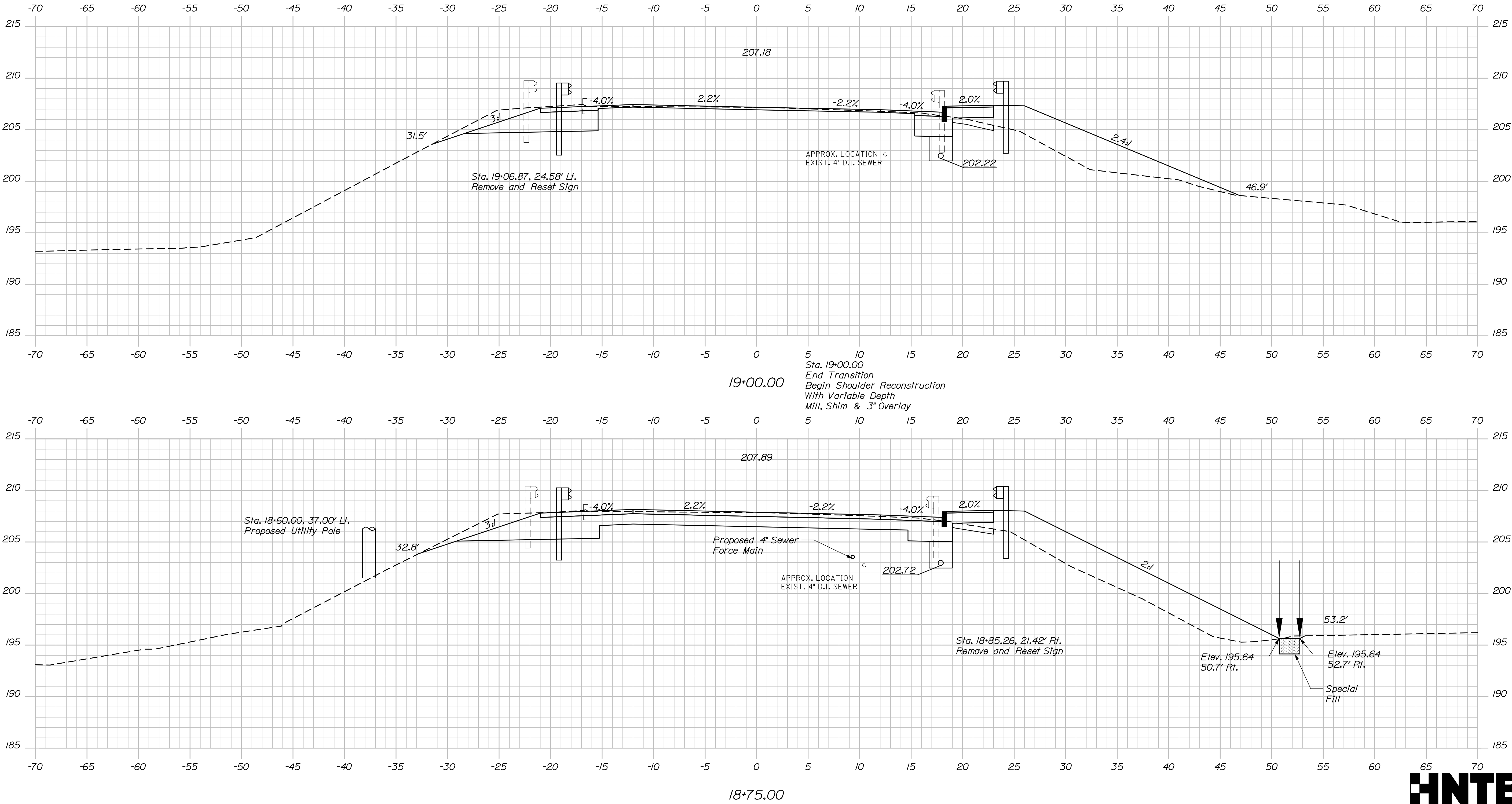
SHEET NUMBER
17
OF 69

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



Sta. 18+75.00 to Sta. 19+00.00

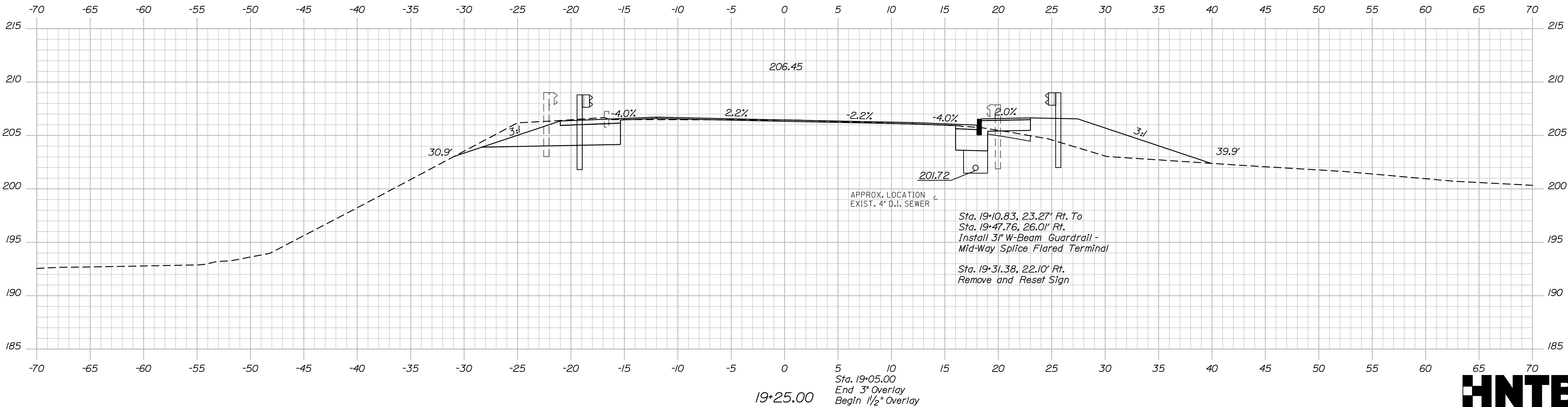
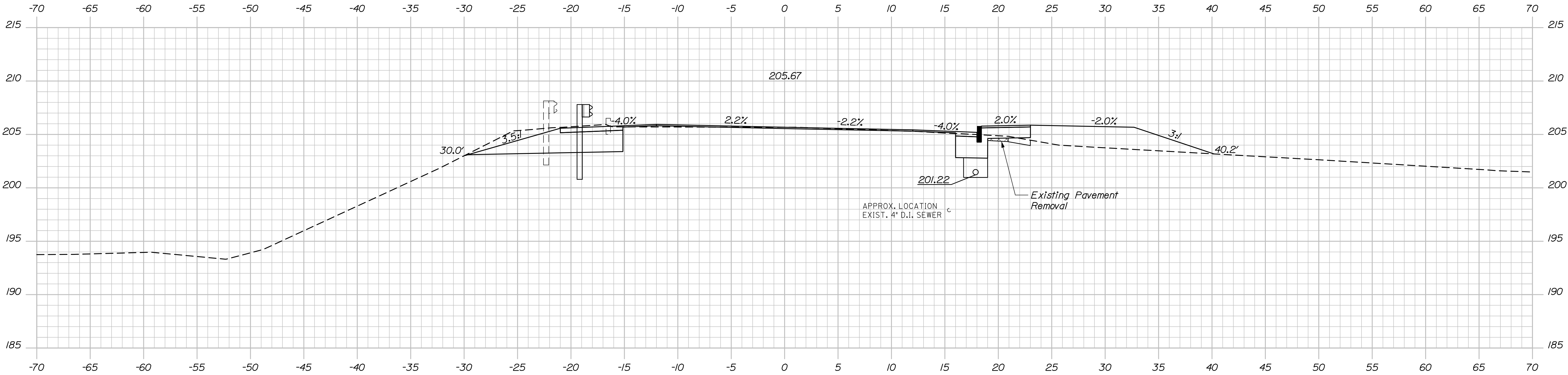
PROJ. MANAGER	BY	DATE	SIGNATURE
DESIGN-DETAILED C. Helmick	P. Bishop	7/20	
CHECKED-REVIEWED L. Driscoll	A. Stephens	7/20	
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



PROJ. MANAGER	CHECKED	REVIEWED	BY	DATE	SIGNATURE
C. Hainick	P. Bishop	A. Stephens		7/20	
L. Driscoll				7/20	
DESIGNS DETAIL	DESIGNS DETAIL	DESIGNS DETAIL			
REVISIONS 1	REVISIONS 2	REVISIONS 3			
REVISIONS 4	REVISIONS 5	REVISIONS 6			
FIELD CHANGES					

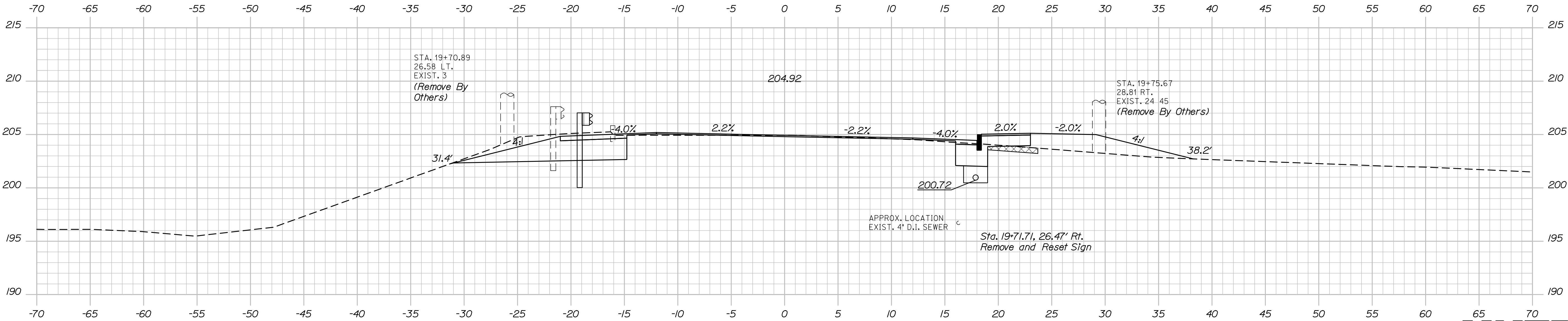
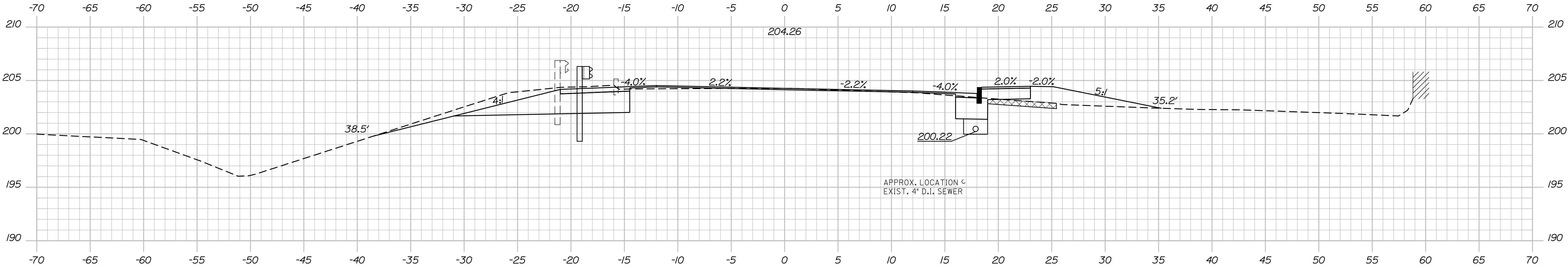
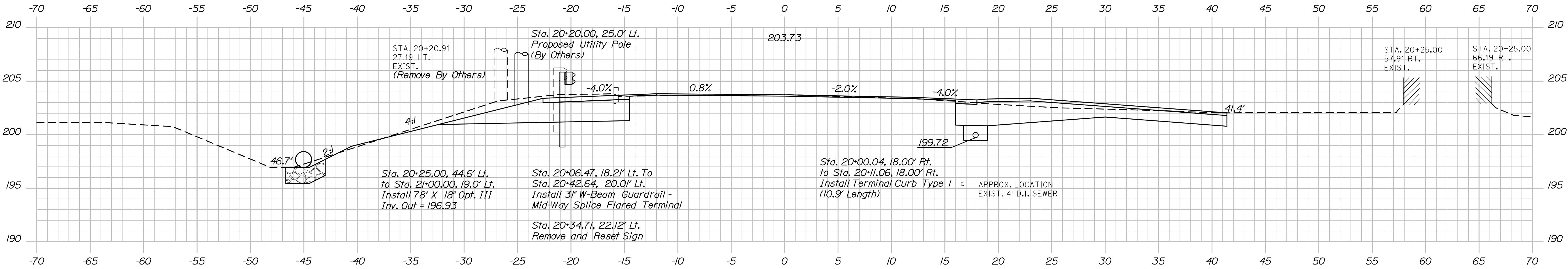
MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
CROSS SECTIONS
MAIN STREET/U.S. ROUTE 2

Date:7/10/2020

Username:

Division:

Filename: Xsect.dgn



STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2262701		WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE		MATTAWAMKEAG RIVER		MATTAWAMKEAG		PENOBSCOT COUNTY		CROSS SECTIONS		MAIN STREET/U.S. ROUTE 2		SHEET NUMBER	
BY		DATE		SIGNATURE		P.E. NUMBER		DATE		FIELD CHANGES		20	
P. Bishop		7/20										OF 69	
A. Stephens		7/20											
C. Hainick													
L. Driscoll													
DESIGN-DETAILED		DESIGN-DETAILED		DESIGN-DETAILED		DESIGN-DETAILED		DESIGN-DETAILED		DESIGN-DETAILED			
CHECKED-REVIEWED		CHECKED-REVIEWED		CHECKED-REVIEWED		CHECKED-REVIEWED		CHECKED-REVIEWED		CHECKED-REVIEWED			
DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED			
REVISIONS 1		REVISIONS 1		REVISIONS 1		REVISIONS 1		REVISIONS 1		REVISIONS 1			
REVISIONS 2		REVISIONS 2		REVISIONS 2		REVISIONS 2		REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3		REVISIONS 3		REVISIONS 3		REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4		REVISIONS 4		REVISIONS 4		REVISIONS 4		REVISIONS 4			
FIELD CHANGES		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES			

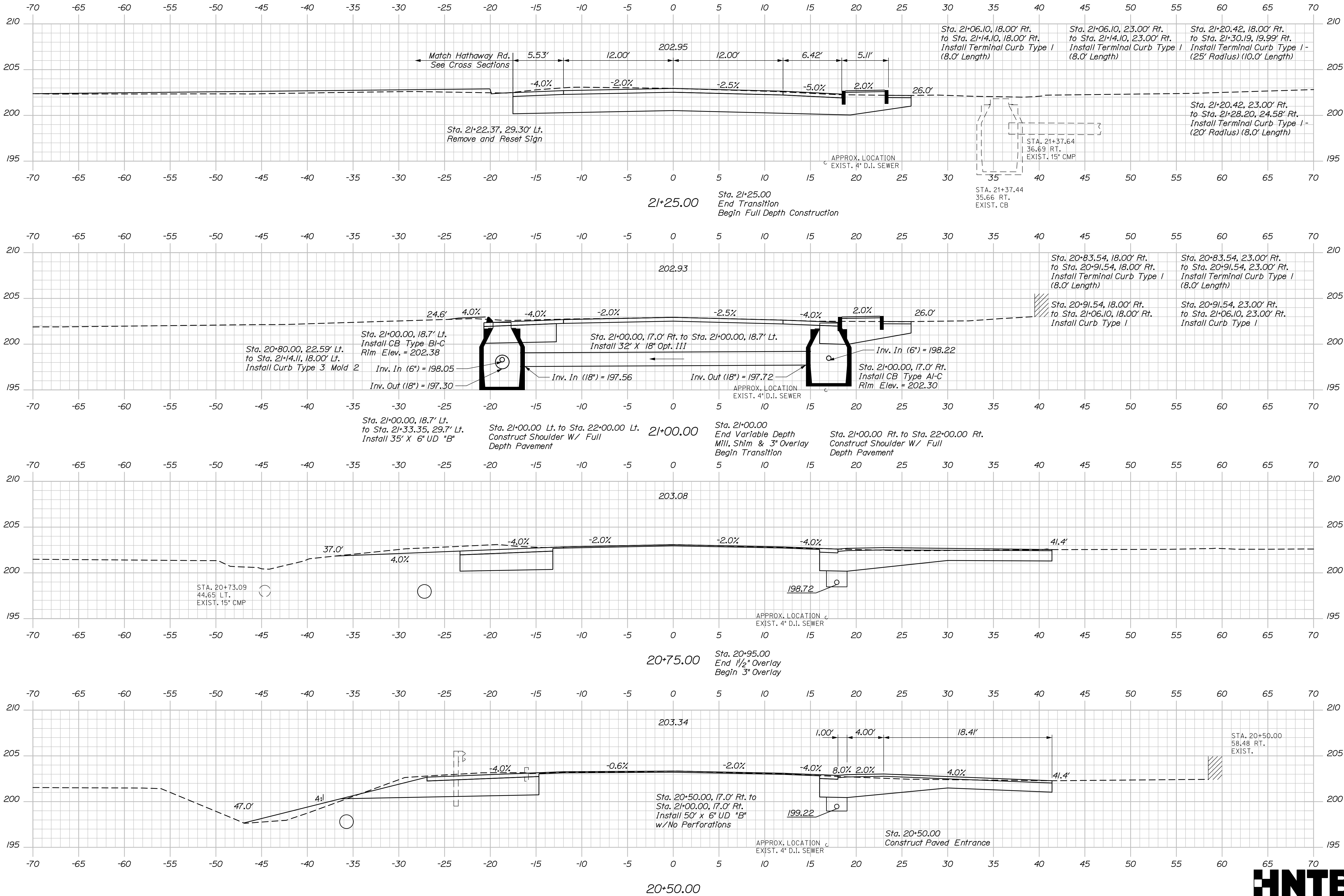
Sta. 19+75.00 to Sta. 20+25.00

Date: 8/11/2020

Username:

Division:

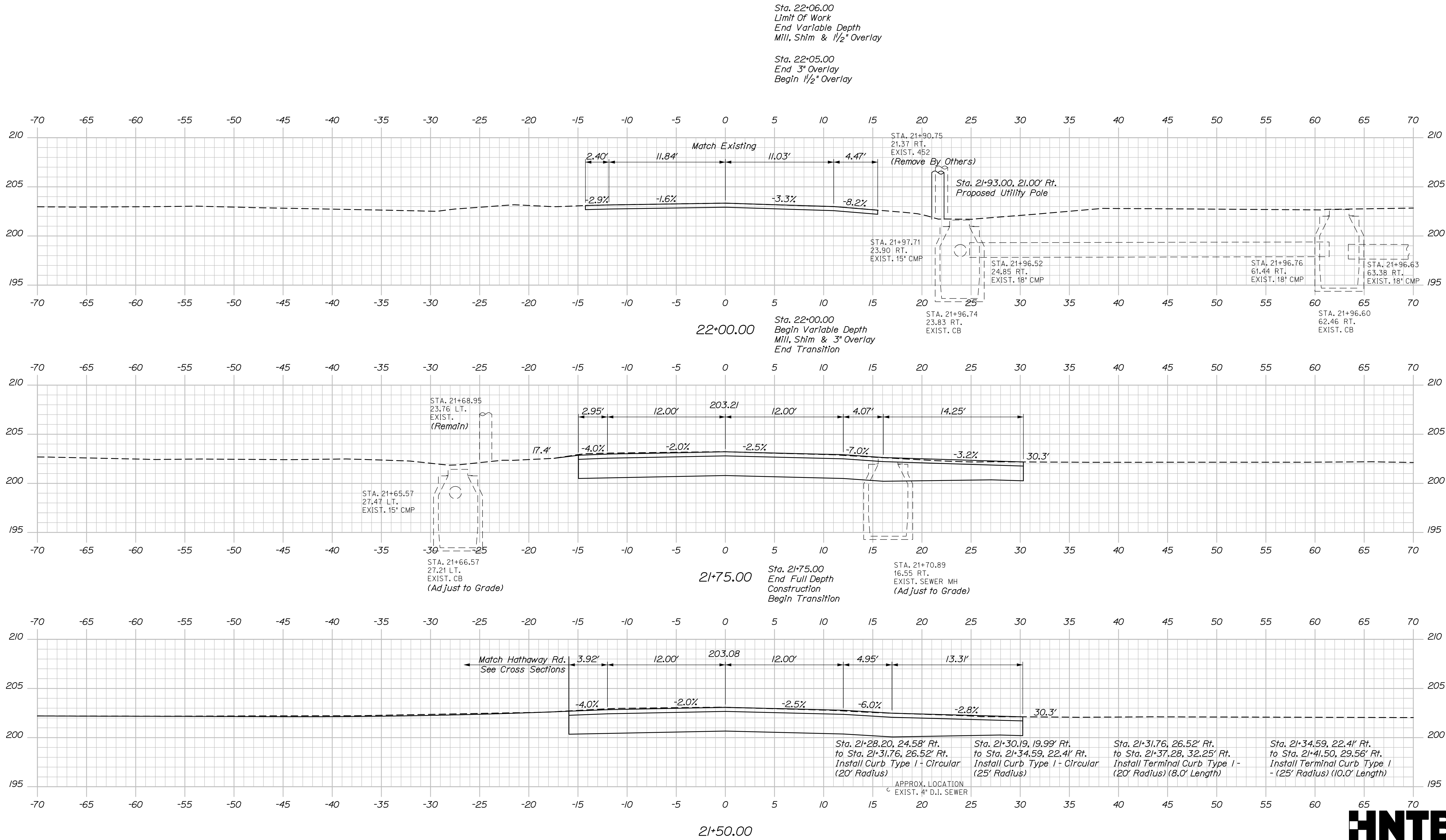
Filename: Xsect.dgn



Sta. 20+50.00 to Sta. 21+25.00

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2262701		WIN 023234.01		BRIDGE NO. 2522		BRIDGE PLANS			
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY		CROSS SECTIONS MAIN STREET/U.S. ROUTE 2		SHEET NUMBER 21 OF 69		DATE 7/20 7/20		SIGNATURE P. Bishop A. Stephens		P.E. NUMBER DATE	

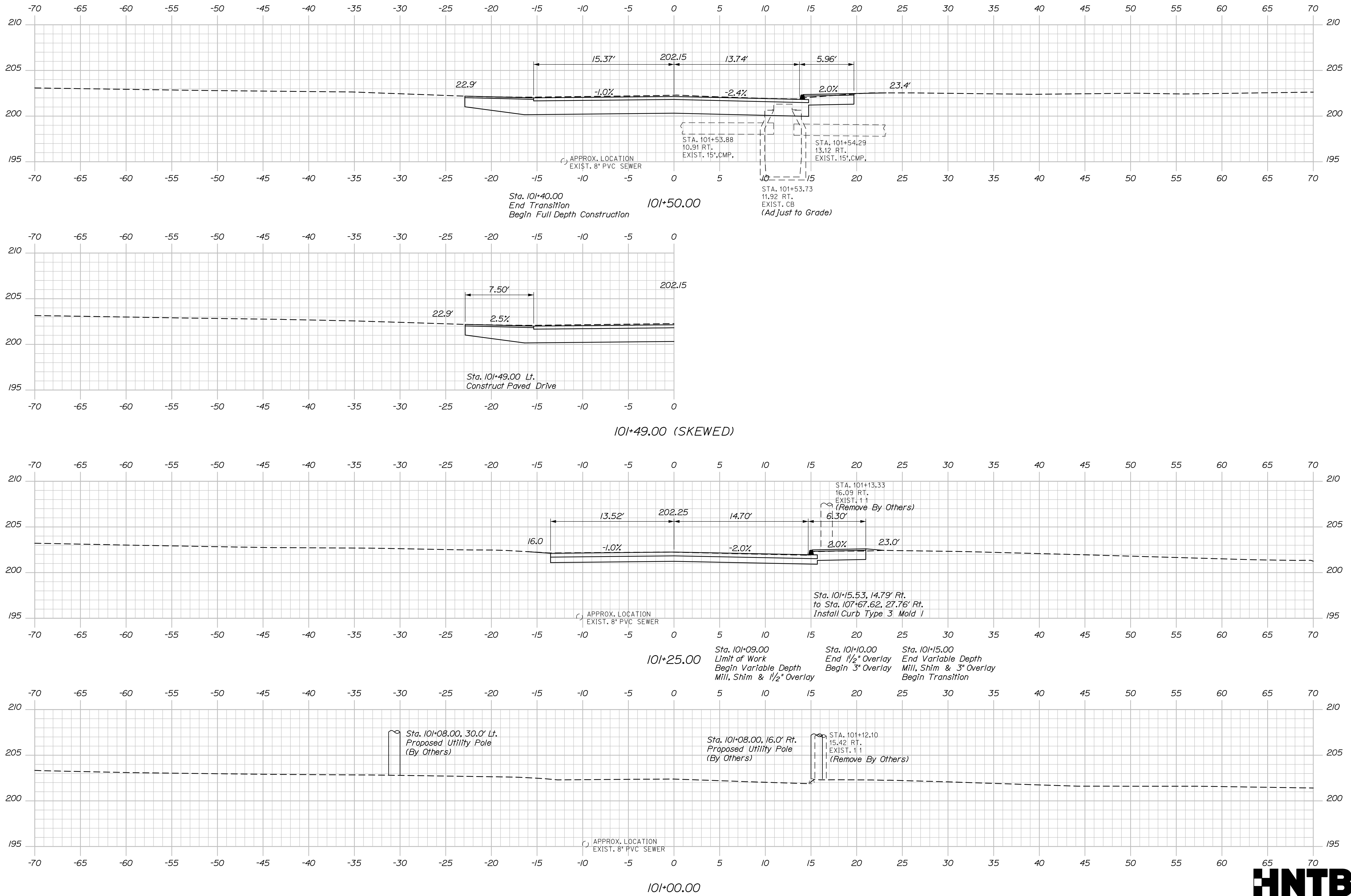
Filename: Xsect.dgn



HNTB

Sta. 21+50.00 to Sta. 22+00.00

Filename: Xsect.dgn



HNTB

Sta. 101+00.00 to Sta. 101+50.00

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
2262701	
BRIDGE NO. 2522	WIN 023234.01
	BRIDGE PLANS

PROJ. MANAGER	BY	DATE
CHECKED-DETAILED	P. Bishop	7/20
DESIGNED-DETAILED	L. Driscoll	7/20
DESIGNS 1		
DESIGNS 2		
DESIGNS 3		
DESIGNS 4		
FIELD CHANGES		
SIGNATURE		
P.E. NUMBER		
DATE		

MATTAWAMKEAG BRIDGE	
MATTAWAMKEAG RIVER	
MATTAWAMKEAG PENOBSCOT COUNTY	
CROSS SECTIONS	
HATHAWAY ROAD	

SHEET NUMBER

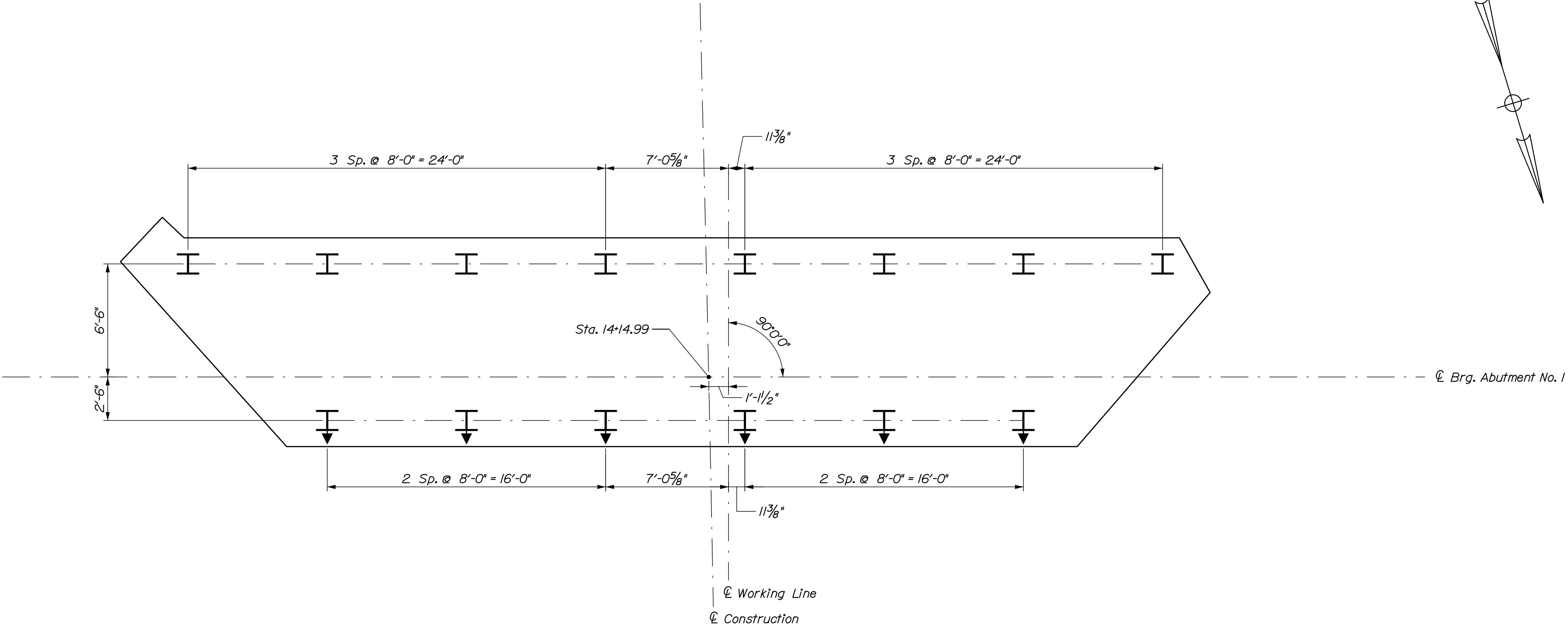
23

OF 69

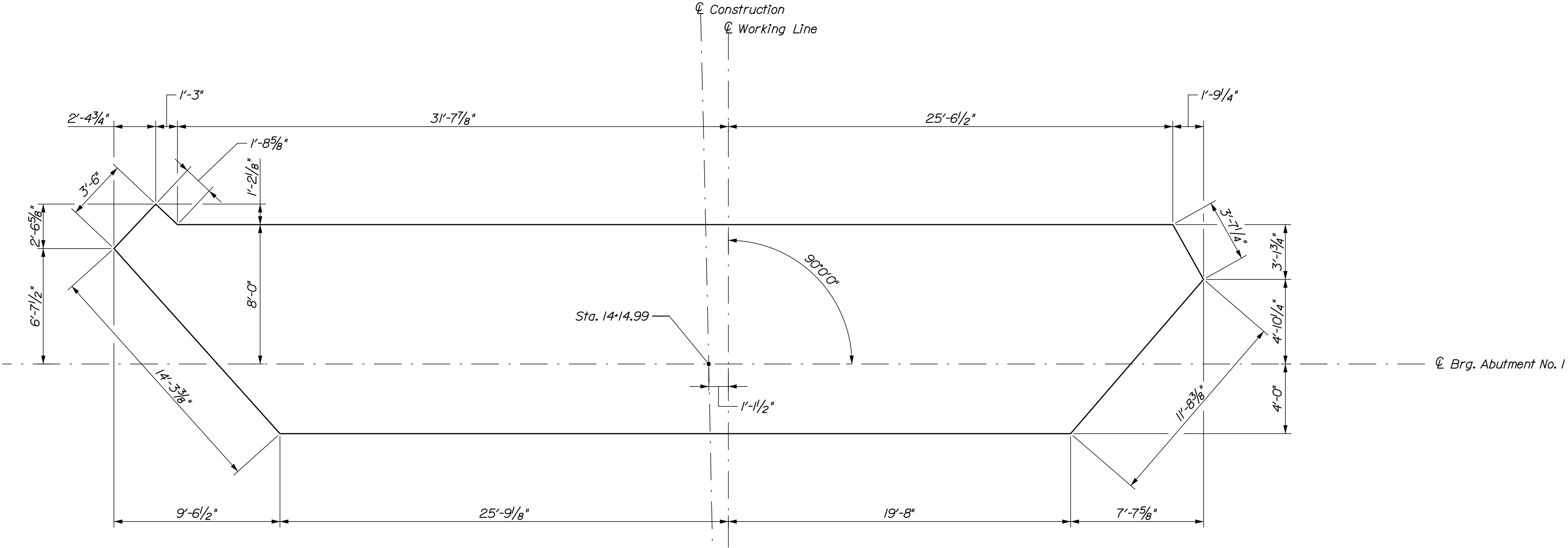
PILE NOTES:

1. The maximum factored pile load is 299 kips at the Strength Limit State.
2. H-pile material shall be ASTM A572, Grade 50.
3. Estimate of piles required (includes extra 5 feet per pile as contingency):

Abutment No. 1: 14 ~ HP 14x89 @ 24 feet
Abutment No. 2: 14 ~ HP 14x89 @ 45 feet
4. All piles shall be equipped with a pile tip in accordance with Standard Specification Section 501.048, Prefabricated Pile Tips.
5. Drive piles to achieve a nominal pile resistance of 600 kips.
6. Piles shall be driven to the required nominal resistance on or within bedrock in accordance with Standard Specification Section 501.
7. Piles shall not be out of position shown by more than 2 inches in any direction.
8. Piles marked with an arrow shall be battered 3 in/ft in the direction of the arrow.
9. The Contractor shall submit to the Department, for review and acceptance, their proposed pile driving equipment with a completed "Pile and Driving Equipment Data Form", Figure 1, of Standard Section 501-Foundation Piles. Approval of the proposed pile driving equipment by the Department will be based on Department-conducted wave equation analyses and the criteria specified in Section 501 and Subsection 501.042, Equipment for Driving Piles. If the Department-conducted wave equation analyses show that the proposed driving system(s) is unacceptable, the Contractor shall modify or replace the proposed driving equipment in an amendment of the QCP, at their own expense, until subsequent wave equation analyses by the Department indicate the pile can be driven to the required resistance, without damage or excessive blows.
10. The Contractor shall provide access for the agents of the Department to perform (2) dynamic load tests, one at each abutment, with signal matching and 24-hour (minimum) restrike, as specified in Special Provision 501-Dynamic Loading Test, to confirm the nominal resistance of the piles. The dynamic pile load test at each abutment will be completed on the first production battered pile driven and will include a minimum 24-hour restrike test. The required nominal resistance for the pile is specified in Note 5.



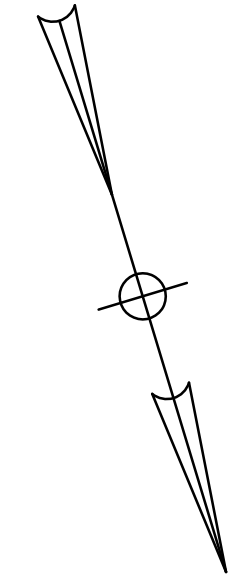
ABUTMENT NO. 1 PILE PLAN



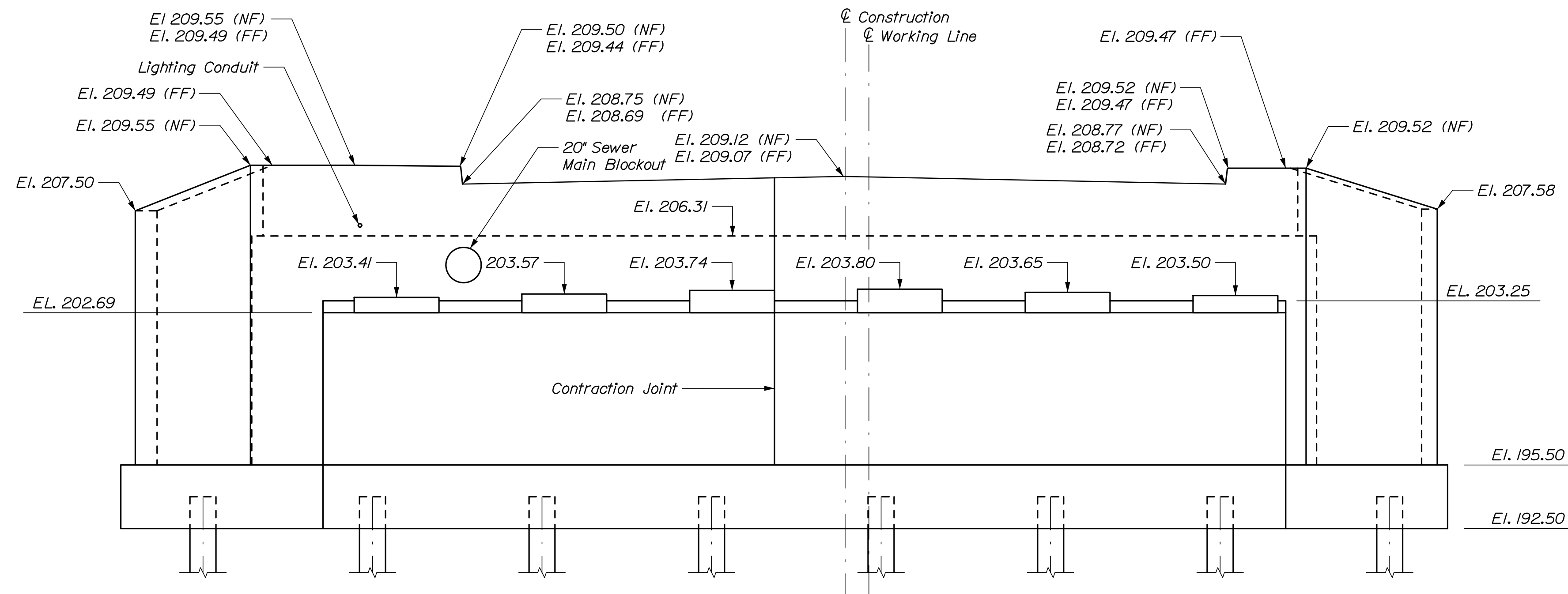
ABUTMENT NO. 1 FOOTING PLAN

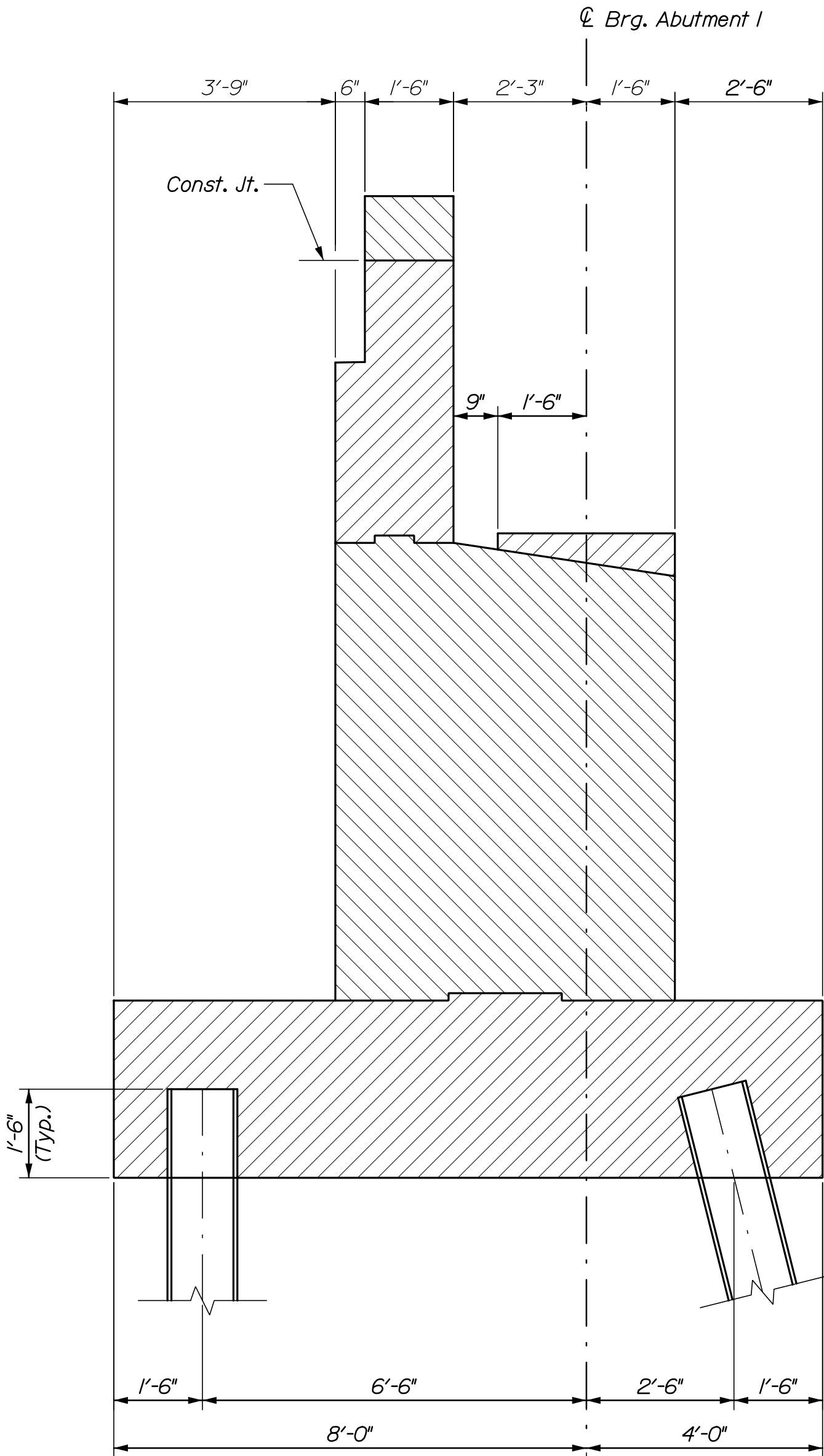


STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2262701		WIN 023234.01		BRIDGE NO. 2522 BRIDGE PLANS	
PROJECT MANAGER		DESIGN-DETAILED		CHECKED-REVIEWED		DESIGN-DETAILED	
A. LATHE		M.B.		B. BENNETT		H. HSU	
DATE		7/20		7/20		SIGNATURE	
DATE						P.E. NUMBER	
DATE						DATE	
SHEET NUMBER		24		OF 69			

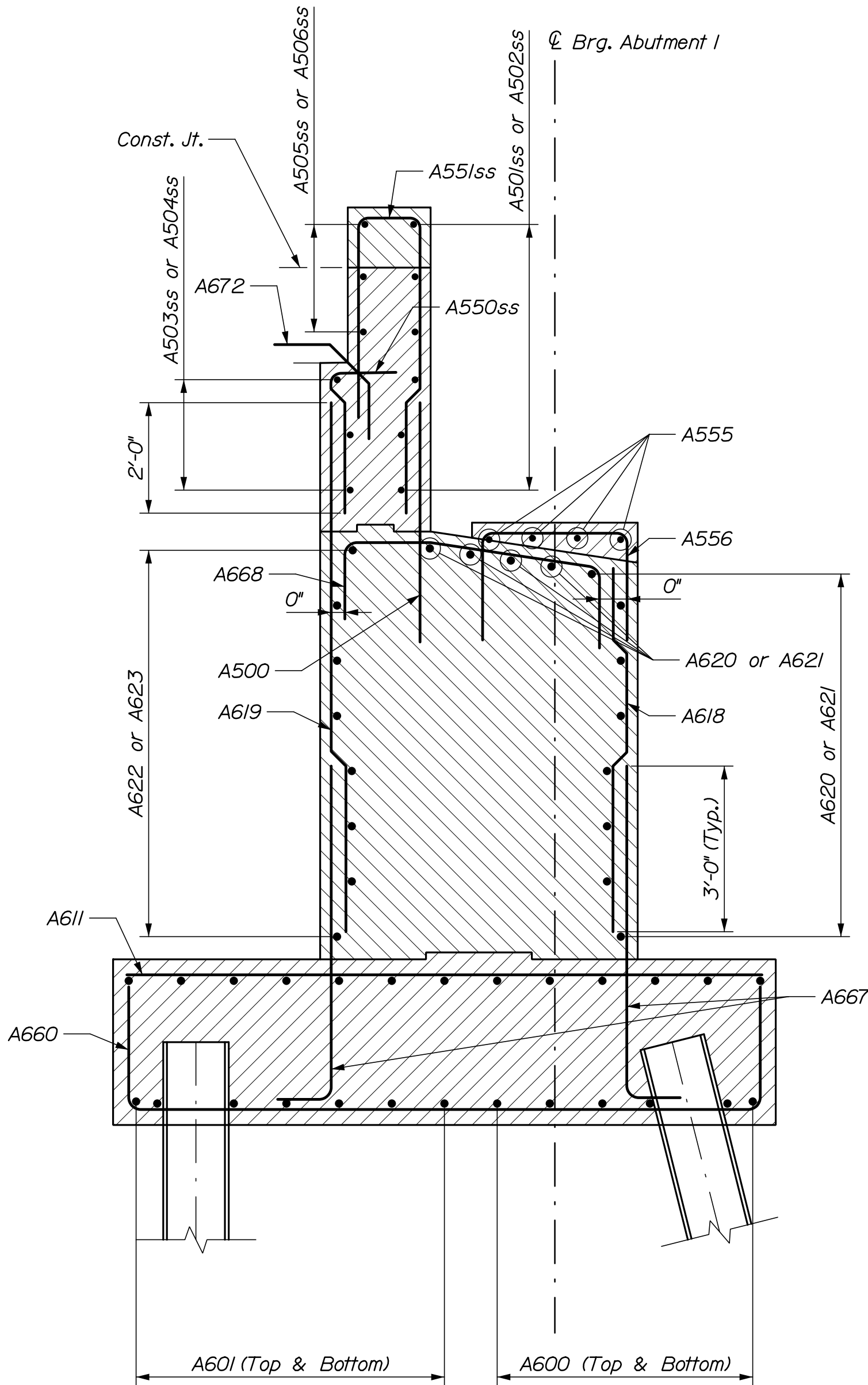


ABUTMENT NO. 1 ELEVATION

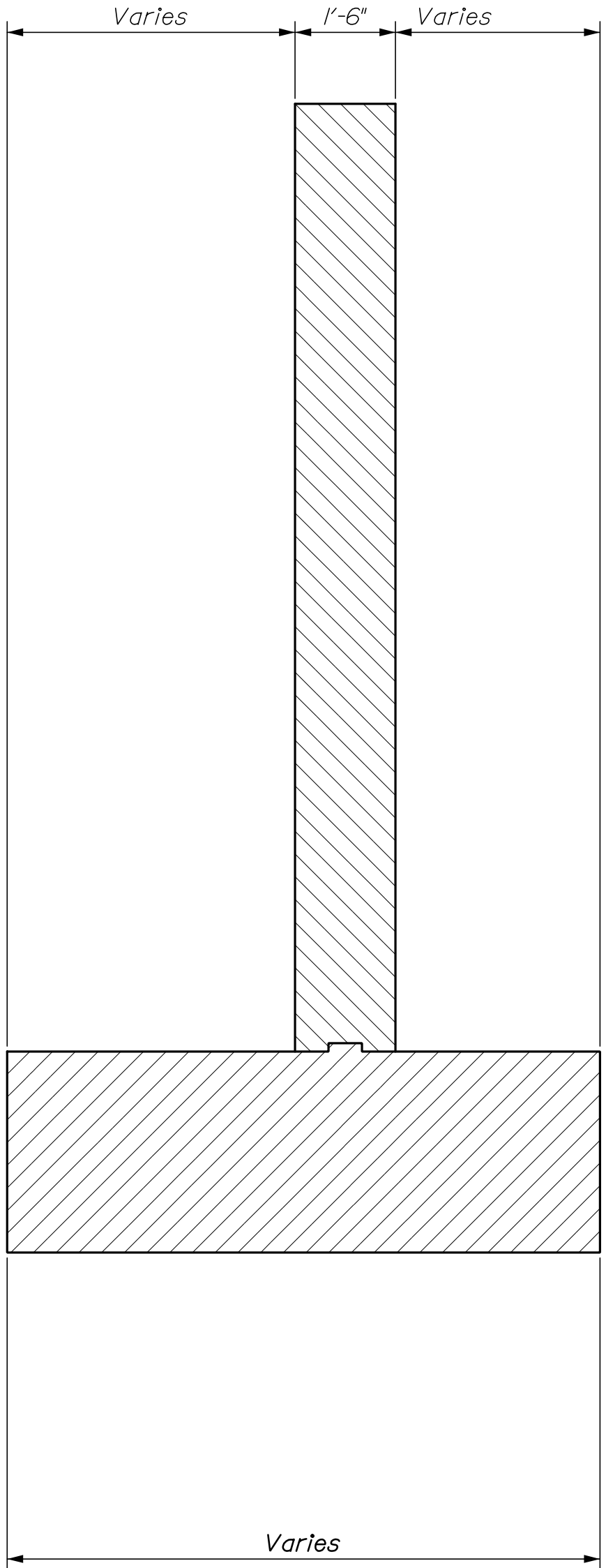




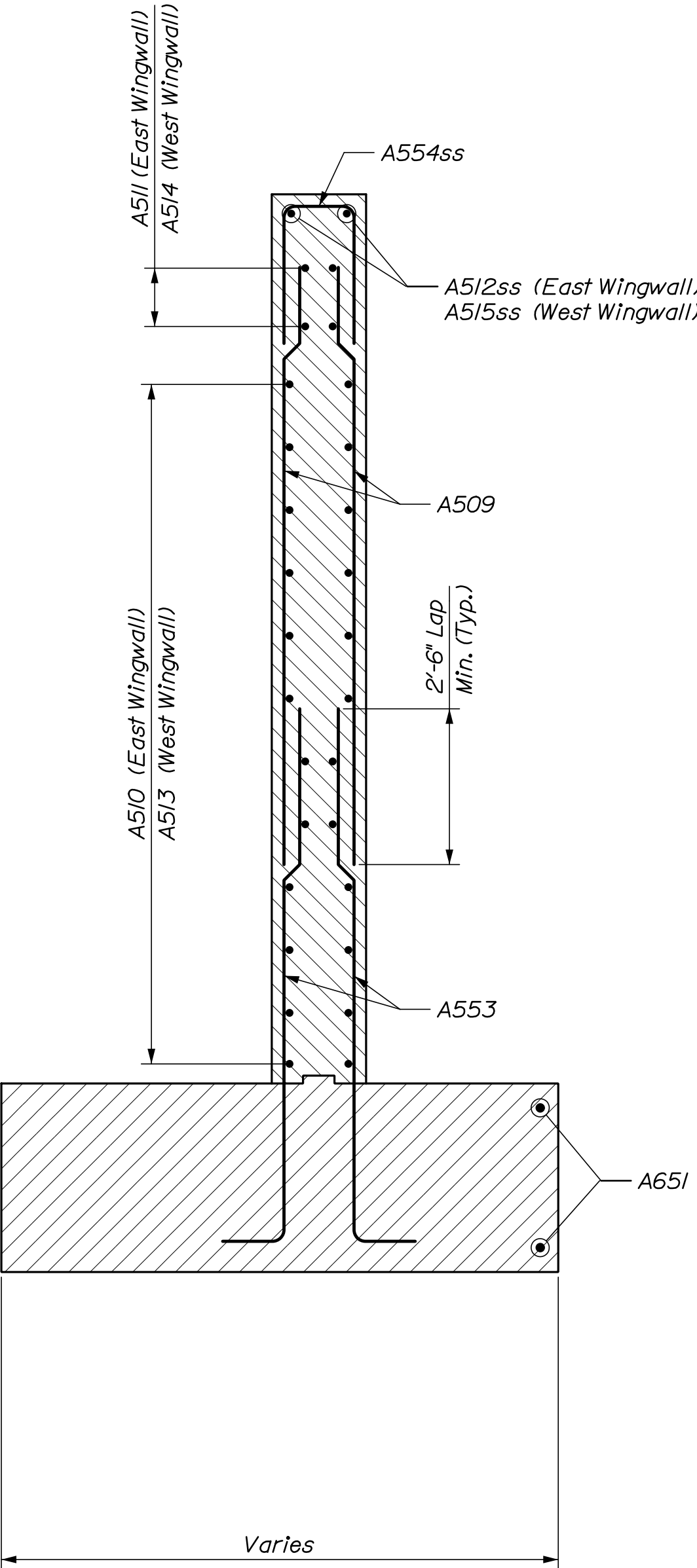
ABUTMENT NO. 1 SECTION



ABUTMENT NO. 1 REINFORCING SECTION



ABUTMENT NO. 1 WINGWALL SECTION
(West wingwall at backwall shown, other sections similar.)

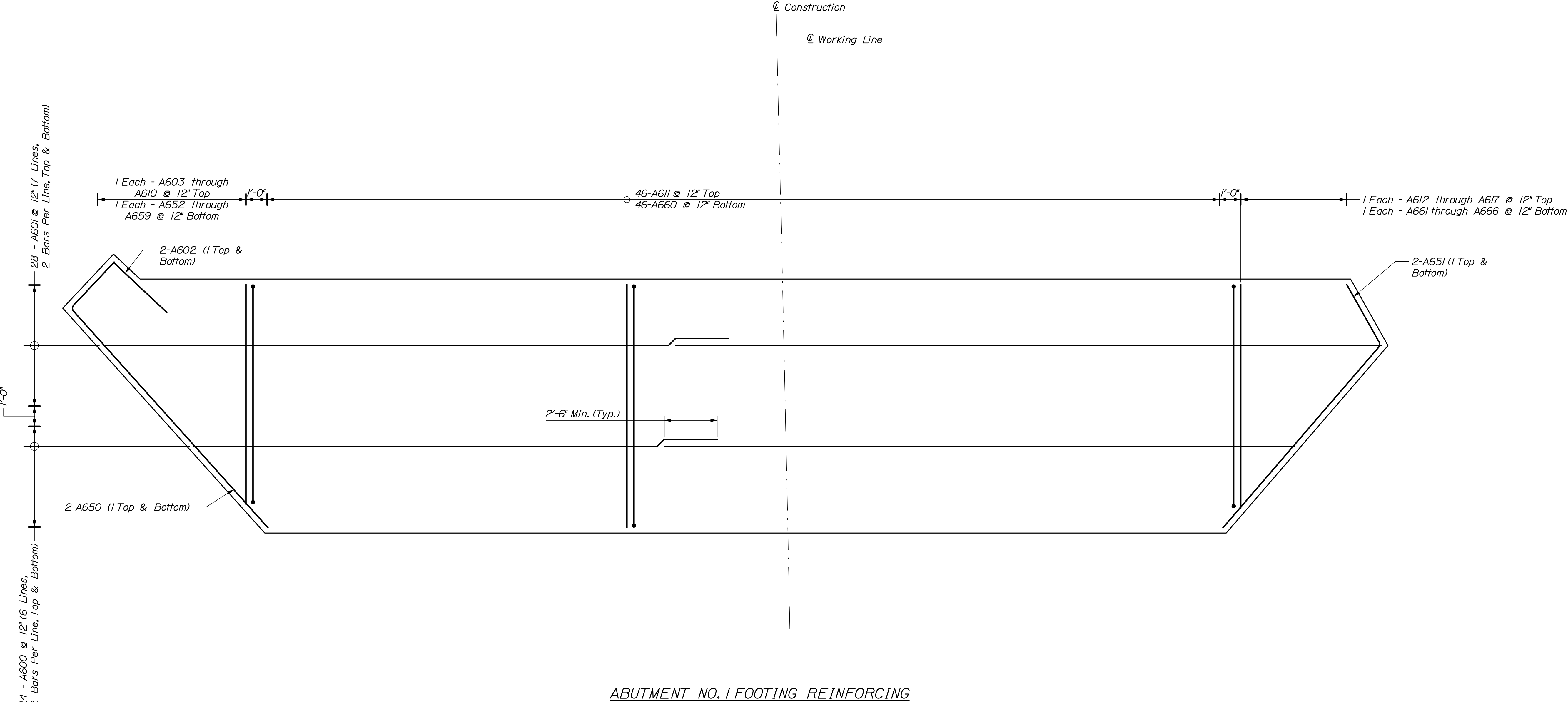


ABUTMENT NO. 1 WINGWALL REINFORCING SECTION
(West wingwall at backwall shown, other sections similar.
Typical footing reinforcement oriented longitudinal and
transverse to the abutment stem is not shown for clarity.)

SHEET NUMBER 26 OF 69	MATTAWAMKEAG BRIDGE				PROJ. MANAGER	A. LATHE	BY	DATE
	MATTAWAMKEAG RIVER				DESIGN-DETAILED	IMB	B. BENNETT	7/20
	MATTAWAMKEAG PENOBSCOT COUNTY				CHECKED-REVIEWED	EMC	H. HSU	7/20
					DESIGN2-DETAILED2			
					DESIGN3-DETAILED3			
					REVISIONS 1			P.E. NUMBER
					REVISIONS 2			
					REVISIONS 3			
					REVISIONS 4			DATE
					FIELD CHANGES			
STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2262701 BRIDGE NO. 2522 WIN 023234.01 BRIDGE PLANS								

FOOTING REINFORCING NOTES:

1. Spacing of footing reinforcing to be adjusted as necessary to avoid piles.



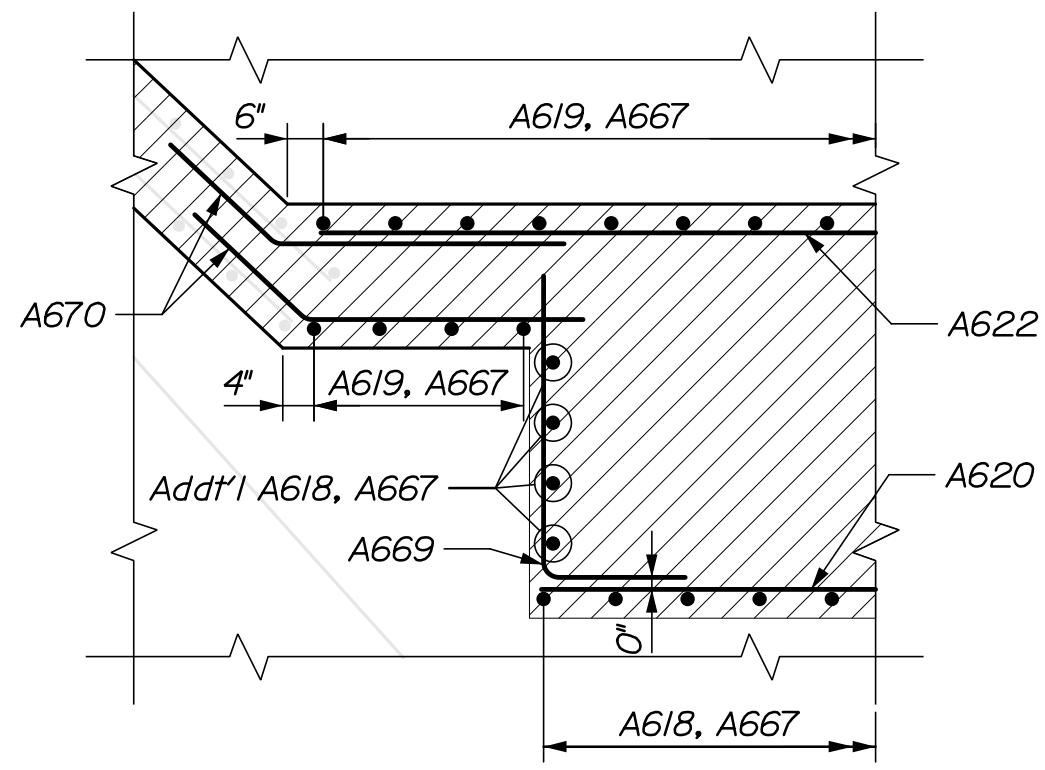
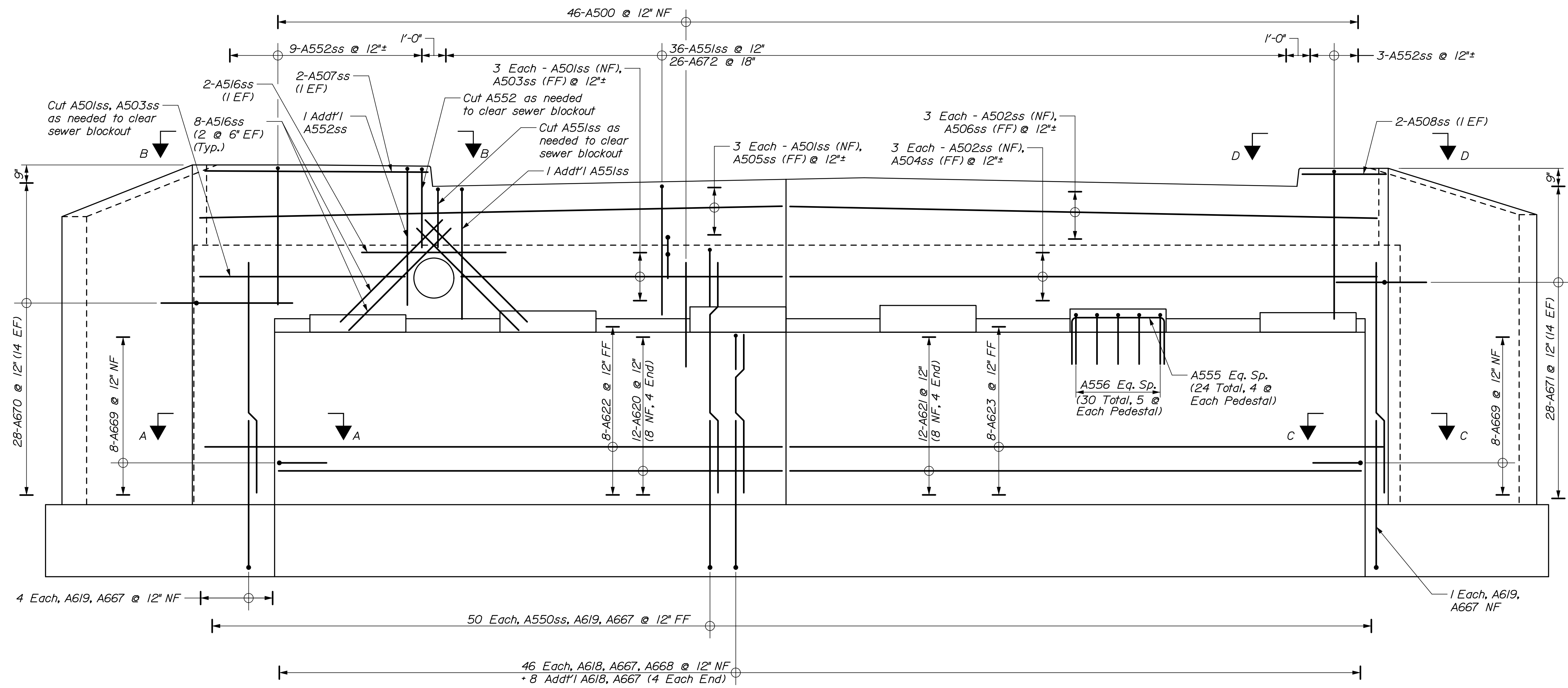
ABUTMENT NO. 1 FOOTING REINFORCING

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
2262701		2262701	
WIN		WIN	
BRIDGE NO. 2522		023234.01	
BRIDGE PLANS		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE		SIGNATURE	
MATTAWAMKEAG RIVER		P.E. NUMBER	
MATTAWAMKEAG PENOBSCOT COUNTY		DATE	
ABUTMENT NO. 1			
FOOTING REINFORCING			
SHEET NUMBER			
27			
OF 69			

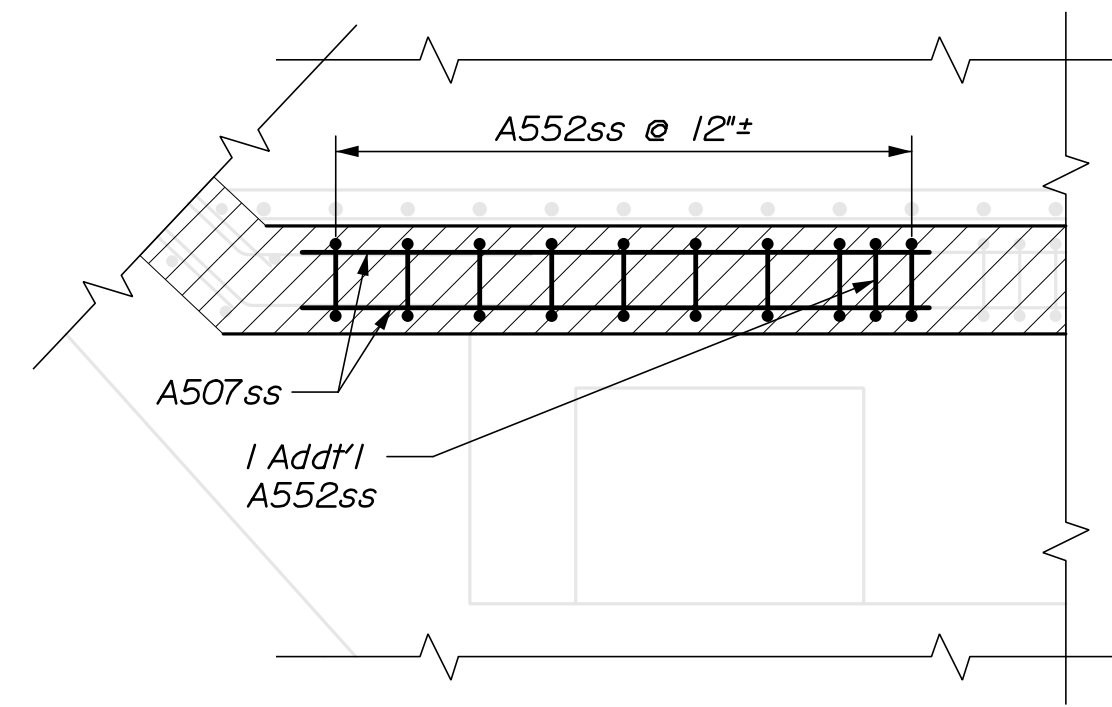
Date:7/10/2020

Username:

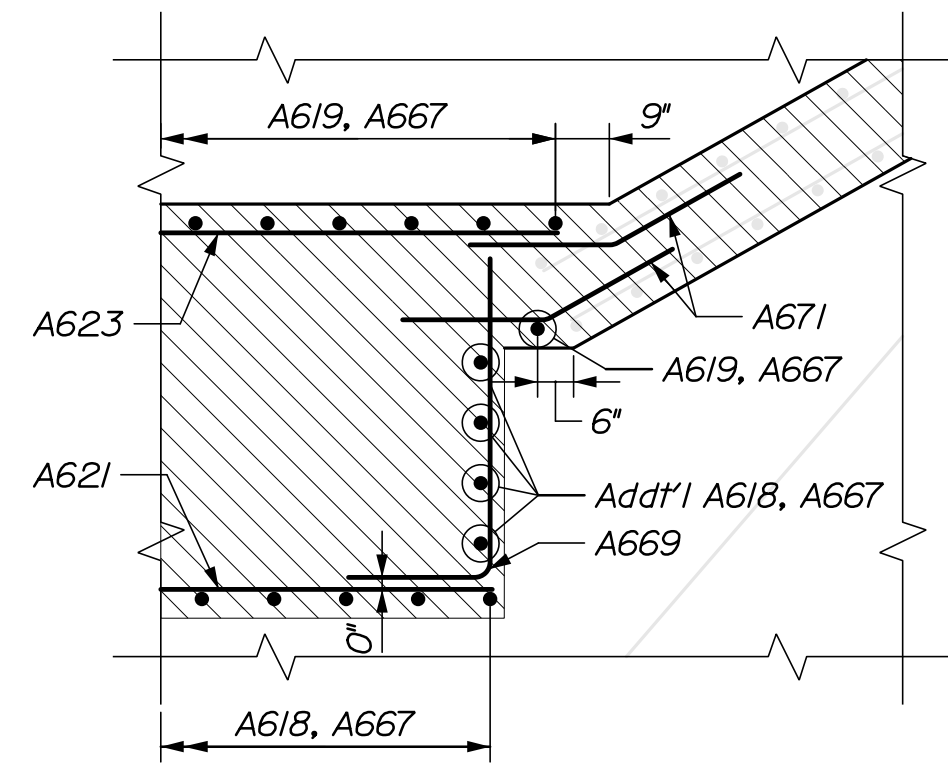
Filename: ... \028_Abutment No.1 Reinforcing Elevation.dwg



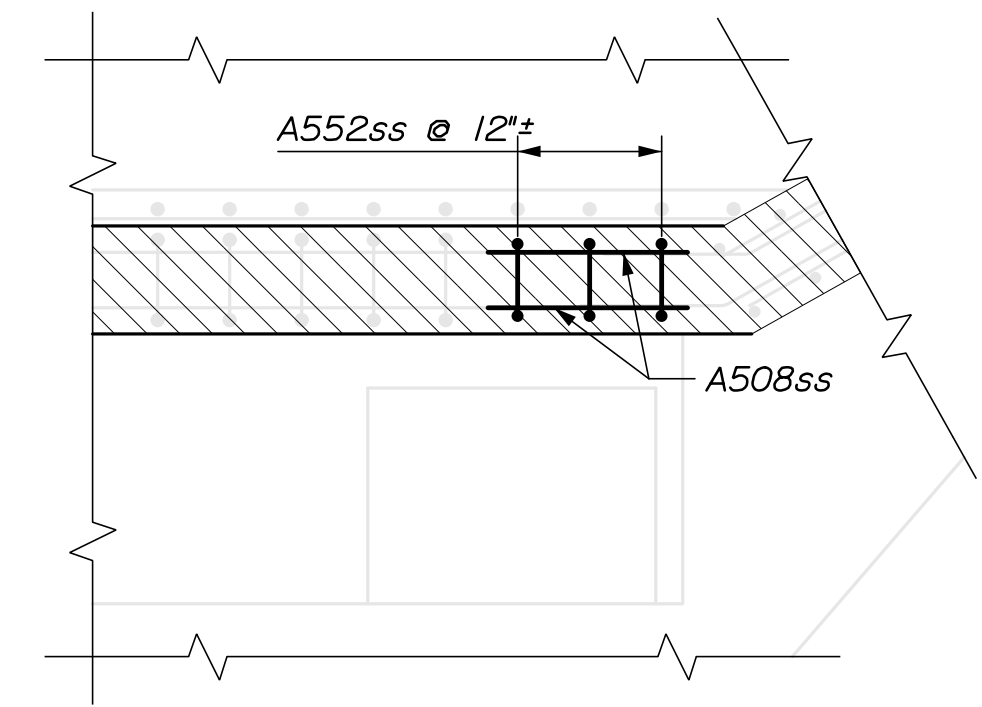
SECTION A-A



SECTION B-B



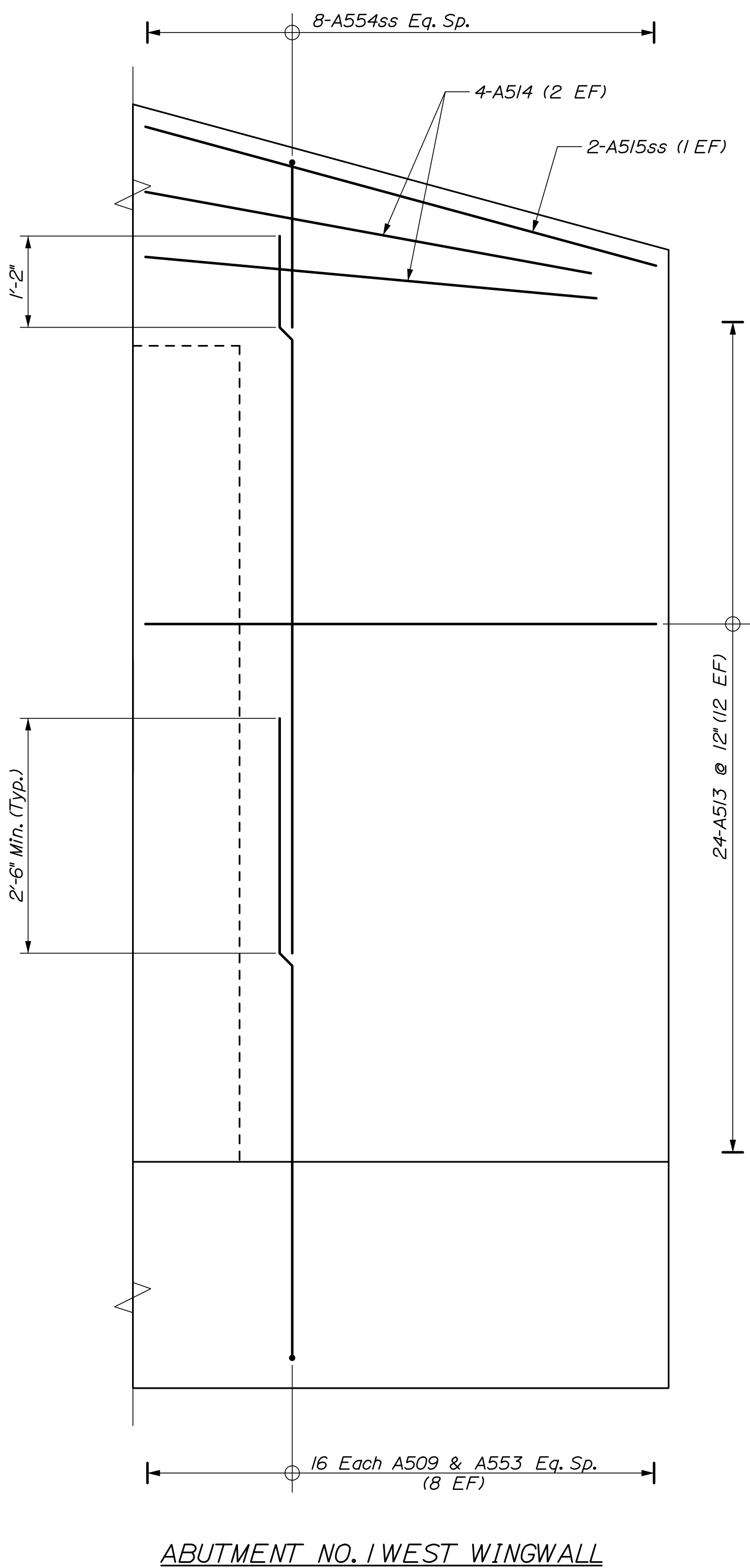
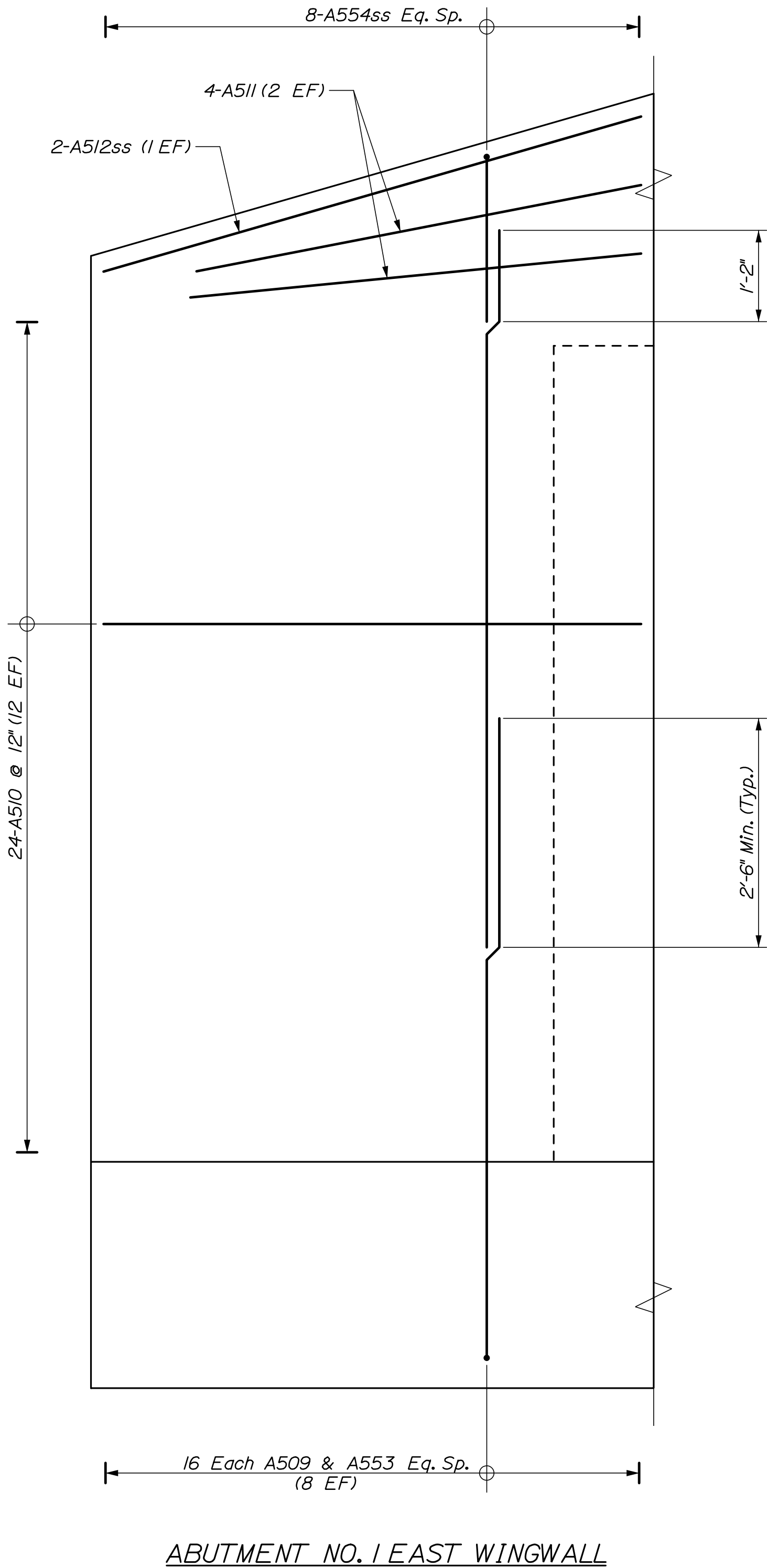
SECTION C-C



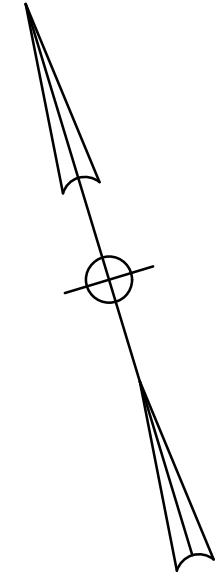
SECTION D-D

ABUTMENT NO. 1 REINFORCING ELEVATION

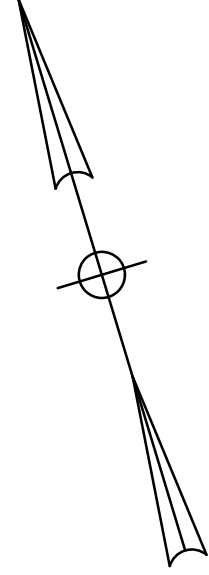
PROJ. MANAGER	A. LATHE	BY	DATE
DESIGN-DETAILED	M.B.	B. BENNETT	7/20
CHECKED-REVIEWED	ENC.	H. HSU	7/20
DESIGN-DETAILED			SIGNATURE
DESIGN-DETAILED			P.E. NUMBER
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			



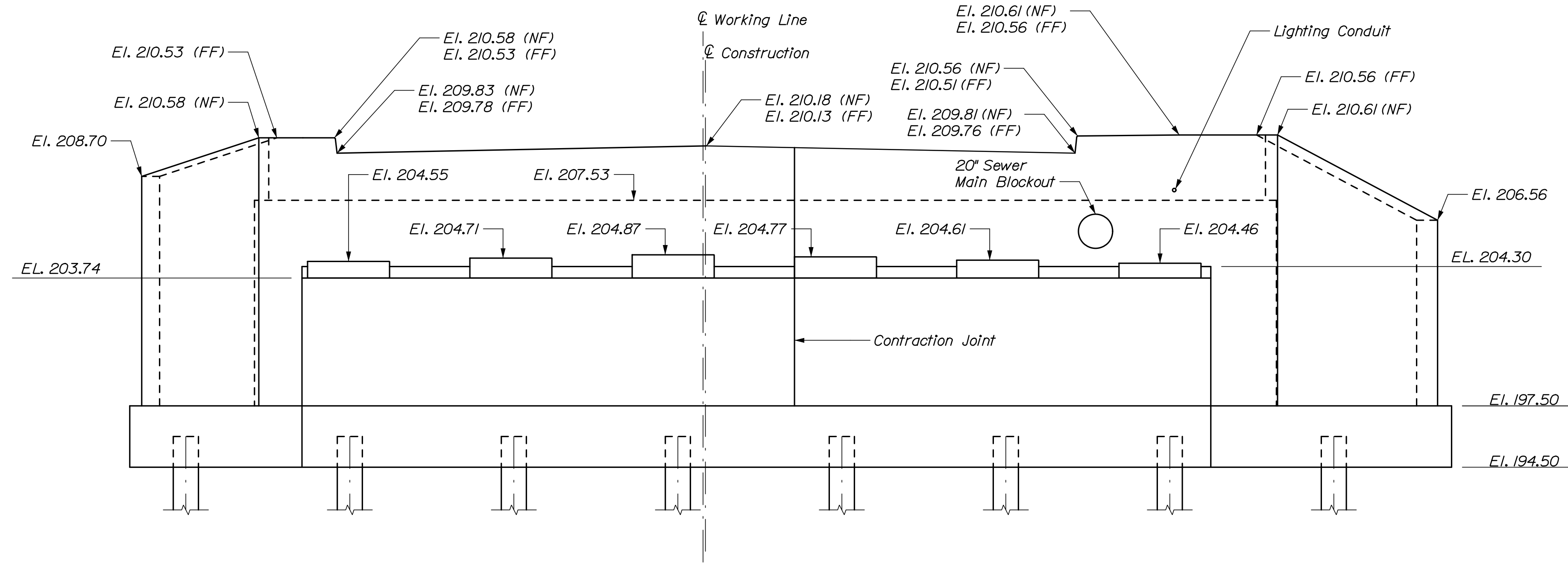
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SIGNATURE			
	2262701			
	WIN			
	023234.01			
BRIDGE NO. 2522				BRIDGE PLANS
PROJECT NAME				DATE
MATTAWAMKEAG BRIDGE				
MATTAWAMKEAG RIVER				
MATTAWAMKEAG PENOBSCOT COUNTY				
ABUTMENT NO. 1 WINGWALL				
ELEVATIONS				
SHEET NUMBER				
29				
OF 69				

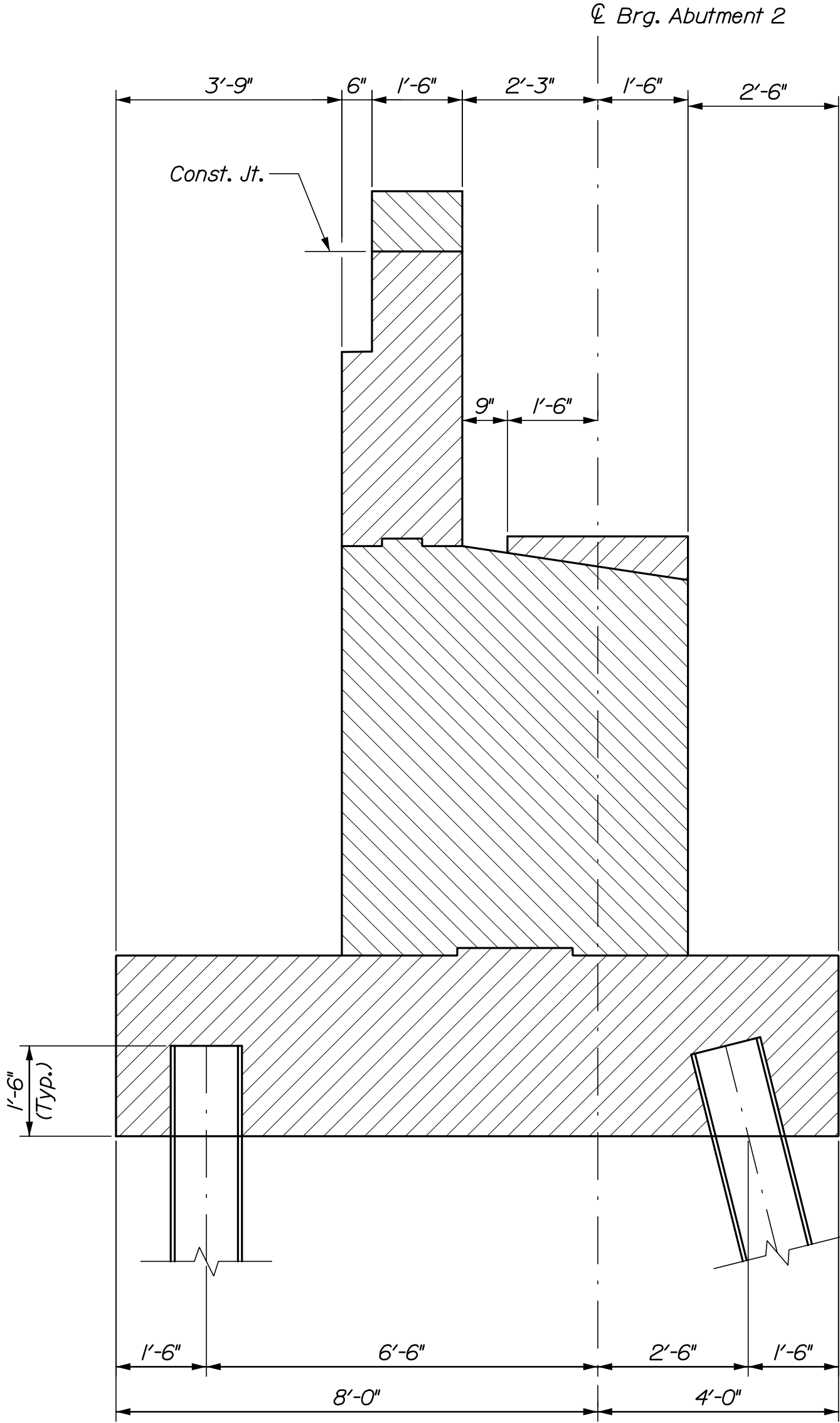


ABUTMENT NO. 2 FOOTING PLAN

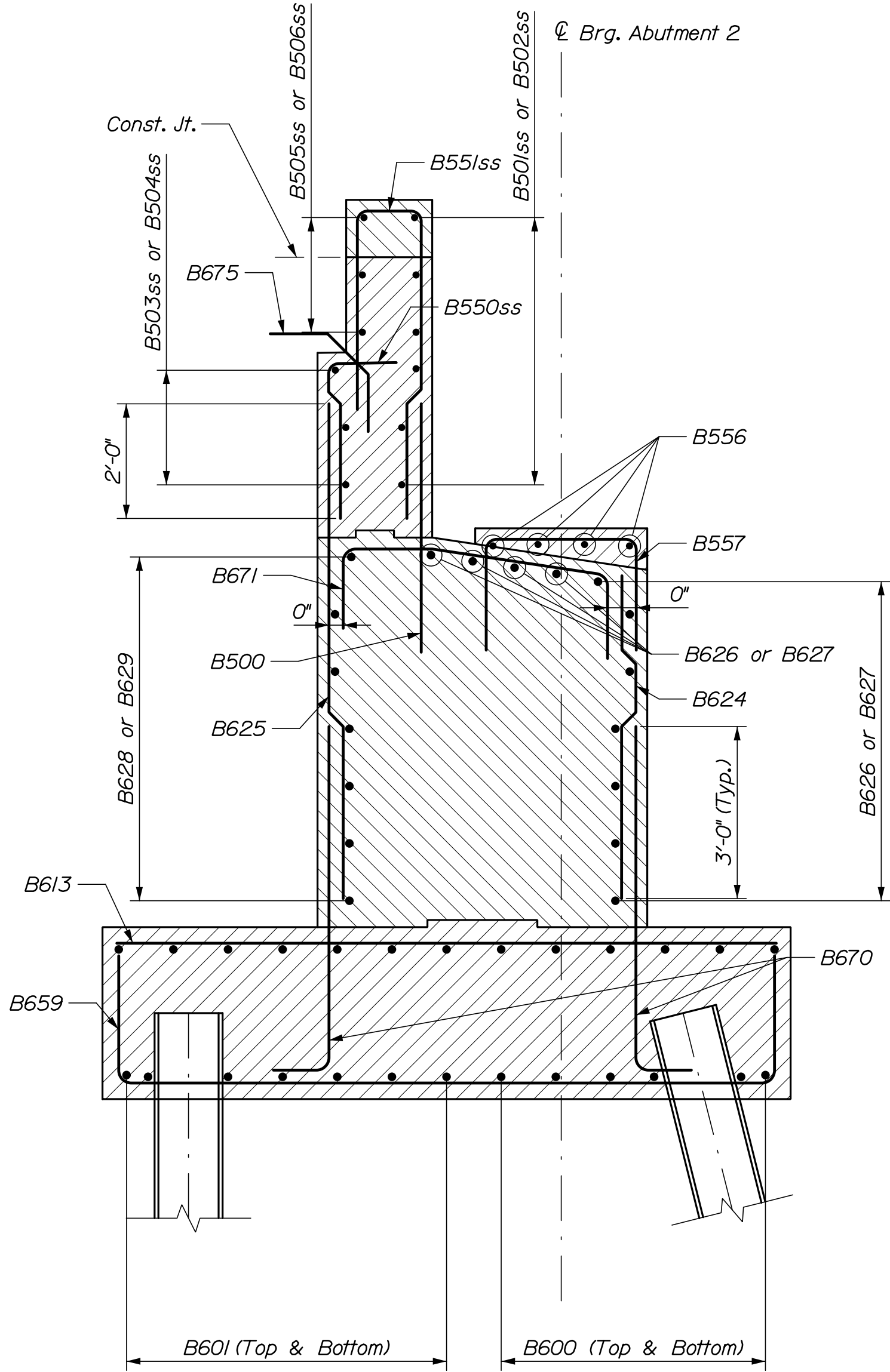


ABUTMENT NO. 2 ELEVATION

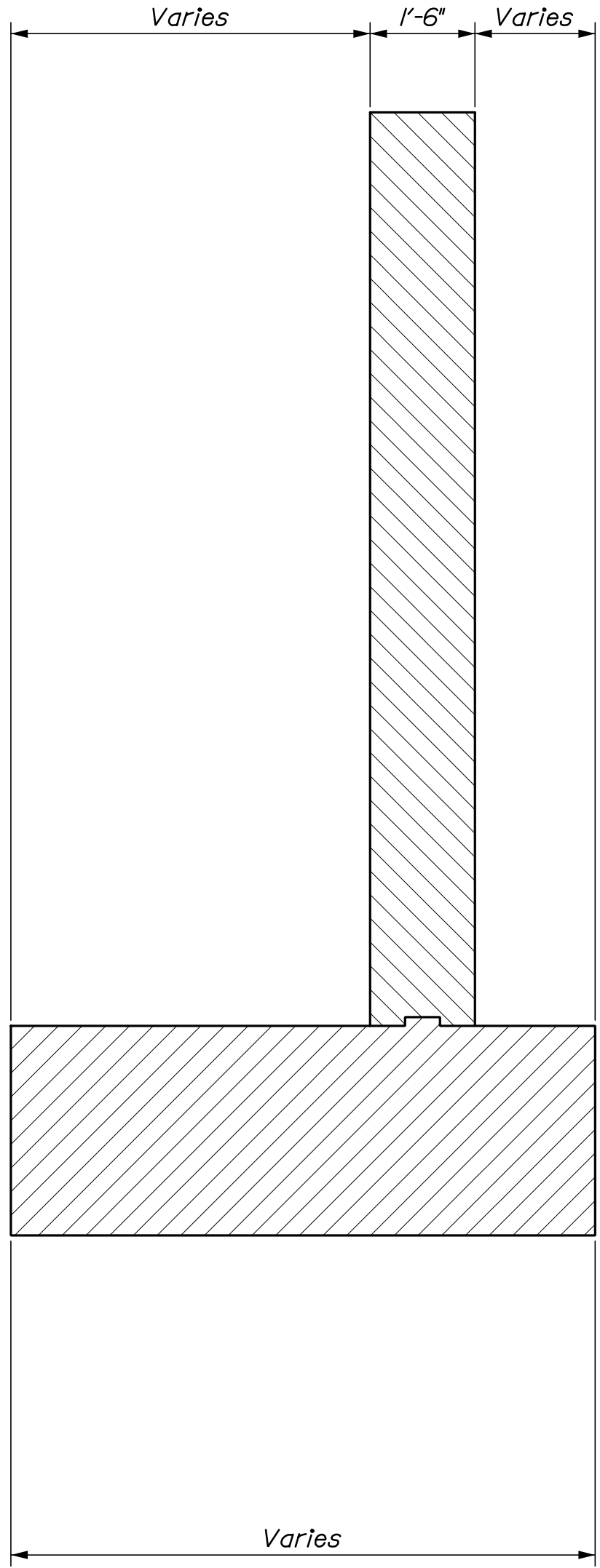




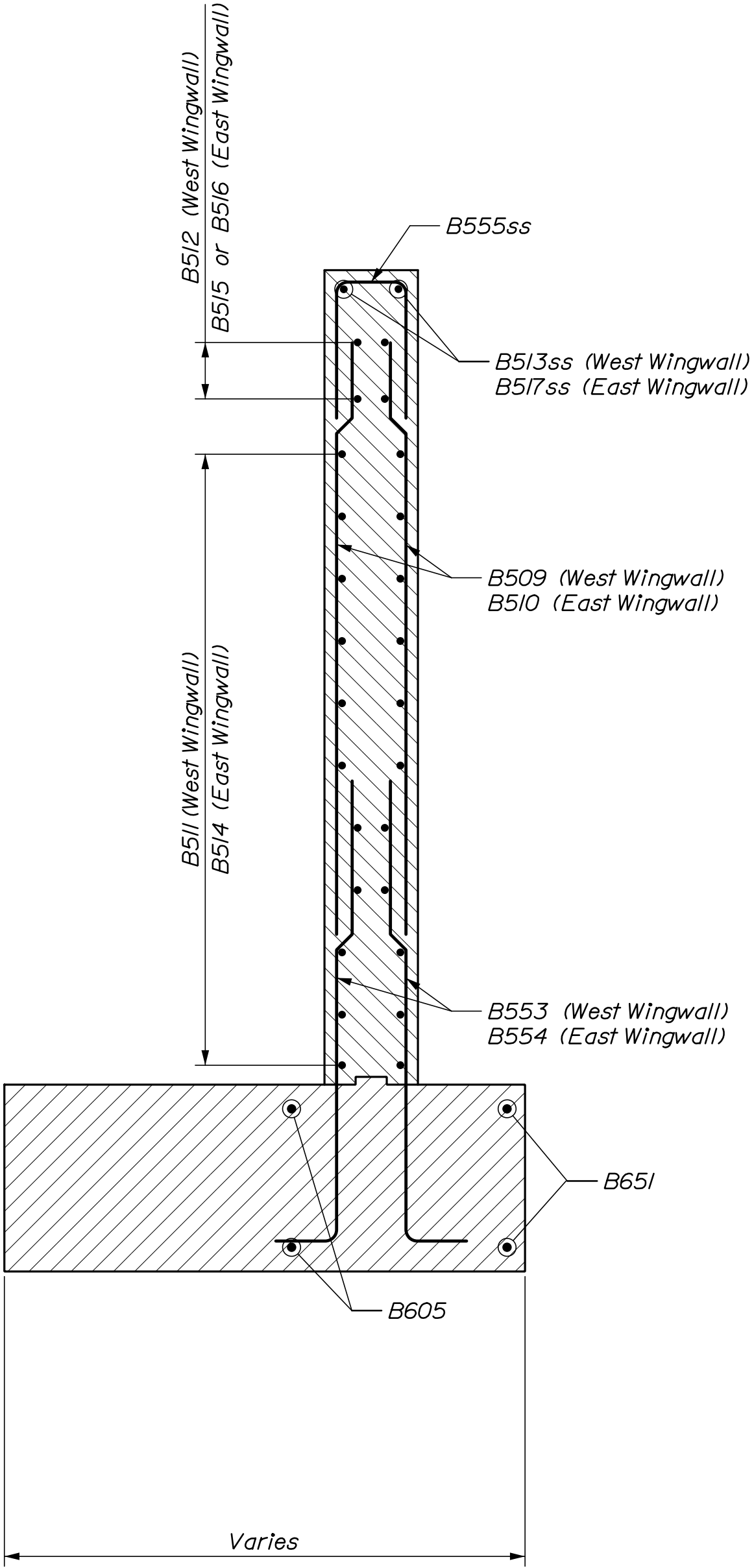
ABUTMENT NO. 2 SECTION



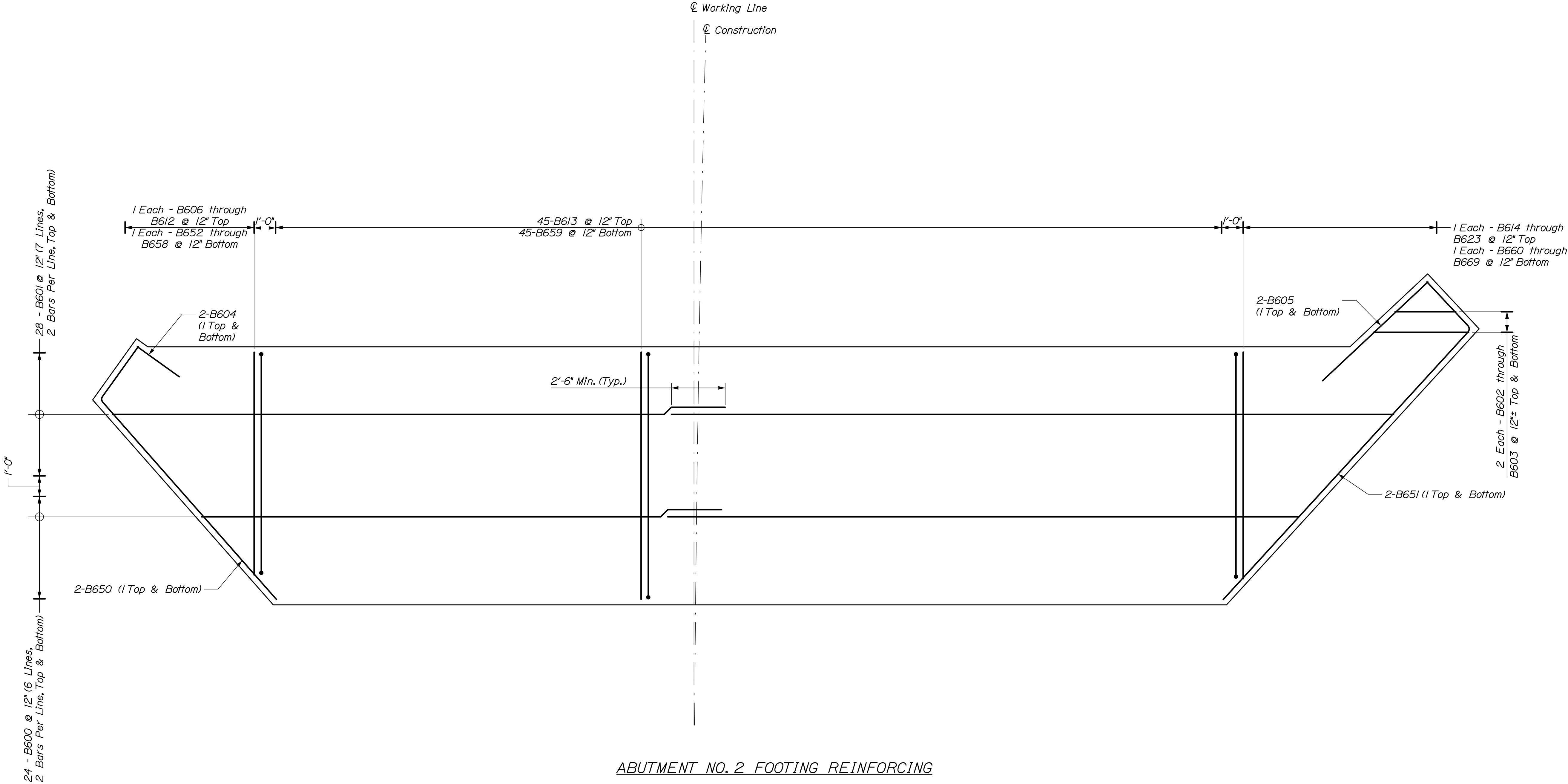
ABUTMENT NO. 2 REINFORCING SECTION



ABUTMENT NO. 2 WINGWALL SECTION
(East wingwall at backwall shown, other sections similar.)



ABUTMENT NO. 2 WINGWALL REINFORCING SECTION
(East wingwall at backwall shown, other sections similar.
Typical footing reinforcement oriented longitudinal and
transverse to the abutment stem is not shown for clarity.)



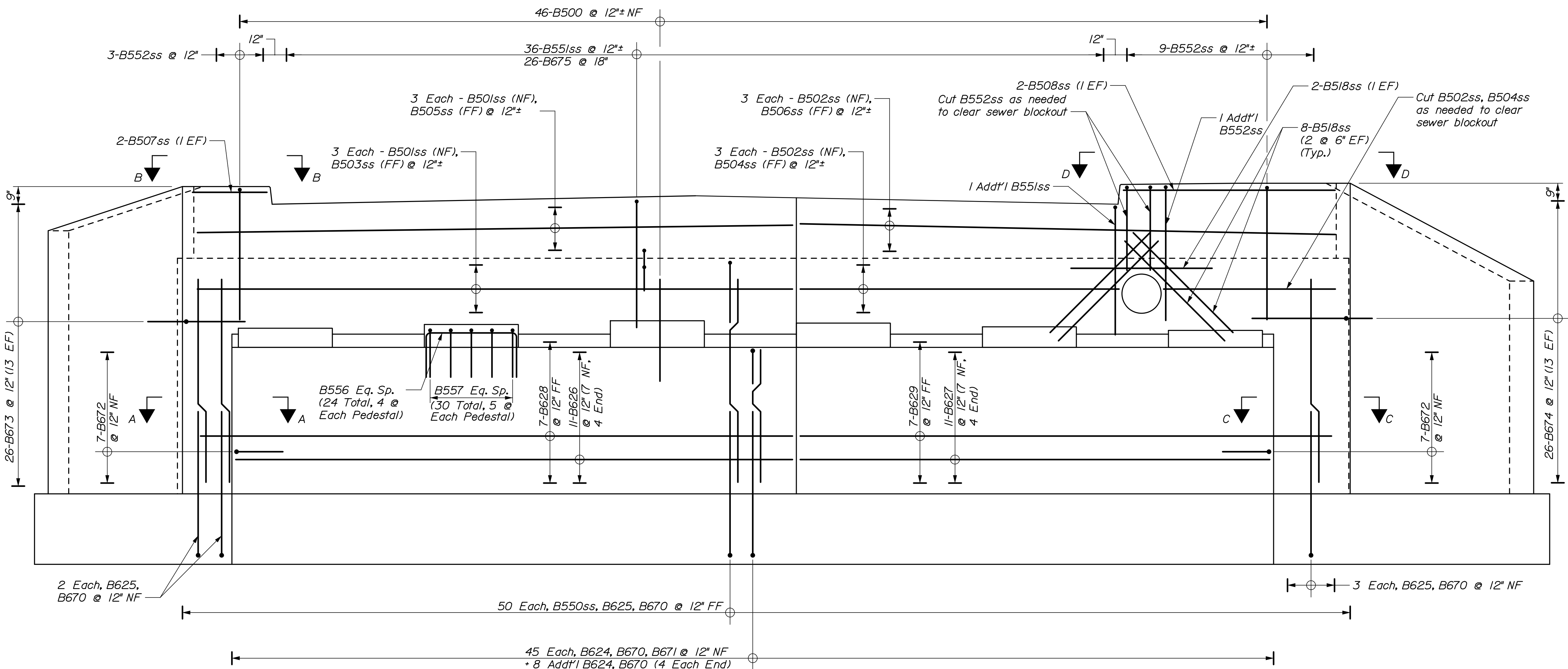
ABUTMENT NO. 2 FOOTING REINFORCING

FOOTING REINFORCING NOTES:

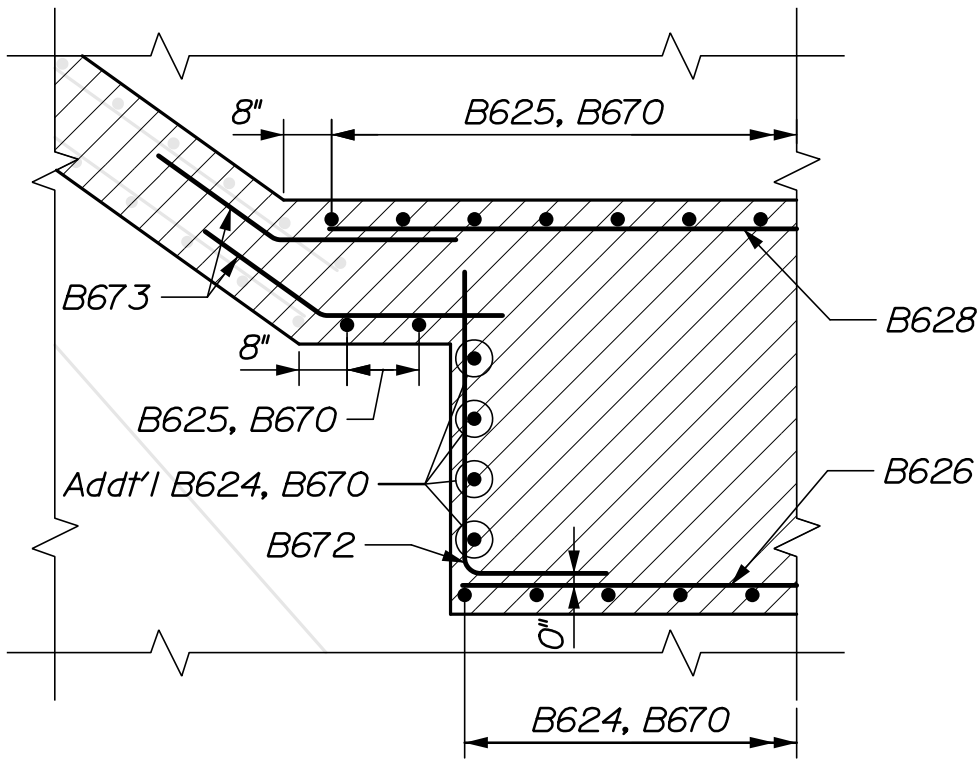
1. Spacing of footing reinforcing to be adjusted as necessary to avoid piles.



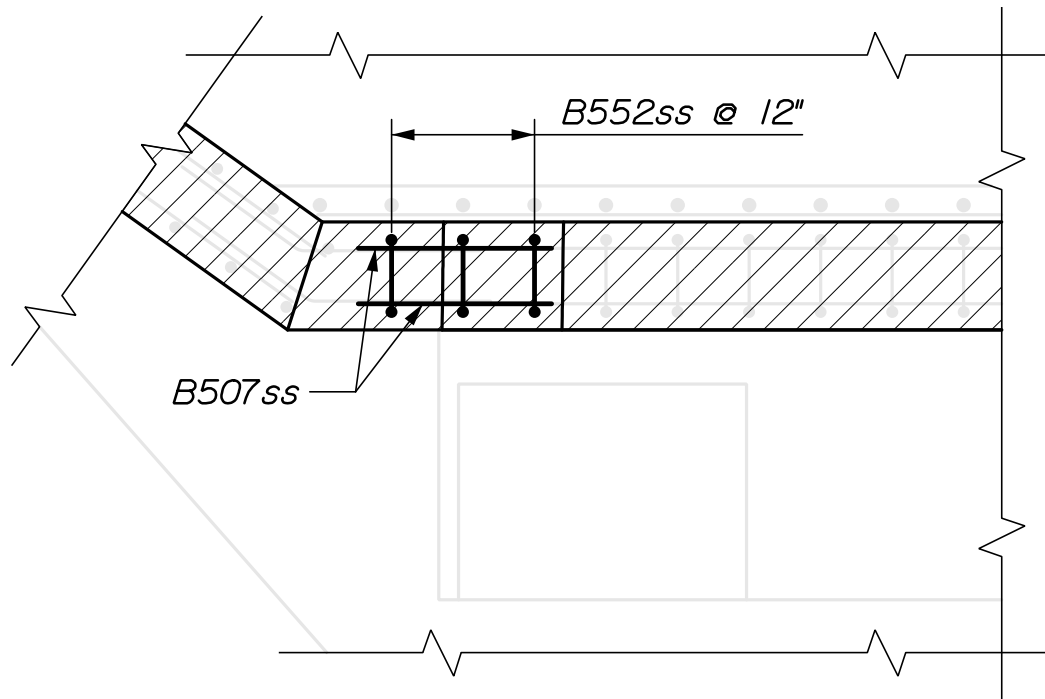
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
		2262701	
		BRIDGE NO. 2522	WIN 023234.01
		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE		PROJ. MANAGER	DATE
MATTAWAMKEAG RIVER		DESIGN-DETAILED MJB	7/20
MATTAWAMKEAG PENOBSCOT COUNTY		CHECKED-REVIEWED EMC	7/20
		DESIGN-DETAILED	SIGNATURE
		DESIGN-DETAILED	P.E. NUMBER
		REVISIONS 1	DATE
		REVISIONS 2	
		REVISIONS 3	
		REVISIONS 4	
		FIELD CHANGES	
SHEET NUMBER			
33			
OF 69			



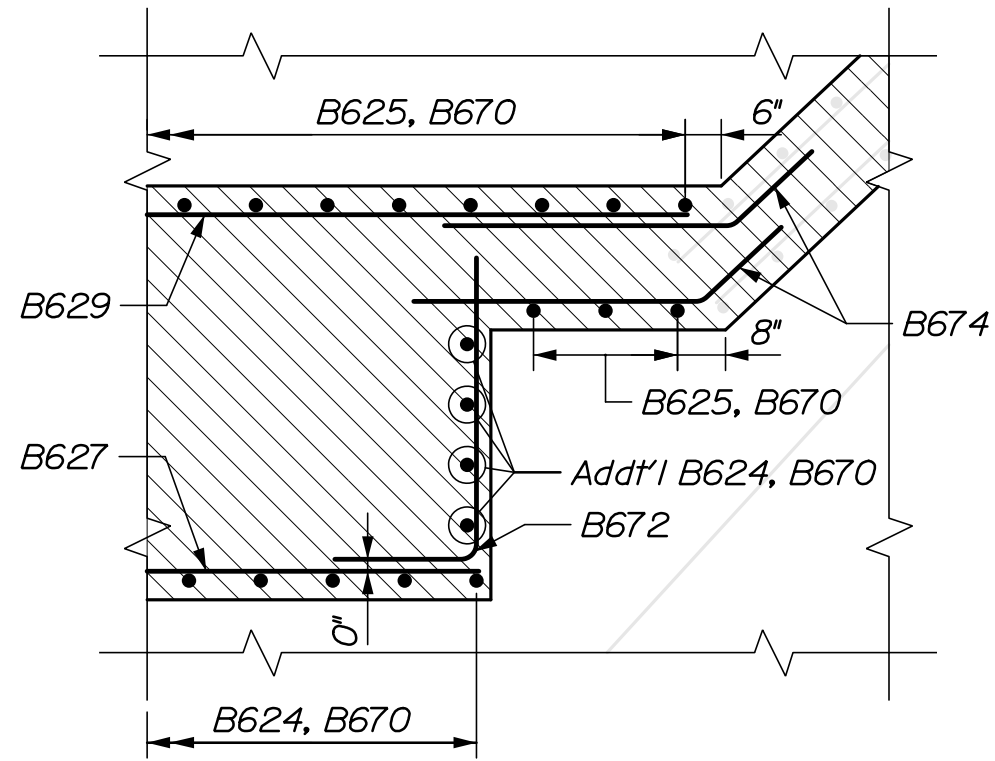
ABUTMENT NO. 2 REINFORCING ELEVATION



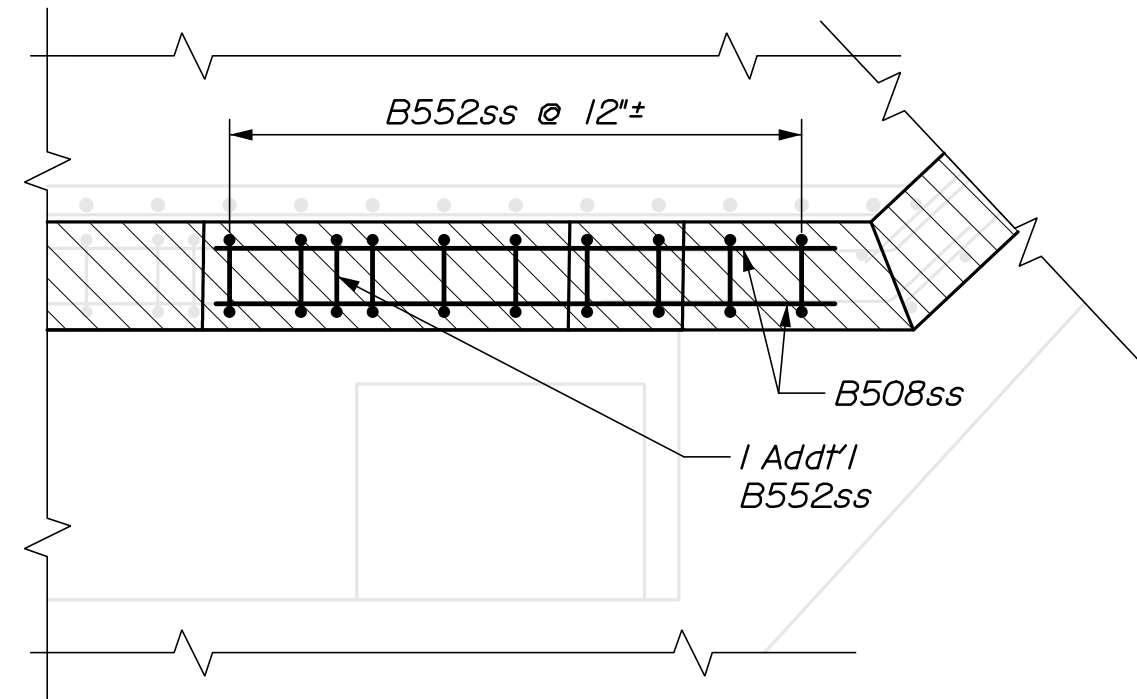
SECTION A-A



SECTION B-B



SECTION C-C



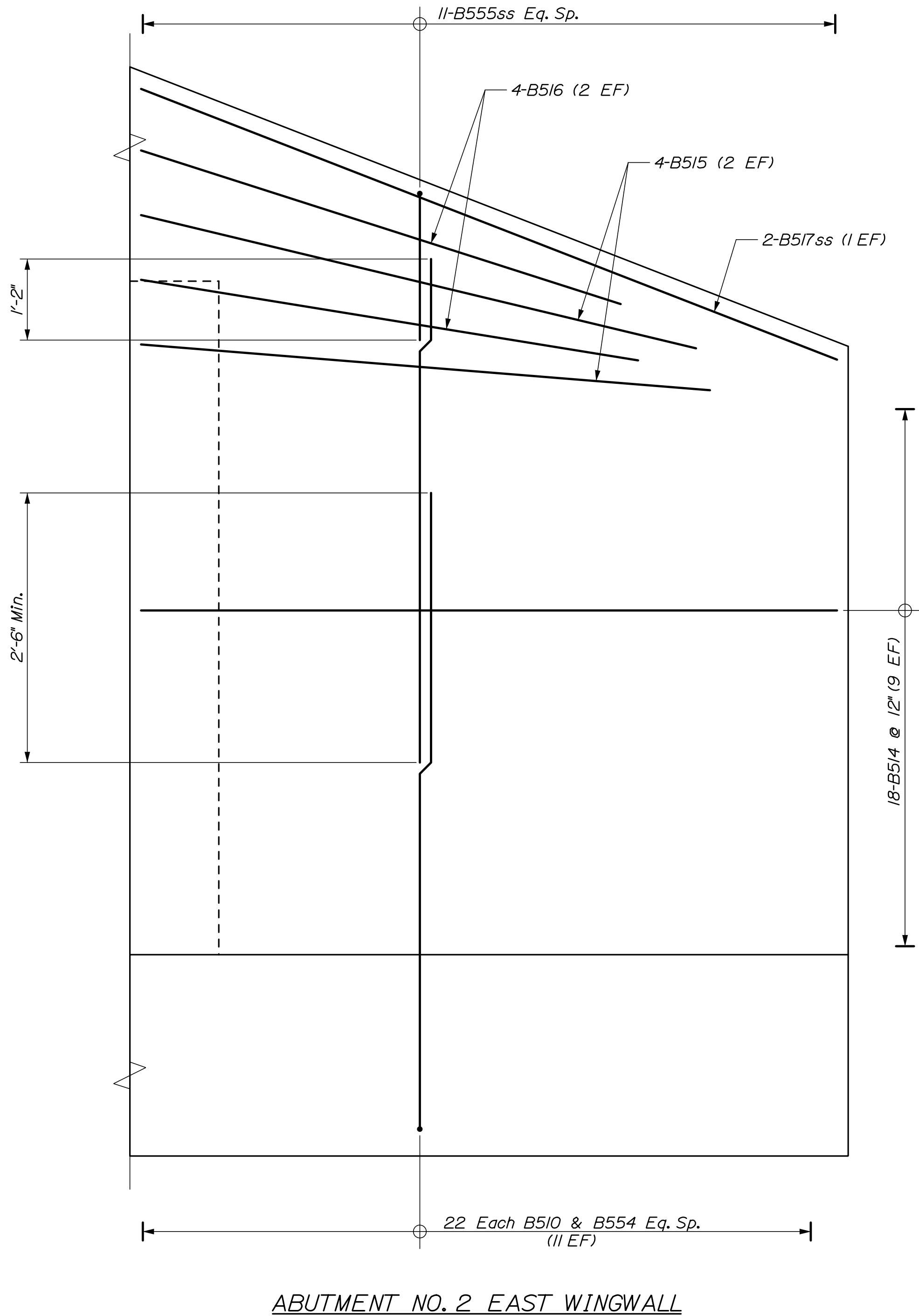
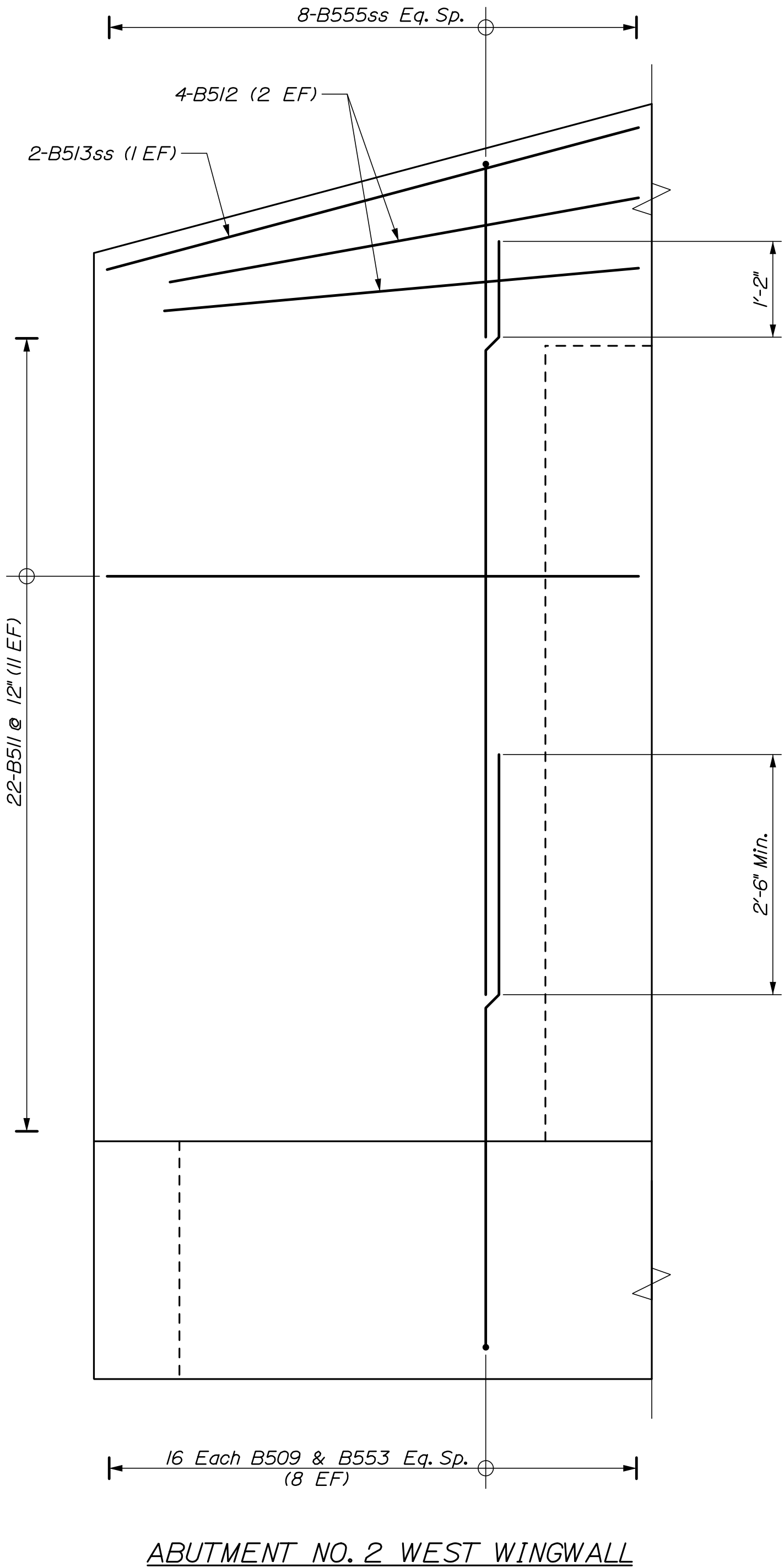
SECTION D-D

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701
WIN
023234.01
BRIDGE NO. 2522
BRIDGE PLANS

PROJ. MANAGER	A. LATHE	BY	DATE
DESIGN-DETAILED	M.B.	B. BENNETT	7/20
CHECKED-REVIEWED	ENC	H. HSU	7/20
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
ABUTMENT NO. 2
REINFORCING ELEVATION

SHEET NUMBER
34
OF 69



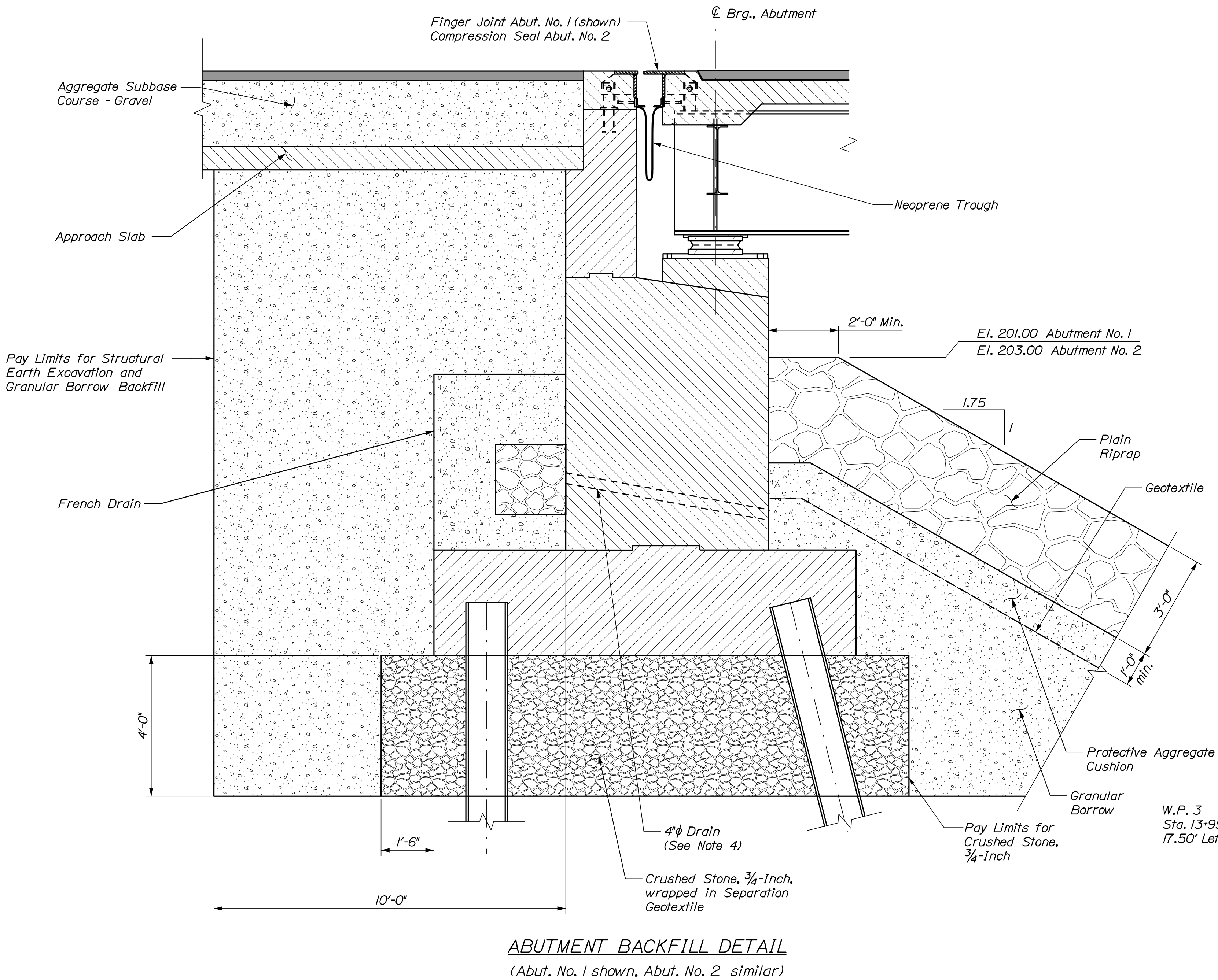
SHEET NUMBER 35 OF 69	MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY ABUTMENT NO. 2 WINGWALL ELEVATIONS				STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2262701	
	PROJ. MANAGER DESIGNED-DETAILED CHECKED-REVIEWED DESIGNED-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES				BY B. BENNETT H. HSU	DATE 7/20 7/20
	SIGNATURE P.E. NUMBER DATE				BRIDGE NO. 2522 WIN 023234.01 BRIDGE PLANS	

Date:7/10/2020

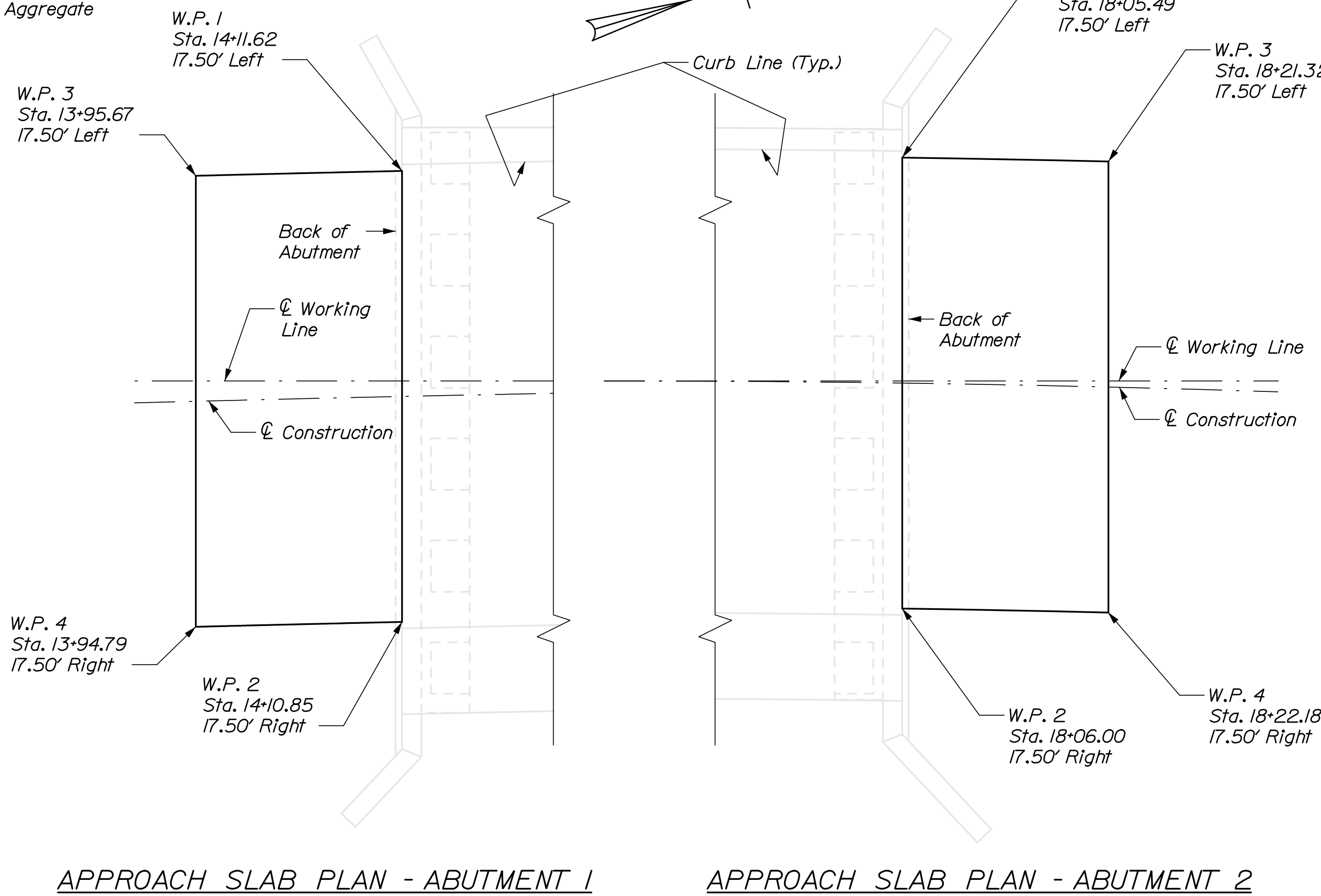
Username:

Division:

Filename: ... \036_Abutment Details.dgn



- ABUTMENT NOTES:**
1. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches cover in the footings unless otherwise noted.
 2. All elevations are provided at centerline of bearing unless otherwise noted.
 3. Cover joints where waterstops are not required in accordance with Standard Detail 502(01).
 4. Place 4 inch diameter drains in breastwall and wingwalls at 8 feet maximum spacing. The exact location will be determined by the Resident.
 5. Abutments, wingwalls, and their footings shall be backfilled with Granular Borrow, Material for Underwater Backfill. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 10 feet behind the walls in fill areas.



STATE OF MAINE										DEPARTMENT OF TRANSPORTATION										2262701										WIN										023234.01										BRIDGE NO. 2522										BRIDGE PLANS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
MATTAWAMKEAG BRIDGE										MATTAWAMKEAG RIVER										MATTAWAMKEAG PENOBSCOT COUNTY										ABUTMENT DETAILS										SHEET NUMBER										36										OF 69																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
PROJ. MANAGER										A. LATHE										BY										DATE										SIGNATURE										P.E. NUMBER										DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

Date:7/10/2020

Username:

Division:

Filename: ... \Bridge\037_Pier Notes.dgn

PIER DESIGN CRITERIA

1. Critical AASHTO Load Combination - Strength I.
2. Buoyancy: Water level assumed at EL. 199.33.
3. Stream flow: Velocity of 5.97 fps normal to longitudinal centerline of pier.
4. Wind: 115 mph.
5. Ice: Thickness 1.5 feet, pressure 28.8 ksf at El. 194.73, 30% of nose force applied transverse to pier.

PIER NOTES

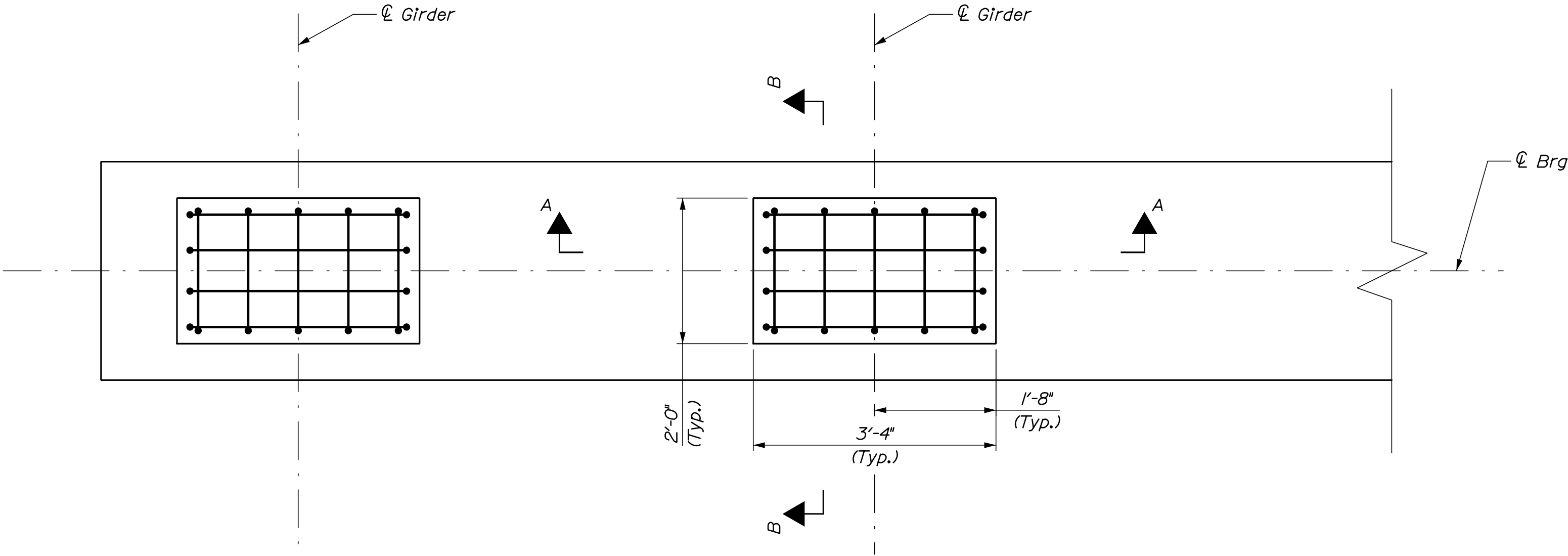
1. The maximum factored applied footing pressure is 15.0 ksf (Str. I).
2. Reinforcing steel shall have a minimum concrete cover of 3 inches unless otherwise noted.
3. Bridge pedestal elevations shown are based on bearing heights given in the "Disc Bearing Design Table" on Sheet No. 42. Adjustments to the elevations shall be made, if necessary, according to the provisions stated there.
4. The bedrock will vary in nature, slope, and degree of fracturing. Bedrock elevations shown are estimated based on boring information. Actual rock elevations may vary. After the foundation excavations are completed and all unsound bedrock removed, the Contractor shall survey the foundation bedrock and provide the exact bedrock elevations to the Resident for review and approval by the Engineer.

PIER NOSE ARMOR NOTES

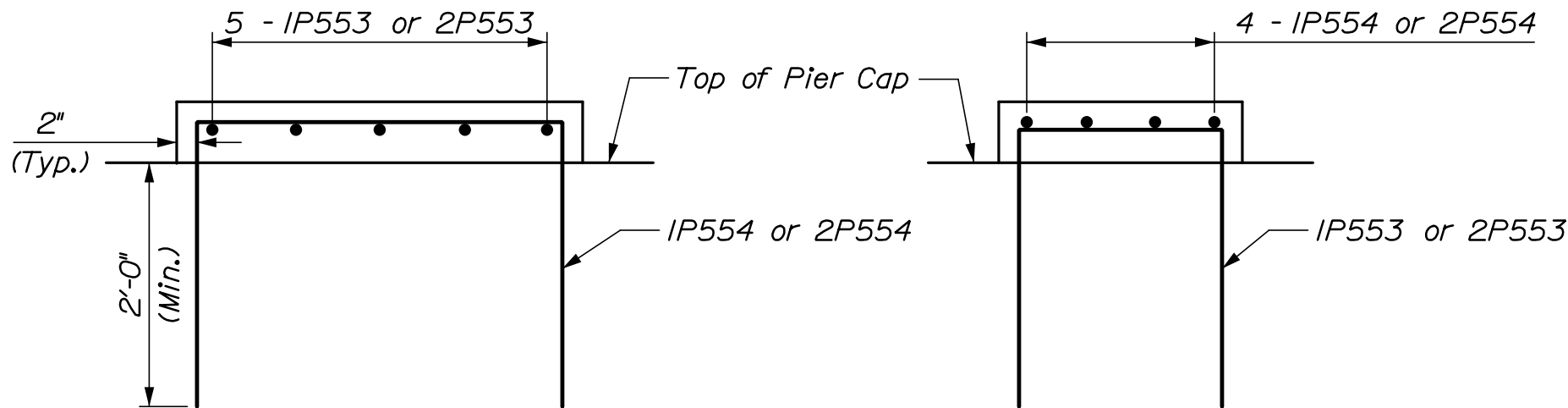
1. Payment for furnishing and placing the concrete anchors and pier nose shall be incidental to the unit price bid for the concrete pier.
2. Pier Nose Protection shall be extended from the top of footing to bottom of pier cap for Pier Nos. 1 and 2.
3. Nose armor, including anchor studs, shall be cleaned and galvanized in accordance with Section 506 of the Standard Specifications and included in Pay Item 502.239 - Structural Concrete Piers.

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 these limits.
4. The depth of the seal is set for a water elevation of 199.33. If the water elevation at the time of construction is higher, the seal shall be adjusted as approved by the Resident.
5. The method of placing dowels in the seal concrete shall be approved by the Resident. Grout used for drilled and anchored dowels shall be selected from the MaineDOT Qualified Products List for Grout Materials.
6. 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 Special Provision Section 511 - Cofferdams.
7. Each seal shall be cored full depth in at least four (4) locations to ensure that the seal is satisfactorily placed. The final core run shall sample the bedrock interface and a minimum of one (1) foot of bedrock. Seal core locations will be approved by the Department. Seal concrete cores will be a minimum three (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, two (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.
8. If the bedrock elevations vary from the elevations assumed in the development of these plans, the pier seals may need to be modified. The Contractor shall grant the Department 10 Working Days to modify the Plans from the date the Resident accepts the bedrock survey.



PLAN

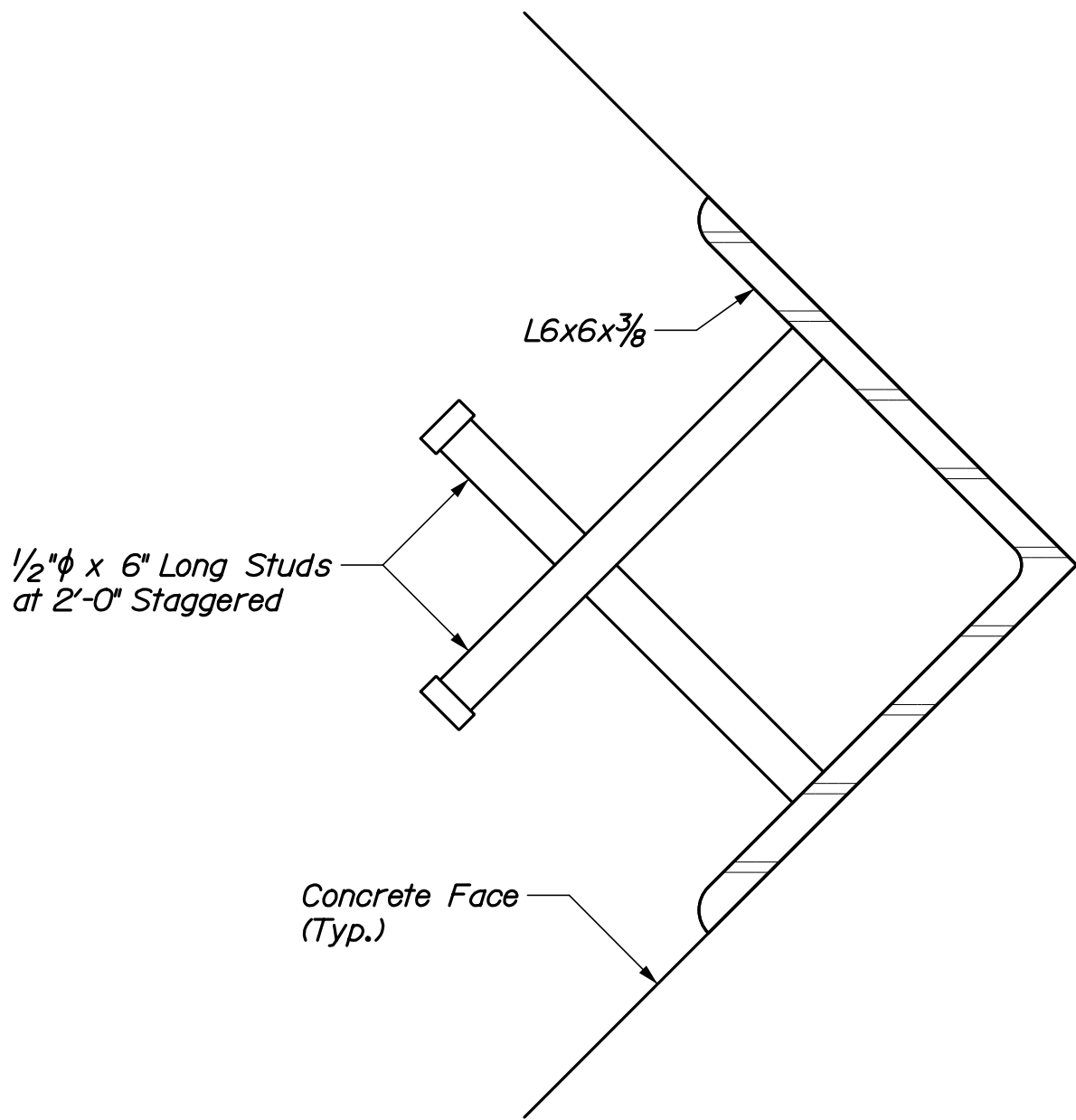


Section A-A

Section B-B

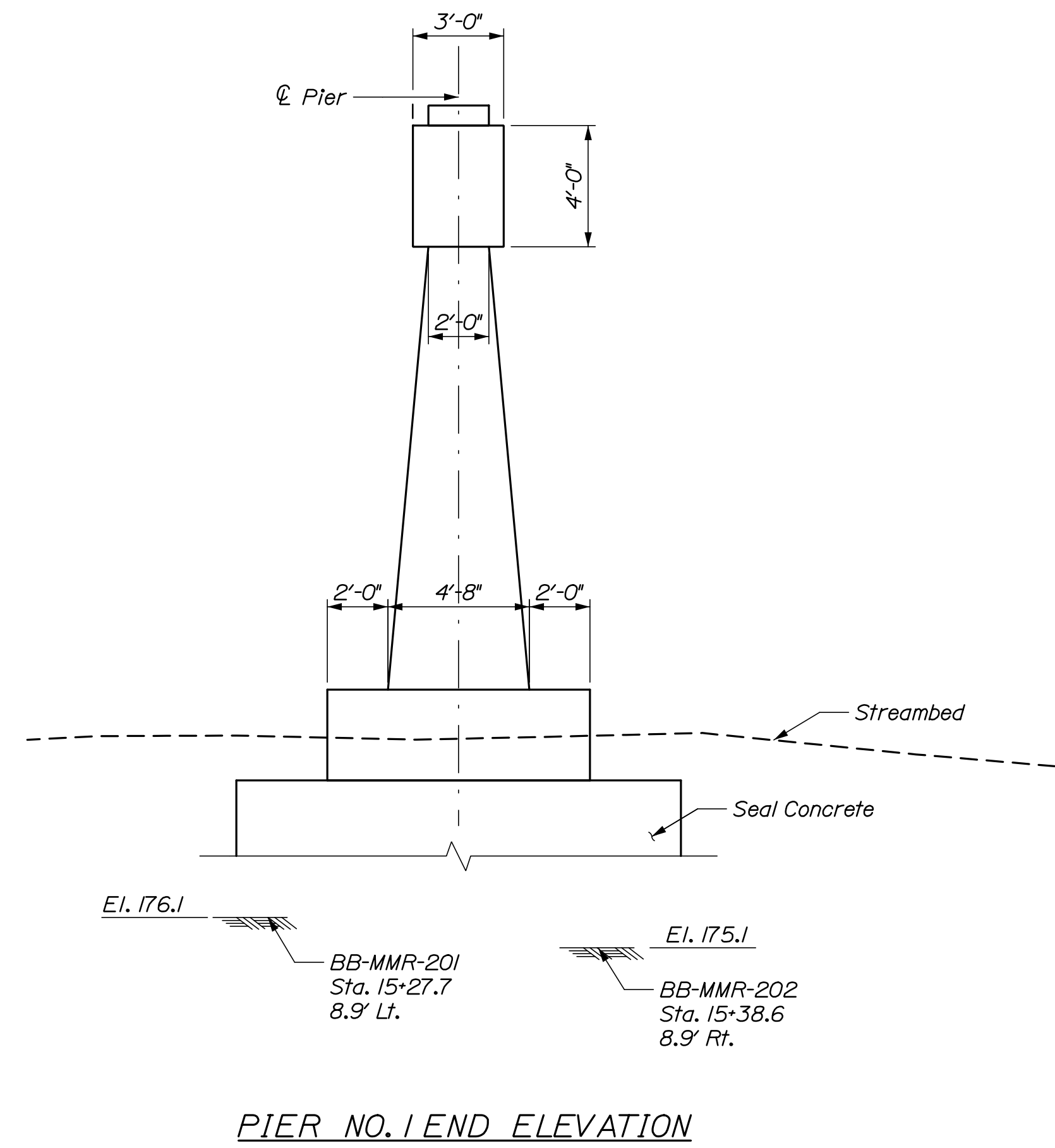
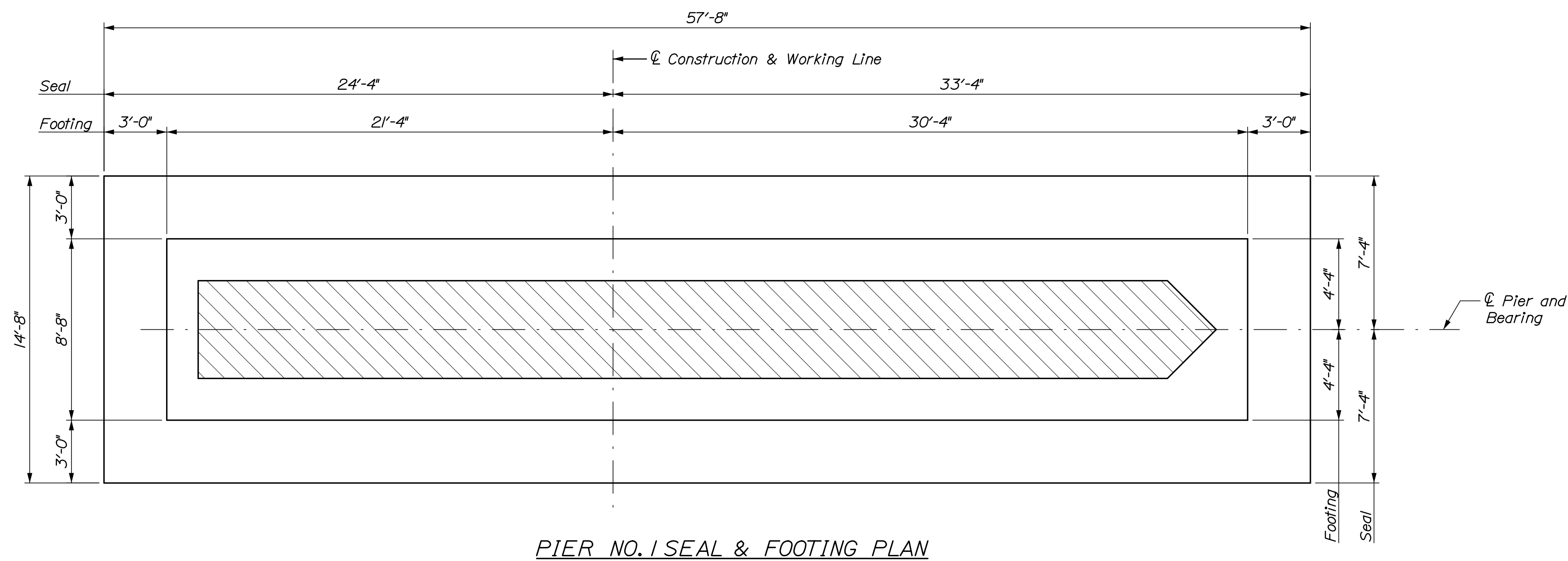
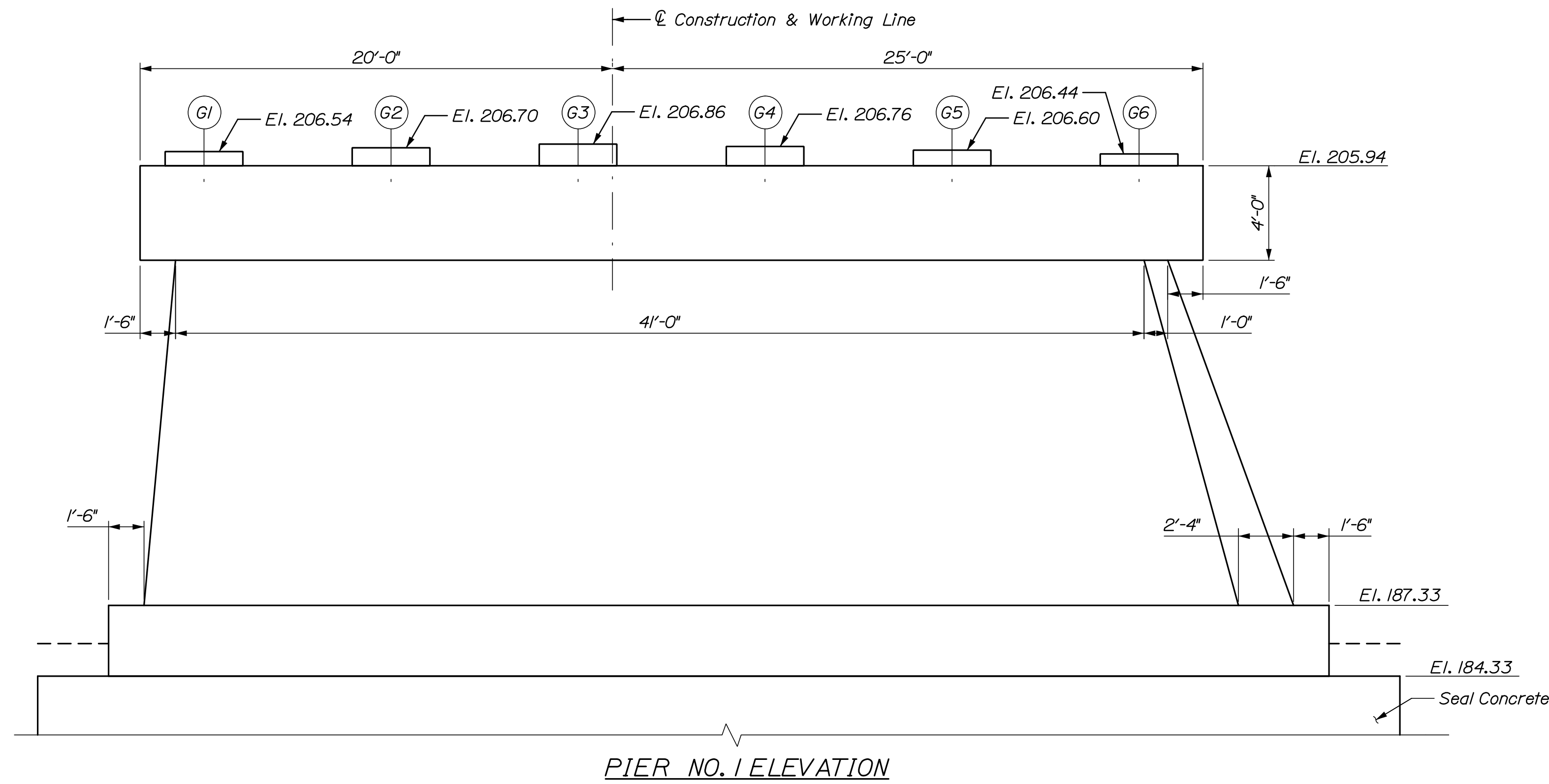
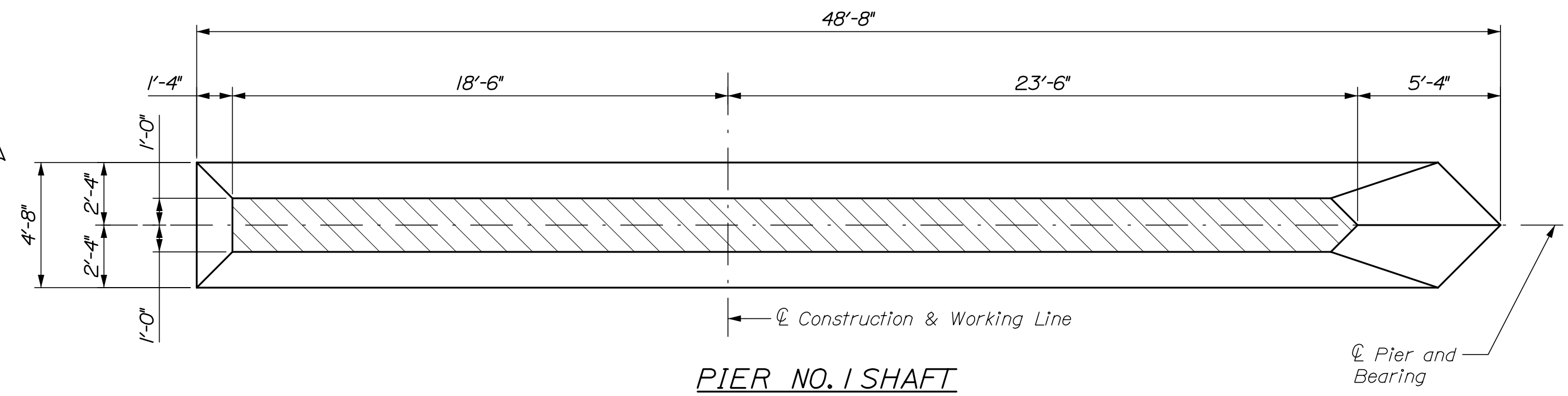
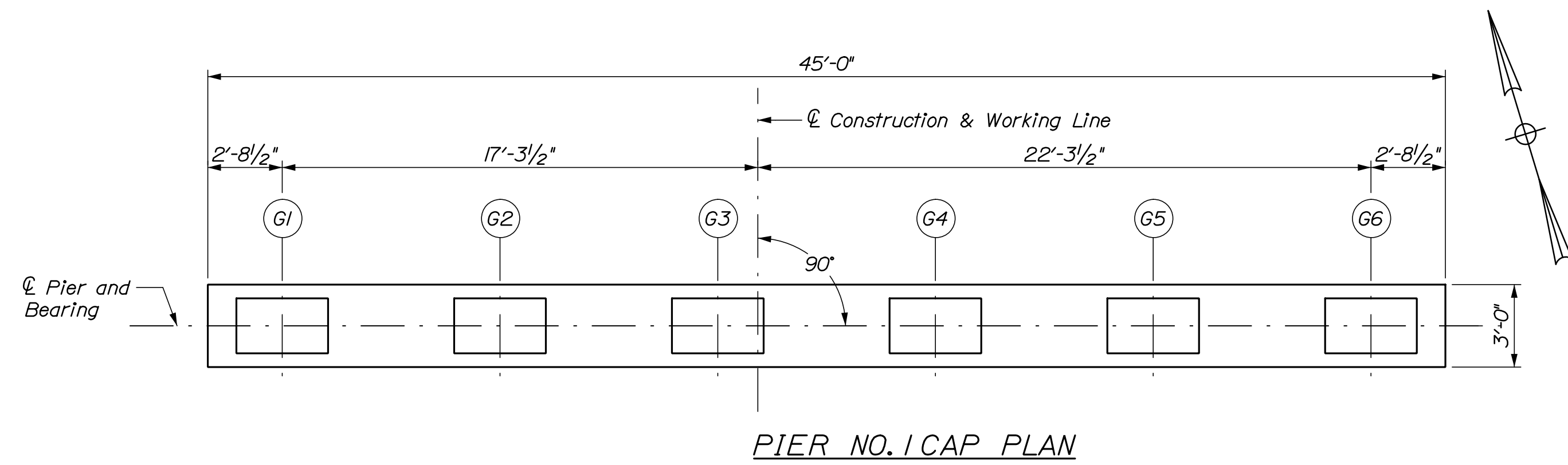
SECTION

BEARING PEDESTAL DETAILS

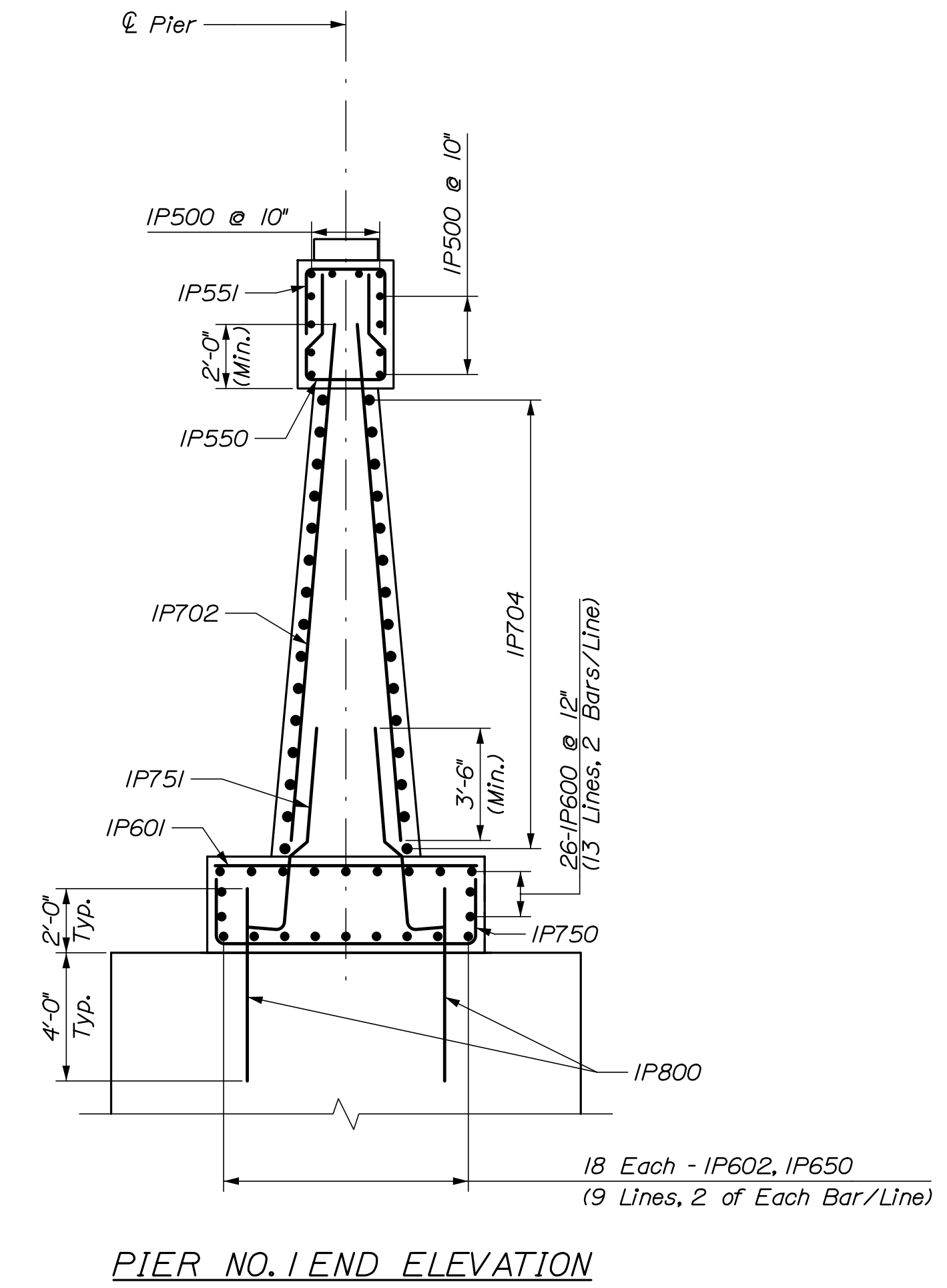
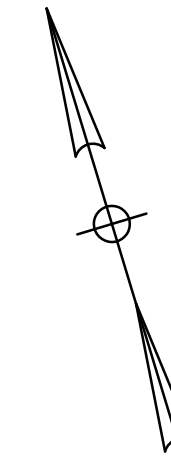


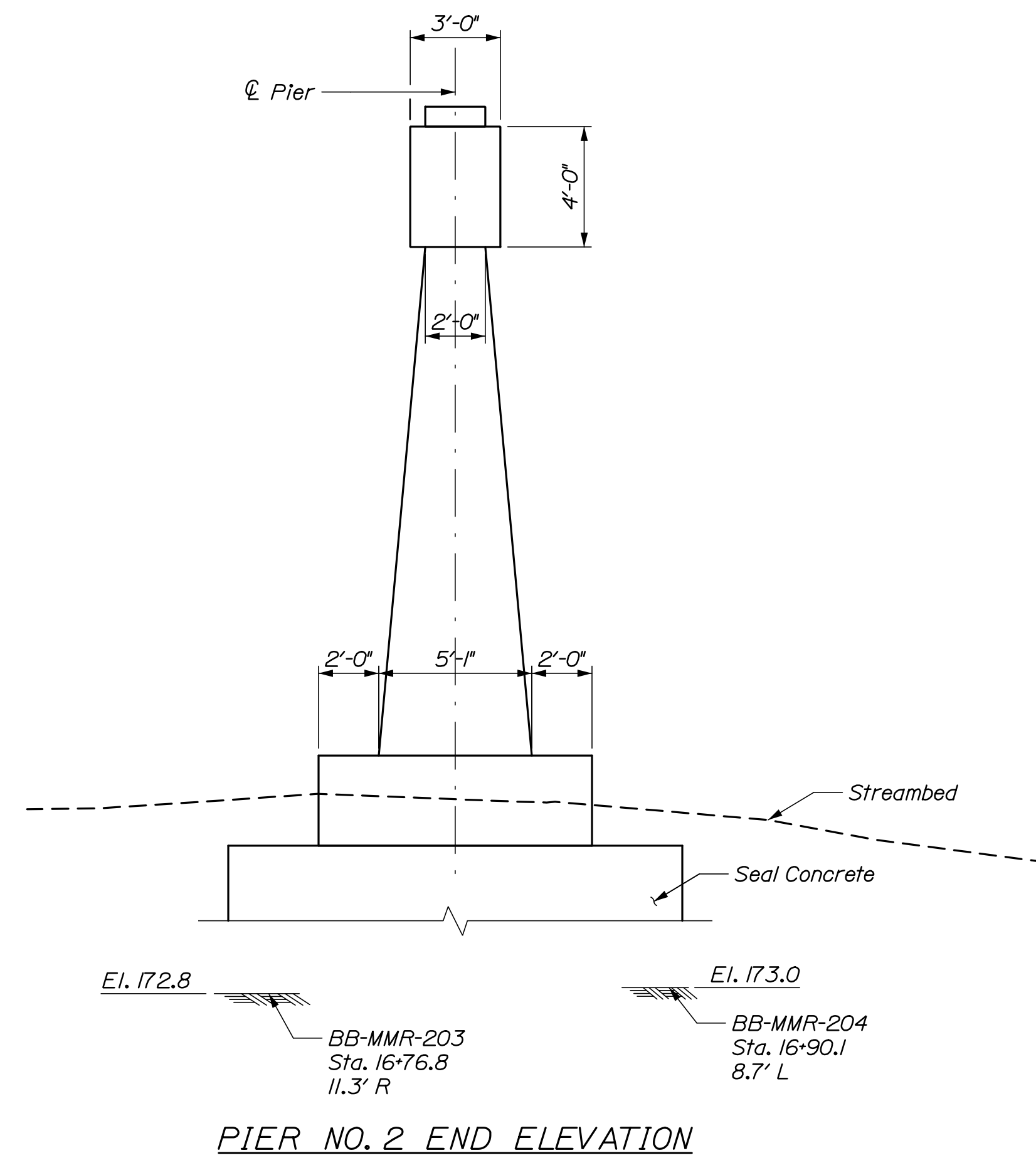
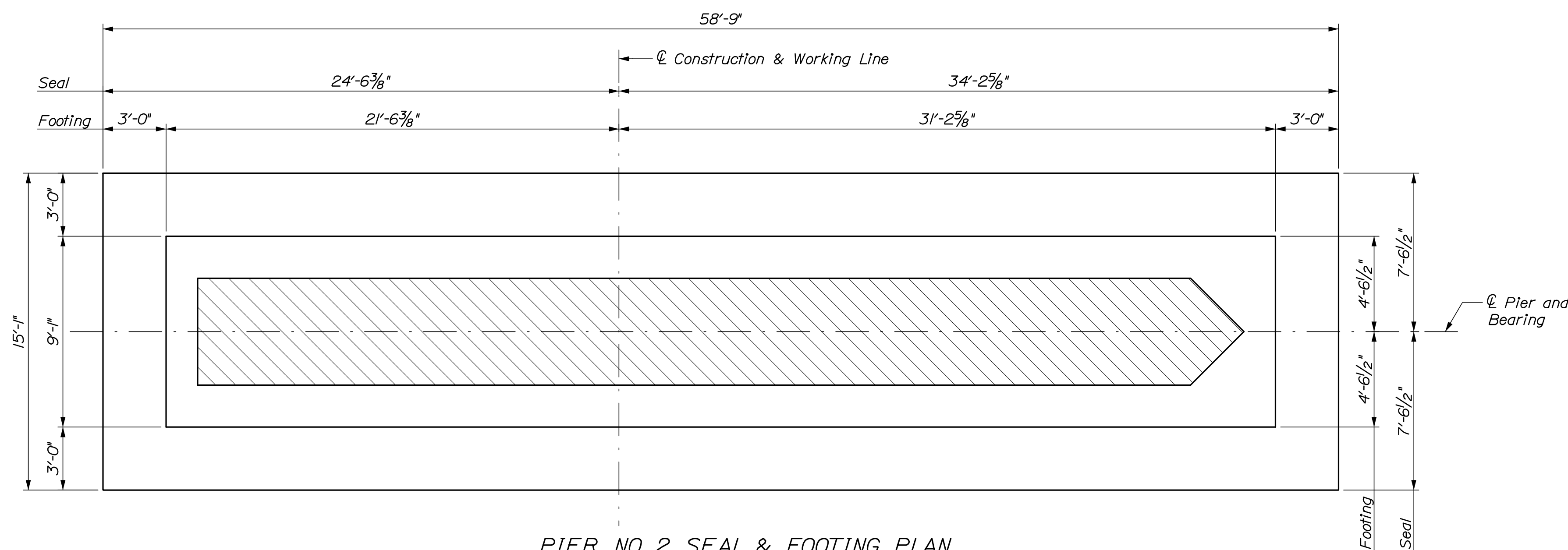
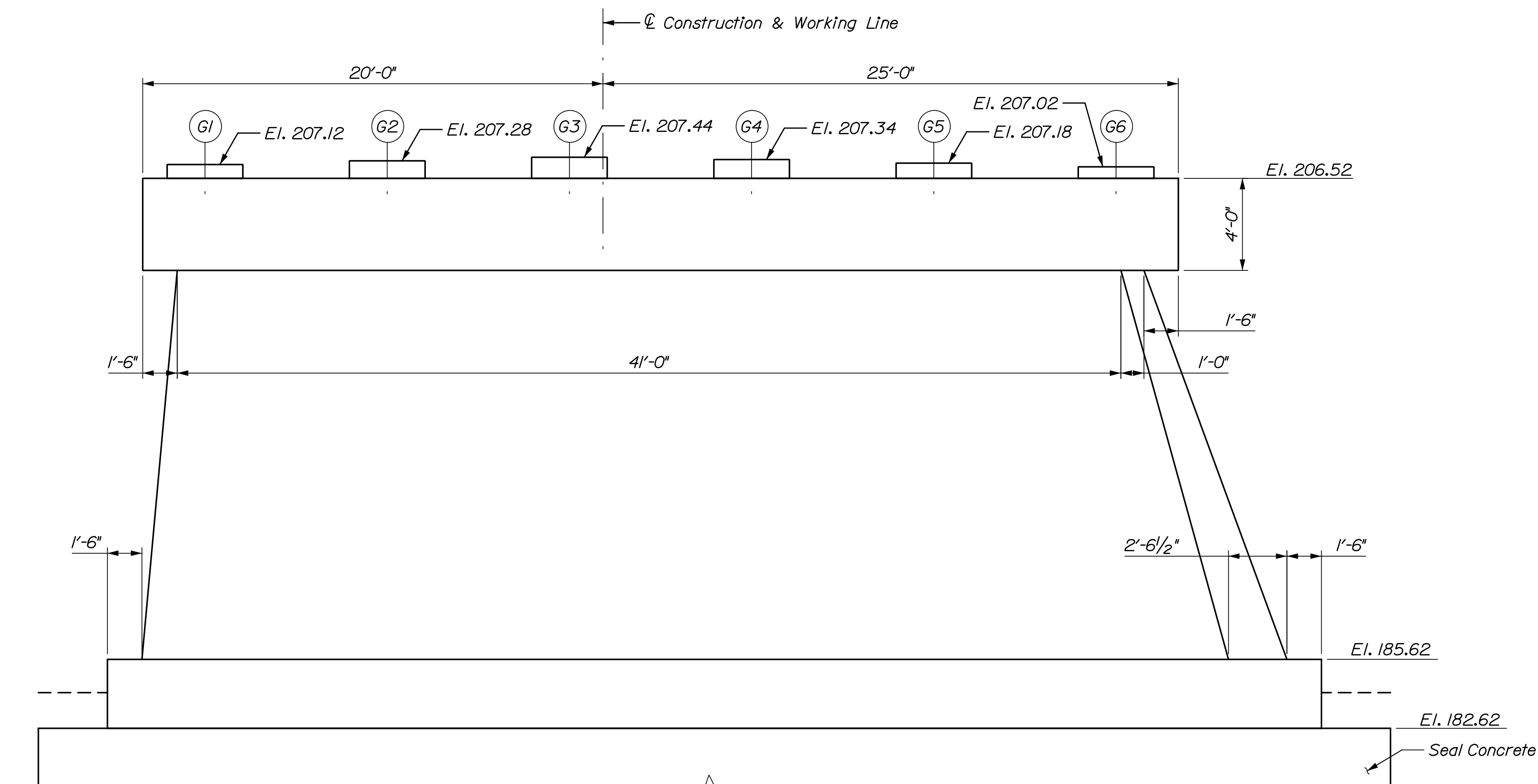
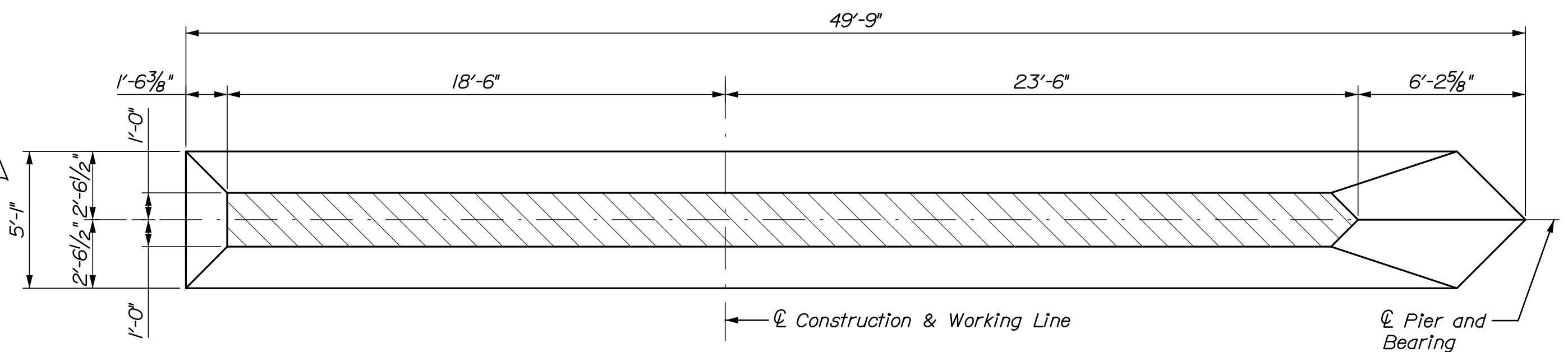
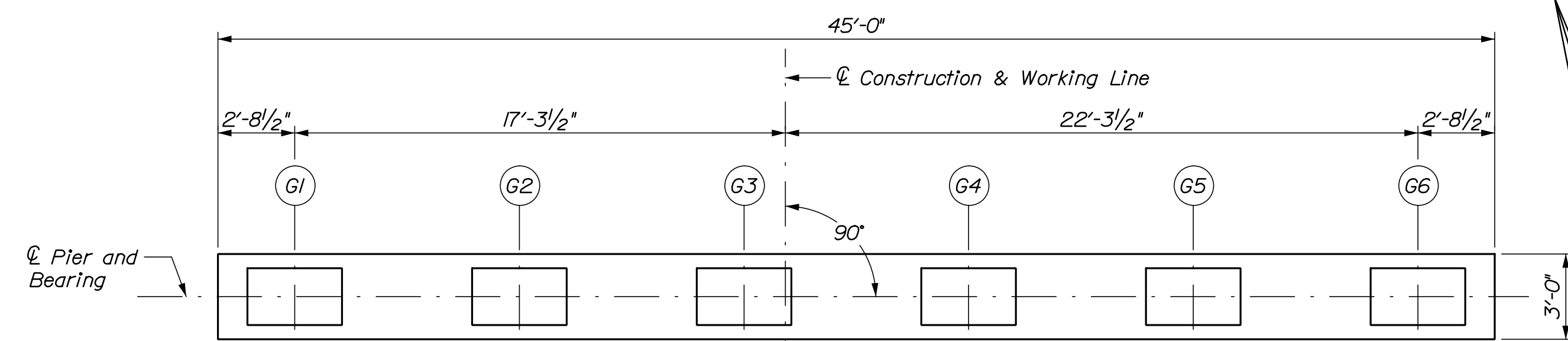
NOSE ARMOR DETAIL

STATE OF MAINE DEPARTMENT OF TRANSPORTATION				2262701				WIN 023234.01				BRIDGE NO. 2522 HIGHWAY PLANS			
				DATE	BY	A. LATHE	PROJ. MANAGER	DESIGN-DETAILED	M.B.	CHECKED-REVIEWED	ENC.	SIGNATURE	P.E. NUMBER	DATE	
				7/20	B. BENNETT										
				7/20	H. HSU										
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY				PIER NOTES				SHEET NUMBER				37			
												OF 69			



DESIGN-DETAILED	MJB	B. BENNETT	7/20
CHECKED-REVIEWED	EMC	H. HSU	7/20
SIGNATURE			
P.E. NUMBER			
DATE			
FIELD CHANGES			



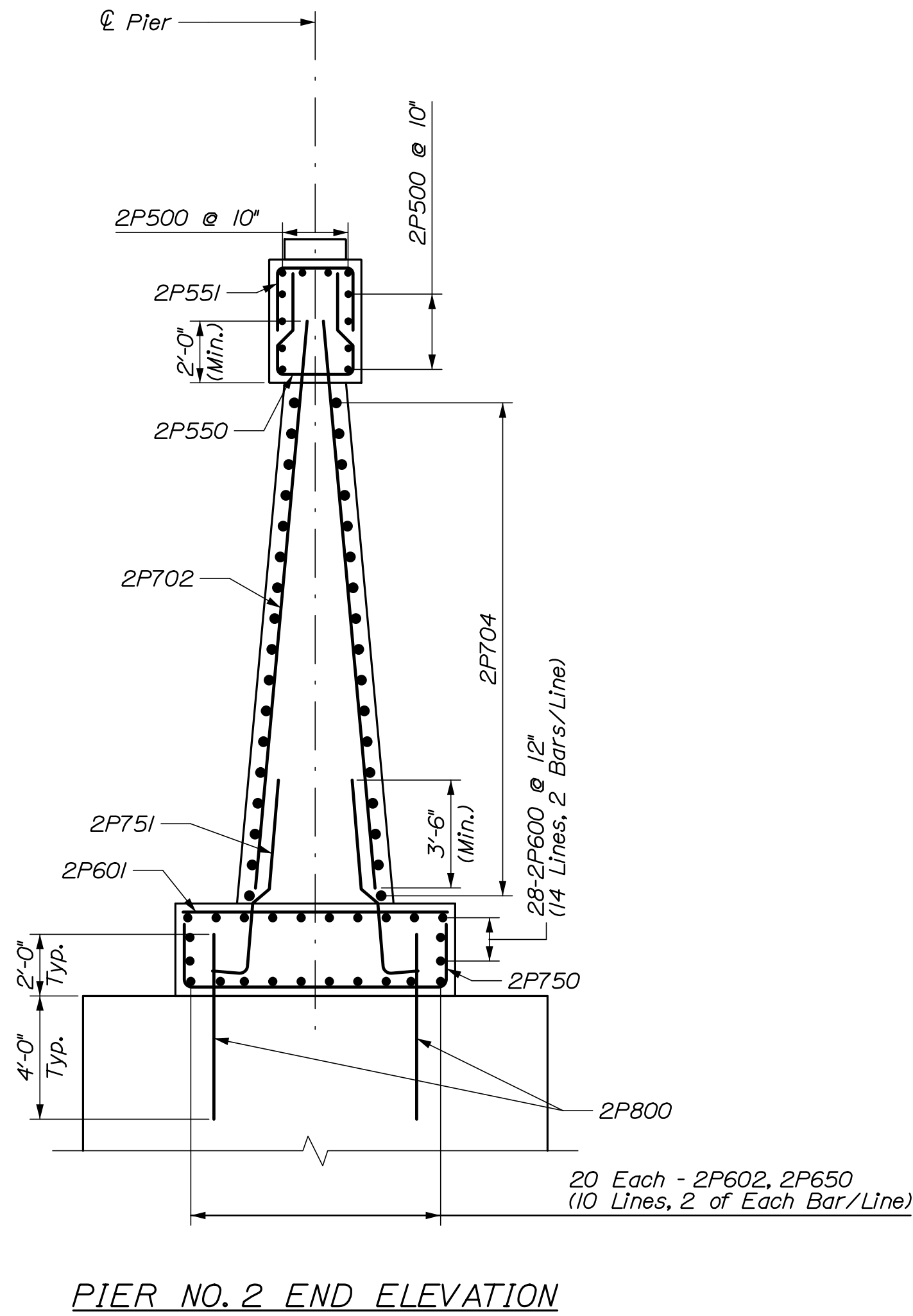
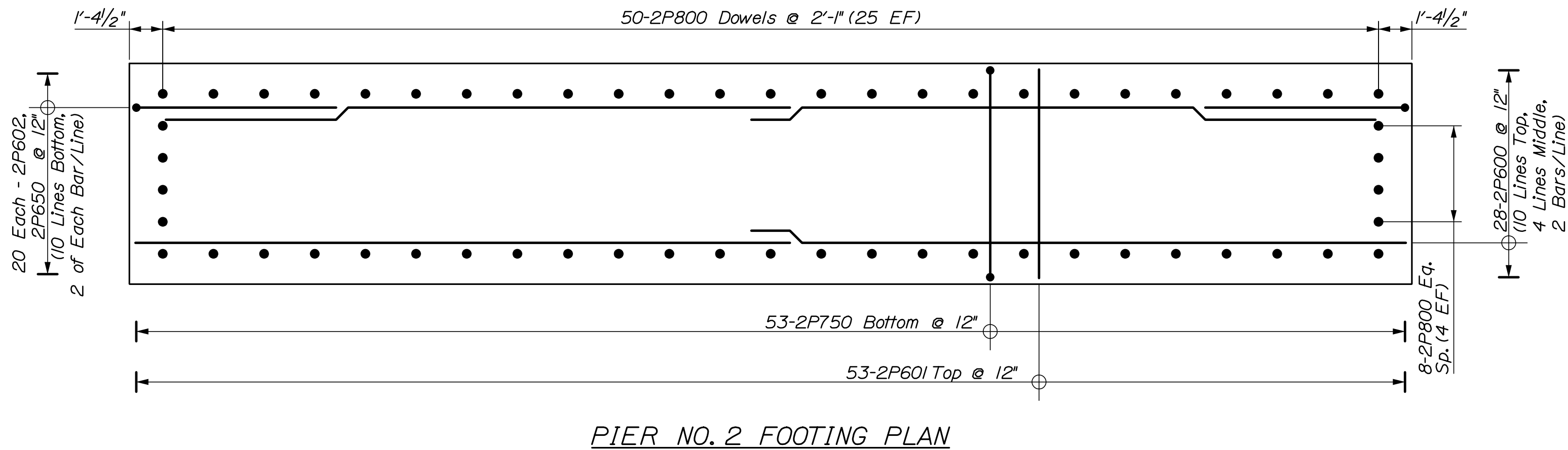
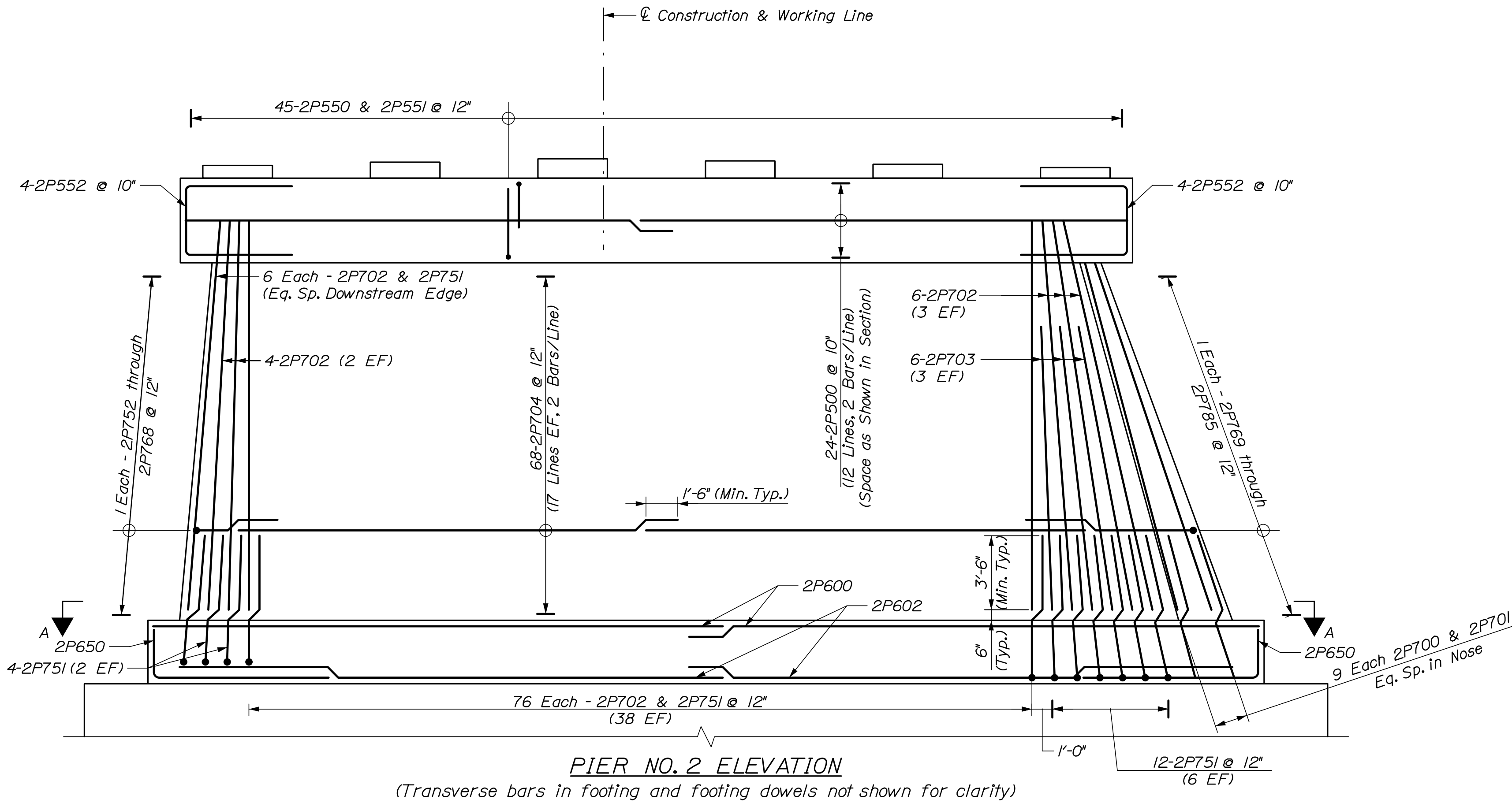
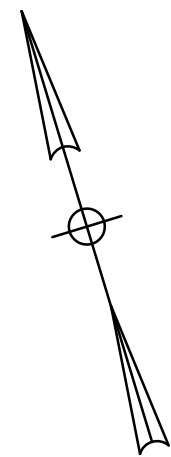
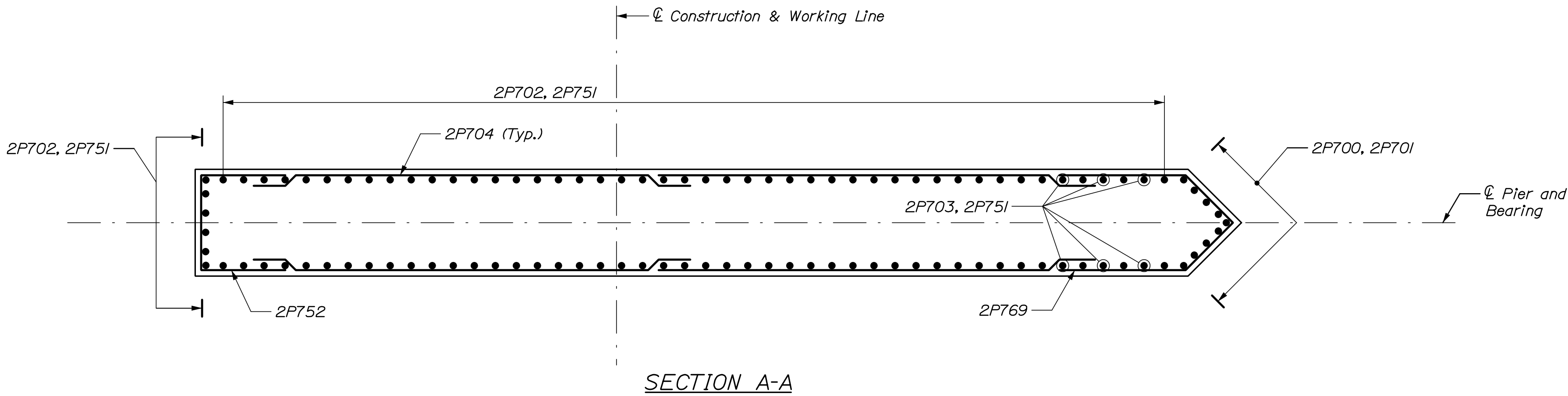


Date:7/10/2020

Username:

Division:

Filename: ... \041_Pier No. 2 Reinforcing.dgn



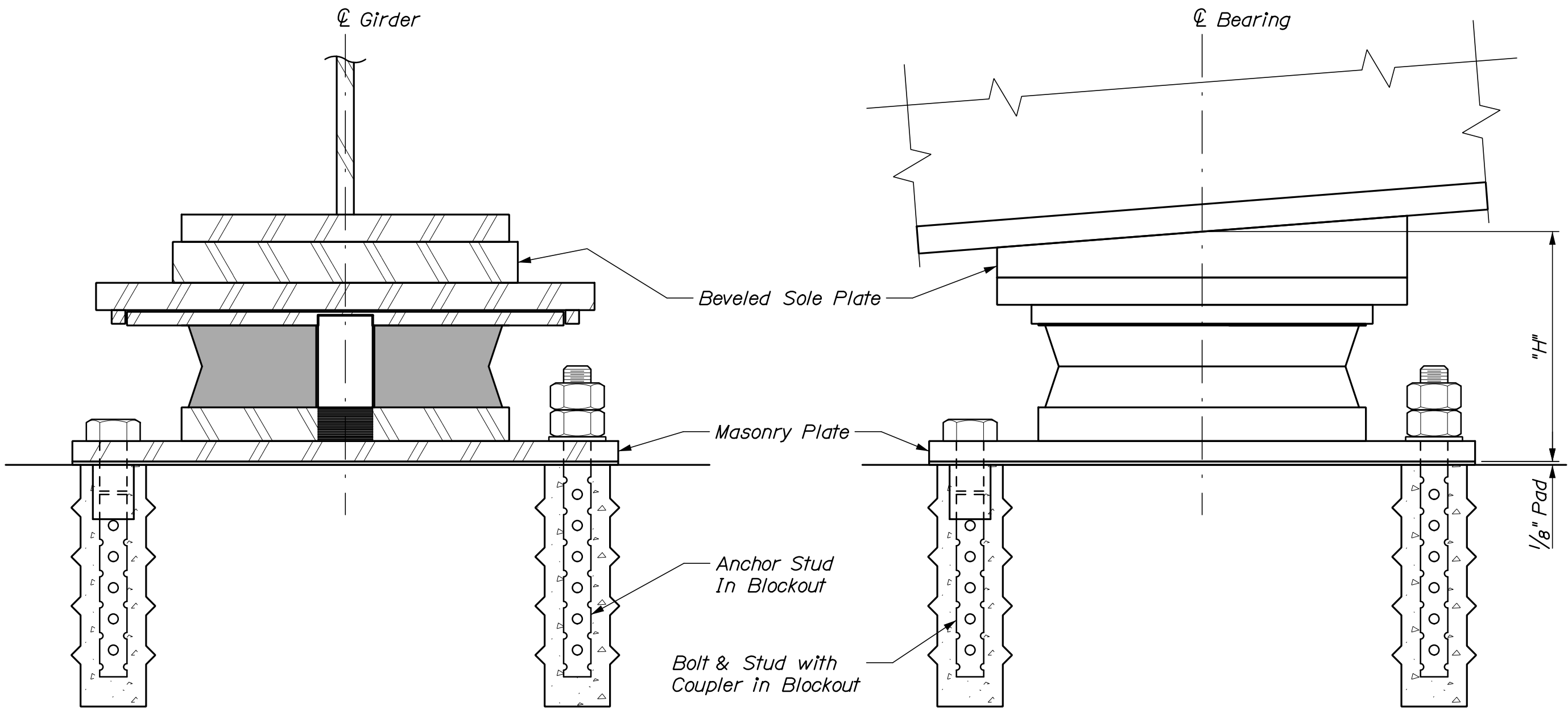
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2262701		WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE		MATTAWAMKEAG RIVER		MATTAWAMKEAG		PENOBSCOT COUNTY		PIER NO. 2 REINFORCING		SHEET NUMBER		41	
PROJ. MANAGER		A. LATHE		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGN-DETAILED		M.B.		B. BENNETT		7/20							
CHECKED-REVIEWED		E.M.		H. HSU		7/20							
DESIGN-DETAILED													
REVISIONS 1													
REVISIONS 2													
REVISIONS 3													
REVISIONS 4													
FIELD CHANGES													

Date:7/10/2020

Username:

Division:

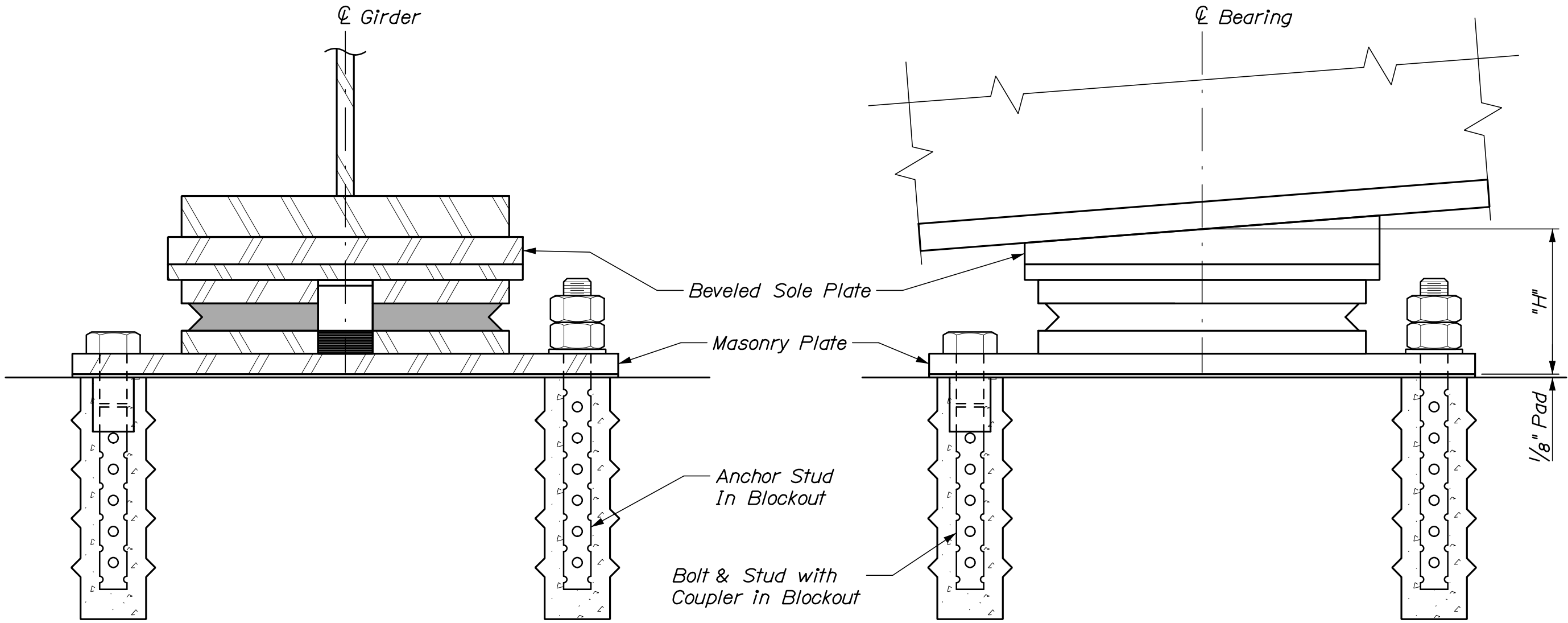
Filename: ... \Bridge\042_Bearing_Details.dgn



~ TRANSVERSE SECTION ~

~ LONGITUDINAL ELEVATION ~

EXPANSION BEARING



~ TRANSVERSE SECTION ~

~ LONGITUDINAL ELEVATION ~

FIXED BEARING

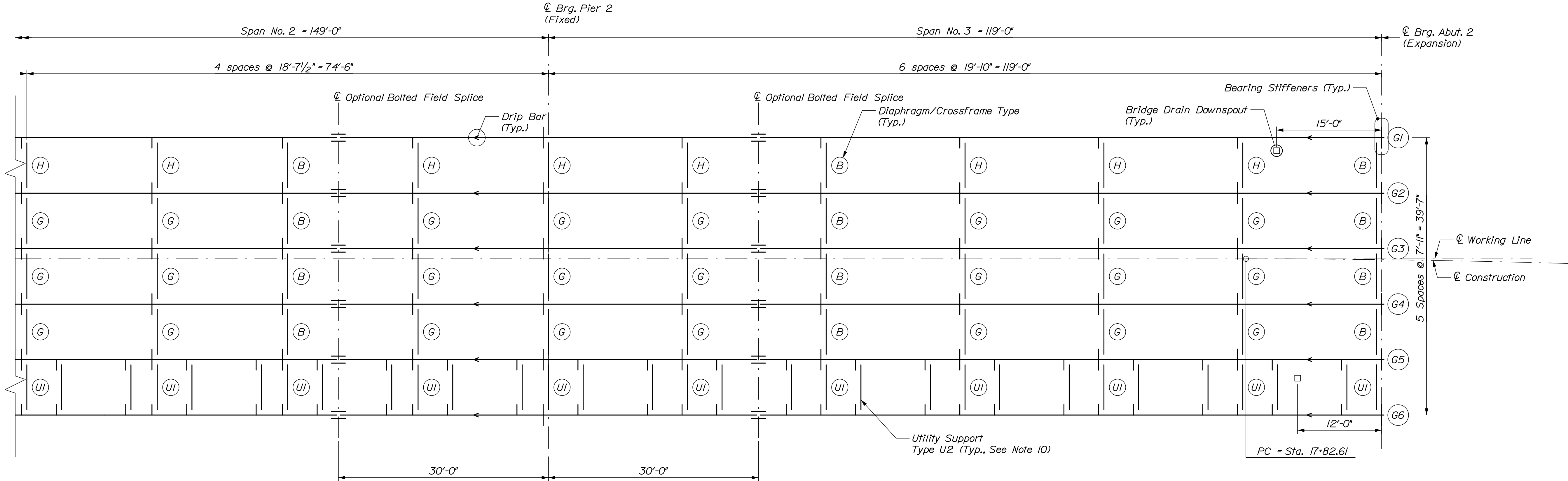
DISC BEARING NOTES:

1. The actual dimension "H" shall be the responsibility of the Contractor. Dimensions and sizes of plates not shown are dependent on design loads, capacity, and the manufacturer of the bearings. The shop drawings, prepared by the manufacturer, shall provide all pertinent bearing information. The final bearing pedestal elevations shall be determined by the Contractor and submitted with the shop drawings for approval prior to construction of the substructure units.
2. Masonry plates shall be placed on 1/8" thick preformed pads in accordance with the specifications.
3. All steel, unless otherwise specified, shall meet the requirements of ASTM A709, Grade 50W.
4. Bearing anchorage shall be either Anchor Stud with double nuts and washers in blockout, or Bolt & Stud with Coupler in blockout, at the Contractor's option.
5. Anchorage spacing shall be coordinated with the bearing manufacturer.
6. Anchor bolts shall meet the requirements of ASTM F1554, Grade 105.
7. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swaged on the embedded portion of the rod.
8. Heavy hex nuts for anchor rods shall meet the requirements of ASTM A563, Grade D or DH.
9. Anchor bolts, rods, washers, and nuts shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type I. Payment for galvanizing will be considered incidental to the disc bearing pay items.
10. For abutment bearings, all steel located below the polyether urethane disc shall be coated in accordance with Standard Specifications Section 506, Protective Coating - Steel (Thermal Spray Coating). All remaining steel shall be coated in accordance with Standard Specifications Section 506, Protective Coating - Steel (Zinc Rich Coating System). Payment for Coatings for Disc Bearings will be considered incidental to Item 523.5551, Pot or Disc Bearings, Fixed or Item 523.5552 Pot or Disc Bearings, Expansion as applicable.
11. For pier bearings, all steel located below the polyether urethane disc shall be coated in accordance with Standard Specifications Section 506, Protective Coating - Steel (Thermal Spray Coating). All remaining steel shall remain uncoated. Payment for Coatings for Disc Bearings will be considered incidental to Item 523.5551, Pot or Disc Bearings, Fixed or Item 523.5552 Pot or Disc Bearings, Expansion as applicable.
12. The abbreviation "PTFE" indicates polytetrafluoroethylene.
13. All PTFE, including guide and restraint surfaces, shall be unfilled.
14. PTFE minimum bearing pressure shall be 1 ksi under total service loading and 3 ksi under total strength loading.
15. Average compressive stresses on the disc shall be computed using the minimum plan area of the unstressed disc, excluding the area of any holes.
16. The design temperature range shall be 150°F (-30°F to 120°F).
17. Design of the sole plates and masonry plates is the responsibility of the Bearing Manufacturer. Payment for these shall be made under Item 523.5551, Pot or Disc Bearings, Fixed or Item 523.5552, Pot or Disc Bearings, Expansion as applicable.
18. Sole plate shall be beveled according to the grade defined at each substructure location in the Disc Bearing Design Table.
19. Strength Limit State rotations shown in the Disc Bearing Design Table include an allowance for uncertainties of 0.005 radians, as defined in AASHTO LRFD Bridge Design Specifications, 8th Edition 2017.
20. Bearings shall be designed with a thermal load factor of 1.0.
21. Longitudinal horizontal forces do not include friction forces at expansion bearings.
22. 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.
23. Bearing installation shall be in strict conformance with the Standard Specifications and the manufacturer's recommendations.
24. In the Disc Bearing Setting Corrections Table, a negative dimension indicates a direction away from the nearer expansion joint. A positive dimension indicates a direction toward the nearer expansion joint.
25. Temperatures shown in the Disc Bearing Setting Corrections Table are those of the steel girders and not necessarily the ambient air temperature.
26. Pier No. 2 bearings shall be welded to the girder prior to welding of any other bearings. Bearing stiffeners at Pier No. 2 shall be within 1/2 inch of the centerline of bearing at the time of welding.

DISC BEARING DESIGN TABLE

Disc Bearing Design Table																		
Location	Bearing Type	Design Loads Per Bearing (kips)										Dim "H" (in.) (Note No. 1)	Design Rotation (Note No. 19)				Total Long. Movement (in.)	Sole Plate Bevel
		Vertical				Horizontal							Strength		Service			
		Strength	Extreme Event	Service		Strength		Extreme Event		Service								
		Total Load	Total Load	Dead Load	Total Load	Longitudinal (Note No. 21)	Transverse	Longitudinal (Note No. 21)	Transverse	Longitudinal (Note No. 21)	Transverse							
Abut. No. 1	Uni-directional	300	140	75	193	0	3	0	34	0	3	8.0	0.022	197	0.011	126	4.02	3.69%
Pier No. 1	Uni-directional	738	392	264	493	0	6	0	95	0	6	10.0	0.011	549	0.003	374	2.24	1.66%
Pier No. 2	Fixed	738	392	264	493	17	6	202	95	14	6	8.0	0.011	549	0.003	374	0.00	1.11%
Abut. No. 2	Uni-directional	300	140	75	193	0	3	0	34	0	3	8.0	0.022	197	0.011	126	1.79	3.31%

Disc Bearing Setting Corrections Table						
	Dimension "X" (Inches)					
	15 °F	30 °F	45°F	60 °F	75 °F	90 °F
Abut. No. 1	-7/8	-1/2	0	1/2	7/8	1 1/4
Pier No. 1	-1/2	-1/4	0	1/4	1/2	3/4
Pier No. 2	--	--	--	--	--	--
Abut. No. 2	-3/8	-1/4	0	1/4	3/8	5/8



FRAMING PLAN

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2262701	SHEET NUMBER 44	
	MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY	
	FRAMING PLAN II	
WIN 023234.01	BRIDGE NO. 2522	BRIDGE PLANS

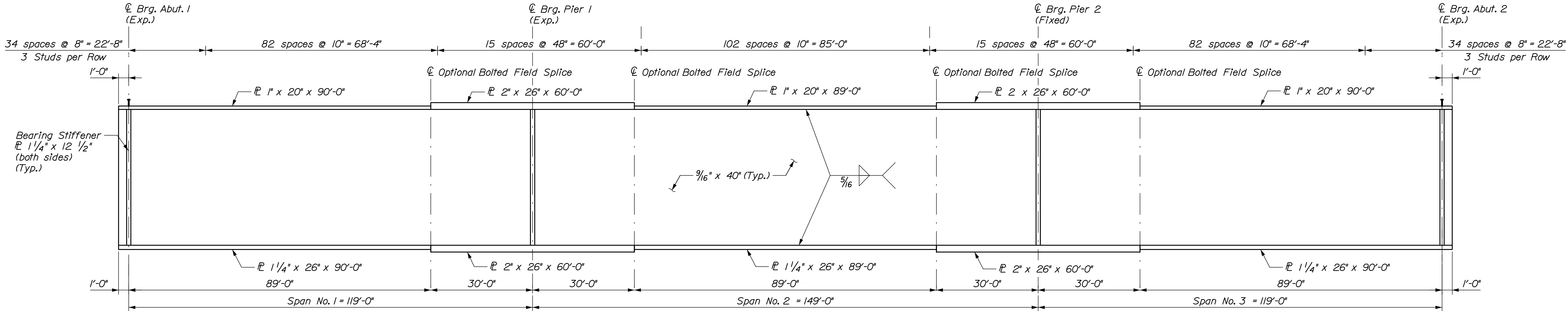
PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
A. LATHE	M.B.	ENC.							
BY	B. BENNETT	H. HSU							
DATE	7/20	7/20							
SIGNATURE			P.E. NUMBER						
DATE			DATE						

Date:7/10/2020

Username:

Division:

Filename: ... \045_Girder Elevation Plan.dgn



GIRDER ELEVATION
1,095 studs per girder (6,570 studs total)

TABLE OF DEFLECTIONS ~ GIRDER 1 (Inches)																					
	℄ Abut. 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 2
Steel Dead Load	0.00	-0.23	-0.42	-0.55	-0.59	-0.56	-0.46	-0.32	-0.17	-0.06	0.00	-0.06	-0.20	-0.37	-0.50	-0.55	-0.50	-0.37	-0.20	-0.06	0.00
Fluid Dead Load	0.00	-0.61	-1.11	-1.44	-1.56	-1.47	-1.20	-0.83	-0.45	-0.15	0.00	-0.12	-0.46	-0.88	-1.22	-1.34	-1.22	-0.88	-0.46	-0.12	0.00
Superimposed Dead Load	0.00	-0.15	-0.27	-0.35	-0.38	-0.36	-0.30	-0.21	-0.12	-0.04	0.00	-0.03	-0.12	-0.22	-0.30	-0.33	-0.30	-0.23	-0.13	-0.04	0.00
Wearing Surface & Utility D.L.	0.00	-0.11	-0.21	-0.27	-0.29	-0.28	-0.23	-0.16	-0.09	-0.03	0.00	-0.03	-0.11	-0.20	-0.27	-0.30	-0.27	-0.20	-0.11	-0.03	0.00

	℄ Brg. Pier 2	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Abut. 2
Steel Dead Load	0.00	-0.06	-0.17	-0.32	-0.46	-0.56	-0.59	-0.55	-0.42	-0.23	0.00
Fluid Dead Load	0.00	-0.15	-0.45	-0.83	-1.20	-1.47	-1.56	-1.44	-1.11	-0.61	0.00
Superimposed Dead Load	0.00	-0.03	-0.10	-0.19	-0.27	-0.33	-0.35	-0.32	-0.24	-0.13	0.00
Wearing Surface & Utility D.L.	0.00	-0.03	-0.09	-0.16	-0.23	-0.28	-0.29	-0.27	-0.21	-0.11	0.00

TABLE OF DEFLECTIONS ~ GIRDERS 2 - 5 (Inches)																					
	℄ Abut. 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 2
Steel Dead Load	0.00	-0.24	-0.43	-0.56	-0.61	-0.58	-0.48	-0.33	-0.18	-0.06	0.00	-0.06	-0.20	-0.38	-0.51	-0.57	-0.51	-0.38	-0.20	-0.06	0.00
Fluid Dead Load	0.00	-0.74	-1.35	-1.75	-1.90	-1.79	-1.47	-1.01	-0.55	-0.18	0.00	-0.15	-0.57	-1.08	-1.49	-1.64	-1.49	-1.08	-0.57	-0.15	0.00
Superimposed Dead Load	0.00	-0.14	-0.25	-0.33	-0.35	-0.34	-0.28	-0.20	-0.11	-0.04	0.00	-0.03	-0.11	-0.21	-0.29	-0.32	-0.29	-0.22	-0.12	-0.04	0.00
Wearing Surface & Utility D.L.	0.00	-0.11	-0.20	-0.25	-0.28	-0.26	-0.22	-0.15	-0.08	-0.02	0.00	-0.03	-0.11	-0.19	-0.26	-0.28	-0.26	-0.19	-0.11	-0.03	0.00

	℄ Brg. Pier 2	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Abut. 2
Steel Dead Load	0.00	-0.06	-0.18	-0.33	-0.48	-0.58	-0.61	-0.56	-0.43	-0.24	0.00
Fluid Dead Load	0.00	-0.18	-0.55	-1.01	-1.47	-1.79	-1.90	-1.75	-1.35	-0.74	0.00
Superimposed Dead Load	0.00	-0.03	-0.10	-0.18	-0.26	-0.31	-0.33	-0.30	-0.23	-0.13	0.00
Wearing Surface & Utility D.L.	0.00	-0.02	-0.08	-0.15	-0.22	-0.26	-0.28	-0.25	-0.20	-0.11	0.00

TABLE OF DEFLECTIONS ~ GIRDER 6 (Inches)																					
	℄ Abut. 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 2
Steel Dead Load	0.00	-0.23	-0.42	-0.55	-0.59	-0.56	-0.46	-0.32	-0.17	-0.06	0.00	-0.06	-0.20	-0.37	-0.50	-0.55	-0.50	-0.37	-0.20	-0.06	0.00
Fluid Dead Load	0.00	-0.69	-1.27	-1.65	-1.79	-1.70	-1.40	-0.99	-0.56	-0.20	0.00	-0.07	-0.38	-0.78	-1.11	-1.24	-1.13	-0.82	-0.42	-0.10	0.00
Superimposed Dead Load	0.00	-0.15	-0.27	-0.35	-0.38	-0.36	-0.30	-0.21	-0.12	-0.04	0.00	-0.03	-0.12	-0.22	-0.30	-0.33	-0.30	-0.23	-0.13	-0.04	0.00
Wearing Surface & Utility D.L.	0.00	-0.11	-0.21	-0.27	-0.29	-0.28	-0.23	-0.16	-0.09	-0.03	0.00	-0.03	-0.11	-0.20	-0.27	-0.30	-0.27	-0.20	-0.11	-0.03	0.00

	℄ Brg. Pier 2	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Abut. 2
Steel Dead Load	0.00	-0.06	-0.17	-0.32	-0.46	-0.56	-0.59	-0.55	-0.42	-0.23	0.00
Fluid Dead Load	0.00	-0.16	-0.48	-0.86	-1.24	-1.50	-1.59	-1.47	-1.13	-0.62	0.00
Superimposed Dead Load	0.00	-0.03	-0.10	-0.19	-0.27	-0.33	-0.35	-0.32	-0.24	-0.13	0.00
Wearing Surface & Utility D.L.	0.00	-0.03	-0.09	-0.16	-0.23	-0.28	-0.29	-0.27	-0.21	-0.11	0.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
GIRDER ELEVATION PLAN

SHEET NUMBER
45
OF 69

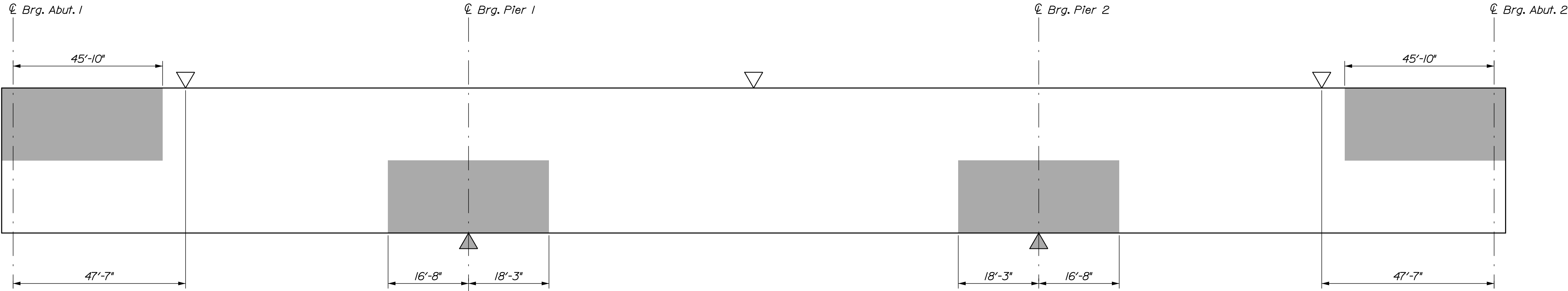
WIN
023234.01
BRIDGE NO. 2522

BRIDGE PLANS

PROJ. MANAGER	A. LATHE	BY	DATE
DESIGN-DETAILED	M.B.	B. BENNETT	7/20
CHECKED-REVIEWED	EMC	H. HSU	7/20
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE





Indicates areas always in compression.
All other areas are in tension or have
stress reversals.



Point of Maximum Positive Moment



Point of Maximum Negative Moment

GIRDER STRESS DIAGRAM

GIRDER	BOTTOM OF SLAB ELEVATIONS																				
	℄ Brg. Abut. 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Pier 2
G1	207.91	208.42	208.90	209.33	209.71	210.05	210.33	210.58	210.80	211.00	211.19	211.43	211.66	211.85	212.00	212.07	212.08	212.02	211.90	211.76	211.60
G2	208.06	208.58	209.07	209.51	209.89	210.23	210.51	210.75	210.96	211.16	211.35	211.59	211.82	212.03	212.17	212.25	212.26	212.19	212.07	211.92	211.76
G3	208.22	208.73	209.22	209.67	210.05	210.39	210.67	210.91	211.12	211.31	211.50	211.75	211.98	212.18	212.33	212.41	212.42	212.35	212.23	212.08	211.92
G4	208.16	208.66	209.15	209.59	209.97	210.29	210.57	210.81	211.02	211.21	211.41	211.65	211.88	212.08	212.23	212.31	212.32	212.25	212.13	211.98	211.82
G5	207.99	208.50	208.98	209.43	209.81	210.14	210.41	210.65	210.86	211.06	211.25	211.49	211.72	211.93	212.07	212.15	212.16	212.09	211.97	211.82	211.66
G6	207.83	208.33	208.82	209.26	209.64	209.97	210.25	210.49	210.70	210.90	211.09	211.33	211.55	211.74	211.89	211.96	211.97	211.91	211.80	211.66	211.50

GIRDER	℄ Brg. Pier 2	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ Brg. Abut. 2
G1	211.60	211.47	211.34	211.18	211.00	210.79	210.52	210.20	209.84	209.42	208.97
G2	211.76	211.63	211.50	211.36	211.18	210.97	210.70	210.39	210.01	209.59	209.13
G3	211.92	211.79	211.66	211.51	211.34	211.13	210.86	210.54	210.17	209.75	209.28
G4	211.82	211.69	211.55	211.40	211.22	211.00	210.74	210.42	210.05	209.64	209.19
G5	211.66	211.53	211.40	211.24	211.06	210.84	210.58	210.26	209.89	209.48	209.03
G6	211.50	211.37	211.24	211.09	210.91	210.69	210.42	210.11	209.74	209.32	208.87

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2262701

WIN
023234.01

BRIDGE NO. 2522
BRIDGE PLANS

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY

GIRDER STRESS DIAGRAM &
BOT. OF SLAB ELEVATIONS

SHEET NUMBER

46

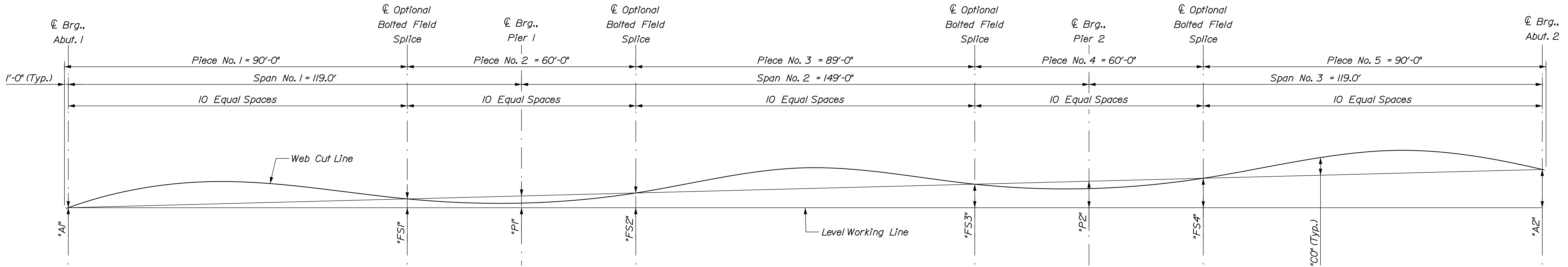
OF 69

PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	7/20	B. BENNETT	7/20
CHECKED-REVIEWED		H. HSU	
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

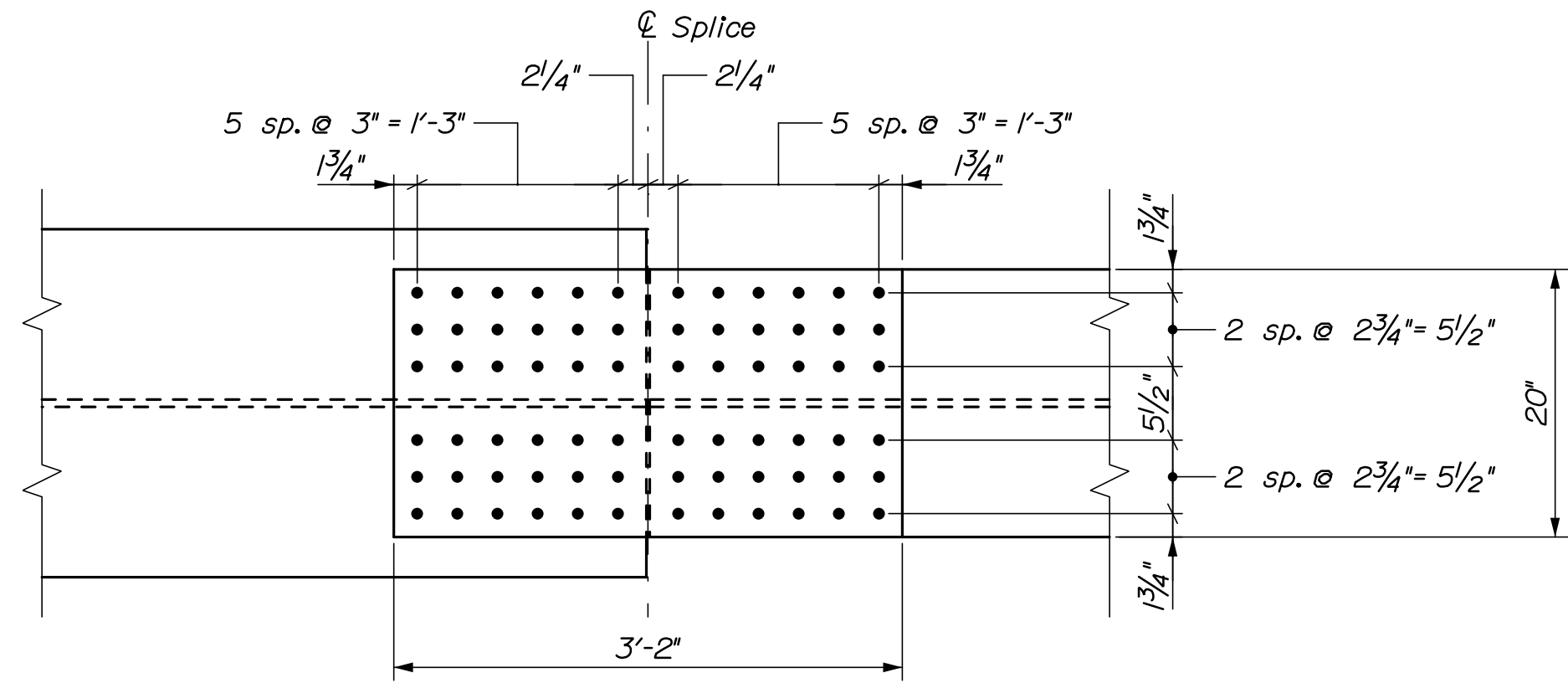


CAMBER DIAGRAM

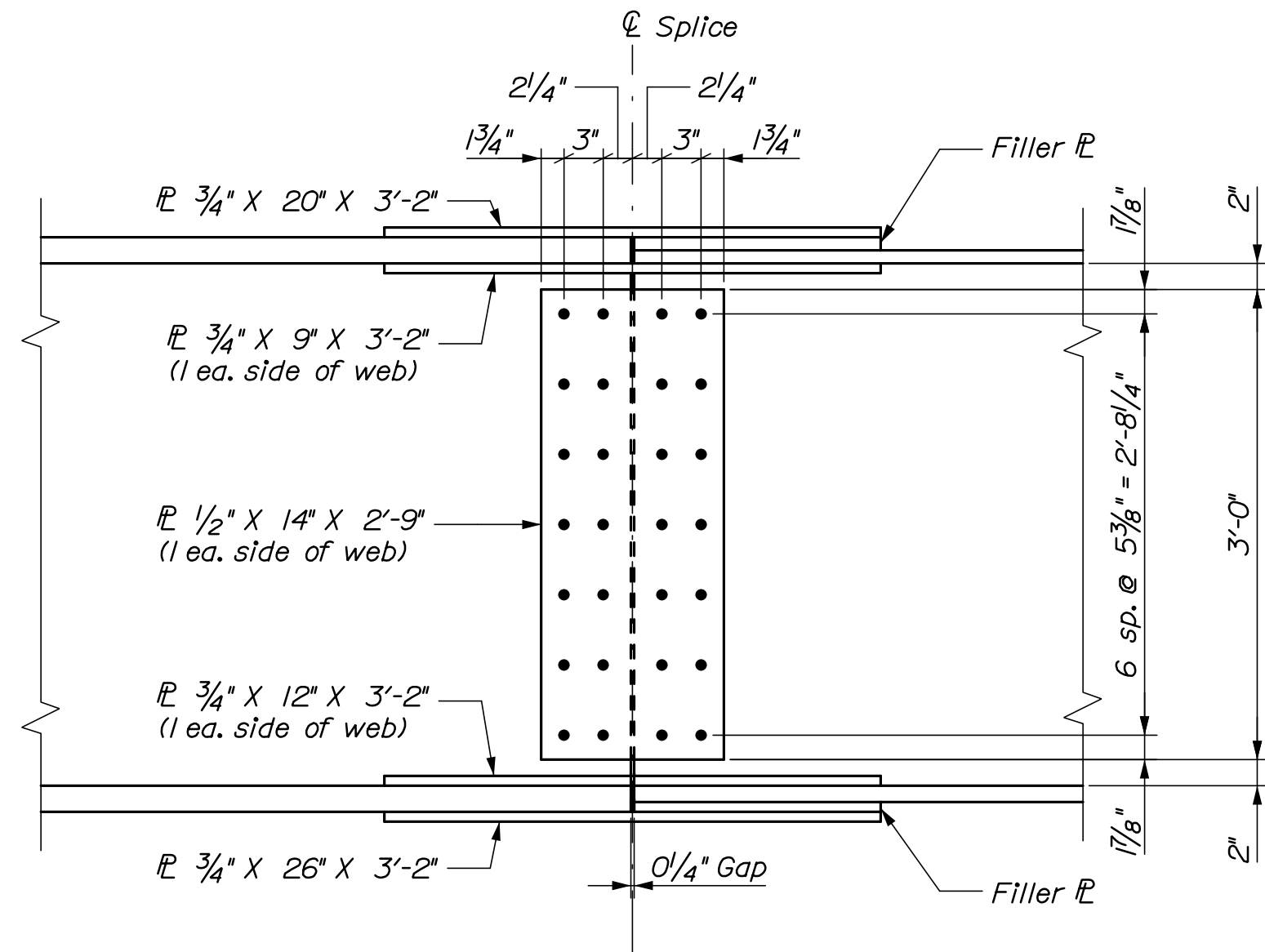
TABLE OF CAMBER DIMENSIONS (Feet)									
GIRDER	"A"	"FS"	"P"	"FS2"	"FS3"	"P2"	"FS4"	"A2"	GIRDER
G1	0.00	2.70	3.28	3.69	3.93	3.69	3.27	1.06	G1
G2	0.00	2.70	3.28	3.70	3.94	3.69	3.28	1.07	G2
G3	0.00	2.71	3.29	3.70	3.95	3.70	3.28	1.07	G3
G4	0.00	2.67	3.25	3.66	3.91	3.66	3.25	1.03	G4
G5	0.00	2.67	3.26	3.67	3.91	3.67	3.25	1.03	G5
G6	0.00	2.68	3.26	3.68	3.92	3.67	3.26	1.04	G6

TABLE OF CAMBER ORDINATES "CO" (INCHES)																								
		Piece No. 1											Piece No. 2											
GIRDER	℄ A/	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	FS1	0.1 x L	0.2 x L	0.3 x L	0.4 x L	℄ P/	0.6 x L	0.7 x L	0.8 x L	0.9 x L	FS2	GIRDER		
G1	0.00	0.76	1.45	1.97	2.29	2.39	2.25	1.90	1.37	0.71	0.00	0.28	0.54	0.76	0.90	0.96	0.91	0.76	0.55	0.29	0.00	G1		
G2	0.00	0.84	1.60	2.18	2.54	2.64	2.49	2.10	1.51	0.79	0.00	0.32	0.61	0.85	1.01	1.08	1.02	0.85	0.62	0.32	0.00	G2		
G3	0.00	0.84	1.60	2.18	2.54	2.64	2.49	2.10	1.51	0.79	0.00	0.32	0.61	0.85	1.01	1.08	1.02	0.85	0.61	0.32	0.00	G3		
G4	0.00	0.84	1.60	2.17	2.53	2.63	2.48	2.10	1.51	0.78	0.00	0.32	0.61	0.85	1.01	1.08	1.02	0.85	0.61	0.32	0.00	G4		
G5	0.00	0.84	1.60	2.18	2.53	2.64	2.49	2.10	1.51	0.78	0.00	0.32	0.61	0.85	1.01	1.07	1.02	0.85	0.61	0.32	0.00	G5		
G6	0.00	0.81	1.54	2.10	2.45	2.55	2.40	2.03	1.46	0.76	0.00	0.29	0.55	0.77	0.92	0.98	0.93	0.78	0.56	0.30	0.00	G6		

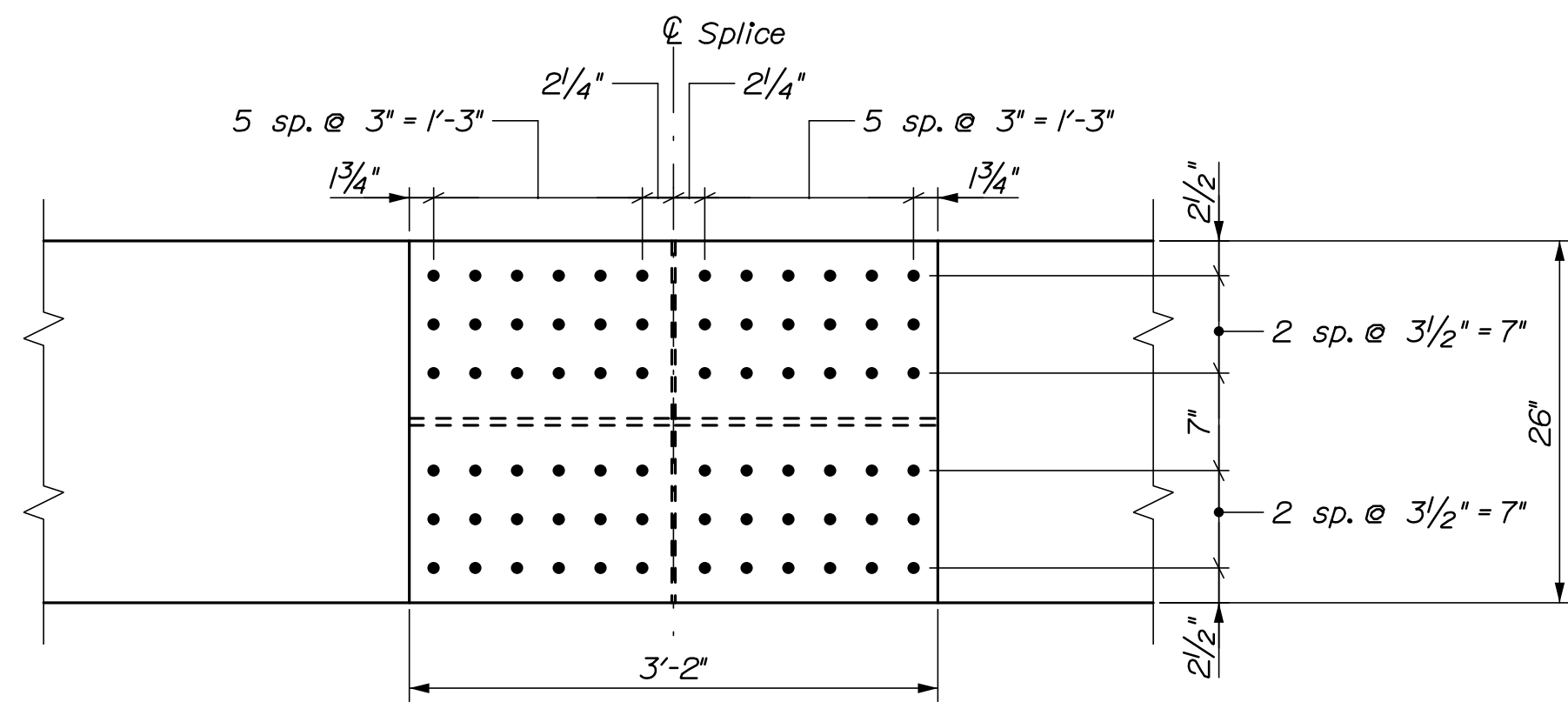
TABLE OF CAMBER ORDINATES "CO" (INCHES)																																			
		Piece No. 3											Piece No. 4											Piece No. 5											
GIRDER	FS2	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	FS3	0.1 x L	0.2 x L	0.3 x L	0.4 x L	℄ P2	0.6 x L	0.7 x L	0.8 x L	0.9 x L	FS4	0.1 x L	0.2 x L	0.3 x L	0.4 x L	0.5 x L	0.6 x L	0.7 x L	0.8 x L	0.9 x L	℄ A2	GIRDER			
G1	0.00	0.53	1.04	1.45	1.71	1.80	1.71	1.45	1.04	0.53	0.00	0.29	0.54	0.76	0.90	0.95	0.90	0.75	0.54	0.28	0.00	0.70	1.36	1.88	2.23	2.37	2.27	1.96	1.44	0.77	0.00	G1			
G2	0.00	0.59	1.14	1.59	1.89	1.99	1.89	1.59	1.14	0.59	0.00	0.32	0.61	0.85	1.01	1.07	1.01	0.84	0.60	0.32	0.00	0.78	1.50	2.09	2.47	2.62	2.52	2.17	1.60	0.85	0.00	G2			
G3	0.00	0.59	1.14	1.59	1.89	1.99	1.89	1.59	1.14	0.59	0.00	0.32	0.61	0.85	1.01	1.07	1.01	0.84	0.60	0.32	0.00	0.78	1.50	2.09	2.47	2.63	2.52	2.17	1.60	0.85	0.00	G3			
G4	0.00	0.59	1.14	1.59	1.89	1.99	1.89	1.59	1.14	0.59	0.00	0.32	0.61	0.85	1.01	1.07	1.01	0.84	0.60	0.32	0.00	0.78	1.50	2.09	2.47	2.63	2.52	2.17	1.60	0.85	0.00	G4			
G5	0.00	0.59	1.14	1.59	1.89	1.99	1.89	1.59	1.14	0.59	0.00	0.32	0.61	0.85	1.01	1.07	1.01	0.84	0.60	0.32	0.00	0.78	1.50	2.09	2.48	2.63	2.52	2.17	1.60	0.85	0.00	G5			
G6	0.00	0.51	1.01	1.41	1.67	1.76	1.68	1.42	1.02	0.52	0.00	0.28	0.54	0.75	0.89	0.95	0.89	0.75	0.53	0.28	0.00	0.71	1.37	1.91	2.26	2.39	2.30	1.98	1.46	0.78	0.00	G6			



PLAN - TOP FLANGE

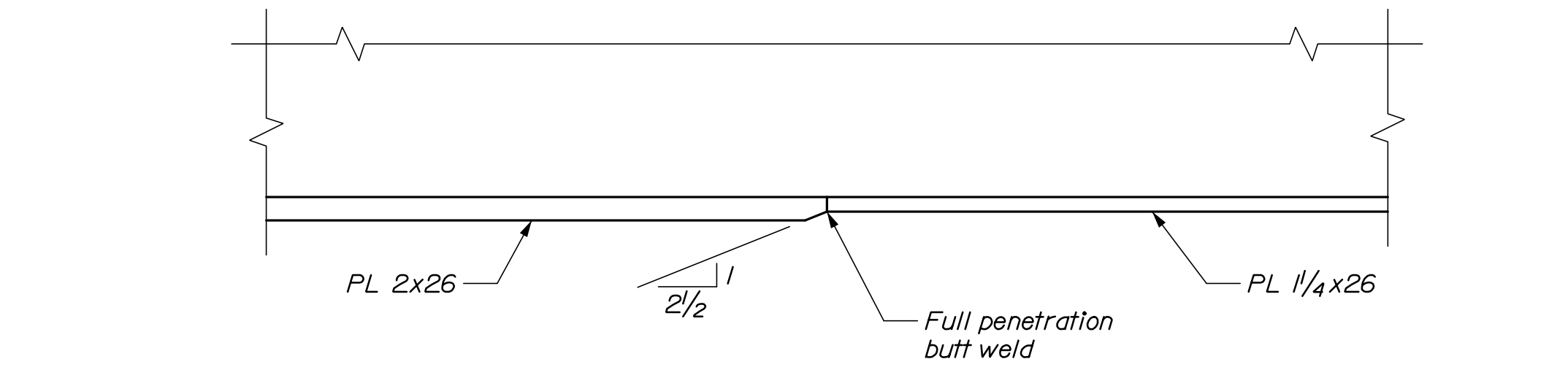


ELEVATION

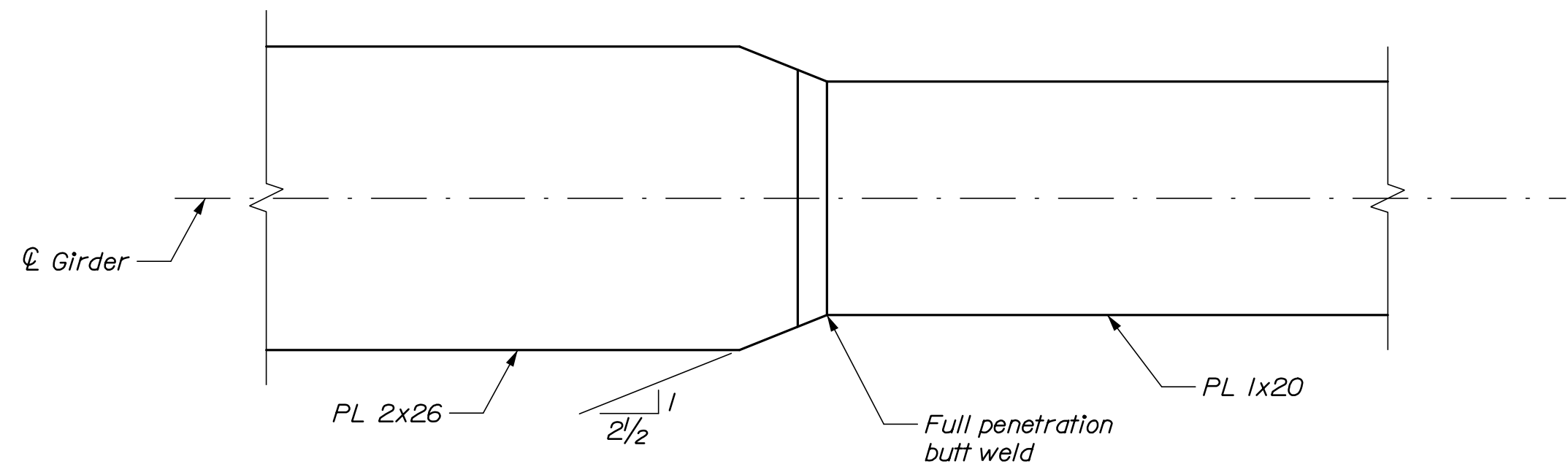


PLAN - BOTTOM FLANGE

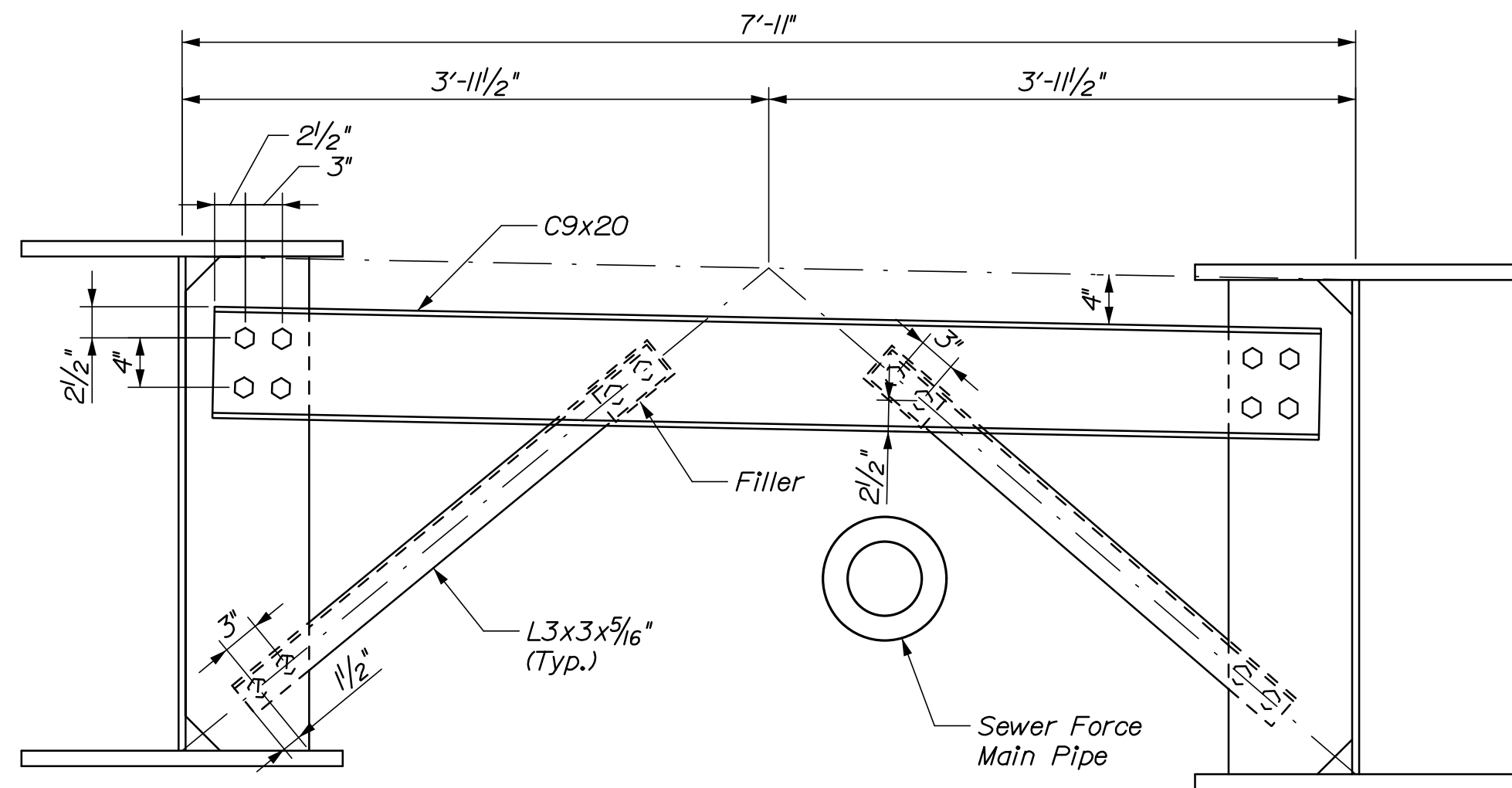
OPTIONAL BOLTED FIELD SPLICE



FLANGE THICKNESS TRANSITION DETAIL
Bottom Flange Shown, Top Flange Similar



FLANGE WIDTH TRANSITION DETAIL
Typical Top Flange



~ TYPE UI ~

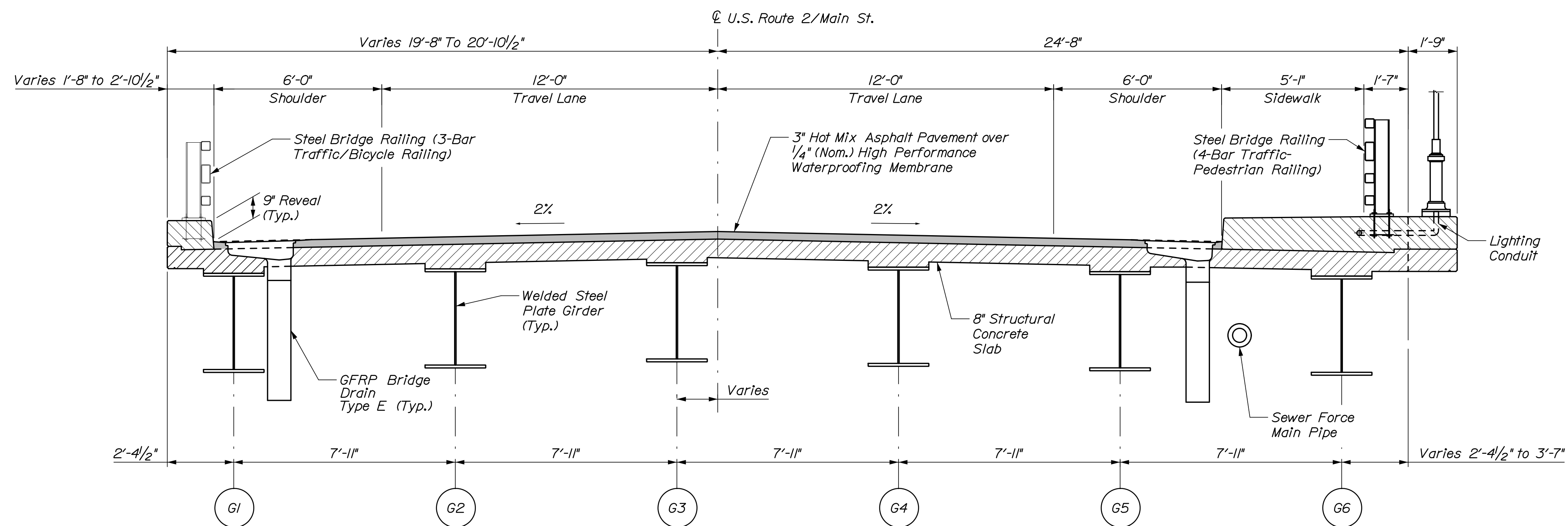
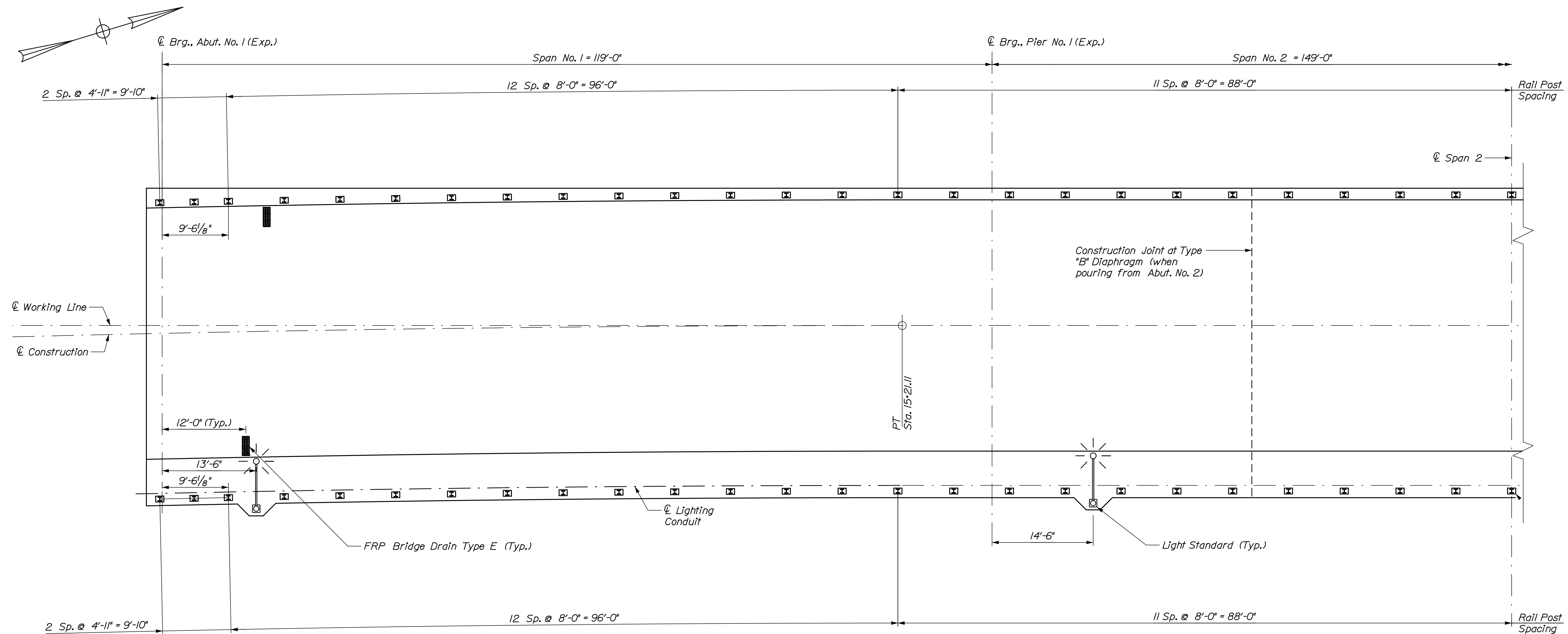
Note: For dimensions not shown, refer to Standard Details.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2262701
WIN
023234.01
BRIDGE NO. 2522
BRIDGE PLANS

PROJ. MANAGER	A. LATHE	BY	DATE
DESIGNED-DETAILED	M.B.	B. BENNETT	7/20
CHECKED-REVIEWED	ENC	H. HSU	7/20
DESIGNED-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

MATTAWAMKEAG BRIDGE
MATTAWAMKEAG RIVER
MATTAWAMKEAG PENOBSCOT COUNTY
STRUCTURAL STEEL DETAILS I

SHEET NUMBER
48
OF 69

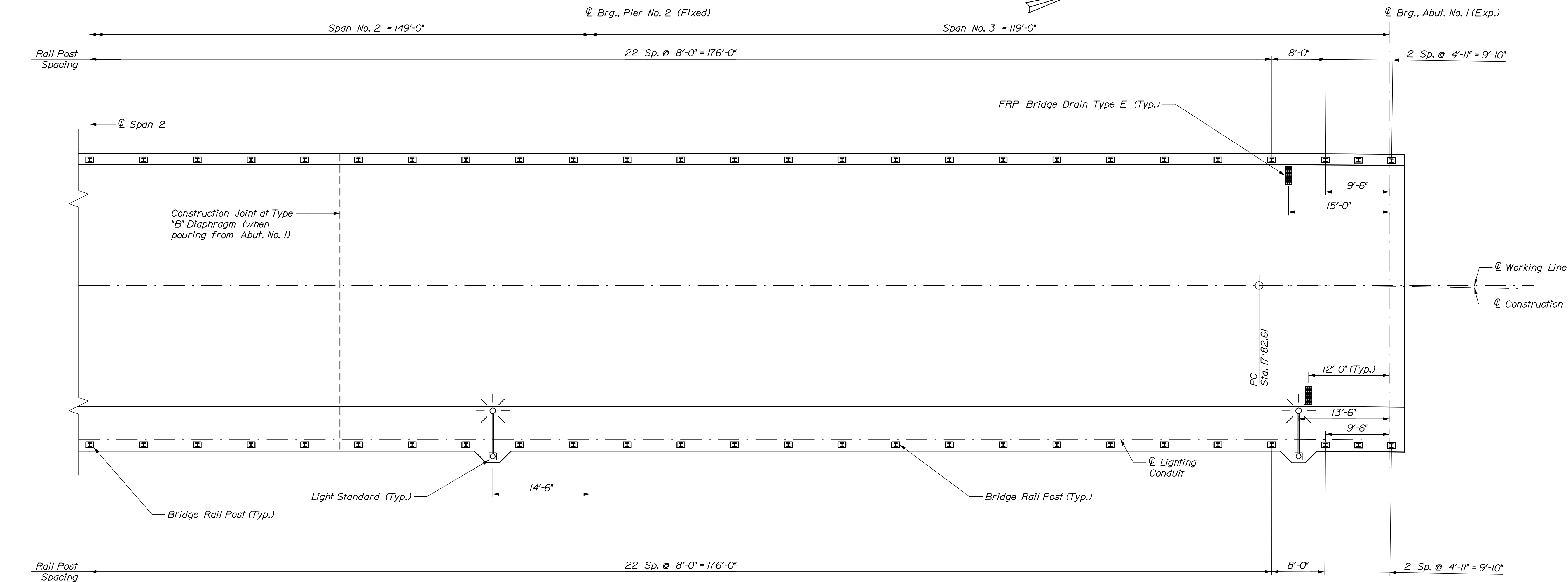


Date:7/10/2020

Username:

Division:

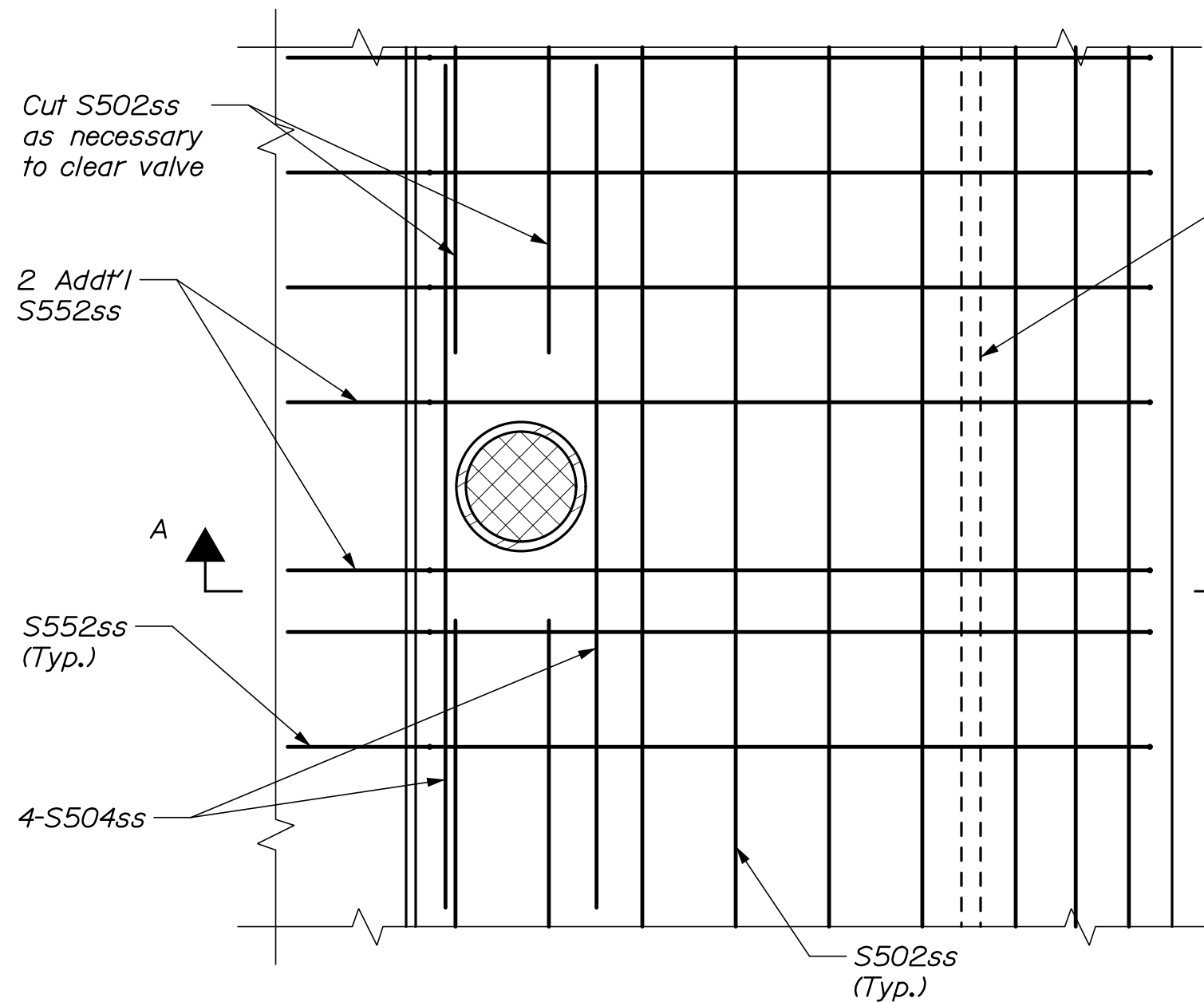
Filename: ... \050_Superstructure Plan II.dgn



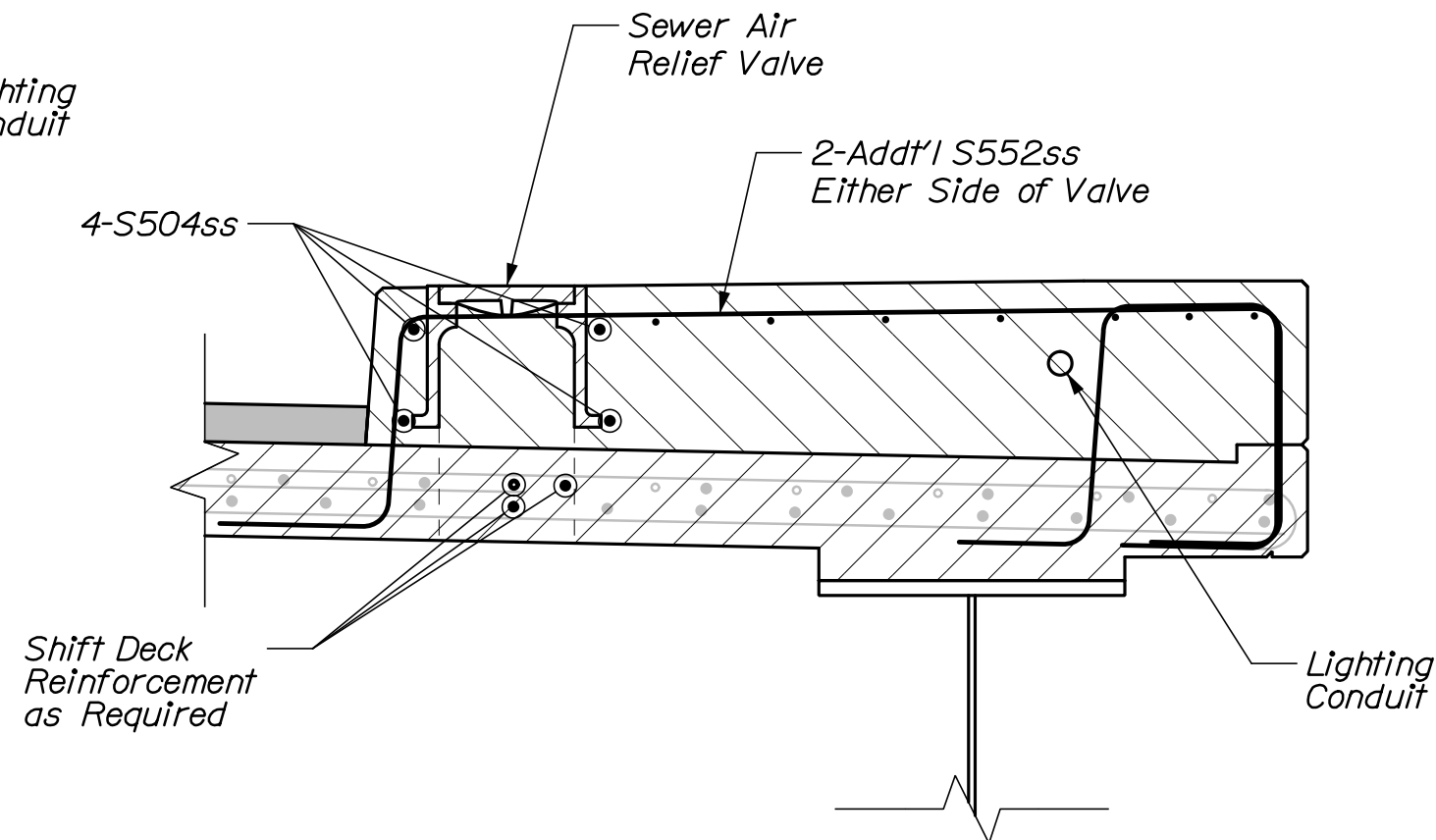
SUPERSTRUCTURE PLAN

SUPERSTRUCTURE NOTES:

1. The theoretical blocking used for design of the structure is $3\frac{3}{4}$ " 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" unless otherwise noted.
3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
4. Unless the superstructure slab concrete is placed in a continuous operation, the initial placement shall start at an abutment and shall terminate at the completion of the Span 2 positive moment region. The second placement shall proceed from the termination of the initial placement to the other abutment. Concrete in a placement shall be kept plastic for one complete span behind the span being placed. A minimum of 5 days shall elapse between the initial and second placement. The superstructure slab concrete placement sequence shall be approved by the Resident.
5. The use of precast deck panels will not be allowed on this project.
6. Provide 3 additional stirrups in the curbs at each Bridge Rail Post location, as shown in Standard Details Section 507.
7. Bar supports for GFRP reinforcement shall be plastic, dielectric material, or other approved material. See special provisions subsection 530.6 for additional requirements.
8. Adjust reinforcing steel to fit around the bridge drains in a manner approved by the Resident. Do not cut transverse reinforcing bars.
9. The compression seal to be furnished at Abutment Number 2 shall have a minimum Movement Rating of $1\frac{1}{2}$ ".



SEWER AIR RELIEF VALVE DETAIL



Note: Valve enclosure shown schematically to demonstrate required additional reinforcing, and modifications to typical reinforcing. Refer to sewer plans for exact valve placement, including station/offset.

SECTION A-A

HNTB

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2262701	WIN 023234.01	BRIDGE NO. 2522 BRIDGE PLANS
--	---------	------------------	---------------------------------

PROJ. MANAGER	A. LATHE	BY	DATE
DESIGN-DETAILED	M.B.	B. BENNETT	7/20
CHECKED-REVIEWED	EMC	H. HSU	7/20
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

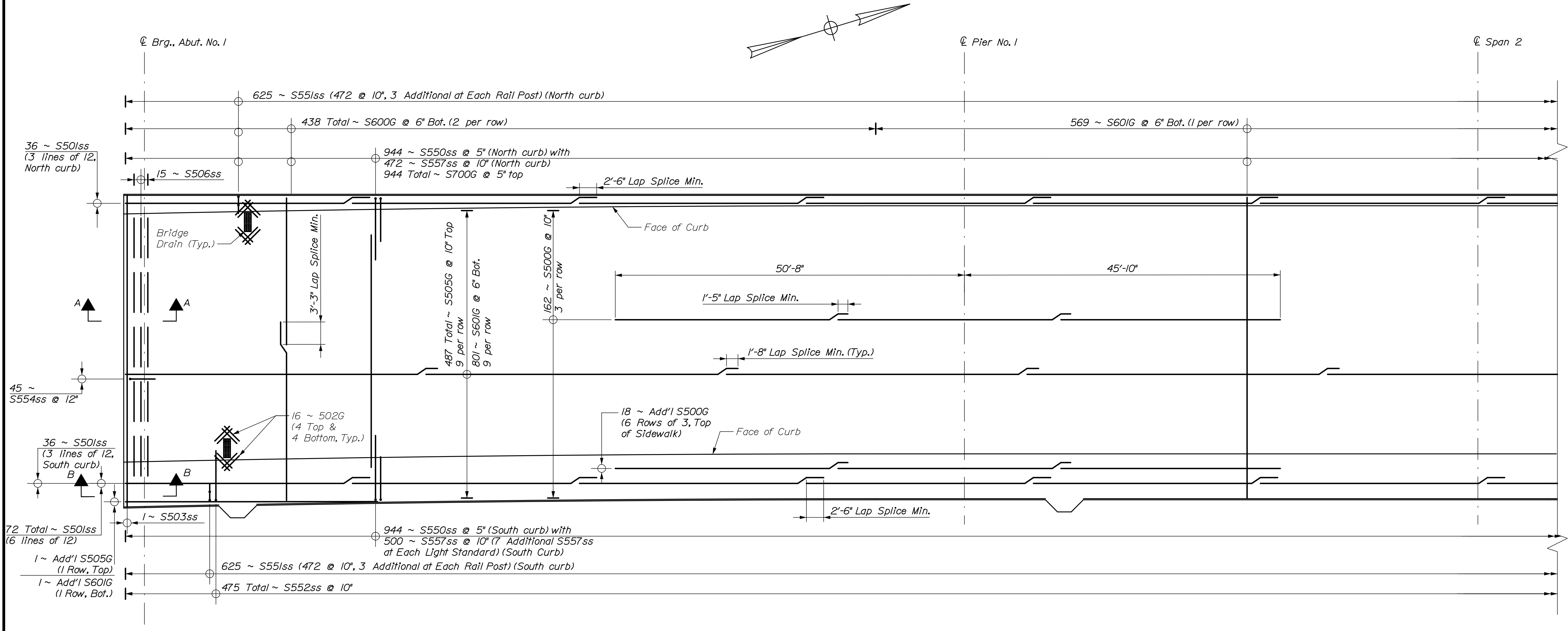
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY	SUPERSTRUCTURE PLAN II
--	------------------------

SHEET NUMBER	50
OF 69	

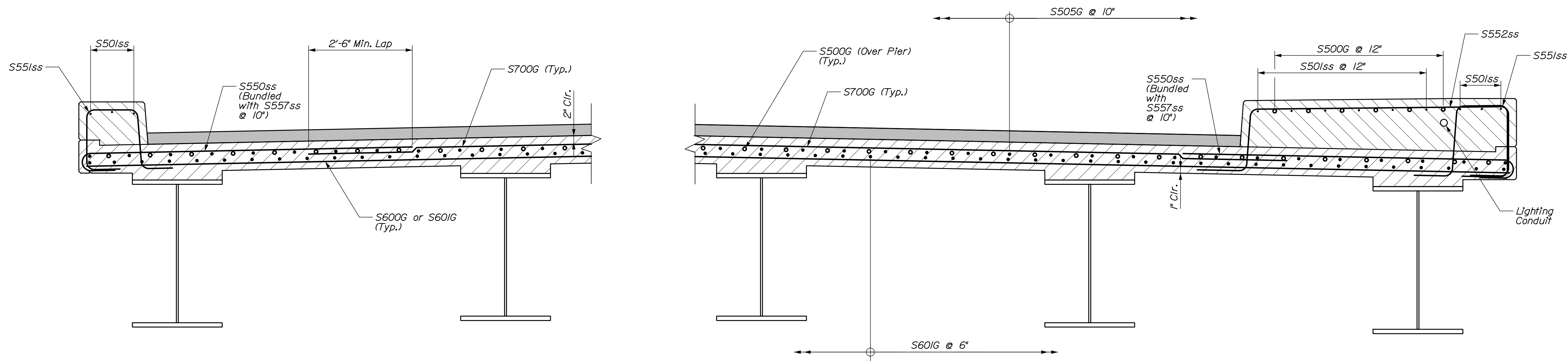
Date:7/10/2020

Username:

Filename: ... \051_Superstructure Reinforcing 1.dgn Division:



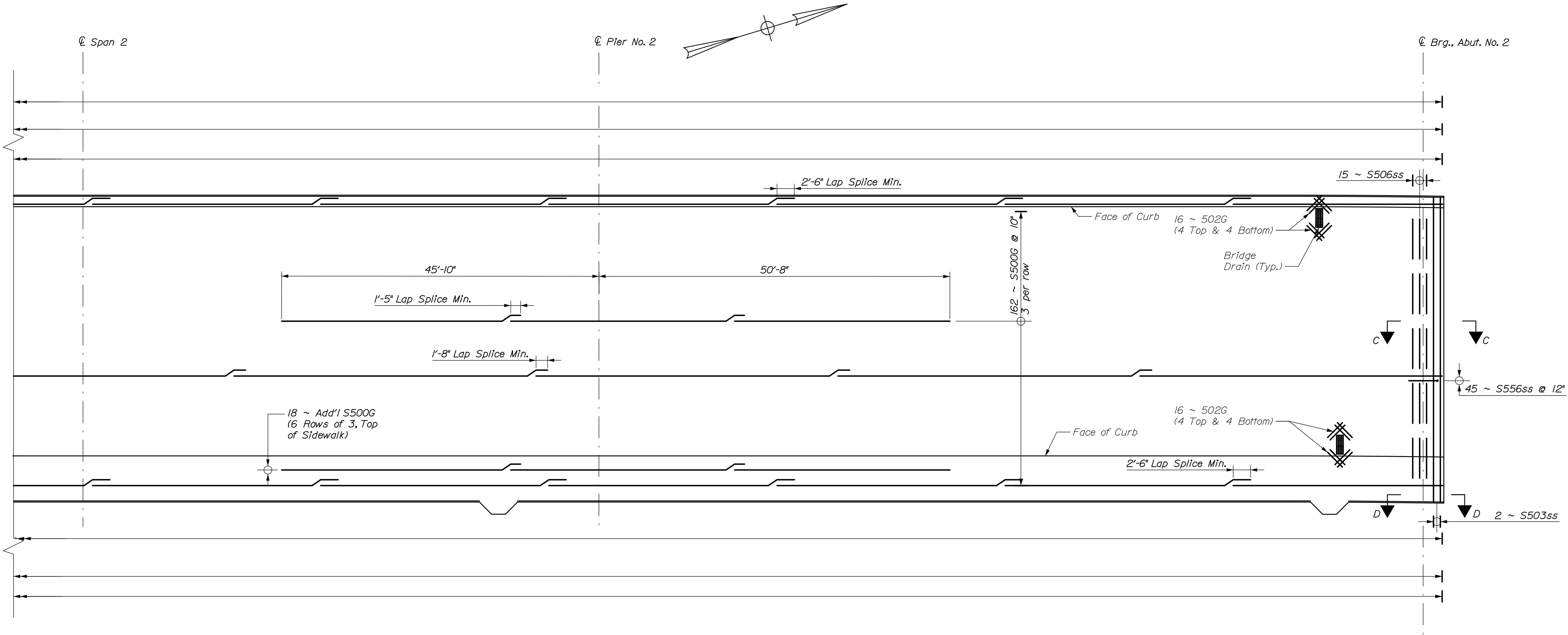
SUPERSTRUCTURE REINFORCING



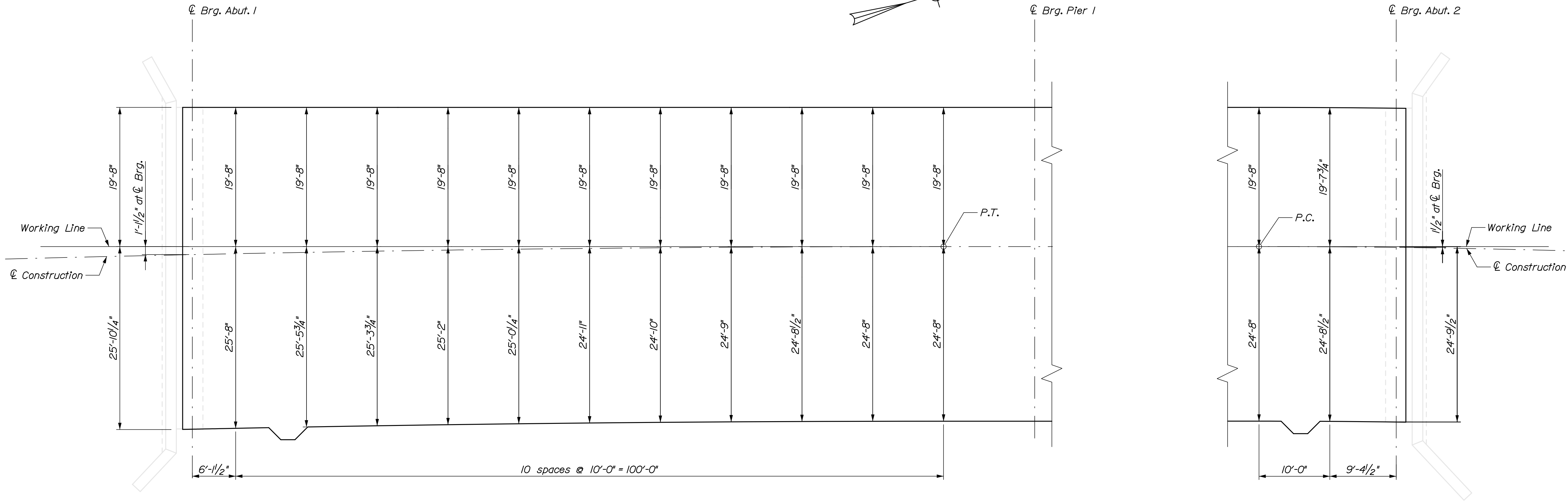
TRANSVERSE REINFORCEMENT SECTIONS



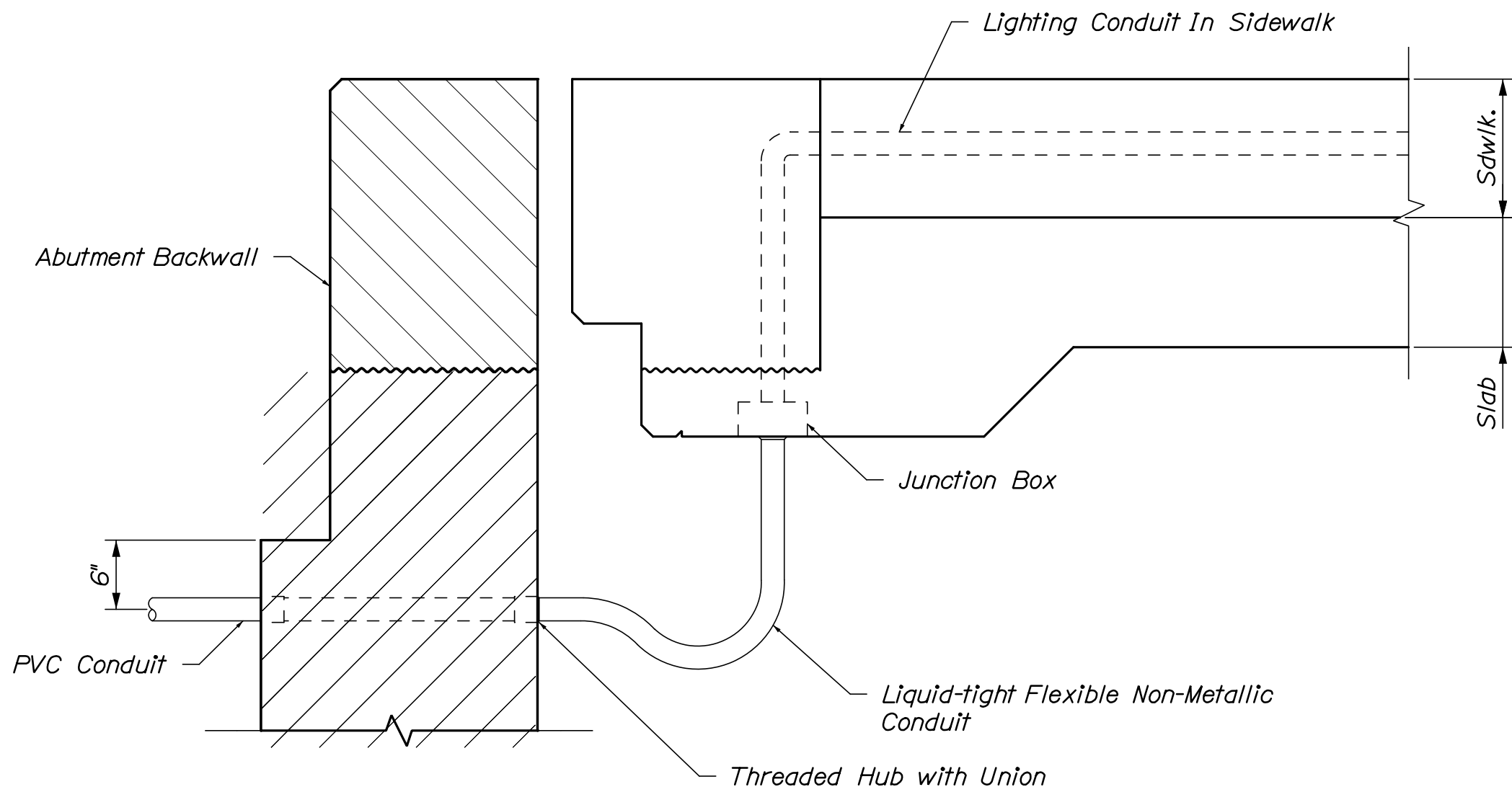
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2262701		WIN 023234.01		BRIDGE NO. 2522		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY		SUPERSTRUCTURE REINFORCING I		SHEET NUMBER 51		OF 69			
PROJ. MANAGER	A. LATHE	BY	B. BENNETT H. HSU	DATE	7/20 7/20	SIGNATURE	P.E. NUMBER	DATE	
DESIGNED-DETAILED	M.B.	CHECKED-REVIEWED	EMC	DESIGNED-DETAILED		REVISIONS 1			
						REVISIONS 2			
						REVISIONS 3			
						REVISIONS 4			
						FIELD CHANGES			



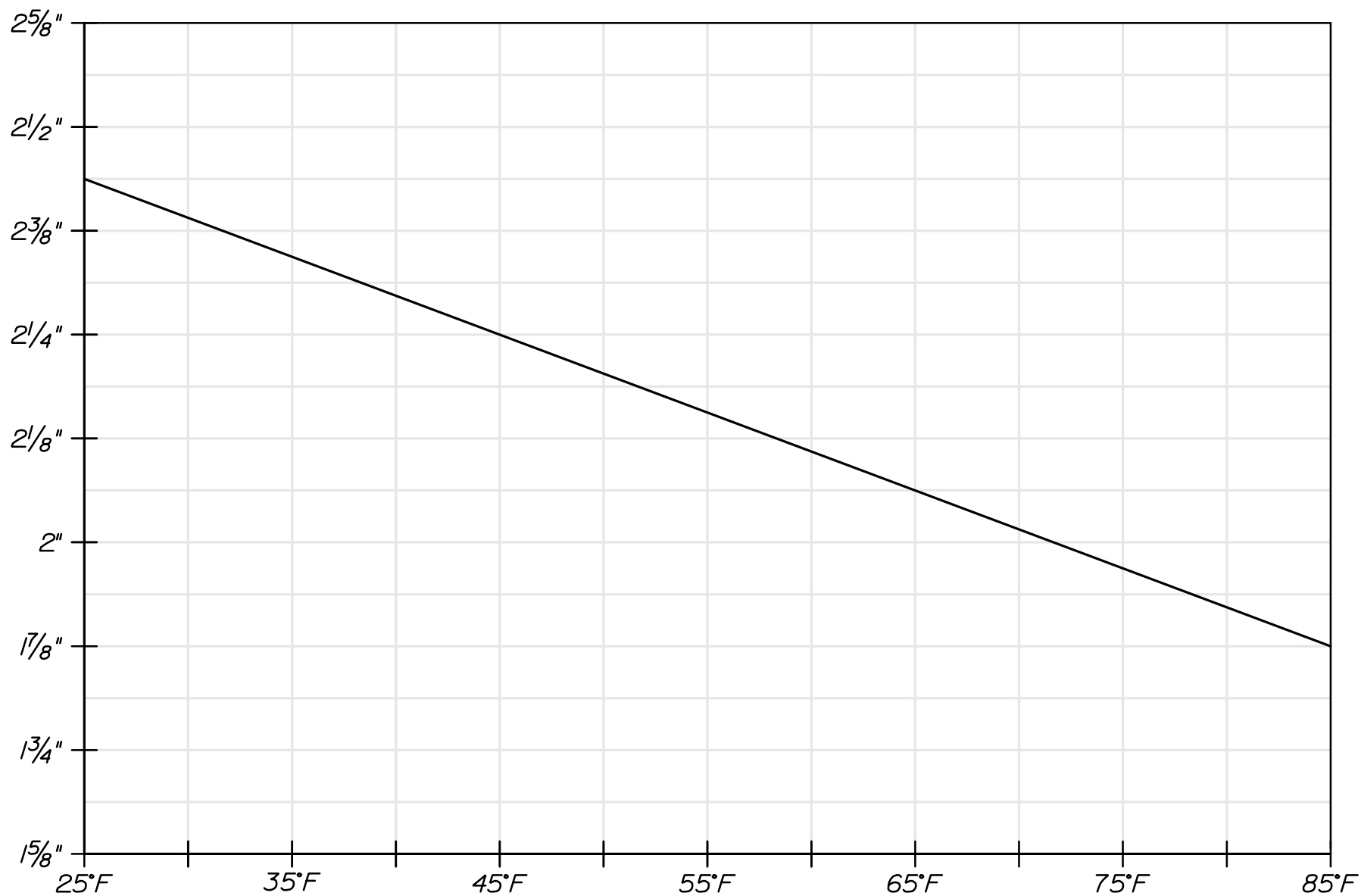
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2262701			
	WIN 023234.01			
	BRIDGE NO. 2522			
MATTAWAMKEAG BRIDGE MATTAWAMKEAG RIVER MATTAWAMKEAG PENOBSCOT COUNTY		PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	BY A. LATHE B. BENNETT H. HSU	DATE 7/20 7/20
SHEET NUMBER		SIGNATURE P.E. NUMBER DATE		
52		262701		
OF 69		BRIDGE PLANS		



SUPERSTRUCTURE SLAB FASCIA OFFSETS



LIGHTING CONDUIT EXPANSION DETAIL



SEAL OPENING TABLE



Technical drawing of a light standard base showing dimensions and reinforcement details.

Dimensions:

- Overall width: 1'-0" (Typ.)
- Overall height: 1'-9"
- Base width: 4" min.
- Base length: 1'-9"
- Base width: 1'-0"
- Base length: 1'-0"
- Base width: 1'-9"
- Base length: 1'-9"

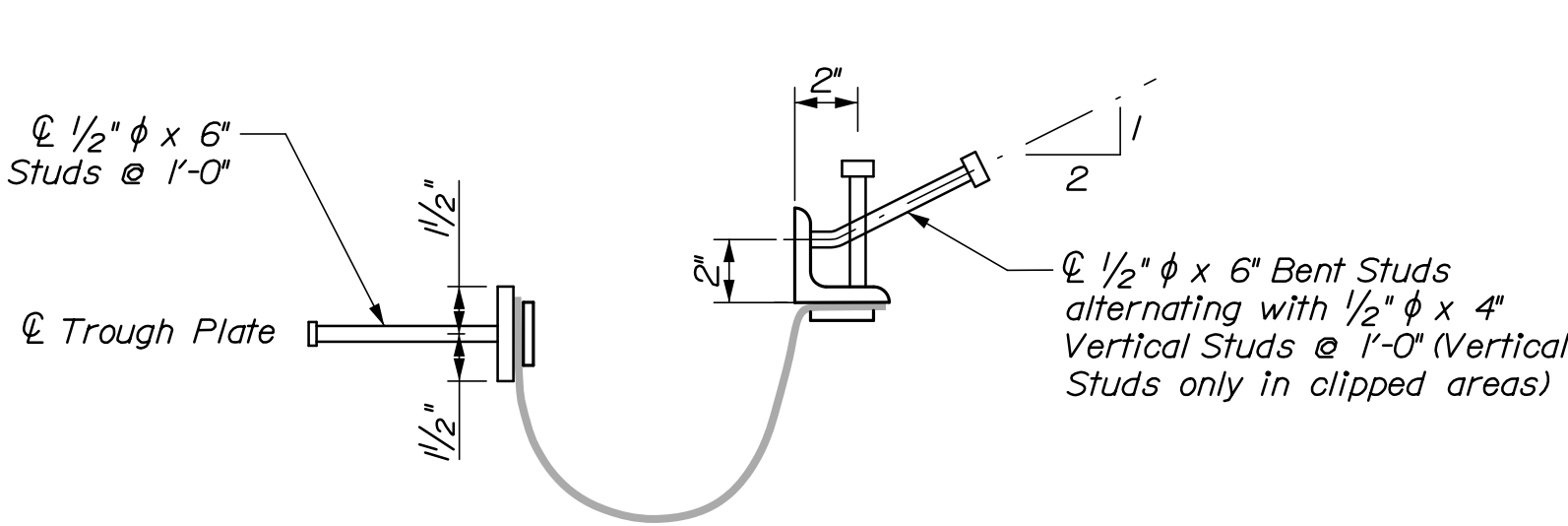
Reinforcement Details:

- 1 Each - S650ss through S652ss @ 1'-0" (Typ.)
- 3 ~ S653ss
- Anchors Bolt Circle for Light Standard per Manufacturer's specifications
- 2" Lighting Conduit
- Edge of Deck

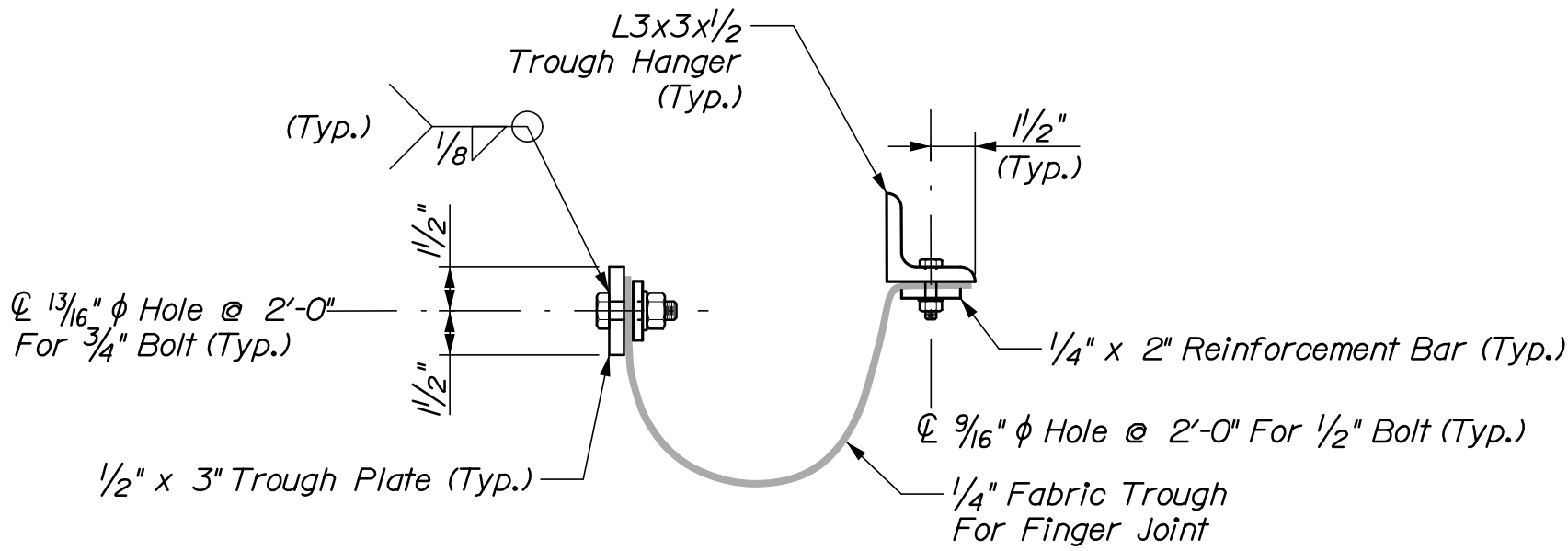
Technical drawing of a light standard cross-section. The drawing shows a cylindrical body with a base. Key dimensions and components are labeled:

- Dimensions:**
 - Overall width: 5'-0"
 - Top flange width: 1'-7" Level
 - Base width: 1'-9"
 - Bottom flange width: 1'-9"
 - Internal diameter: 2'-0"
- Components and Labels:**
 - S650ss through S652ss:** Points to the main cylindrical body.
 - 2" Lighting Conduit:** Points to a horizontal pipe running through the center.
 - S653ss:** Points to the base flange.
 - S557ss @ 10' (7 Additional at Each Light Standard, Lap with S550ss):** Points to a horizontal pipe running through the base.

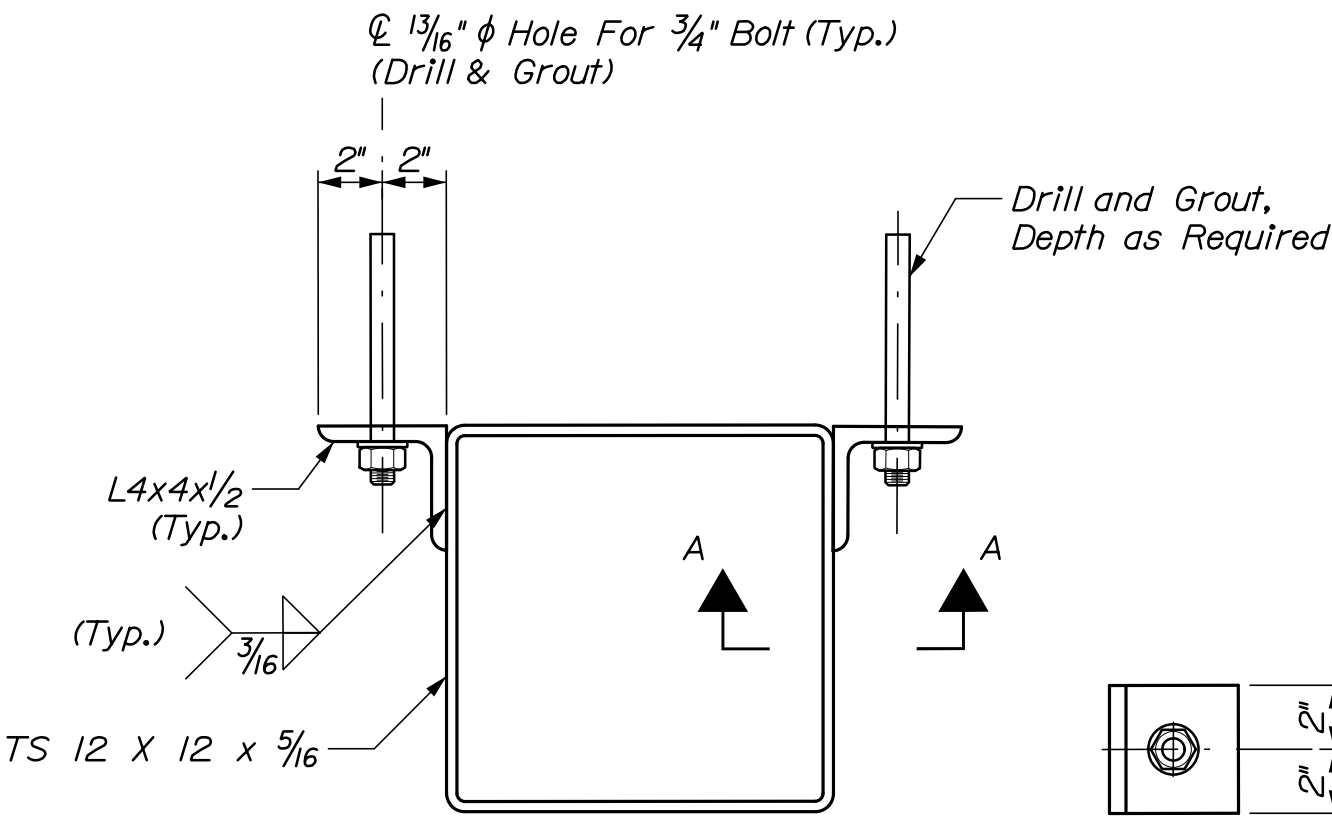
HNTB



TROUGH SECTION - ANCHORAGE

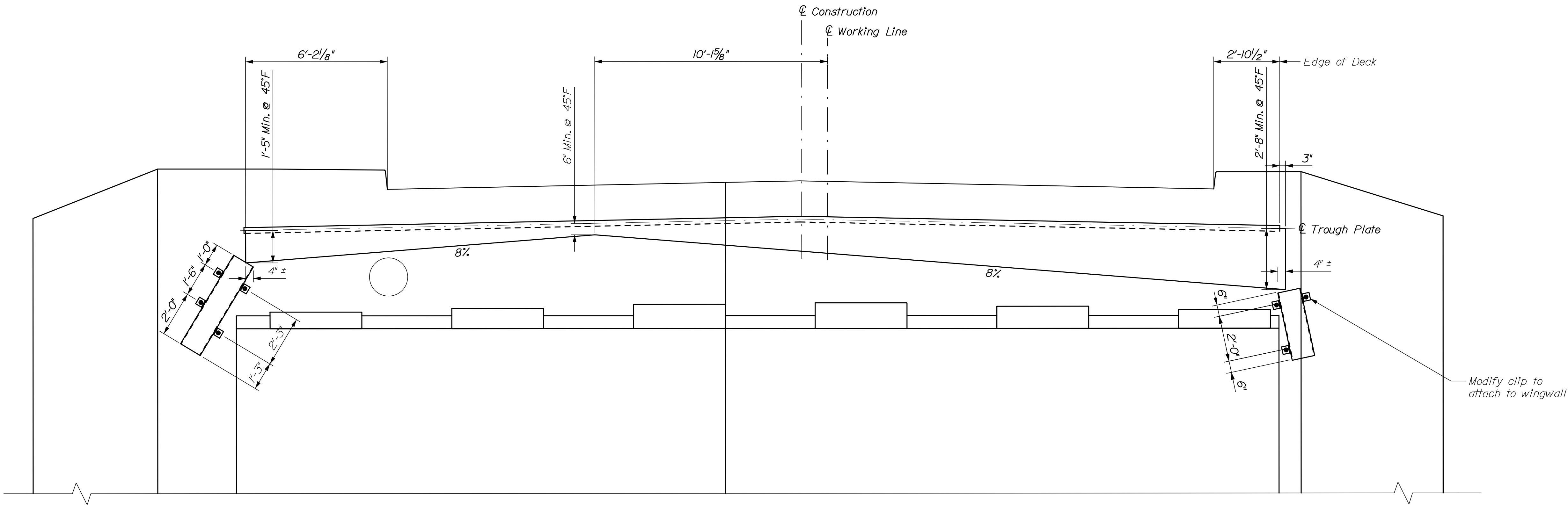


TROUGH SECTION



TROUGH SECTION

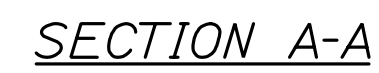
SECTION A-A



FINGER JOINT ELEVATION

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2262701		WIN		023234.01		BRIDGE NO. 2522		BRIDGE PLANS	
MATTAWAMKEAG BRIDGE		MATTAWAMKEAG RIVER		PENOBSCOT COUNTY		ABUTMENT NO. 1		FINGER JOINT		SHEET NUMBER		55	
PROJ. MANAGER		DESIGN-DETAILED		CHECKED-REVIEWED		DESIGN-DETAILED		REVISIONS 1		REVISIONS 2		REVISIONS 3	
A. LATHE		M.B.		B. BENNETT		H. HSU		SIGNATURE		P.E. NUMBER		DATE	
BY		DATE		7/20		7/20							
FIELD CHANGES													
OF 69													

Filename: ... \056_Bridge Drain Details.dgn



4. For weathering or painted steel superstructures, the WT 6x13 shall be coated with a zinc rich coating system in accordance with Standard Specifications Section 506. Bolts in contact with weathering steel shall be Type 3. Nuts and washers shall be treated in the same manner as their associated bolt.





1. All bridge approach rail materials, dimensions and sizes shall be the same as those of the bridge rail, unless otherwise noted. See MaineDOT Standard Details Section 507 Bridge Rail for additional information.
2. Carriage bolts shall be ASTM A307, and nuts shall be ASTM A563 Grade A or better (galvanized).
3. Weld splice bar to fit bend. Use complete joint penetration butt weld.
4. Modified Precast Concrete Transition Curb will not be paid for separately but shall be considered incidental to the transition item.
5. Standard Bridge Transition may require longer posts to account for higher rail height. No additional payment will be made for this modification.
6. Three foot spacing to first post on bridge is standard. For longer expansion joints, the first post on the bridge may be located up to 5'-6" from the previous post in the approach.
7. Precast Concrete Transition Curb shall meet the requirements of Standard Specifications Section 609 - Curb.
8. Dimensions shown are designed to accommodate a 9" reveal bridge curb with a battered face. Dimensions shall be adjusted to fit other situations as required.
9. Alternate transition curb sections may be used as approved by the Resident.
10. Unless otherwise indicated, payment for the precast curbs will be included under the applicable Bridge Transition item. No separate payment will be made.
11. For additional details, refer to MaineDOT Standard Details Section 507, for 3-Bar Rail. For Section B-B, refer to Standard Detail 507(24).

Date:7/10/2020

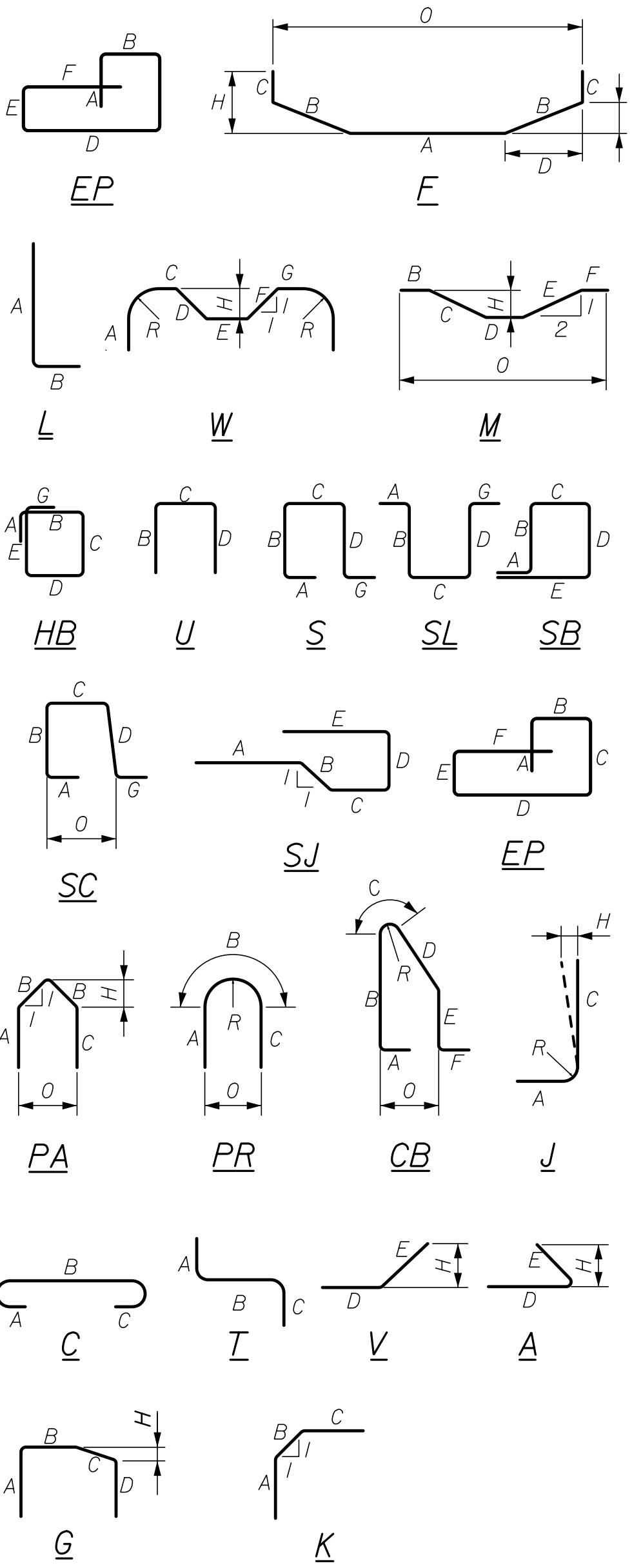
Username:

Filename: ... \058_Reinforcing Steel Schedule 1.dgn Division:

STRAIGHT BARS										BENT BARS															
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION			
ABUTMENT NO. 1				ABUTMENT NO. 2				ABUTMENT NO. 1																	
A500	46	4'-4"	Vertical - Backwall (NF)	B500	45	4'-4"	Vertical - Backwall (NF)	A550ss	50	3'-8"	L	2'-7"	1'-1"										Vertical - Backwall (FF)		
A501ss	6	24'-3"	Horizontal - Backwall (NF)	B501ss	6	25'-4"	Horizontal - Backwall (NF)	A551ss	37	9'-6"	U		3'-6"	1'-2"	4'-10"								Vertical - Backwall (NF)		
A502ss	6	24'-5"	Horizontal - Backwall (NF)	B502ss	6	22'-9"	Horizontal - Backwall (NF)	A552ss	13	10'-10"	U		4'-0"	1'-2"	5'-8"								Vertical - Backwall @ Sidewalk/Curb		
A503ss	3	24'-0"	Horizontal - Backwall (FF)	B503ss	3	25'-6"	Horizontal - Backwall (FF)	A553	32	9'-3"	L	8'-6"	0'-9"										Vertical - Wingwall into Footing		
A504ss	3	24'-8"	Horizontal - Backwall (FF)	B504ss	3	22'-10"	Horizontal - Backwall (FF)	A554ss	16	5'-4"	U		2'-1"	1'-2"	2'-1"								Vertical - Wingwall Cap		
A505ss	3	23'-5"	Horizontal - Backwall (FF)	B505ss	3	25'-0"	Horizontal - Backwall (FF)	A555	24	7'-4"	U		1'-10"	3'-8"	1'-10"								Vertical - Pedestal		
A506ss	3	24'-0"	Horizontal - Backwall (FF)	B506ss	3	22'-4"	Horizontal - Backwall (FF)	A556	30	6'-4"	U		1'-10"	2'-8"	1'-10"								Vertical - Pedestal		
A507ss	2	8'-9"	Horizontal - Backwall @ Sidewalk	B507ss	2	2'-8"	Horizontal - Backwall @ Curb																		
A508ss	2	2'-9"	Horizontal - Backwall @ Curb	B508ss	2	8'-7"	Horizontal - Backwall @ Sidewalk	A650	2	16'-9"	V				14'-0"	2'-9"			3'-0"				Transverse - Footing Corner (Top & Bottom)		
A509	32	9'-6"	Vertical - Wingwall	B509	16	9'-6"	Vertical - West Wingwall	A651	2	14'-3"	V				11'-5"	2'-10"			3'-1				Transverse - Footing Corner (Top & Bottom)		
A510	24	7'-1"	Horizontal - East Wingwall	B510	22	7'-6"	Vertical - East Wingwall	A652	1	7'-0"	U		2'-1"	2'-10"	2'-1"								Transverse - Footing (Bottom)		
A511	4	6'-0"	Horizontal - East Wingwall	B511	22	6'-8"	Horizontal - West Wingwall	A653	1	8'-8"	U		2'-1"	4'-6"	2'-1"								Transverse - Footing (Bottom)		
A512ss	2	7'-5"	Horizontal - East Wingwall	B512	4	6'-0"	Horizontal - West Wingwall	A654	1	9'-0"	U		2'-1"	4'-10"	2'-1"								Transverse - Footing (Bottom)		
A513	24	6'-9"	Horizontal - West Wingwall	B513ss	2	6'-11"	Horizontal - West Wingwall	A655	1	10'-1"	U		2'-1"	5'-11"	2'-1"								Transverse - Footing (Bottom)		
A514	4	6'-0"	Horizontal - West Wingwall	B514	18	10'-4"	Horizontal - East Wingwall	A656	1	11'-2"	U		2'-1"	7'-0"	2'-1"								Transverse - Footing (Bottom)		
A515ss	2	7'-0"	Horizontal - West Wingwall	B515	4	8'-6"	Horizontal - East Wingwall	A657	1	12'-4"	U		2'-1"	8'-2"	2'-1"								Transverse - Footing (Bottom)		
A516ss	10	6'-0"	Horizontal - Backwall @ Sewer Blockout	B516	4	7'-6"	Horizontal - East Wingwall	A658	1	13'-5"	U		2'-1"	9'-3"	2'-1"								Transverse - Footing (Bottom)		
				B517ss	2	11'-1"	Horizontal - East Wingwall	A659	1	14'-6"	U		2'-1"	10'-4"	2'-1"								Transverse - Footing (Bottom)		
A600	24	28'-1"	Longitudinal - Footing (Top & Bottom)	B518ss	10	6'-0"	Horizontal - Backwall @ Sewer Blockout	A660	46	15'-8"	U		2'-1"	11'-6"	2'-1"								Transverse - Footing (Bottom)		
A601	28	31'-8"	Longitudinal - Footing (Top & Bottom)					A661	1	14'-8"	U		2'-1"	10'-6"	2'-1"								Transverse - Footing (Bottom)		
A602	2	3'-6"	Transverse - Footing (Top)	B600	24	29'-4"	Longitudinal - Footing (Top & Bottom)	A662	1	13'-7"	U		2'-1"	9'-5"	2'-1"								Transverse - Footing (Bottom)		
A603	1	2'-10"	Transverse - Footing (Top)	B601	28	33'-7"	Longitudinal - Footing (Top & Bottom)	A663	1	12'-5"	U		2'-1"	8'-3"	2'-1"								Transverse - Footing (Bottom)		
A604	1	4'-6"	Transverse - Footing (Top)	B602	2	4'-5"	Longitudinal - Footing (Top & Bottom)	A664	1	11'-3"	U		2'-1"	7'-1"	2'-1"								Transverse - Footing (Bottom)		
A605	1	4'-9"	Transverse - Footing (Top)	B603	2	2'-9"	Longitudinal - Footing (Top & Bottom)	A665	1	10'-1"	U		2'-1"	5'-11"	2'-1"								Transverse - Footing (Bottom)		
A606	1	5'-11"	Transverse - Footing (Top)	B604	2	2'-5"	Transverse - Footing (Top & Bottom)	A666	1	8'-11"	U		2'-1"	4'-9"	2'-1"								Transverse - Footing (Bottom)		
A607	1	7'-0"	Transverse - Footing (Top)	B605	2	6'-9"	Transverse - Footing (Top & Bottom)	A667	109	7'-0"	L	6'-2"	0'-10"										Vertical - Stem into Footing		
A608	1	8'-1"	Transverse - Footing (Top)	B606	1	3'-0"	Transverse - Footing (Top)	A668	46	7'-9"	G	1'-2"	1'-10"	3'-7"	1'-2"					0'-6"			Vertical - Breastwall Top Cap		
A609	1	9'-3"	Transverse - Footing (Top)	B607	1	4'-8"	Transverse - Footing (Top)	A669	16	6'-5"	L	4'-7"	1'-10"										Horizontal - Breastwall Side		
A610	1	10'-4"	Transverse - Footing (Top)	B608	1	5'-9"	Transverse - Footing (Top)	A670	28	6'-0"	V				2'-0"	4'-0"			2'-9"				Horizontal - East Wingwall Corner		
A611	46	11'-6"	Transverse - Footing (Top)	B609	1	6'-11"	Transverse - Footing (Top)	A671	28	4'-0"	V				2'-0"	2'-0"			1'-0"				Horizontal - West Wingwall Corner		
A612	1	10'-6"	Transverse - Footing (Top)	B610	1	8'-1"	Transverse - Footing (Top)	A672	26	3'-0"	K	1'-0"	1'-0"	1'-0"									Vertical - Backwall into Approach Slab		
A613	1	9'-4"	Transverse - Footing (Top)	B611	1	9'-2"	Transverse - Footing (Top)	ABUTMENT NO. 2																	
A614	1	8'-3"	Transverse - Footing (Top)	B612	1	10'-4"	Transverse - Footing (Top)	B550ss	50	3'-9"	L	2'-8"	1'-1"										Vertical - Backwall (FF)		
A615	1	7'-1"	Transverse - Footing (Top)	B613	45	11'-6"	Transverse - Footing (Top)	B551ss	37	9'-5"	U		3'-4"	1'-2"	4'-11"								Vertical - Backwall (NF)		
A616	1	5'-11"	Transverse - Footing (Top)	B614	1	10'-6"	Transverse - Footing (Top)	B552ss	13	10'-8"	U		3'-10"	1'-2"	5'-8"								Vertical - Backwall @ Sidewalk/Curb		
A617	1	4'-9"	Transverse - Footing (Top)	B615	1	9'-5"	Transverse - Footing (Top)	B553	16	8'-3"	L	7'-6"	0'-9"										Vertical - West Wingwall into Footing		
A618	54	6'-6"	Vertical - Breastwall (NF)	B616	1	8'-4"	Transverse - Footing (Top)	B554	22	10'-3"	L	9'-6"	0'-9"										Vertical - East Wingwall into Footing		
A619	55	9'-7"	Vertical - Backwall	B617	1	7'-3"	Transverse - Footing (Top)	B555ss	19	5'-4"	U		2'-1"	1'-2"	2'-1"								Vertical - Wingwall Cap		
A620	12	20'-11"	Horizontal - Breastwall (NF)	B618	1	6'-1"	Transverse - Footing (Top)	B556	24	7'-4"	U		1'-10"	3'-8"	1'-10"								Vertical - Pedestal		
A621	12	23'-9"	Horizontal - Breastwall (NF)	B619	1	5'-0"	Transverse - Footing (Top)	B557	30	6'-4"	U		1'-10"	2'-8"	1'-10"								Vertical - Pedestal		
A622	8	24'-0"	Horizontal - Breastwall (FF)	B620	1	4'-10"	Transverse - Footing (Top)																		
A623	8	24'-8"	Horizontal - Breastwall (FF)	B621	1	4'-8"	Transverse - Footing (Top)	B650	2	15'-2"	V				12'-5"	2'-9"			2'-11"				Transverse - Footing Corner (Top & Bottom)		
				B622	1	4'-6"	Transverse - Footing (Top)	B651	2	19'-11"	V				17'-2"	2'-9"			3'-0"				Transverse - Footing Corner (Top & Bottom)		
				B623	1	3'-6"	Transverse - Footing (Top)	B652	1	7'-2"	U		2'-1"	3'-0"	2'-1"								Transverse - Footing (Bottom)		
				B624	53	5'-6"	Vertical - Breastwall (NF)	B653	1	8'-10"	U		2'-1"	4'-8"	2'-1"								Transverse - Footing (Bottom)		
				B625	55	8'-7"	Vertical - Backwall	B654	1	10'-0"	U		2'-1"	5'-10"	2'-1"								Transverse - Footing (Bottom)		
				B626	11	23'-8"	Horizontal - Breastwall (NF)	B655	1	11'-1"	U		2'-1"	6'-11"	2'-1"								Transverse - Footing (Bottom)		
				B627	11	20'-0"	Horizontal - Breastwall (NF)	B656	1	12'-3"	U		2'-1"	8'-1"	2'-1"								Transverse - Footing (Bottom)		
				B628	7	25'-6"	Horizontal - Breastwall (FF)	B657	1	13'-4"	U		2'-1"	9'-2"	2'-1"								Transverse - Footing (Bottom)		
				B629	7	22'-10"	Horizontal - Breastwall (FF)	B658	1	14'-6"	U		2'-1"	10'-4"	2'-1"								Transverse - Footing (Bottom)		
								B659	45	15'-8"	U		2'-1"	11'-6"	2'-1"								Transverse - Footing (Bottom)		
								B660	1	14'-8"	U		2'-1"	10'-6"	2'-1"								Transverse - Footing (Bottom)		
								B661	1	13'-7"	U		2'-1"	9'-5"	2'-1"								Transverse - Footing (Bottom)		
								B662	1	12'-6"	U		2'-1"	8'-4"	2'-1"								Transverse - Footing (Bottom)		
								B663	1	11'-5"	U		2'-1"	7'-3"	2'-1"								Transverse - Footing (Bottom)		
								B664	1	10'-4"	U		2'-1"	6'-2"	2'-1"								Transverse - Footing (Bottom)		
								B665	1	9'-2"	U		2'-1"	5'-0"	2'-1"								Transverse - Footing (Bottom)		
								B666	1	9'-0"	U		2'-1"	4'-10"	2'-1"								Transverse - Footing (Bottom)		
								B667	1	8'-10"	U		2'-1"	4'-8"	2'-1"								Transverse - Footing (Bottom)		
								B668	1	8'-8"	U		2'-1"	4'-6"	2'-1"								Transverse - Footing (Bottom)		
								B669	1	7'-8"	U		2'-1"	3'-6"	2'-1"								Transverse - Footing (Bottom)		
								B670	108	7'-0"	L	6'-2"	0'-10"										Vertical - Stem into Footing		
								B671	45	7'-9"	G	1'-2"	1'-10"	3'-7"	1'-2"					0'-6"			Vertical - Breastwall Top Cap		
								B672	14	6'-5"	L	4'-7"	1'-10"										Horizontal - Breastwall Side		
								B673	26	4'-6"	V				2'-0"	2'-6"			1'-5"				Horizontal - West Wingwall Corner		
								B674	26	5'-6"	V				1'-6"	4'-0"			2'-8"				Horizontal - East Wingwall Corner		
								B675	26	3'-0"	K	1'-0"	1'-0"	1'-0"									Vertical - Backwall into Approach Slab		

STRAIGHT BARS				BENT BARS															
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	
PIER NO. 1				PIER NO. 1															
IP500	24	23'-0"	Longitudinal - Pier Cap	IP550	45	8'-10"	U		3'-2"	2'-6"	3'-2"							Vertical - Pier Cap (Bottom)	
				IP551	45	6'-4"	U		1'-11"	2'-6"	1'-11"							Vertical - Pier Cap (Top)	
IP600	26	26'-4"	Longitudinal - Footing (Top & Sides)	IP552	8	13'-2"	U		4'-11"	3'-4"	4'-11"							Horizontal - Pier Cap (End Cap)	
IP601	52	8'-2"	Transverse - Footing (Top)	IP553	30	7'-2"	U		2'-9"	1'-8"	2'-9"							Vertical - Pedestal	
IP602	18	25'-1"	Longitudinal - Footing (Bottom)	IP554	24	8'-8"	U		2'-10"	3'-0"	2'-10"							Vertical - Pedestal	
IP700	9	7'-2"	Vertical - Footing to Stem @ Nose	IP650	18	10'-4"	L	8'-3"	2'-1"									Longitudinal - Footing (Bottom)	
IP701	9	14'-9"	Vertical - Stem @ Nose																
IP702	92	16'-8"	Vertical - Stem	IP750	52	12'-4"	U		2'-1"	8'-2"	2'-1"							Transverse - Footing (Bottom)	
IP703	6	10'-8"	Vertical - Stem	IP751	98	7'-10"	L	6'-10"	1'-0"									Vertical - Footing to Stem	
IP704	60	20'-3"	Transverse - Stem	IP752	1	12'-5"	U		4'-2"	4'-1"	4'-2"							Horizontal - Stem Downstream Side Cap	
				IP753	1	12'-3"	U		4'-2"	3'-11"	4'-2"							Horizontal - Stem Downstream Side Cap	
IP800	58	6'-0"	Vertical - Footing to Seal Dowel	IP754	1	12'-1"	U		4'-2"	3'-9"	4'-2"							Horizontal - Stem Downstream Side Cap	
				IP755	1	11'-10"	U		4'-2"	3'-6"	4'-2"							Horizontal - Stem Downstream Side Cap	
PIER NO. 2				IP756	1	11'-8"	U		4'-2"	3'-4"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P500	24	23'-0"	Longitudinal - Pier Cap	IP757	1	11'-6"	U		4'-2"	3'-2"	4'-2"							Horizontal - Stem Downstream Side Cap	
				IP758	1	11'-4"	U		4'-2"	3'-0"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P600	28	26'-11"	Longitudinal - Footing (Top & Sides)	IP759	1	11'-2"	U		4'-2"	2'-10"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P601	53	8'-7"	Transverse - Footing (Top)	IP760	1	10'-11"	U		4'-2"	2'-7"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P602	20	25'-8"	Longitudinal - Footing (Bottom)	IP761	1	10'-9"	U		4'-2"	2'-5"	4'-2"							Horizontal - Stem Downstream Side Cap	
				IP762	1	10'-7"	U		4'-2"	2'-3"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P700	9	7'-2"	Vertical - Footing to Stem @ Nose	IP763	1	10'-5"	U		4'-2"	2'-1"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P701	9	17'-1"	Vertical - Stem @ Nose	IP764	1	10'-3"	U		4'-2"	1'-11"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P702	92	19'-1"	Vertical - Stem	IP765	1	10'-0"	U		4'-2"	1'-8"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P703	6	12'-6"	Vertical - Stem	IP766	1	9'-10"	U		4'-2"	1'-6"	4'-2"							Horizontal - Stem Downstream Side Cap	
2P704	68	20'-9"	Transverse - Stem	IP767	1	17'-8"	PA	6'-0"	2'-10"	6'-0"					1'-10 1/2"	4'-1"		Horizontal - Stem Nose Cap	
				IP768	1	17'-4"	PA	6'-0"	2'-8"	6'-0"					1'-9 1/2"	3'-11"		Horizontal - Stem Nose Cap	
2P800	58	6'-0"	Vertical - Footing to Seal Dowel	IP769	1	17'-2"	PA	6'-0"	2'-7"	6'-0"					1'-8 1/2"	3'-9"		Horizontal - Stem Nose Cap	
				IP770	1	16'-10"	PA	6'-0"	2'-5"	6'-0"					1'-7"	3'-6"		Horizontal - Stem Nose Cap	
				IP771	1	16'-8"	PA	6'-0"	2'-4"	6'-0"					1'-6"	3'-4"		Horizontal - Stem Nose Cap	
				IP772	1	16'-4"	PA	6'-0"	2'-2"	6'-0"					1'-5"	3'-2"		Horizontal - Stem Nose Cap	
				IP773	1	16'-2"	PA	6'-0"	2'-1"	6'-0"					1'-4"	3'-0"		Horizontal - Stem Nose Cap	
				IP774	1	15'-10"	PA	6'-0"	1'-11"	6'-0"					1'-3"	2'-10"		Horizontal - Stem Nose Cap	
				IP775	1	15'-8"	PA	6'-0"	1'-10"	6'-0"					1'-2"	2'-8"		Horizontal - Stem Nose Cap	
				IP776	1	15'-4"	PA	6'-0"	1'-8"	6'-0"					1'-1"	2'-5"		Horizontal - Stem Nose Cap	
				IP777	1	15'-0"	PA	6'-0"	1'-6"	6'-0"					0'-11 1/2"	2'-3"		Horizontal - Stem Nose Cap	
				IP778	1	14'-10"	PA	6'-0"	1'-5"	6'-0"					0'-10 1/2"	2'-1"		Horizontal - Stem Nose Cap	
				IP779	1	14'-6"	PA	6'-0"	1'-3"	6'-0"					0'-9 1/2"	1'-11"		Horizontal - Stem Nose Cap	
				IP780	1	14'-4"	PA	6'-0"	1'-2"	6'-0"					0'-8 1/2"	1'-9"		Horizontal - Stem Nose Cap	
				IP781	1	14'-0"	PA	6'-0"	1'-0"	6'-0"					0'-7"	1'-6"		Horizontal - Stem Nose Cap	
				PIER NO. 2															
				2P550	45	8'-10"	U		3'-2"	2'-6"	3'-2"							Vertical - Pier Cap (Bottom)	
				2P551	45	6'-4"	U		1'-11"	2'-6"	1'-11"							Vertical - Pier Cap (Top)	
				2P552	8	13'-2"	U		4'-11"	3'-4"	4'-11"							Horizontal - Pier Cap (End Cap)	
				2P553	30	7'-2"	U		2'-9"	1'-8"	2'-9"							Vertical - Pedestal	
				2P554	24	8'-8"	U		2'-10"	3'-0"	2'-10"							Vertical - Pedestal	
				2P650	20	10'-4"	L	8'-3"	2'-1"									Longitudinal - Footing (Bottom)	
				2P750	53	12'-9"	U		2'-1"	8'-7"	2'-1"							Transverse - Footing (Bottom)	
				2P751	98	8'-0"	L	7'-0"	1'-0"									Vertical - Footing to Stem	
				2P752	1	12'-10"	U		4'-2"	4'-6"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P753	1	12'-8"	U		4'-2"	4'-4"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P754	1	12'-6"	U		4'-2"	4'-2"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P755	1	12'-3"	U		4'-2"	3'-11"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P756	1	12'-1"	U		4'-2"	3'-9"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P757	1	11'-11"	U		4'-2"	3'-7"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P758	1	11'-9"	U		4'-2"	3'-5"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P759	1	11'-7"	U		4'-2"	3'-3"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P760	1	11'-4"	U		4'-2"	3'-0"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P761	1	11'-2"	U		4'-2"	2'-10"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P762	1	11'-0"	U		4'-2"	2'-8"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P763	1	10'-10"	U		4'-2"	2'-6"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P764	1	10'-8"	U		4'-2"	2'-4"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P765	1	10'-5"	U		4'-2"	2'-1"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P766	1	10'-3"	U		4'-2"	1'-11"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P767	1	10'-1"	U		4'-2"	1'-9"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P768	1	9'-11"	U		4'-2"	1'-7"	4'-2"							Horizontal - Stem Downstream Side Cap	
				2P769	1	18'-2"	PA	6'-0"	3'-1"	6'-0"					2'-1"	4'-6"		Horizontal - Stem Nose Cap	
				2P770	1	18'-0"	PA	6'-0"	3'-0"	6'-0"					2'-0"	4'-4"		Horizontal - Stem Nose Cap	
				2P771	1	17'-8"	PA	6'-0"	2'-10"	6'-0"					1'-11"	4'-2"		Horizontal - Stem Nose Cap	
				2P772	1	17'-6"	PA	6'-0"	2'-9"	6'-0"					1'-10"	4'-0"		Horizontal - Stem Nose Cap	
				2P773	1	17'-2"	PA	6'-0"	2'-7"	6'-0"					1'-8 1/2"	3'-9"		Horizontal - Stem Nose Cap	
				2P774	1	17'-0"	PA	6'-0"	2'-6"	6'-0"					1'-7 1/2"	3'-7"		Horizontal - Stem Nose Cap	
				2P775	1	16'-8"	PA	6'-0"	2'-4"	6'-0"					1'-6 1/2"	3'-5"		Horizontal - Stem Nose Cap	
				2P776	1	16'-6"	PA	6'-0"	2'-3"	6'-0"					1'-5 1/2"	3'-3"		Horizontal - Stem Nose Cap	
				2P777	1	16'-2"	PA	6'-0"	2'-1"	6'-0"					1'-4 1/2"	3'-1"		Horizontal - Stem Nose Cap	
				2P778	1	16'-0"	PA	6'-0"	2'-0"	6'-0"					1'-3 1/2"	2'-10"		Horizontal - Stem Nose Cap	
				2P779	1	15'-8"	PA	6'-0"	1'-10"	6'-0"					1'-2"	2'-8"		Horizontal - Stem Nose Cap	
				2P780	1	15'-4"	PA	6'-0"	1'-8"	6'-0"					1'-1"	2'-6"		Horizontal - Stem Nose Cap	
				2P781	1	15'-2"	PA	6'-0"	1'-7"	6'-0"					1'-0"	2'-4"		Horizontal - Stem Nose Cap	
				2P782	1	14'-10"	PA	6'-0"	1'-5"	6'-0"					0'-11"	2'-2"		Horizontal - Stem Nose Cap	
				2P783	1	14'-8"	PA	6'-0"	1'-4"	6'-0"					0'-10"	1'-11"		Horizontal - Stem Nose Cap	
				2P784	1														

TYPE – BENDING DIAGRAMS



[illegible]

Engineering plan for State Highway "50" / Military Road, Mattawamkeag, Maine. The plan shows the proposed road alignment, existing and proposed right-of-way (R/W) lines, and various engineering details such as curve data, stationing, and easements.

PLAN LEGEND

- Existing: Sanitary Sewer, Telephone Line, Electric Line, Water Line, Underdrain Line, Gas Line, Guardrail, Culvert, Traveled Way, Ditch, Catch Basin, Manhole, Sewer Manhole, Utility Pole, Fire Hydrant, Curbing.
- Proposed: Sanitary Sewer, Telephone Line, Electric Line, Water Line, Underdrain Line, Gas Line, Guardrail, Culvert, Traveled Way, Ditch, Catch Basin, Manhole, Sewer Manhole, Utility Pole, Fire Hydrant, Curbing.
- Other: Cut Line, Fill Line, Baseline, Monument, Iron Rod Found, Replacement Pin Set, Traverse Point, Pipe Found.

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.

Scale of Feet

25 0 25 50 75 100

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____ h _____ m _____ M and
recorded in Plan Bk _____, Pg. _____
Attest: _____ REGISTER

TOWN OF MATTAWAMKEAG
PARCEL NO. (3)
LAND TAKEN = 1278± S.F.
CONST. & MAINT. EASE. 1000± S.F. (1)
TEMP. ROAD RIGHTS = 0.21± AC. (1)
TOTAL AREA = 0.25± AC. (TOWN)
REM. AREA = 0.22± AC.

EDWARD R. MADDEN
ITEM NO. (5)
SLOPE EASE. = 1370± S.F. (1)
TEMP. ROAD RIGHTS = 0.34± AC. (1)
TEMP. CONST. RIGHTS = 960± S.F. (1)
TOTAL AREA = 5.7± AC. (TOWN)

US RTE. 2/MAIN ST. CURVE DATA
PI = 19+02.52
D = 3°34'51.6"
Δ = 8°34'19.5" Rt.
R = 1600.00'
L = 239.38'
T = 119.91'
E = 4.49'

HATHAWAY ROAD CURVE DATA
PI = 101+41.55
D = 9°32'57.3"
Δ = 9°05'13.7"
R = 600.00'
L = 95.16'
T = 47.68'
E = 1.89'

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK

NO.	GRANTOR	PAGE	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "50"
U.S. ROUTE 2 / MILITARY ROAD
MATTAWAMKEAG PENOBSCOT COUNTY
STATE PROJECT NO. 23234.00

APRIL 2020
SCALE 1" = 25'

RIGHT-OF-WAY MAP
SHEET 2 OF 2

D.O.T. FILE NO. 10-521

SHEET NUMBER
62
OF 62

GENERAL NOTES

1) THE PLANS NUMBERED G-1, C-1, C-2, C-3, C-4, C-5 AND E-1 AND TITLED "MATTAWAMKEAG BRIDGE SEWER FORCE MAIN REPLACEMENT" DEFINE THE SCOPE AND REQUIREMENTS SPECIFIC TO THE RELOCATION AND REPLACEMENT OF THE TOWN OF MATTAWAMKEAG'S PUMP STATION NO. 2 SEWER FORCE MAIN RELATED TO THE INSTALLATION OF THE PROPOSED MATTAWAMKEAG RIVER BRIDGE. SCOPE AND REQUIREMENTS FOR THE BRIDGE REPLACEMENT, DETOUR, ROAD RESTORATION, TEMPORARY BRIDGE, ETC. ARE DEFINED ELSEWHERE IN THE PLANS OR CONTRACT DOCUMENTS AND NOT PART OF THE TOWN'S SCOPE.

2) UTILITY LOCATIONS AS SHOWN ARE APPROXIMATE BASED ON AVAILABLE INFORMATION AT TIME OF SURVEY. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATION AND CONFIRMATION OF ALL EXISTING SEWER UTILITIES. IT IS POSSIBLE THAT OTHER ACTIVE AND INACTIVE SEWER UTILITIES MAY EXIST IN THE PROJECT AREA. CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EXCAVATION.

3) CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE TOWN OR RESIDENT ENGINEER TO FIELD LOCATE EXISTING FACILITIES AND TO MINIMIZE THEIR DISRUPTION. CONTINUOUS SEWER SERVICE MUST BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.

4) CONTRACTOR SHALL FIELD VERIFY LOCATION OF ANY UNDERGROUND PUBLIC OR PRIVATE ELECTRICAL AND TELEPHONE UTILITIES WITH DIG-SAFE OR THE TOWN OF MATTAWAMKEAG PRIOR TO EXCAVATION.

5) CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPE SIZES AND MATERIAL FOR CONNECTION OF TEMPORARY AND PERMANENT WORK PRIOR TO STARTING CONSTRUCTION AND ORDERING STRUCTURES.

6) PORTIONS OF SURVEY DATA AND RIGHT-OF-WAY INFORMATION ARE BASED ON PLANS TITLED "STATE OF MAINE DEPT. OF TRANSPORTATION, MATTAWAMKEAG BRIDGE OVER MATTAWAMKEAG RIVER, PROJECT NO. 023234.00". NO LEGAL REPRESENTATION OF PROPERTY LINE AND RIGHT-OF-WAY INFORMATION IS INTENDED, NOR WAS ANY FORMAL BOUNDARY SURVEY CONDUCTED.

7) CONTRACTOR SHALL PROPERLY PROTECT AND AVOID DISTURBING PROPERTY PINS AND MONUMENTS. IF DISTURBED, THE PROPERTY PIN OR MONUMENT SHALL BE RESET AT CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR APPROVED BY THE ENGINEER.

8) CONTRACTOR SHALL CONTACT OWNERS OF UTILITY POLES ADJACENT TO EXCAVATION AREAS TO ARRANGE POLE SUPPORT AND OR REMOVAL AND RESETTING DURING EXCAVATION AS REQUIRED.

9) CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT OF ALL TEMPORARY AND PROPOSED PERMANENT WORK. ENGINEER WILL ASSIST ONLY IN PROVIDING REFERENCE POINTS AND ELEVATION DATA FOR INITIAL LAYOUT ONLY. CONTRACTOR SHALL MAINTAIN LAYOUT THROUGHOUT PROJECT.

10) CONTRACTOR SHALL CONTROL DUST GENERATED DURING THE PROJECT TO A LEVEL SATISFACTORY TO THE TOWN OF MATTAWAMKEAG AND ENGINEER.

11) REPAIR ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

12) LOAM AND SEED ALL DISTURBED LAWN AREAS WITH 4" LOAM, HYDROSEED, AND MULCH.

13) ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE NOTED. COST OF RESTORATION IS INCIDENTAL TO CONTRACT OUTSIDE OF PAY LIMITS.

14) CONTRACTOR SHALL PROVIDE REDUNDANT TEMPORARY PUMPING OR FORCE MAIN SEWER AS NEEDED TO BYPASS SEWAGE FLOWS AROUND WORK AREAS AND MAINTAIN SEWER SERVICE ALONG ROUTE OF NEW WORK. CONTRACTOR IS RESPONSIBLE TO MONITOR AND MAINTAIN TEMPORARY FORCE MAIN SEWER TO PROVIDE CONTINUOUS SEWER SERVICE OVER THE DURATION OF THE PROJECT.

15) ALL PROJECT ARE SEWER LINES SHALL BE PROPERLY FLUSHED BY CONTRACTOR AT COMPLETION OF PROJECT AND WHENEVER CONSTRUCTION DEBRIS ENTERS OPEN PIPE WORK. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT CONSTRUCTION MATERIALS AND DEBRIS FROM ENTERING OPEN PIPE LINES AND SHALL BE RESPONSIBLE FOR THE COST OF ANY REPAIRS FROM DAMAGE THAT RESULTS FROM SUCH DEBRIS. LINES SHALL BE FLUSHED WITH HIGH PRESSURE JETTING EQUIPMENT AND CLEANED WITH VACUUM TRUCK. GRAVITY FLUSHING IS NOT ACCEPTABLE.

16) MANHOLE RIM ELEVATIONS ARE PROVIDED ON PLAN SHEETS TO ESTABLISH GENERAL HEIGHT OF NEW STRUCTURES FOR BIDDING PURPOSES. EXACT FINAL RIM ELEVATIONS SHALL BE ESTABLISHED IN FIELD SUCH THAT TOP OF RIM IS 3/8" BELOW FINAL PAVEMENT GRADE OR AS SHOWN FOR OTHER AREAS ON PLAN AND PROFILE SHEETS. CONTRACTOR SHALL FIELD VERIFY FINAL ELEVATION WITH RESIDENT ENGINEER PRIOR TO COMPLETION OF MASONRY WORK.

17) ALL PERMANENT SEWER LINES WITH LESS THAN SIX FEET OF COVER SHALL BE INSULATED WITH TWO INCHES OF RIGID INSULATION AT FULL TRENCH WIDTH. IF LESS THAN FIVE FEET OF COVER IS AVAILABLE, PROVIDE DOUBLE LAYER OF TWO INCH INSULATION.

18) CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY TO ENSURE THAT ALL WORK MEETS ALL OSHA AND OTHER APPLICABLE CODE, HEALTH, AND SAFETY REQUIREMENTS.

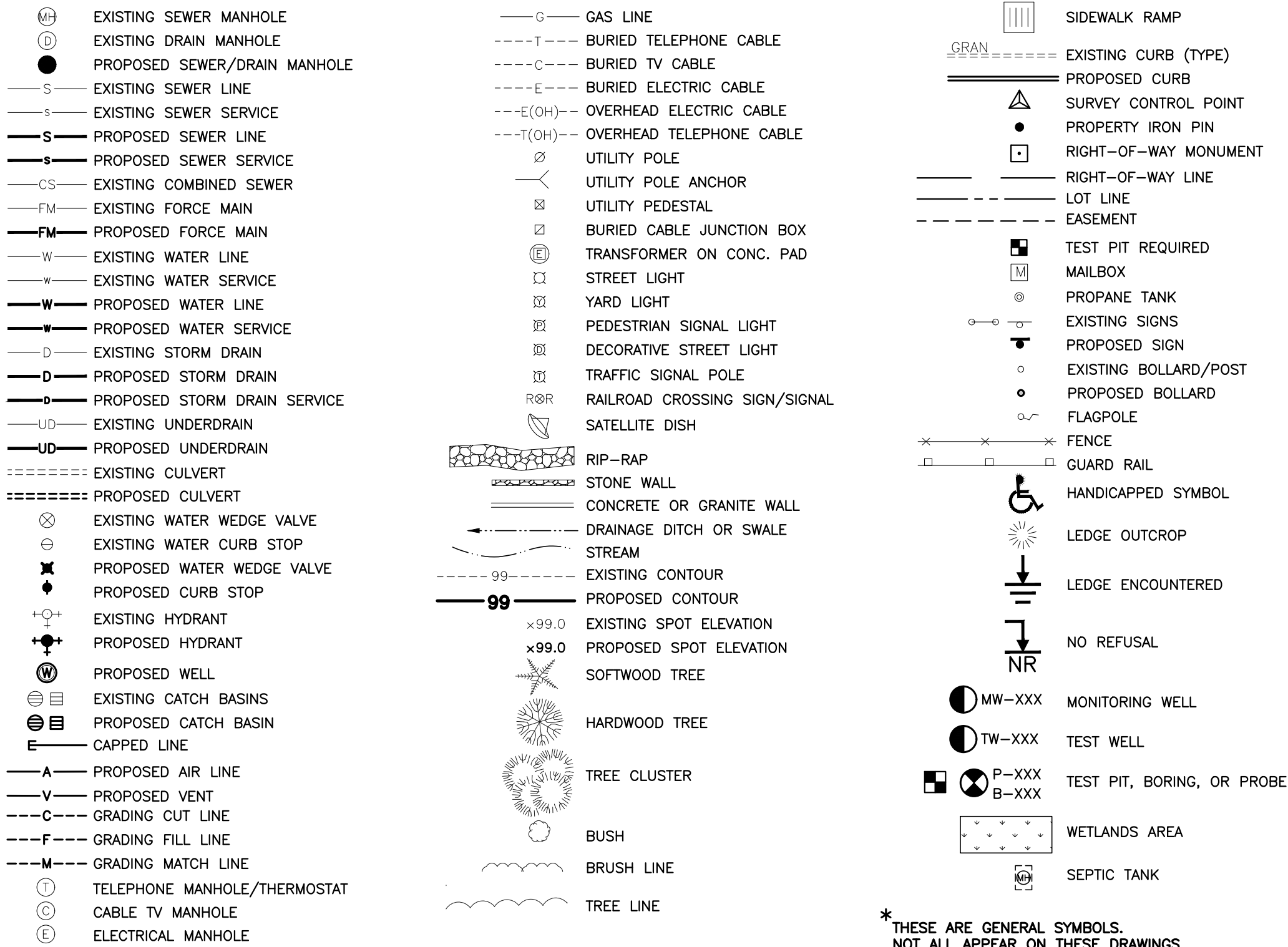
19) CONTRACTOR SHALL EXERCISE APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION IN ACCORDANCE WITH ACCEPTED PRACTICE, APPLICABLE LAWS AND REGULATIONS AND REQUIREMENTS OF THESE CONTRACT DOCUMENTS.

20) DESIGN INTENT IS TO COORDINATE TEMPORARY FORCE MAIN SEWER SYSTEM WITH ROADWAY DETOUR AND TEMPORARY BRIDGE CROSSING STRUCTURE.

21) TEMPORARY BRIDGE FORCE MAIN SYSTEM PROPOSED BY CONTRACTOR SHALL BE REVIEWED ONCE SUBMITTED BY ENGINEER TO VERIFY ADEQUACY. PROPOSED TEMPORARY BRIDGE SYSTEM MUST MEET INTENT OF DESIGN SHOWN ON SHEET C-2.

22) THIS PROJECT REQUIRES THAT ALL OF THE IRON AND STEEL PRODUCTS USED ON SHEETS REFERENCED IN NOTE 1 BE PRODUCED IN THE UNITED STATES (AMERICAN IRON AND STEEL REQUIREMENTS).

LEGEND*



ABBREVIATIONS *

AC	ANCHOR BOLTS	Fb	BENDING STRESS	MANUF	MANUFACTURER	S	SLOPE OR SEWER
AC	ASBESTOS CEMENT	Fc	COMPRESSIVE STRESS	MAT'L	MATERIAL	SAN	SANITARY
AFF	ABOVE FINISHED FLOOR	FT	TENSILE STRESS	MB	MACHINE BOLTS	SDR	STANDARD DIMENSION RATIOS
AGGR	AGGREGATE	FC	FIRE CODE	MC	MAXIMUM	SCH	SCHEDULE
ALT	ALTERNATE	F1	FLOOR CLEANOUT	MC	FLOOR CONTENT	SCP	SURVEY CONTROL POINT
ALUM	ALUMINUM	FCS	FLOW CONTROL STRUCTURE	MCC	MOTOR CONTROL CENTER	SCR	SCREENINGS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FD	FLOOR DRAIN	MECH	MECHANICAL	SECT	SECTION
APA	AMERICAN PLYWOOD ASSOCIATION	FDN	FOUNDATION	MFG	MANUFACTURER	SF	SQUARE FEET
APPROX.;±	APPROXIMATELY	FE	FIRE EXTINGUISHER	MH	MANHOLE	SERV	SERVICE
ARV	AIR RELIEF VALVE	FF-FIN FLR	FINISH FLOOR	MHW	MEAN HIGH WATER	SHT	SHEET
		FIN	FINISHED	MIL	1/1000 INCH	SHD	ROAD SHOULDER
		FIN GR	FINISH GRADE	MIN	MINIMUM	SI	SPRAY IRRIGATION
BL	BLUISH	FLG	FLANGED	MJ	MECHANICAL JOINT	SICPE	SMOOTH INTERIOR CORRUGATED POLYETHYLENE
BL	BASELINE	FLR	FLOOR	MLSS	MIXED LIQUOR SUSPENDED SOLIDS	SLUCE	SLUICE GATE
BLDG	BUILDING	FLR'G	FLOORING	MLW	MEAN LOW WATER	SPEC	SPECIAL
BF	BOTTOM OF FOOTING	FM	FORCE MAIN	MM	MILLIMETER	SPEC'S	SPECIFICATIONS
BOT	BOTTOM	FOS	FACE OF STUD	MON	MASONRY OPENING	SP	SUMP PUMP
BV	BACK VENT	FPT	FAIRPOINT COMMUNICATION	MPS	MAINE PUBLIC SERVICE	SQ	SQUARE
		FR	FIRE RESISTANT	MRL	MEAN RIVER LEVEL	SR	SHORT RADIUS
		FRP	FIBERGLASS REINFORCED PLASTIC	MS	MOISTURE SENSOR	SWR	SHOWER
		FT	FEET	MSL	MEAN SEA LEVEL	SS	STAINLESS STEEL
				MTL	METAL	STA	STATION
				MW	MONITORING WELL	STD	STANDARD
						STL	STEEL
						SUSP	SUSPENDED
						SW	SIDEWALK OR SEAWATER
C	CHANNEL	G	GAS LINE	N/F	NOW/FORMERLY	T	TELEPHONE OR THICKNESS
CB	CATCH BASIN	GAL	GALLON	NO	NUMBER	T & B	TOP AND BOTTOM
CFM	CUBIC FEET PER MINUTE	GALV	GALVANIZED	NMFS	NATIONAL MARINE FISHERIES SERVICE	T & G	TONGUE AND GROOVE
CJ	CONTROL JOINT	GHT	GARDEN HOSE THREAD	NPS	NATIONAL PARK SERVICE	TBM	TEMPORARY BENCH MARK
CLG	CLEARING LIMITS OR CENTERLINE	GL	GLASS LINED	NPT	NATIONAL PIPE THREAD	TDH	TOTAL DYNAMIC HEAD
CL	CEILING	GPD	GALLONS PER DAY	NR	NO REFUSAL	TEFC	TOTALLY ENCLOSED MOTOR
CL	CEILING	GPH	GALLONS PER HOUR	NRPA	NATURAL RESOURCES PROTECTION ACT	THR'HD	THRESHOLD
CMP	CLEAR	GPM	GALLONS PER MINUTE	NPS	NEAR SIDE	THWN	THERMOPLASTIC HEAT AND WATER-RESISTANT NYLON-COATED
CMP	CHLORINATION	GRAN	GRANITE	NTS	NOT TO SCALE	TOP	TOP OF PLATE
CMP	CENTRAL MAINE POWER	GRD	GROUND	OC	ON CENTER	TR	TRUSS PIPE
CMP	CORRUGATED METAL PIPE	GRS	GALVANIZED RIGID STEEL	OD	OUTSIDE DIAMETER	TYP	TYPICAL
CNU	CONCRETE MASONRY UNIT	GWB	GYPSED WALLBOARD	OH	OPERATOR	UG	UNDERGROUND
CO	CLEANOUT	H	HEIGHT	OPER	ORANGEBURG PIPE	URINAL	URINAL
COL	COLUMN	HB	HOSE BIBB	PE	PEN	USDA	UNITED STATES DEPARTMENT OF AGRICULTURE
CONC.	CONCRETE	HC	HOSE CLEANOUT	PE	PEN	UST	UNDERGROUND STORAGE TANK
CONN	CONNECTION	HDW	HARDWARE	PERF	PURGED	V	VENT
CONT	CONTINUOUS	HOM	HOLLOW METAL	PEK	GROSS-LINKED POLYETHYLENE	VAR	VARIABLE
CPE	CORRUGATED POLYETHYLENE PIPE	HORIZ	HORIZONTAL	PI	PURGE DIFFUSER	VB	VAPOR BARRIER OR VACUUM BREAKER
CS	CARBON STEEL/COMBINED SEWER	H P	HIGH POINT	PL	PROPERTY IRON	VC	VITRIFIED CLAY
CTS	COPPER TUBE SIZE	HPC	BEGIN HORIZONTAL CURVE	PLYWD	PLATE OR PROPERTY LINE	VER	VERTICAL
CULV	CULVERT	HPI	HORIZONTAL CURVE TANGENT INTERSECTION	POTW	PUBLICLY OWNED TREATMENT WORKS	VERT.	VERTICAL
		HPT	HORIZONTAL CURVE	PROP	PROPOSED	VFD	VARIABLE FREQUENCY DRIVE
		HT	HEIGHT	PSI	POUNDS PER SQUARE FOOT	VPC	VERTICAL CURVE
		HYD	HYDRANT	PT	POUNDS PER SQUARE INCH	VPI	VERTICAL CURVE TANGENT INTERSECTION
		HZ	HERTZ	PTD	PRESSURE TREATED	VPT	END VERTICAL CURVE
				PVC	PAINTED	VTR	VENT THROUGH ROOF
					POLYVINYL CHLORIDE		
D	DRAIN OR DIAMETER	ID	INSIDE DIAMETER			W	WATER OR WIDTH
DBC	DIRECT BURIAL CABLE	I	ISOLATION JOINT			W/	WITH
DEP	DEPT OF ENVIRONMENTAL PROTECTION	INF	INFILUENT	Qpk	PEAK FLOW	WC	WASTE ACTIVATED SLUDGE
DEP	DEPT OF ENVIRONMENTAL PROTECTION	INSUL	INSULATION	Q1.1	ORDINARY HIGH WATER	WAS	WATER CLOSET
DIA;Ø	DIAMETER	INT	INTERIOR	Q50	DESIGN DISCHARGE	WCO	WALL CLEANOUT
DIAG	DIAGONAL	INV	INVERT	R	RADIUS OR RIGHT	WD	WOOD
DM	DIMENSIONS	I/O	INPUT/OUTPUT	RAD	RADIUS	WF	WIDE FLANGE
DIN	GERMAN INSTITUTE FOR STANDARDIZATION	IP	IRON PIPE	RAN	RANGE	WH	WATER HEATER
DCW	DOMESTIC COLD WATER	IS	JANITOR SINK	RAS	RETURN ACTIVATED SLUDGE	WLD	WELDED
DHW	DOMESTIC HOT WATER	JB	JUNCTION BOX	RCFP	REINFORCED CONCRETE ELLIPTICAL PIPE	WR	WATER RESISTANT
DN	DOWN	KD	KILN DRIED	RCF	REINFORCED CONCRETE PIPE	WS	WATER SURFACE

INDEX

GENERAL

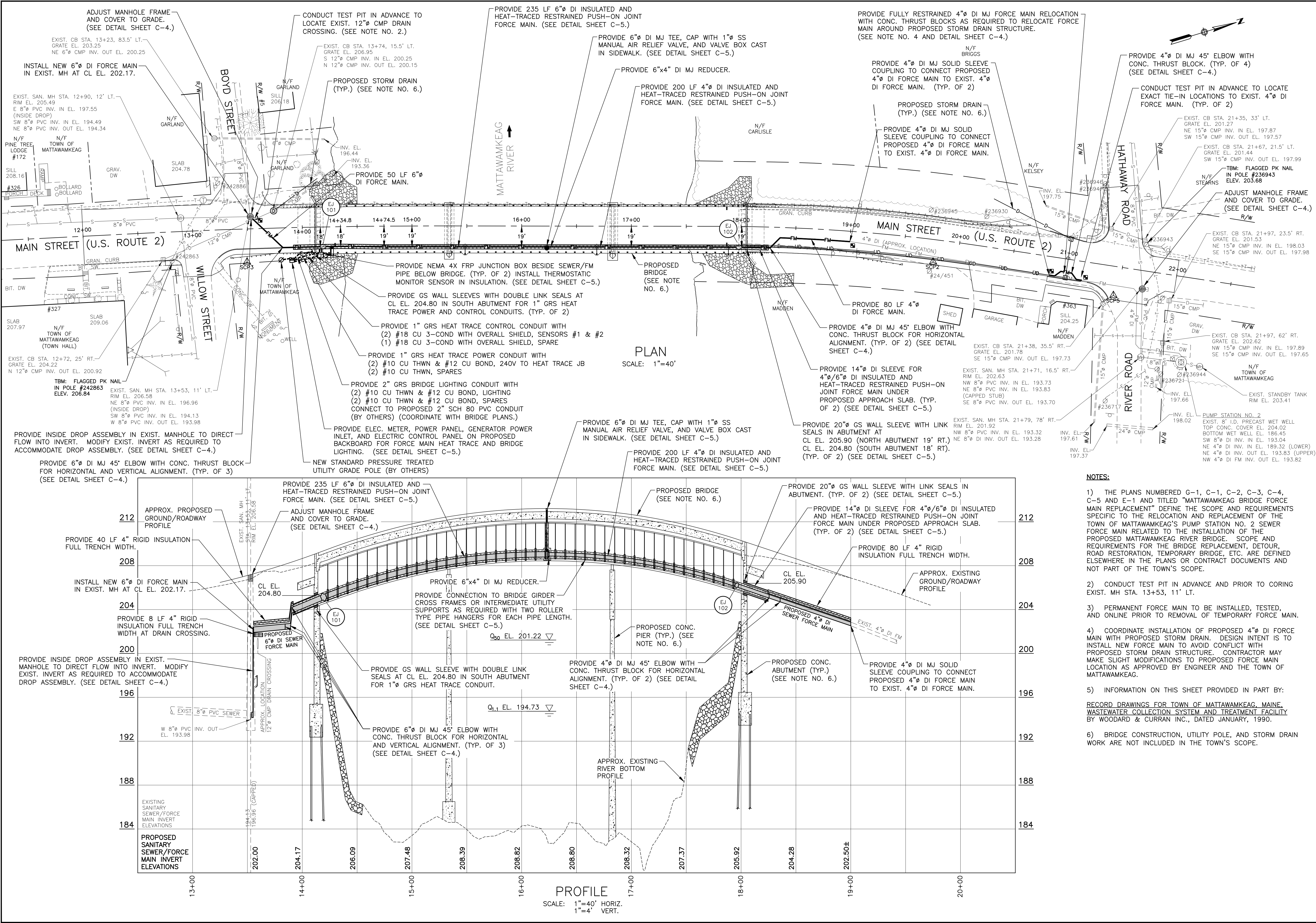
G-1 GENERAL NOTES AND INDEX

CIVIL

C-1 EXISTING SEWER FORCE MAIN PLAN & PROFILE
C-2 TEMPORARY SEWER FORCE MAIN PLAN & PROFILE
C-3 PERMANENT SEWER FORCE MAIN PLAN & PROFILE
C-4 SEWER FORCE MAIN DETAILS
C-5 SEWER FORCE MAIN DETAILS

ELECTRICAL

E-1 ELECTRICAL DETAILS



PROJECT NO. 023234.00

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
WINTERPORT, MAINE
290 MAIN STREET

STATE OF MAINE
No. 11562
Professional Engineer

DATE		ADDITION OR REVISION	
DES. BY: AH/AES	DR. BY: NWD	OK. BY: AH	PROJECT NO.: 1199
SCALE: AS NOTED	DATE: JULY, 2020	SHEET: C-3	

TOWN OF MATTAWAMKEAG, MAINE
MATTAWAMKEAG BRIDGE SEWER
FORCE MAIN REPLACEMENT

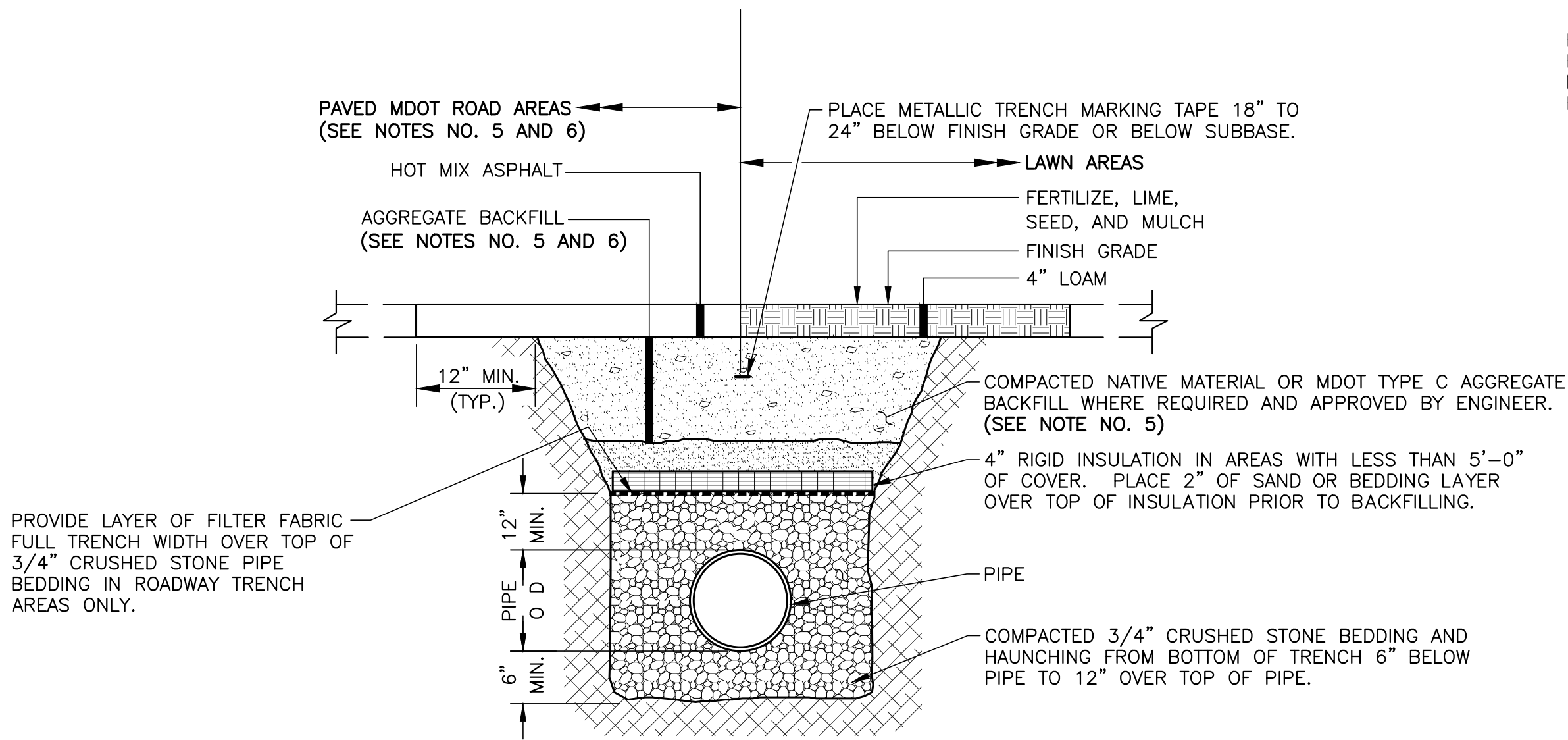
PERMANENT SEWER FORCE
MAIN PLAN & PROFILE

SHEET: C-3

SHEET NUMBER

66

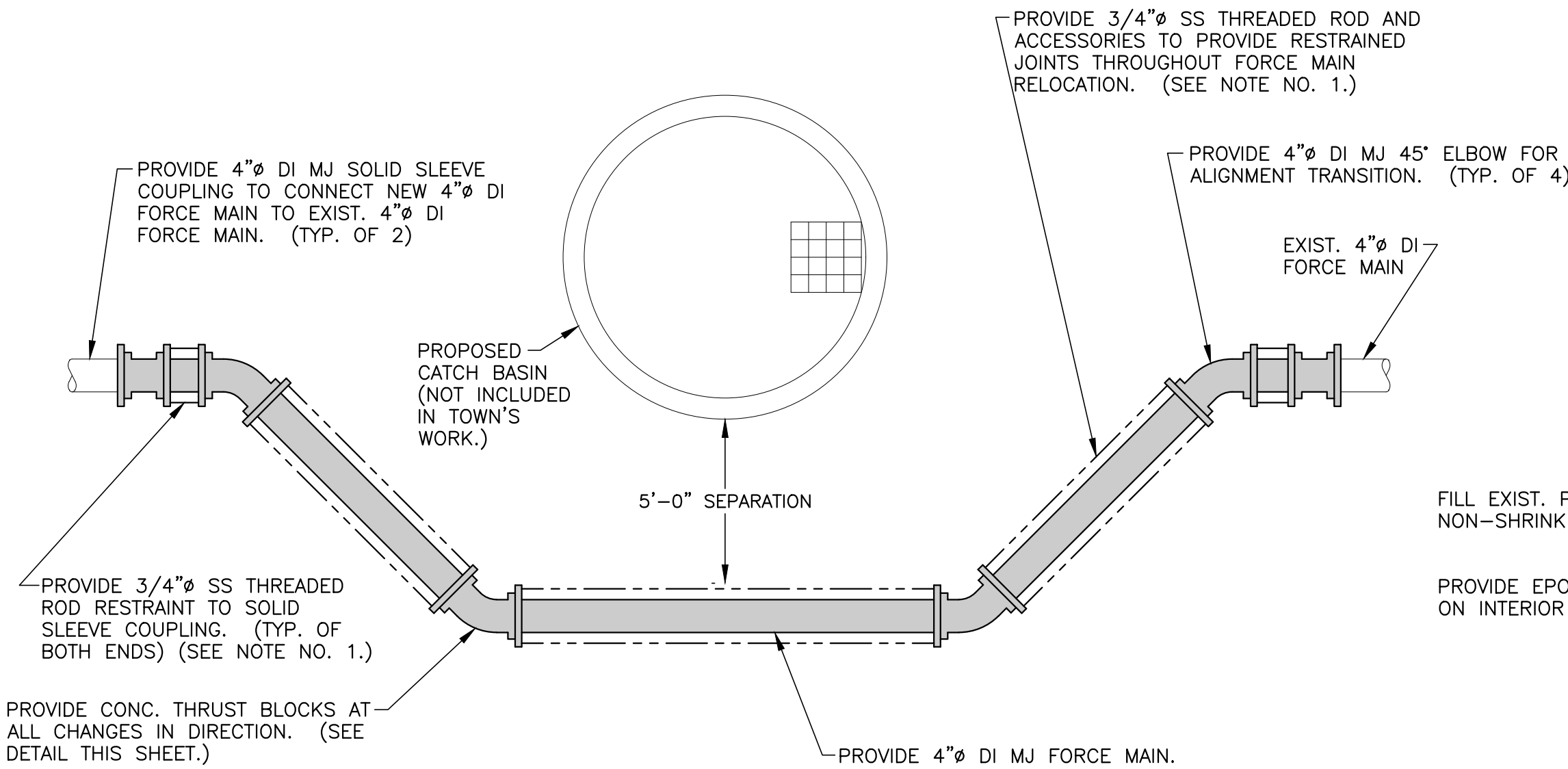
OF 69



TYPICAL FORCE MAIN TRENCH DETAIL

NOTES:

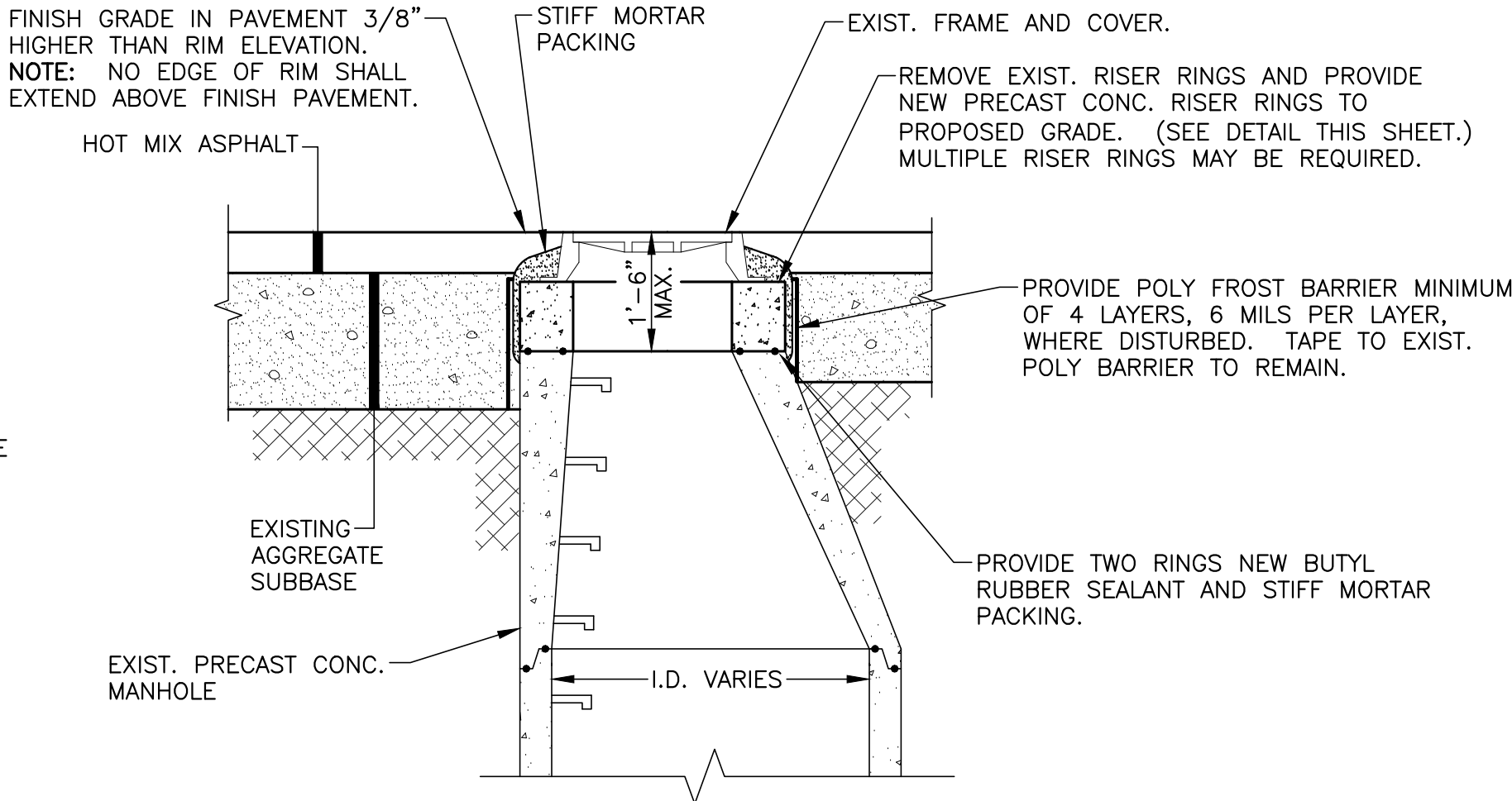
- 1) THIS DETAIL APPLIES TO THE PERMANENT SEWER/FORCE MAIN INSTALLATION AND IS NOT INTENDED FOR THE TEMPORARY SEWER/FORCE MAIN.
- 2) COORDINATE SEWER/FORCE MAIN TRENCH BACKFILL REQUIREMENTS WITH MILL/OVERLAY AREAS AS SHOWN ON THE PLAN SHEETS.
- 3) MAINTAIN UNIFORM TRENCH WIDTH TO 12" OVER PIPE.
- 4) IN THE MILL AND OVERLAY ROADWAY AREAS, THE FINAL SAW CUTTING OF PAVEMENT TO THE TOP OF THE MILLED SURFACE SHALL BE PERFORMED AFTER BACKFILLING AND COMPACTION IS COMPLETE. AFTER SAW CUTTING AND REMOVING AN ADDITIONAL 12" MIN. OF PAVEMENT BEYOND EACH EDGE OF THE TRENCH, THE ENTIRE EXPOSED GRAVEL LAYER SHALL BE ONCE AGAIN COMPACTED, INCLUDING THE UNDISTURBED GRAVEL PORTION, PRIOR TO PAVING.
- 5) DURING EXCAVATION WITHIN MILL AND OVERLAY AREAS, SEPARATE THE EXISTING ROADBED GRAVEL LAYER FROM THE NATIVE TRENCH EXCAVATION BELOW. REUSE ORIGINAL EXCAVATED NATIVE MATERIALS DURING BACKFILLING IF COMPACTABLE IN THE ORDER THAT THEY WERE REMOVED. THE DESIGN INTENT IS TO MATCH THE EXISTING ROADWAY BASE/SUBBASE DEPTH AND TO PROVIDE A MINIMUM DEPTH OF 18". IF EXISTING ROADWAY BASE/SUBBASE DEPTHS ARE LESS THAN 18", CONTRACTOR SHALL CONSULT WITH ENGINEER BEFORE PROCEEDING. INTENT IS TO MATCH EXISTING CONDITIONS AS CLOSELY AS PRACTICAL.
- 6) IN ROAD RECONSTRUCTION AREAS, COORDINATE PAVEMENT AND AGGREGATE BACKFILL WITH ROAD PLAN SHEETS AND DETAILS.



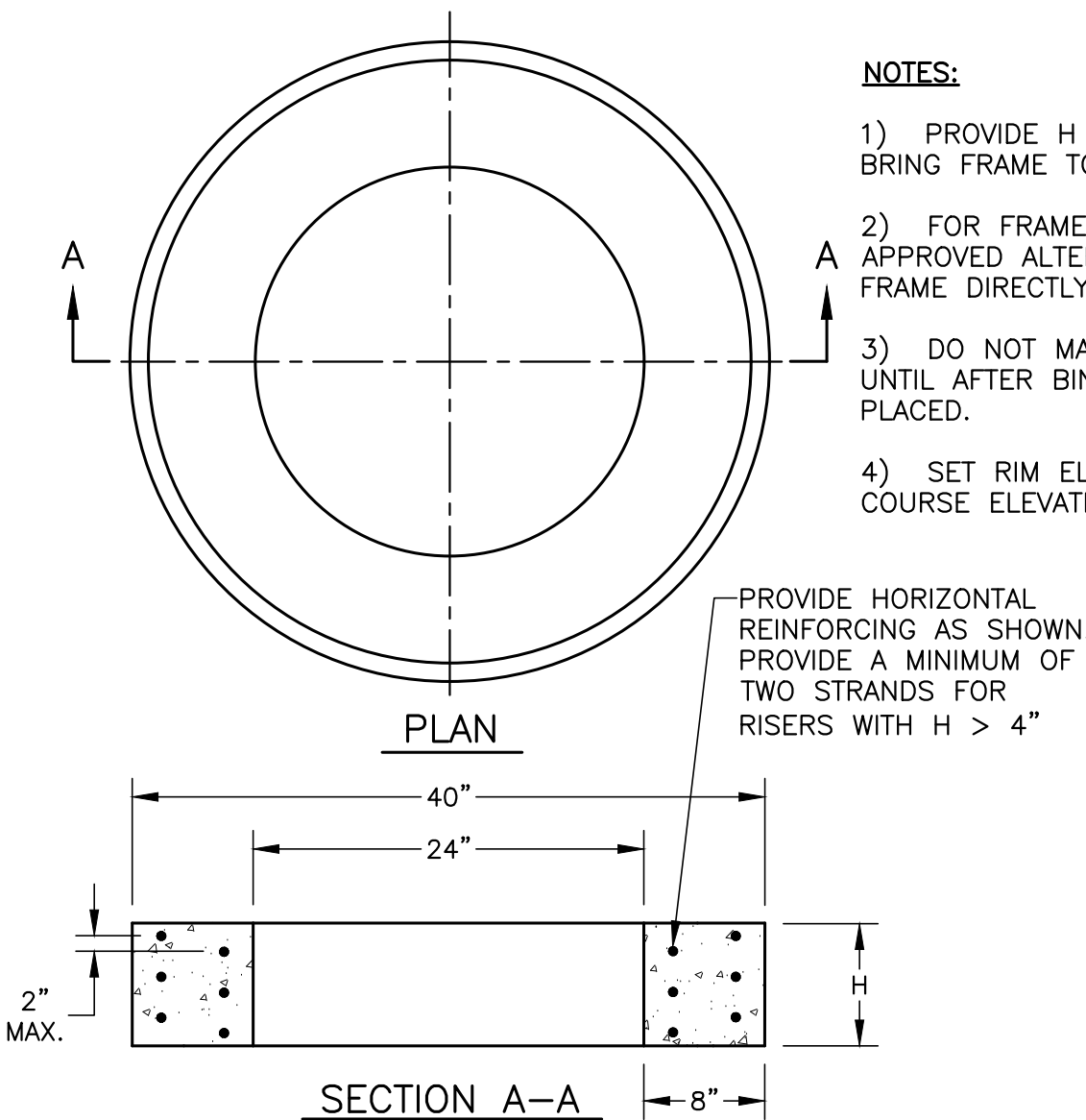
EXISTING FORCE MAIN RELOCATION DETAIL

NOTES:

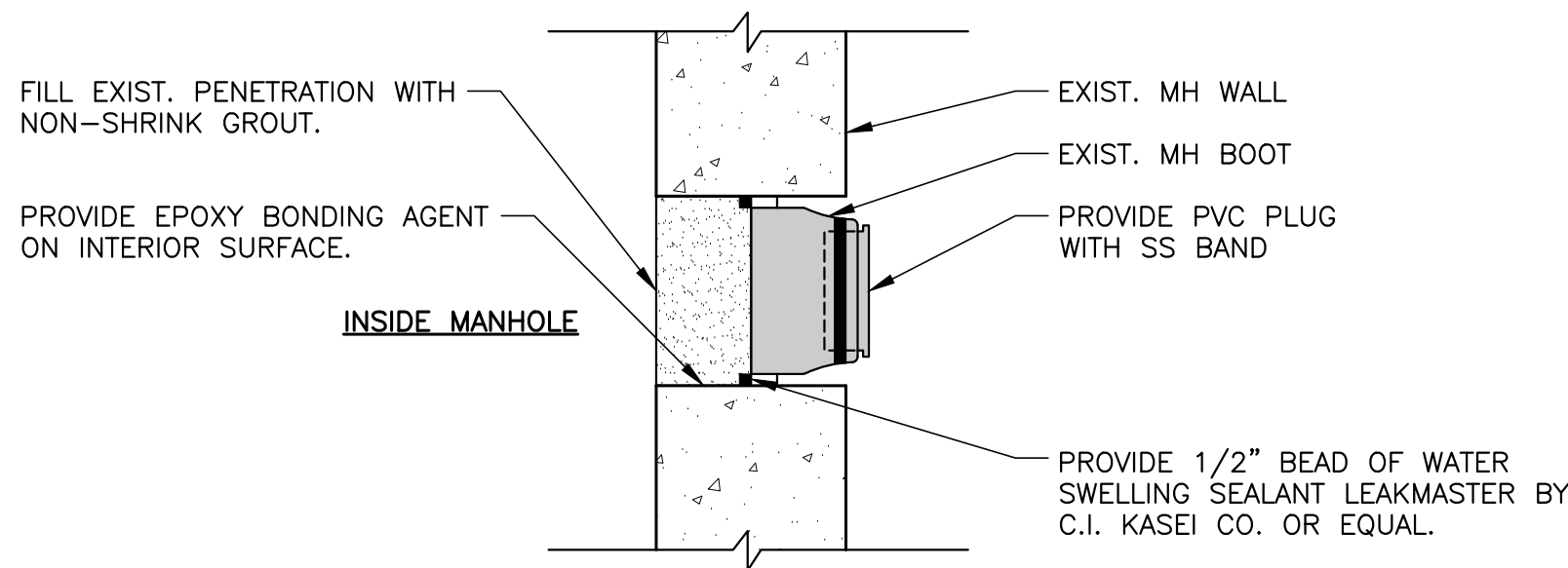
- 1) DESIGN INTENT IS TO FULLY RESTRAIN THE RELOCATED SECTION OF FORCE MAIN WITH 3/4" SS THREADED ROD, DUC LUG OR TIE BOLTS, AND ALL NECESSARY ACCESSORIES. PROVIDE MINIMUM 2 LENGTHS OF THREADED ROD BETWEEN EACH JOINT.
- 2) COORDINATE INSTALLATION OF RELOCATED 4" DI FORCE MAIN WITH PROPOSED STORM DRAIN. DESIGN INTENT IS TO INSTALL NEW FORCE MAIN TO AVOID CONFLICT WITH PROPOSED MDOT STORM DRAIN STRUCTURE. CONTRACTOR SHALL MAKE SLIGHT MODIFICATIONS TO PROPOSED FORCE MAIN LOCATION AS APPROVED BY ENGINEER AND THE TOWN OF MATTAWAMKEAG.
- 3) THRUST BLOCKS ARE REQUIRED AT ALL CHANGES OF DIRECTION AND FITTINGS IN FORCE MAIN.



PRECAST MANHOLE RAISING DETAIL



PRECAST CONCRETE GRADE RINGS DETAIL

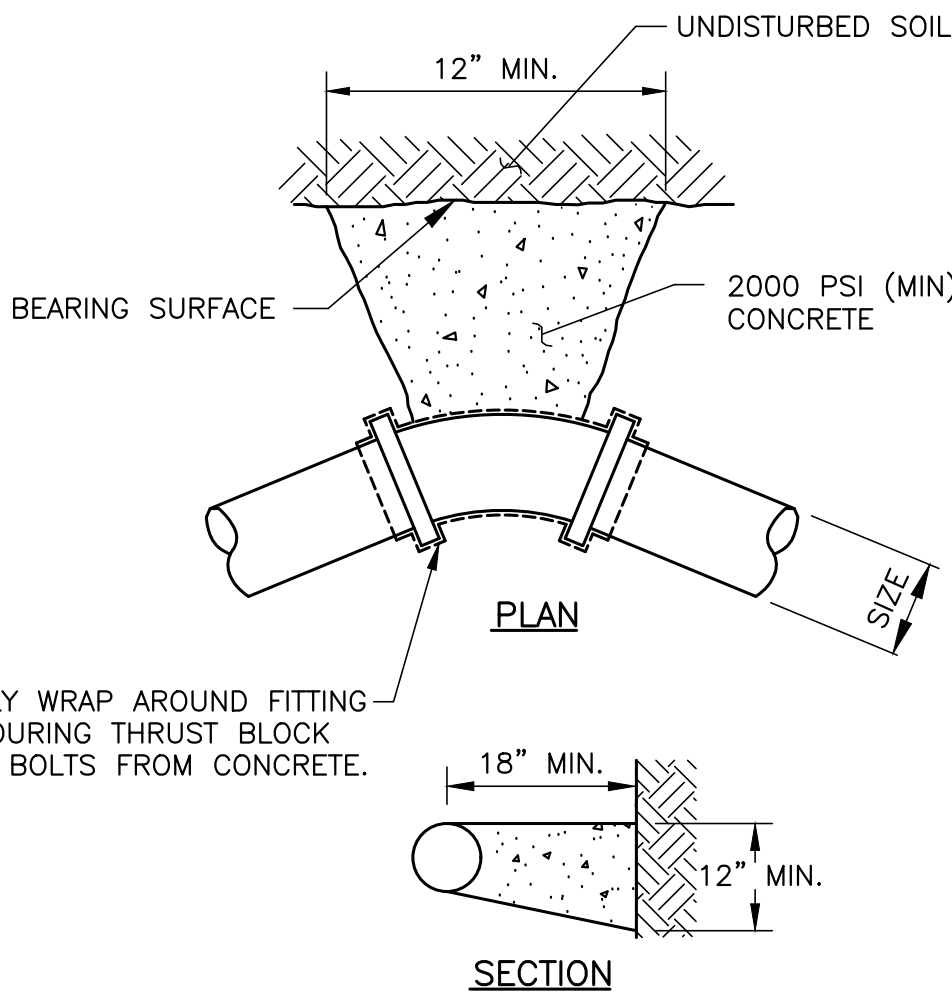


NOTE:

MODIFY EXIST. INVERT AND BENCH TO FILL IN REMOVED PIPES AFTER COMPLETION OF REPAIR AS REQUIRED.

EXISTING MH REPAIR DETAIL

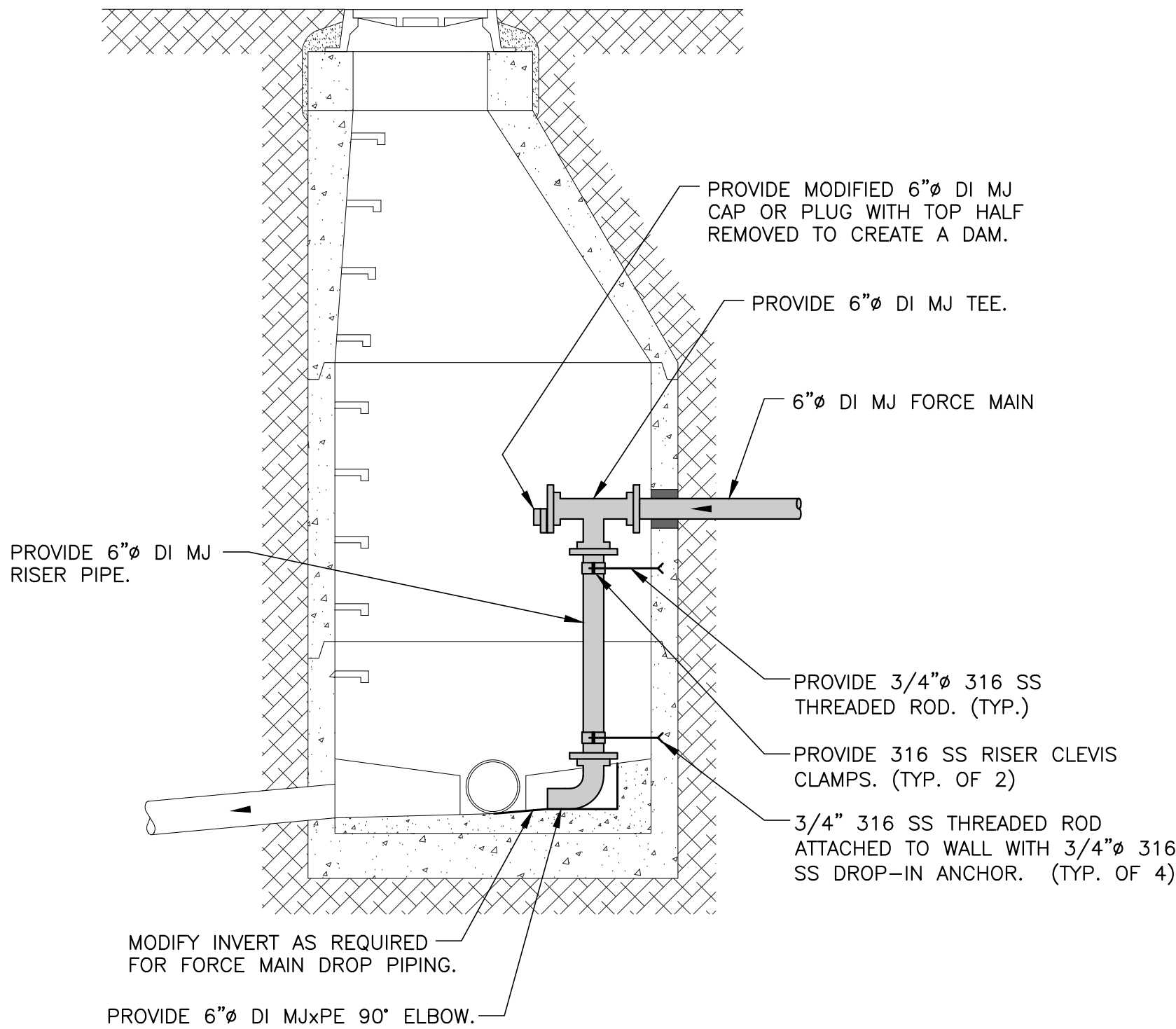
BEARING SURFACE, FT ²				
SIZE, IN	TEE, 90°	45°	22 1/2°	11 1/4°
4	1.2	1.0	1.0	1.0
6	2.6	1.4	1.0	1.0



THRUST BLOCK DETAIL

NOTES:

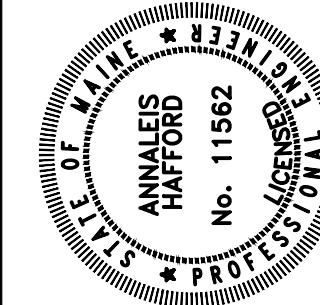
- 1) THRUST BLOCK CONFIGURATION SHALL BE APPROX. SQUARE AT BEARING SURFACE, THEN TRANSITION IN DEPTH AND WIDTH TO PIPE, 12"x 12" MINIMUM AT BEARING SURFACE AND 18" MINIMUM DEPTH.
- 2) THRUST BLOCKS ARE REQUIRED AT ALL CHANGES OF DIRECTION AND FITTINGS IN PRESSURIZED FORCE MAINS.
- 3) THRUST BLOCK BEARING SURFACES BASED UPON UP TO 100 PSI LINE PRESSURE IN SAND/GRAVEL WITH SOIL BEARING PRESSURE OF 3000 PSI. (ADJUSTMENTS TO SURFACE AREA MAY BE REQUIRED IN POOR QUALITY SOILS OR IF LINE PRESSURE EXCEEDS 100 PSI.)
- 4) SAFETY FACTOR = 1.5.



FORCE MAIN DROP ASSEMBLY DETAIL

PROJECT NO.: 023234.00

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET
WINTERPORT, MAINE



DATE	ADDITION OR REVISION
DES. BY: AH/AES	DR. BY: NWD
SCALE: AS NOTED	QA PROJECT NO.: 1199
DATE: JULY, 2020	SHEET: C-4

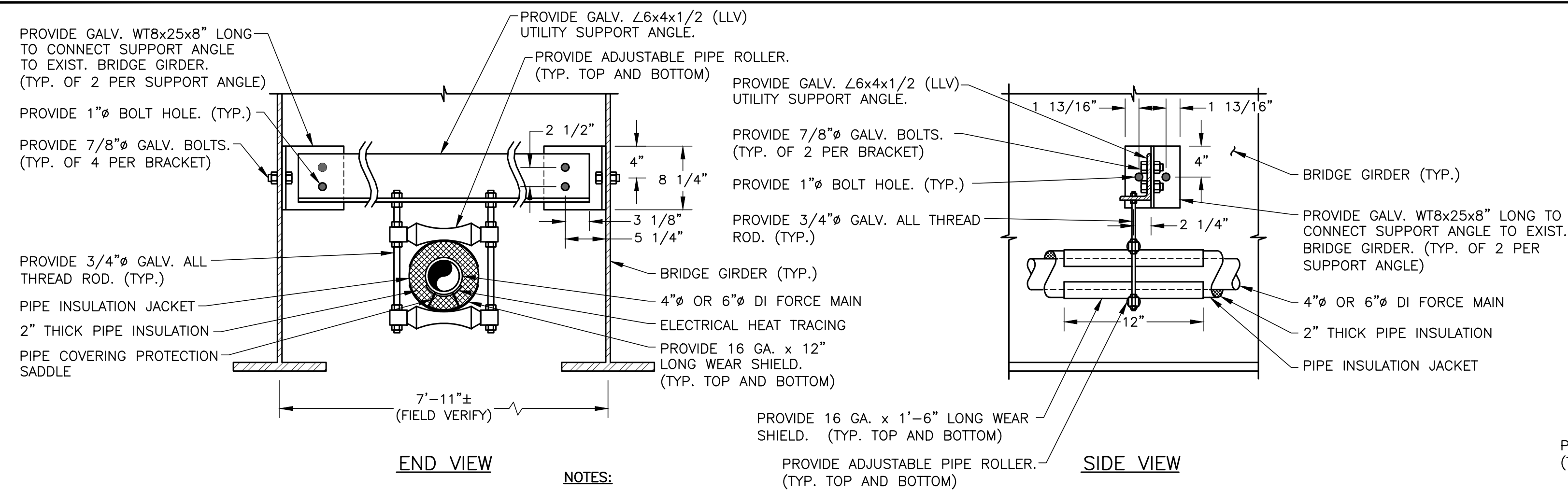
TOWN OF MATTAWAMKEAG, MAINE
MATTAWAMKEAG BRIDGE SEWER
FORCE MAIN REPLACEMENT

SHEET: C-4

SHEET NUMBER

67

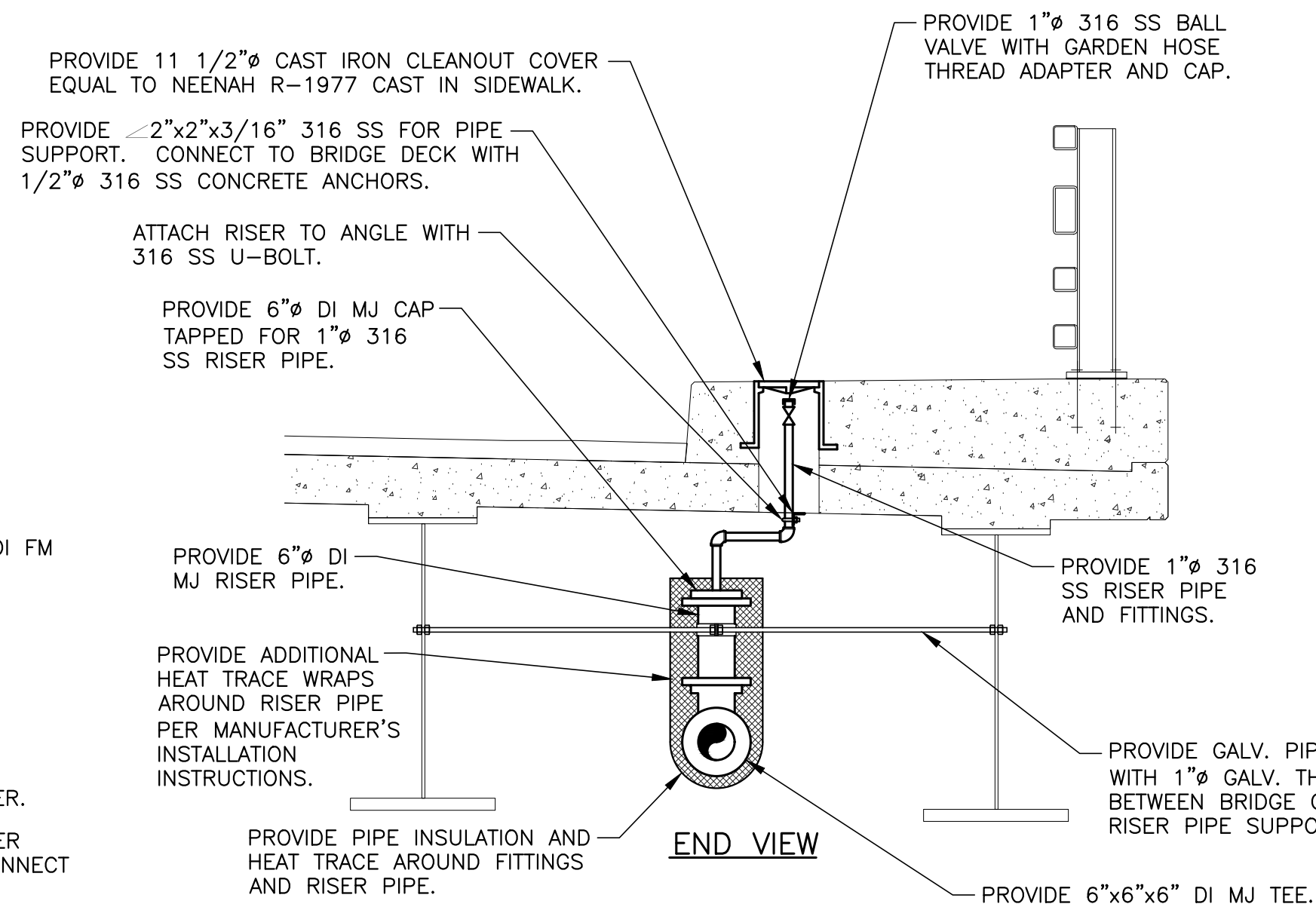
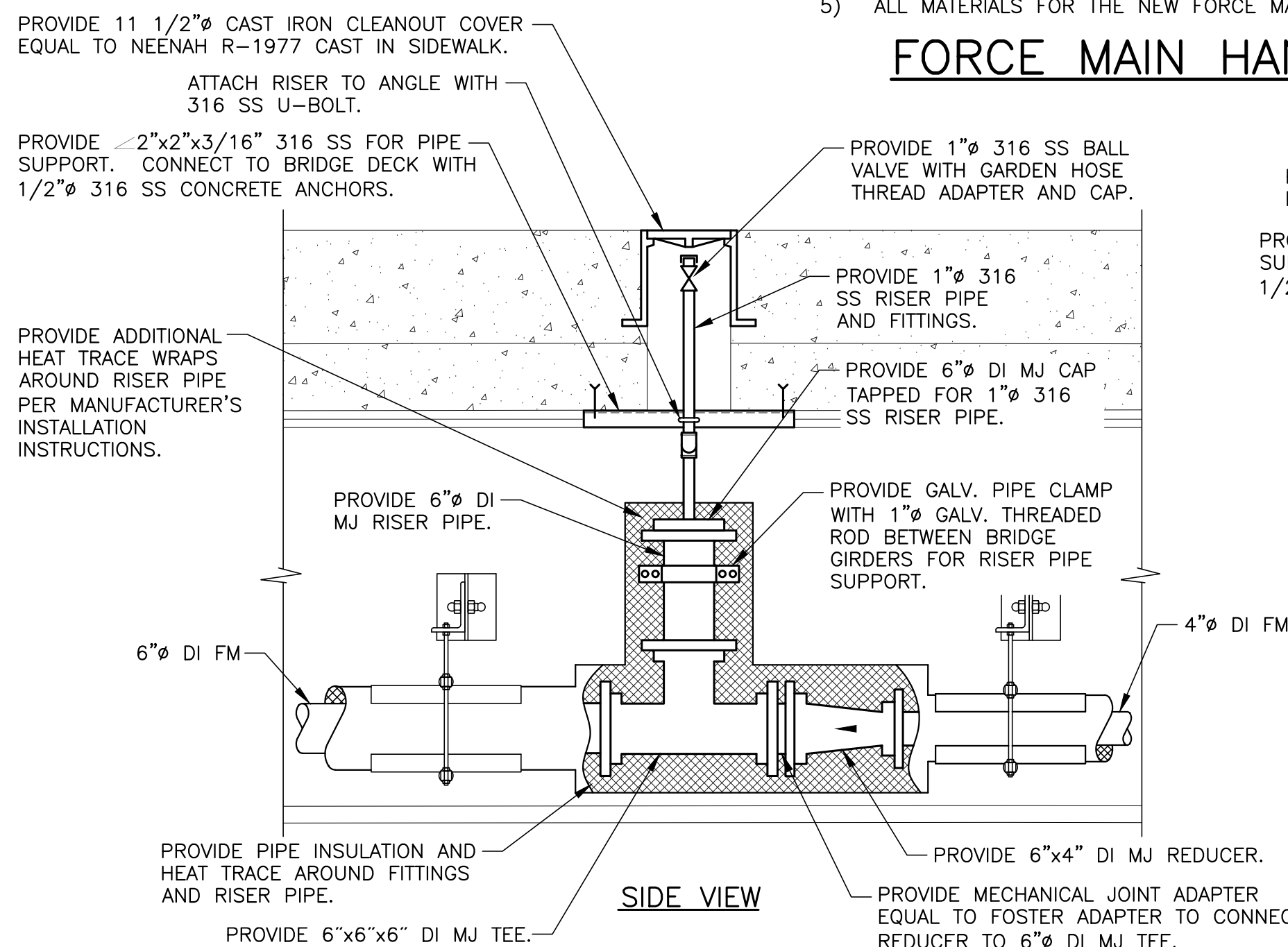
OF 69



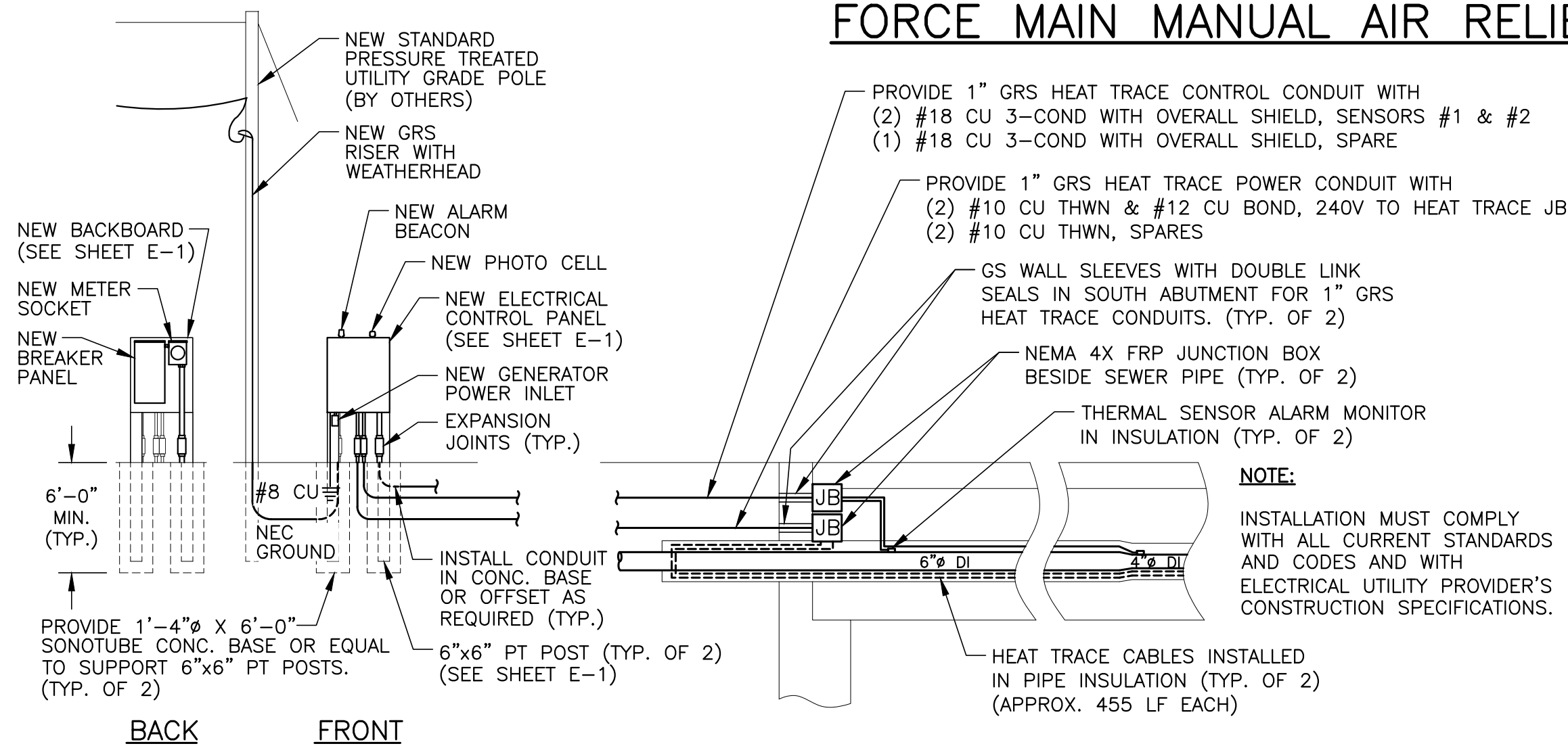
- NOTES:

- 1) ATTACH TWO HANGERS PER LENGTH OF PIPE, MAXIMUM 10' SPACING ON CENTER.
- 2) MATERIALS FOR PIPE HANGERS AND SUPPORTS MUST COMPLY WITH ANSI/MSS SP-58.
- 3) INSTALLATION MUST COMPLY WITH ANSI/MSS SP-69.
- 4) ALL BRACKETS AND BOLT MATERIAL SHALL BE HOT-DIPPED GALVANIZED.
- 5) ALL MATERIALS FOR THE NEW FORCE MAIN CONSTRUCTION MUST COMPLY WITH ALL AIS REQUIREMENTS.

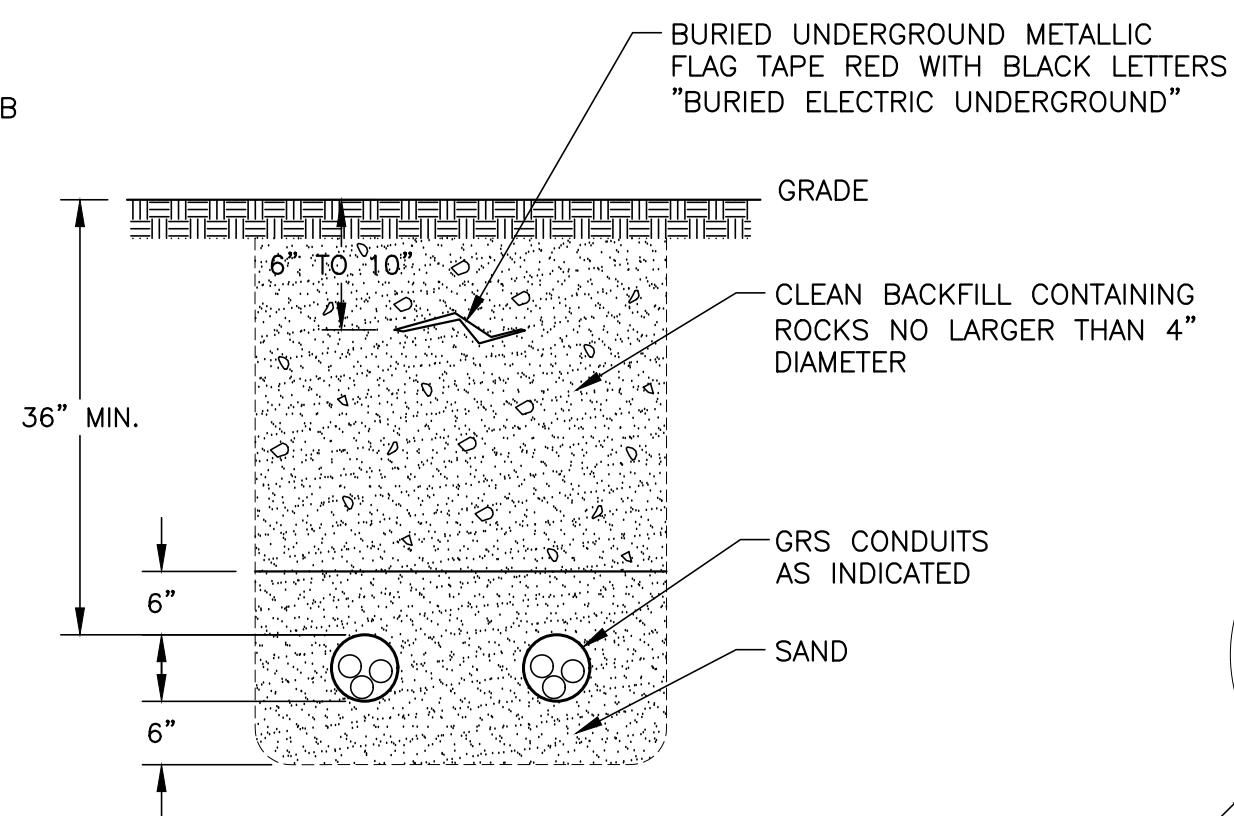
FORCE MAIN HANGER DETAIL



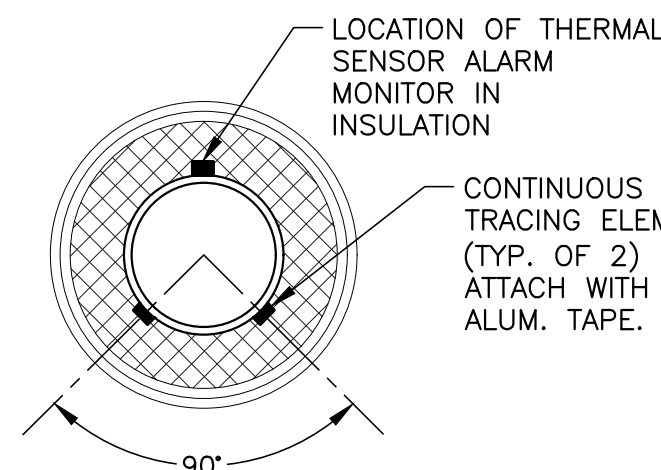
FORCE MAIN MANUAL AIR RELIEF DETAIL



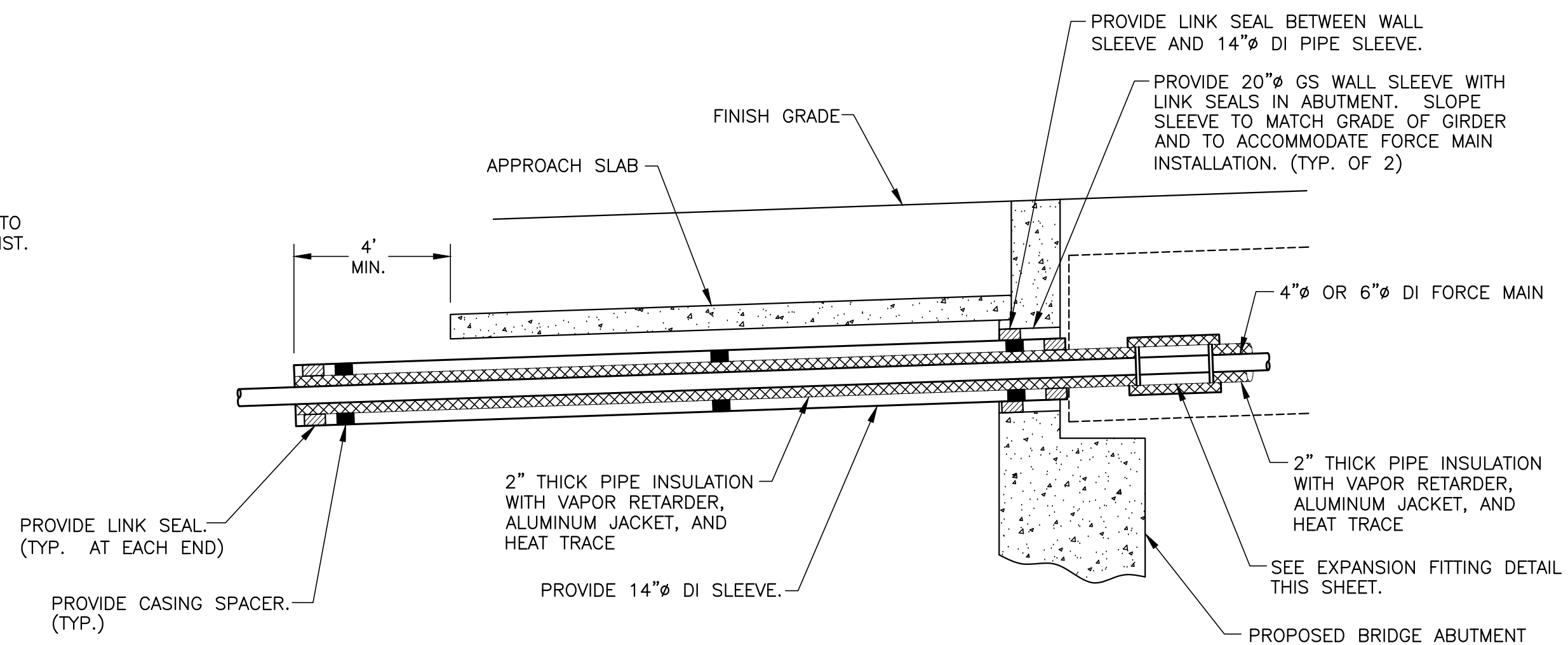
ELECTRICAL SERVICE AND WIRING DETAIL



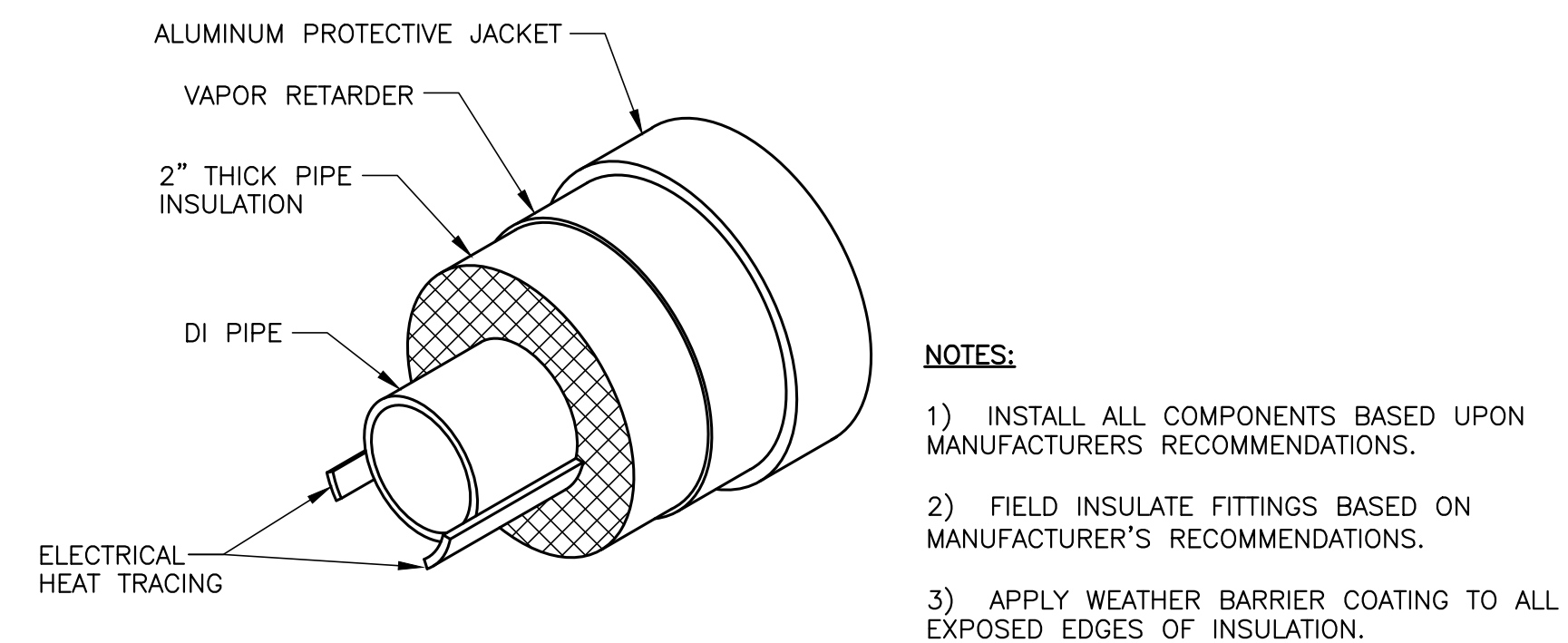
BURIED UG ELECTRIC DETAIL



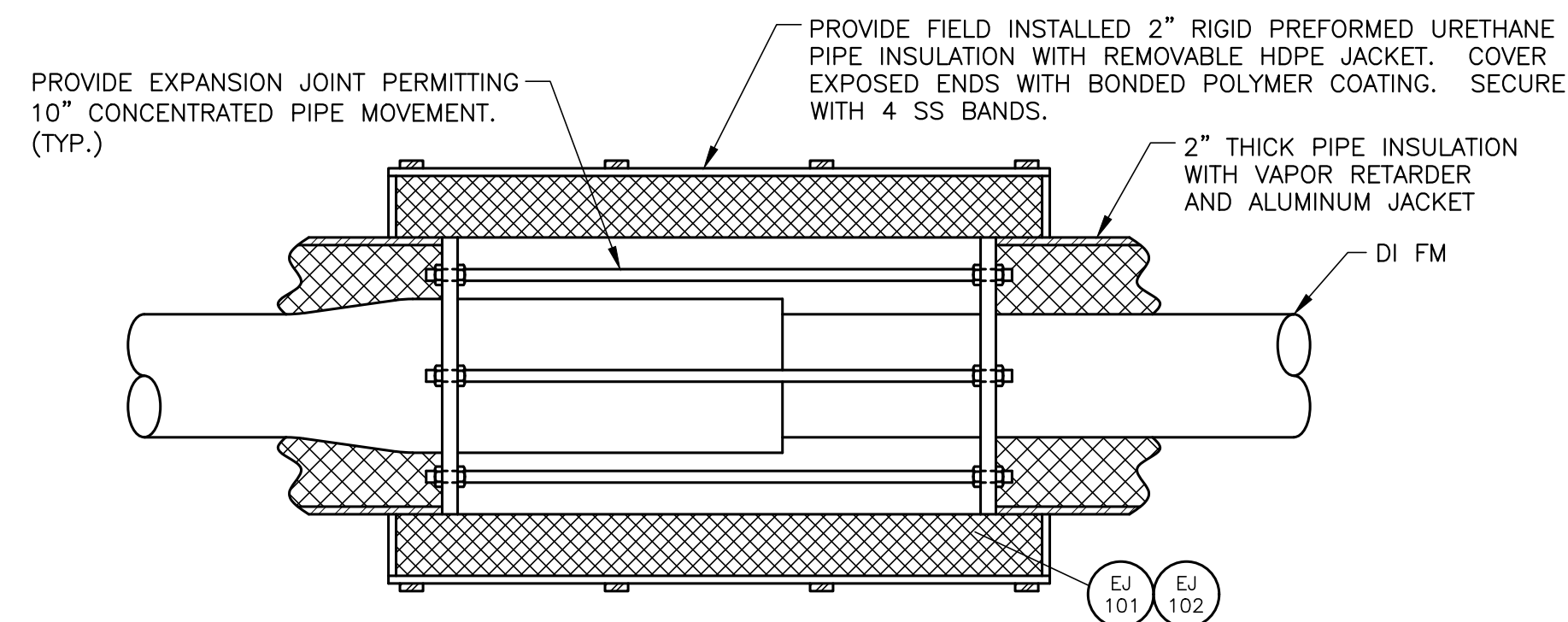
HEAT TRACE DETAIL



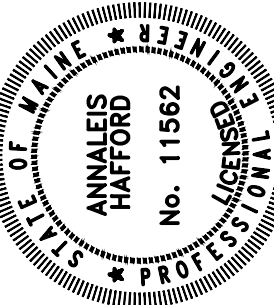
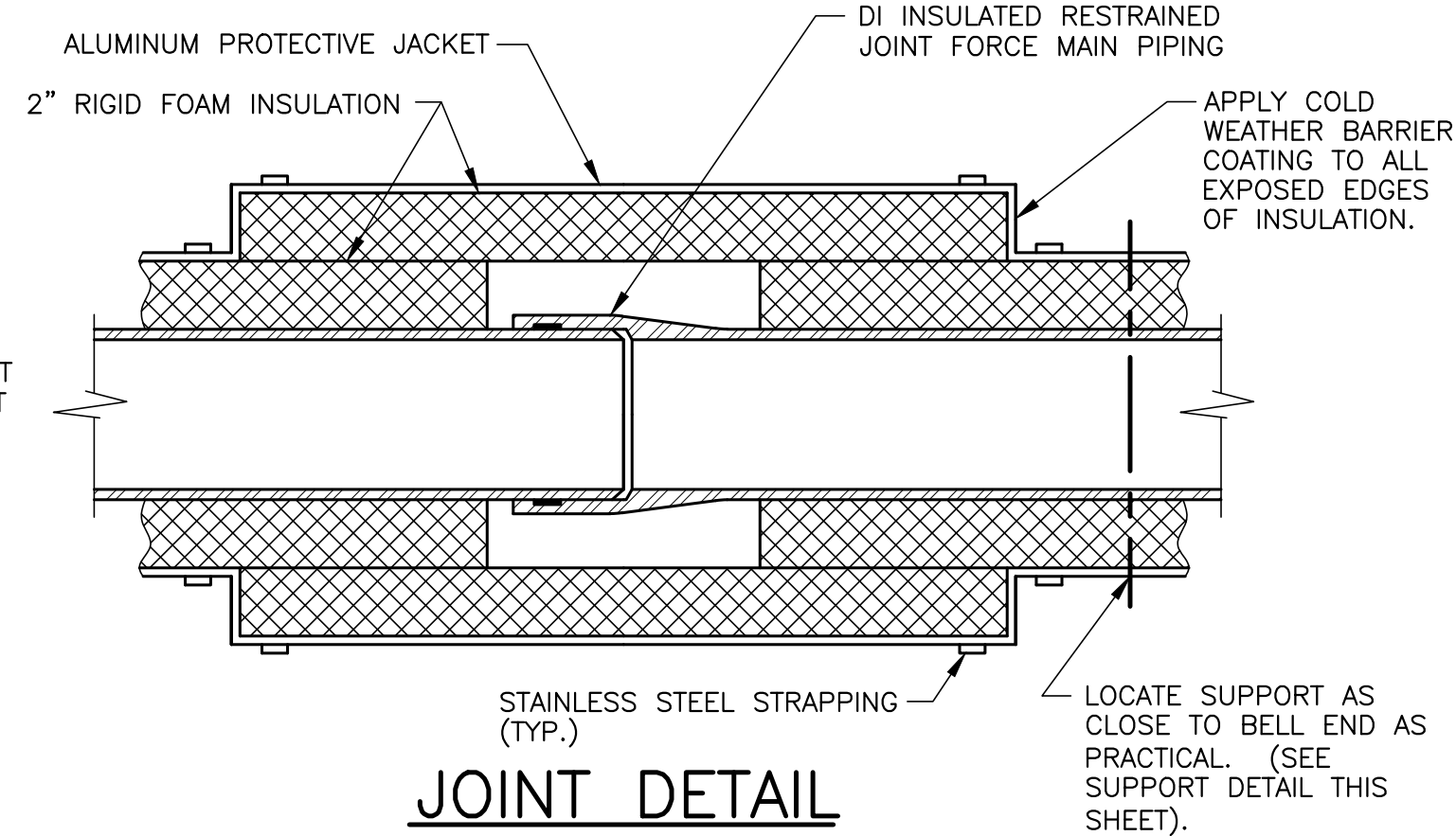
TYPICAL ABUTMENT PENETRATION DETAIL

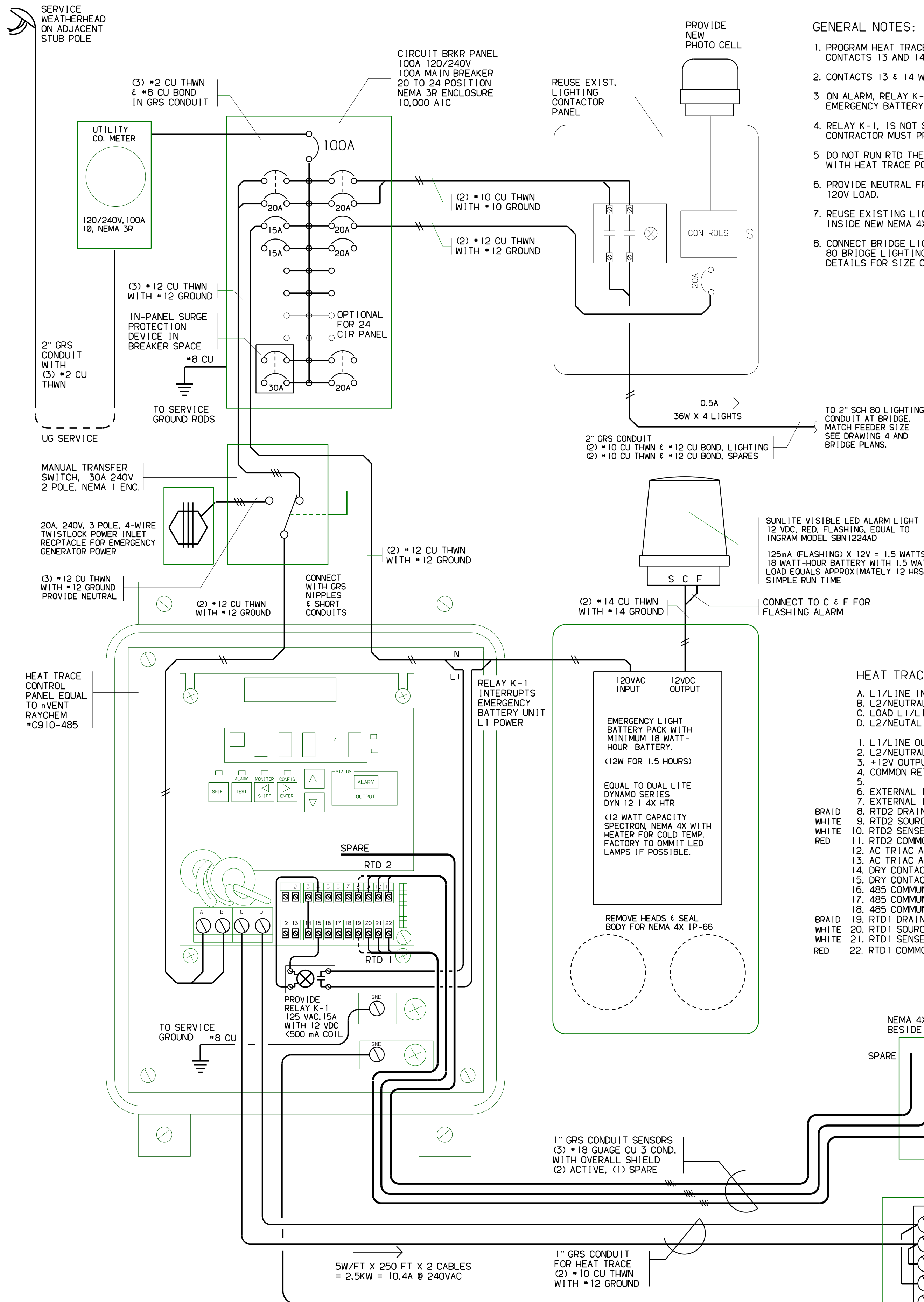


EXPOSED FORCE MAIN INSULATION DETAIL



TYPICAL BRIDGE PIPE EXPANSION FITTING DETAIL

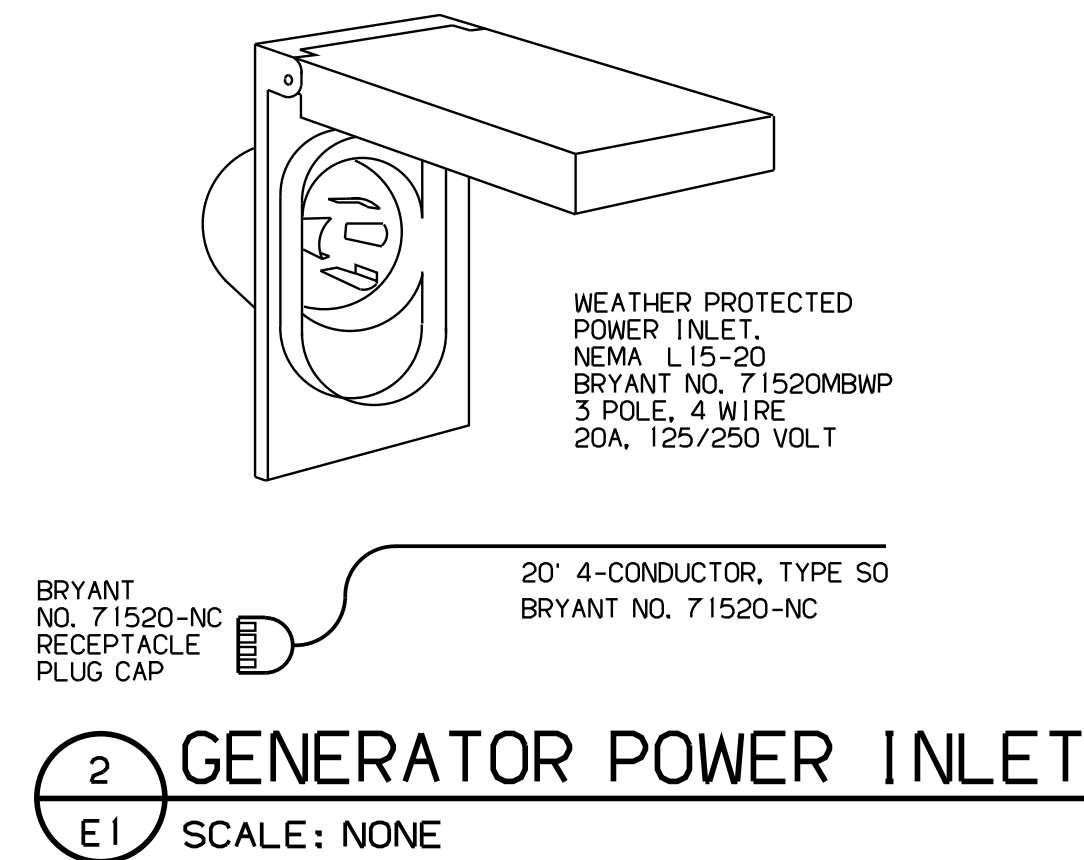
[illegible]



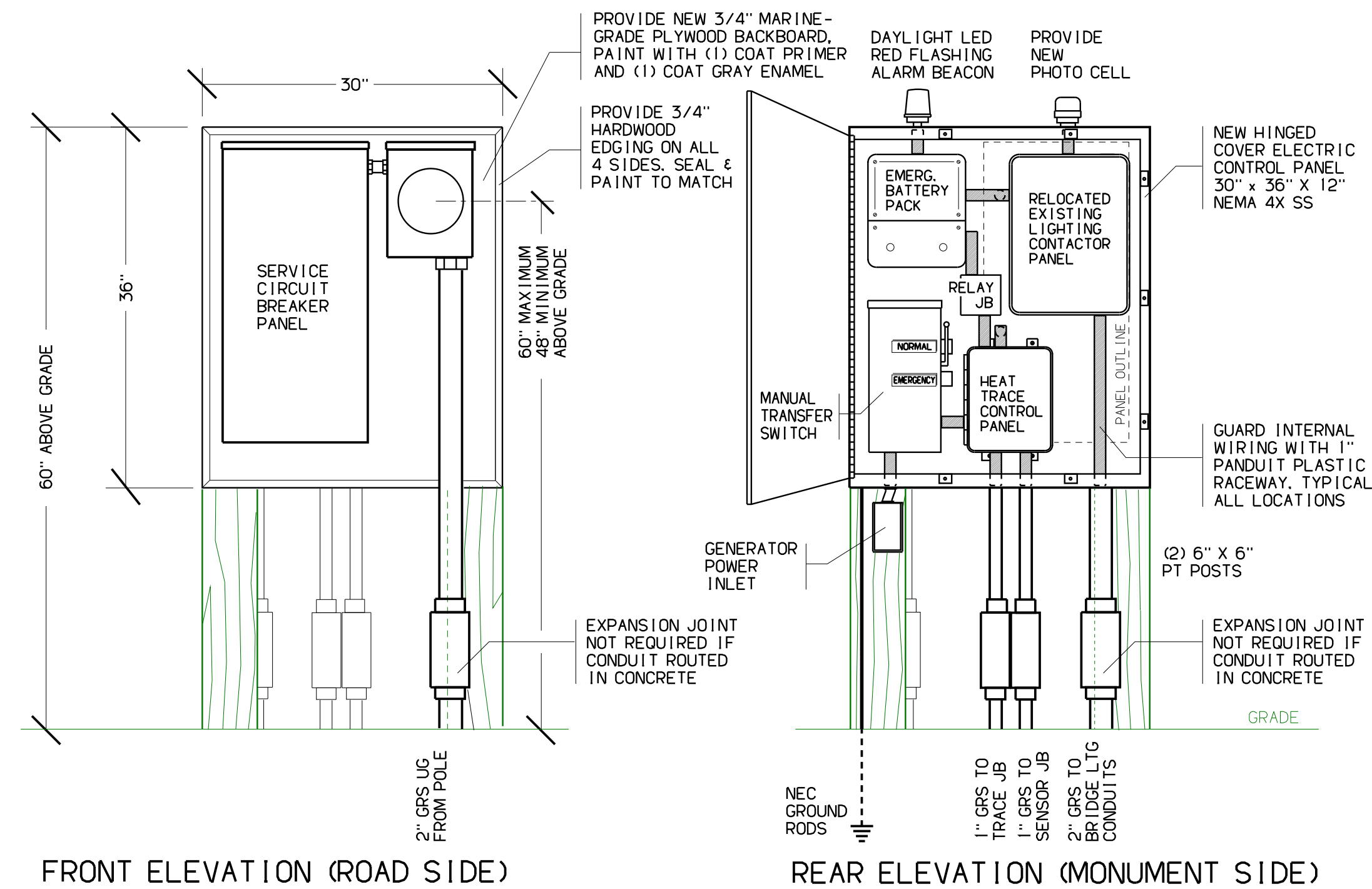
1 HEAT TRACE WIRING
E1 SCALE: NONE

GENERAL NOTES:

1. PROGRAM HEAT TRACE CONTROLLER TO OPEN OUTPUT CONTACTS 13 AND 14 DURING ALARM CONDITION.
2. CONTACTS 13 & 14 WILL OPEN ON POWER FAILURE.
3. ON ALARM, RELAY K-1 OPENS, REMOVING POWER TO THE EMERGENCY BATTERY PACK WHICH ENERGIZES THE ALARM LIGHT.
4. RELAY K-1, IS NOT SUPPLIED WITH CONTROLLER. CONTRACTOR MUST PROVIDE.
5. DO NOT RUN RTD THERMAL SENSOR WIRING IN SAME CONDUIT WITH HEAT TRACE POWER.
6. PROVIDE NEUTRAL FROM GENERATOR INLET IN CASE OF FUTURE 120V LOAD.
7. REUSE EXISTING LIGHTING CONTACTOR PANEL AND MOUNT INSIDE NEW NEMA 4X ELECTRICAL CONTROL PANEL
8. CONNECT BRIDGE LIGHTING FEEDER CONDUIT TO NEW 2" SCHEDULE 80 BRIDGE LIGHTING CONDUIT. SEE DRAWING 4 & BRIDGE DRAWING DETAILS FOR SIZE OF BRIDGE LIGHTING CONDUCTORS



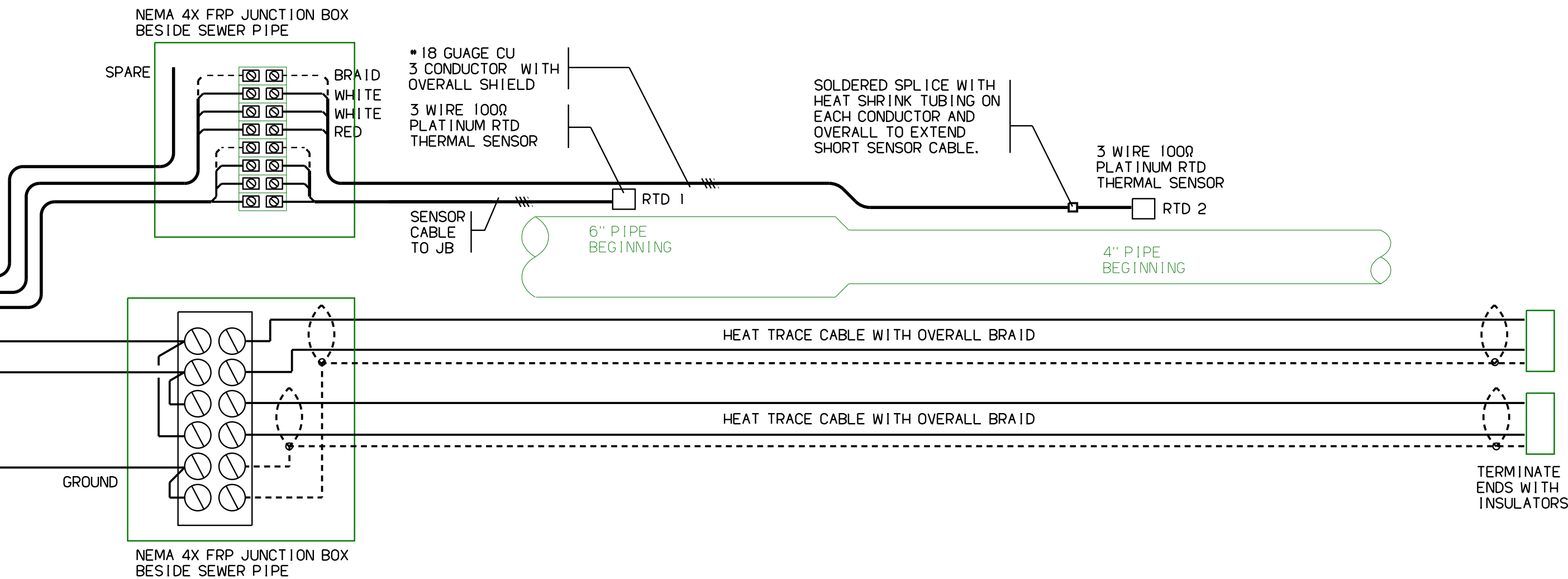
2 GENERATOR POWER INLET
E1 SCALE: NONE



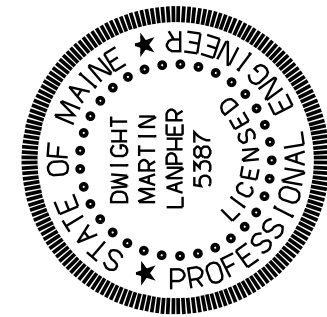
3 PANEL ELEVATIONS
E1 SCALE 1" = 1'-0"

HEAT TRACE CONTROLLER PIN OUTS

1. L1/LINE INPUT
2. L2/NEUTRAL INPUT
3. L1/LINE OUTPUT
4. L2/NEUTRAL OUTPUT
5. EQUAL TO INPUT VOLTAGE
6. +12V OUTPUT
7. COMMON RETURN
8. EXTERNAL INPUT +
9. EXTERNAL INPUT -
10. RTD2 DRAIN
11. RTD2 SOURCE
12. RTD2 SENSE
13. AC TRIAC ALARM RELAY
14. AC TRIAC ALARM RELAY
15. DRY CONTACT ALARM RELAY
16. DRY CONTACT ALARM RELAY
17. 485 COMMUNICATIONS DATA +
18. 485 COMMUNICATIONS DATA -
19. 485 COMMUNICATIONS DRAIN
20. RTD1 DRAIN
21. RTD1 SOURCE
22. RTD1 SENSE



OLVER ASSOCIATES INC.
DESIGN AND CONSULTING ENGINEERS
280 MAIN STREET
WINTERPORT, MAINE
TEL: (207) 876-5500 FAX: (207) 876-5007



ADDITION OR REVISION			
DATE	DESIGN	DRY BY	CHECK BY
	DML	DML	DML/MMQ
SCALE: AS NOTED	DATE: JULY 2020	PROJECT NO. 1199	LA 2020-008
SHEET: E-1			

TOWN OF MATTAWAKEAG, MAINE
MATTAWAKEAG BRIDGE SEWER
FORCE MAIN REPLACEMENT

ELECTRICAL DETAILS

SHEET: E-1

SHEET NUMBER

69

OF 69