

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 I

TRAFFIC DATA

Current (2016) AADT 1,370
Future (2036) AADT 1,640
DHV - % of AADT 13%
Design Hour Volume 213
Heavy Trucks (% of AADT) 5%
Heavy Trucks (% of DHV) 4%
Directional Distribution (% of DHV) 60%
18 kip Equivalent P 2.0 28
18 kip Equivalent P 2.5 27
Design Speed (mph) 30

HYDROLOGIC DATA

Drainage Area 0.2 sq mi
Storm Surge Elevation (100-year) 9.7 ft
Storm Surge Elevation (50-year) 9.2 ft
Storm Surge Elevation (10-year) 8.2 ft
Mean Lower Low Water (MLLW) -5.15 ft
Mean Low Water (MLW) -4.80 ft
Mean Tide Level (MTL) -0.32 ft
Mean High Water (MHW) 4.13 ft
Mean Higher High Water (MHHW) 4.56 ft
2016 Predicted High Tide 6.99 ft

MATERIALS

Concrete:
Curbs, Deck Closure Pours, Diaphragms, & Transition Barriers.. Class "LP"
Seals Class "S"
Precast Class "P"
All Other Class "A"
Reinforcing Steel:
Plain ASTM A615, Grade 60
Stainless Steel ASTM A955, Grade 75
Prestressing Strands AASHTO 203 (ASTM A416),
Grade 270, Low Relaxation
Structural Steel:
All Material (except as noted) ASTM A709, Grade 50 (Galvanized)
High Strength Bolts ASTM F3125, Grade A325, Type 1 (Galvanized)
H-Piles ASTM A572, Grade 50

BASIC DESIGN STRESSES

Concrete, Class "S" f 'c = 3,000 psi
Concrete, Class "A" f 'c = 4,000 psi
Concrete, Class "LP" f 'c = 5,000 psi
Precast Concrete, Class "P" f 'c = 8,000 psi
..... f 'ci = 6,000 psi
Reinforcing Steel:
ASTM A615, Grade 60 f y = 60,000 psi
ASTM A955, Grade 75 f y = 75,000 psi
Prestressing Strand F μ = 270,000 psi
Structural Steel:
ASTM A709, Grade 50 F y = 50,000 psi
ASTM F3125, Grade A325 F μ = 120,000 psi
ASTM A572, Grade 50 F y = 50,000 psi

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
Construction Notes	3
General Plan	4
Profile	5
Geotechnical Plan & Profile	6-8
Boring Logs	9-11
Typical Sections	12
Cross Sections	13-21
Abutment No. 1	22-25
Abutment No. 2	26-29
Pier	30-31
Superstructure Plan & Details	32-37
End Diaphragms	38-39
Reinforcing Schedule	40
Maintenance of Traffic Summary	41-42
Right of Way Map	43

SOUTHPORT
LINCOLN COUNTY
THOMPSONS BRIDGE
OVER
DECKER COVE
ROUTE 238
FEDERAL AID PROJECT NO. STP-1874(800)
PROJECT LENGTH 0.10 mi.
BRIDGE NO. 2848

UTILITIES

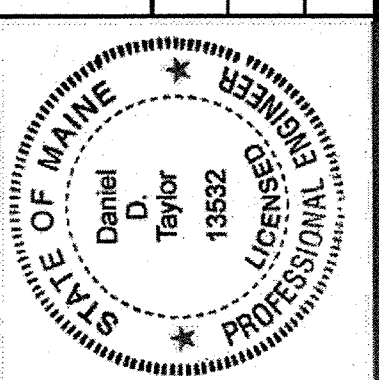
Central Maine Power Company
FairPoint Communications
Charter Communications
Boothbay Region Water District

MAINTENANCE OF TRAFFIC

Bridge closure with a detour on Route 27 and Route 238.

PROJECT LOCATION	In the Town of Southport, 0.1 mile South of Route 27, carrying Route 238 over the Decker Cove. Lat./Long. 43°50'23" N, 69°39'17" W
PROGRAM AREA	Bridge
OUTLINE OF WORK	Bridge Replacement

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER:	4/4/19
	CHIEF ENGINEER:	4-4-19



SIGNATURE	P.E. NUMBER	DATE
D. Taylor	13532	03/01/2019

PROJECT INFORMATION	
PROGRAM	BRIDGE PROGRAM
PROJECT MANAGER	L. TIMMERLAKE
DESIGNER	D. TAYLOR
CONSULTANT	STANTEC
PROJECT RESIDENT	GLENN PHILBROOK
CONTRACTOR	
PROJECT COMPLETION DATE	

SOUTHPORT THOMPSONS BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 43



Date:3/1/2019

Username: dataylor

Division: BRIDGE

Filename: ...\\00\\BRIDGE\\MSTA 001\\Title.dgn

WIN 18748.00

STP-1874(800)

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.23	REMOVING SINGLE TREE TOP ONLY	10	EA
201.24	REMOVING STUMP	11	EA
202.19	REMOVING EXISTING BRIDGE	1	LS
202.202	REMOVING PAVEMENT SURFACE	620	SY
203.20	COMMON EXCAVATION	470	CY
203.2318	DISPOSAL OF SPECIAL WASTE	100	T
203.24	COMMON BORROW	10	CY
203.25	GRANULAR BORROW	320	CY
206.082	STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES, PLAN QUANTITY	850	CY
206.092	STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	24	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	590	CY
403.208	HOT MIX ASPHALT - 12.5 MM	170	T
403.209	HOT MIX ASPHALT - 9.5 MM (SIDEWALKS, DRIVES, & INCIDENTALS)	28	T
403.211	HOT MIX ASPHALT - SHIM	8	T
403.213	HOT MIX ASPHALT - 12.5 MM (BASE AND INTERMEDIATE COURSE)	170	T
409.15	BITUMINOUS TACK COAT - APPLIED	120	G
501.239	DYNAMIC LOADING TEST - PROVIDING FOR	1	EA
501.551	FRP COMPOSITE PILE, DELIVERED	134	LF
501.552	FRP COMPOSITE PILE, IN PLACE	126	LF
501.59	STEEL H-BEAM PILES 204 LB/FT, DELIVERED	292	LF
501.591	STEEL H-BEAM PILES 204 LB/FT, IN PLACE	292	LF
501.90	PILE TIPS	4	EA
501.91	PILE SPLICES	8	EA
501.92	PILE DRIVING EQUIPMENT MOBILIZATION	1	LS
502.219	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS (148 CY)	1	LS
502.22	STRUCTURAL CONCRETE, ABUT. AND RET. WALLS (PLACED UNDER WATER)	250	CY
502.239	STRUCTURAL CONCRETE PIERS (19 CY)	1	LS
502.25	STRUCTURAL CONCRETE SUPERSTRUCTURE SLAB (62 CY)	1	LS
502.31	STRUCTURAL CONCRETE APPROACH SLAB (19 CY)	1	LS
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS (24 CY)	1	LS
503.12	REINFORCING STEEL, FABRICATED & DELIVERED	4600	LB
503.13	REINFORCING STEEL, PLACING	4600	LB
503.26	STAINLESS STEEL REINFORCEMENT, FABRICATED AND DELIVERED	28400	LB
503.27	STAINLESS STEEL REINFORCEMENT, PLACING	28400	LB
504.70	STRUCTURAL STEEL FABRICATED & DELIVERED (4200 LB)	1	LS
504.71	STRUCTURAL STEEL ERECTION (4200 LB)	1	LS
507.0821	STEEL BRIDGE RAILING, 3 BAR (376 LF)	1	LS
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (560 SY)	1	LS
511.07	COFFERDAM: ABUTMENT NO. 1	1	LS
511.07	COFFERDAM: ABUTMENT NO. 2	1	LS
512.081	FRENCH DRAINS (110 LF)	1	LS
514.06	CURING BOX FOR CONCRETE CYLINDERS	1	EA
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (240 SY)	1	LS
523.52	BEARING INSTALLATION	16	EA
523.5402	LAMINATED ELASTOMERIC BEARINGS, EXPANSION	16	EA
526.301	TEMPORARY CONCRETE BARRIER, TYPE 1 (48 LF)	1	LS
526.34	PERMANENT CONCRETE TRANSITION BARRIER	4	EA
535.61	PRESTRESSED STRUCTURAL CONCRETE I-GIRDERS (784 LF)	1	LS
603.179	18 INCH CULVERT PIPE OPTION III	14	LF
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	1	EA
606.1301	31"W-BEAM GUARDRAIL, MID-WAY SPLICE - SINGLE FACED	231.25	LF
606.1304	31"W-BEAM GUARDRAIL, MID-WAY SPLICE - OVER 15' RADII'S	156.25	LF
606.1307	BRIDGE TRANSITION (ASYMMETRICAL) - TYPE 1	4	EA
606.2591	ANCHORAGE ASSEMBLY FOR DRIVEWAY RADIUS	1	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	6	EA
606.51	MULTIPLE MAILBOX SUPPORT	1	EA
610.08	PLAIN RIPRAP	1100	CY
610.16	HEAVY RIPRAP	94	CY
610.18	STONE DITCH PROTECTION	5	CY
613.319	EROSION CONTROL BLANKET	73	SY
615.07	LOAM	86	CY

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
618.13	SEEDING METHOD NUMBER 1	2	UN
618.14	SEEDING METHOD NUMBER 2	6	UN
619.12	MULCH	7	UN
619.14	EROSION CONTROL MIX	50	CY
620.58	EROSION CONTROL GEOTEXTILE	1050	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	680	LF
629.05	HAND LABOR, STRAIGHT TIME	100	HR
631.12	ALL-PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK-LARGE (INCLUDING OPERATOR)	10	HR
631.22	FRONT END LOADER (INCLUDING OPERATOR)	10	HR
631.32	CULVERT CLEANER (INCLUDING OPERATORS)	5	HR
639.18	FIELD OFFICE, TYPE A	1	EA
652.312	TYPE III BARRICADES	7	EA
652.33	DRUM	10	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	290	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (220 CD)	1	LS
652.38	FLAGGER	250	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	3	EA
656.75	TEMPORARY SOIL EROSION & WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1874(800)

WIN
18748.00
BRIDGE NO. 2848
BRIDGE PLANS

THOMPSONS BRIDGE
DECKER COVE
SOUTHPORT
LINCOLN COUNTY

ESTIMATED QUANTITIES

SHEET NUMBER

2
OF 43

GENERAL CONSTRUCTION NOTES

1. During construction, the road will be closed to traffic for a time period specified in the Special Provisions.

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

3. The exact clearing limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.

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

5. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

6. In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.

7. All embankment material, except as otherwise shown, placed below EL 9.0 shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Material for Underwater Backfill.

8. Place riprap on sideslopes up to EL 7.0, unless otherwise shown on the plans.

9. Construct the riprap shelf at each abutment at EL 3.0.

10. On Nickerson Road, stones which cannot be rolled or compacted into the surface of the shoulder shall be removed by hand raking. Payment for hand raking will be considered incidental to Item No. 304.10, Aggregate Subbase Course - Gravel.

11. Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.

12. Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.

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

14. Guardrail posts as shown in the Standard Details shall be modified from the indicated length of 6 feet to a length 8 feet with an embedment of 5.5 feet. Payment will be considered incidental to the guardrail pay items.

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

16. Residential paved entrances shall be constructed with 2" Hot Mix Asphalt and 12" Aggregate Subbase Course Gravel.

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

All exposed surfaces of concrete curbs,
Fascias down to the drip notch,
All exposed surfaces of Concrete Transition Barriers,
Top of abutment end diaphragms and to one foot below the top of end diaphragms on the back side.

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

19. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

20. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

21. The project geotechnical report titled: Geotechnical Design Report, Thompsons Bridge No. 2848 over Decker Cove, MaineDOT WIN 18748, Southport, Maine may be accessed at the MaineDOT web address.

22. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

23. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

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 a 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 adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

24. The existing bridge shall be removed in its entirety by and become the property of the Contractor, unless otherwise noted. The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required to remove and dispose of the existing bridge will be considered incidental to the bridge removal pay item.

25. An NCHRP350 or MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.

26. Existing culvert and catch basins will be cleaned as directed by the Resident under Item 631.32 Culvert Cleaner.

27. Inlets and outlets of all culverts shall be riprapped unless otherwise noted on the Plans or directed by the Resident.

28. The culvert sizes shown on the Plans and cross sections are for smoothlined pipes.

29. Any necessary cutting of existing pipe connections will not be paid for separately and will be considered incidental to related Contract items.

30. Any damage to the slopes caused by the Contractor's equipment, personnel, or operations shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at no cost to the Department.

31. No separate payment for superintendent or foreman will be made for the supervision of equipment and layout of work being paid for under the equipment rental items.

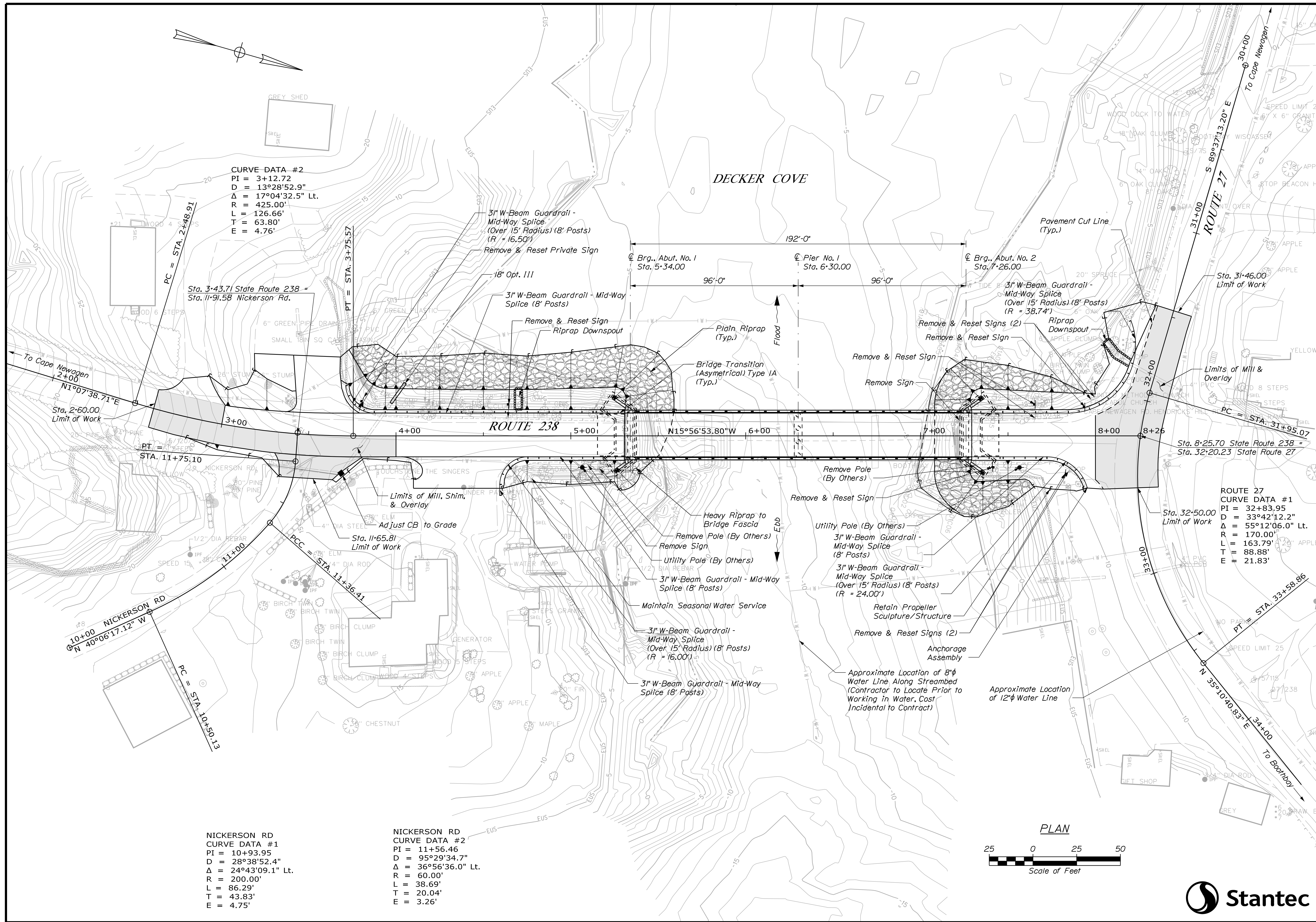
32. Catch basin and rim elevations (including "Behind Curb Catch Basins") noted on the cross sections are the top of the grate elevations at the center of grate. Catch basin offset locations are measured to the center of grate.

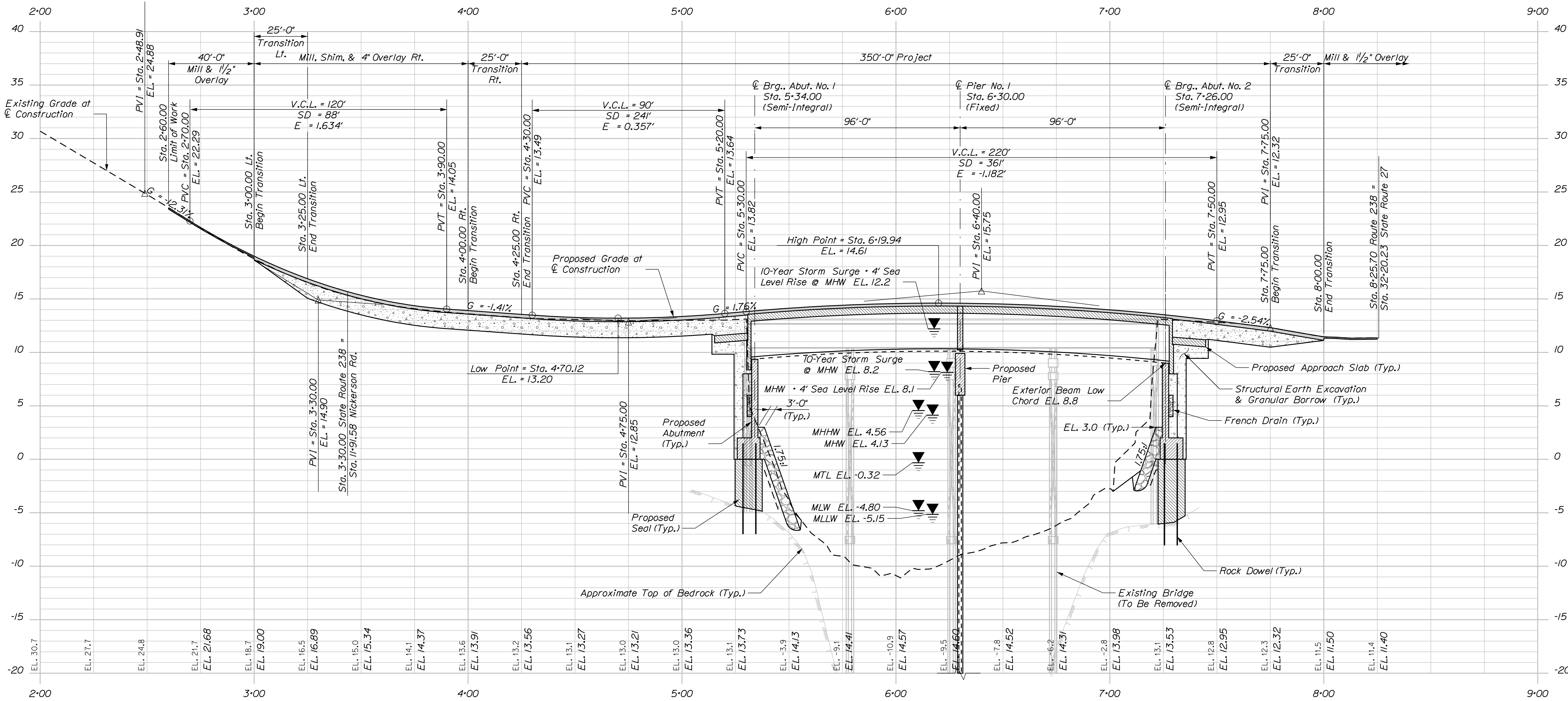
33. Install two layers of 6 mil polyethylene sheeting under approach slabs. Payment will be considered incidental to Item No. 502.31, Structural Concrete Approach Slab.

34. Existing signs within the Project limits shall be removed and reset as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.

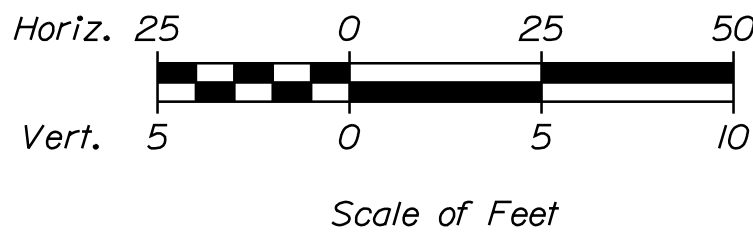
35. The Contractor shall not disturb or otherwise impact the propeller at Sta. 7+74.38, 30.13' RT.

THOMPSONS BRIDGE DECKER COVE SOUTHPORT					PROJ. MANAGER		L. TIMBERLAKE	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-1874(800)	
LINCOLN COUNTY CONSTRUCTION NOTES					DESIGN-DETAILED		LSF	KLW/LSF	FEB 2019		
					CHECKED-REVIEWED		DOT/PAG	DOT/WM			
					DESIGN2-DETAILED2						
					DESIGN3-DETAILED3				P.E. NUMBER		
					REVISIONS 1					BRIDGE NO. 2848 WIN 18748.00 BRIDGE PLANS	
					REVISIONS 2						
					REVISIONS 3						
					REVISIONS 4				DATE		
					FIELD CHANGES						





PROFILE - ROUTE 238



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1874(800)

BRIDGE NO. 2848
WIN
18748.00
BRIDGE PLANS

THOMPSONS BRIDGE
DECKER COVE
SOUTHPORT
LINCOLN COUNTY

PROFILE

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	DOT	FEB 2019	SIGNATURE
CHECKED-REVIEWED	LSF	FEB 2019	P.E. NUMBER
DESIGN-DETAILED	PLP	FEB 2019	DATE
DESIGN-DETAILED	PLP		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SHEET NUMBER
5
OF 43

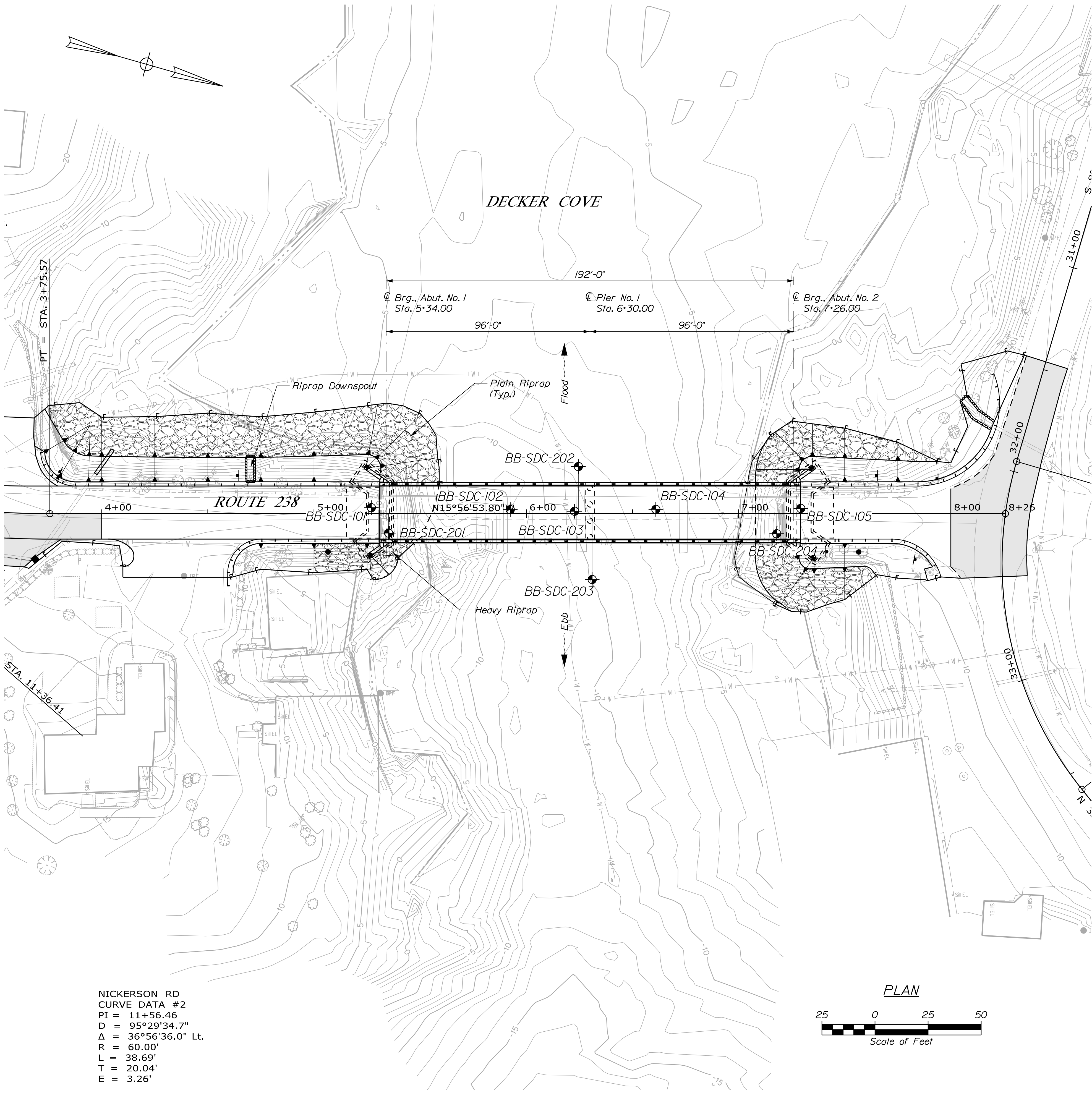


Date: 3/1/2019

Username: dataylor

Division: BRIDGE

Filename: ...\\00\\BRIDGE\\MSTA\\006_BLP.DGN

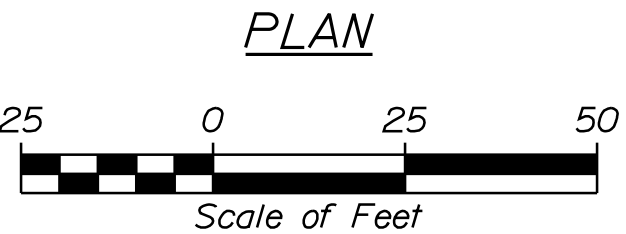
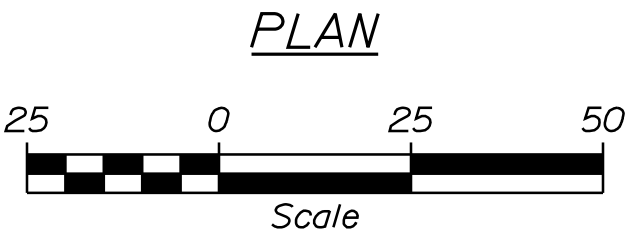


NOTES

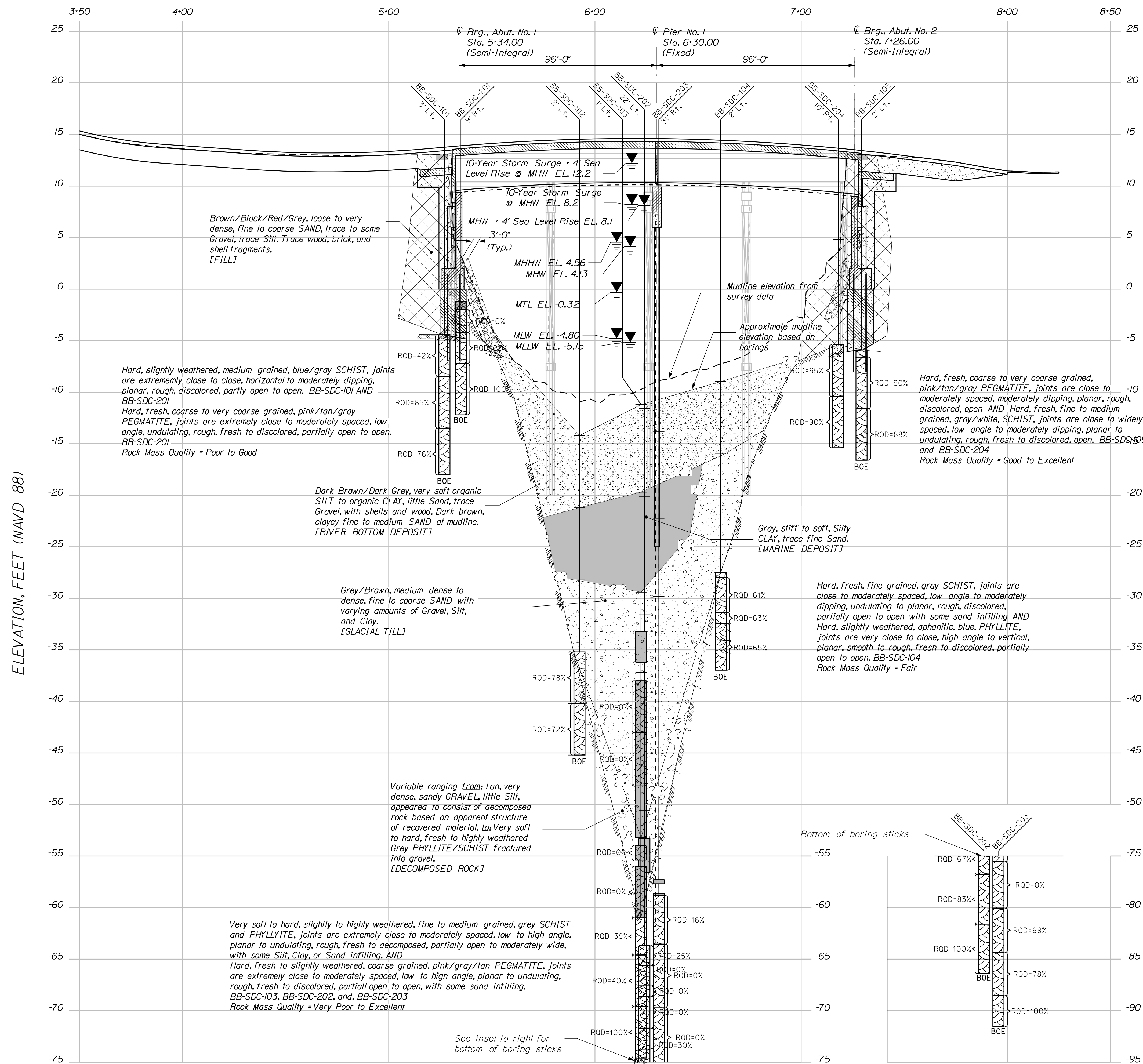
- 1) Base map developed from electronic files provided by Stantec on August 16, 2016 (Files included 002_GeneralPlan.dgn, BDPLAN.dgn, contours.dgn, and 3DTopo_10aug16.dgn) and on January 24, 2019 (bridge.dgn).
- 2) The as drilled locations of the test borings were estimated by taping to existing bridge structural elements and should be considered approximate.
- 3) BB-SDC-100 series bridge borings were performed by New England Boring Contractors and observed by GZA personnel between May 24 and May 27, 2016.
- 4) BB-SDC-200 series bridge borings were performed by New England Boring Contractors and observed by GZA personnel between November 13, 2018 and December 27, 2018.

LEGEND

BB-SDC-204 Location and designation of cased wash boring



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-1874(800)		BRIDGE NO. 2848		WIN 18748.00		BRIDGE PLANS	
THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY		BORING LOCATION PLAN		SHEET NUMBER		6		OF 43	
PROJ. MANAGER		L. TIMBERLAKE		BY		DATE		SIGNATURE	
DESIGNED-DETAILED		NW		CLS		FEB 2019		P.E. NUMBER	
CHECKED-REVIEWED		ARB				FEB 2019		DATE	
DESIGNS-DETAILED									
REVISIONS 1									
REVISIONS 2									
REVISIONS 3									
REVISIONS 4									
FIELD CHANGES									
PREPARED BY:		GZA		Andrew R. Blasdel		10957		02/21/2019	
STATE OF MAINE		PROFESSIONAL ENGINEER		10957					



NOTES

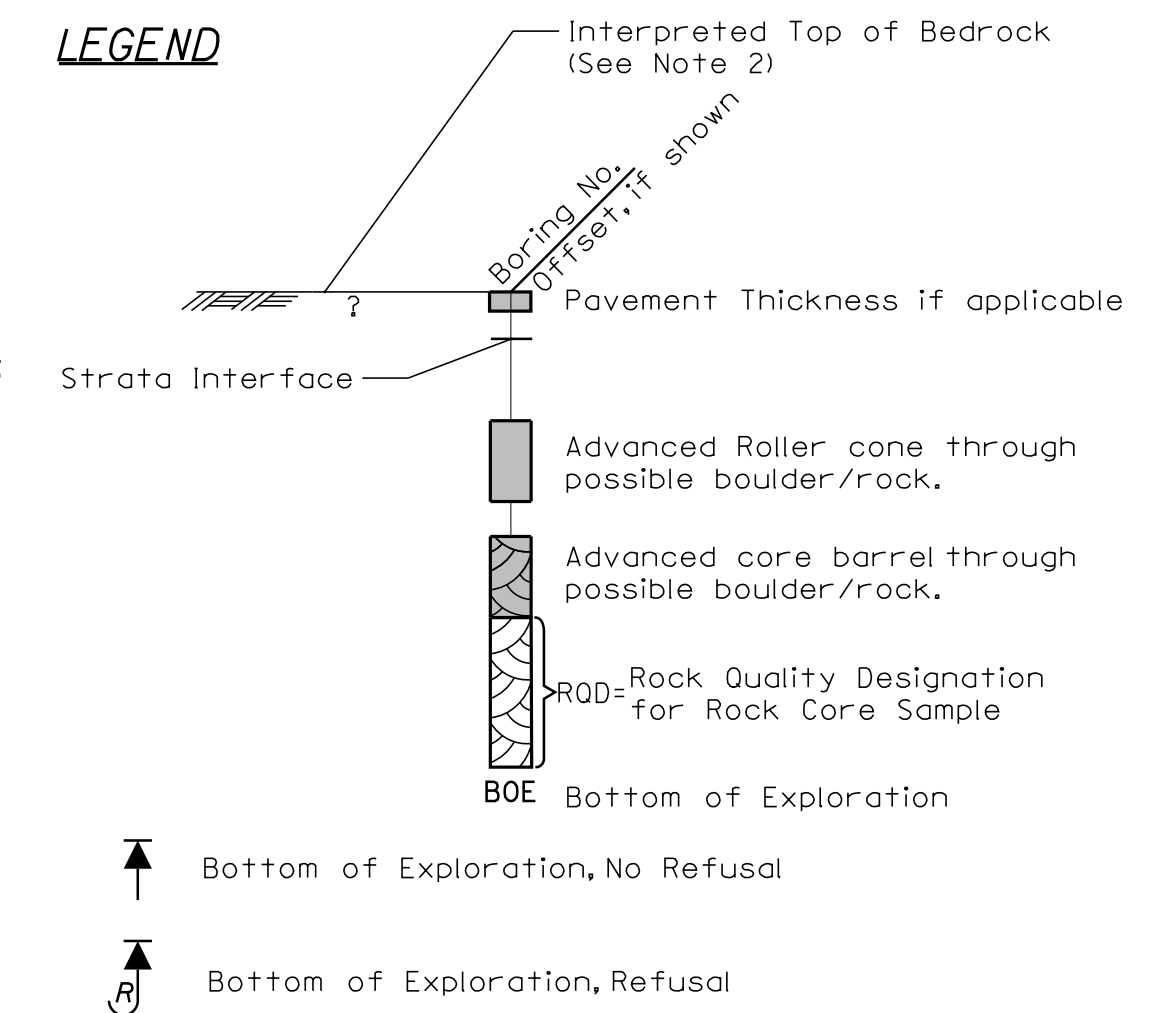
1) Base map developed from electronic files provided by Stantec on January 24, 2019 (Files included profiles.dgn).

2) The as drilled locations of the test borings were estimated by taping to existing bridge structural elements and should be considered approximate.

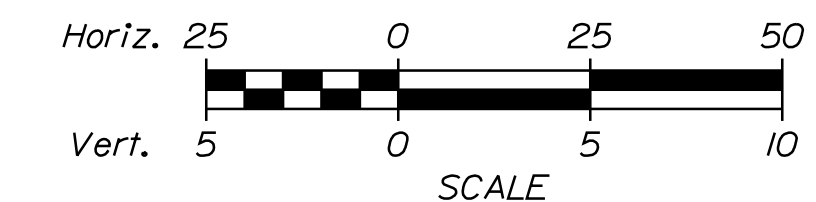
3) Interpreted top of rock considers general trend of ledge lines from 1933 plans between borings BB-SDC-101 and -102 and between borings BB-SDC-104 and -105.

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 transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

LEGEND



PROFILE



STATE OF NEW YORK	
DEPARTMENT OF TRANSPORTATION	
	STP-1874(800)
	WIN
	18748.00
BRIDGE NO. 2848	BRIDGE PLANS

Jeff Ball
SIGNATURE _____
10957
E. NUMBER _____
02/21/2019
DATE _____



DESIGN-DETAILED	NWV	NWV	FEB 2019
CHECKED-REVIEWED	ARB	CLS	FEB 2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

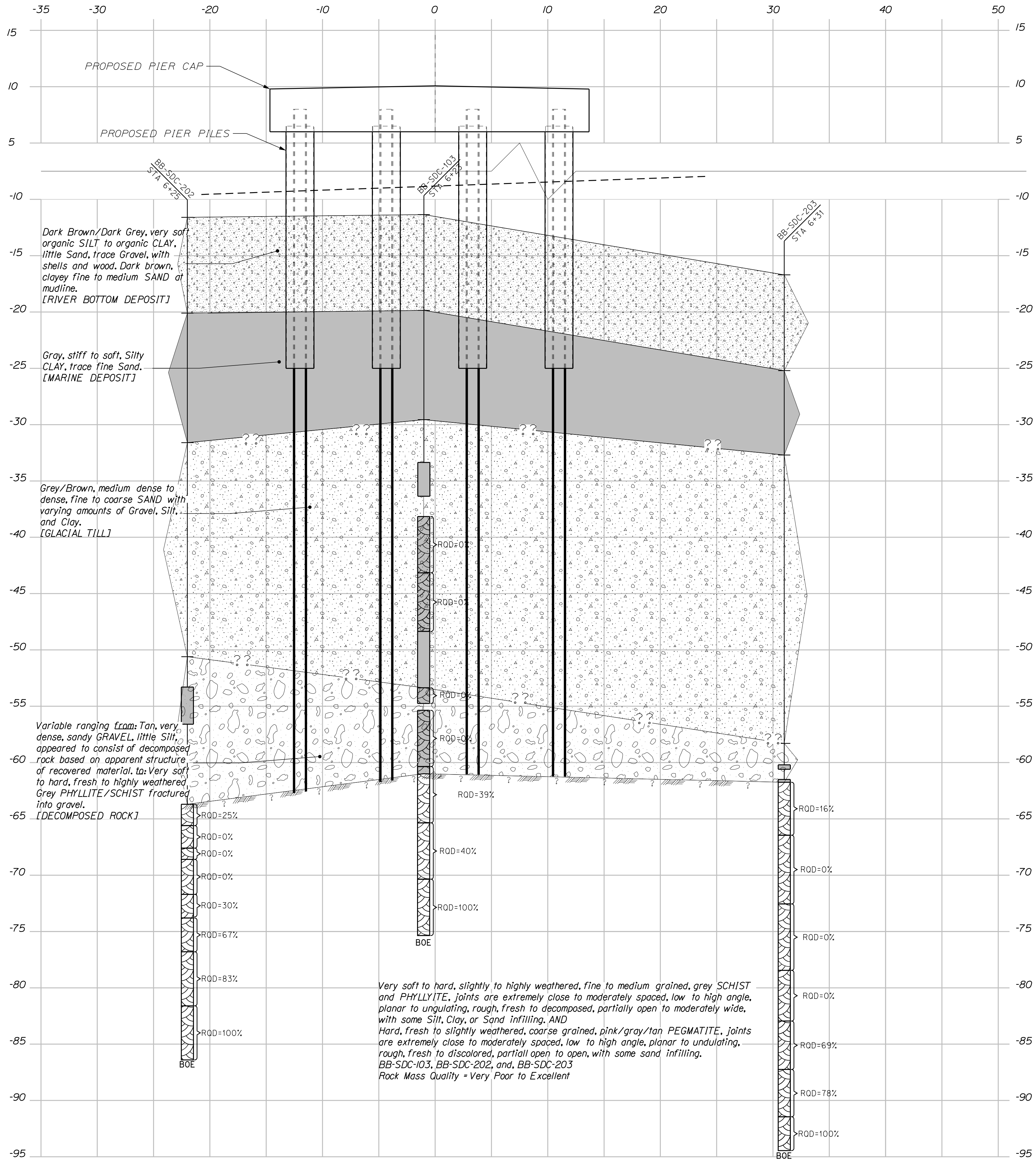
THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

7

OF 43

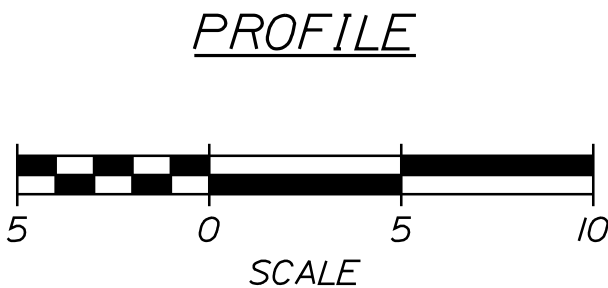
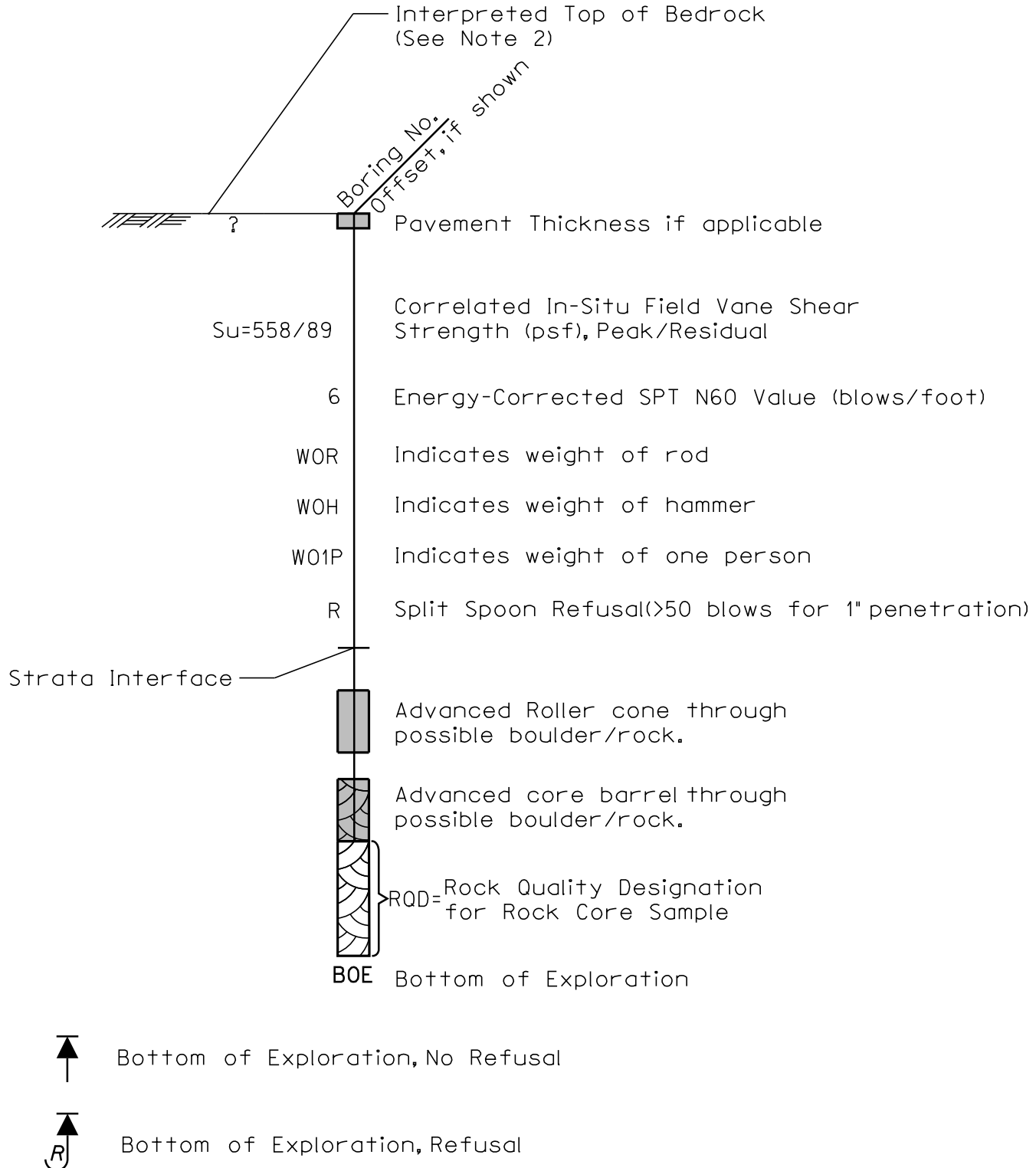
ELEVATION, FEET (NAVD 88)



NOTES

- 1) The as drilled locations of the test borings were estimated by taping to existing bridge structural elements and should be considered approximate.
- 2) This generalized interpretive subsurface cross section 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 transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

LEGEND



PREPARED BY:

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-1874(800)		BRIDGE PLANS	
THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY		INTERPRETIVE SUBSURFACE CROSS SECTION		SHEET NUMBER 8 OF 43	
PROJ. MANAGER L. TIMBELLA DESIGN-DETAILED NW CHECKED-REVIEWED ARB DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 4 FIELD CHANGES		DATE FEB 2019 FEB 2019 BY NW CLS SIGNATURE Andrew R. Blaisdell 10957 P.E. NUMBER 02/21/2019 DATE		BRIDGE NO. 2848 WIN 18748.00	

[illegible]

Maine Department of Transportation										Project: Thompson Bridge #248 Over Deck Core		Boring No.: BB-SDC-104	
Soil/Rock Exploration Log US Geological UNITS										Location: Southport, Maine		PIN: 018748-00	
Driller: New England Boring Contractors		Elevation (ft.):		-9.0 (est.)		Asper: O/D/0							
Operator: M. Porter / J. B. Enos		Datum:		NAVD 88		Sampler:		SS, R					
Lugged By: N. Williams (GZA)		Rig Type:		ATV Mobile Drill Series 2		Hammer: W1/Fall		140/30					
Date Start/Finish: 05/25-16/05/25-16		Drilling Method:		Drive & Wash		Core Barrel:		NX					
Boring Location: N24495, E500362		Casing O/D/ID:		3/3.5"		Water Level:		Total					
Hammer Efficiency Factor: 0.6		Hammer Type:		Automatic		Hydraulic		Rope & Catwalk		X			
Definitions: O - Split Spoon Sample U - Unsuccessful Split Spoon Sample attempt U - Thin Wall Tube Sample MU - Unsuccessful Thin Wall Tube Sample attempt V - In-situ Vane Shear Test MU - Unsuccessful In-situ Vane Shear Test attempt		R - Rock Core Sample SSA - Solid Stem Auger HSA - Hollow Stem Auger RC - Rotary Core RWH - weight of HSB hammer RWH - weight of rods RWH - Weight of log section		S _u - In-situ End Zone Shear Strength (psi) T _u - In-situ Torsion Shear Strength (psi) S _u - Unconfined Compressive Strength (ksi) N _u - Standard - Raw Soil SPT In-situ Hammer Efficiency Factor - Actual Calibration Value N _u - SPT Uncorrected corrected for hammer efficiency N _u - Hammer Efficiency Factor (N60/60) uncorrected		S _u - Lab Vane Shear Strength (psi) RE - water content, percent LL - Liquid Limit PL - Plastic Limit PI - Plasticity Index C - Grain Size Analysis C - Consolidation Test							
Sample Information													
Depth (ft.)	Sample No.	Flow/Rec. (in.)	Sample Depth (ft.)	Blows (16 in.) Strength or RWD (25)	Noncorrected	N60	Casing Blow	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class		
												WDR	WDR
0	1D	24/21	0.0 - 2.0	WOR-WOR-WDR	0	0	WDR			Black/gray, wet, very soft, sandy organic silt, shell fragments. -ROVER BOTTOM DEPOSIT- (OL) gray wet water return contained wood, brick, shells, fine sand.	WC-39.4		
5	2D	24/6	5.0 - 7.0	WDR-1-WOR-2	1	1				Dark gray, wet, very loose, fine to coarse SAND, some Silt, little Gravel, shell and wood fragments. -ROVER BOTTOM DEPOSIT- (SM) Casing resistance increased at 7.0' bgs, probable granular material.	G-10 A-2-4, SM WC-46.1		
10	3D	24/6	10.0 - 12.0	7-7-13-13	20	20	36			Brown, wet, medium dense, fine to coarse SAND, some Gravel, little Silt. (GACAL, TEL: (SM)	G-11 A-1-6, SM		
15	4D	24/5	15.0 - 17.0	10-33-14-15	47	47	10			Brown, wet, dense, fine to coarse SAND, some Silt, some Gravel. (GACAL, TEL: (SM)	G-12 A-2-4, SM		
20	R1	33/31	19.0 - 21.8	RDD - 63f						Increased resistance at 18.5' bgs. Apparent Top of Rock. Advanced casing and raker cone to 19.0' bgs and started to core.	-18.5-		
25	R2	26/26	21.8 - 24.0	RDD - 63f						R1: Hard, fresh, fine grained, gray, SCHST. Joints are close to moderately spaced, low angle, undulating, rough, discolored, partially open. Rock Mass Quality - Fair Recovery = 94% Rock Core Times (min/ft): 3.0, 1.75, 1.75 R2: 21.8'-23.7': Hard, fresh, coarse grained, gray SCHST. Joints are close, moderately dipping, planar, rough, fractured, partially open.	G _u =1850 ksi		
30	R3	54/54	24.0 - 28.5	RDD - 65f						R3: 23.7'-24.0': Hard, slightly weathered, aphonic, blue, PHYLITE. Joints are very close to close, high angle, planar, smooth, fresh, partially open. Rock Mass Quality - Fair Recovery = 100% Rock Core Times (min/ft): 1.75, 2.0, 2.25, 1.75 R3: 24.0'-26.0': Hard, fresh, aphonic, blue, PHYLITE. Joints are very close to close, high angle to vertical, planar, rough, discolored, open. R3: 26.0'-29.5': Hard, fresh, fine grained, SCHST. Joints are close to moderately spaced, moderately dipping, planar, rough, discolored, open. Some silt infilling. Rock Mass Quality - Fair Recovery = 100% Rock Core Times (min/ft): 2.0, 2.75	-23.1- -26.0- -29.5-		
35										Bottom of Exploration at 29.50' below ground surface.			
40													
45													
50													

REMARKS:

1. Madine level at 22.0' below bridge deck elevation.
2. Drive & Wash hole casing to 8.0' bgs.
3. Approximate boring locations were determined by taping from existing bridge structural elements. Coordinates were estimated to the nearest foot using measured offset distances in the plans. Ground surface/madine elevations were estimated noted on an assumed bridge deck and approach road elevation of EL. 13'.

Page 1 of 1

Boring No.: BB-SDC-104

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

Maine Department of Transportation										Project: Thompson Bridge #248 Over Deck Cove		Boring No.: BB-SDC-105																											
Soil/Rock Exploration Log										Location: Southport, Maine		PIN: 018748.00																											
US CUSTOMARY UNITS																																							
Driller: M. Porter / B. Tros				Elevation (ft.): 13.0 (est.)		Auger ID/OD: _____																																	
Operator: N. Milnes (GZ)				Datum: NVD 88		Sampler: _____																																	
Logged By: N. Milnes (GZ)				Rq. Type: A15 Mobile Drive Series 2		Hammer Wt./ft./s: 145, 8																																	
Date Start/Finish: 05/14/05-05/24/06				Drilling Method: SSA/Drive & Wash/Spin		Core Barrel: NX																																	
Boring Location: N724561, E7500343				Casing ID/OD: 4.4/5", 3/15"		Water Level: ____ Tides																																	
Hammer Efficiency Factor: 0.6				Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒																																			
Definitions: D = Split Spoon Sample W = Unconsolidated Split Spoon Sample attempt U = Thin Wall Tube Sample WU = Unconsolidated Thin Wall Tube Sample attempt V = Hole Vane Shear Test WDR = Unconsolidated Thin Wall Tube Sample attempt										R = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDR = weight of rods WDR = weight of rods WDR = Weight of one person										Sp. = Hole Field Vane Shear Strength (psi) T _u = Torque Torque Shear Strength (psi) C _u = Unconsolidated Compressive Strength (psi) N _u = Unconsolidated - Hole Test SPT N-value H _u = Hammer Efficiency Factor - Actual Collection Value N _u = SPT Unconsolidated corrected for hammer efficiency N _u = Hammer Efficiency Factor/SDC/Unconsolidated										S _u /c _u = 1.48 Vane Shear Strength (psi) WC = water content, percent LL = Liquid Limit P = Plastic Index C = Grain Size Analysis C = Consolidation Test									
Sample Information										Visual Description and Remarks										Laboratory Testing Results/ASHTO and Unified Class																			
Depth (ft.)	Sample No.	Pen./R.C. (in.)	Sample Depth (ft.)	Bore (1/8 in.) Strength (lb/ft. or ASD 1/2)	Unconsolidated	N _u	Casing	Excavation (ft.)	Graphic Log																														
10	24/10	1.0 - 3.0	9.6-7.7	13	13					Red-brown, dry, medium dense, fine to coarse sand, trace gravel, trace silt. FILL: (SW-SM)										G13 w/b, SW-SM																			
20	24/6	5.0 - 7.0	2-1-2.4	3	3	7				Red-brown, dry, very loose, fine to medium SAND, trace gravel, trace silt. FILL: (SP-SM)										G14 A-3, SP-SM																			
30	24/8	10.0 - 12.0	9-8-6-84	24	24	15				White/grey/ton, wet, medium dense, GRAVEL some fine to medium sand, trace silt. open gravel, several full diameter pieces (probable cobbles/boulders). FILL (POSSIBLE ROCK FILL): (GP)																													
40	24/5	15.0 - 17.0	9-3-2-3	5	5	40				Black and grey, wet, loose, GRAVEL, little fine to medium grained sand. FILL: (GP)																													
R1	60/60	19.6 - 24.6	ROD - 90'							Casing refusal at 18.9' bgs. Advanced roller came to approximately 19.2' bgs, spun NW casing to 19.6' bgs and started to core. Apparent Top of Rock at 18.9' bgs. R1: 19.6'-21.1': Hard, fresh, coarse to very coarse grained, pink/taupe/grey, PEGMATITE, joints are close to moderately spaced, moderately dipping, planar, rough, discolored, open. R1: 21.1'-24.6': Hard, fresh, fine to medium grained, grey and white, SCHIST, joints are moderately to widely spaced, low angle, planar, rough, fresh to discolored, open. Rock Mass Quality = Good Recovery = 100% Rock Core Times (min/ft): 2.0, 1.5, 1.5, 1.5, 1.5 R1: 24.6'-28.5': Hard, fresh, fine grained, grey and white, SCHIST, joints are close to moderately spaced, moderately dipping, planar, rough, discolored, open.										-5.9																			
R2	60/60	24.6 - 29.6	ROD - 88'							R2: 21.1'-24.6': Hard, fresh, fine to medium grained, grey and white, SCHIST, joints are moderately to widely spaced, low angle, planar, rough, fresh to discolored, open. Rock Mass Quality = Good Recovery = 100% Rock Core Times (min/ft): 2.0, 1.5, 1.5, 1.5, 1.5 R2: 24.6'-28.5': Hard, fresh, fine grained, grey and white, SCHIST, joints are close to moderately spaced, moderately dipping, planar, rough, discolored, open.										-8.1	η=1740 ksf																		
25																				-21.1	η=1360 ksf																		
30																				-15.5																			
35																				-16.6																			
40																				-28.5																			
45																			-29.6																				
Bottom of Exploration at 29.6 feet below ground surface.																																							
Remarks: 1. Advanced SSA through asphalt 5" thick, continued with SSA to 5.0' bgs. 2. Drove NW casing to 14.2' bgs. Spun NW casing to 19.6' prior to coring. 3. Approximate boring locations were determined by taping from existing bridge structural elements. Coordinates were estimated to the nearest foot using measured offset distances in the plans. Ground surface/mudline elevations were estimated based on an assumed bridge deck and approach road elevation of El. 13'. * Water level readings have been made at times and under conditions stated. Streamwater fluctuations may occur due to conditions other than those present at the time measurements were made.																																							
Stratification lines represent approximate boundaries between soil types; transitions may be gradual. * Water level readings have been made at times and under conditions stated. Streamwater fluctuations may occur due to conditions other than those present at the time measurements were made.														Page 1 of 1																									
Boring No.: BB-SDC-105																																							

Moine Division of Transportation Soil/Rock Exploration Log				Project: Thompson Bridge #2848 Over Decker Cove		Boring No.: BB-SDC-201	
US CUSTOMARY UNITS				Location: Southport, Maine		PIN: 018748.00	
Driller: New England Boring Contractors		Elevation (ft.): 4.7 (test)		Auger ID/OD:			
Operator: Brad Ernst		Datum: NAVD 88		Sampler:		Split Spoon	
Lugged By: R. Woodson (G24)		Rig Type: ATV-Mounted Mobile D/R B-23		Hammer (BL/Fall): 140/10		Core Barrel: NQ	
Date Start/Finish: 12/27/18-12/27/18		Drilling Method: Drive & Wash		Water Level: *		Total	
Boring Location: N284376, E7502407		Casing ID/OD: 4/4.5", 3/3.5"		Hammer Efficiency Factor = Annual Calibration Value		N ₆₀ - Plastic Limit	
Hammer Efficiency Factor: 0.869		Hammer Type: Automatic ☒ Hydraulic ☐ Split & Cathead ☐		N ₆₀ - Plastic Limit		C - Gravel Size Analysis	
Definitions:		R = Rock Core Sample		S _u = Mini Field Vane Shear Strength (psi)		S _u = Mini Field Vane Shear Strength (psi)	
D = Split Spoon Sample		SDA = Solid Stem Auger		T _u = Pocket Torque Shear Strength (psi)		W _c = water content, percent	
ND = Unsuccessful Split Spoon Sample attempt		HSA = Hollow Stem Auger		C _u = Isolated Compressive Strength (psi)		LL = Liquid Limit	
U = Thin Wall Tube Sample		RC = Rubber Core		N _u = Undrained - Flow Test SPT N-value		PL = Plastic Limit	
M _u = Unsuccessful Thin Wall Tube Sample attempt		ROR = weight of ROR hammer		Hammer Efficiency Factor = Annual Calibration Value		P = Plasticity Index	
V = Mobile Vane Shear Test		ROR = weight of rods		N ₆₀ - SPT Undrained corrected for hammer efficiency		C = Grain Size Analysis	
MC = Unsuccessful Mobile Vane Shear Test attempt		ROR = weight of one rod		N ₆₀ - Hammer Efficiency Factor/6000=uncorrected		C = Consolidation Test	
Sample Information							
Depth (ft.)	Sample No.	Pen./Feet (in.)	Sample Depth (ft.)	Bore (1/8 in.) Bore (1/4 in.) Bore (3/8 in.) Bore (1/2 in.) Bore (3/4 in.) Bore (1 in.) Bore (1 1/4 in.) Bore (1 1/2 in.) Bore (1 3/4 in.) Bore (2 in.) Bore (2 1/4 in.) Bore (2 1/2 in.) Bore (2 3/4 in.) Bore (3 in.) Bore (3 1/4 in.) Bore (3 1/2 in.) Bore (3 3/4 in.) Bore (4 in.) Bore (4 1/4 in.) Bore (4 1/2 in.) Bore (4 3/4 in.) Bore (5 in.) Bore (5 1/4 in.) Bore (5 1/2 in.) Bore (5 3/4 in.) Bore (6 in.) Bore (6 1/4 in.) Bore (6 1/2 in.) Bore (6 3/4 in.) Bore (7 in.) Bore (7 1/4 in.) Bore (7 1/2 in.) Bore (7 3/4 in.) Bore (8 in.) Bore (8 1/4 in.) Bore (8 1/2 in.) Bore (8 3/4 in.) Bore (9 in.) Bore (9 1/4 in.) Bore (9 1/2 in.) Bore (9 3/4 in.) Bore (10 in.) Bore (10 1/4 in.) Bore (10 1/2 in.) Bore (10 3/4 in.) Bore (11 in.) Bore (11 1/4 in.) Bore (11 1/2 in.) Bore (11 3/4 in.) Bore (12 in.) Bore (12 1/4 in.) Bore (12 1/2 in.) Bore (12 3/4 in.) Bore (13 in.) Bore (13 1/4 in.) Bore (13 1/2 in.) Bore (13 3/4 in.) Bore (14 in.) Bore (14 1/4 in.) Bore (14 1/2 in.) Bore (14 3/4 in.) Bore (15 in.) Bore (15 1/4 in.) Bore (15 1/2 in.) Bore (15 3/4 in.) Bore (16 in.) Bore (16 1/4 in.) Bore (16 1/2 in.) Bore (16 3/4 in.) Bore (17 in.) Bore (17 1/4 in.) Bore (17 1/2 in.) Bore (17 3/4 in.) Bore (18 in.) Bore (18 1/4 in.) Bore (18 1/2 in.) Bore (18 3/4 in.) Bore (19 in.) Bore (19 1/4 in.) Bore (19 1/2 in.) Bore (19 3/4 in.) Bore (20 in.) Bore (20 1/4 in.) Bore (20 1/2 in.) Bore (20 3/4 in.) Bore (21 in.) Bore (21 1/4 in.) Bore (21 1/2 in.) Bore (21 3/4 in.) Bore (22 in.) Bore (22 1/4 in.) Bore (22 1/2 in.) Bore (22 3/4 in.) Bore (23 in.) Bore (23 1/4 in.) Bore (23 1/2 in.) Bore (23 3/4 in.) Bore (24 in.) Bore (24 1/4 in.) Bore (24 1/2 in.) Bore (24 3/4 in.) Bore (25 in.) Bore (25 1/4 in.) Bore (25 1/2 in.) Bore (25 3/4 in.) Bore (26 in.) Bore (26 1/4 in.) Bore (26 1/2 in.) Bore (26 3/4 in.) Bore (27 in.) Bore (27 1/4 in.) Bore (27 1/2 in.) Bore (27 3/4 in.) Bore (28 in.) Bore (28 1/4 in.) Bore (28 1/2 in.) Bore (28 3/4 in.) Bore (29 in.) Bore (29 1/4 in.) Bore (29 1/2 in.) Bore (29 3/4 in.) Bore (30 in.) Bore (30 1/4 in.) Bore (30 1/2 in.) Bore (30 3/4 in.) Bore (31 in.) Bore (31 1/4 in.) Bore (31 1/2 in.) Bore (31 3/4 in.) Bore (32 in.) Bore (32 1/4 in.) Bore (32 1/2 in.) Bore (32 3/4 in.) Bore (33 in.) Bore (33 1/4 in.) Bore (33 1/2 in.) Bore (33 3/4 in.) Bore (34 in.) Bore (34 1/4 in.) Bore (34 1/2 in.) Bore (34 3/4 in.) Bore (35 in.) Bore (35 1/4 in.) Bore (35 1/2 in.) Bore (35 3/4 in.) Bore (36 in.) Bore (36 1/4 in.) Bore (36 1/2 in.) Bore (36 3/4 in.) Bore (37 in.) Bore (37 1/4 in.) Bore (37 1/2 in.) Bore (37 3/4 in.) Bore (38 in.) Bore (38 1/4 in.) Bore (38 1/2 in.) Bore (38 3/4 in.) Bore (39 in.) Bore (39 1/4 in.) Bore (39 1/2 in.) Bore (39 3/4 in.) Bore (40 in.) Bore (40 1/4 in.) Bore (40 1/2 in.) Bore (40 3/4 in.) Bore (41 in.) Bore (41 1/4 in.) Bore (41 1/2 in.) Bore (41 3/4 in.) Bore (42 in.) Bore (42 1/4 in.) Bore (42 1/2 in.) Bore (42 3/4 in.) Bore (43 in.) Bore (43 1/4 in.) Bore (43 1/2 in.) Bore (43 3/4 in.) Bore (44 in.) Bore (44 1/4 in.) Bore (44 1/2 in.) Bore (44 3/4 in.) Bore (45 in.) Bore (45 1/4 in.) Bore (45 1/2 in.) Bore (45 3/4 in.) Bore (46 in.) Bore (46 1/4 in.) Bore (46 1/2 in.) Bore (46 3/4 in.) Bore (47 in.) Bore (47 1/4 in.) Bore (47 1/2 in.) Bore (47 3/4 in.) Bore (48 in.) Bore (48 1/4 in.) Bore (48 1/2 in.) Bore (48 3/4 in.) Bore (49 in.) Bore (49 1/4 in.) Bore (49 1/2 in.) Bore (49 3/4 in.) Bore (50 in.) Bore (50 1/4 in.) Bore (50 1/2 in.) Bore (50 3/4 in.) Bore (51 in.) Bore (51 1/4 in.) Bore (51 1/2 in.) Bore (51 3/4 in.) Bore (52 in.) Bore (52 1/4 in.) Bore (52 1/2 in.) Bore (52 3/4 in.) Bore (53 in.) Bore (53 1/4 in.) Bore (53 1/2 in.) Bore (53 3/4 in.) Bore (54 in.) Bore (54 1/4 in.) Bore (54 1/2 in.) Bore (54 3/4 in.) Bore (55 in.) Bore (55 1/4 in.) Bore (55 1/2 in.) Bore (55 3/4 in.) Bore (56 in.) Bore (56 1/4 in.) Bore (56 1/2 in.) Bore (56 3/4 in.) Bore (57 in.) Bore (57 1/4 in.) Bore (57 1/2 in.) Bore (57 3/4 in.) Bore (58 in.) Bore (58 1/4 in.) Bore (58 1/2 in.) Bore (58 3/4 in.) Bore (59 in.) Bore (59 1/4 in.) Bore (59 1/2 in.) Bore (59 3/4 in.) Bore (60 in.) Bore (60 1/4 in.) Bore (60 1/2 in.) Bore (60 3/4 in.) Bore (61 in.) Bore (61 1/4 in.) Bore (61 1/2 in.) Bore (61 3/4 in.) Bore (62 in.) Bore (62 1/4 in.) Bore (62 1/2 in.) Bore (62 3/4 in.) Bore (63 in.) Bore (63 1/4 in.) Bore (63 1/2 in.) Bore (63 3/4 in.) Bore (64 in.) Bore (64 1/4 in.) Bore (64 1/2 in.) Bore (64 3/4 in.) Bore (65 in.) Bore (65 1/4 in.) Bore (65 1/2 in.) Bore (65 3/4 in.) Bore (66 in.) Bore (66 1/4 in.) Bore (66 1/2 in.) Bore (66 3/4 in.) Bore (67 in.) Bore (67 1/4 in.) Bore (67 1/2 in.) Bore (67 3/4 in.) Bore (68 in.) Bore (68 1/4 in.) Bore (68 1/2 in.) Bore (68 3/4 in.) Bore (69 in.) Bore (69 1/4 in.) Bore (69 1/2 in.) Bore (69 3/4 in.) Bore (70 in.) Bore (70 1/4 in.) Bore (70 1/2 in.) Bore (70 3/4 in.) Bore (71 in.) Bore (71 1/4 in.) Bore (71 1/2 in.) Bore (71 3/4 in.) Bore (72 in.) Bore (72 1/4 in.) Bore (72 1/2 in.) Bore (72 3/4 in.) Bore (73 in.) Bore (73 1/4 in.) Bore (73 1/2 in.) Bore (73 3/4 in.) Bore (74 in.) Bore (74 1/4 in.) Bore (74 1/2 in.) Bore (74 3/4 in.) Bore (75 in.) Bore (75 1/4 in.) Bore (75 1/2 in.) Bore (75 3/4 in.) Bore (76 in.) Bore (76 1/4 in.) Bore (76 1/2 in.) Bore (76 3/4 in.) Bore (77 in.) Bore (77 1/4 in.) Bore (77 1/2 in.) Bore (77 3/4 in.) Bore (78 in.) Bore (78 1/4 in.) Bore (78 1/2 in.) Bore (78 3/4 in.) Bore (79 in.) Bore (79 1/4 in.) Bore (79 1/2 in.) Bore (79 3/4 in.) Bore (80 in.) Bore (80 1/4 in.) Bore (80 1/2 in.) Bore (80 3/4 in.) Bore (81 in.) Bore (81 1/4 in.) Bore (81 1/2 in.) Bore (81 3/4 in.) Bore (82 in.) Bore (82 1/4 in.) Bore (82 1/2 in.) Bore (82 3/4 in.) Bore (83 in.) Bore (83 1/4 in.) Bore (83 1/2 in.) Bore (83 3/4 in.) Bore (84 in.) Bore (84 1/4 in.) Bore (84 1/2 in.) Bore (84 3/4 in.) Bore (85 in.) Bore (85 1/4 in.) Bore (85 1/2 in.) Bore (85 3/4 in.) Bore (86 in.) Bore (86 1/4 in.) Bore (86 1/2 in.) Bore (86 3/4 in.) Bore (87 in.) Bore (87 1/4 in.) Bore (87 1/2 in.) Bore (87 3/4 in.) Bore (88 in.) Bore (88 1/4 in.) Bore (88 1/2 in.) Bore (88 3/4 in.) Bore (89 in.) Bore (89 1/4 in.) Bore (89 1/2 in.) Bore (89 3/4 in.) Bore (90 in.) Bore (90 1/4 in.) Bore (90 1/2 in.) Bore (90 3/4 in.) Bore (91 in.) Bore (91 1/4 in.) Bore (91 1/2 in.) Bore (91 3/4 in.) Bore (92 in.) Bore (92 1/4 in.) Bore (92 1/2 in.) Bore (92 3/4 in.) Bore (93 in.) Bore (93 1/4 in.) Bore (93 1/2 in.) Bore (93 3/4 in.) Bore (94 in.) Bore (94 1/4 in.) Bore (94 1/2 in.) Bore (94 3/4 in.) Bore (95 in.) Bore (95 1/4 in.) Bore (95 1/2 in.) Bore (95 3/4 in.) Bore (96 in.) Bore (96 1/4 in.) Bore (96 1/2 in.) Bore (96 3/4 in.) Bore (97 in.) Bore (97 1/4 in.) Bore (97 1/2 in.) Bore (97 3/4 in.) Bore (98 in.) Bore (98 1/4 in.) Bore (98 1/2 in.) Bore (98 3/4 in.) Bore (99 in.) Bore (99 1/4 in.) Bore (99 1/2 in.) Bore (99 3/4 in.) Bore (100 in.) Bore (100 1/4 in.) Bore (100 1/2 in.) Bore (100 3/4 in.) Bore (101 in.) Bore (101 1/4 in.) Bore (101 1/2 in.) Bore (101 3/4 in.) Bore (102 in.) Bore (102 1/4 in.) Bore (102 1/2 in.) Bore (102 3/4 in.) Bore (103 in.) Bore (103 1/4 in.) Bore (103 1/2 in.) Bore (103 3/4 in.) Bore (104 in.) Bore (104 1/4 in.) Bore (104 1/2 in.) Bore (104 3/4 in.) Bore (105 in.) Bore (105 1/4 in.) Bore (105 1/2 in.) Bore (105 3/4 in.) Bore (106 in.) Bore (106 1/4 in.) Bore (106 1/2 in.) Bore (106 3/4 in.) Bore (107 in.) Bore (107 1/4 in.) Bore (107 1/2 in.) Bore (107 3/4 in.) Bore (108 in.) Bore (108 1/4 in.) Bore (108 1/2 in.) Bore (108 3/4 in.) Bore (109 in.) Bore (109 1/4 in.) Bore (109 1/2 in.) Bore (109 3/4 in.) Bore (110 in.) Bore (110 1/4 in.) Bore (110 1/2 in.) Bore (110 3/4 in.) Bore (111 in.) Bore (111 1/4 in.) Bore (111 1/2 in.) Bore (111 3/4 in.) Bore (112 in.) Bore (112 1/4 in.) Bore (112 1/2 in.) Bore (112 3/4 in.) Bore (113 in.) Bore (113 1/4 in.) Bore (113 1/2 in.) Bore (113 3/4 in.) Bore (114 in.) Bore (114 1/4 in.) Bore (114 1/2 in.) Bore (114 3/4 in.) Bore (115 in.) Bore (115 1/4 in.) Bore (115 1/2 in.) Bore (115 3/4 in.) Bore (116 in.) Bore (116 1/4 in.) Bore (116 1/2 in.) Bore (116 3/4 in.) Bore (117 in.) Bore (117 1/4 in.) Bore (117 1/2 in.) Bore (117 3/4 in.) Bore (118 in.) Bore (118 1/4 in.) Bore (118 1/2 in.) Bore (118 3/4 in.) Bore (119 in.) Bore (119 1/4 in.) Bore (119 1/2 in.) Bore (119 3/4 in.) Bore (120 in.) Bore (120 1/4 in.) Bore (120 1/2 in.) Bore (120 3/4 in.) Bore (121 in.) Bore (121 1/4 in.) Bore (121 1/2 in.) Bore (121 3/4 in.) Bore (122 in.) Bore (122 1/4 in.) Bore (122 1/2 in.) Bore (122 3/4 in.) Bore (123 in.) Bore (123 1/4 in.) Bore (123 1/2 in.) Bore (123 3/4 in.) Bore (124 in.) Bore (124 1/4 in.) Bore (124 1/2 in.) Bore (124 3/4 in.) Bore (125 in.) Bore (125 1/4 in.) Bore (125 1/2 in.) Bore (125 3/4 in.) Bore (126 in.) Bore (126 1/4 in.) Bore (126 1/2 in.) Bore (126 3/4 in.) Bore (127 in.) Bore (127 1/4 in.) Bore (127 1/2 in.) Bore (127 3/4 in.) Bore (128 in.) Bore (128 1/4 in.) Bore (128 1/2 in.) Bore (128 3/4 in.) Bore (129 in.) Bore (129 1/4 in.) Bore (129 1/2 in.) Bore (129 3/4 in.) Bore (130 in.) Bore (130 1/4 in.) Bore (130 1/2 in.) Bore (130 3/4 in.) Bore (131 in.) Bore (131 1/4 in.) Bore (131 1/2 in.) Bore (131 3/4 in.) Bore (132 in.) Bore (132 1/4 in.) Bore (132 1/2 in.) Bore (132 3/4 in.) Bore (133 in.) Bore (133 1/4 in.) Bore (133 1/2 in.) Bore (133 3/4 in.) Bore (134 in.) Bore (134 1/4 in.) Bore (134 1/2 in.) Bore (134 3/4 in.) Bore (135 in.) Bore (135 1/4 in.) Bore (135 1/2 in.) Bore (135 3/4 in.) Bore (136 in.) Bore (136 1/4 in.) Bore (136 1/2 in.) Bore (136 3/4 in.) Bore (137 in.) Bore (137 1/4 in.) Bore (137 1/2 in.) Bore (137 3/4 in.) Bore (138 in.) Bore (138 1/4 in.) Bore (138 1/2 in.) Bore (138 3/4 in.) Bore (139 in.) Bore (139 1/4 in.) Bore (139 1/2 in.) Bore (139 3/4 in.) Bore (140 in.) Bore (140 1/4 in.) Bore (140 1/2 in.) Bore (140 3/4 in.) Bore (141 in.) Bore (141 1/4 in.) Bore (141 1/2 in.) Bore (141 3/4 in.) Bore (142 in.) Bore (142 1/4 in.) Bore (142 1/2 in.) Bore (142 3/4 in.) Bore (143 in.) Bore (143 1/4 in.) Bore (143 1/2 in.) Bore (143 3/4 in.) Bore (144 in.) Bore (144 1/4 in.) Bore (144 1/2 in.) Bore (144 3/4 in.) Bore (145 in.) Bore (145 1/4 in.) Bore (145 1/2 in.) Bore (145 3/4 in.) Bore (146 in.) Bore (146 1/4 in.) Bore (146 1/2 in.) Bore (146 3/4 in.) Bore (147 in.) Bore (147 1/4 in.) Bore (147 1/2 in.) Bore (147 3/4 in.) Bore (148 in.) Bore (148 1/4 in.) Bore (148 1/2 in.) Bore (148 3/4 in.) Bore (149 in.) Bore (149 1/4 in.) Bore (149 1/2 in.) Bore (149 3/4 in.) Bore (150 in.) Bore (150 1/4 in.) Bore (150 1/2 in.) Bore (150 3/4 in.) Bore (151 in.) Bore (151 1/4 in.) Bore (151 1/2 in.) Bore (151 3/4 in.) Bore (152 in.) Bore (152 1/4 in.) Bore (152 1/2 in.) Bore (152 3/4 in.) Bore (153 in.) Bore (153 1/4 in.) Bore (153 1/2 in.) Bore (153 3/4 in.) Bore (154 in.) Bore (154 1/4 in.) Bore (154 1/2 in.) Bore (154 3/4 in.) Bore (155 in.) Bore (155 1/4 in.) Bore (155 1/2 in.) Bore (155 3/4 in.) Bore (156 in.) Bore (156 1/4 in.) Bore (156 1/2 in.) Bore (156 3/4 in.) Bore (157 in.) Bore (157 1/4 in.) Bore (157 1/2 in.) Bore (157 3/4 in.) Bore (158 in.) Bore (158 1/4 in.) Bore (158 1/2 in.) Bore (158 3/4 in.) Bore (159 in.) Bore (159 1/4 in.) Bore (159 1/2 in.) Bore (159 3/4 in.) Bore (160 in.) Bore (160 1/4 in.) Bore (160 1/2 in.) Bore (160 3/4 in.) Bore (161 in.) Bore (161 1/4 in.) Bore (161 1/2 in.) Bore (161 3/4 in.) Bore (162 in.) Bore (162 1/4 in.) Bore (162 1/2 in.) Bore (162 3/4 in.) Bore (163 in.) Bore (163 1/4 in.) Bore (163 1/2 in.) Bore (163 3/4 in.) Bore (164 in.) Bore (164 1/4 in.) Bore (164 1/2 in.) Bore (164 3/4 in.) Bore (165 in.) Bore (165 1/4 in.) Bore (165 1/2 in.) Bore (165 3/4 in.) Bore (166 in.) Bore (166 1/4 in.) Bore (166 1/2 in.) Bore (166 3/4 in.) Bore (167 in.) Bore (167 1/4 in.) Bore (167 1/2 in.) Bore (167 3/4 in.) Bore (168 in.) Bore (168 1/4 in.) Bore (168 1/2 in.) Bore (168 3/4 in.) Bore (169 in.) Bore (169 1/4 in.) Bore (169 1/2 in.) Bore (169 3/4 in.) Bore (170 in.) Bore (170 1/4 in.) Bore (170 1/2 in.) Bore (170 3/4 in.) Bore (171 in.) Bore (171 1/4 in.) Bore (171 1/2 in.) Bore (171 3/4 in.) Bore (172 in.) Bore (172 1/4 in.) Bore (172 1/2 in.) Bore (172 3/4 in.) Bore (173 in.) Bore (173 1/4 in.) Bore (173 1/2 in.) Bore (173 3/4 in.) Bore (174 in.) Bore (174 1/4 in.) Bore (174 1/2 in.) Bore (174 3/4 in.) Bore (175 in.) Bore (175 1/4 in.) Bore (175 1/2 in.) Bore (175 3/4 in.) Bore (176 in.) Bore (176 1/4 in.) Bore (176 1/2 in.) Bore (176 3/4 in.) Bore (177 in.) Bore (177 1/4 in.) Bore (177 1/2 in.) Bore (177 3/4 in.) Bore (178 in.) Bore (178 1/4 in.) Bore (178 1/2 in.) Bore (178 3/4 in.) Bore (179 in.) Bore (179 1/4 in.) Bore (179 1/2 in.) Bore (179 3/4 in.) Bore (180 in.) Bore (180 1/4 in.) Bore (180 1/2 in.) Bore (180 3/4 in.) Bore (181 in.) Bore (181 1/4 in.) Bore (181 1/2 in.) Bore (181 3/4 in.) Bore (182 in.) Bore (182 1/4 in.) Bore (182 1/2 in.) Bore (182 3/4 in.) Bore (183 in.) Bore (183 1/4 in.) Bore (183 1/2 in.) Bore (183 3/4 in.) Bore (184 in.) Bore (184 1/4 in.) Bore (184 1/2 in.) Bore (184 3/4 in.) Bore (185 in.) Bore (185 1/4 in.) Bore (185 1/2 in.) Bore (185 3/4 in.) Bore (186 in.) Bore (186 1/4 in.) Bore (186 1/2 in.) Bore (186 3/4 in.) Bore (187 in.) Bore (187 1/4 in.) Bore (187 1/2 in.) Bore (187 3/4 in.) Bore (188 in.) Bore (188 1/4 in.) Bore (188 1/2 in.) Bore (188 3/4 in.) Bore (189 in.) Bore (189 1/4 in.) Bore (189 1/2 in.) Bore (189 3/4 in.) Bore (190 in.) Bore (190 1/4 in.) Bore (190 1/2 in.) Bore (190 3/4 in.) Bore (191 in.) Bore (191 1/4 in.) Bore (191 1/2 in.) Bore (191 3/4 in.) Bore (192 in.) Bore (192 1/4 in.) Bore (192 1/2 in.) Bore (192 3/4 in.) Bore (193 in.) Bore (193 1/4 in.) Bore (193 1/2 in.) Bore (193 3/4 in.) Bore (194 in.) Bore (194 1/4 in.) Bore (194 1/2 in.) Bore (194 3/4 in.) Bore (195 in.) Bore (195 1/4 in.) Bore (195 1/2 in.) Bore (195 3/4 in.) Bore (196 in.) Bore (196 1/4 in.) Bore (196 1/2 in.) Bore (196 3/4 in.) Bore (197 in.) Bore (197 1/4 in.) Bore (197 1/2 in.) Bore (197 3/4 in.) Bore (198 in.) Bore (198 1/4 in.) Bore (198 1/2 in.) Bore (198 3/4 in.) Bore (199 in.) Bore (199 1/4 in.) Bore (199 1/2 in.) Bore (199 3/4 in.) Bore (200 in.) Bore (200 1/4 in.) Bore (200 1/2 in.) Bore (200 3/4 in.) Bore (201 in.) Bore (201 1/4 in.) Bore (201 1/2 in.) Bore (201 3/4 in.) Bore (202 in.) Bore (202 1/4 in.) Bore (202 1/2 in.) Bore (202 3/4 in.) Bore (203 in.) Bore (203 1/4 in.) Bore (203 1/2 in.) Bore (203 3/4 in.) Bore (204 in.) Bore (204 1/4 in.) Bore (204 1/2 in.) Bore (204 3/4 in.) Bore (205 in.) Bore (205 1/4 in.) Bore (205 1/2 in.) Bore (205 3/4 in.) Bore (206 in.) Bore (206 1/4 in.) Bore (206 1/2 in.) Bore (206 3/4 in.) Bore (207 in.) Bore (207 1/4 in.) Bore (207 1/2 in.) Bore (207 3/4 in.) Bore (208 in.) Bore (208 1/4 in.) Bore (208 1/2 in.) Bore (208 3/4 in.) Bore (209 in.) Bore (209 1/4 in.) Bore (209 1/2 in.) Bore (209 3/4 in.) Bore (210 in.) Bore (210 1/4 in.) Bore (210 1/2 in.) Bore (210 3/4 in.) Bore (211 in.) Bore (211 1/4 in.) Bore (211 1/2 in.) Bore (211 3/4 in.) Bore (212 in.) Bore (212 1/4 in.) Bore (212 1/2 in.) Bore (212 3/4 in.) Bore (213 in.) Bore (213 1/4 in.) Bore (213 1/2 in.) Bore (213 3/4 in.) Bore (214 in.) Bore (214 1/4 in.) Bore (214 1/2 in.) Bore (214 3/4 in.) Bore (215 in.) Bore (215 1/4 in.) Bore (215 1/2 in.) Bore (215 3/4 in.) Bore (216 in.) Bore (216 1/4 in.) Bore (216 1/2 in.) Bore (216 3/4 in.) Bore (217 in.) Bore (217 1/4 in.) Bore (217 1/2 in.) Bore (217 3/4 in.) Bore (218 in.) Bore (218 1/4 in.) Bore (218 1/2 in.) Bore (218 3/4 in.) Bore (219 in.) Bore (219 1/4 in.) Bore (219 1/2 in.) Bore (219 3/4 in.) Bore (220 in.) Bore (220 1/4 in.) Bore (220 1/2 in.) Bore (220 3/4 in.) Bore (221 in.) Bore (221 1/4 in.) Bore (221 1/2 in.) Bore (221 3/4 in.) Bore (222 in.) Bore (222 1/4 in.) Bore (222 1/2 in.) Bore (222 3/4 in.) Bore (223 in.) Bore (223 1/4 in.) Bore (223 1/2 in.) Bore (223 3/4 in.) Bore (224 in.) Bore (224 1/4 in.) Bore (224 1/2 in.) Bore (224 3/4 in.) Bore (225 in.) Bore (225 1/4 in.) Bore (225 1/2 in.) Bore (225 3/4 in.) Bore (226 in.) Bore (226 1/4 in.) Bore (226 1/2 in.) Bore (226 3/4 in.) Bore (227 in.) Bore (227 1/4 in.) Bore (227 1/2 in.) Bore (227 3/4 in.) Bore (228 in.) Bore (228 1/4 in.) Bore (228 1/2 in.) Bore (228 3/4 in.) Bore (229 in.) Bore (229 1/4 in.) Bore (229 1/2 in.) Bore (229 3/4 in.) Bore (230 in.) Bore (230 1/4 in.) Bore (230 1/2 in.) Bore (230 3/4 in.) Bore (231 in.) Bore (231 1/4 in.) Bore (231 1/2 in.) Bore (231 3/4 in.) Bore (232 in.) Bore (232 1/4 in.) Bore (232 1/2 in.) Bore (232 3/4 in.) Bore (233 in.) Bore (233 1/4 in.) Bore (233 1/2 in.) Bore (233 3/4 in.) Bore (234 in.) Bore (234 1/4 in.) Bore (234 1/2 in.) Bore (234 3/4 in.) Bore (235 in.) Bore (235 1/4 in.) Bore (235 1/2 in.) Bore (235 3/4 in.) Bore (236 in.) Bore (236 1/4 in.) Bore (236 1/2 in.) Bore (236 3/4 in.) Bore (237 in.) Bore (237 1/4 in.) Bore (237 1/2 in.) Bore (237 3/4 in.) Bore (238 in.) Bore (238 1/4 in.) Bore (238 1/2 in.) Bore (238 3/4 in.) Bore (239 in.) Bore (239 1/4 in.) Bore (239 1/2 in.) Bore (239 3/4 in.) Bore (240 in.) Bore (240 1/4 in.) Bore (240 1/2 in.) Bore (240 3/4 in.) Bore (241 in.) Bore (241 1/4 in.) Bore (241 1/2 in.) Bore (241 3/4 in.) Bore (242 in.) Bore (242 1/4 in.) Bore (242 1/2 in.) Bore (242 3/4 in.) Bore (243 in.) Bore (243 1/4 in.) Bore (243 1/2 in.) Bore (243 3/4 in.) Bore (244 in.) Bore (244 1/4 in.) Bore (244 1/2 in.) Bore (244 3/4 in.) Bore (245 in.) Bore (245 1/4 in.) Bore (245 1/2 in.) Bore (245 3/4 in.) Bore (246 in.) Bore (246 1/4 in.) Bore (246 1/2 in.) Bore (246 3/4 in.) Bore (247 in.) Bore (247 1/4 in.) Bore (247 1/2 in.) Bore (247 3/4 in.) Bore (248 in.) Bore (248 1/4 in.) Bore (248 1/2 in.) Bore (248 3/4 in.) Bore (249 in.) Bore (249 1/4 in.) Bore (249 1/2 in.) Bore (249 3/4 in.) Bore (250 in.) Bore (250 1/4 in.) Bore (250 1/2 in.) Bore (250 3/4 in.) Bore (251 in.) Bore (251 1/4 in.) Bore (251 1/2 in.) Bore (251 3/4 in.) Bore (252 in.) Bore (252 1/4 in.) Bore (252 1/2 in.) Bore (252 3/4 in.) Bore (253 in.) Bore (253 1/4 in.) Bore (253 1/2 in.) Bore (253 3/4 in.) Bore (254 in.) Bore (254 1/4 in.) Bore (254 1/2 in.) Bore (254 3/4 in.) Bore (255 in.) Bore (255 1/4 in.) Bore (255 1/2 in.) Bore (255 3/4 in.) Bore (256 in.) Bore (256 1/4 in.) Bore (256 1/2 in.) Bore (256 3/4 in.) Bore (257 in.) Bore (257 1/4 in.) Bore (257 1/2 in.) Bore (257 3/4 in.) Bore (258 in.) Bore (258 1/4 in.) Bore (258 1/2 in.) Bore (258 3/4 in.) Bore (259 in.) Bore (259 1/4 in.) Bore (259 1/2 in.) Bore (259 3/4 in.) Bore (260 in.) Bore (260 1/4 in.) Bore (260 1/2 in.) Bore (260 3/4 in.) Bore (261 in.) Bore (261 1/4 in.) Bore (261 1/2 in.) Bore (261 3/4 in.) Bore (262 in.) Bore (262 1/4 in.) Bore (262 1/2 in.) Bore (262 3/4 in.) Bore (263 in.) Bore (263 1/4 in.) Bore (263 1/2 in.) Bore (263 3/4 in.) Bore (264 in.) Bore (264 1/4 in.) Bore (264 1/2 in.) Bore (264 3/4 in.) Bore (265 in			

Moine Department of Transportation

Soil/Rock Exploration Log _____

U.S. CUSTOMARY UNITS

Project: Thompson Bridge +2848
Over Deck Bridge

Location: Southport, Maine

Boring No.: BB-SDC-202

PIN: 018748-00

Driller: New England Boring Contractors

Operator: Brad Enos

Logged By: N. Williams (GZA)

Date Start/Finish: 11/15/18/11/14/18

Boring Location: N024454, E000352

Hammer Efficiency Factor: 0.6

Elevation (ft.): 7.6 (test.)

Datum: NAVD 88

Rig Type: Barge-Mounted Mobile Drill B-23

Drilling Method: Drive & Wash

Casing ID/OD: 4.4/5", 3/3.5"

Automatic: ☐ Hydraulic: ☐ Rope & Cathead: ☐

Auger ID/OD: --

Sampler: Split Spoon

Hammer: W1/Fall: 140/30

Core Barrel: NQ

Water Level: -- Total

0 = Split Spoon Sample
1 = Unconsolidated Split Spoon Sample attempt
U = Thin Wall Tube Sample
WU = Unconsolidated Thin Wall Tube Sample attempt
V = Hollow Vane Shear Test
W = Unconsolidated Thin Wall Shear Test attempt

R = Rock Core Sample
SA = Solid Stem Auger
HA = Hollow Stem Auger
RC = Roller Cone
WB = weight of 140lb. hammer
WD = weight of rods
WSP = Weight of slip stream

S_u = Initial Vane Shear Strength (psf)
T_u = Final Vane Shear Strength (psf)
q_u = Uncorrected Compressive Strength (psf)
N_{uncorrected} = Raw for SPT N-value
Hammer Efficiency Factor = Actual Collection Value
N_g = SPT N_{uncorrected} corrected for hammer efficiency
N_g = Hammer Efficiency Factor/40000_{uncorrected}

S_u = Lab Vane Shear Strength (psf)
RC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
P = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Feet/Rev. (in.)	Sample Depth (ft.)	Blows (16 in.) Strength per 1000 (lb)	Uncorrected	N _g	Coring Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ Unified Class
0	1D	24/8	0.0 - 2.0	WOR-WOR-WOR-WOR	WOR		PUSH			Dark brown, wet, very loose, clayey fine to medium SAND, trace Gravel, organics, shells - REVER BOTTOM DEPOSIT - (SC)	G-25 4-4, SS WC-77.2
5	20	24/8 5/5	5.0 - 7.0 6.6 - 6.8	PUSH S _u 357/09 psf	--					Dark brown, wet, soft, organic SILT, little fine SAND, little clay, shells, wood - REVER BOTTOM DEPOSIT - (OH)	LL-80 PL-40 Ph-40 WC-72.8
	V2	5/5	6.6 - 7.0	S _u 402/89 psf						55 x 10 mm in Silty Vane Shear Tests! V1: 8/2.5 ft-lbs V2: 9/2 ft-lbs	
10	3D	24/24	10.0 - 12.0	WOH-WOH-WOH-2	WOH					Grey, wet, soft, Silty CLAY, trace fine SAND - MARINE DEPOSIT - (CL)	WC-33.8
15	4D	24/24 5/5	15.0 - 17.0 16.0 - 16.8	PUSH S _u 200/45 psf	--					Grey, wet, soft, Silty CLAY, trace fine SAND - MARINE DEPOSIT - (CL)	WC-36.1
	V4	5/5	16.0 - 17.0	S _u 223/45 psf						55 x 10 mm in Silty Vane Shear Tests! V1: 4.5/1 ft-lbs V4: 5/1 ft-lbs	
20	5D	24/14	20.0 - 22.0	WOH-WOH-7-4	7	7				20.0'-21.0': Grey, wet, soft, Silty CLAY, trace fine SAND - MARINE DEPOSIT - (CL)	
										21.0'-22.0': Grey, wet, Silty fine to medium SAND, trace coarse SAND - GLACIAL TLL - (SM)	
25	6D	24/4	25.0 - 27.0	50-34-5-6	39	39				Grey, wet, dense, Silty fine to medium SAND - GLACIAL TLL - (SM)	
30	7D	24/10	30.0 - 32.0	14-9-11-11	20	20				Grey, wet, medium dense, Silty fine to medium SAND, trace Gravel - GLACIAL TLL - (SM)	
35	8D	24/10	35.0 - 37.0	10-11-10-13	21	21				Grey, wet, medium dense, fine to medium SAND, some SILT - GLACIAL TLL - (SM)	
40	9D	20/8	40.0 - 41.7	24-13-46-75/2"	59	59	RC			Ton, wet, very dense, SANDY GRAVEL, little SILT - DECOMPOSED ROCK - Intermittent increases in resistance during roller cone advancement from 41.7'-45.0'.	
45	10D	8/7	45.0 - 45.7	33-75/2"						Ton, wet, very dense, SANDY GRAVEL, little SILT - DECOMPOSED ROCK -	
	11D	3/3	47.0 - 47.3	112/3"						Ton, wet, very dense, SANDY GRAVEL, little SILT - DECOMPOSED ROCK -	
50	12D	5/5	49.0 - 49.4	125/5"						Ton, wet, very dense, SANDY GRAVEL, little SILT -	

Remarks:

1. Mudline level at 24.6 below bridge deck. Ground surface/mudline elevations were estimated based on bridge deck elevation of El. 13' from previous MaineDOT survey. Boring coordinates were estimated based on top line to existing tentacles of the bridge and should be considered approximate.

2. Course sand in wash return at 20.0'.

3. Attempted to push vane at 20.0', could not advance vane.

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

Page 1 of 2

Boring No.: BB-SDC-202

Maine Department of Transportation						Project: Thompson Bridge #248 Over Decker Cove		Boring No.: BB-SDC-202			
Soil/Bore Exploration Log _____ US CUSTOMARY UNITS						Location: Southport, Maine		AUG: 018748.00			
Driller:		New England Boring Contractors				Elevation (ft.):	11.6 (feet.)		Pipe O/D(OD)	--	
Operator:		Brad Enos				Datum:	NAVD 88		Sampler:	Split Spoon	
Lugged By:		N. Williams IGZM				Rig Type:	Borg-Muntz Mobile Drill B-23		Hammer Wt./Fall:	140/30	
Date Start/Finish:		10/13/19-10/14/19				Drilling Method:	Drive & Wash		Cave Barrel:	NQ	
Boring Location:		NQ24454, E1500352				Casing O/D(OD):	4.4/5.0, 3X3.5"		Water Level +/-:	Total	
Hammer Efficiency Factor:		0.6				Hammer Type:	☐ Automatic ☒ Hydraulic ☐ Split & Cathead ☒				
Definitions: D = Split Spoon Sample MD = Unsuccessful Split Spoon Sample attempt U = Thin Wall Take Sample MU = Unsuccessful Thin Wall Take Sample attempt V = Inside Vane Shear Test R = Unconsolidated soils, open Shale, test attempts		R = Rock Core Sample SIA = Solid Core Sample HSA = Hollow Stem Auger RC = Roller Core ROH = weight of ROH hammer ROW = weight of rods RDP = Report all log parameters				% = inside hole Vane Shear Strength % = % of blow count % = unconfined Compressive Strength Unconsolidated - Base Read if Value hammer Efficiency Factor = Actual Calibration Value Ng = SPT Hammer corrected for hammer efficiency NG = Hammer Efficiency Factor NG2000 reported				Spills as 1 Lab Vane Shear strength (psi) WC = water content, percent LL = Liquid Limit P = Plastic Limit PI = Plasticity Index G = Grain Size Analysis C = Consolidation Test	
Sample Information						Visual Description and Remarks				Testing Results / AADT and Unified Class.	
Depth (ft.)	Sample No.	Pen./Rev. (in.)	Sample Depth (ft.)	Blows (4' S) / Strength (lb-ft) / RDP Q3	Uncorrected	Ng	Casing Blows	Elevation (ft.)	Graphic Log		
-50								-64.1			
	13D R1	1/0 23/71	52.1 / 52.2	110/V / RDP = 25x	R			-54.3		Advanced roller core to 52.1 where increase in roller core resistance observed. No recovery. Advanced roller core and 3" casing to 52.5. Set up to core.	
			54.4 / 54.4							(R) Top 2" Moderately weathered Gravel pieces of PEGMATITE.	
-55	R2	24/24	54.4 / 56.4	RDP = 0/x						(R) Bottom 3" Hard, moderately weathered, fine grained, grey, SCHIST. Joints are closely spaced, moderately dipping, rough, disintegrated. Sand infilling. Low recovery makes it difficult to see joint spacing. Rock Mass Quality = Very Poor Recovery = 48%	
	R3	12/12	56.4 / 57.4	RDP = 0/x						Rock Core Times (min/sec): 52.5-55.4" (115), 53.5-54.4" (245) R2 Hard, slightly weathered, fine grained, grey, PHYLITIC joints are extremely close to close, high angle, planar, rough, discolored, open, clay infilling from 55.4"-58.2". Highly fractured into gravel pieces. Rock Mass Quality = Very Poor Recovery = 100%	
	R4	37/4	57.4 / 60.5							R2 Hard, slightly weathered, fine grained, grey, PHYLITIC joints are extremely close to close, high angle, planar, rough, discoloring, open, clay infilling from 55.4"-58.2". Highly fractured into gravel pieces. Rock Mass Quality = Very Poor Recovery = 100%	
-60	R5	25/25	60.5 / 62.6	RDP = 30/x				-72.1		R5 Medium hard, moderately weathered, fine grained, grey, SCHIST. Joints are extremely close to very close, high angle, planar / undulating, rough, discoloring / disintegrated, moderately wide (gravel present). Rock Mass Quality = Very Poor Recovery = 100%	
	R6	36/36	62.6 / 65.6	RDP = 67/x				-74.2		R5 Medium hard, moderately weathered, fine grained, grey, SCHIST. Joints are extremely close to very close, high angle, planar / undulating, rough, discoloring / disintegrated, moderately wide (gravel present). Rock Mass Quality = Very Poor Recovery = 100%	
-65	R7	58/58	65.6 / 70.4	RDP = 83/x				-77.2		R7 Softly, moderately to highly weathered, fine grained, grey, SCHIST. Joints are extremely close to close, moderate / dipping, undulating, rough, decomposed / disintegrated, moderately wide. Rock Mass Quality = Very Poor Recovery = 54%	
-70	R8	58/58	70.4 / 75.2	RDP = 100/x						Rock Core Times (min/sec): 56.4-57.4" (2322) At softness, moderately to highly weathered, fine grained, grey, SCHIST. Joints are extremely close to close, moderate / dipping, undulating, rough, decomposed / disintegrated, moderately wide. Rock Mass Quality = Very Poor Recovery = 54%	
-75									Rock Core Times (min/sec): 52.5-55.4" (127), 58.4-59.4" (1145), 59.4-60.4" (210)		
-75.2									R5 Hard, slightly weathered, coarse grained, grey/pink/orange, PEGMATITE. Joints are extremely close to close, high angle, planar, rough, discolored, partially open to open. Moderately weathered rock from 62.3'-62.6'. Rock Mass Quality = Poor Recovery = 100%		
-80									Rock Mass Quality = Fair Recovery = 100%		
-85									Rock Core Times (min/sec): 62.6-63.6" (115), 63.6-64.6" (113), 64.6-65.6" (115)		
-90									R7 Hard, slightly weathered, coarse grained, grey/pink/orange, PEGMATITE. Joints are very close to moderately spaced, moderately dipping, planar, rough, fresh to discolored, partially open to open, with sand infilling. Rock Mass Quality = Good Recovery = 100%		
-95									Rock Core Times (min/sec): 65.6-66.6" (107), 66.6-67.6" (239), 67.6-68.6" (322), 68.6-69.6" (320), 69.6-70.4" (454)		
-100									RB Very hard, fresh, coarse grained, grey/pink/orange, PEGMATITE. Joints are close to moderately spaced, low angle, undulating, rough, fresh. Rock Mass Quality = Excellent Recovery = 100%		
-105									Rock Core Times (min/sec): 70.4-71.4" (309), 71.4-72.4" (345), 72.4-73.4" (448), 73.4-74.4" (518), 74.4-75.2" (508)		
-110									Bottom of Exploration at 75.20 feet below ground surface.		
Remarks: 1. Mudline level at 24.5' below bridge deck. Ground surface/mudline elevations were estimated based on bridge deck elevation of El. 13' from previous MohDOT survey. Boring coordinates were estimated based on tape ties to existing elements of the bridge and would be considered approximate. 2. Coarse sand in water return at 20.0'. 3. Attempted to push vane at 20.0'; could not advance vane.											
Standardization Note: Replicate measurements between soil tests are essential. Water level readings have been made at three psi order conditions noted. Groundwater fluctuations may occur due to conditions other than those presented in the flow measurements were made.											
Page 2 of 2										Boring No.: BB-SDC-202	

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Thompson Bridge #2848 Over Decker Cove Location: Southport, Maine		Boring No.: BB-SDC-203 PIN: 018748.00	
Driller: New England Boring Contractors		Elevation (ft.): 16.7 (est.)		Auger ID/OD: --			
Operator: Brad Enos		Datum: NAVD 88		Sampler: Split Spoon			
Logged By: B. Woodman (GZA)		Rig Type: Barge-Mounted Mobile Drill B-23		Hammer Wt./Fall: 140/30			
Date Start/Finish: 10/14/18-10/15/18		Drilling Method: Drive & Wash		Core Barrel: NQ			
Boring Location: N124475, E1500402		Casing ID/OD: 4/4.5"/ 3/3.5"		Water Level: -- Tide			
Hammer Efficiency Factor: 0.6		Hammer Type: Automatic ☐ Hydraulic ☒ Rope & Cathead ☒		Turbidity: ☐			
Notations: D = Split Spoon Sample SD = Unsuccessful Split Spoon Sample attempt U = Thin Wall Tube Sample W = Unsuccessful Thin Wall Tube Sample attempt V = In situ Vane Shear Test N = Unsuccessful In situ Vane Shear Test attempt Abbreviations: B = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDR = weight of rods, hammer WDR = weight of rods NQR = NQR NQR = weight of rods NQR = weight of rods Legend: L = Liquid Limit P = Plastic Limit N = Plastic Index G = Grain Size Analysis C = Consolidation Test							
Sample Information		Visual Description and Remarks		Laboratory Results/AASHTO and Unified Class.			
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Box (ft. in.)	Notes		
10	10	24/2	0.0 - 2.0	WOR-WOR-WOR-WOR	Push		
15	20	24/20	5.0 - 7.0	PUSH			
20	V1	5/5	5.6 - 6.0	S _u =558/89 psf			
25	V2	5/5	6.6 - 7.0	S _u =553/125 psf			
30	V3	24/24	10.0 - 12.0	PUSH			
35	MV	0/0	11.0 - 11.0	11.0			
40	MV	24/18	15.0 - 17.0	15.0			
45	40	24/18	17.0 - 19.0	17.0			
50	50	24/8	20.0 - 22.0	63-17-16-10	35 35 R/C		
55	60	24/2	25.0 - 27.0	11-10-12-12	22 22		
60	70	24/12	30.0 - 32.0	6-5-5-7	10 10 46		
65	80	24/16	35.0 - 37.0	7-11-11-11	22 22 RC		
70	90	19/13	40.0 - 41.6	8-10-40-63/2"	50 50		
75	100	1/0	45.0 - 49.9	RQD = 16%	R NQ2		
80	R2	72/38	49.9 - 55.9	RQD = 0%			
1. Mudline level at 29.2' below bridge deck. Ground surface/mudline elevations were estimated based on bridge deck elevation of El. 13' from previous MaineDOT survey. Boring coordinates were estimated based on tape ties to existing elements of the bridge and should be considered approximate.							
Stratification lines represent approximate boundaries between soil types; transitions may be gradual. Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.							
Page 1 of 2 Boring No.: BB-SDC-203							

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Thompson Bridge #2848 Over Decker Cove Location: Southport, Maine		Boring No.: BB-SDC-203 PIN: 018748.00	
Driller: New England Boring Contractors		Elevation (ft.): 16.7 (est.)		Auger ID/OD: --			
Operator: Brad Enos		Datum: NAVD 88		Sampler: Split Spoon			
Logged By: B. Woodman (GZA)		Rig Type: Barge-Mounted Mobile Drill B-23		Hammer Wt./Fall: 140/30			
Date Start/Finish: 10/14/18-10/15/18		Drilling Method: Drive & Wash		Core Barrel: NQ			
Boring Location: N124475, E1500402		Casing ID/OD: 4/4.5"/ 3/3.5"		Water Level: -- Tide			
Hammer Efficiency Factor: 0.6		Hammer Type: Automatic ☐ Hydraulic ☒ Rope & Cathead ☒		Turbidity: ☐			
Notations: D = Split Spoon Sample SD = Unsuccessful Split Spoon Sample attempt U = Thin Wall Tube Sample W = Unsuccessful Thin Wall Tube Sample attempt V = In situ Vane Shear Test N = Unsuccessful In situ Vane Shear Test attempt Abbreviations: B = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDR = weight of rods, hammer WDR = weight of rods NQR = NQR NQR = weight of rods NQR = weight of rods Legend: L = Liquid Limit P = Plastic Limit N = Plastic Index G = Grain Size Analysis C = Consolidation Test							
Sample Information		Visual Description and Remarks		Laboratory Results/AASHTO and Unified Class.			
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Box (ft. in.)	Notes		
10							
15	R3	58/28	55.9 - 60.7	RQD = 0%			
20							
25							
30	R4	54/12	60.7 - 65.2	RQD = 0%			
35							
40							
45	R5	54/54	65.2 - 69.7	RQD = 69%			
50							
55							
60	R6	54/54	69.7 - 74.2	RQD = 78%			
65							
70							
75	R7	36/36	74.2 - 77.2	RQD = 100%			
80							
85							
90							
95							
100							
1. Mudline level at 29.2' below bridge deck. Ground surface/mudline elevations were estimated based on bridge deck elevation of El. 13' from previous MaineDOT survey. Boring coordinates were estimated based on tape ties to existing elements of the bridge and should be considered approximate.							
Stratification lines represent approximate boundaries between soil types; transitions may be gradual. Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.							
Page 2 of 2 Boring No.: BB-SDC-203							

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Thompson Bridge #2848 Over Decker Cove Location: Southport, Maine		Boring No.: BB-SDC-204 PIN: 018748.00	
Driller: New England Boring Contractors		Elevation (ft.): 4.8 (est.)		Auger ID/OD: --			
Operator: Brad Enos		Datum: NAVD 88		Sampler: Split Spoon			
Logged By: B. Woodman (GZA)		Rig Type: ATV-Mounted Mobile Drill B-23		Hammer Wt./Fall: 140/30			
Date Start/Finish: 12/26/18-12/26/18		Drilling Method: Drive & Wash		Core Barrel: NQ			
Boring Location: N124553, E1500357		Casing ID/OD: 4/4.5"/ 3/3.5"		Water Level: -- Tide			
Hammer Efficiency Factor: 0.869		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		Turbidity: ☐			
Notations: D = Split Spoon Sample SD = Unsuccessful Split Spoon Sample attempt U = Thin Wall Tube Sample W = Unsuccessful Thin Wall Tube Sample attempt V = In situ Vane Shear Test N = Unsuccessful In situ Vane Shear Test attempt Abbreviations: B = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDR = weight of rods, hammer WDR = weight of rods NQR = NQR NQR = weight of rods NQR = weight of rods Legend: L = Liquid Limit P = Plastic Limit N = Plastic Index G = Grain Size Analysis C = Consolidation Test							
Sample Information		Visual Description and Remarks		Laboratory Results/AASHTO and Unified Class.			
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Box (ft. in.)	Notes		
10							
15	ID	24/7	4.8 - 6.8	9-6-4-4	10 14 128		
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							
1. Mudline level at 8.2' below bridge deck. Ground surface/mudline elevations were estimated based on bridge deck elevation of El. 13' from previous MaineDOT survey. Boring coordinates were estimated based on tape ties to existing elements of the bridge and should be considered approximate.							
Stratification lines represent approximate boundaries between soil types; transitions may be gradual. Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.							
Page 1 of 2 Boring No.: BB-SDC-204							

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
SOUTHPORT
LINCOLN COUNTY
THOMPSON BRIDGE
DECKER COVE

STP-1874(800)
WIN
18748.00
BRIDGE NO. 2848
BRIDGE PLANS

ENGINEER
Andrew R. Blaisdell
10957
P.E. NUMBER
02/21/2019
DATE

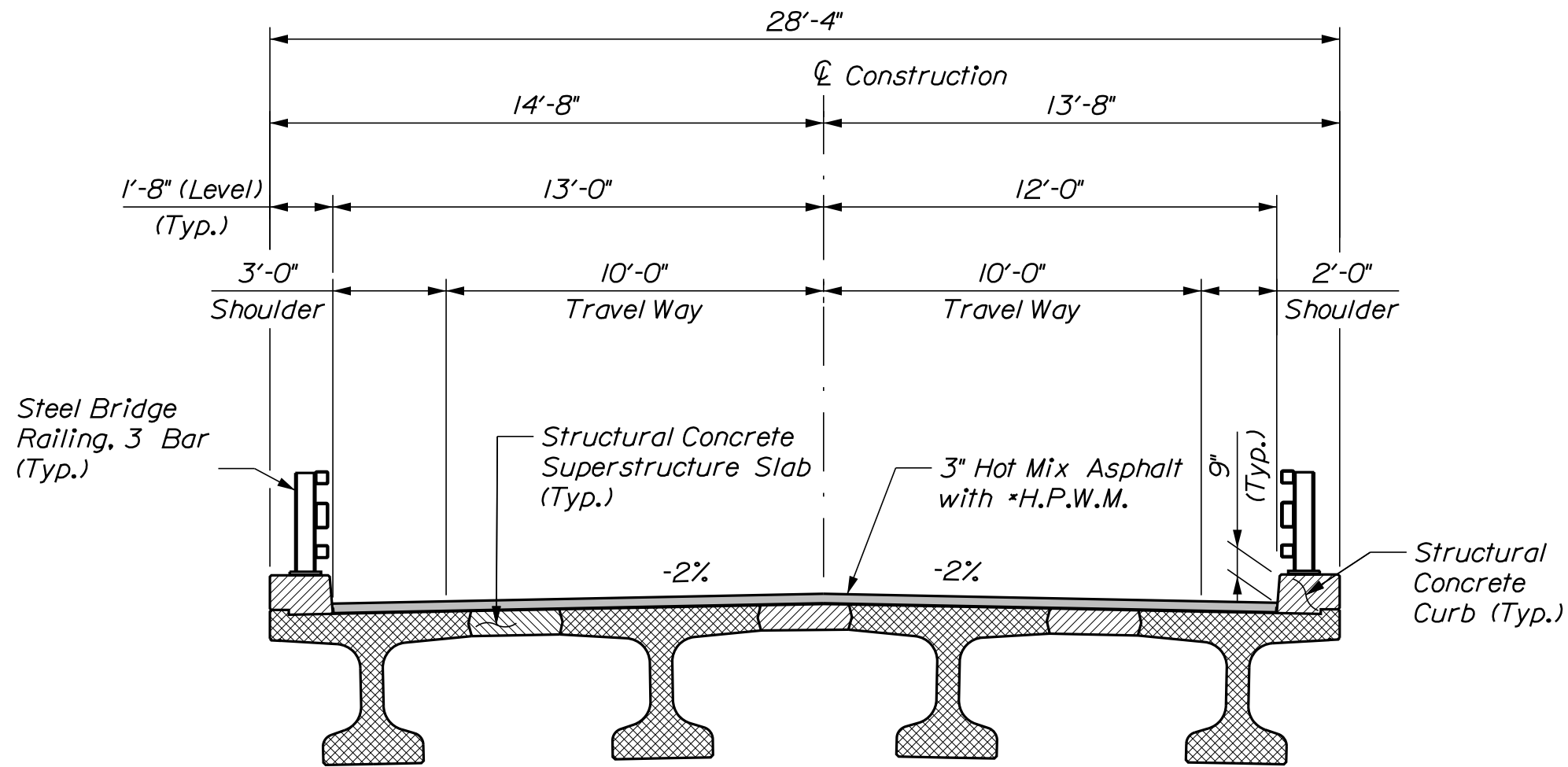
SHEET NUMBER
11
OF 43

Date: 3/1/2019

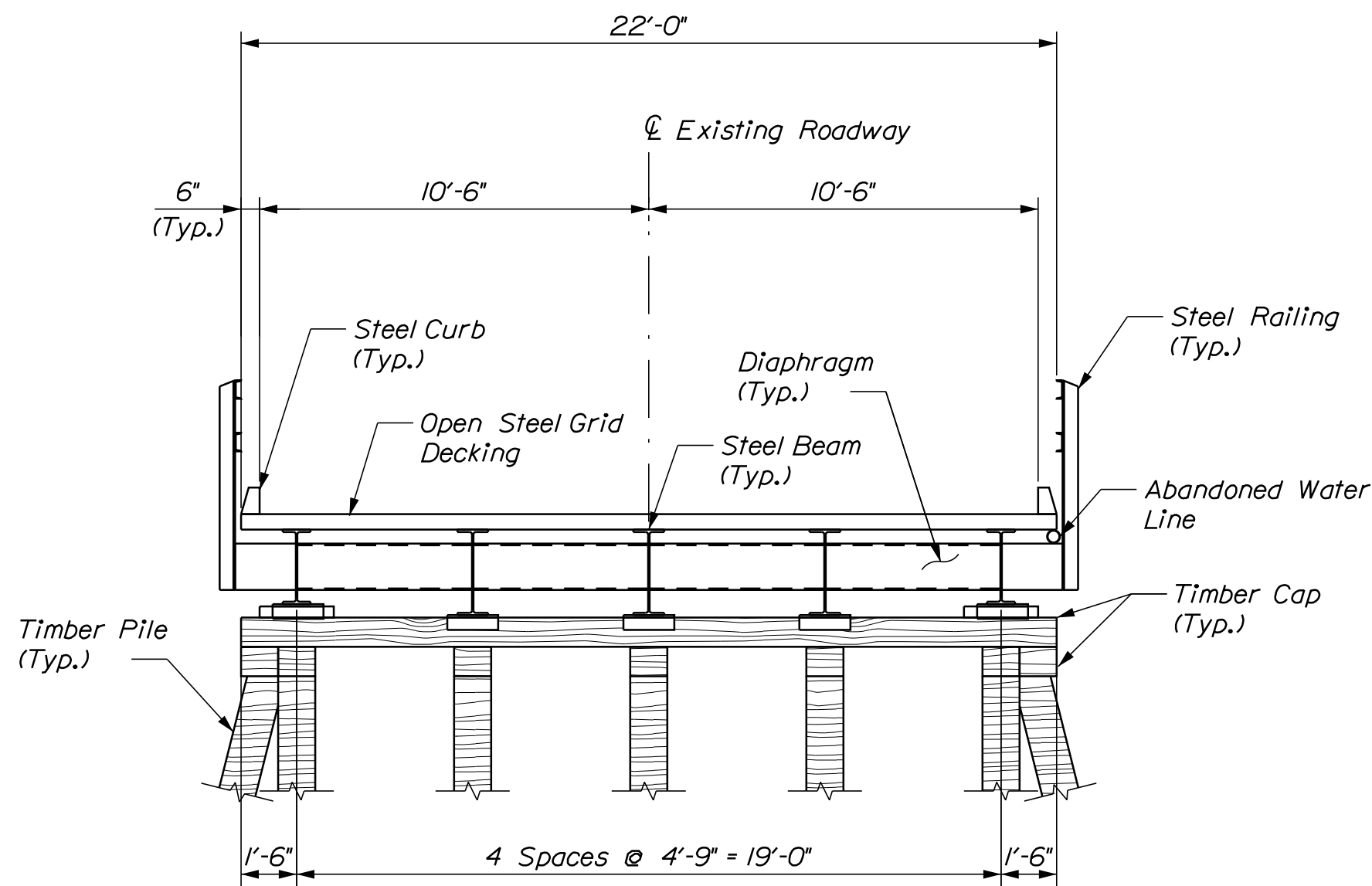
Username: dataylor

Division: BRIDGE

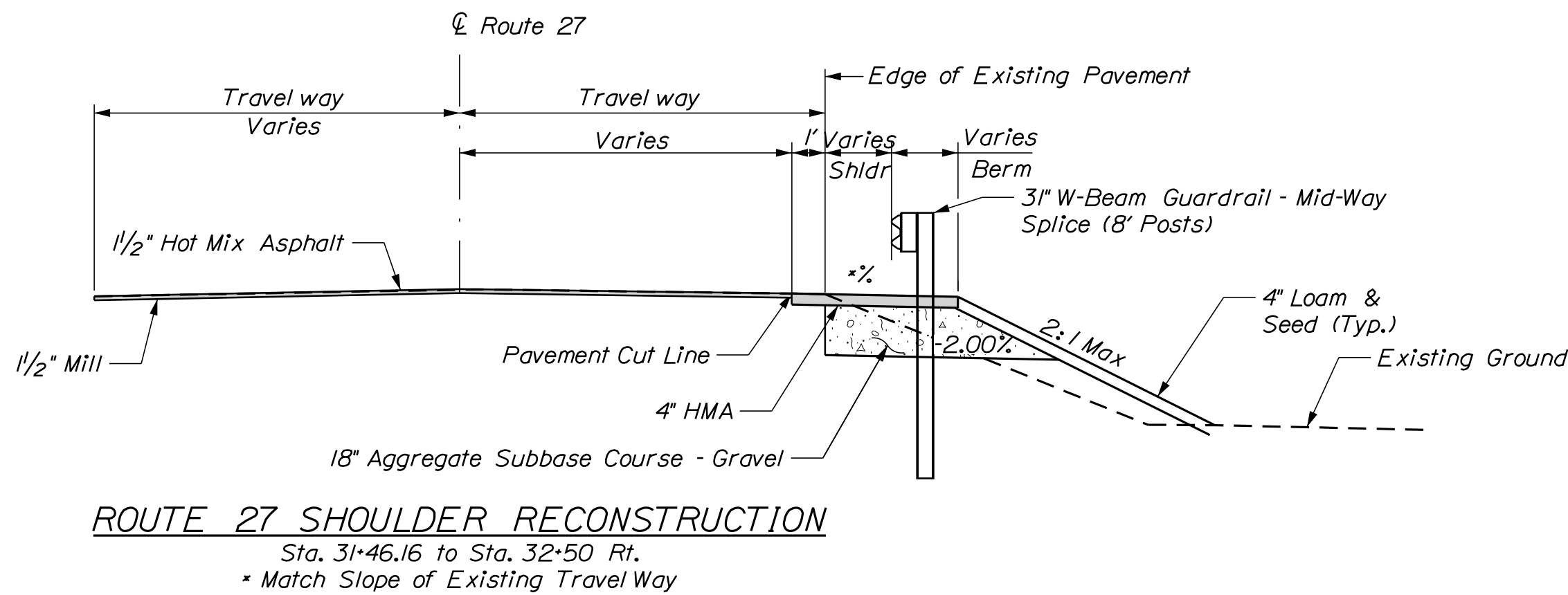
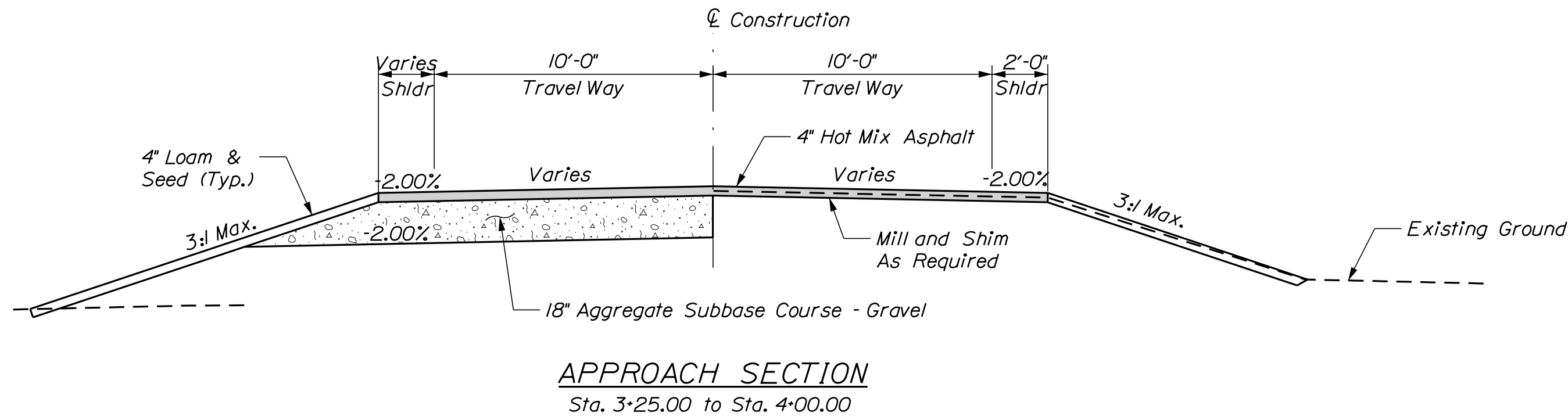
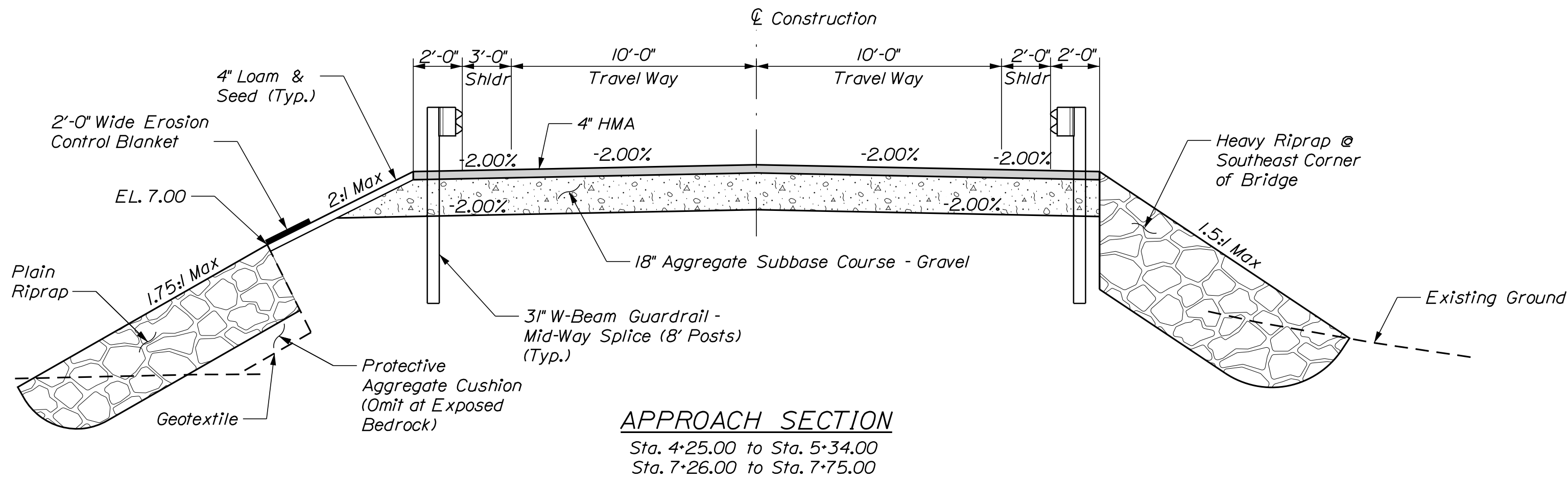
Filename: ...\\00\\BRIDGE\\MSTA\\012_Typ.dgn



SECTION - PROPOSED STRUCTURE
* High Performance Waterproofing Membrane



SECTION - EXISTING STRUCTURE

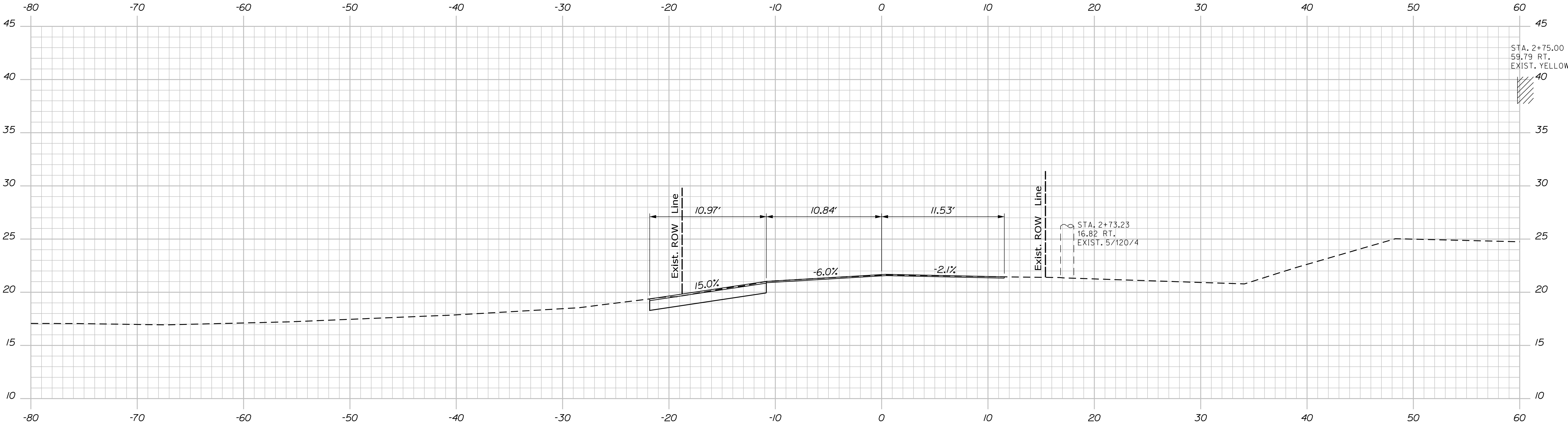


Date: 3/1/2019

Username: dataylor

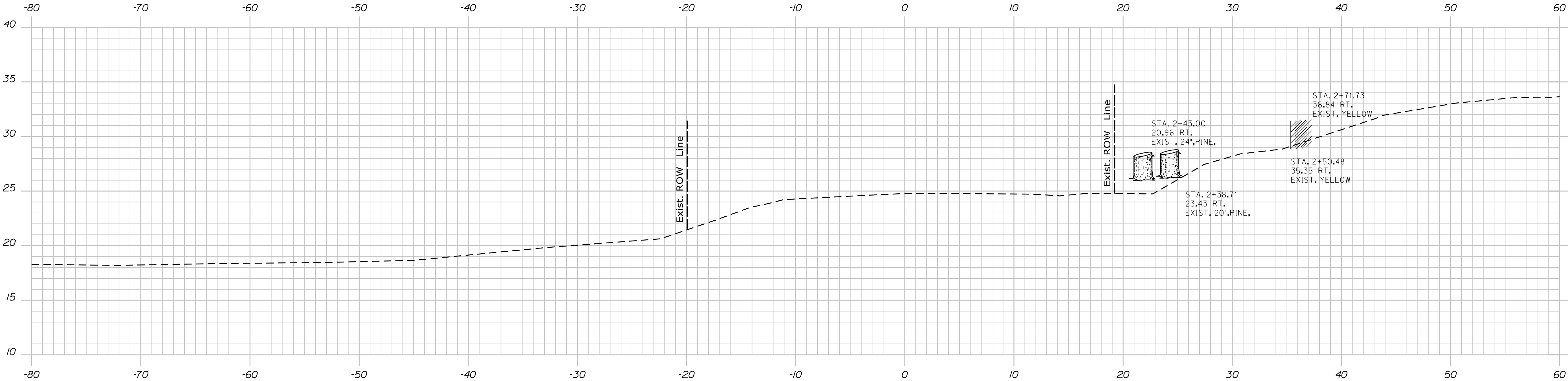
Division: BRIDGE

Filename: ... \18748\00\BRIDGE\MSTA\xssect.dgn



2+75.00

Sta. 2+60.00
 Match Existing
 Limit of Work
 Begin Mill, Shim & 1 1/2" Overlay



2+50.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1874(800)
WIN
BRIDGE NO. 2848
18748.00
BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	PIP	FEB 2019
CHECKED-REVIEWED	LEM	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

THOMPSONS BRIDGE	SOUTHPORT	LINCOLN COUNTY
DECKER COVE		
CROSS SECTIONS		

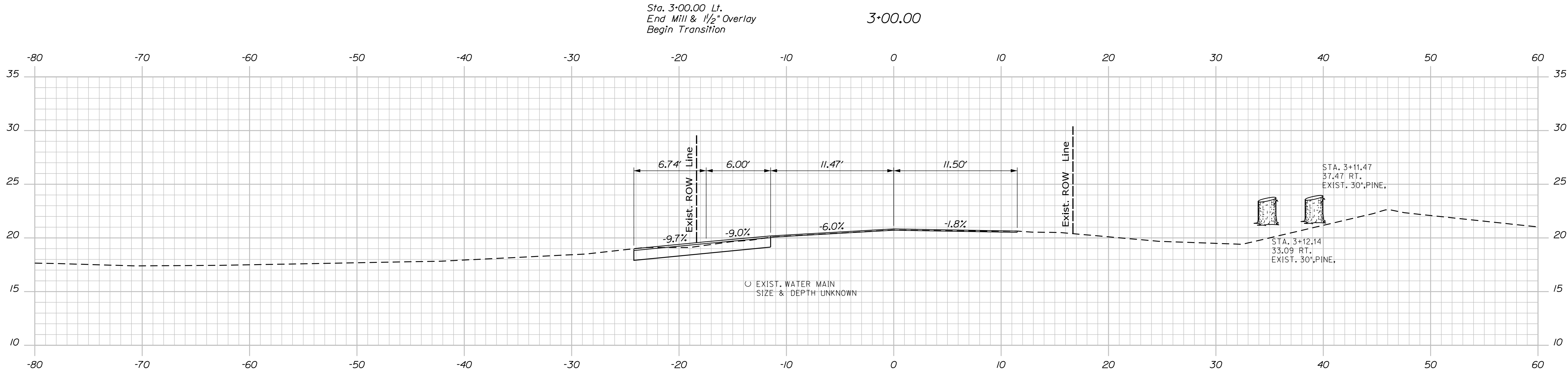
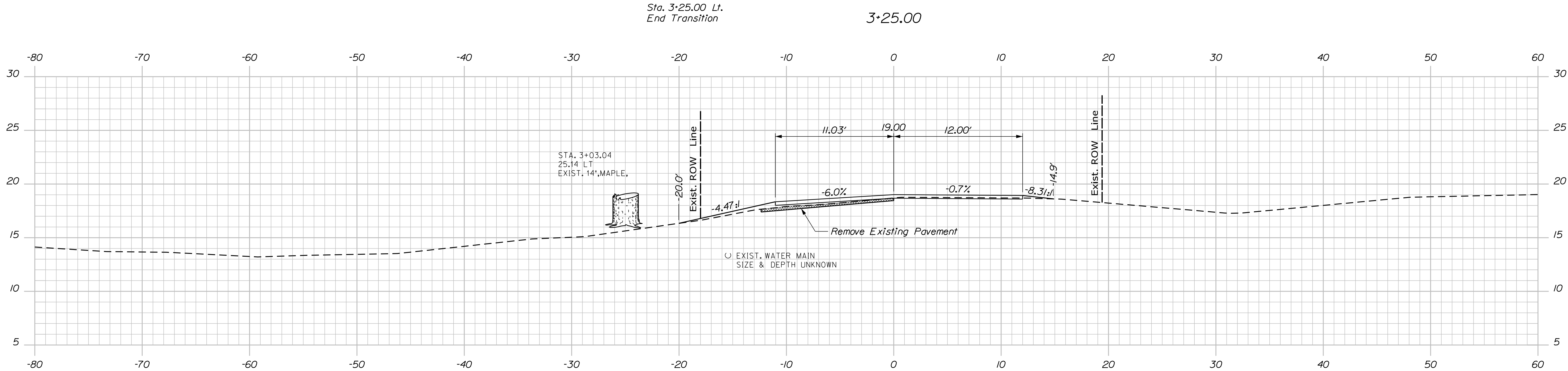
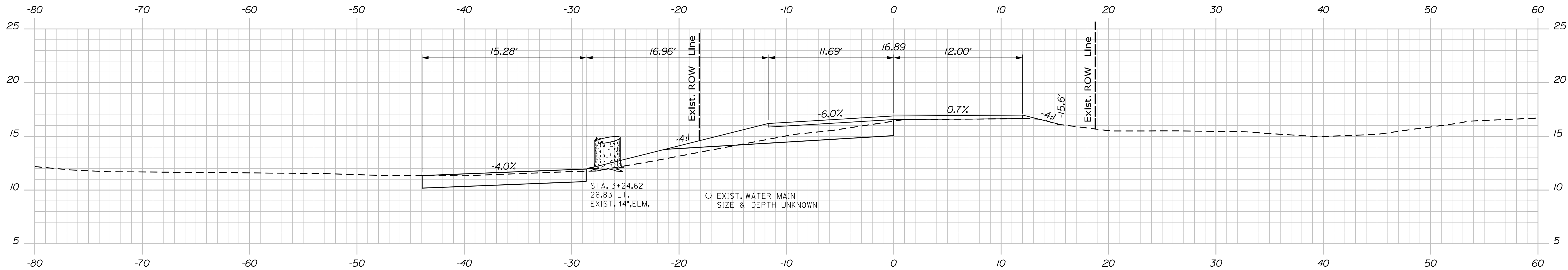
SHEET NUMBER
13
OF 43

Date: 3/1/2019

Username: dataylor

Division: BRIDGE

Filename: ... \18748\00\BRIDGE\MSTAXsect.dgn



Sta. 2+82.30
Construct Paved Drive

2+82.30



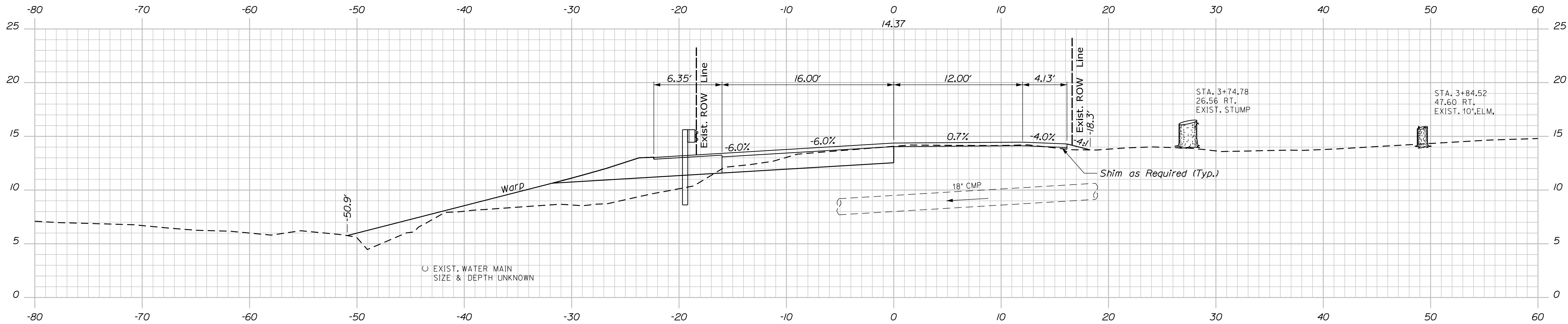
PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	DDT/TMM	FEB 2019
CHECKED-REVIEWED	LEM		FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Date: 3/11/2019

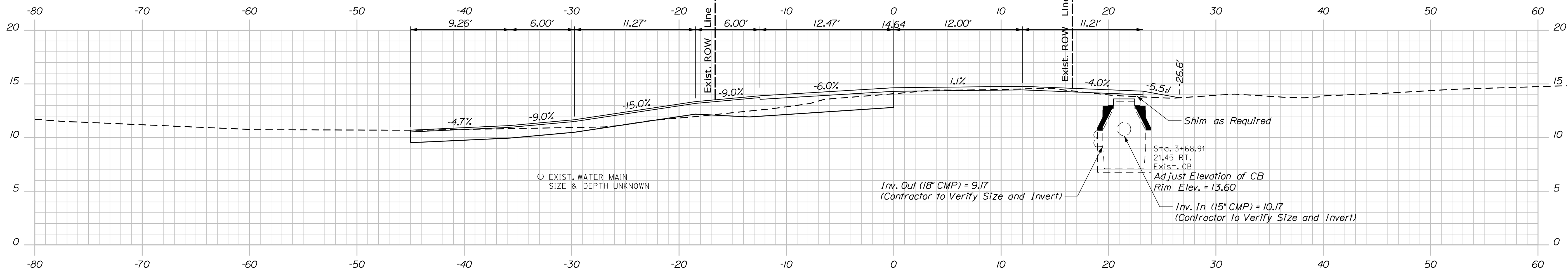
Username: dataylor

Division: BRIDGE

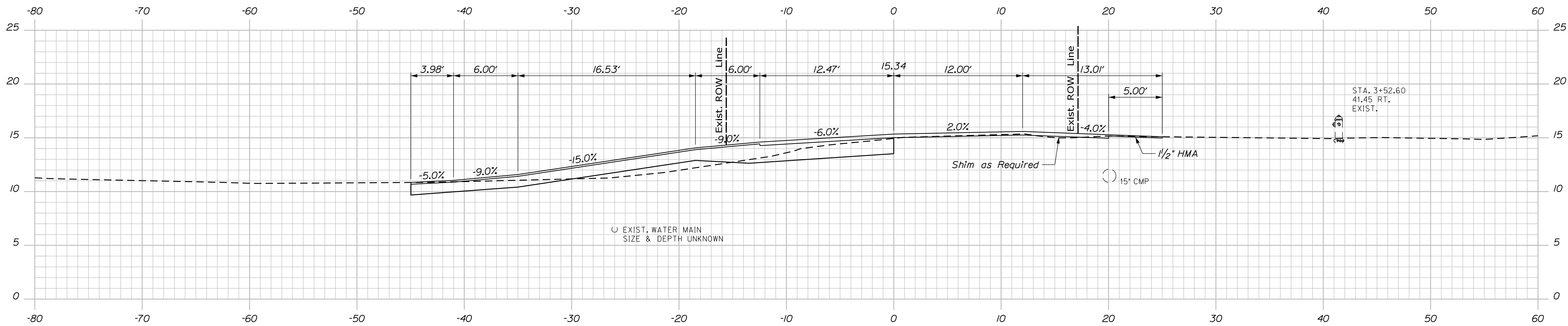
Filename: ... \18748\00\BRIDGE\MSTAXsect.dgn



Sta. 3+70.86, 27.68 Lt. to Sta. 3+87.52, 13.00 Lt.
Install 25.0' 3" W-Beam Guardrail - Mid-Way Splice (Over 15' Radius) (8' Posts)



Sta. 3+66.27
Construct Paved Drive

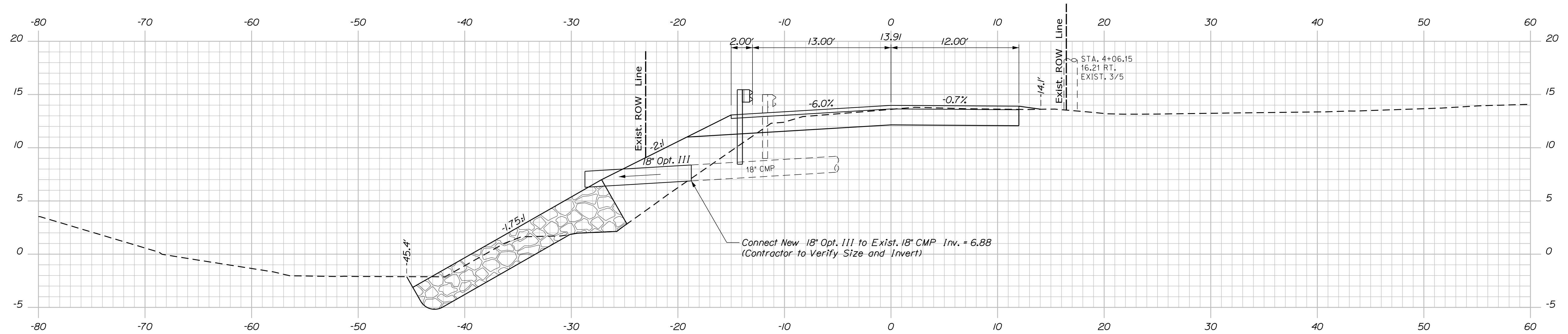


Sta. 3+47.71
Nickerson Rd.

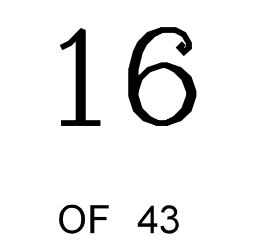


PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	PIP	FEB 2019
CHECKED-REVIEWED	LEM	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Filename: ... \18748\00\BRIDGE\MSTA\xsect.dgn



Sta. 4+00.00
Begin Transition



Route 238 Sta. 4+00.00 to Sta. 4+25.00

THOMPSONS BRIDGE
DECKER COVE
SOUTHPORT LINCOLN COUNTY
CROSS SECTIONS

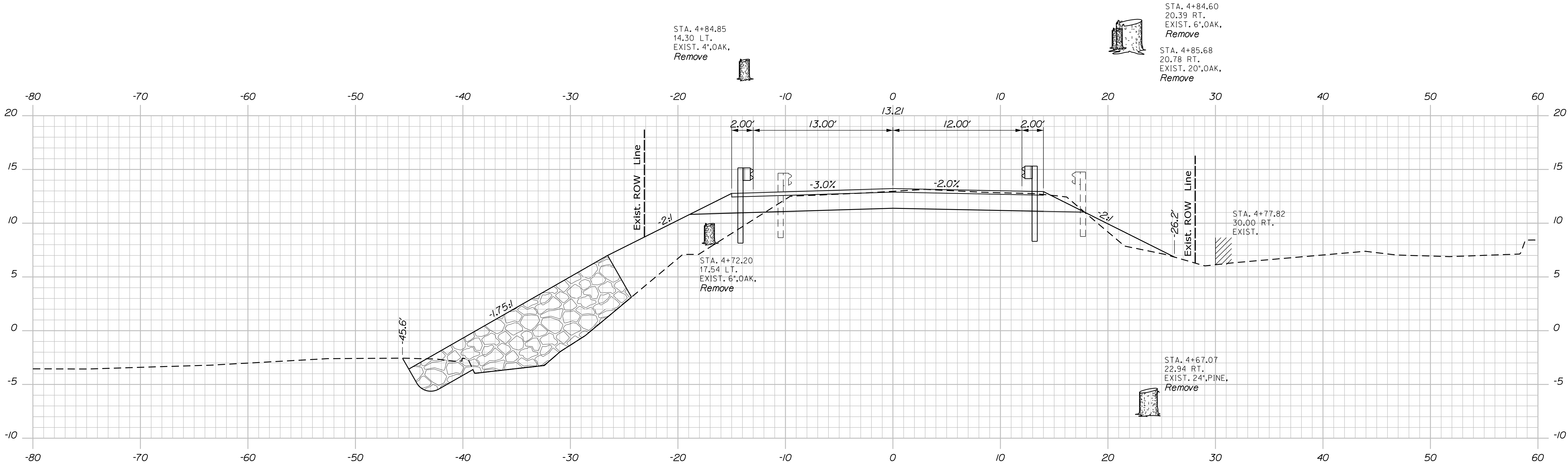
SHEET NUMBER

Date:3/1/2019

Username: dataylor

Division: BRIDGE

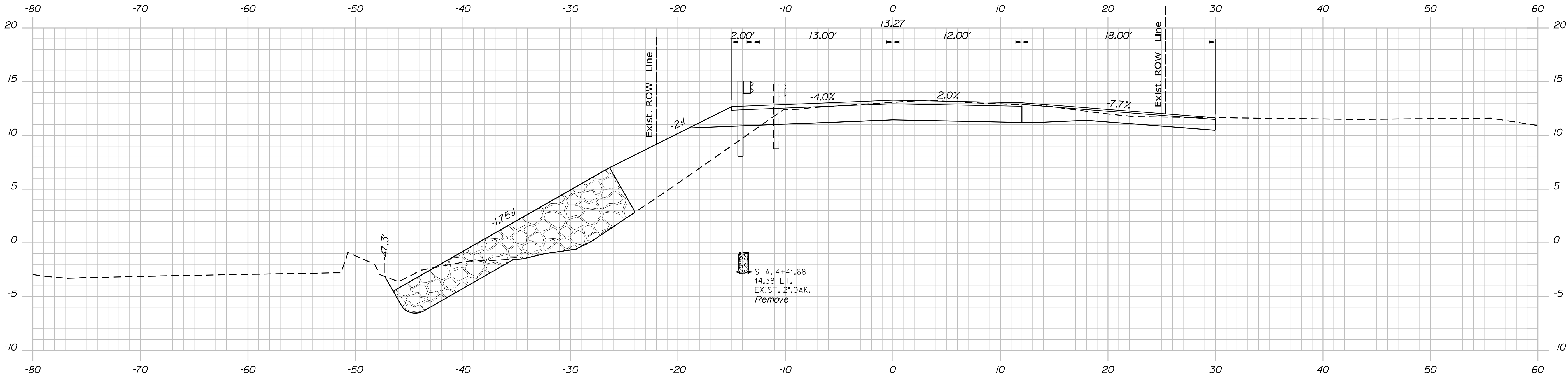
Filename: ... \18748\00\BRIDGE\MSTA\xssect.dgn



4+75.00

Sta. 4+59.27, 27.74 Rt. to Sta. 4+75.40, 12.00 Rt.
Install 25.0' 3" W-Beam Guardrail - Mid-Way Splice (Over 15' Radius) (8' Posts)

Sta. 4+59.22, 33.99 Rt. to Sta. 4+59.27, 27.74 Rt.
Install 6.25' 3" W-Beam Guardrail - Mid-Way Splice (8' Posts)



4+50.00



STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
STP-1874(800)	
BRIDGE NO. 2848	WIN 18748.00
BRIDGE PLANS	

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	PIP	FEB 2019
CHECKED-REVIEWED	LEM	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

THOMPSONS BRIDGE	LINCOLN COUNTY	CROSS SECTIONS
DECKER COVE		
SOUTHPORT		

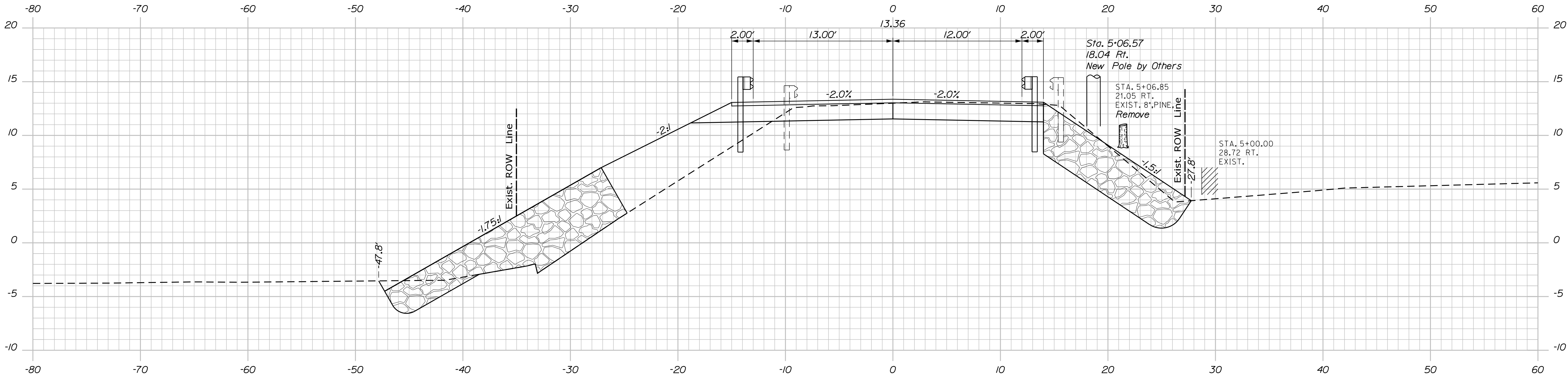
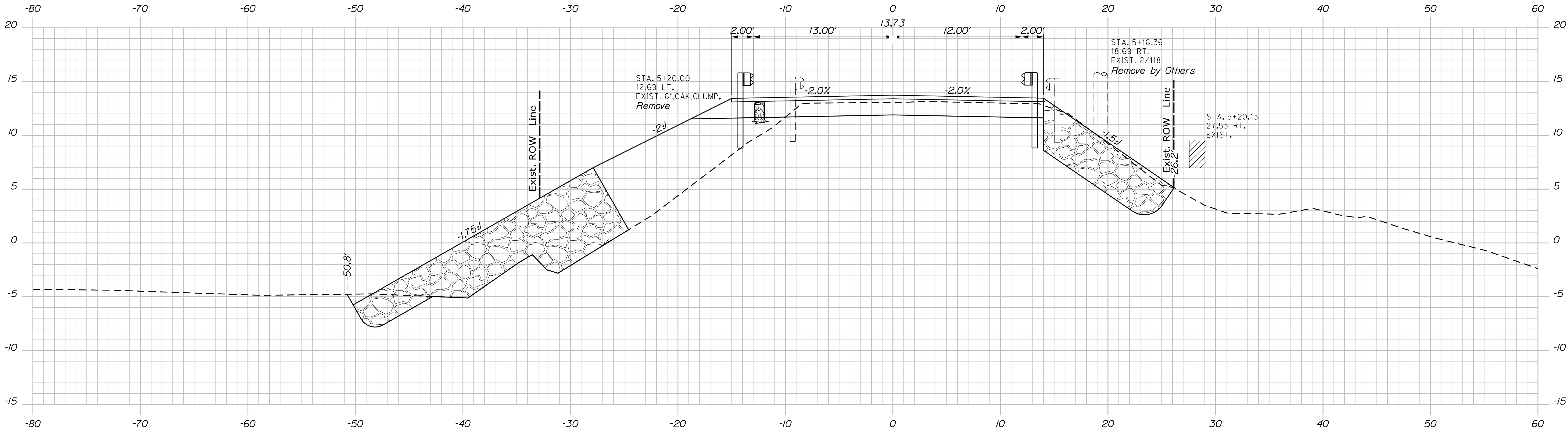
SHEET NUMBER
17
OF 43

Date: 3/1/2019

Username: dataylor

Division: BRIDGE

Filename: ... \18748\00\BRIDGE\MSTA\xssect.dgn



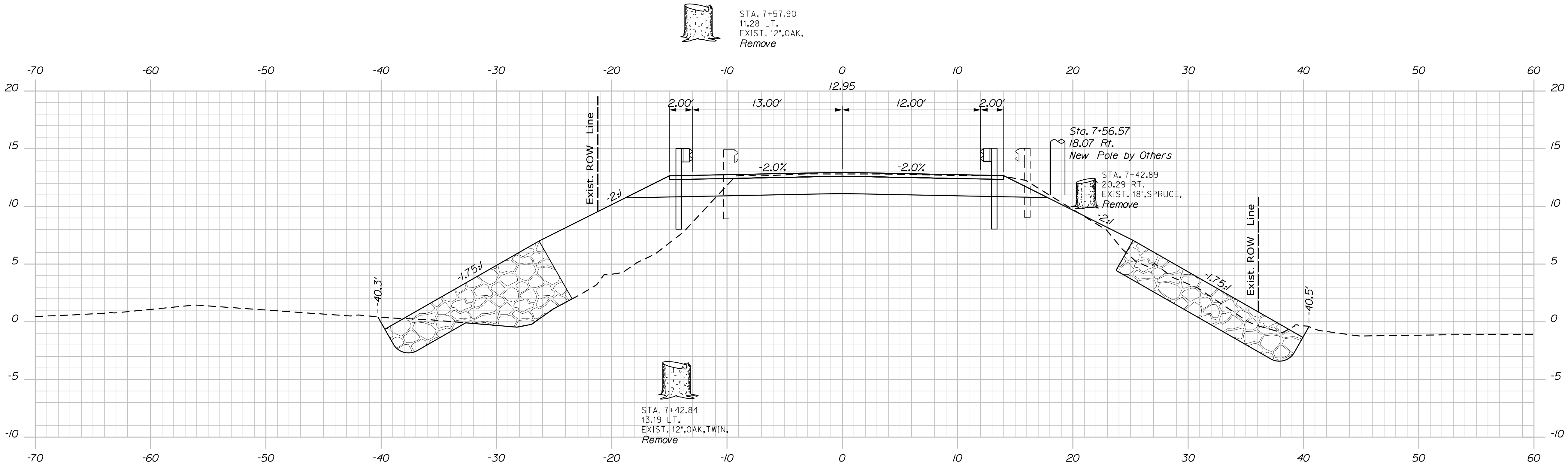
PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	PIP	FEB 2019
CHECKED-REVIEWED	LEM	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE





Sta. 7+47.10, 13.00 Lt. to Sta. 7+84.60, 13.00 Lt., 21.48 Rt.
Install 37.5' 3" W-Beam Guardrail - Mid-Way Splice (8' Posts)

Sta. 7+47.10, 13.00 Lt.
Install Bridge Transition (Asymetrical) Type 1A

7+50.00

Sta. 7+47.35, 12.00 Rt. to Sta. 7+72.35, 12.00 Rt.
Install 25.0' 3" W-Beam Guardrail - Mid-Way Splice (8' Posts)

Sta. 7+47.35, 12.00 Rt.
Install Bridge Transition (Asymetrical) Type 1A



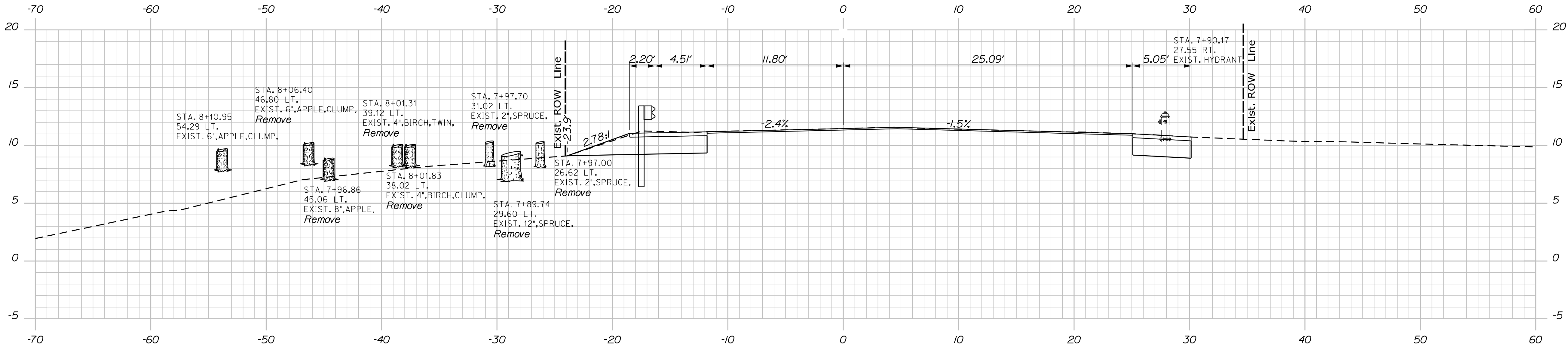
THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
	STP-1874(800)			
	BRIDGE NO. 2848			
	WIN 18748.00			
CROSS SECTIONS	SIGNATURE			
	P.E. NUMBER			
	DATE			
	BRIDGE PLANS			
SHEET NUMBER		19		
		OF 43		

Date:3/1/2019

Username: dataylor

Division: BRIDGE

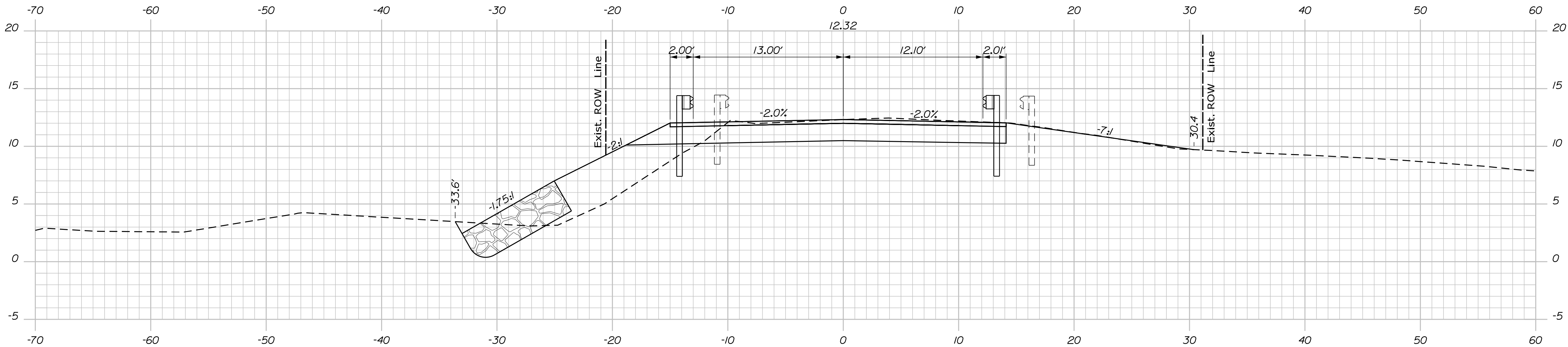
Filename: ... \18748\00\BRIDGE\MSTA\sect.dgn



Sta. 7+84.65, 13.00 Lt. to Sta. 8+20.25, 65.97 Lt.
Install 75.0' 31" W-Beam Guardrail - Mid-Way Splice (Over 15' Radius) (8' Posts)

Sta. 8+00.00
End Transition
Begin Mill & 1/2" Overlay

Sta. 7+95.40, 29.75 Rt.
Install Anchorage Assembly



Sta. 7+75.00
End Project
Begin Transition

Sta. 7+72.35, 12.00 Rt. to Sta. 7+95.40, 29.75 Rt.
Install 31.25' 31" W-Beam Guardrail - Mid-Way Splice (Over 15' Radius) (8' Posts)

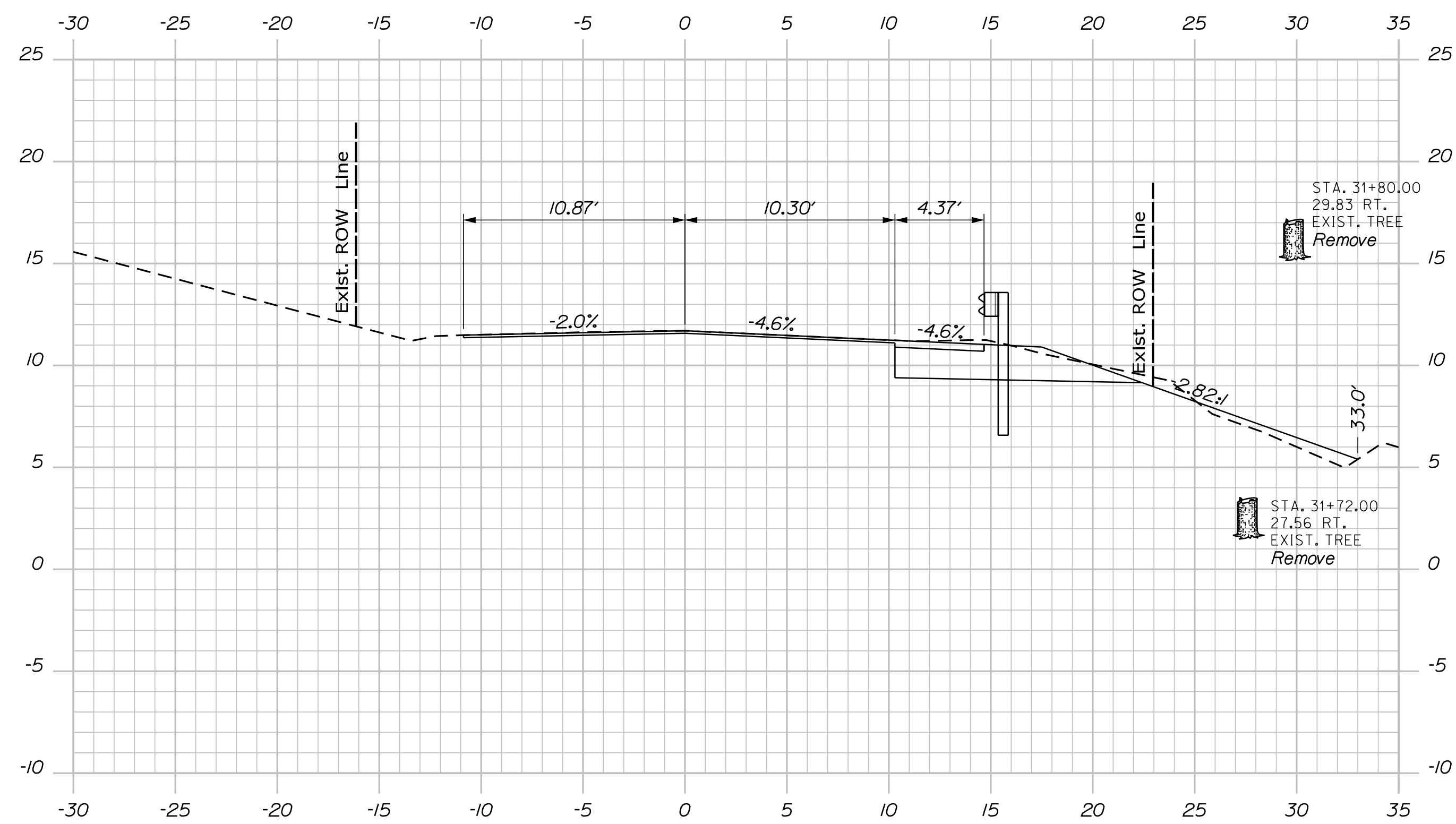


STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
STP-1874(800)	
BRIDGE NO. 2848	WIN
18748.00	
BRIDGE PLANS	

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PIP	PIP	FEB 2019
CHECKED-REVIEWED	LEM	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

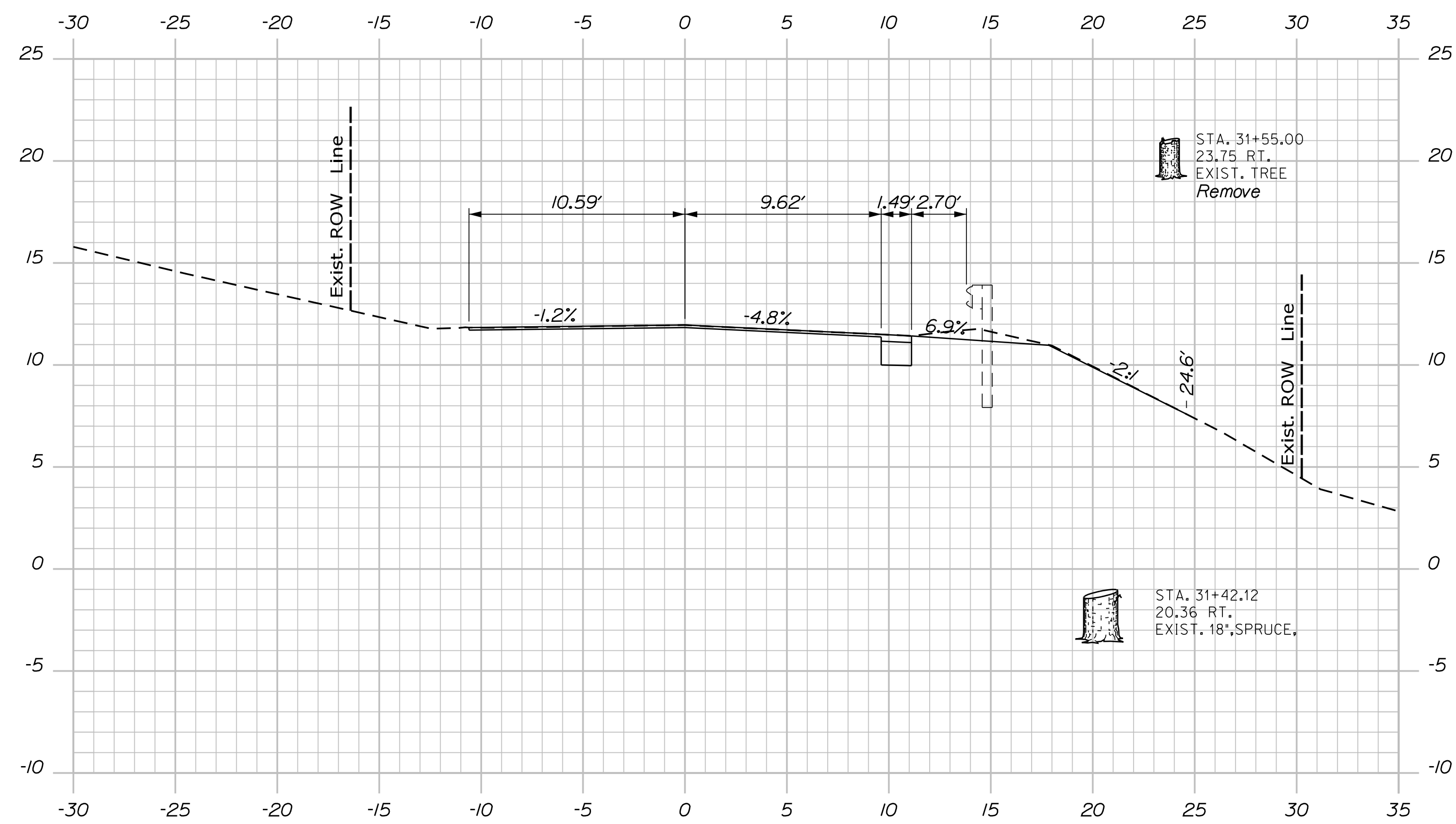
THOMPSONS BRIDGE	LINCOLN COUNTY	CROSS SECTIONS
DECKER COVE		
SOUTHPORT		

SHEET NUMBER
20
OF 43



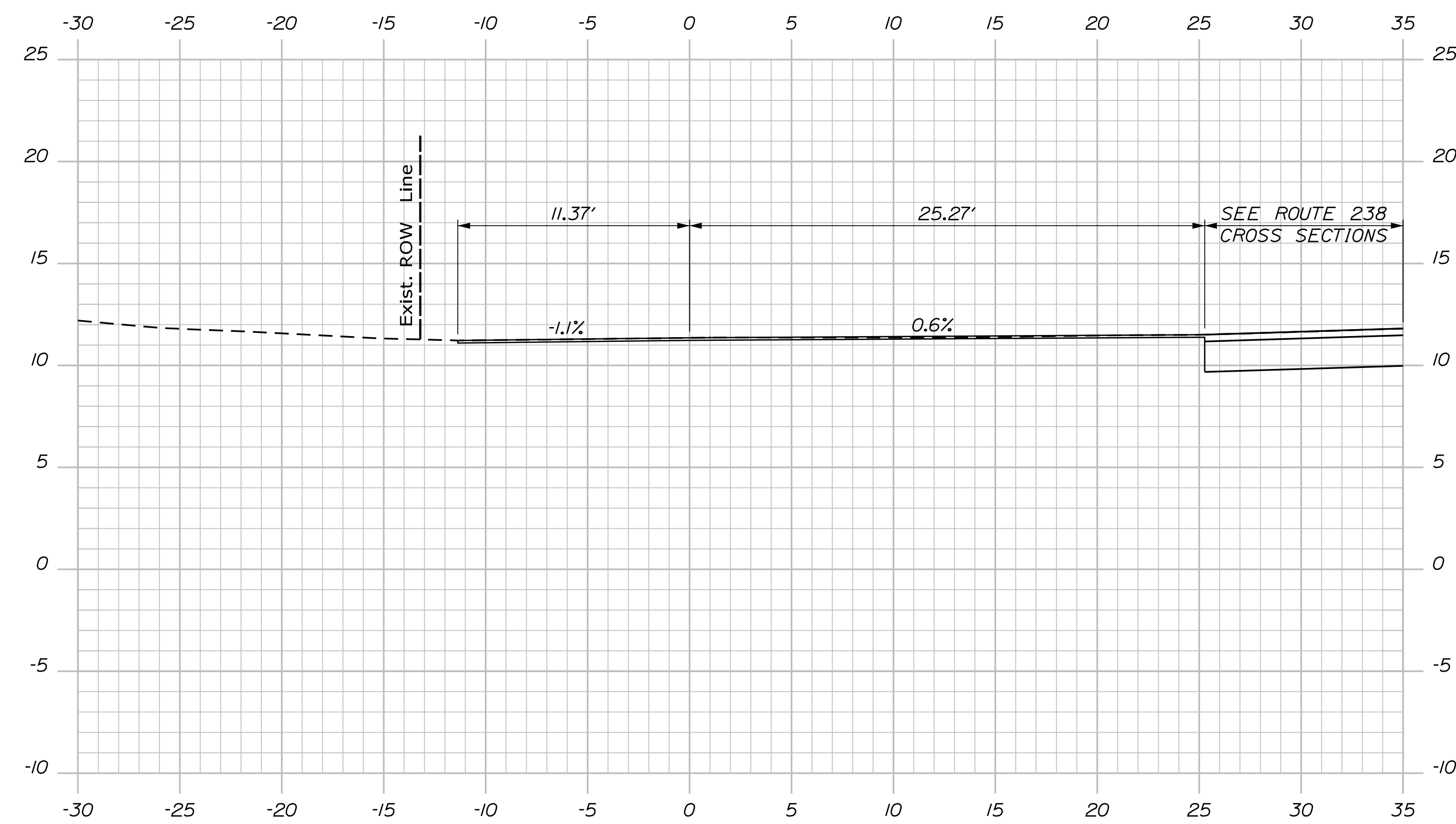
31+75.00

Sta. 31+56.30, 16.2 Rt.
Install Riprap Downspout

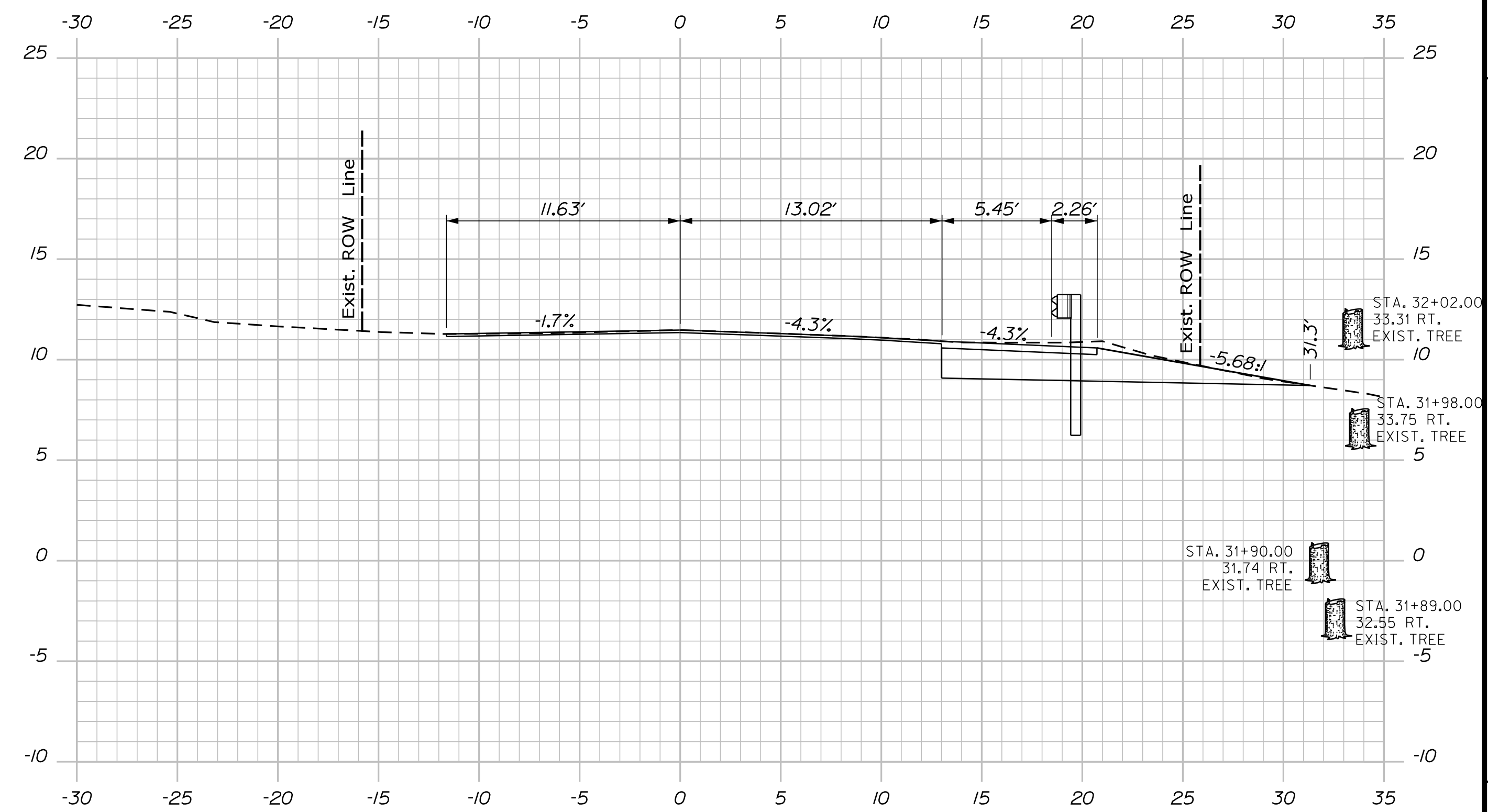


Sta. 31+46.16
Match Existing
Limit of Work
Begin Mill & 1 1/2" Overlay

31+50.00

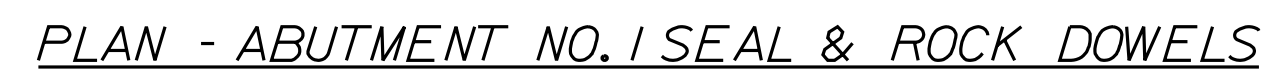


32+25.00



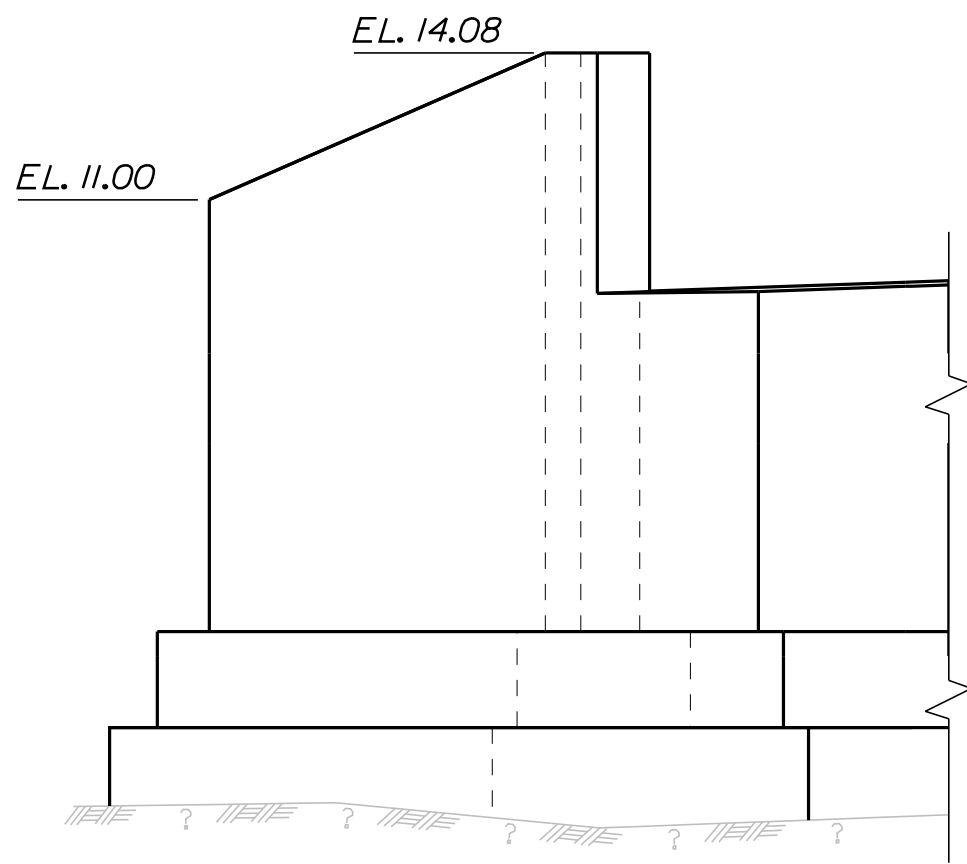
32+00.00



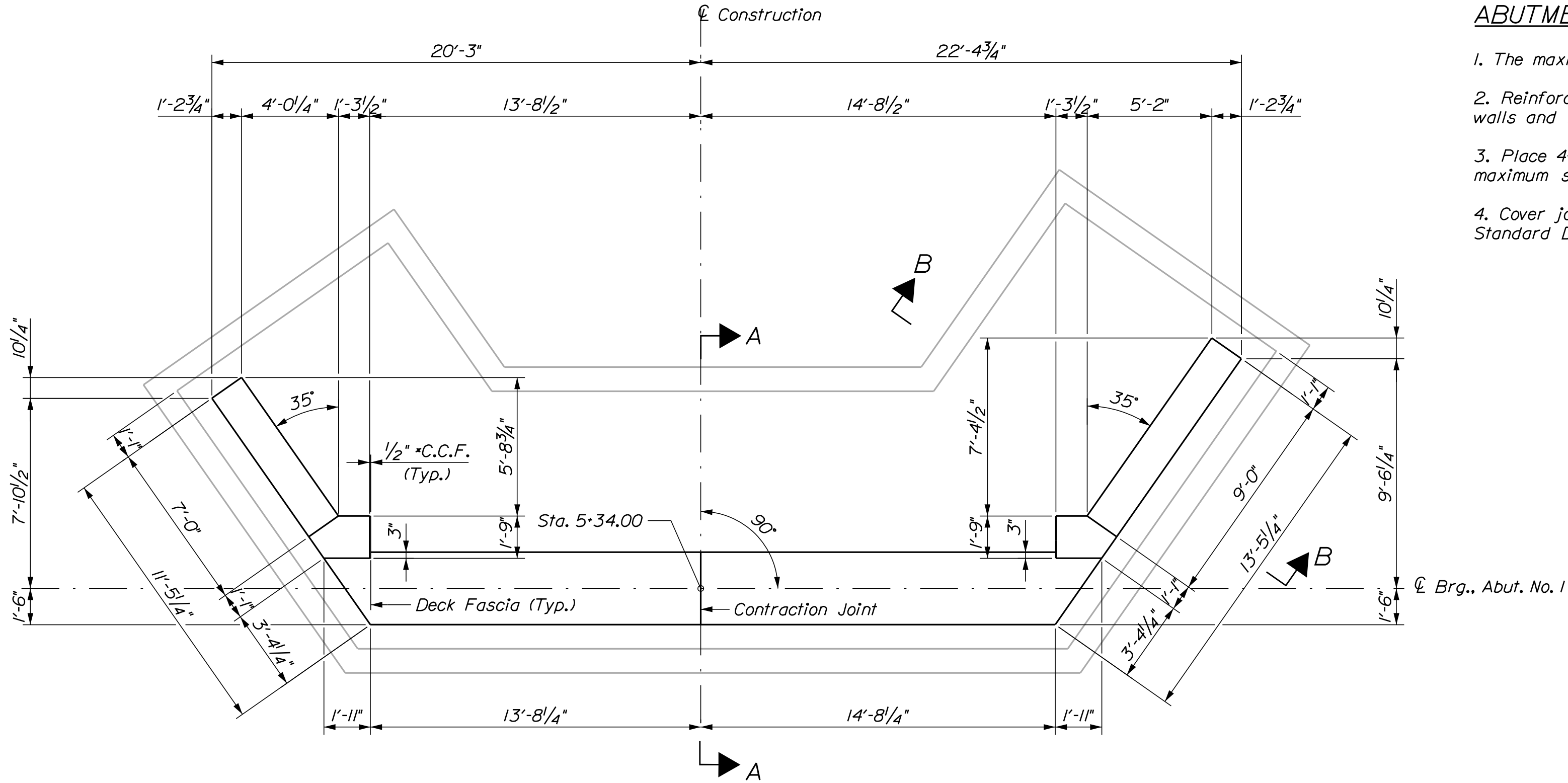


6. Prior to placing the seal, the Contractor shall survey the topography of the prepared bedrock surface and provide the topography to the Resident. Sufficient elevation measurements shall be obtained to demonstrate the prepared surface meets the slope and/or benching requirements. At a minimum, the elevation shall be determined at 20 evenly distributed locations across the seal at a maximum 5 foot spacing. Payment will be incidental to related Contract items.
7. If the bedrock elevations vary from the elevations assumed in the development of these Plans, the abutments and/or wingwalls may need to be modified. The Contractor shall grant the Department seven (7) Days to modify the Plans from the date the Resident accepts the bedrock survey.
8. Where bedrock protrudes above the bottom of the footing, the footing may be raised and vertical reinforcing may be cut in the field with the approval of the Resident. Payment for adjusting the footing elevations and reinforcing steel will be considered incidental to related Contract items. No separate payment will be made.
9. At the option of the Resident, bedrock that protrudes above the bottom of the footing elevation may be removed. Payment for bedrock removal will be made under Item No. 206.092, Structural Rock Excavation - Major Structures.

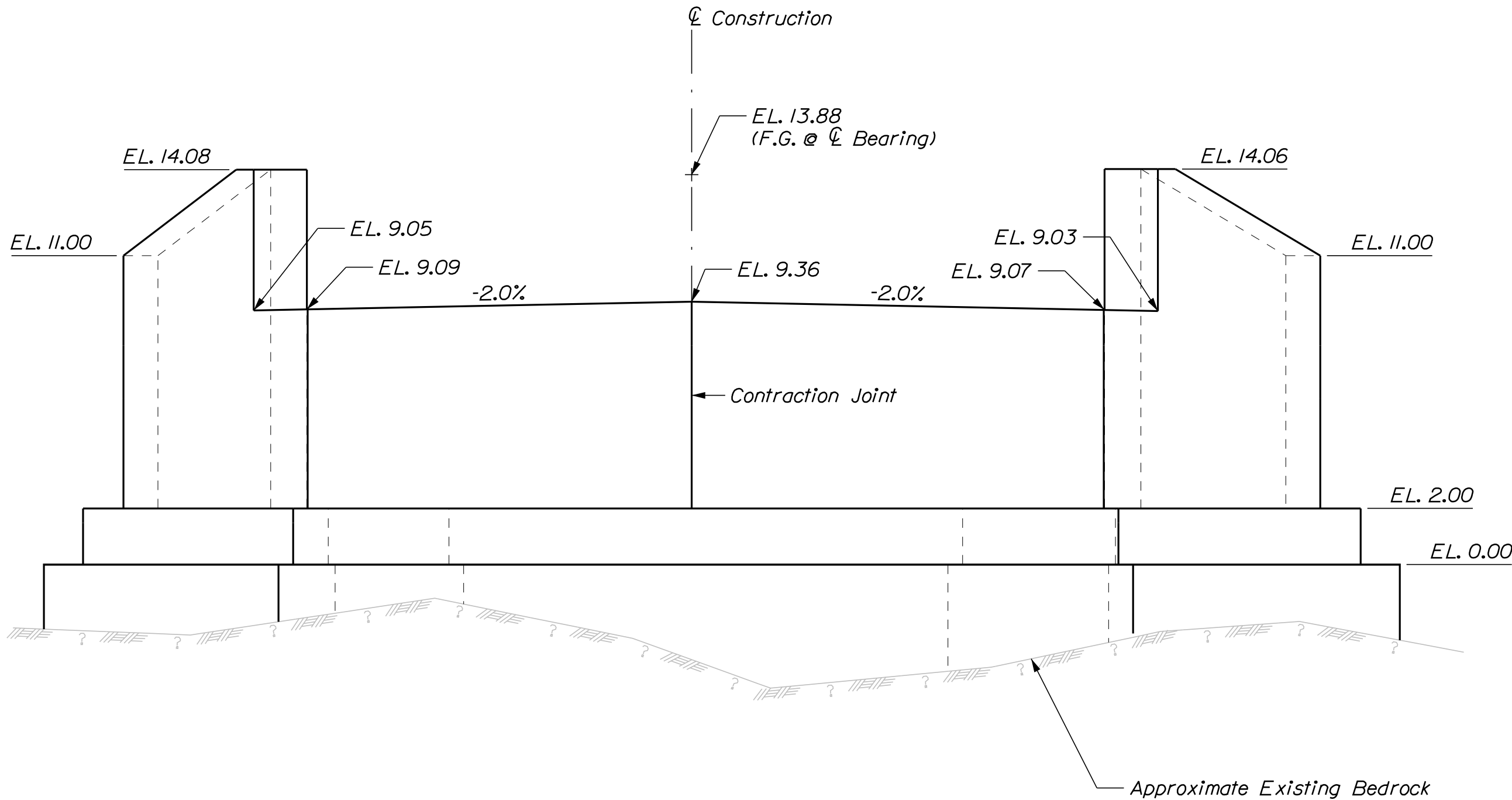
1. The connection between the bearing surface and the abutment footing shall be doweled.
2. The method of installing dowels shall be approved by the Resident.
3. All cost for drilling and anchoring of the anchor dowels shall be incidental to Item No. 503.27 - Stainless Steel Reinforcing, Placing.
4. The anchoring material shall be on the MaineDOT Qualified Products List of Grout Materials, be pre-qualified for anchoring, have a maximum water-cement ratio of 0.45 by weight, and a minimum unconfined compressive strength of 4 ksi at the time of testing. Installation shall be in conformance with the manufacturer's recommendations. The anchor material chosen shall be submitted to the Resident prior to installation.
5. Holes drilled for the dowel reinforcing steel shall be a minimum diameter of $2\frac{1}{2}$ inches.



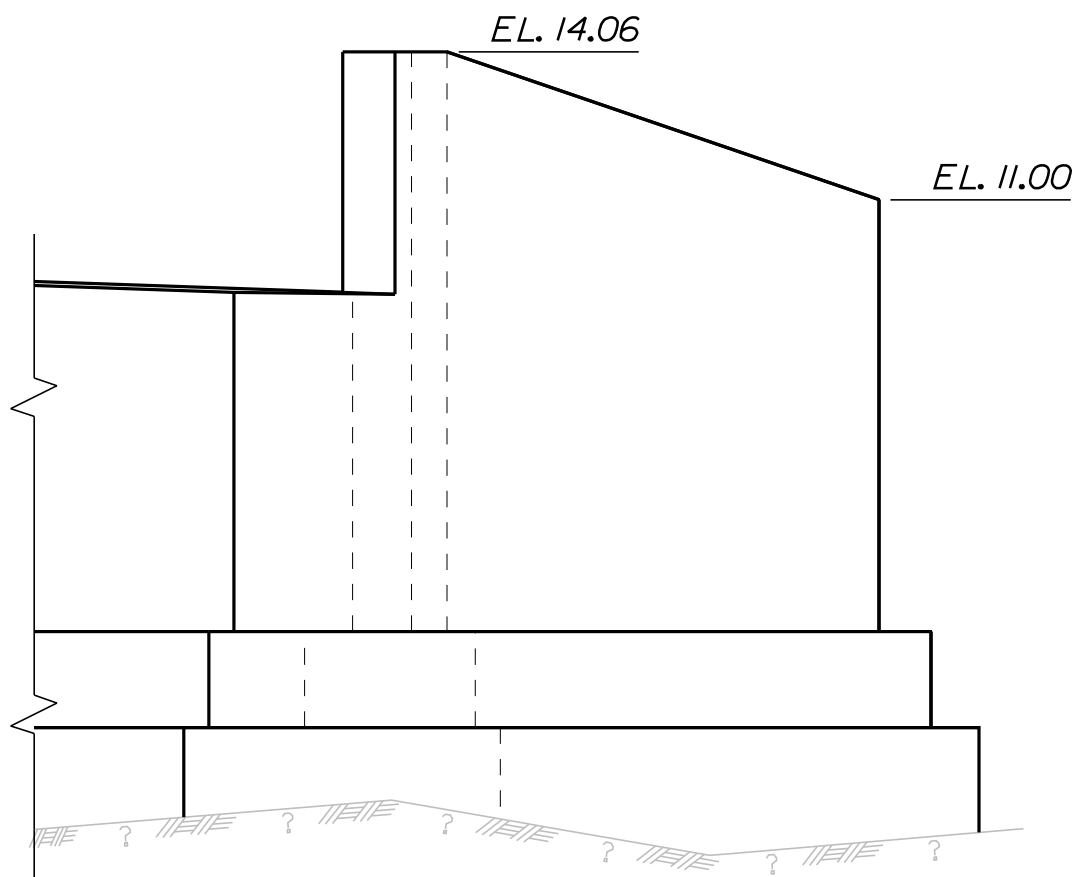
ELEVATION - SOUTHEAST WINGWALL



PLAN - ABUTMENT NO. 1
* Closed Cell Foam



ELEVATION - ABUTMENT NO. 1

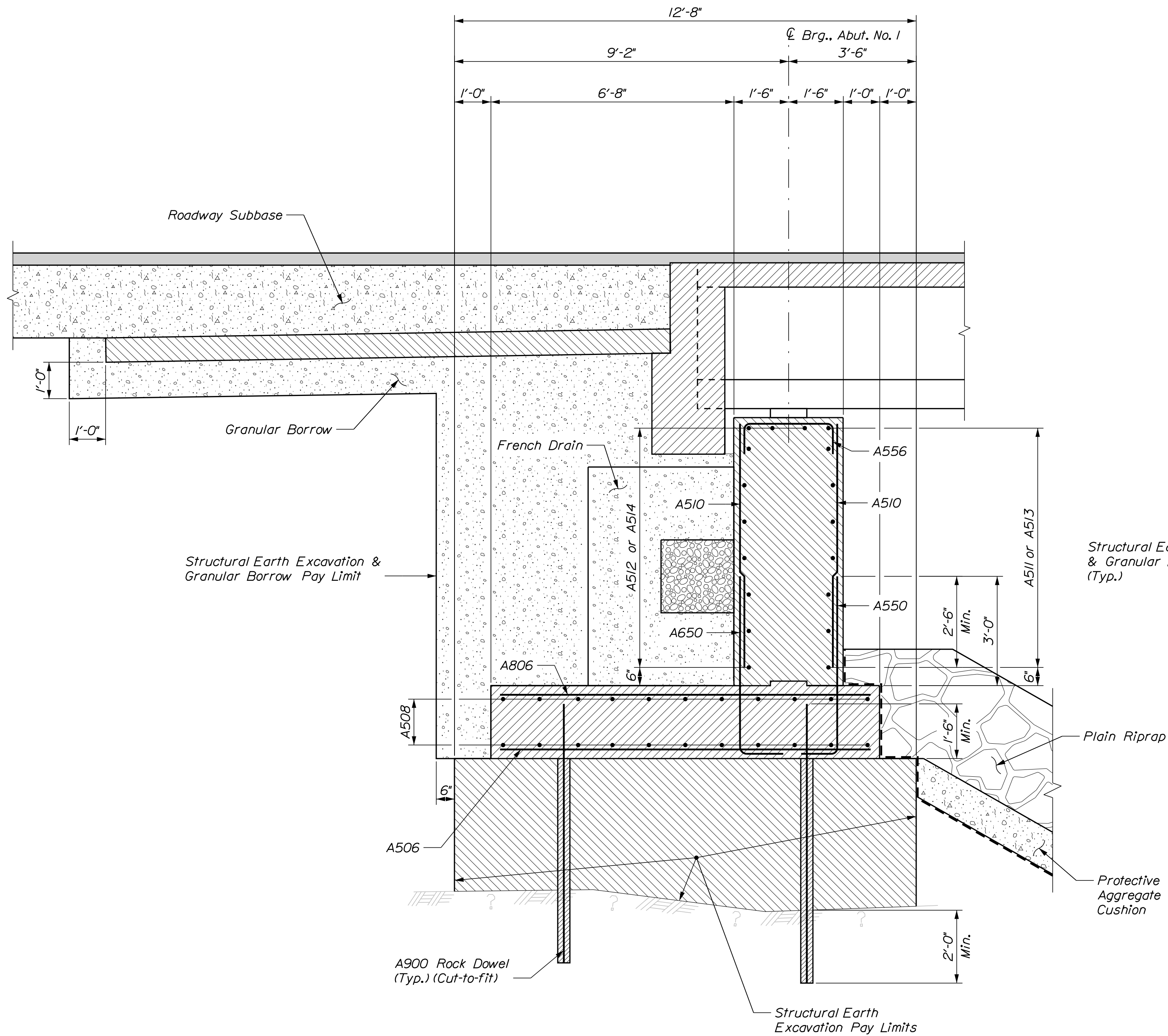


ELEVATION - SOUTHWEST WINGWALL

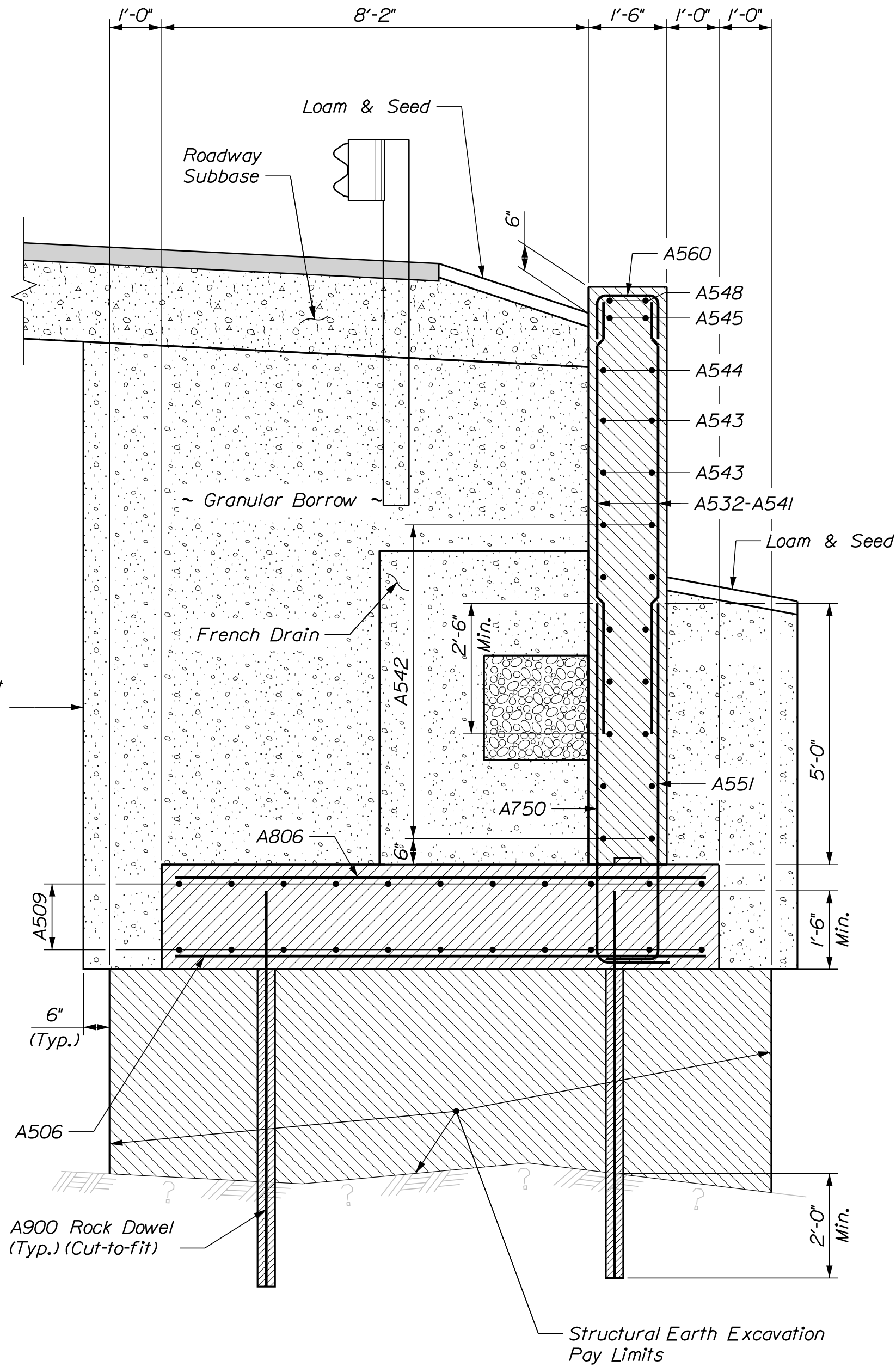
ABUTMENT NOTES

1. The maximum factored applied footing pressure is 20.9 ksf.
2. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.
3. Place 4-in. diameter drains in the breastwall and wingwalls at 10-ft maximum spacing. The exact location will be determined by the Resident.
4. Cover joints where waterstops are not required in accordance with Standard Details Section 502.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-1874(800)		WIN		BRIDGE PLANS	
THOMPSONS BRIDGE		DECKER COVE		LINCOLN COUNTY		SOUTHPORT		ABUTMENT NO. 1	
SHEET NUMBER		23		OF 43		BRIDGE NO. 2848		18748.00	
PROJ. MANAGER	L. TIMBERLAKE	BY	K. WILSON	DATE	FEB 2019	SIGNATURE		P.E. NUMBER	
DESIGN-DETAILED	LSF	CHECKED-REVIEWED	DDT/PAG	DDT/TMM	FEB 2019	DATE			
DESIGN-DETAILED		DESIGN-DETAILED							
REVISIONS 1		REVISIONS 1							
REVISIONS 2		REVISIONS 2							
REVISIONS 3		REVISIONS 3							
REVISIONS 4		REVISIONS 4							
FIELD CHANGES		FIELD CHANGES							

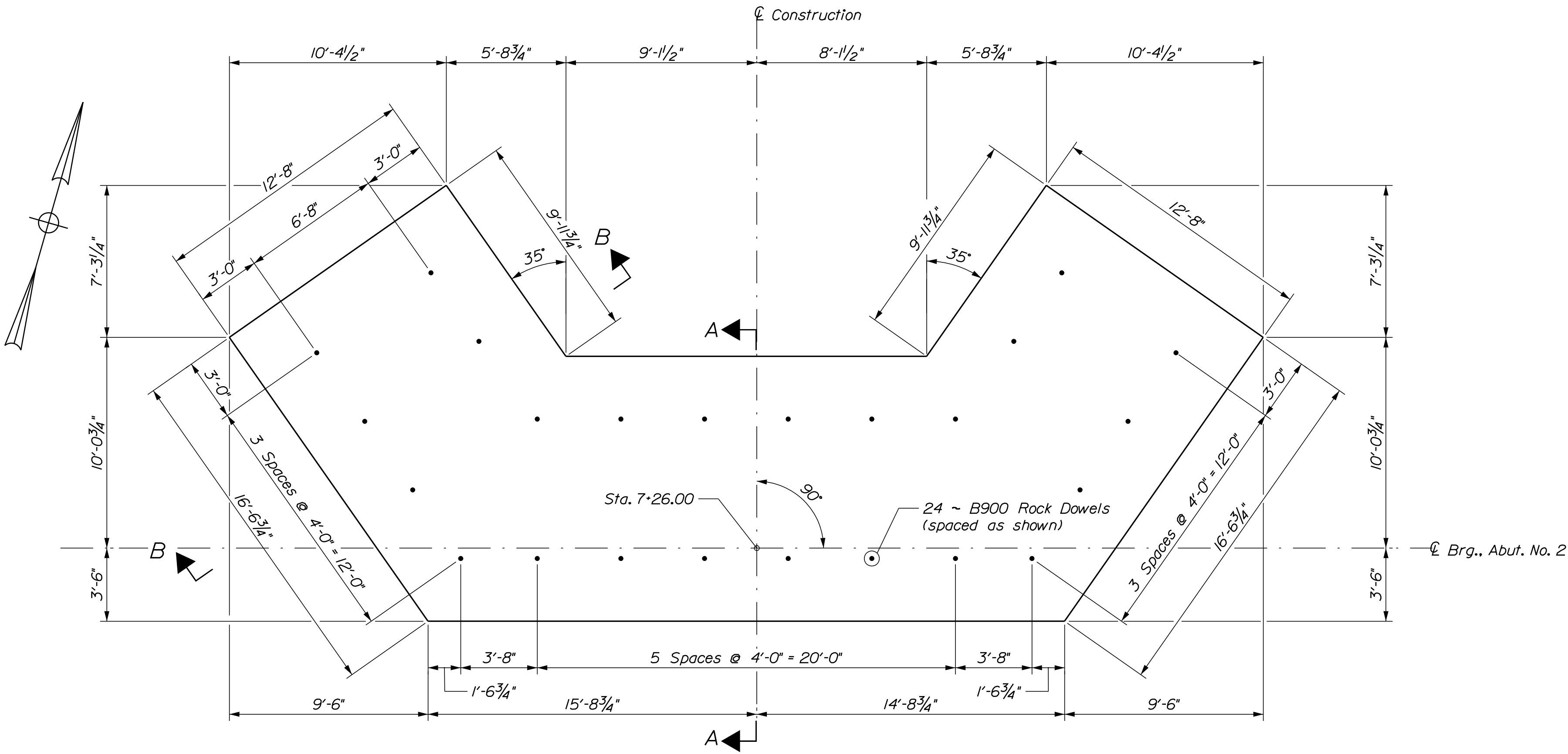


SECTION A-A

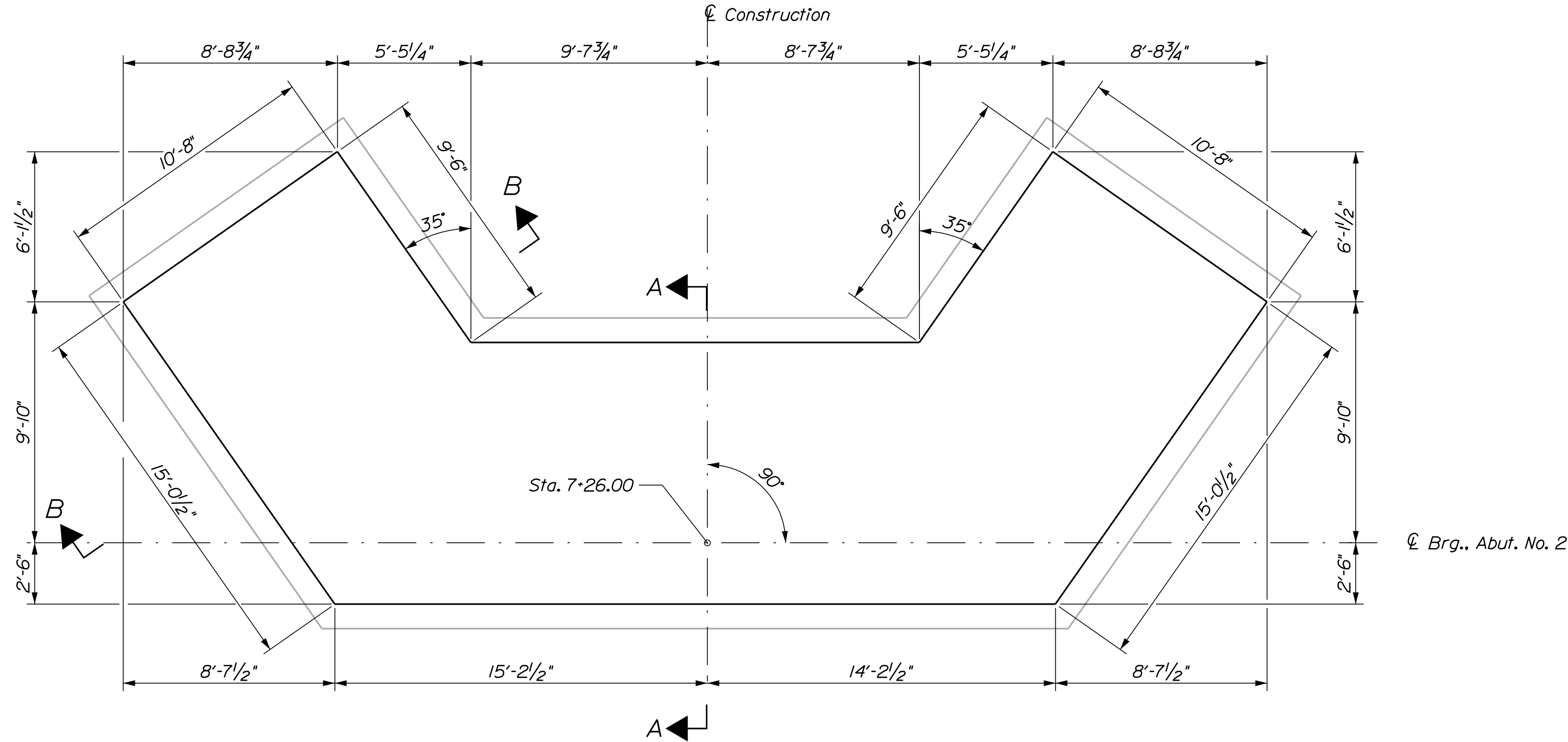


SECTION B-B
(SW Wing Shown, SE Similar)

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
STP-1874(800)		WIN	
BRIDGE NO. 2848		18748.00	
BRIDGE PLANS			
THOMPSONS BRIDGE		SOUTHPORT	
DECKER COVE		LINCOLN COUNTY	
ABUTMENT NO. 1		SECTIONS	
SHEET NUMBER		25	
OF 43			
PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	KLW/LSF	FEB 2019
CHECKED-REVIEWED	DDT/PAG	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE		P.E. NUMBER	
DATE			



PLAN - ABUTMENT NO. 2 SEAL & ROCK DOWELS



PLAN - ABUTMENT NO. 2 FOOTING



THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY				PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
				DESIGN-DETAILED	LSF	KLW/LSF	FEB 2019
ABUTMENT NO. 2 SEAL & FOOTING PLAN				CHECKED-REVIEWED	DDT/PAG	DDT/TMM	FEB 2019
				DESIGN2-DETAILED2			
				DESIGN3-DETAILED3			
				REVISIONS 1			
				REVISIONS 2			
				REVISIONS 3			
				REVISIONS 4			
				FIELD CHANGES			
SHEET NUMBER 26 OF 43				STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
				STP-1874(800)			
				BRIDGE NO. 2848			
				WIN 18748.00			
				BRIDGE PLANS			



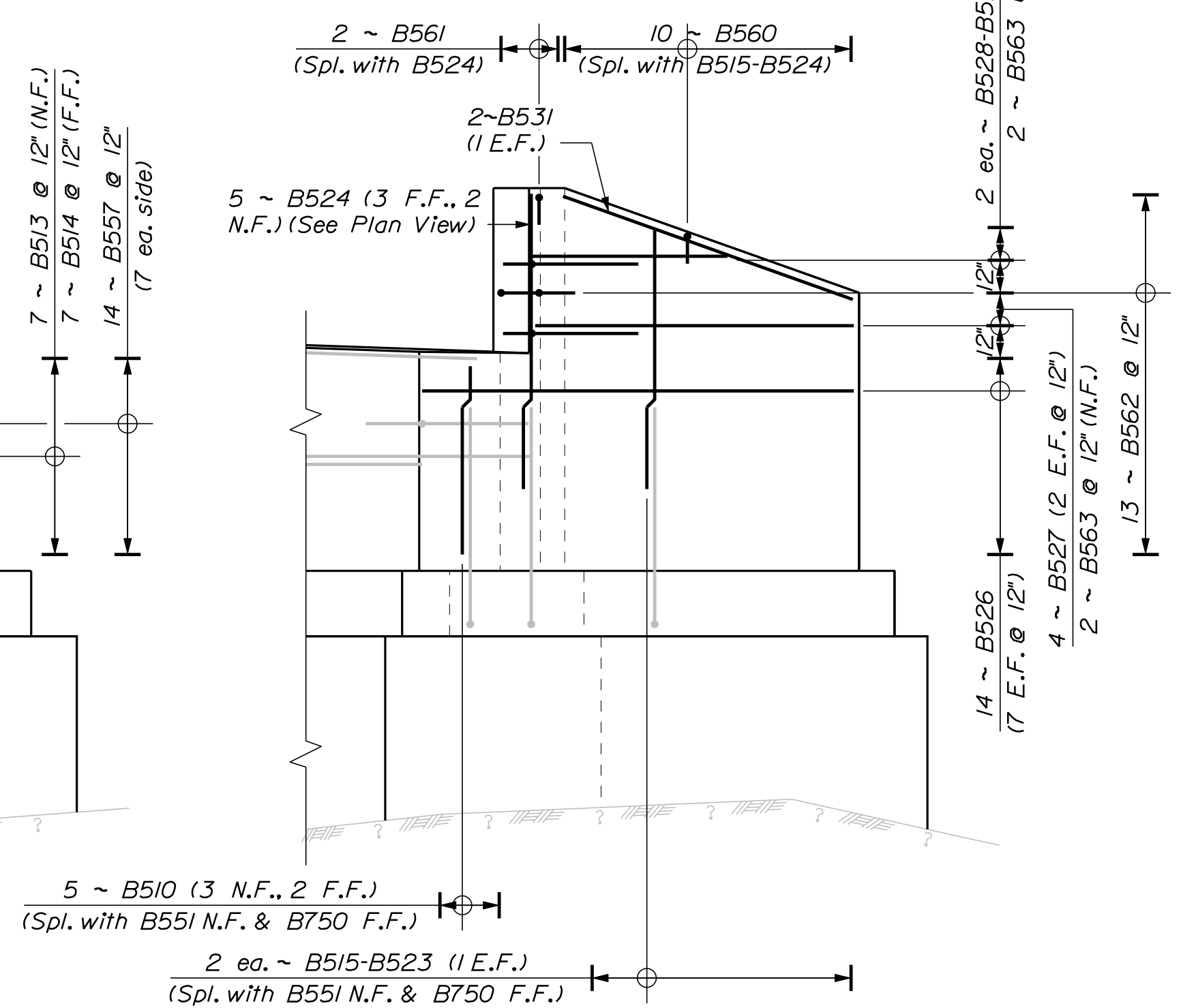
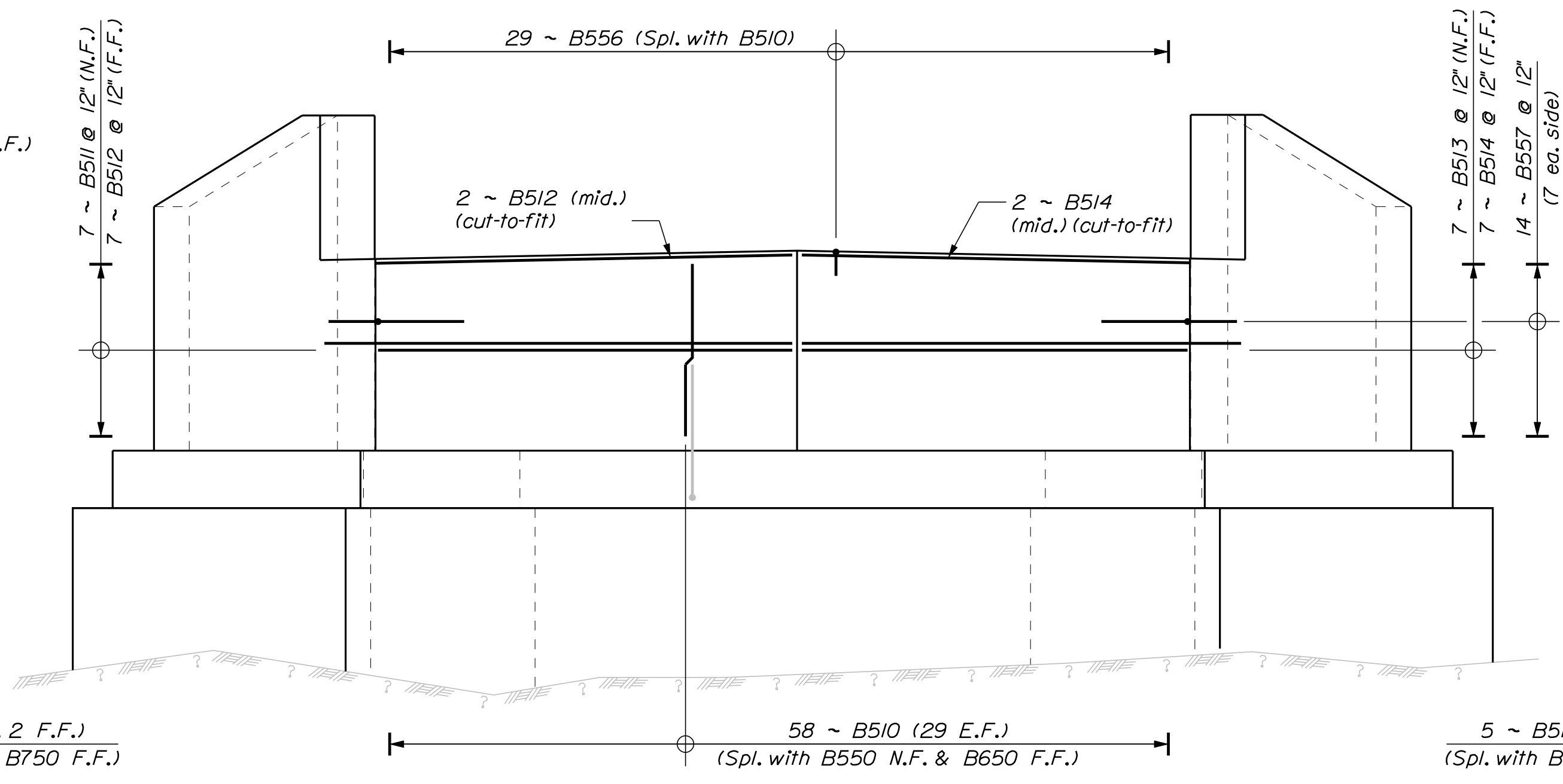
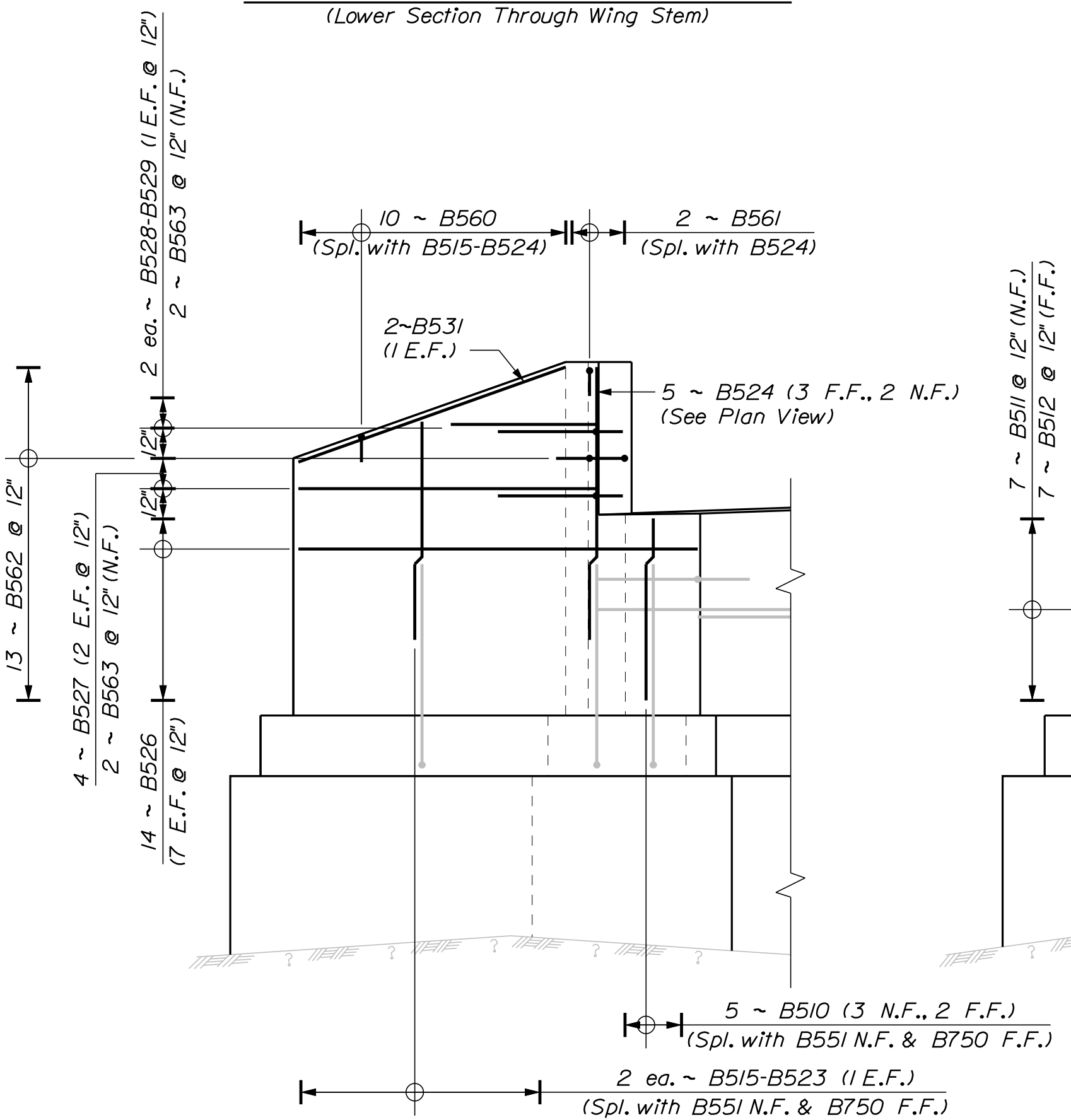
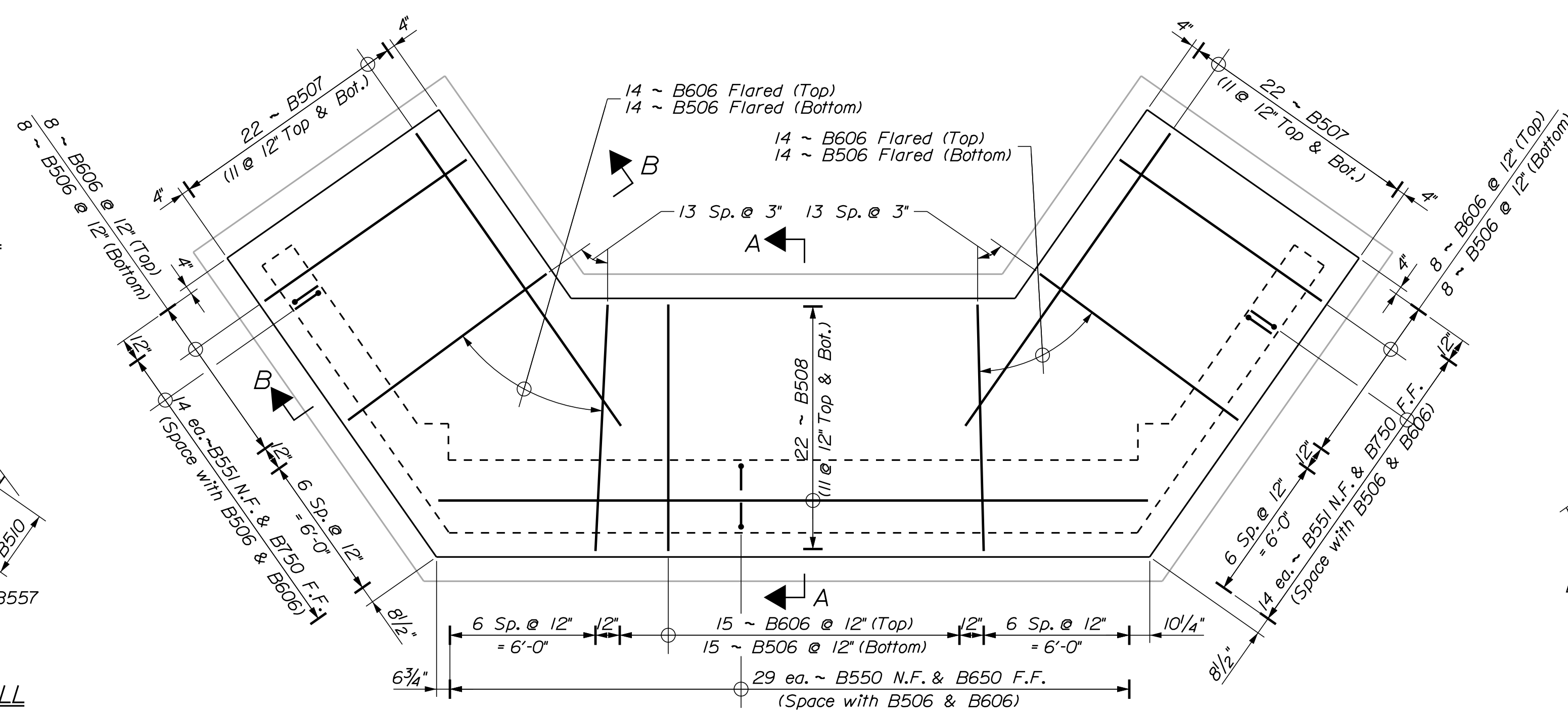
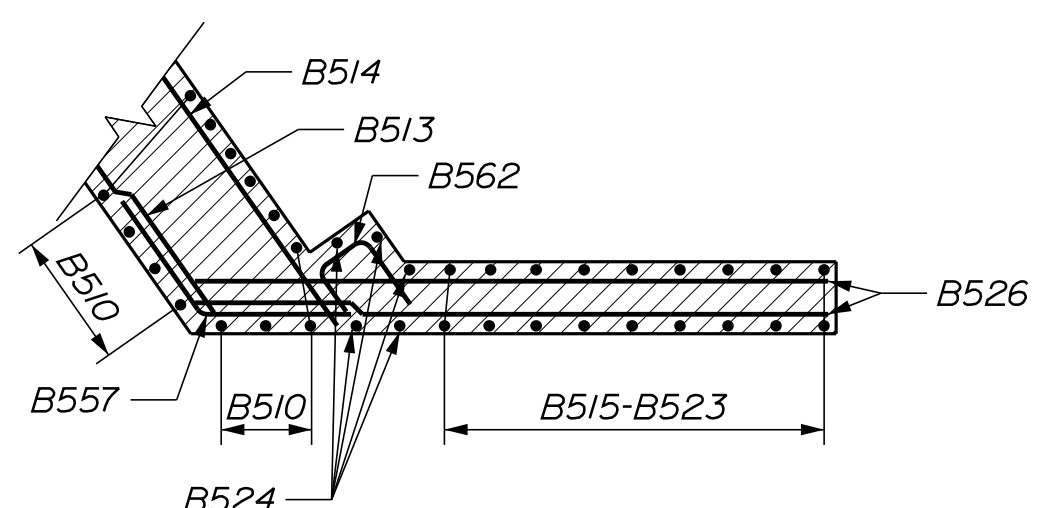
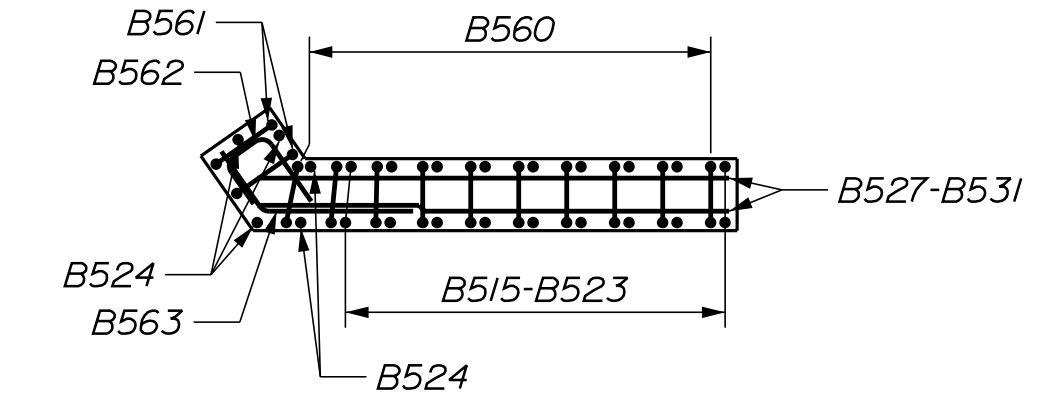
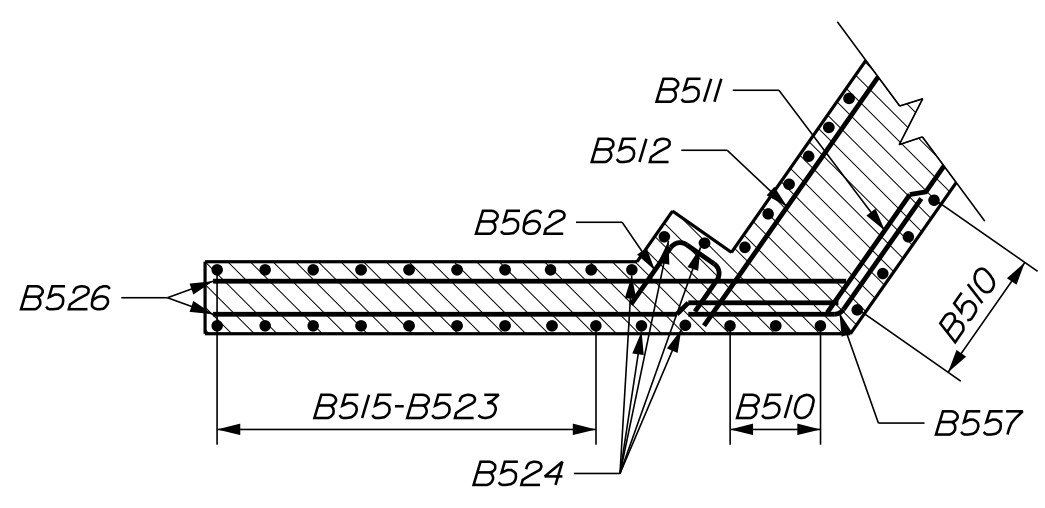
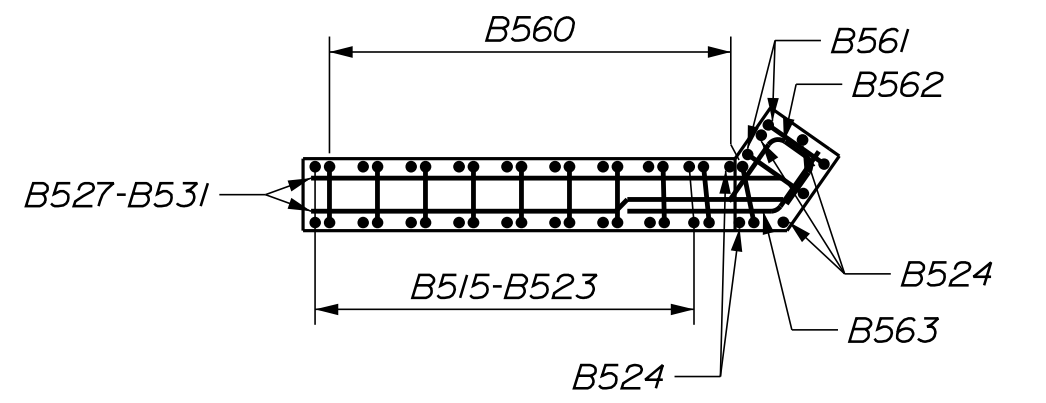
27 OF 43				SHEET NUMBER				THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY				PROJ. MANAGER				L. TIMBERLAKE		BY		DATE		STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-1874(800) BRIDGE NO. 2848 WIN 18748.00 BRIDGE PLANS			
												DESIGN-DETAILED		LSF		KLINWOLF		FEB 2019							
				CHECKED-REVIEWED		DDT/VPAG		DDT/WM		FEB 2019		SIGNATURE													
				DESIGN2-DETAILED2								P.E. NUMBER													
				DESIGN3-DETAILED3										DATE											
								REVISIONS 1																	
								REVISIONS 2																	
								REVISIONS 3																	
								REVISIONS 4																	
								FIELD CHANGES																	

Date: 3/1/2019

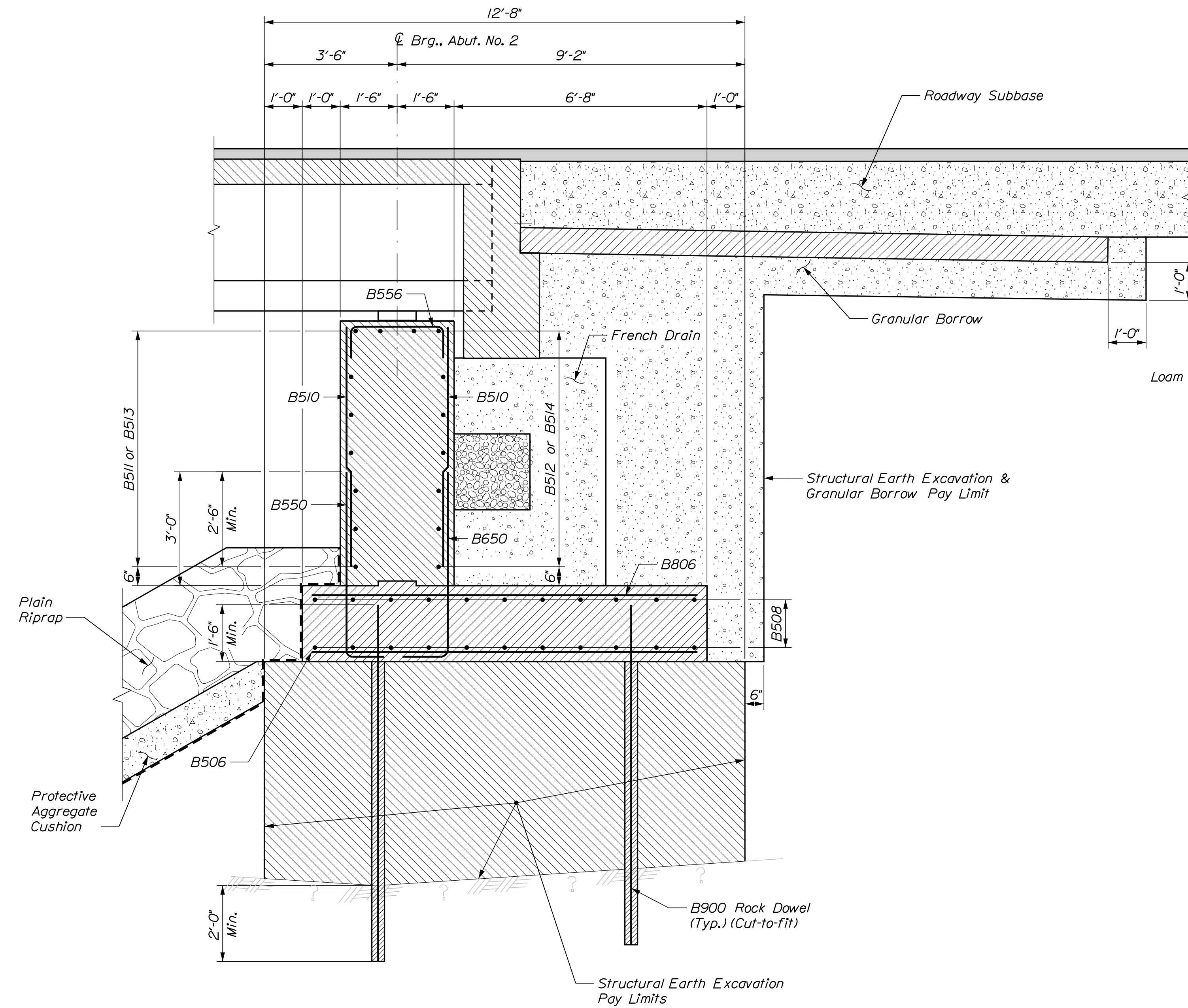
Username: dataylor

Division: BRIDGE

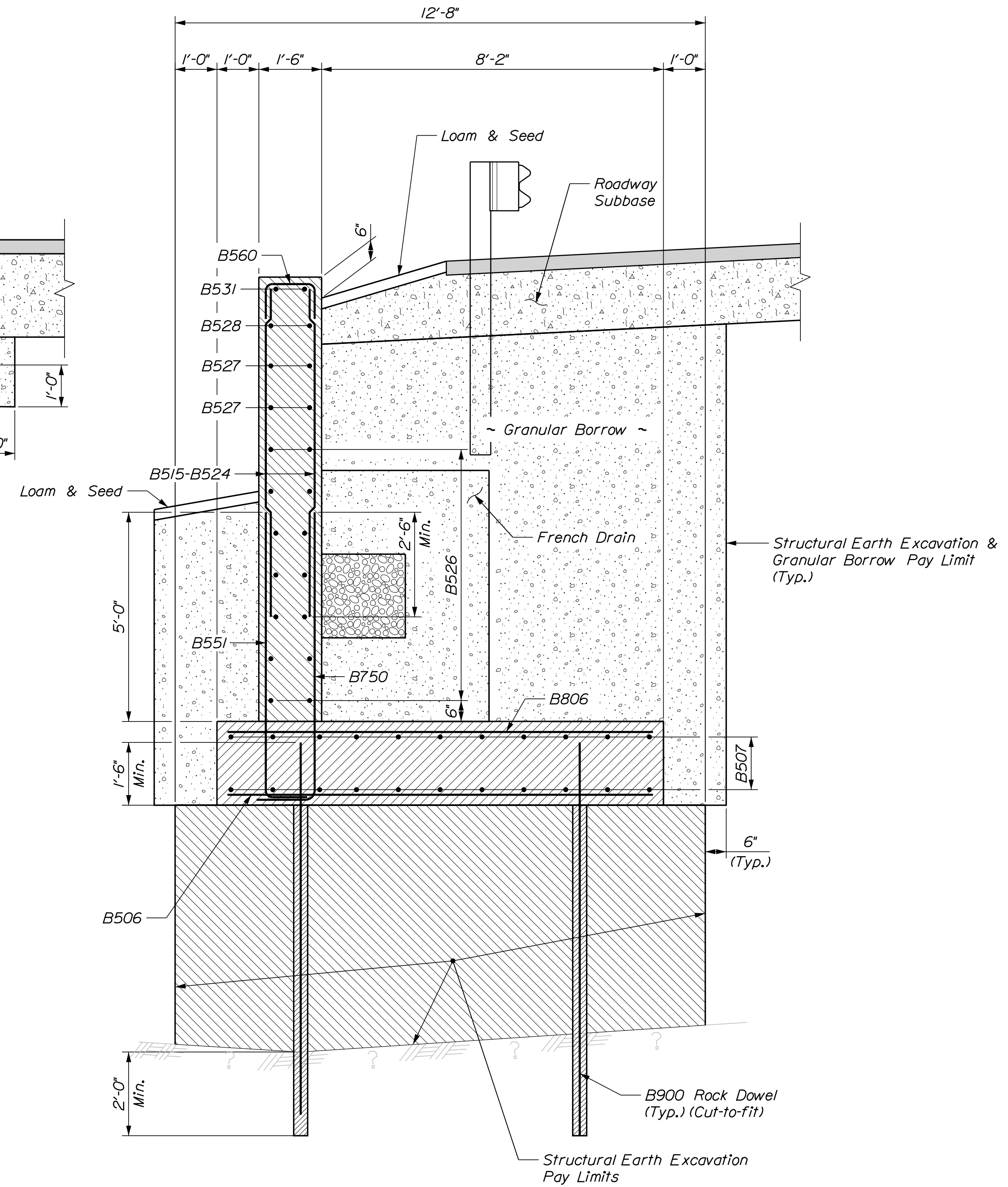
Filename: ... \028_abut_2_reinforcing.dgn



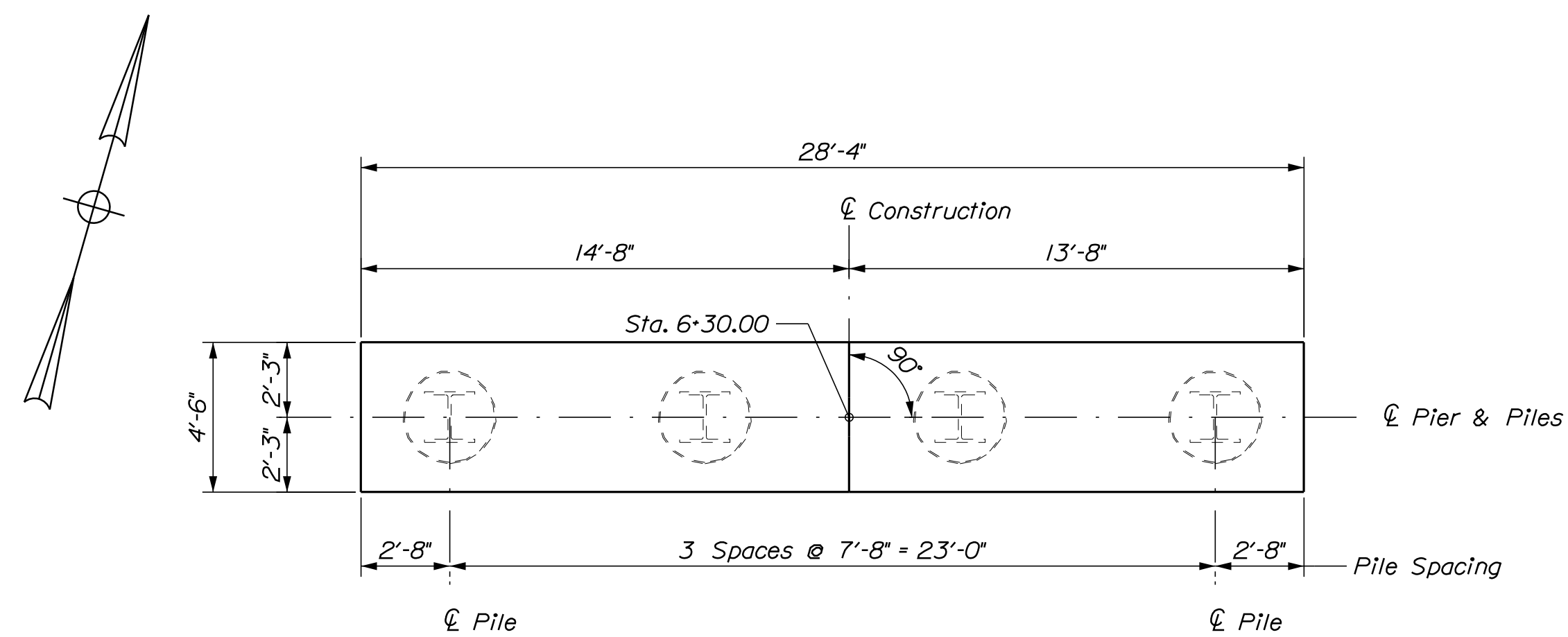
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-1874(800)		WIN		BRIDGE PLANS	
THOMPSONS BRIDGE		DECKER COVE		LINCOLN COUNTY		ABUTMENT NO. 2		REINFORCING	
SOUTHPORT		SHEET NUMBER		28		OF 43			
PROJ. MANAGER		L. TIMBERLAKE		BY		DATE			
DESIGN-DETAILED		LSF		KUMUSF		FEB 2019			
CHECKED-REVIEWED		DDT/PAG		DDT/YMM		FEB 2019			
DESIGN-DETAILED		DDT/PAG		DDT/YMM		FEB 2019			
DESIGN-DETAILED		DDT/PAG		DDT/YMM		FEB 2019			
REVISIONS 1									
REVISIONS 2									
REVISIONS 3									
REVISIONS 4									
FIELD CHANGES									



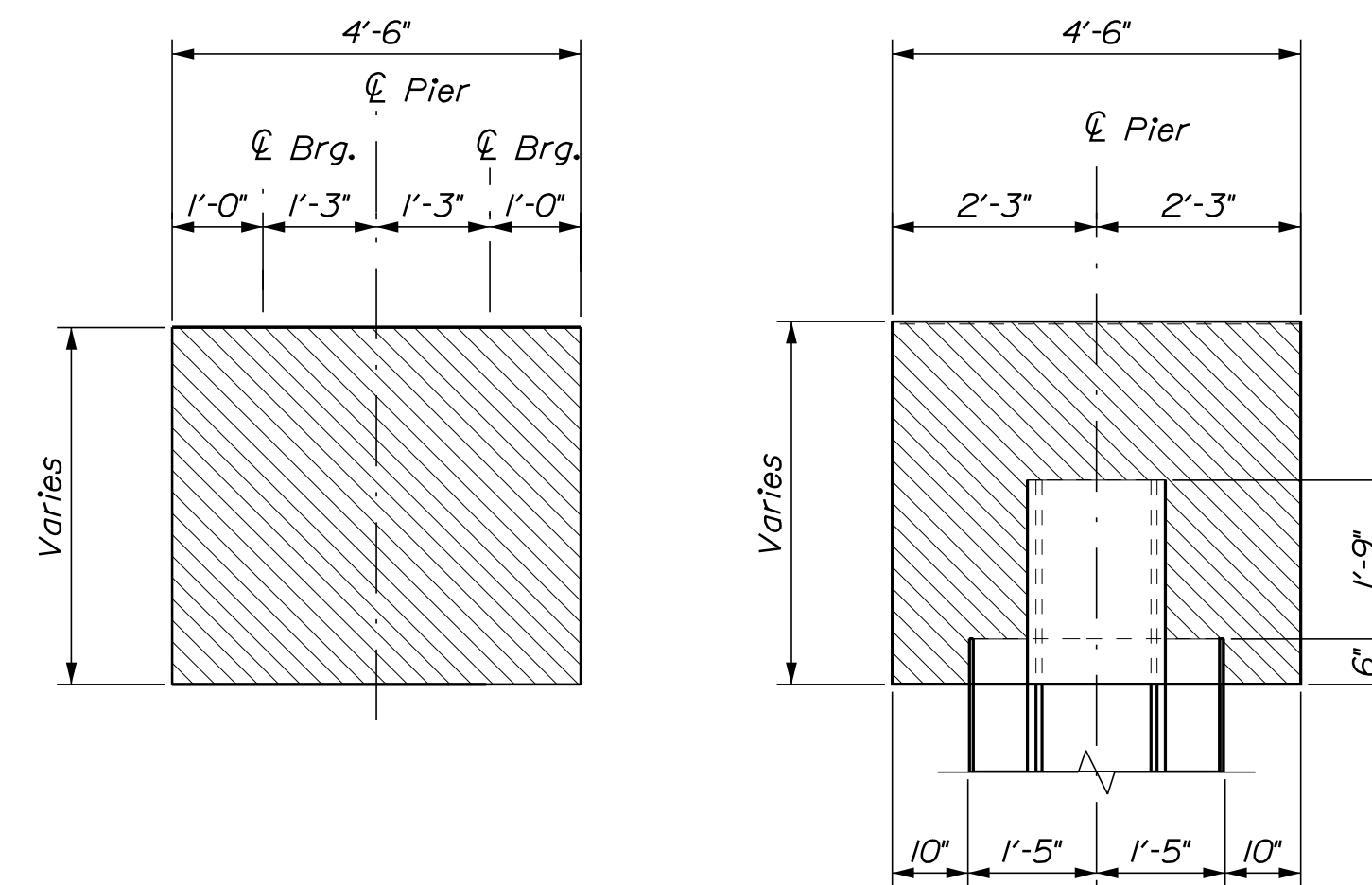
SECTION A-A



SECTION B-B
(NW Wing Shown, NE Similar)

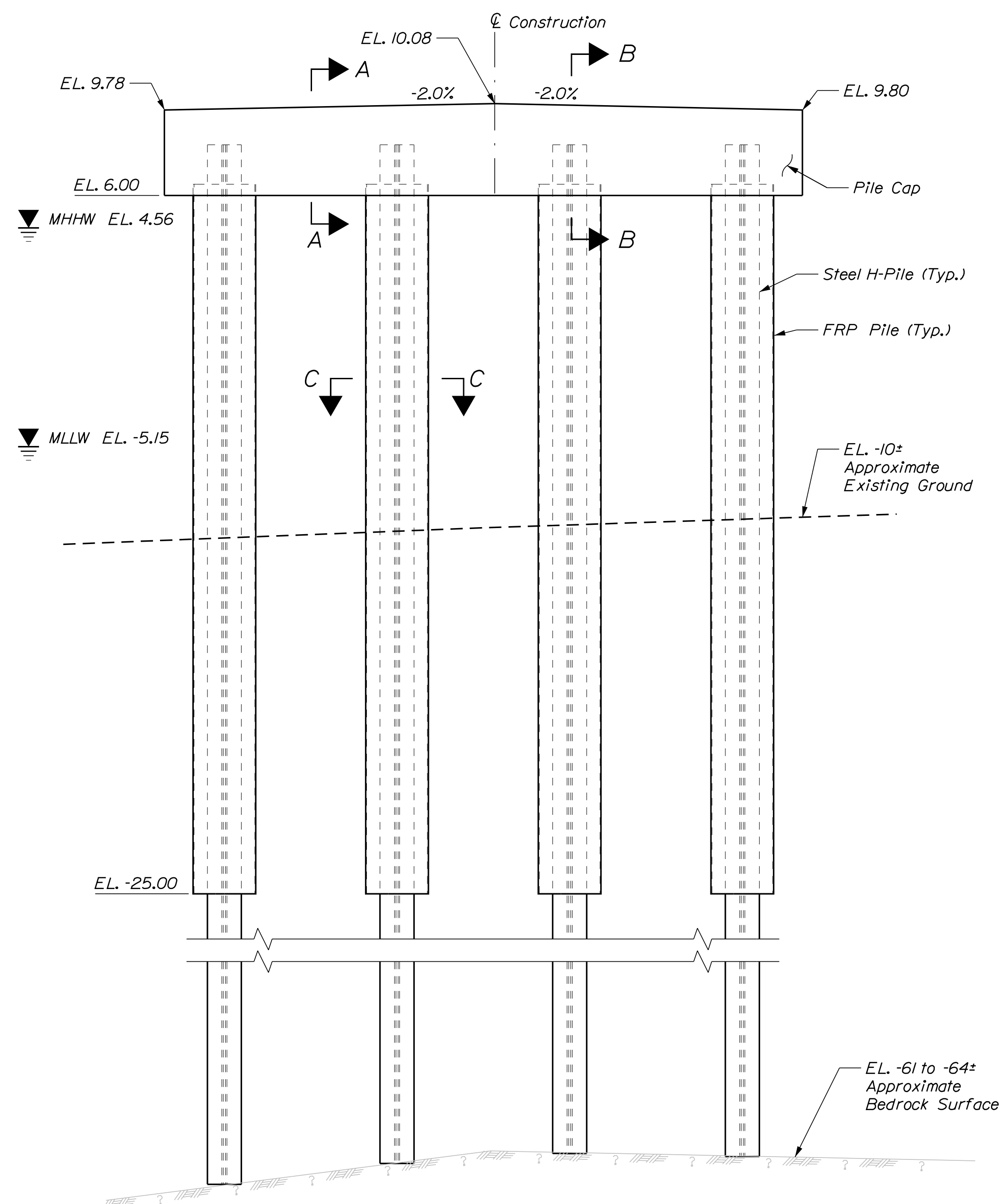


PLAN - PIER

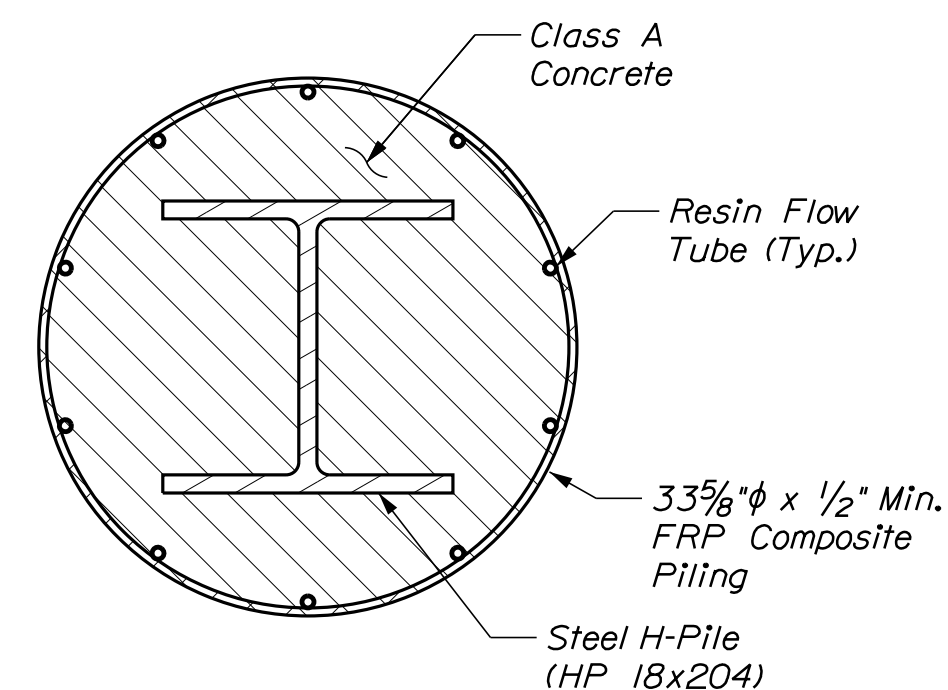


SECTION A-A

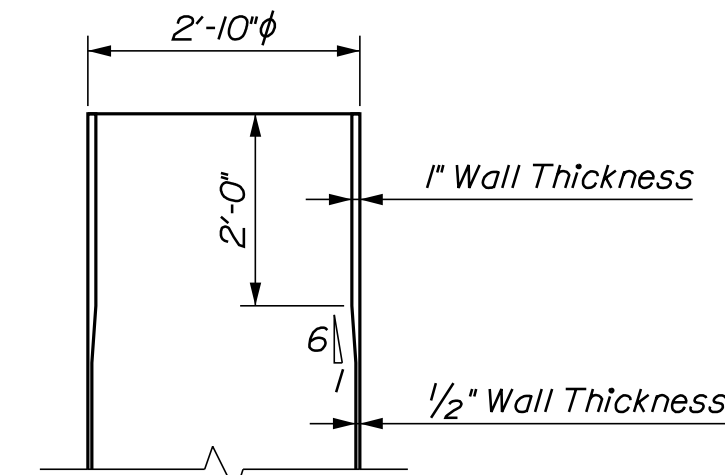
SECTION B-B



ELEVATION - PIER



SECTION C-C



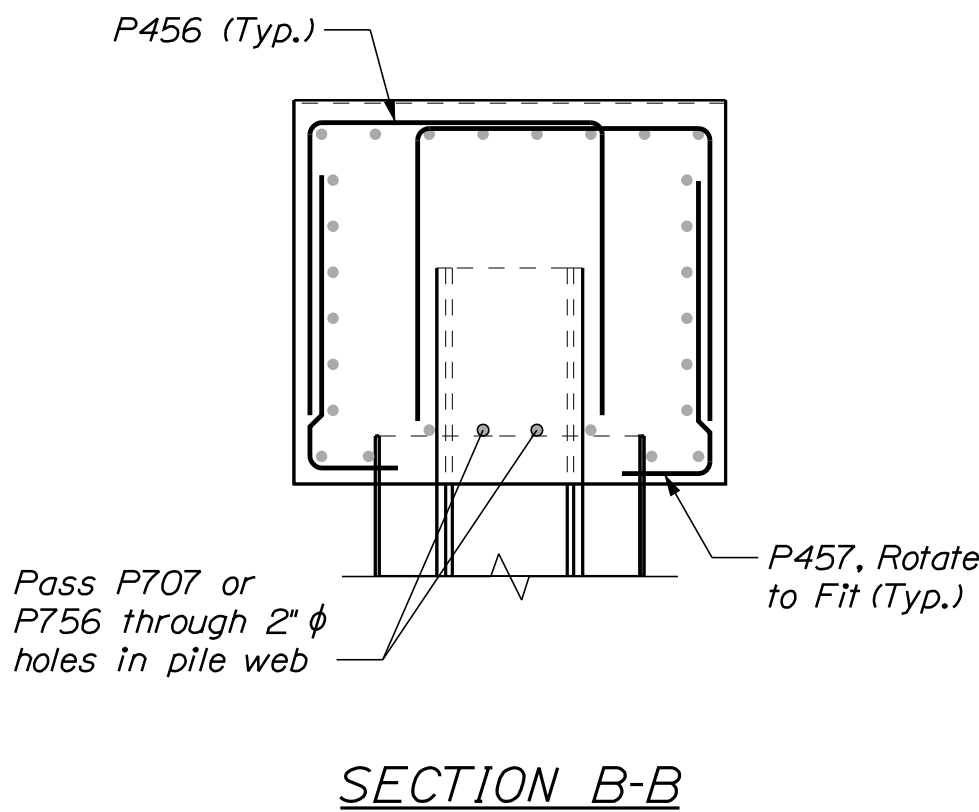
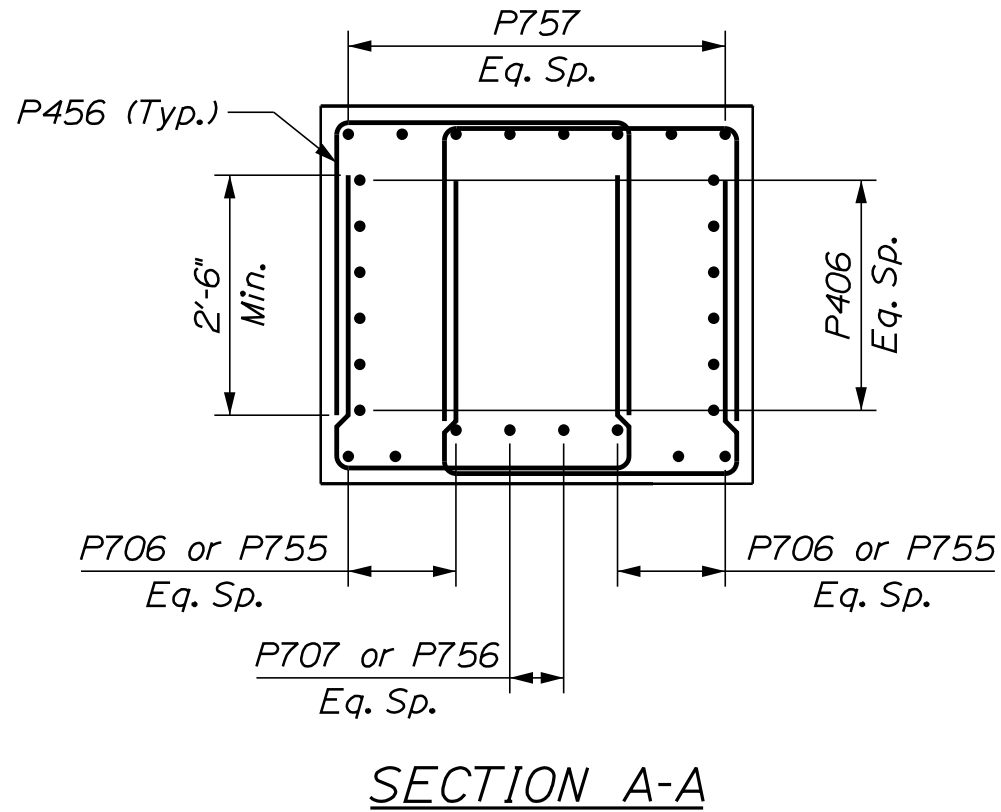
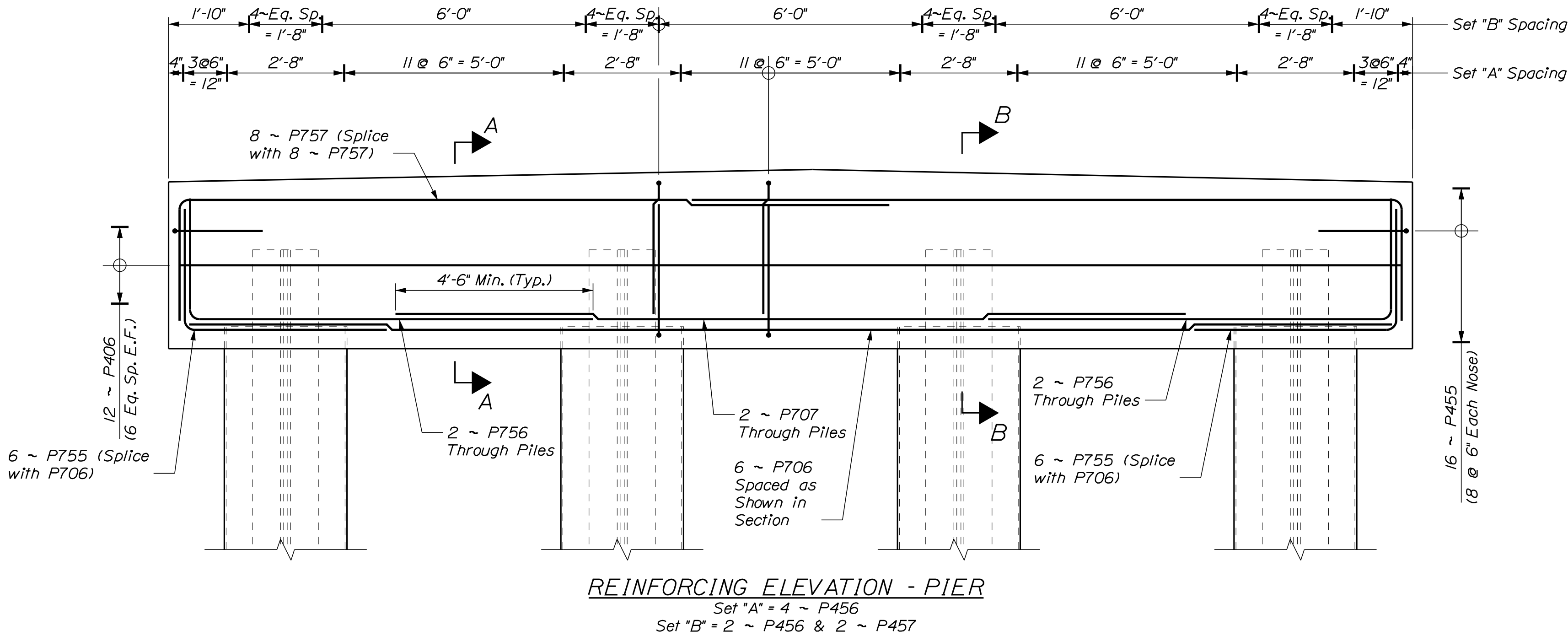
FRP REINFORCED END DETAIL
(Typical top and bottom)

PIER NOTES

1. Reinforcing steel shall have a minimum concrete cover of 3 inches unless otherwise noted.

PILE NOTES

1. The maximum factored pile load is 600 kips.
2. H-pile material shall be ASTM A 572, Grade 50.
3. Estimate of piles required at the pier:
4 ~ HP 18x204 @ 7.3 ft
4 ~ 33 $\frac{3}{8}$ " ϕ (O.D.) x 1/2" FRP Casing @ 33.5 ft (Includes 2 ft sacrificial length at the top of the pile)
4. Piles shall not be out of position shown by more than 2 inches in any direction.
5. The order lengths of the piles shall include an additional 5 feet of length for the test pile to accommodate dynamic pile testing equipment. No additional payment will be made for additional pile length needed to accommodate dynamic pile testing equipment. The cost will be considered incidental to related Contract items.
6. 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 I, of Standard Specification 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 that the pile can be driven to the required resistance, without damage or excessive blows.
7. The Contractor shall provide access for the agents of the Department to perform one (1) dynamic load test with signal matching and two (2) restrike tests as specified in Special Provision 501 - Dynamic Loading Test, to confirm the nominal geotechnical resistance of the H-piles. The dynamic pile load test will be completed on the first production pile driven and will include two (2) restrike tests: one (1) at 24-hour minimum and one (1) at 72-hour minimum. The required nominal resistance for the piles is the maximum factored axial pile load divided by a resistance factor equal to 0.65 per LRFD specifications. The Contractor may drive production piles to the preliminary driving criteria. However, pile cut-off will not be permitted until completion of restrike testing and establishment of final driving criteria.
8. The driving system shall be operating at efficiency greater than or equal to that used in the wave equation submittal. If the driving system is not operating at the required efficiency, as indicated by the approved wave equation analysis and/or dynamic load test result, the Contractor shall rebuild or replace driving system components in accordance with Standard Specification Section 501.
9. In preparation for dynamic H-pile tests, each test pile shall be installed with the tip elevation to approximately EL. -35.00 (into the Glacial Till layer). Dynamic pile test measurements shall be recorded for the remaining length of the driven test pile.
10. Holes shall be field-drilled in the top of the H-pile after installation to allow for placement of two reinforcing bars along the length of the pile cap. Payment shall be considered incidental to related Contract items.

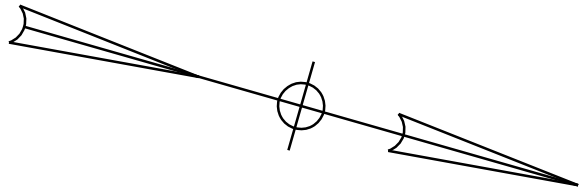


Date: 3/1/2019

Username: dataylor

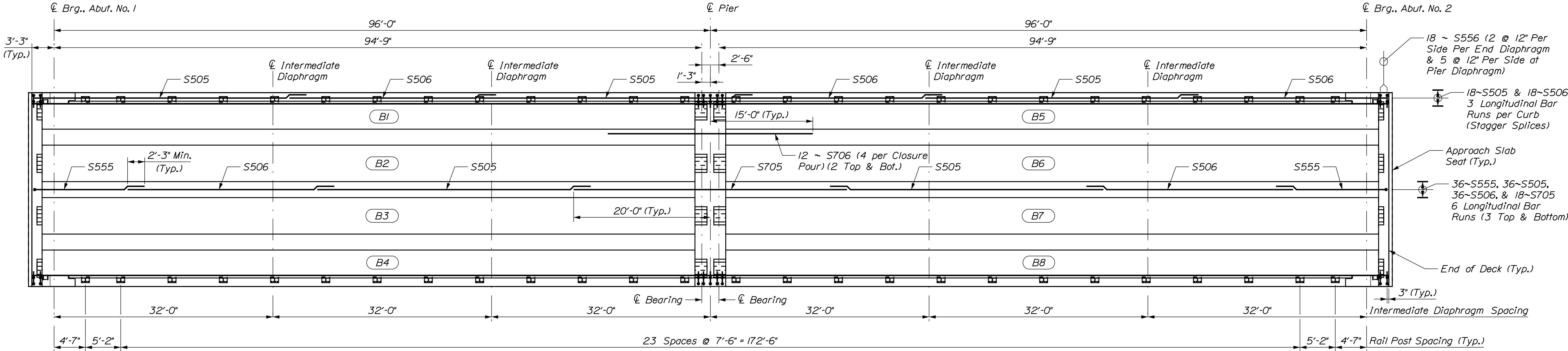
Division: BRIDGE

Filename: ... \032_Superstructure_Plan.dgn

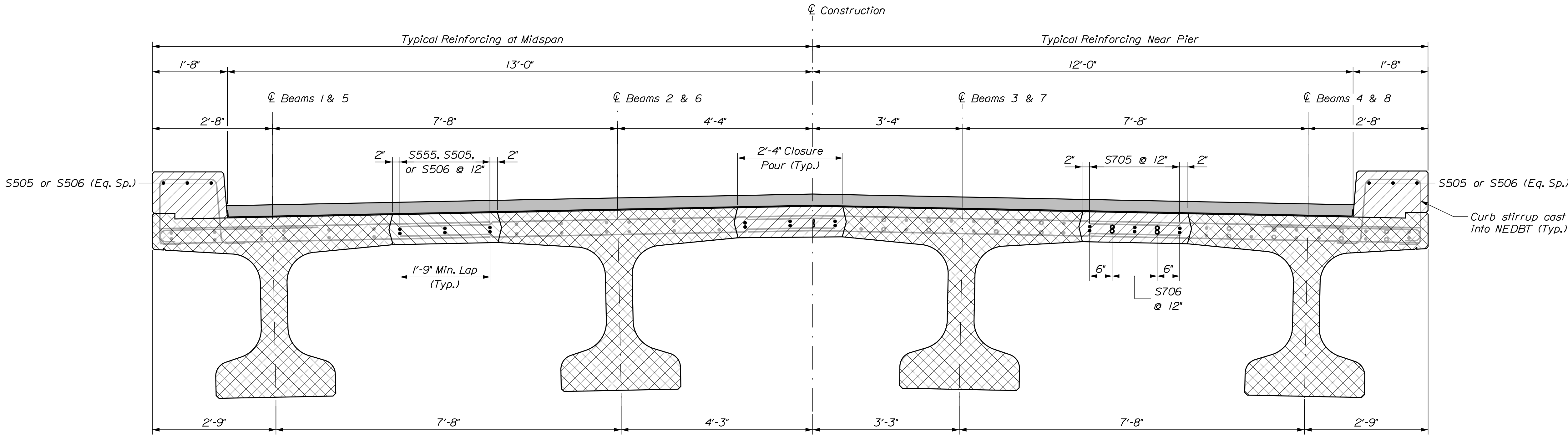


SUPERSTRUCTURE NOTES

- 1. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- 2. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
- 3. The Contractor shall install Transition Barrier vertical closed stirrups, as shown in Standard Details Section 526, prior to the placement of the curb concrete.
- 4. All non-prestressed reinforcing steel, including transition barriers, shall be stainless.
- 5. Concrete in the cast-in-place closure pours, pier diaphragms, and end diaphragms shall be paid for using Item 502.25, Structural Concrete Superstructure Slab.



SUPERSTRUCTURE PLAN



DECK TYPICAL SECTION

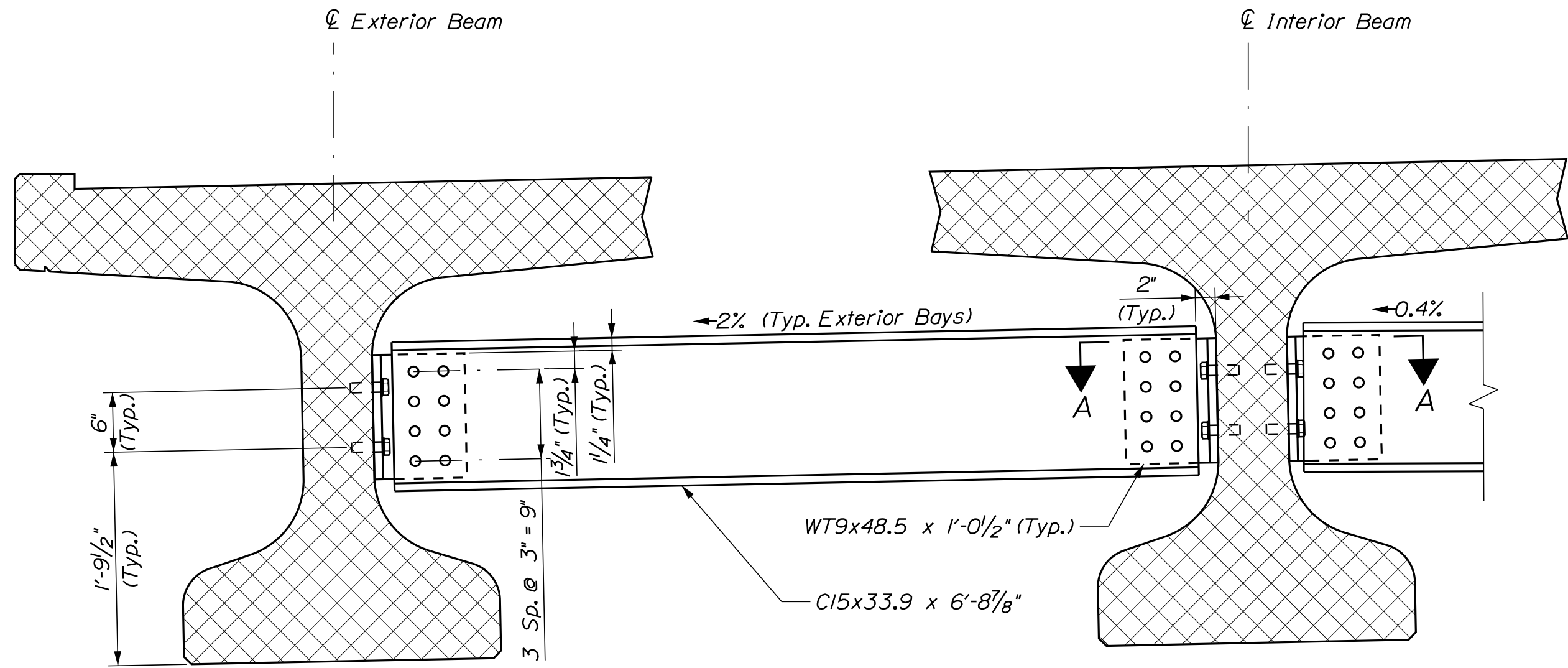
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	STP-1874(800)		BRIDGE NO. 2848 WIN 18748.00	BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	KUMULSF	FEB 2019
CHECKED-REVIEWED	DDTYPAG	DDTYPAG	FEB 2019
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

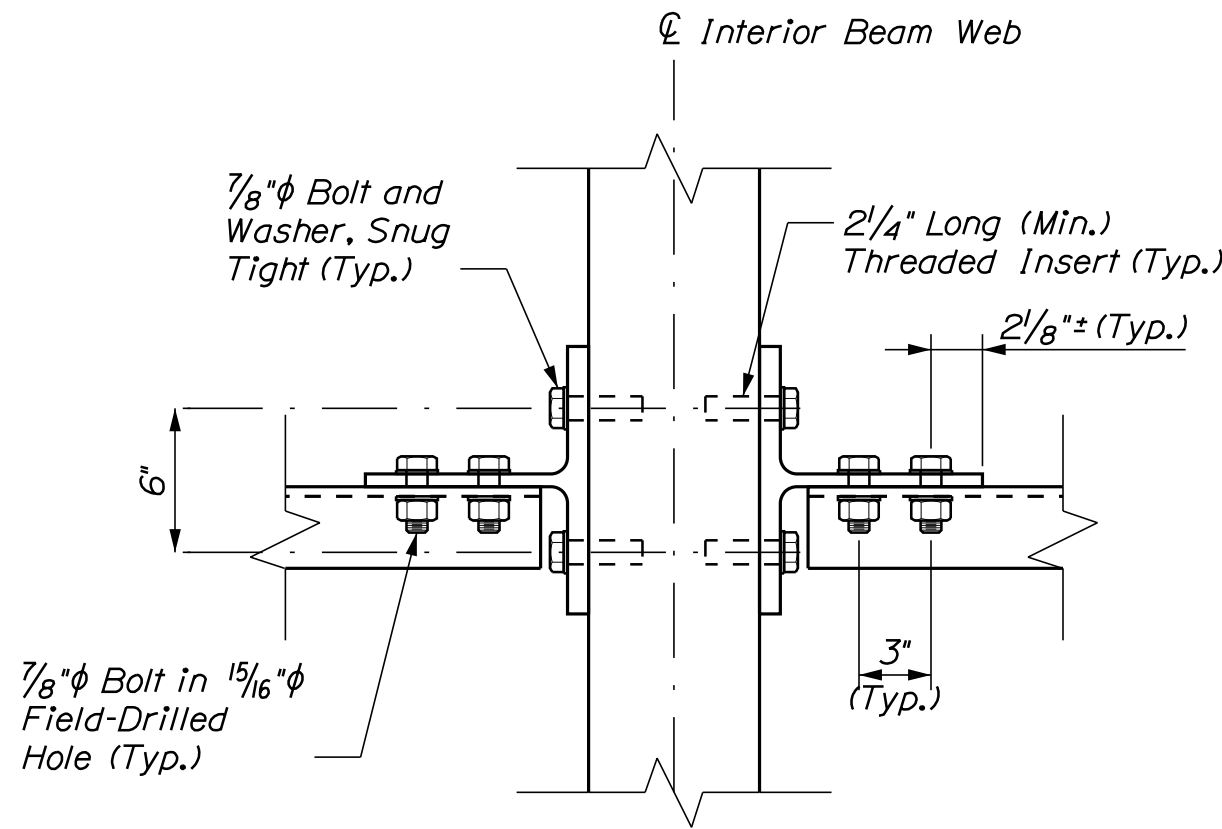
THOMPSONS BRIDGE DECKER COVE SOUTHPORT LINCOLN COUNTY	SUPERSTRUCTURE PLAN & TYPICAL SECTION

SHEET NUMBER
32
OF 43





INTERMEDIATE DIAPHRAGM



SECTION A-A

STEEL DIAPHRAGM NOTES

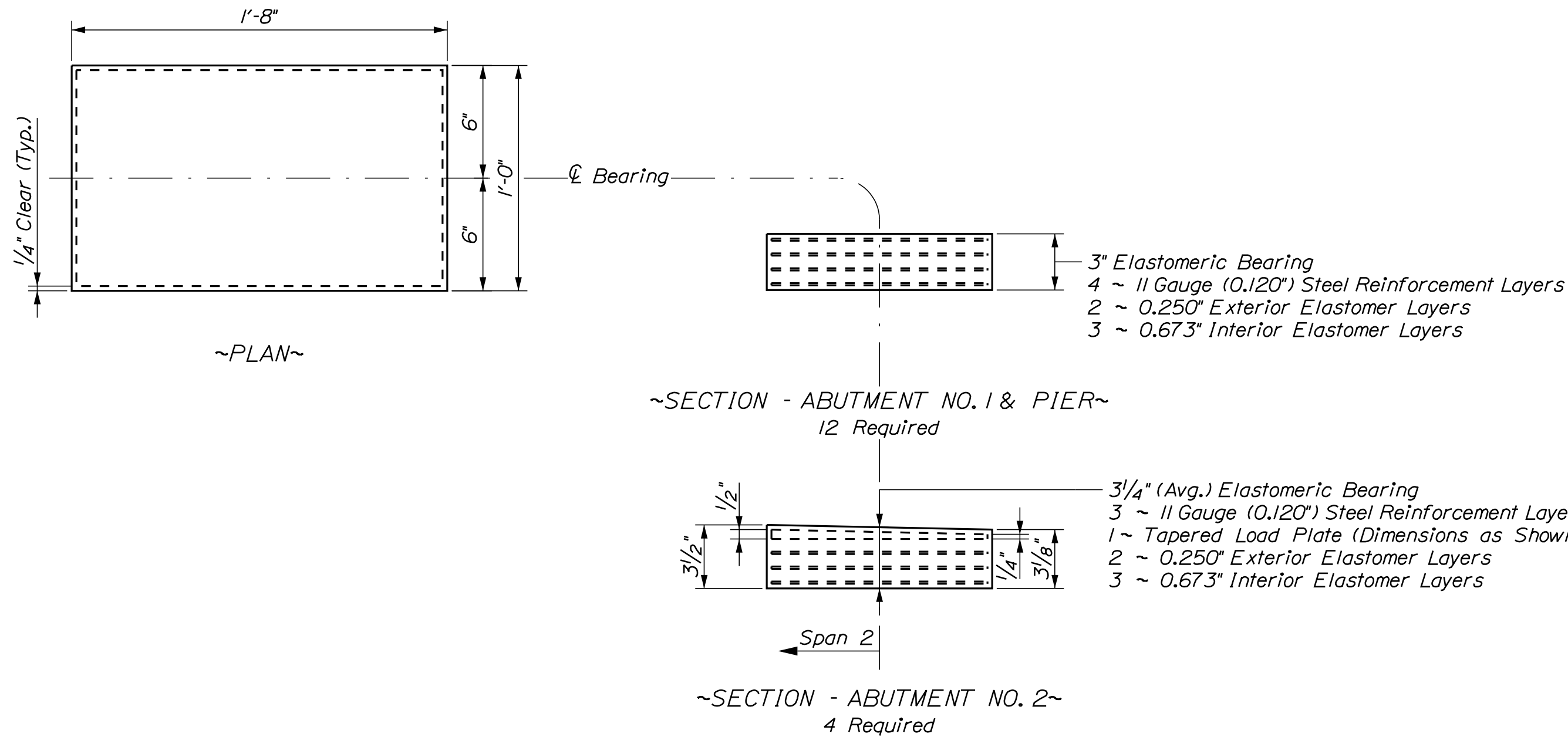
1. All bolts shall be 7/8" ϕ ASTM A325 Type I.
2. All bolted connections shall have one bolt, one nut, and two washers, except for the bolted connection into the threaded inserts, which shall have one bolt and one washer.
3. All steel diaphragm components, including bolts, washers, threaded inserts, and steel shapes, shall be hot-dip galvanized in accordance with ASTM A123 and ASTM A153. All damaged areas shall be touched up per Standard Specifications Section 506.
4. If the location of the threaded inserts needs to be adjusted to avoid prestressing strands, then it shall be done equally to all adjacent diaphragm supports.
5. Field-drilled holes shall maintain a minimum 1 1/2" edge distance. Fabricator may shop drill holes at one end of each diaphragm.

ELASTOMERIC BEARING NOTES

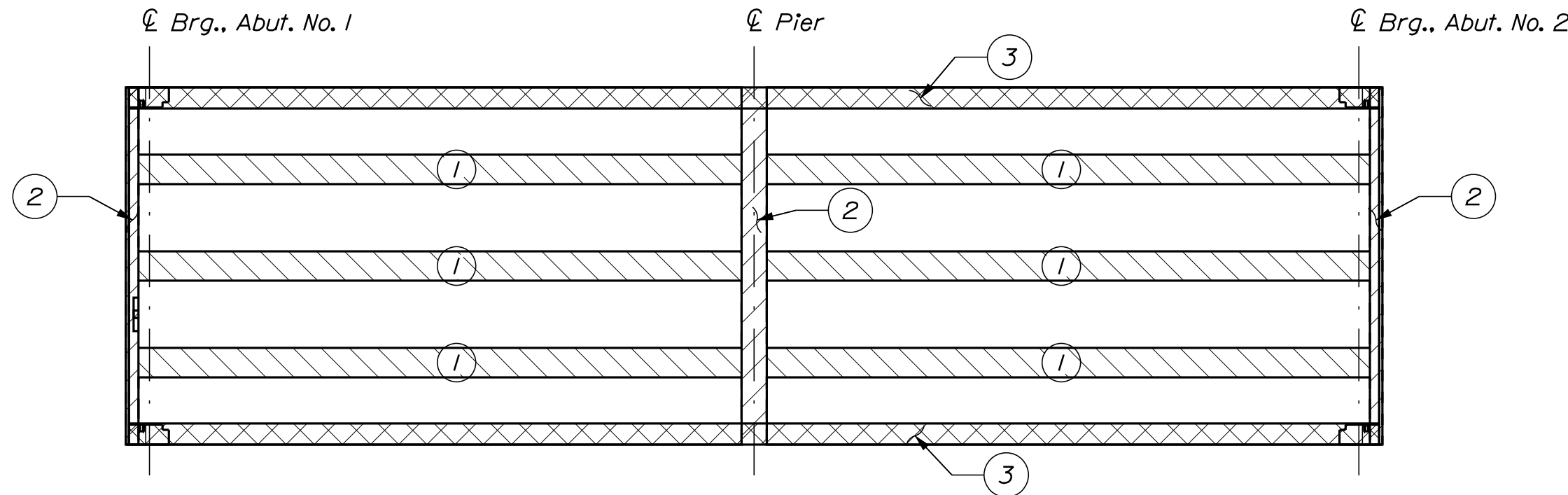
1. The shear modulus of the elastomer shall be 150 psi.
2. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
3. Bearings shall be covered during transit.
4. The bearings are designed so that the superstructure may be erected when the ambient air temperature is within the range of 28°F and 70°F. If the ambient air temperature is outside this range, the bearings shall be reset as directed by the Resident.
5. The "Bearing Design Load" for each bearing, as noted in Standard Specifications Subsection 523.23, is 191 kips. This is the total load for the Service I load combination, without impact.

DECK PLACEMENT NOTES

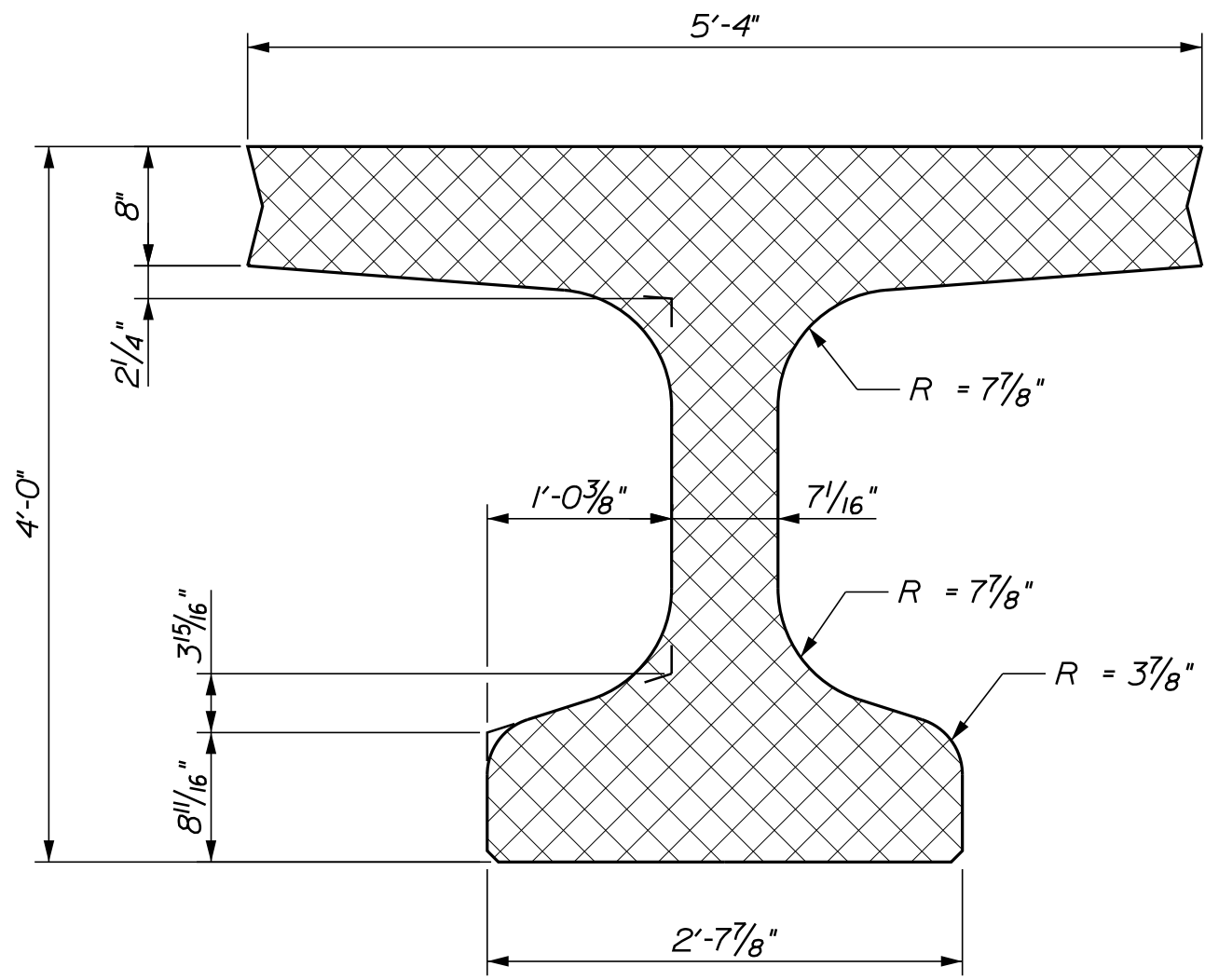
1. Deck slab areas shall be placed in sequence starting with pour No. 1. The next pour shall not be started until 72 hours after completion of the previous pour.
2. All areas of the same number may be placed during a single placement operation provided all areas remain plastic until the last concrete is placed.
3. Beams shall be aged for at least 90 days prior to placement of the pier diaphragm and end diaphragms (pour number 2).



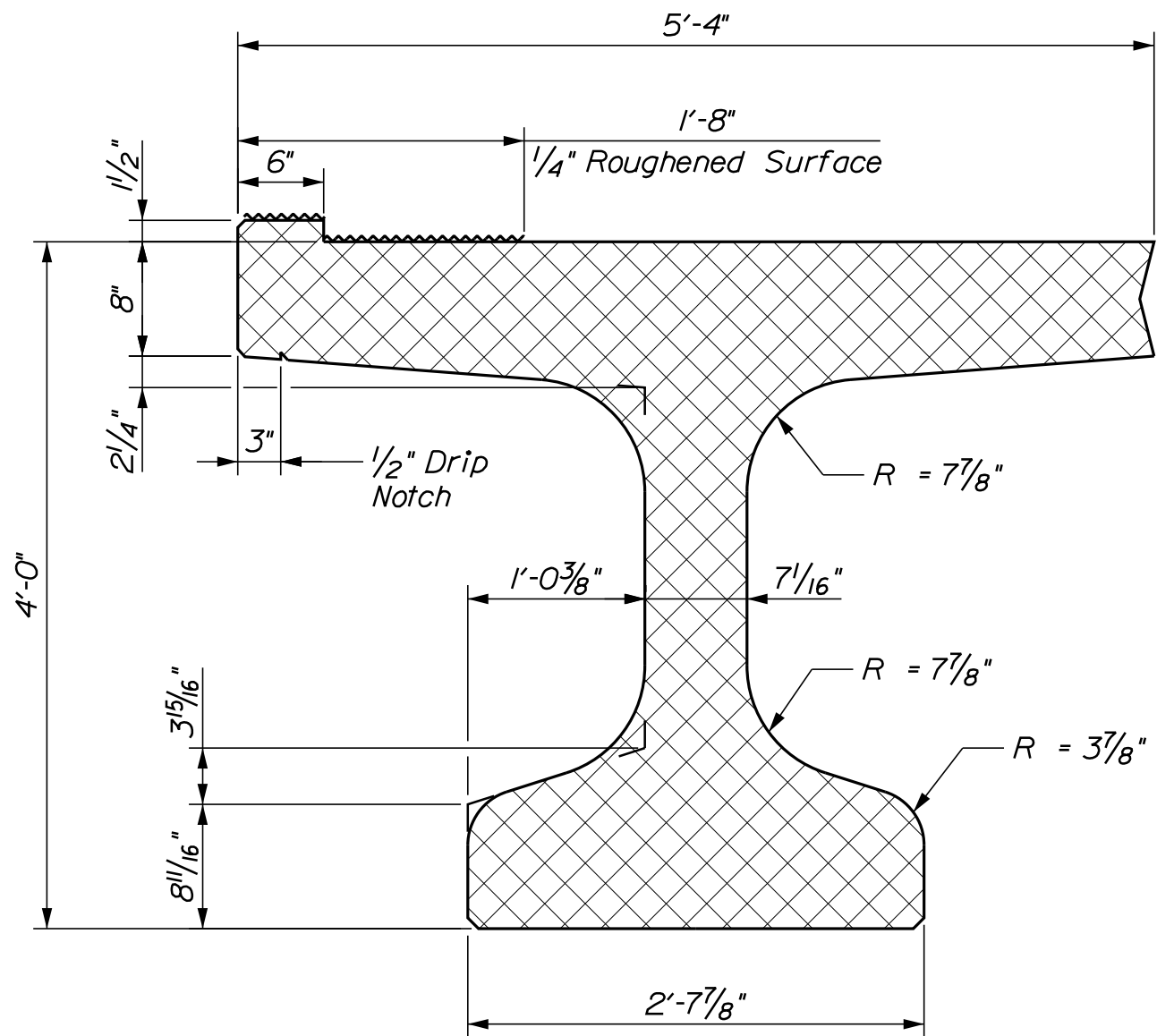
ELASTOMERIC BEARING DETAILS



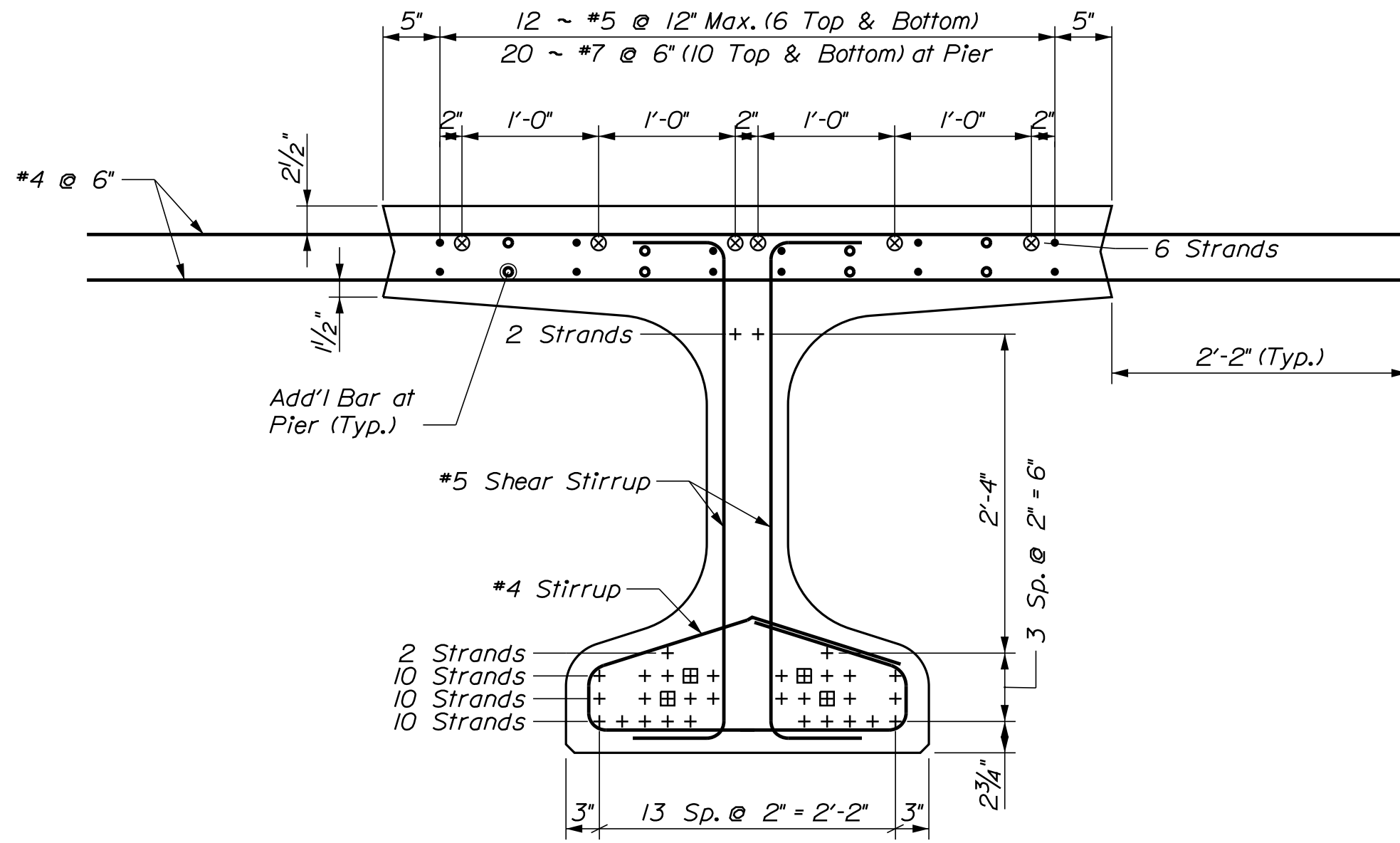
DECK POUR SEQUENCE



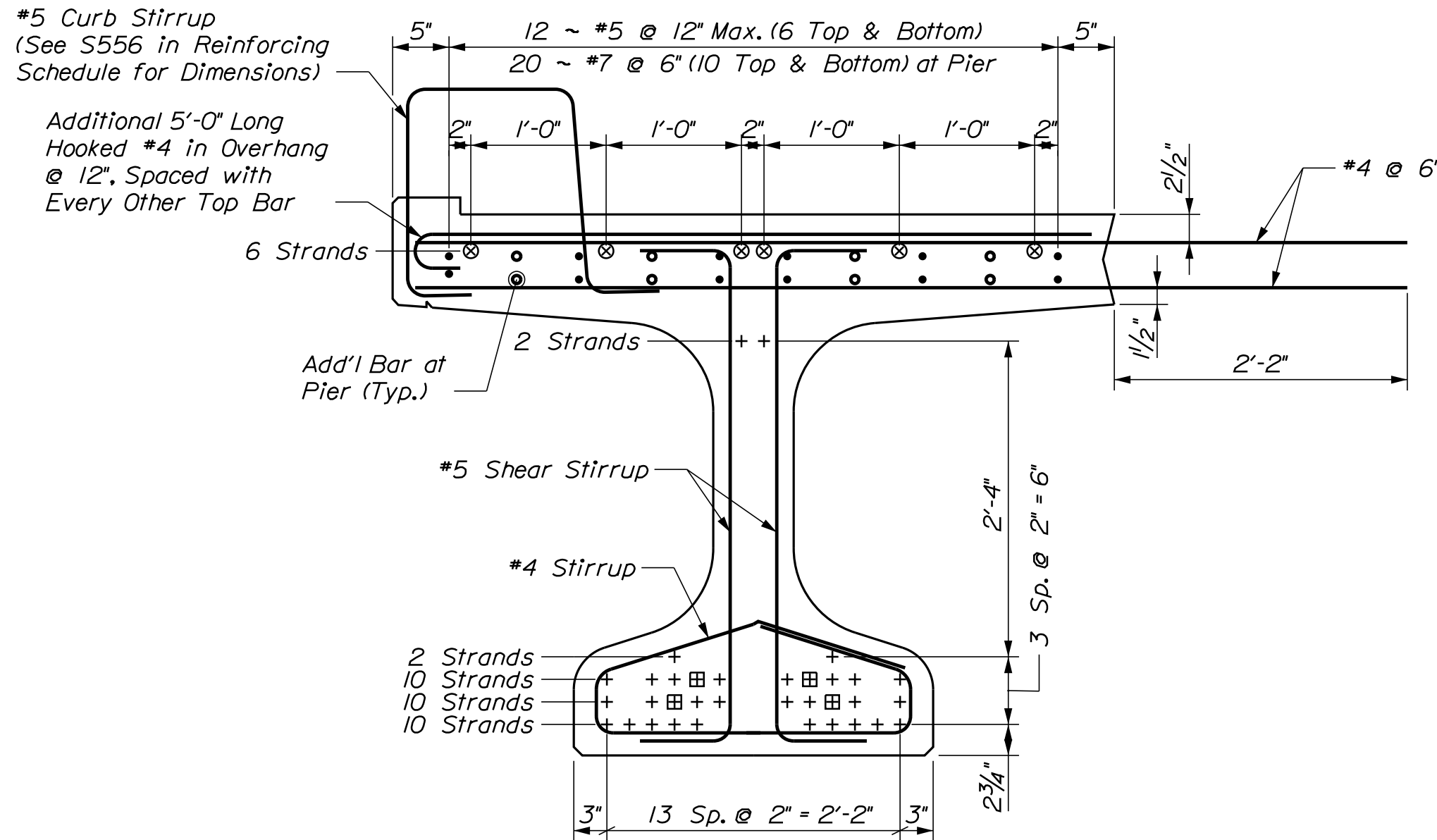
NEDBT 48 INTERIOR BEAM SECTION
Typical for Beams 2 and 3



NEDBT 48 EXTERIOR BEAM SECTION
Beam 1 Shown, Beam 4 Opposite Hand



NEDBT 48 INTERIOR BEAM SECTION
Typical for Beams 2-3 & 6-7



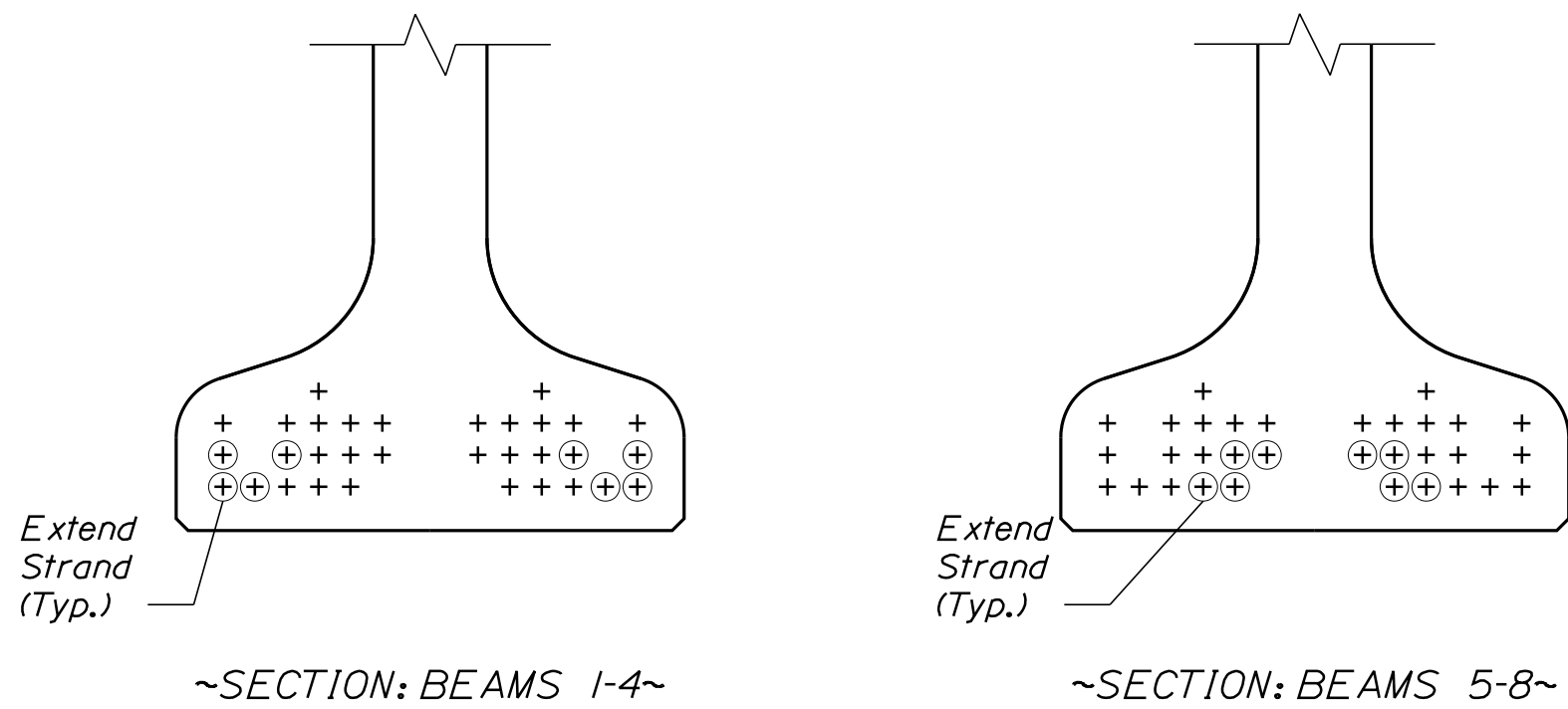
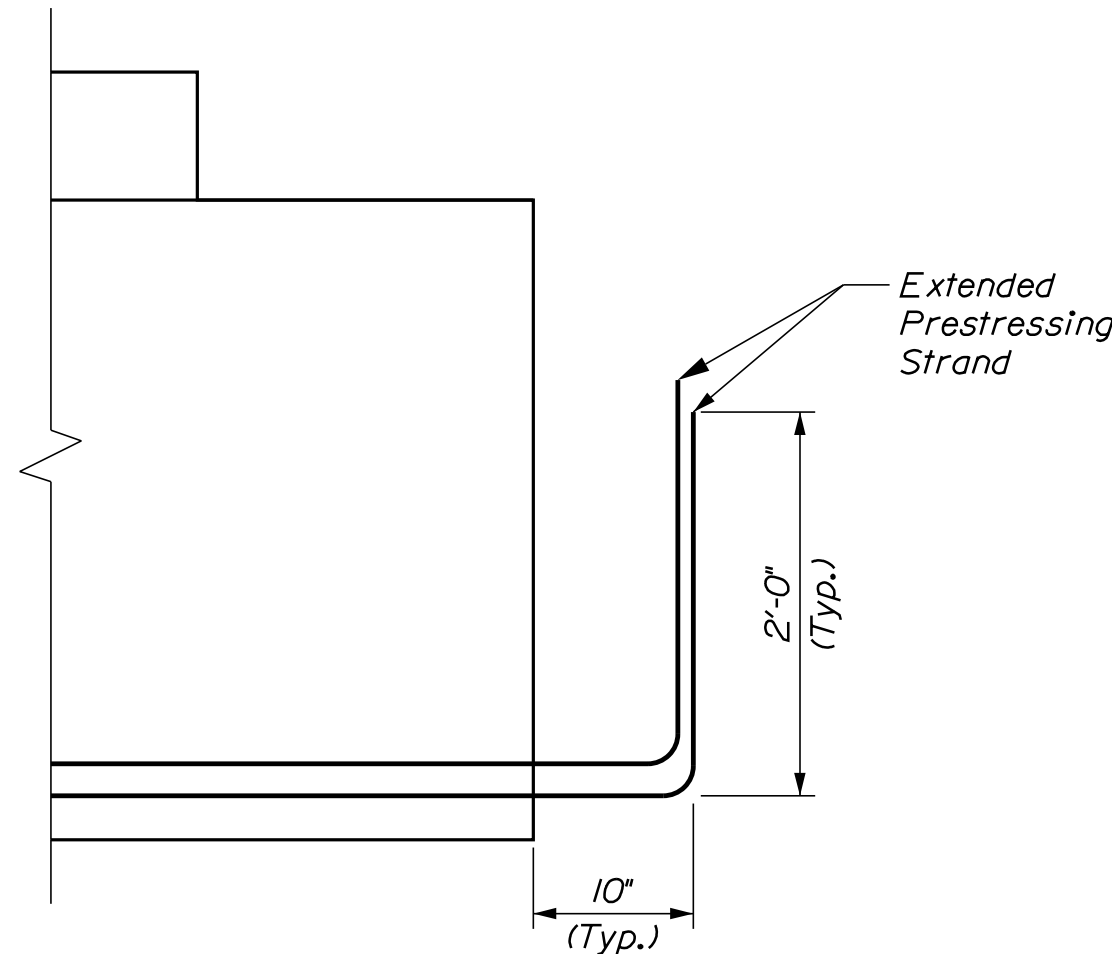
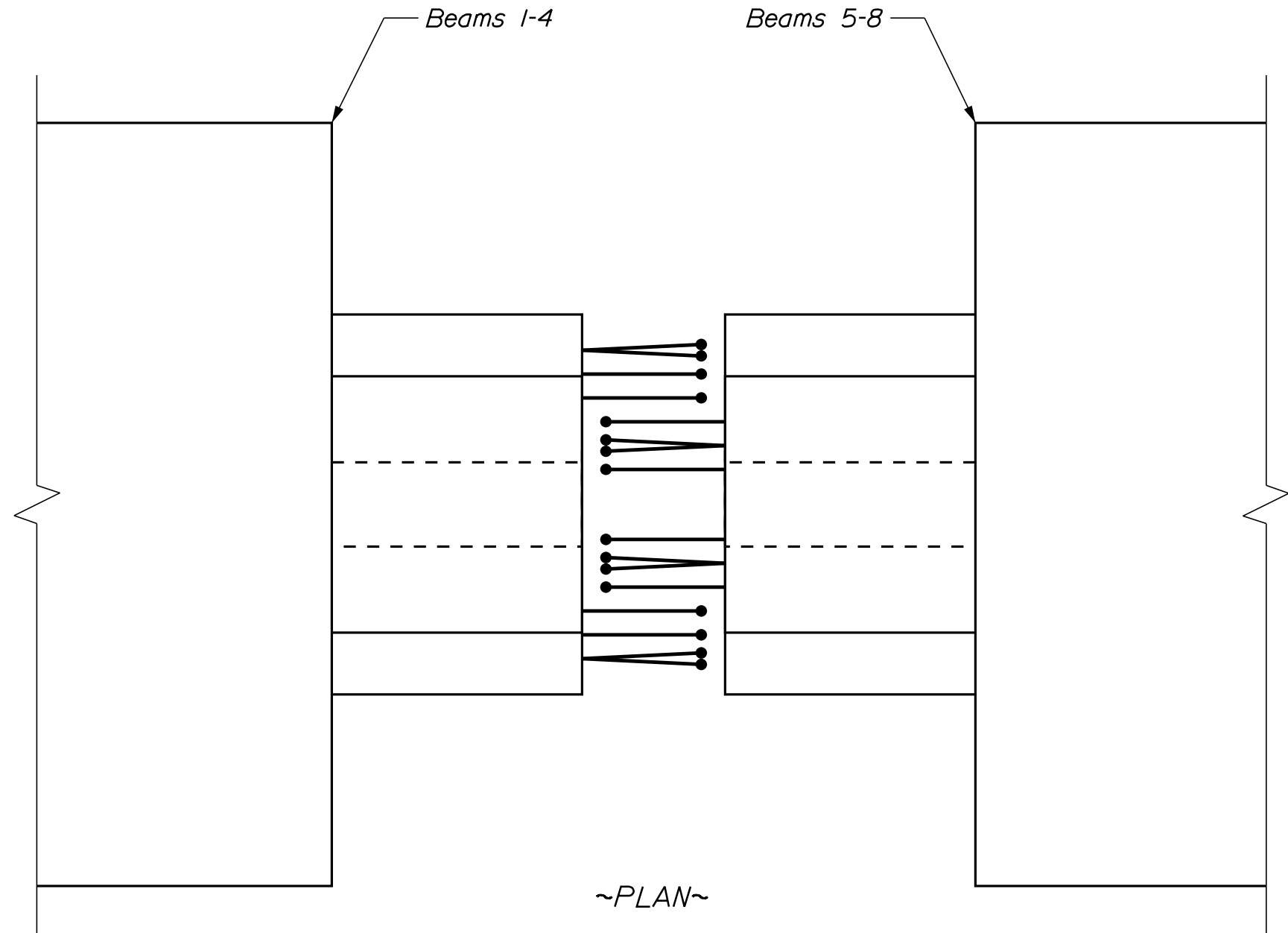
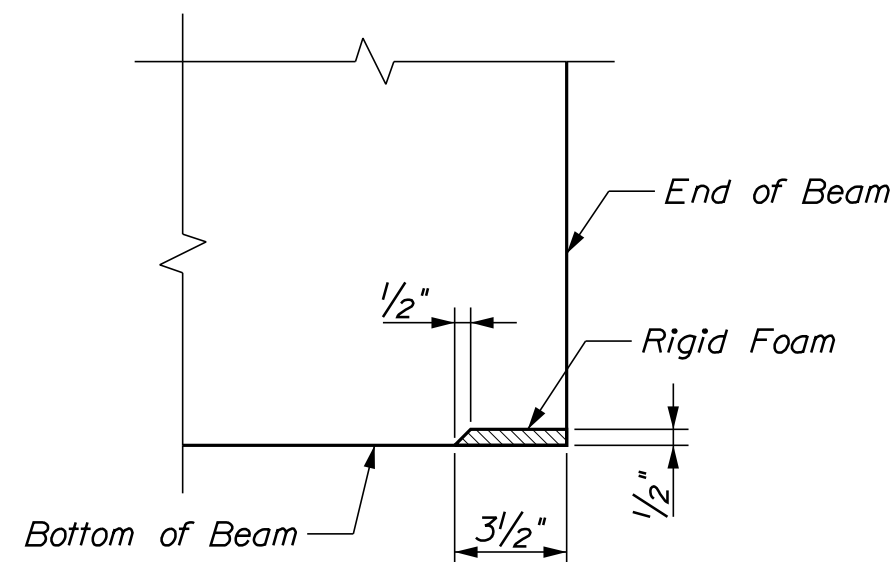
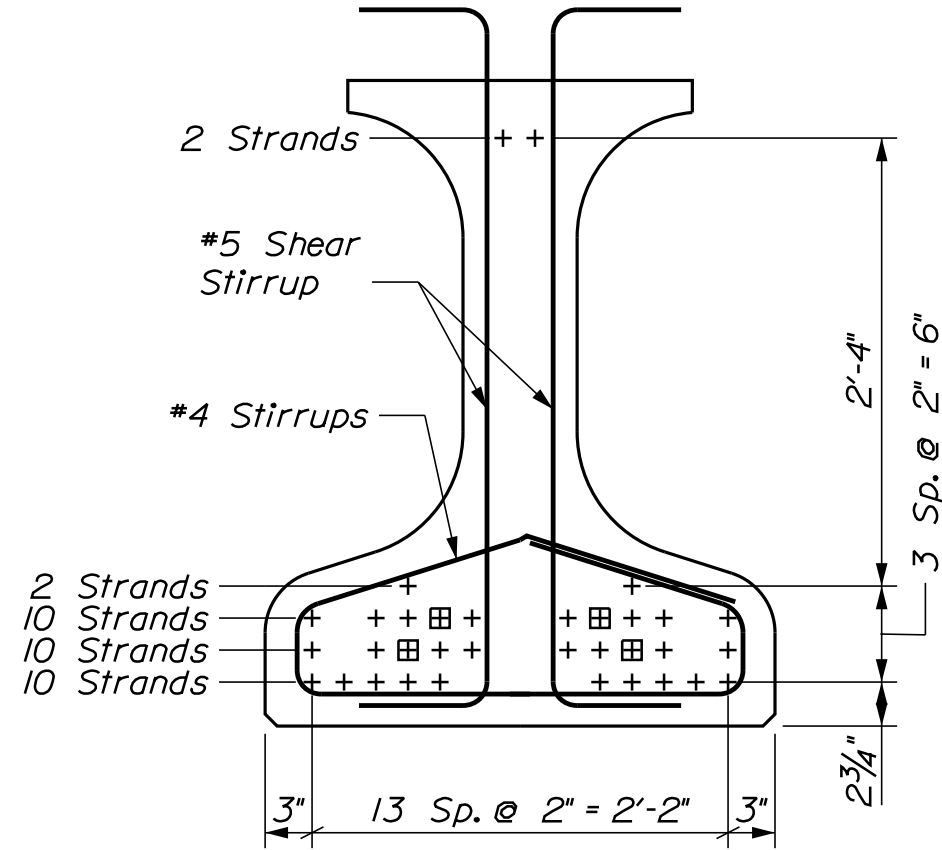
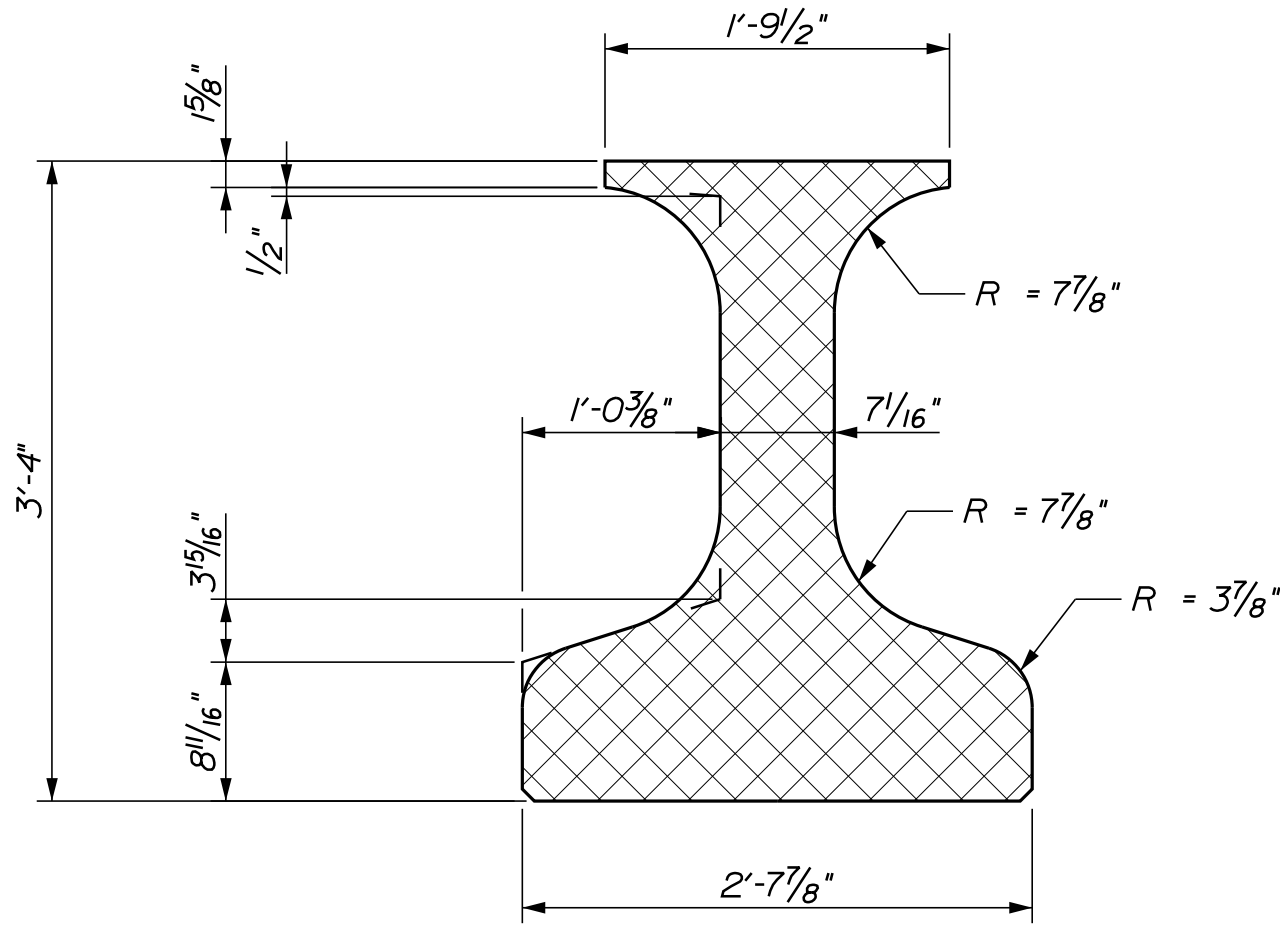
NEDBT 48 EXTERIOR BEAM SECTION
Beams 1 & 5 Shown, Beams 4 & 8 Opposite Hand

PRECAST CONCRETE SUPERSTRUCTURE NOTES

- Northeast Deck Bulb Tee (NEDBT) Beams are a non-proprietary shape developed by PCI Northeast (PCINE) (<http://www.pcine.org>).
- Design values:
 - Prestressing strands shall be 0.6-in. diameter.
 - Estimated camber at release: 1 1/16"
 - Estimated camber at erection: 3"
 - Estimated final camber: 2 7/16"
 - Tensioning force in fully tensioned strands: 44 kips.
 - Tensioning force for nominally tensioned strands: 5 kips per strand.
- Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- All non-prestressed reinforcing shall be stainless steel.
- The top of the precast NEDBT Beam shall have a float finish except where noted otherwise.
- The drilling of holes in the prestressed beams and the use of powder actuated tools on the beams will not be permitted.
- The Contractor shall calibrate the jacking equipment as necessary to provide an anchorage of 38 to 41 kips after setting losses in each 0.6-in. diameter post tensioning strand.
- Ends of flanges in contact with closure pour concrete shall be sandblasted prior to delivery and power washed with water prior to erection of the beams.
- The method of forming the flange connection shall be determined by the Contractor. The forms shall be removable and able to accommodate differential camber. Form supports shall not penetrate through the top of the pour or the NEDBT Beam unless approved by the Engineer.
- The Fabricator is fully responsible for the design of the lifting devices.
- The Contractor shall provide temporary bracing to maintain stability during erection.
- Bar reinforcing protruding from sides and ends of beams shall be laterally offset from reinforcing in adjacent beams to allow lap splicing without field bending. Bars may be offset up to one-half bar spacing.

PRESTRESSING LEGEND

- + Prestressing Strand
- ⊞ Debonded 4'-0"
- ⊗ Nominally Tensioned Strand



STRAND EXTENSION DETAILS @ PIER

THOMPSONS BRIDGE DECKER COVE SOUTHPORT				STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
LINCOLN COUNTY				STP-1874(800)	
MISCELLANEOUS BEAM DETAILS				BRIDGE NO. 2848 WIN 18748.00 BRIDGE PLANS	
PROJ. MANAGER		L. TIMBERLAKE	BY	DATE	SIGNATURE
DESIGN-DETAILED		LSF	KLW/LSF	FEB 2019	
CHECKED-REVIEWED		DDT/VPAG	DDT/VPAG	FEB 2019	
DESIGN2-DETAILED2					
DESIGN3-DETAILED3					
REVISED 1					P.E. NUMBER
REVISED 2					
REVISED 3					
REVISED 4					DATE
FIELD CHANGES					
SHEET NUMBER					
35					
OF 43					

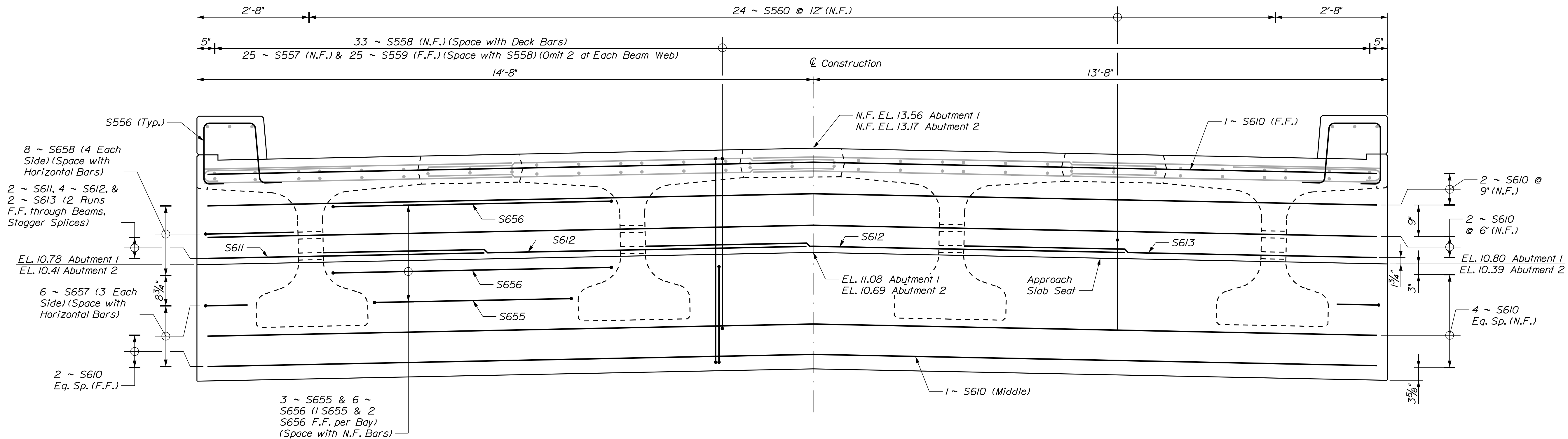


STATE OF MAINE			
DEPARTMENT OF TRANSPORTATION			
STP-1874(800)			
WIN			
18748.00			
BRIDGE NO. 2848			
BRIDGE PLANS			

Date: 3/1/2019

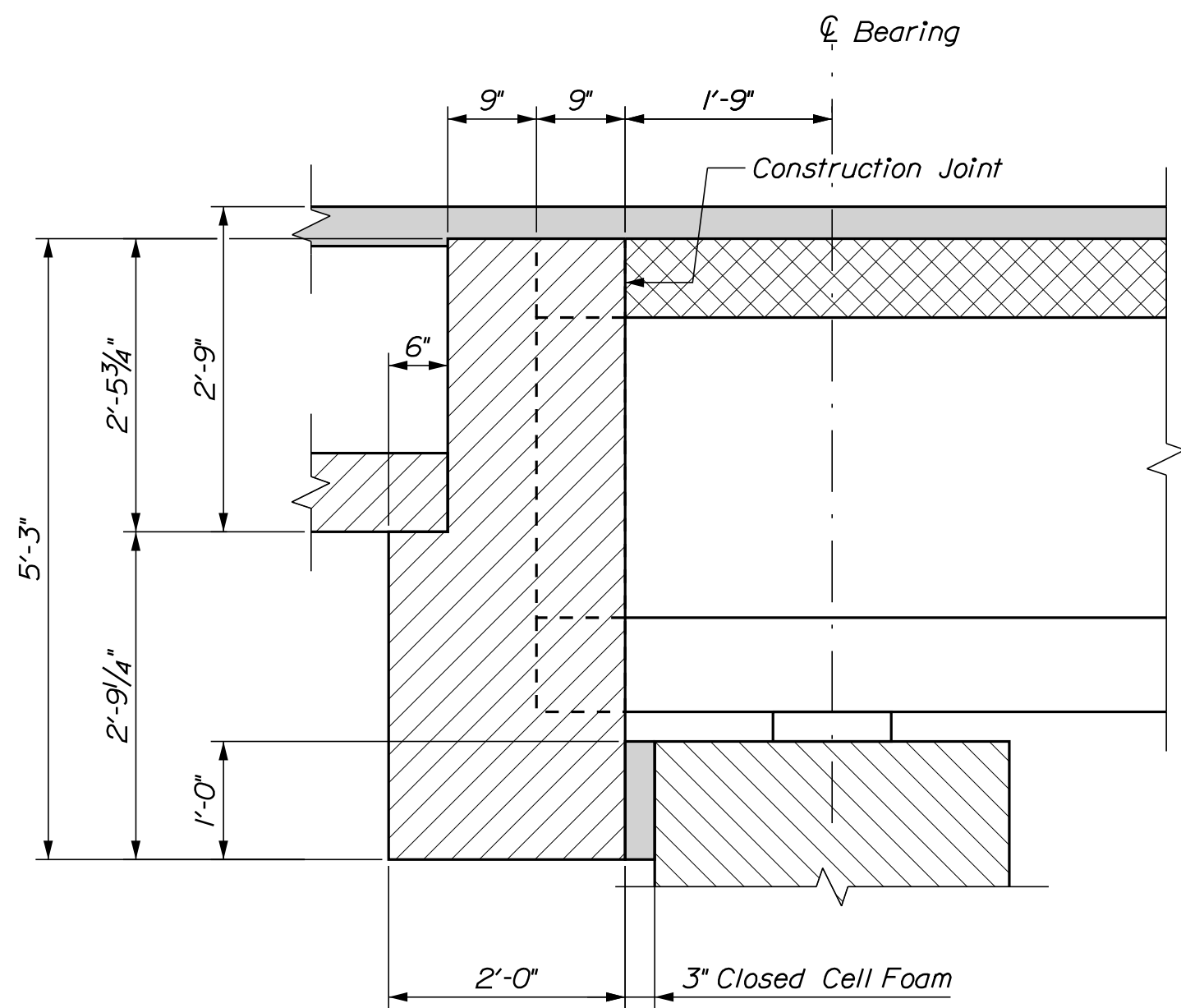
Username: dataylor

Filename: ... \038_Abut_End_Diaphragm Details.dgn Division: BRIDGE



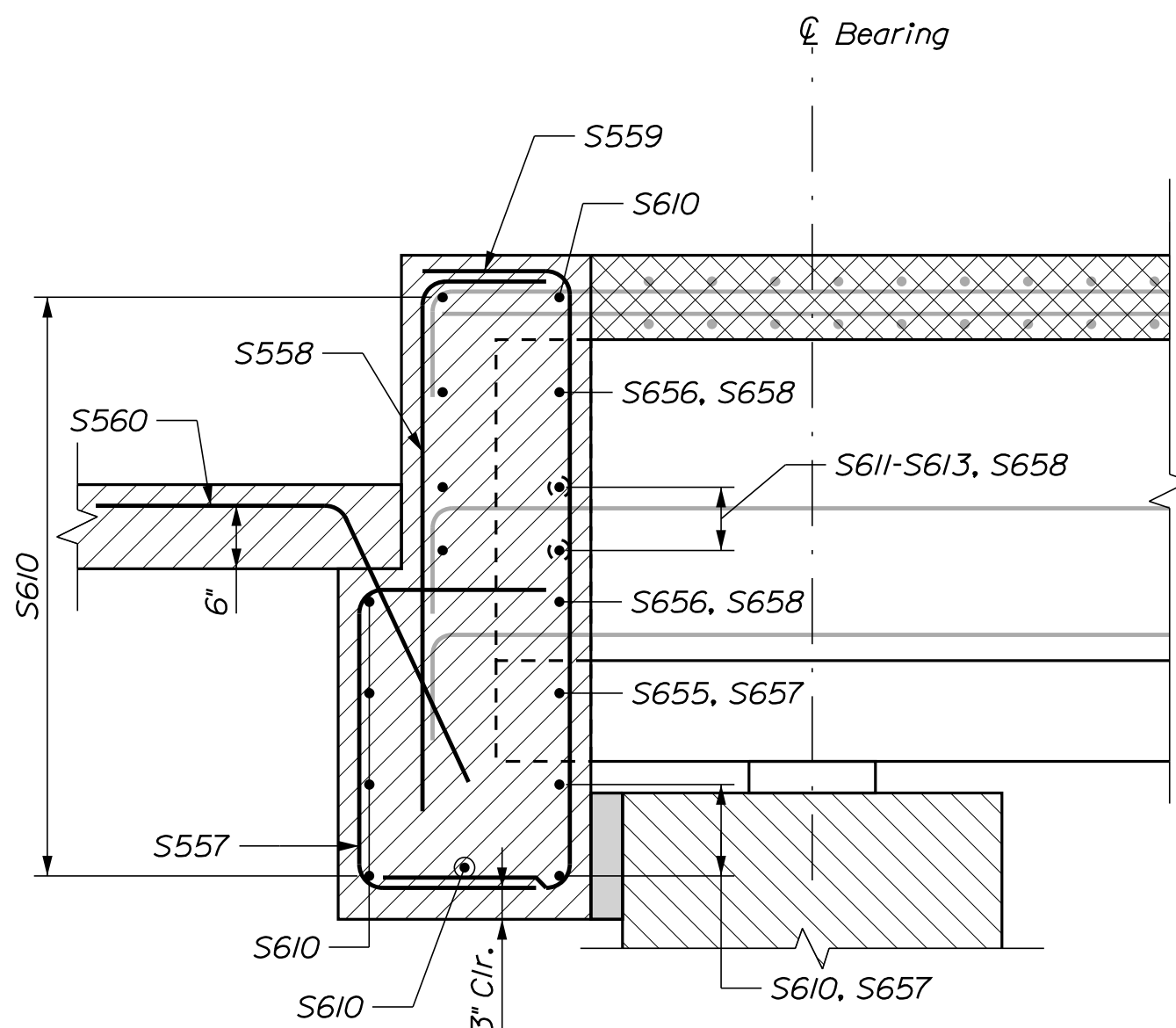
END DIAPHRAGM ELEVATION

Abutment 1 Shown Looking Upstation
Abutment 2 Opposite Hand
Horizontal Splices are 3'-5" Minimum



END DIAPHRAGM SECTION

Closed Cell Foam shall be incidental to related Contract items



END DIAPHRAGM REINFORCING SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1874(800)
WIN 18748.00
BRIDGE NO. 2848
BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	KUNVLSF	FEB 2019
CHECKED-REVIEWED	DDTPAG	DDTYMM	FEB 2019
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

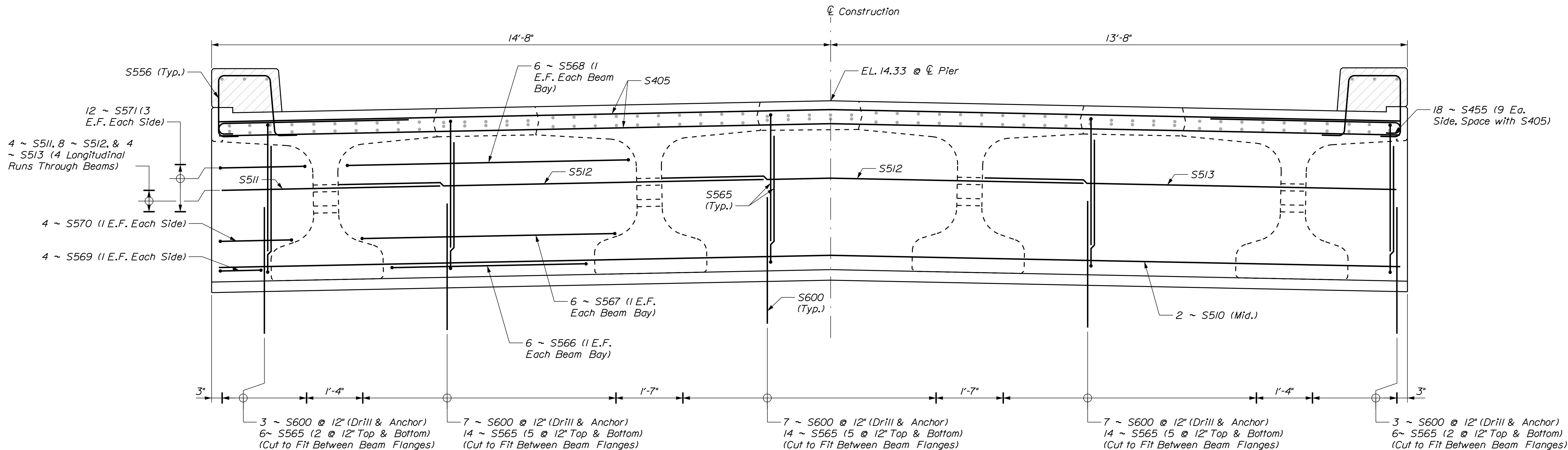
THOMPSONS BRIDGE	SOUTHPORT	LINCOLN COUNTY
DECKER COVE		
END DIAPHRAGM DETAILS		

SHEET NUMBER
38
OF 43

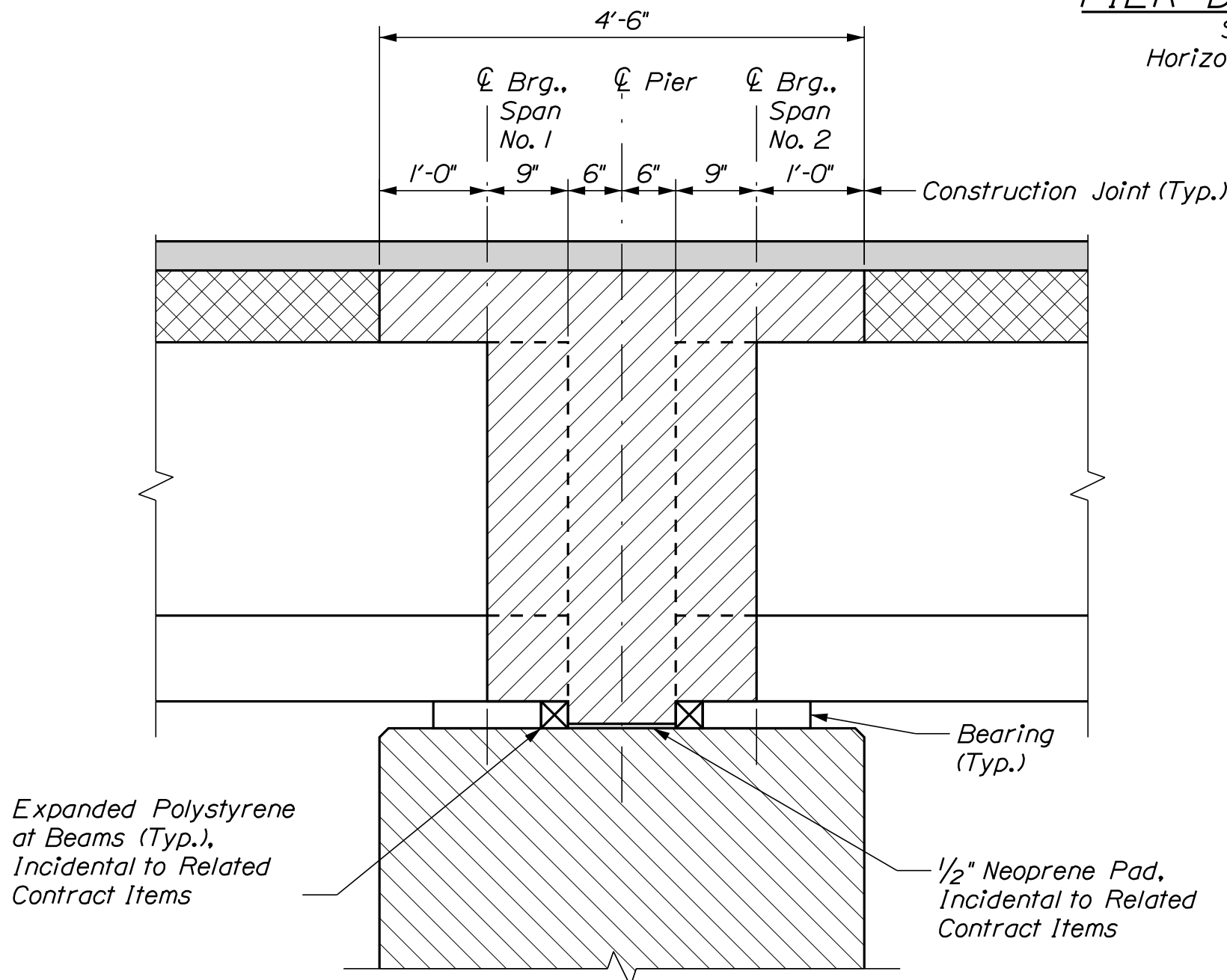
Date: 3/1/2019

Username: dataylor

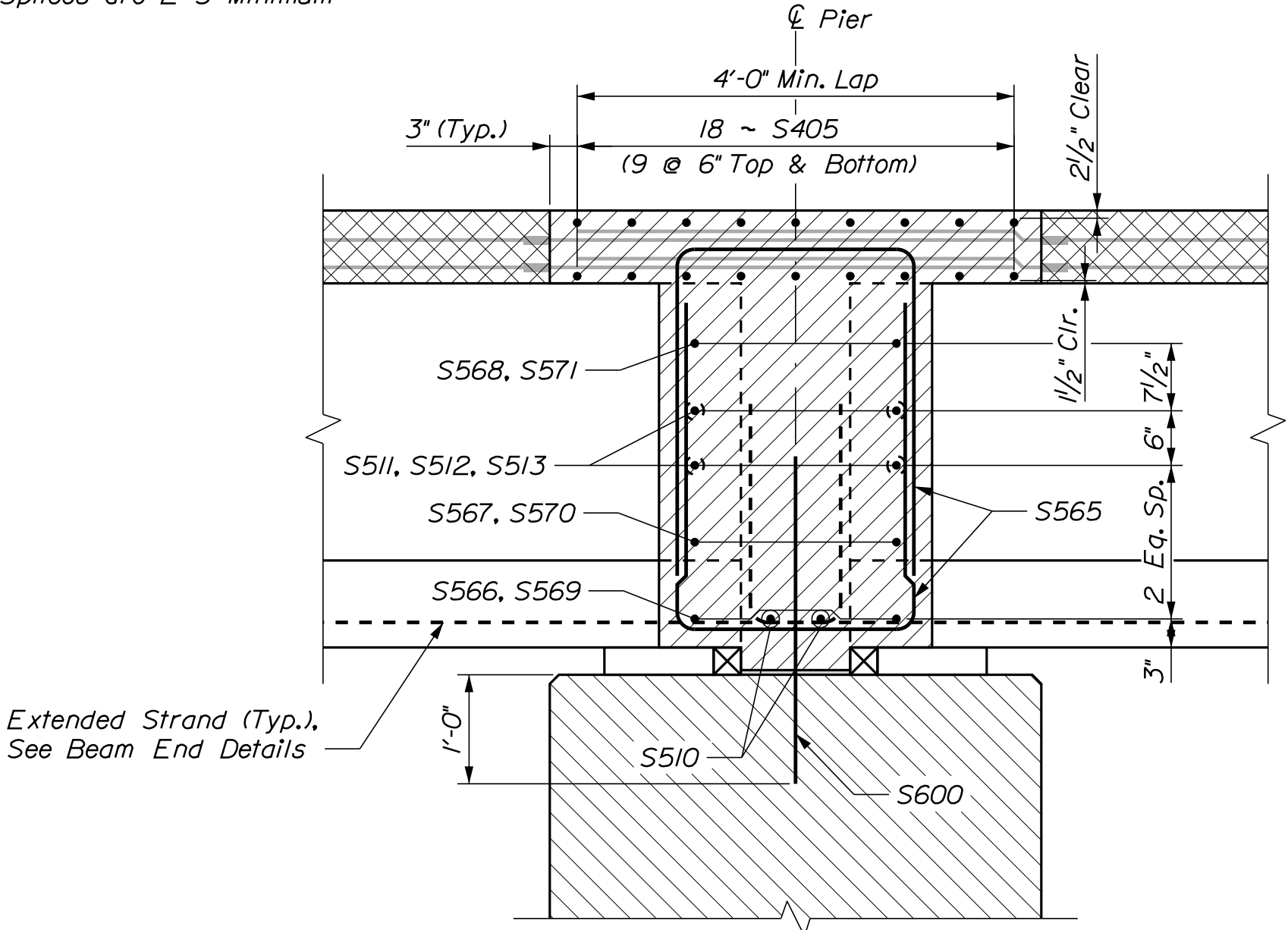
Filename: ... \039_Pier_End_Diaphragm Details.dgn Division: BRIDGE



PIER DIAPHRAGM ELEVATION
Shown Looking Upstation
Horizontal Splices are 2'-3" Minimum



PIER DIAPHRAGM SECTION



PIER DIAPHRAGM REINFORCING SECTION

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	KUMUSF	FEB 2019
CHECKED-REVIEWED	DDT/PAG	DDT/TMM	FEB 2019
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

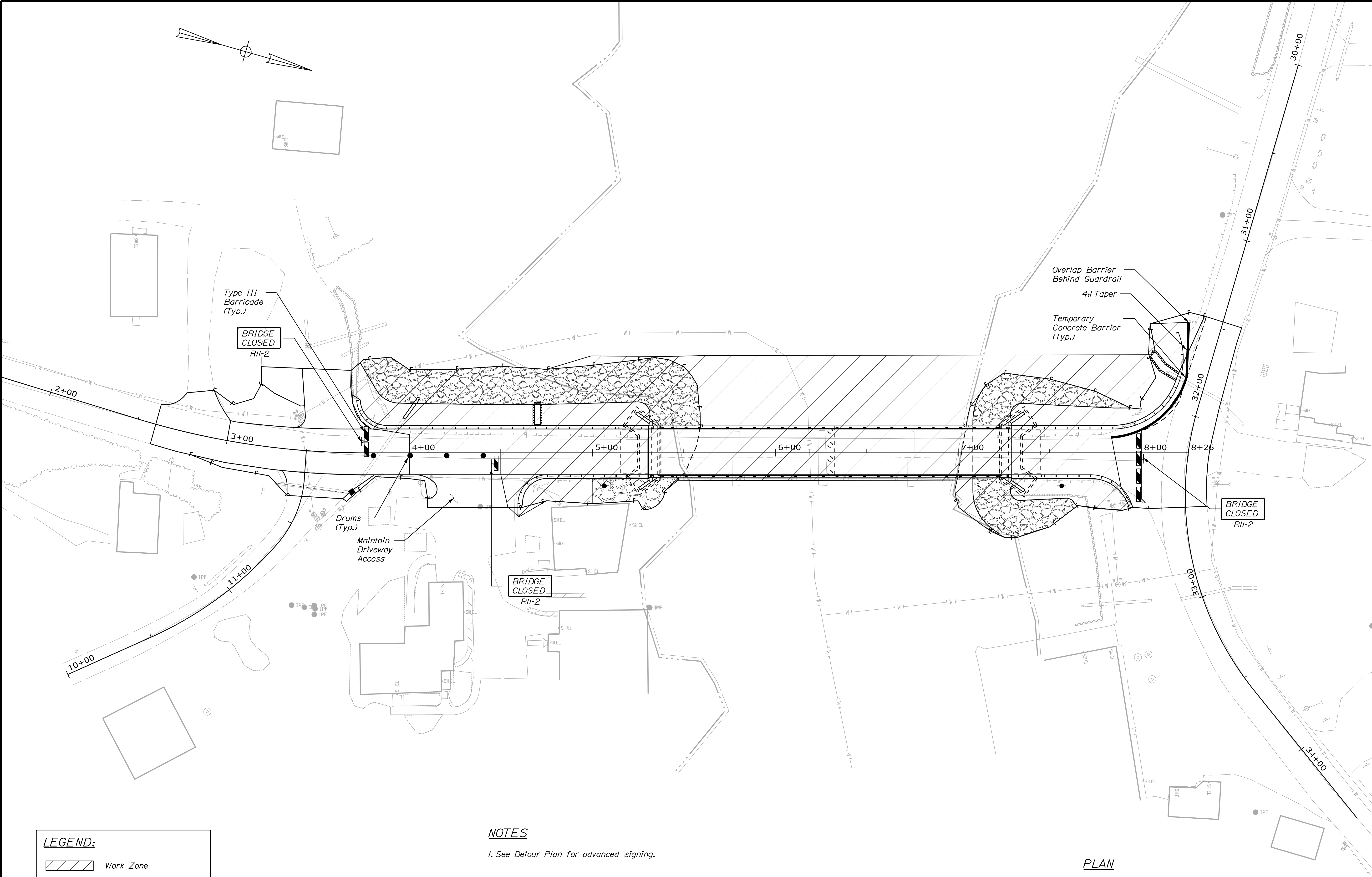
SIGNATURE
P.E. NUMBER
DATE

Date: 3/1/2019

Username: dataylor

Division: BRIDGE

Filename: ... \MSTAO41_MOT_closure_plan.dgn

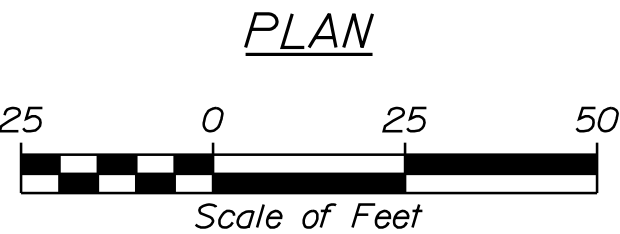


LEGEND:

- Work Zone
- Type 3 Barricades
- Drums @ 20' Spacing

NOTES

1. See Detour Plan for advanced signing.

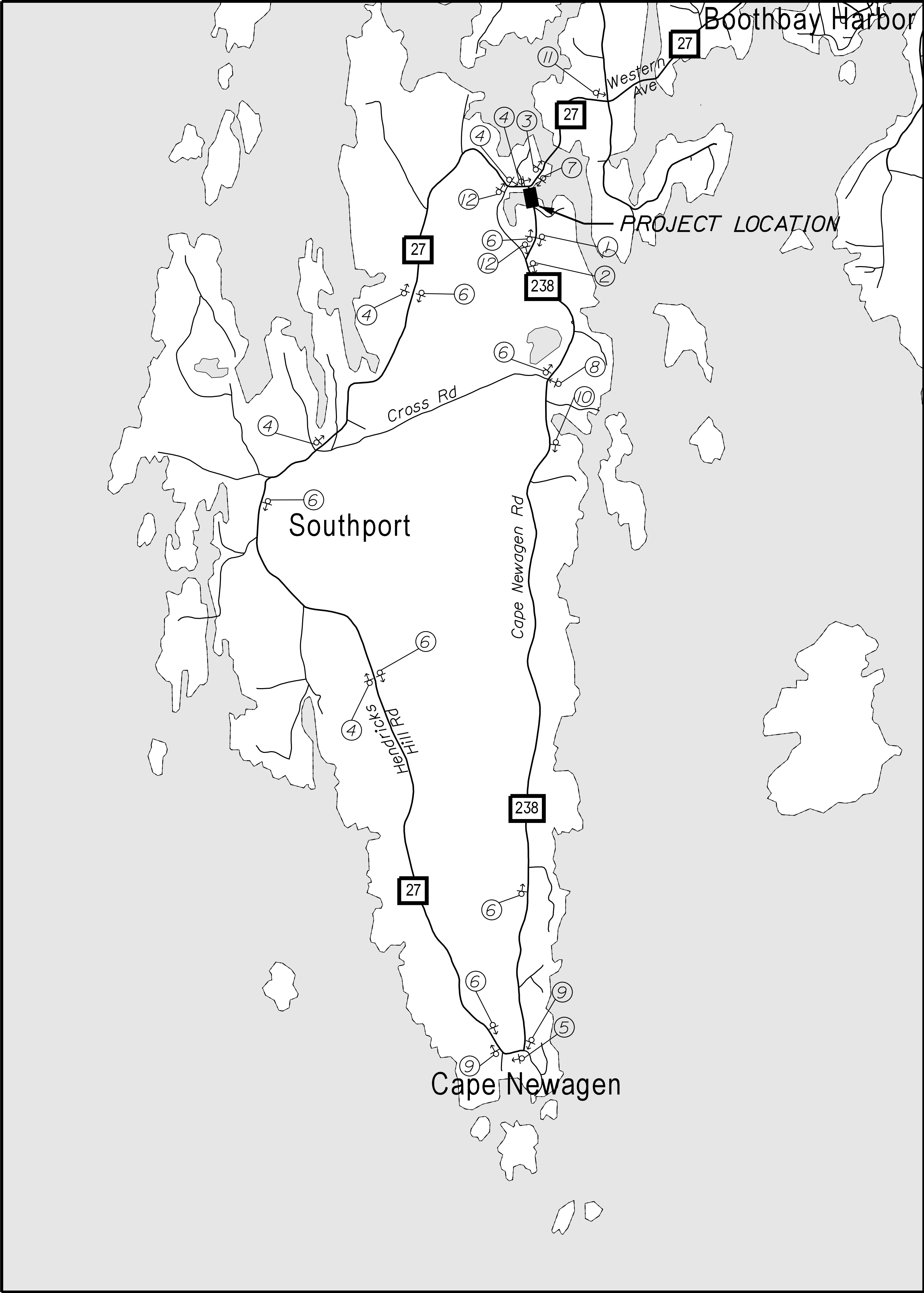


THOMPSONS BRIDGE DECKER COVE LINCOLN COUNTY SOUTHPORT MAINTENANCE OF TRAFFIC BRIDGE CLOSURE PLAN	PROJ. MANAGER		L. TIMBERLAKE	BY	DATE
	DESIGN-DETAILED		PLP	PLP	FEB 2019
	CHECKED-REVIEWED		LEM	LEM/TMM	FEB 2019
	DESIGN2-DETAILED2				
	DESIGN3-DETAILED3				
	REVISIONS 1				P.E. NUMBER
	REVISIONS 2				
	REVISIONS 3				
	REVISIONS 4				DATE
	FIELD CHANGES				
STATE OF MAINE					
DEPARTMENT OF TRANSPORTATION					
STP-1874(800)					
BRIDGE NO. 2848					
WIN					
18748.00					
BRIDGE PLANS					

SHEET NUMBER

41

OF 43



1

ROAD CLOSED
500 FT

W20-3

2

ROAD CLOSED
1000 FT

W20-3

3

DETOUR
AHEAD

W20-2

4

DETOUR
SOUTH
238
↑

M4-8
M3-3
M1-5
M6-3

5

END
DETOUR
SOUTH
238

M4-8a
M3-3
M1-5

6

Western Ave
DETOUR
↑

D3-1a
M4-9

7

END
DETOUR
Western Ave

M4-8a
D3-1a

8

BRIDGE CLOSED
ON CAPE NEWAGEN RD
1 MILE AHEAD ←

CS-1

9

BRIDGE CLOSED
CAPE NEWAGEN RD
4 MILES AHEAD

R11-3

10

BRIDGE CLOSED
CAPE NEWAGEN RD
1 MILE AHEAD

R11-3

11

BRIDGE CLOSED
CAPE NEWAGEN RD
0.5 MILES AHEAD

R11-3

12

ROAD CLOSED
TO
THRU TRAFFIC

R11-4

NOTES

1. Contractor shall cover all existing signs that conflict with construction signing. This shall be incidental to 652.35 Construction Signs.

BRIDGE CLOSURE & DETOUR SIGN SUMMARY							
Text	ID Number	Size	Quantity & Color	Text	ID Number	Size	Quantity & Color
Western Ave	D3-1a	48" X 12"	8 - Black on Orange	BRIDGE CLOSED	R11-2*	48" X 30"	3 - Black on White
238	M1-5	30" X 24"	6 - Black on White	BRIDGE CLOSED CAPE NEWAGEN RD XX MILE AHEAD	R11-3	60" X 30"	4 - Black on White
SOUTH	M3-3	24" X 12"	6 - Black on White	ROAD CLOSED TO THRU TRAFFIC	R11-4	60" X 30"	2 - Black on White
DETOUR	M4-8	24" X 12"	5 - Black on Orange	DETOUR AHEAD	W20-2	36" X 36"	1 - Black on Orange
END DETOUR	M4-8a	24" X 18"	2 - Black on Orange	ROAD CLOSED XX FT	W20-3	36" X 36"	2 - Black on Orange
DETOUR ↑	M4-9	30" X 24"	7 - Black on Orange	BRIDGE CLOSED ON CAPE NEWAGEN RD 1 MILE AHEAD ←	CS-1	60" X 30"	1 - Black on White
↑	M6-3	21" X 15"	5 - Black on White				

* Sign Shown on Bridge Closure Plan

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

STP-1874(800)

WIN 18748.00

THOMPSONS BRIDGE

DECKER COVE

SOUTHPORT

MAINTENANCE OF TRAFFIC

DETOUR PLAN

SHEET NUMBER

42

OF 43

PROJ. MANAGER

DESIGN-DETAILED

CHECKED-REVIEWED

DESIGN-DETAILED

DESIGN-DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

DATE

FEB 2019

FEB 2019

FEB 2019

BY

PLP

LEA/TMM

SIGNATURE

P.E. NUMBER

DATE

This figure is a detailed engineering plan for a highway project, specifically for the State Aid Highway No. 1, Route 238 - Cape Newagen Road in Lincoln County, Maine. The plan shows the proposed highway alignment, including stationing from 2+00 to 8+25.70, and various easements and rights of way. Key features include:

- Plan Legend:** Defines symbols for existing and proposed features such as traveled ways, ditches, catch basins, manholes, sewer manholes, utility poles, fire hydrants, and curbing.
- Curve Data:** PI = 3+12.72, D = 13°28'52.9", Δ = 17°04'32.5" Lt., R = 425.00', L = 126.66', T = 63.80', E = 4.76'.
- Property Owners and Easements:** The plan identifies several property owners and their respective easements, including Donald E. Brewer, Nora E. R. Brewer, Debra B. Sylvester, Richard P. Butler, Brian E. Sylvester, Anne M. Maher, Jack Keith, Richard Dawes, James O. Singer, Rebecca W. Singer, Pamela S. Westfall, and Sheepscoot Pilots, Inc.
- Infrastructure:** Shows existing and proposed infrastructure such as Nickerson Road, Cape Newagen Road, and various bridges (Thompsons Bridge, Decker Cove Bridge).
- Scale and Orientation:** Includes a scale bar (0 to 100 feet) and a north arrow.
- Revisions:** A table at the bottom left lists revisions, including the plan being filed in Plan Book 70, Page 30.
- State of Maine Department of Transportation:** The plan is prepared in connection with the Department's acquisition of real property for transportation purposes.