
MEMORANDUM

To: Scott Rollins
Mackenzie Kersbergen
MaineDOT

From: Darin Bryant
T.Y. Lin International

Date: October 21, 2019

Address: Brunswick/Topsham, ME

CC: File

Re: Frank J. Wood Bridge – 60% Submission – Materials and Finishes

As part of the Memorandum of Agreement for this project between the Maine Department of Transportation, Federal Highway Administration, and others, 60% plans are to be submitted for review by the Maine SHPO, the Bridge Design Committee, and the consulting parties to ensure compatibility with the existing historic features. Design plans stamped “60% Review Set; 10/21/2019” have been developed for this required submission which show the layouts, outlines, and limits for the project. To further clarify those preliminary plans, the additional information contained in this memo outlines the materials and finishes which have yet to be detailed on the design plans.

1. Bridge Rail

A combination parapet/rail system shown in the rendering below will be used on the bridge itself. Arched inset panels in the wall will be smooth, while the insets in the light columns will be inlaid with a brick pattern (but no color). The metal railing at the top will be black. The rendering below illustrates the appearance and configuration being designed for this feature.



2. Approach Rail

The safety rail behind the sidewalk on the roadway approaches to the bridge will be a black, metal rail system with vertical elements which partially resemble the top portion of the combination parapet/rail system on the bridge. The photo below shows a similar system used on the Naples Causeway project. The rail system for this project will appear similar, except the posts will be solid and there will be an additional horizontal member at the bottom to support the bottom of the vertical elements. The photo below illustrates the appearance and configuration being designed for this feature.



3. Lighting Type

The type of lighting to be used on both on the bridge and on the roadway approaches is shown in the rendering below.



4. Pier Shape

Trapezoidal piers are being designed as support for the bridge as shown here:



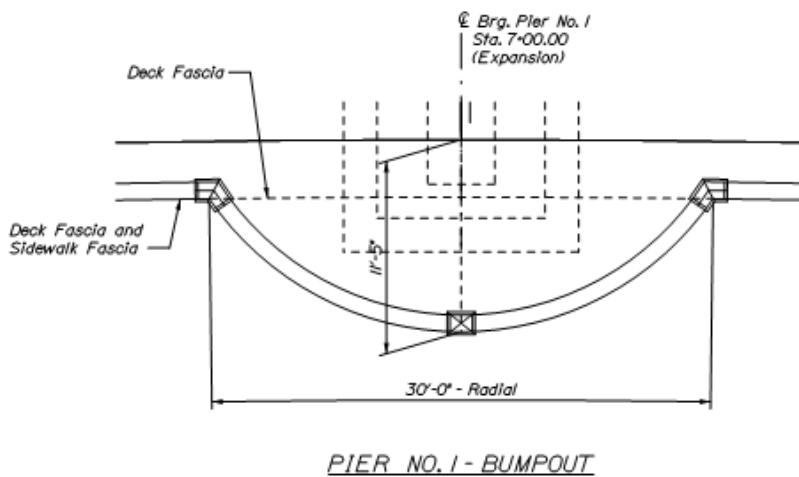
This trapezoidal shape seems to be a good fit for this site from an engineering perspective. Another option studied early in the design process (a daylight arch pier) would have been somewhat more challenging and expensive. Based on the March 14, 2018 DAC vote, the solid, trapezoidal shape was selected as the preferred pier shape and is currently being used in the design of the project.

5. Pier Surface Treatment

A stone color ashlar finish (faux-stone) is being designed for the pier concrete surfaces. The rendering in Item 4 (above) shows the pier surface treatment being used in the design. Final confirmation of the specific texture and shape of the stone finish will occur closer to the end of the design process.

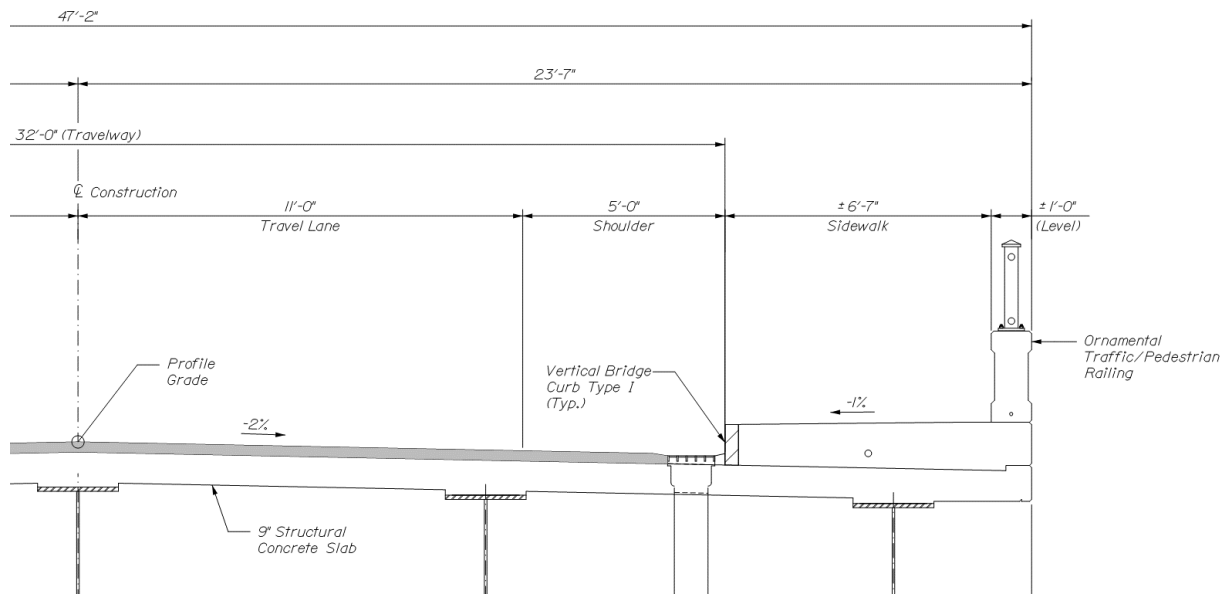
6. Bump-Out Geometry/Placement

MaineDOT has agreed to provide two crescent-shaped bump outs on the bridge, one on the upstream side and one on the downstream side. The current design shows 3 piers on the proposed replacement bridge. The first pier on the Brunswick side will be located just north of the power outfall channel (shown is the red circle to the right in the rendering below). The downstream bump out would be located over this pier. Pier 2 would have the upstream bump out (shown is the red circle to the left in the rendering below). Dimensions of the bump outs are shown in the detail below the rendering.



7. Added Bridge Width

MaineDOT has also agreed to provide 2 extra feet of bridge width, increasing the total bridge width from 45'-2" to 47'-2". In addition, the final bridge rail may be somewhat narrower than the original design, providing a few more inches in available width. This added width is being split equally between the sidewalks on either side of the road. The following typical section illustrates the lane / shoulder-bike path / sidewalk configuration currently being designed for the bridge:



8. Shoulder/Bike Lane Color

The bike lanes will be painted brick red to match the adjacent Cabot Mill buildings. The final treatment will need to be slip-resistant. Options on how to achieve this in a durable manner will be developed later in the design process. The rendering below illustrates the appearance and configuration currently being designed for the colored shoulder/bike lane:



9. Sidewalks

The sidewalks on the bridge and on the majority of the approach roadways will be brushed concrete. On the northerly end of the project, the sidewalks in Topsham will transition to brick to match in with the existing sidewalk materials in that location. The photo below illustrates the appearance currently being designed for the brushed concrete sidewalks:



STATE OF MAINE DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

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

DESIGN LOADING

Live Load HL - 93 Modified for Strength I (Truck only increased 25%)

TRAFFIC DATA

Current (20XX) AADT 18860
 Future (20XX) AADT 22630
 DHV - % of AADT 10%
 Design Hour Volume 2263
 Heavy Trucks (% of AADT) 3%
 Heavy Trucks (% of DHV) 3%
 Directional Distribution (% of DHV) 50%
 18 kip Equivalent P 2.0 189
 18 kip Equivalent P 2.5 181
 Design Speed (mph) 25 mph

HYDROLOGIC DATA

Drainage Area 3435 sq mi
 Ordinary High Water Discharge (Q1.1) 27,500 cfs
 Design Discharge (Q50) 89,300 cfs
 Check Discharge (Q100) 99,700 cfs
 Headwater Elevation & Discharge Velocities vary due to
 nearby dam and due to riverbed topography

MATERIALS

Concrete:
 Sidewalk and End Posts Class "LP"
 Seals Class "S" (Unless Noted)
 All Other Class "A"

Reinforcing Steel ASTM A 615/A 615M, Grade 60

Structural Steel:
 All Material (except as noted) ASTM A 709, Grade 50 Metalized
 High Strength Bolts ASTM F 3125, Type 1, Galvanized

BASIC DESIGN STRESSES

Concrete (Class A) f 'c = 4000 psi
 Concrete (Class LP) f 'c = 5000 psi
 Concrete (Class S) f 'c = 3000 psi

Reinforcing Steel f y = 60,000 psi

Structural Steel:
 ASTM A 709, Grade 50 F y = 50,000 psi
 ASTM F 3125 F μ = 120,000 psi

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

**60% REVIEW SET
10/21/2019**

UTILITIES

Electric Cable TV
 Telephone Water / Sewer

MAINTENANCE OF TRAFFIC

Maintain two lanes of traffic (one each direction) over
 existing bridge and approaches during construction.

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

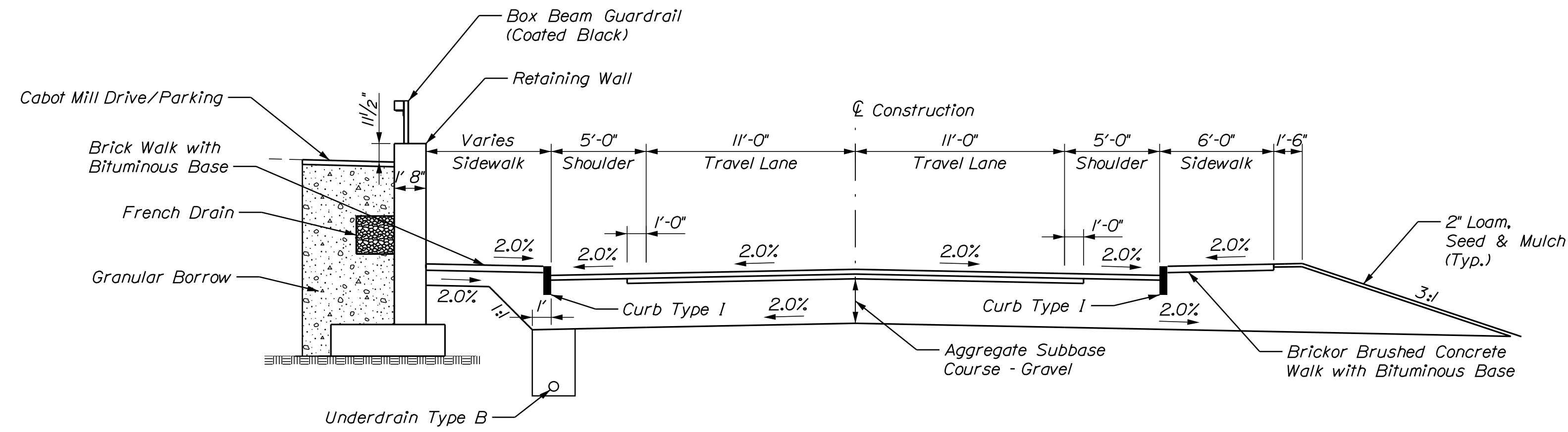
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COMMISSIONER:	CHIEF ENGINEER:	

PROJECT INFORMATION	BRIDGE	SIGNATURE
PROGRAM	DESIGNER	P.E. NUMBER
PROJECT MANAGER	CONSULTANT	DATE
DESIGNER	PROJECT RESIDENT	PROJECT COMPLETION DATE
R.M. HEBERT	T.Y. LIN	

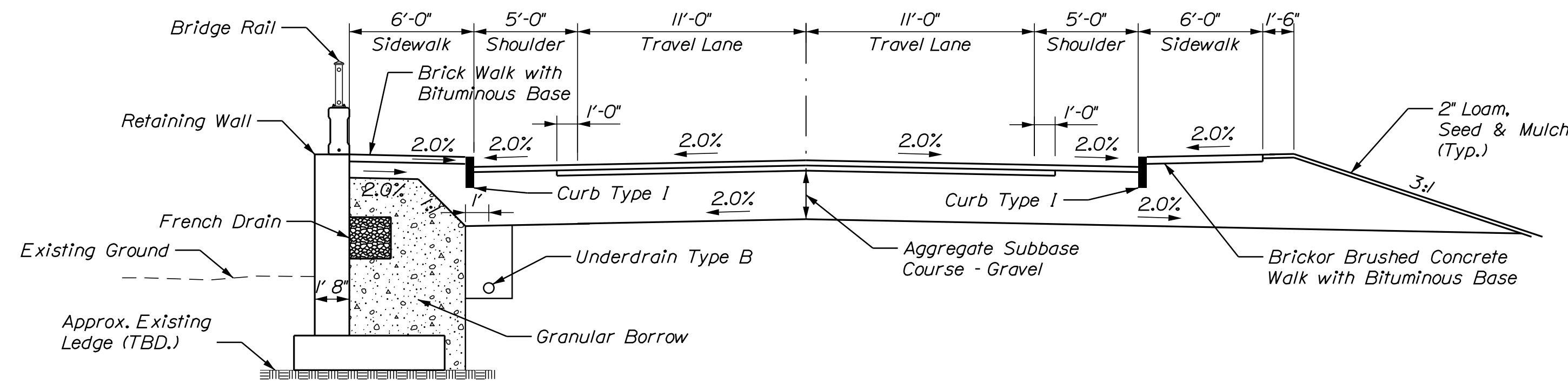
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R.M. HEBERT	T.Y. LIN	

SHEET NUMBER
1



BRUNSWICK APPROACH DESIGN SECTION



TOPSHAM APPROACH DESIGN SECTION

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
D. Bryant	T. Antz	5/2019			
DESIGN DETAILED	D. Burphs	5/2019			
CHECKED/REVIEWED	D. Bryant				
DESIGNS DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
TYPICAL SECTIONS

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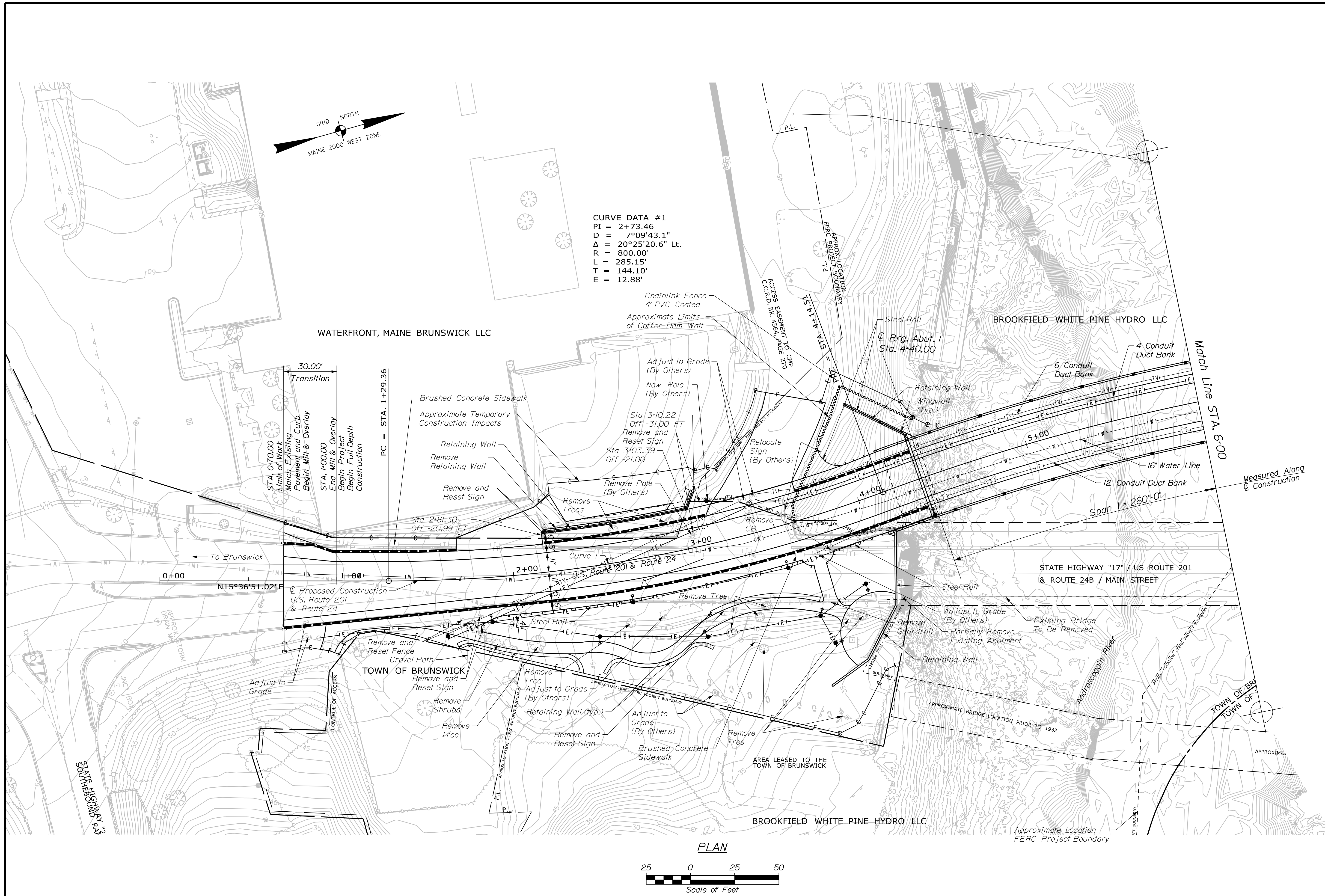
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STP-2260(300)X
WIN
22603.00
BRIDGE NO. 2016
BRIDGE PLANS

PROJ. MANAGER	DATE	BY	SIGNATURE	P.E. NUMBER	DATE
D. Bryant	5/2019	T. Antz			
DESIGN DET AILED	5/2019	D. Burbons			
CHECKED-REVIEWED		D. Bryant			
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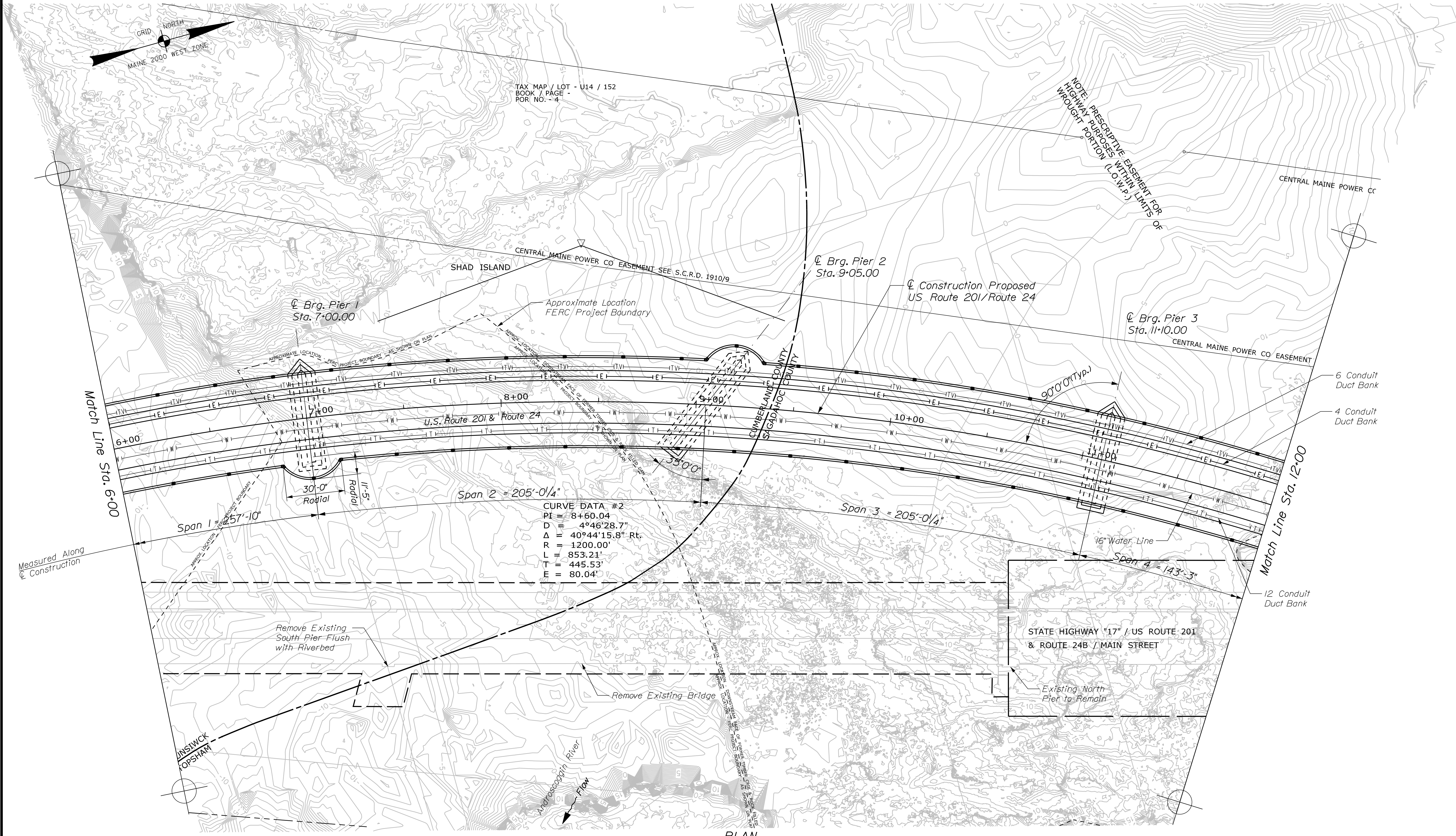
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
PRELIMINARY PLAN 1 OF 3

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OF 30

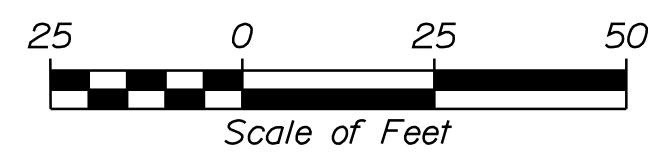
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PLAN



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WIN

BRIDGE PLANS

DATE

5/2019

BY

T. Aziz

DESIGN DETAILED

CHECKED/REVIEWED

DESIGN DETAILED

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REVISIONS 3

REVISIONS 4

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ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM

CUMBERLAND
PRELIMINARY PLAN 2 OF 3

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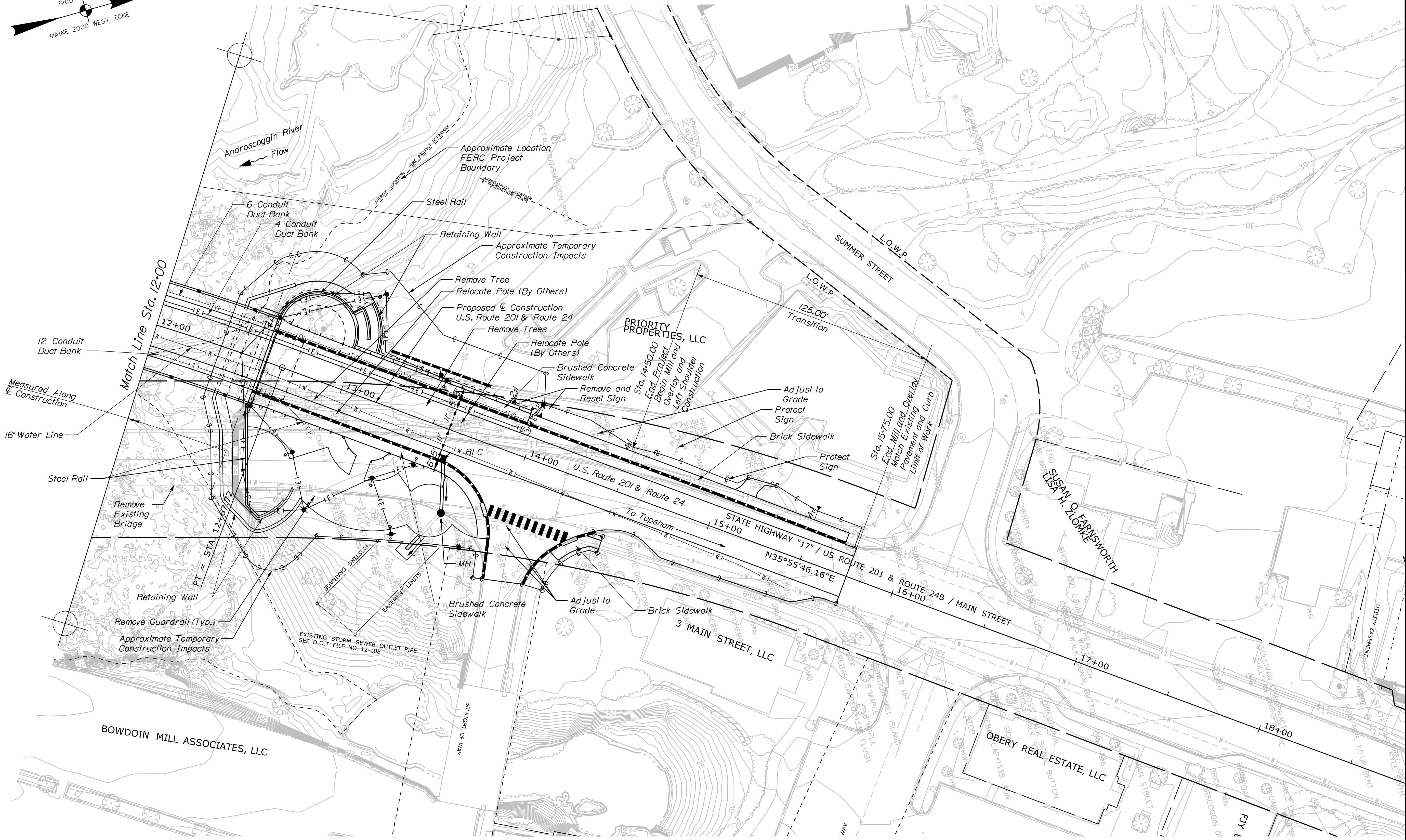
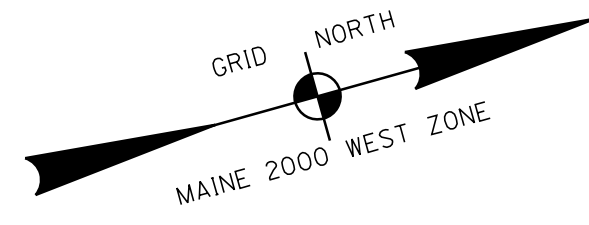
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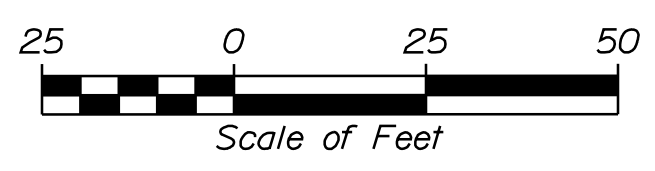
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PLAN



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D. Burrows		D. Bryant		

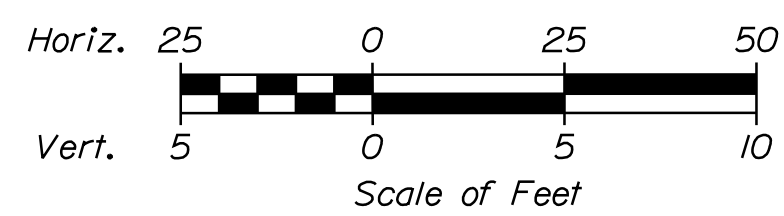
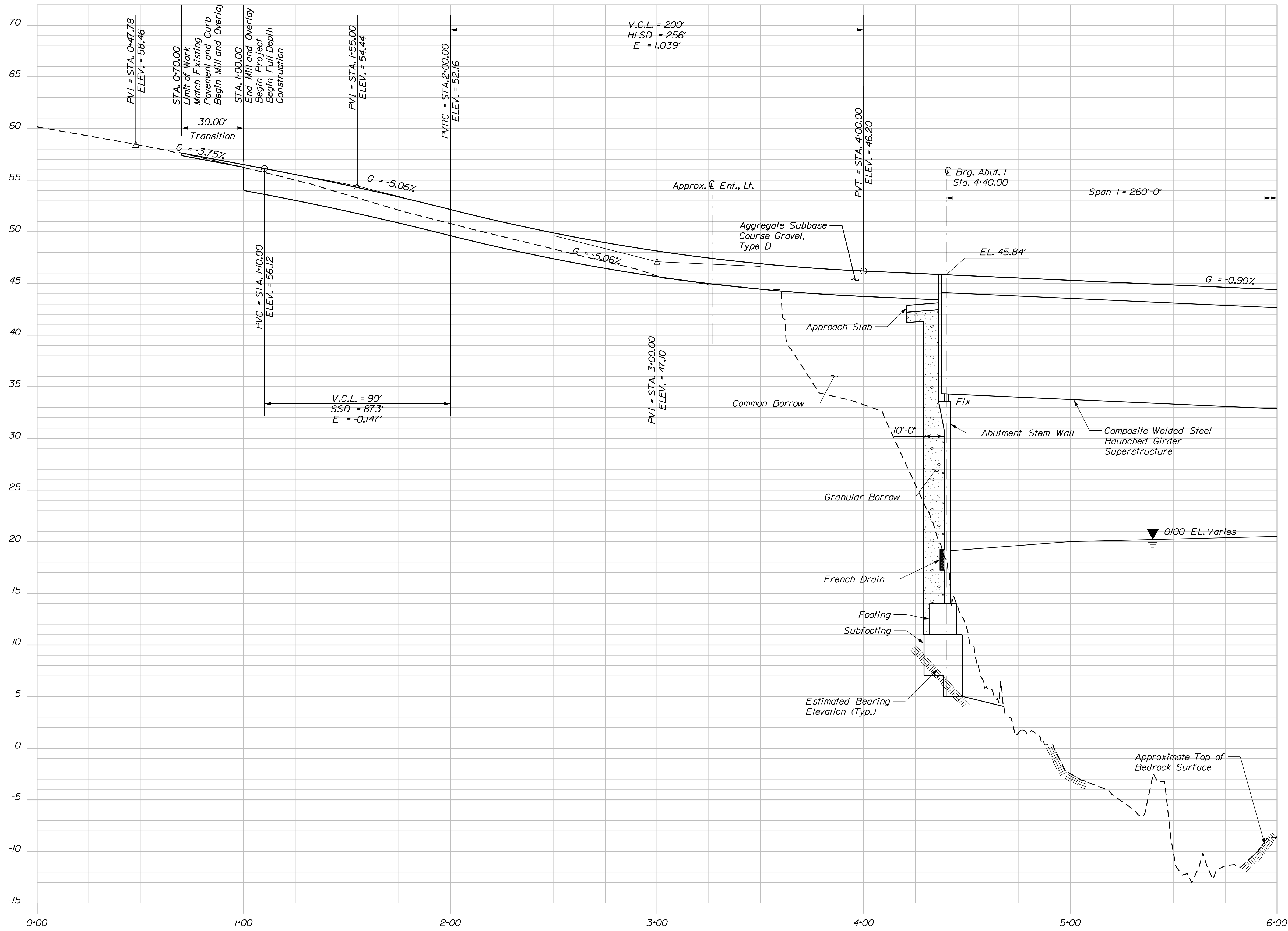
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FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
PRELIMINARY PLAN 3 OF 3

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PROFILE: U.S. ROUTE 201 / ROUTE 24

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D. Bryant	T. Antz	5/2019
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 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
PRELIMINARY PROFILE 1 OF 3

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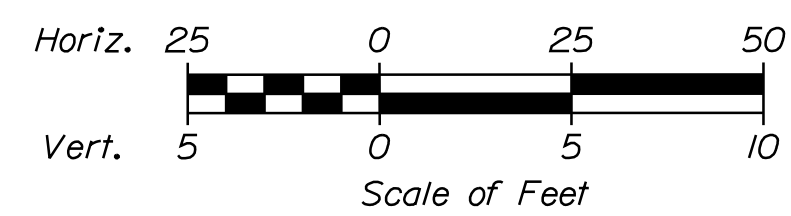
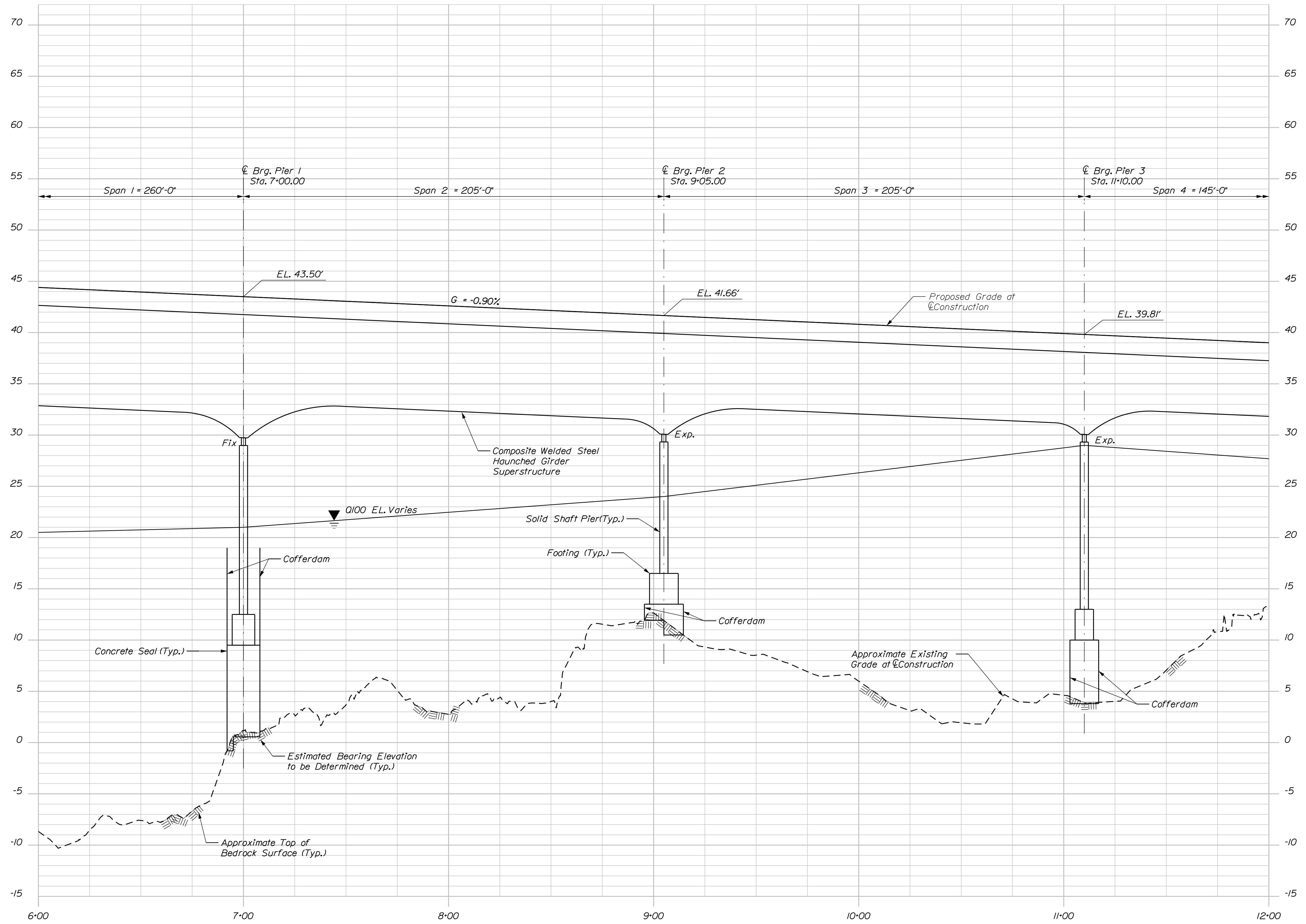
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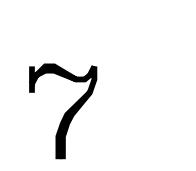
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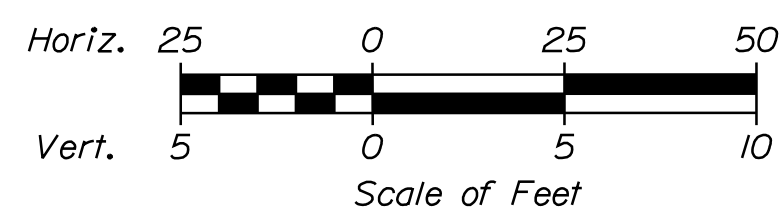
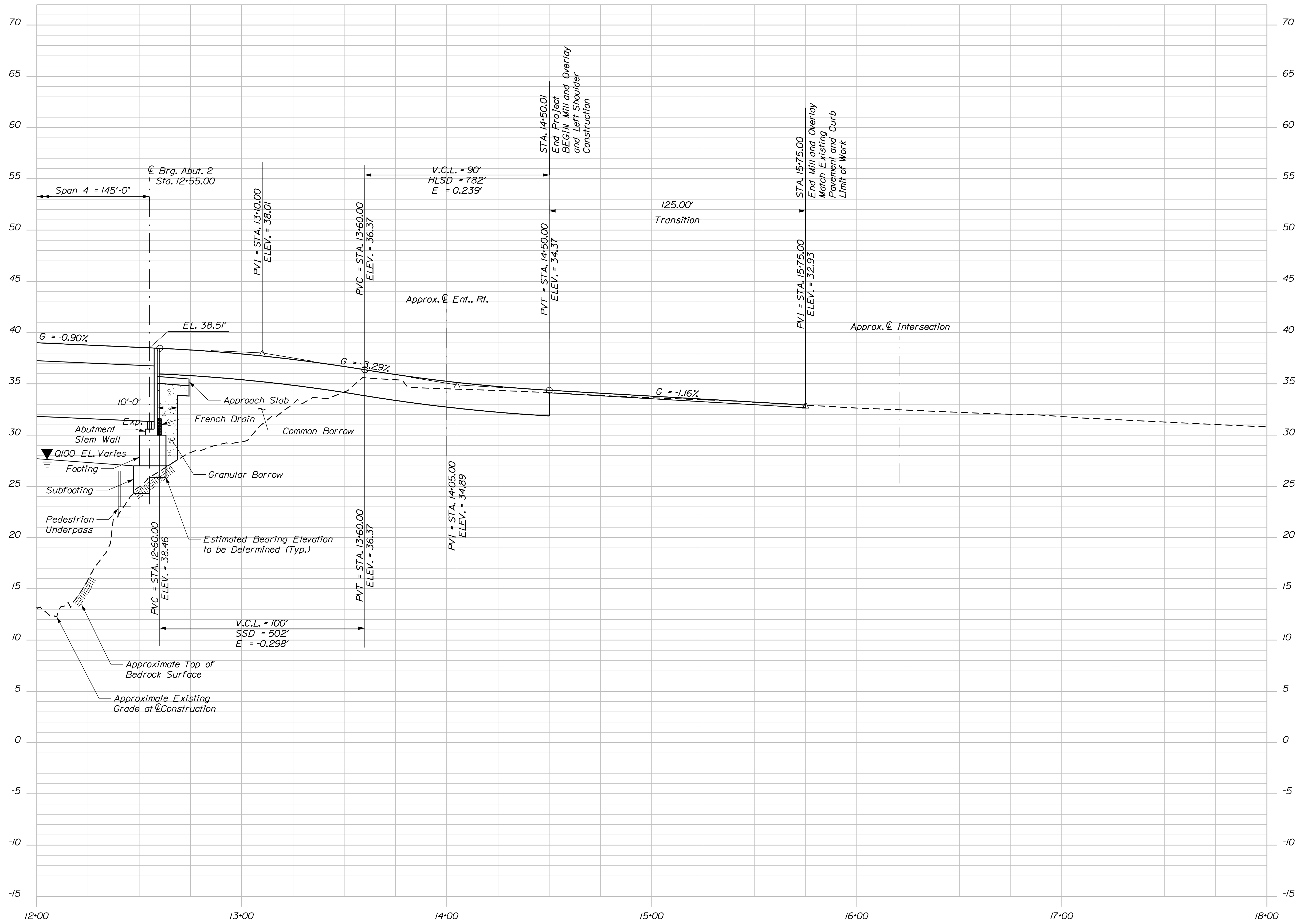
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 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
PRELIMINARY PROFILE 2 OF 3

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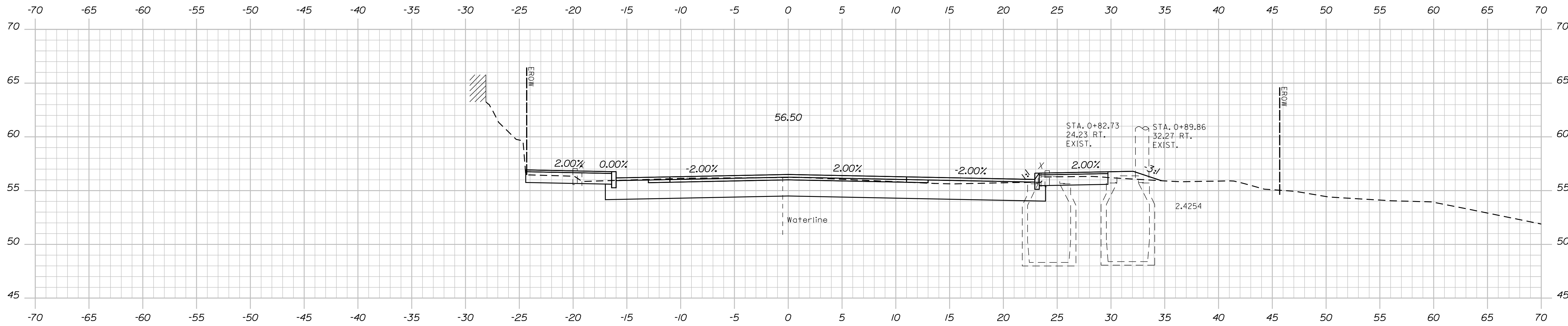
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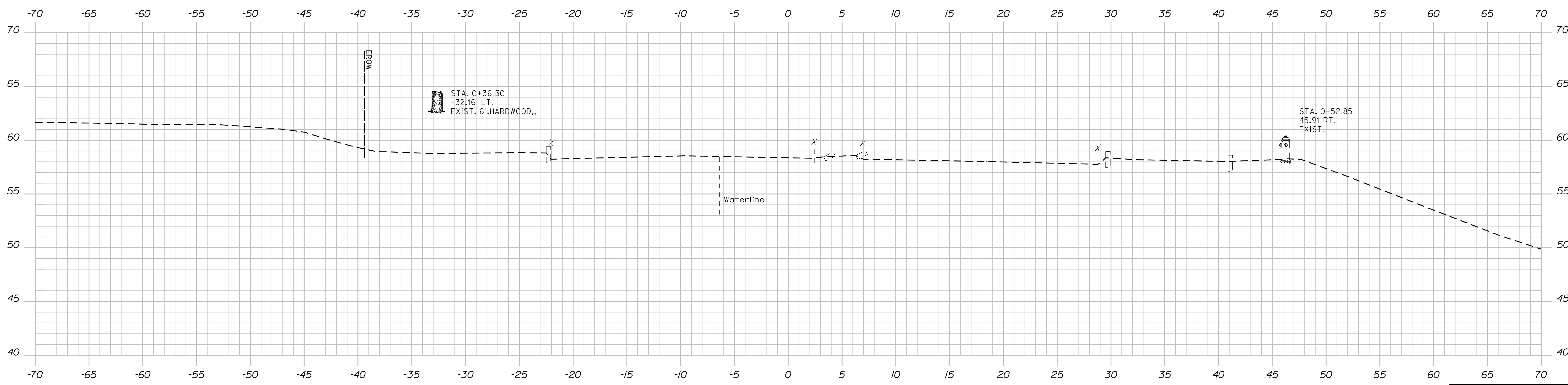
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FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND

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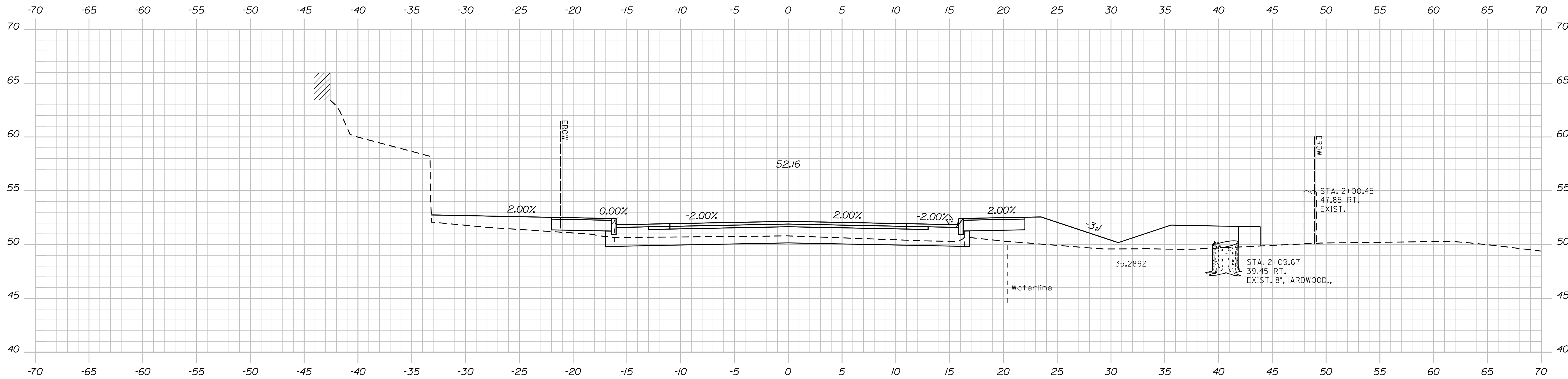
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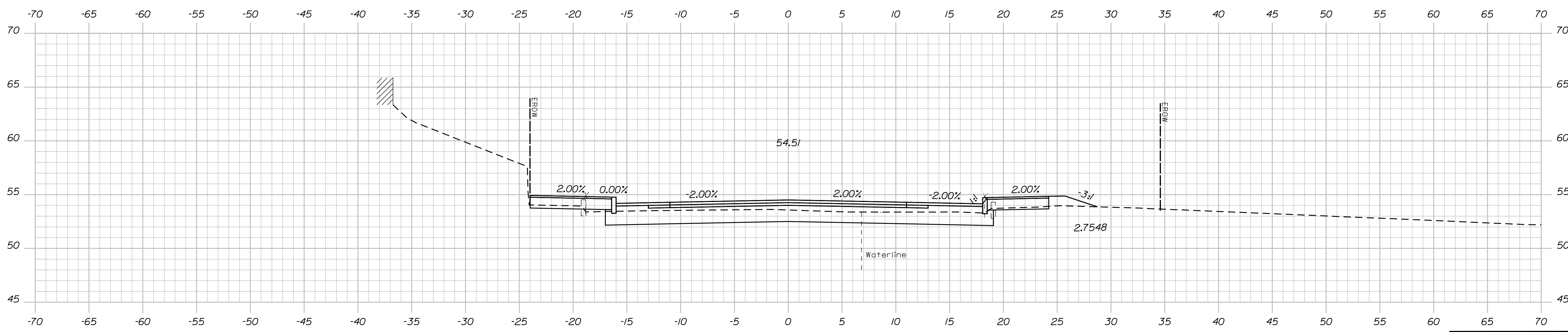
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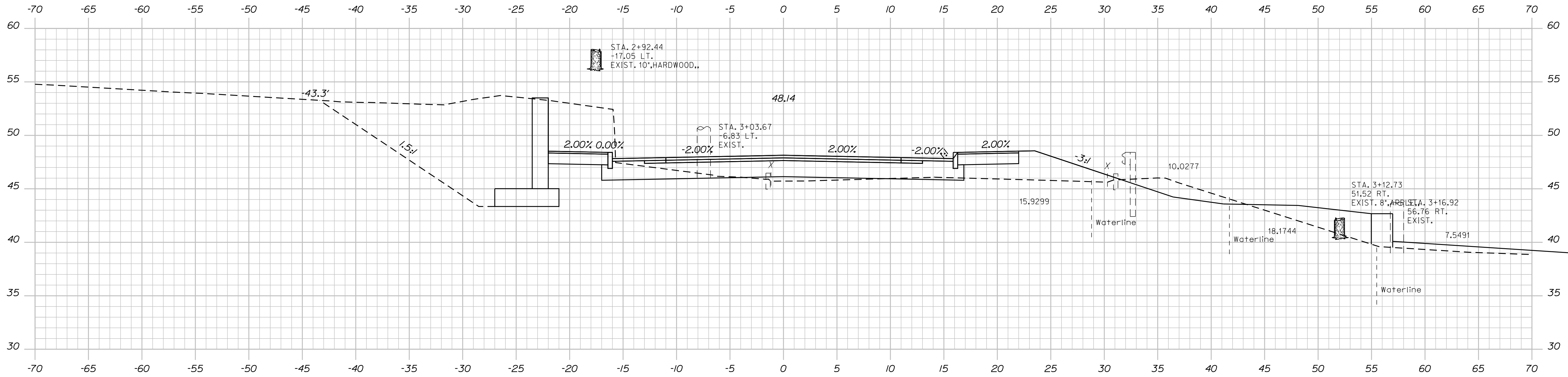
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OF 30

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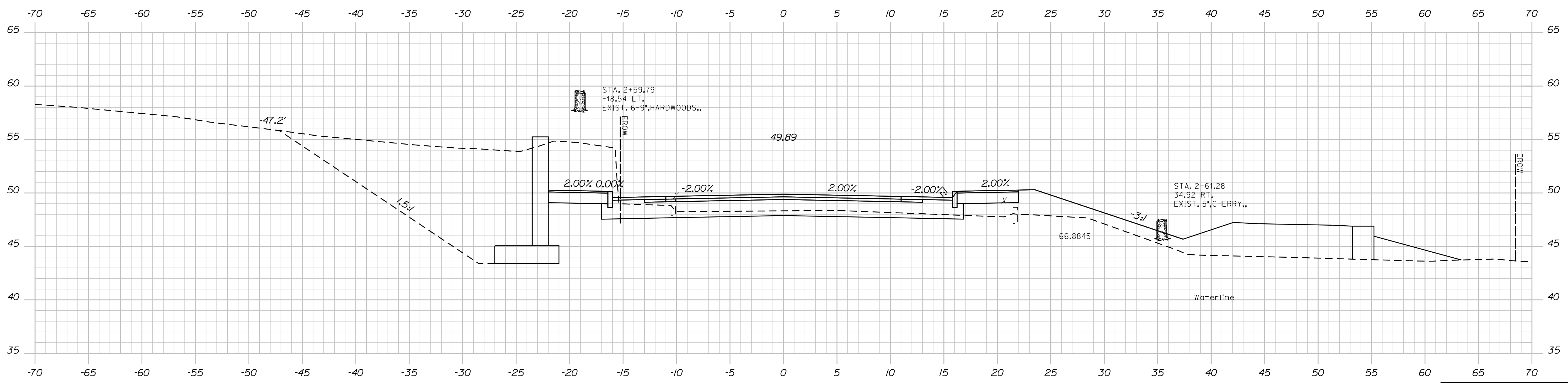
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ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

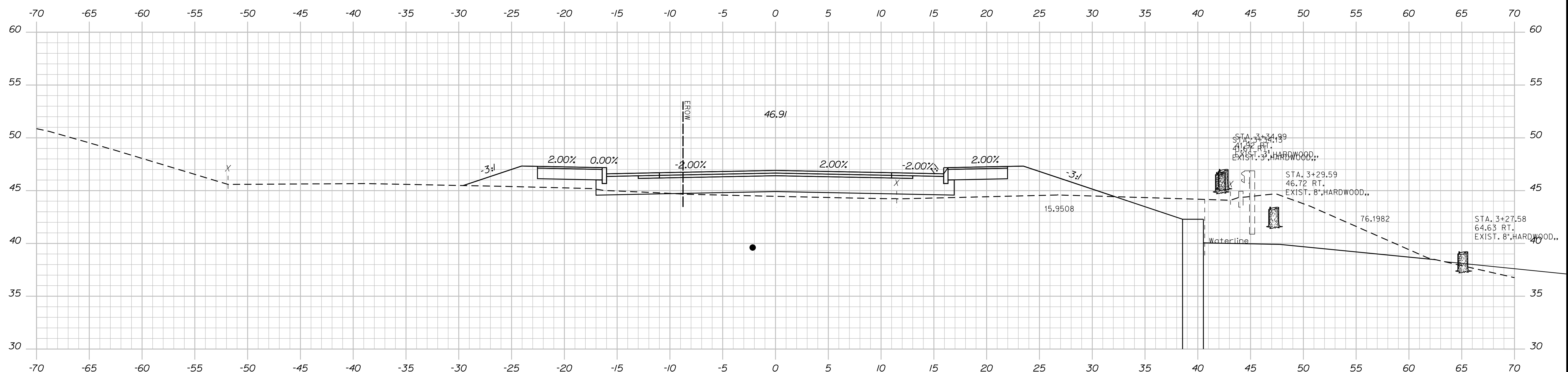
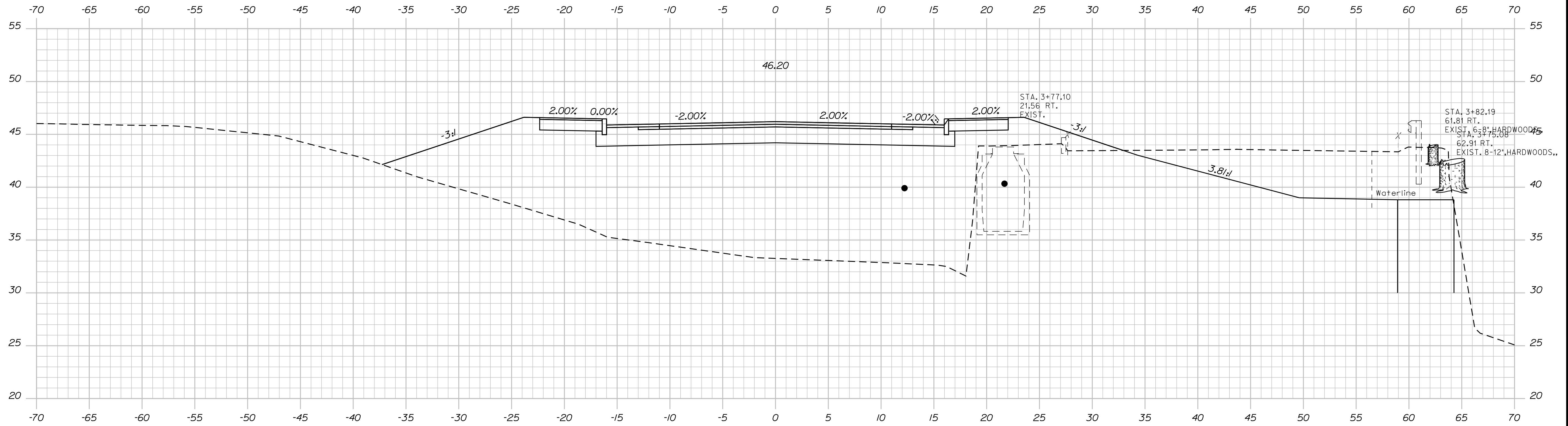
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11
OF 30

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



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

PROJ. MANAGER	DATE	SIGNATURE	P.E. NUMBER	DATE
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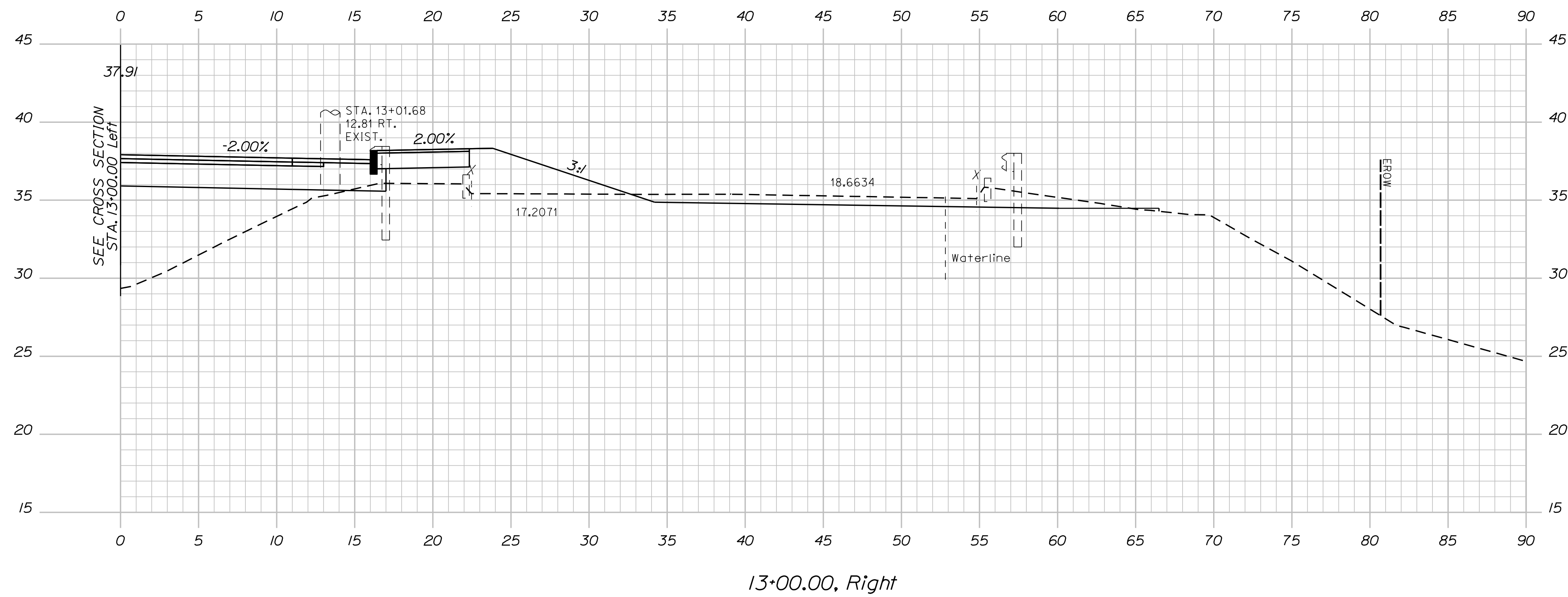
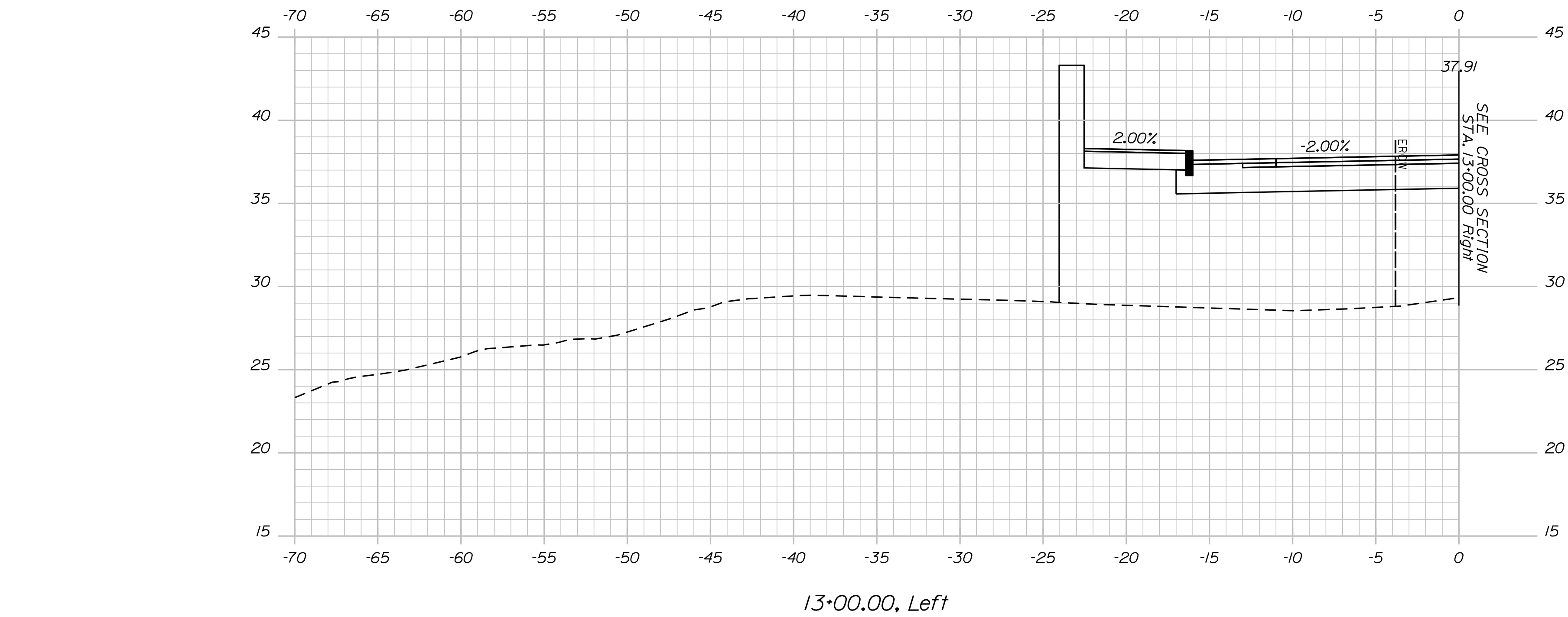
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OF 30

Date: 10/21/2019

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

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2260(300)X

BRUNSWICK-TOPSHAM
ANDROSCOGGIN RIVER
FRANK J. WOOD BRIDGE
CUMBERLAND

PROJ. MANAGER	BY	DATE
D. Bryant		
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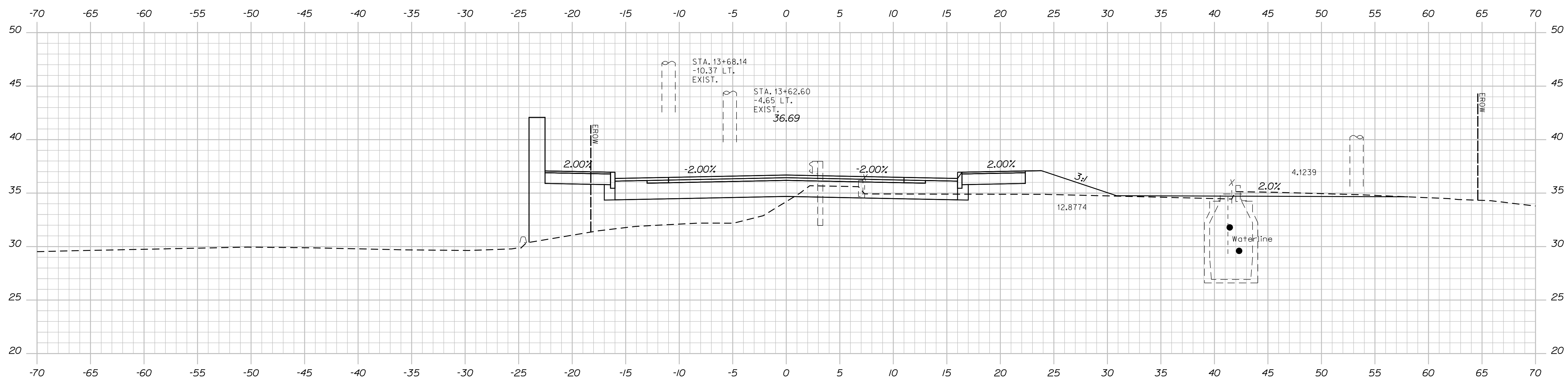
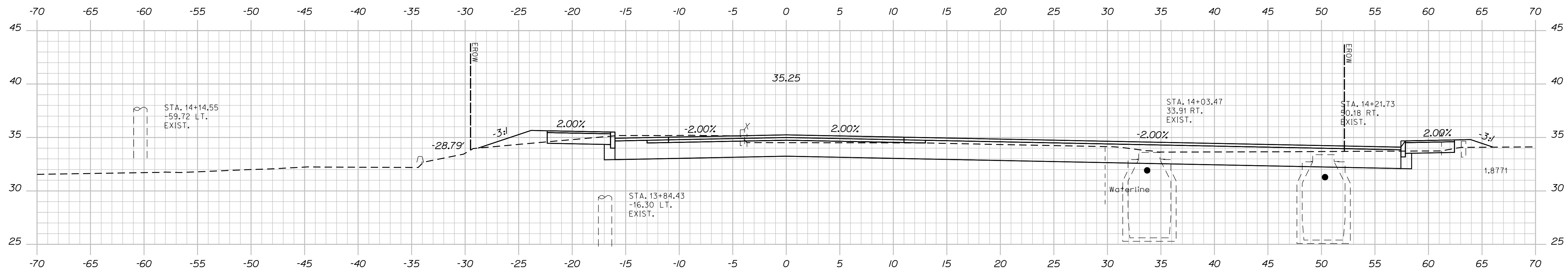
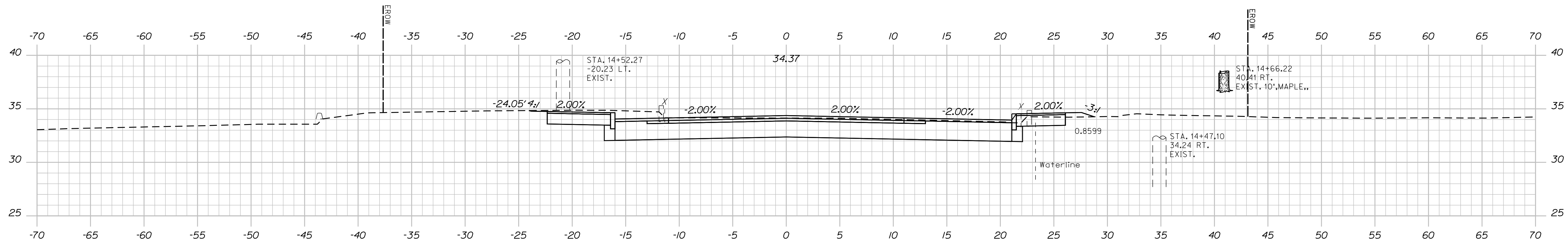
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REVISIONS 4		
FIELD CHANGES		

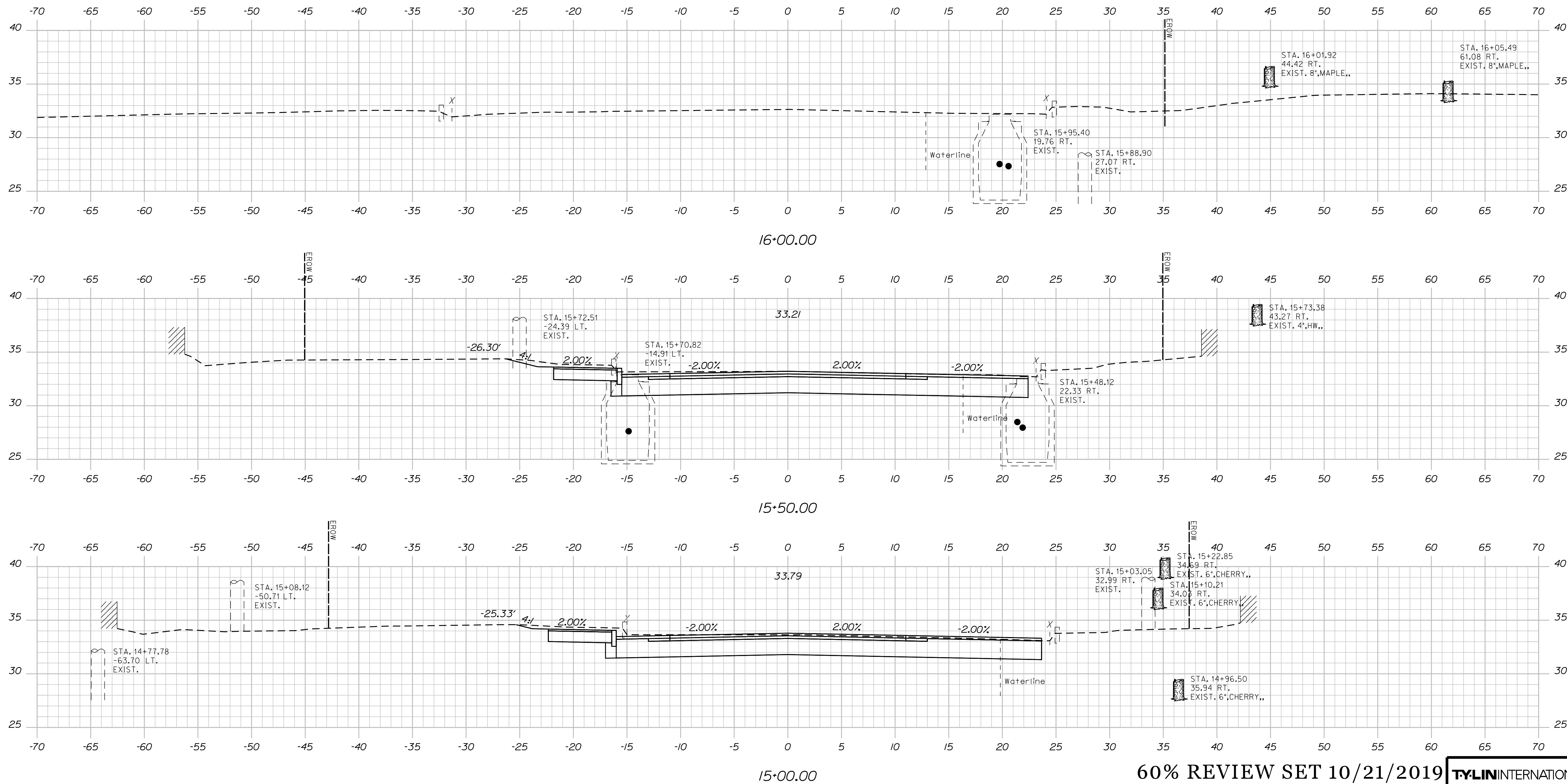
FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM
CUMBERLAND

SHEET NUMBER
14
OF 30

Date: 10/21/2019

Username:

Filename: ... \HIGHWAY\MSTA\000_XSections.dgn Division: HIGHWAY



60% REVIEW SET 10/21/2019 TYLINT INTERNATIONAL

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
STP-2260(300)X

PROJ. MANAGER	DATE	SIGNATURE
D. Bryant		
CHECKED-REVIEWED		P.E. NUMBER
DESIGNED-DETAILED		
DESIGNED-DETAILED		
REVISIONS 1		DATE
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BRUNSWICK-TOPSHAM
 ANDROSCOGGIN RIVER
 CUMBERLAND

FRANK J. WOOD BRIDGE

SHEET NUMBER
15
 OF 30

BRIDGE NO. 2016
 WIN 22603.00
 BRIDGE PLANS

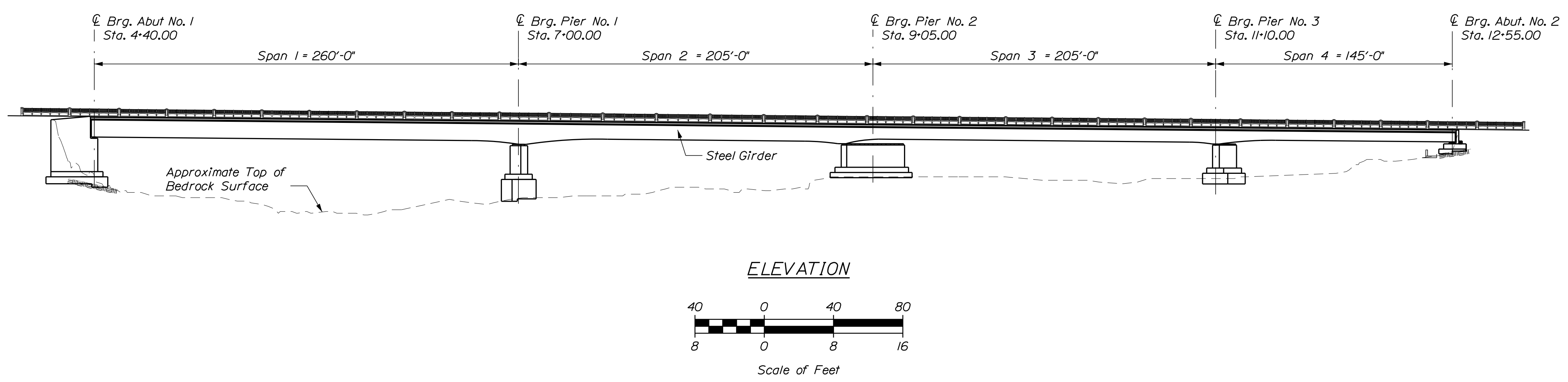
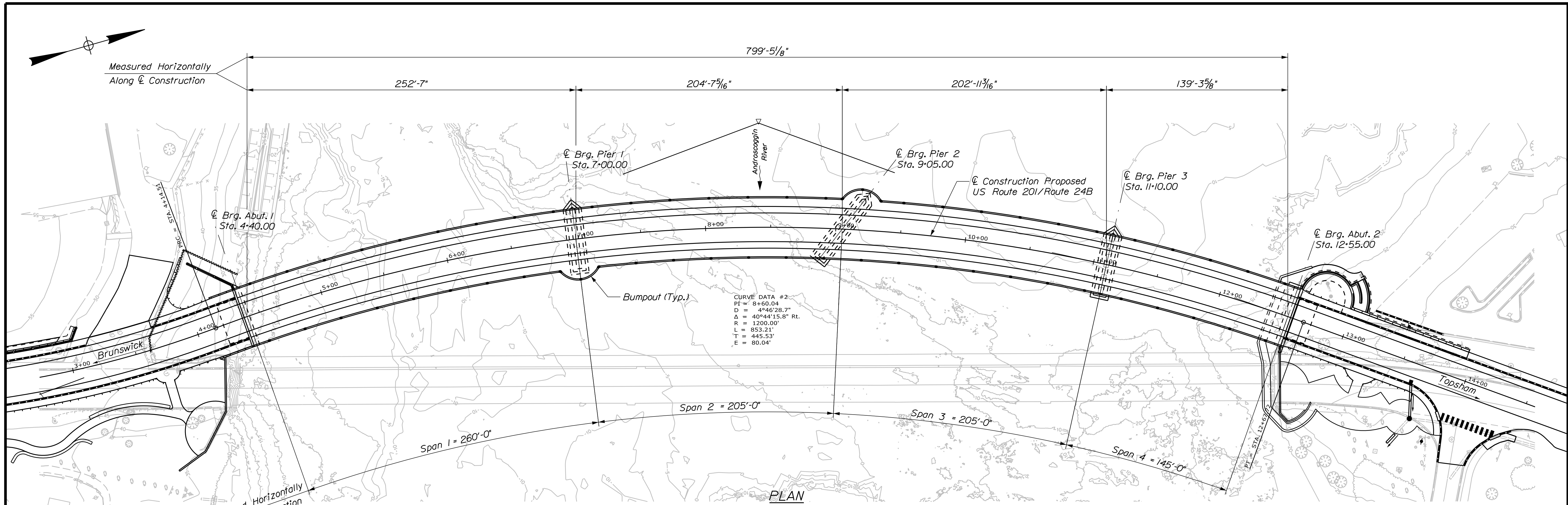
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Date: 10/21/2019

Username:

Division: HIGHWAY

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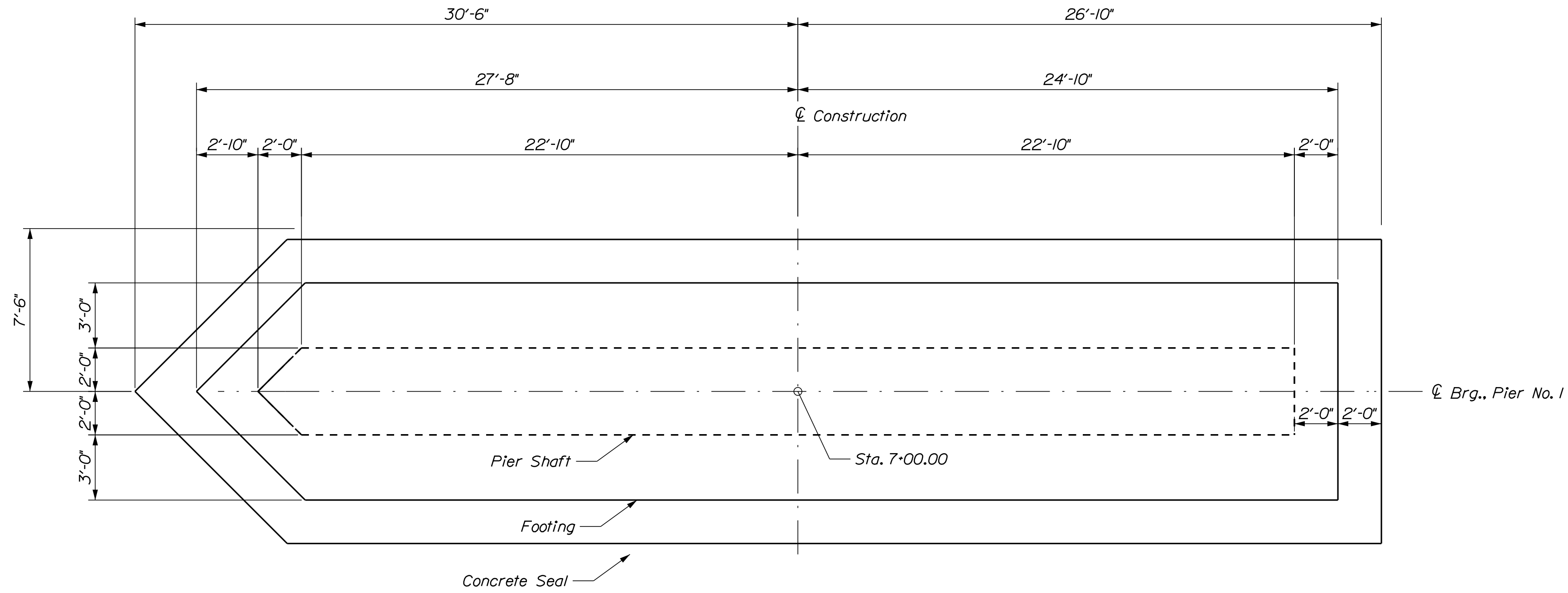
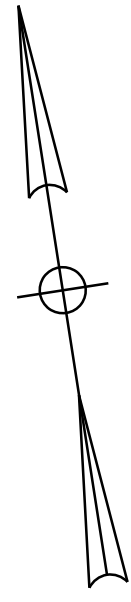
STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-2260(300)X
 WIN 22603.00
 BRIDGE NO. 2016
 BRIDGE PLANS

PROJ. MANAGER	BY	DATE
D. Bryant	S. Morgan	

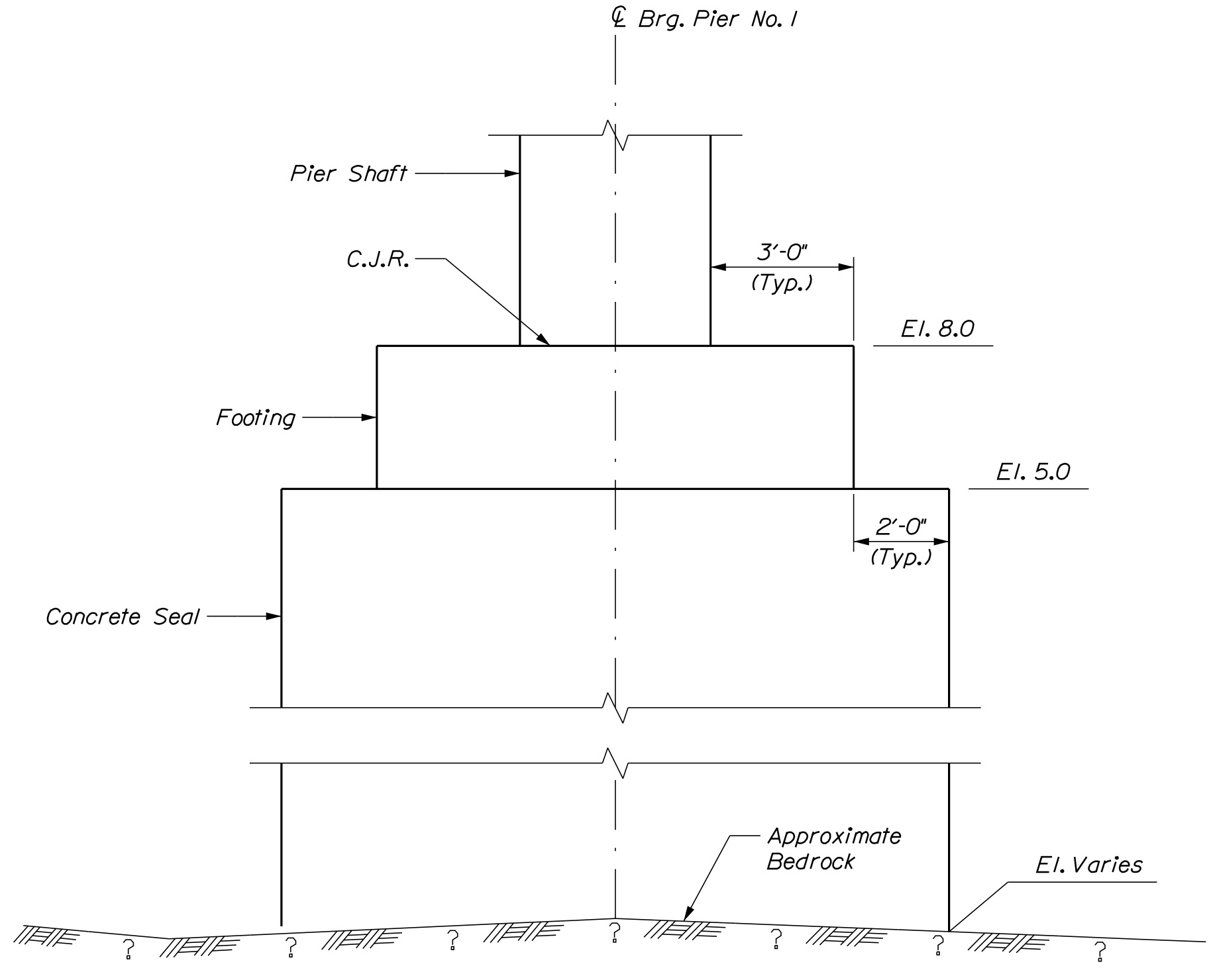
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FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM
 CUMBERLAND
 BRIDGE PLAN & ELEVATION

SHEET NUMBER
 16
 OF 30



PIER NO. 1 FOOTING PLAN
Flow →



SECTION A-A

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

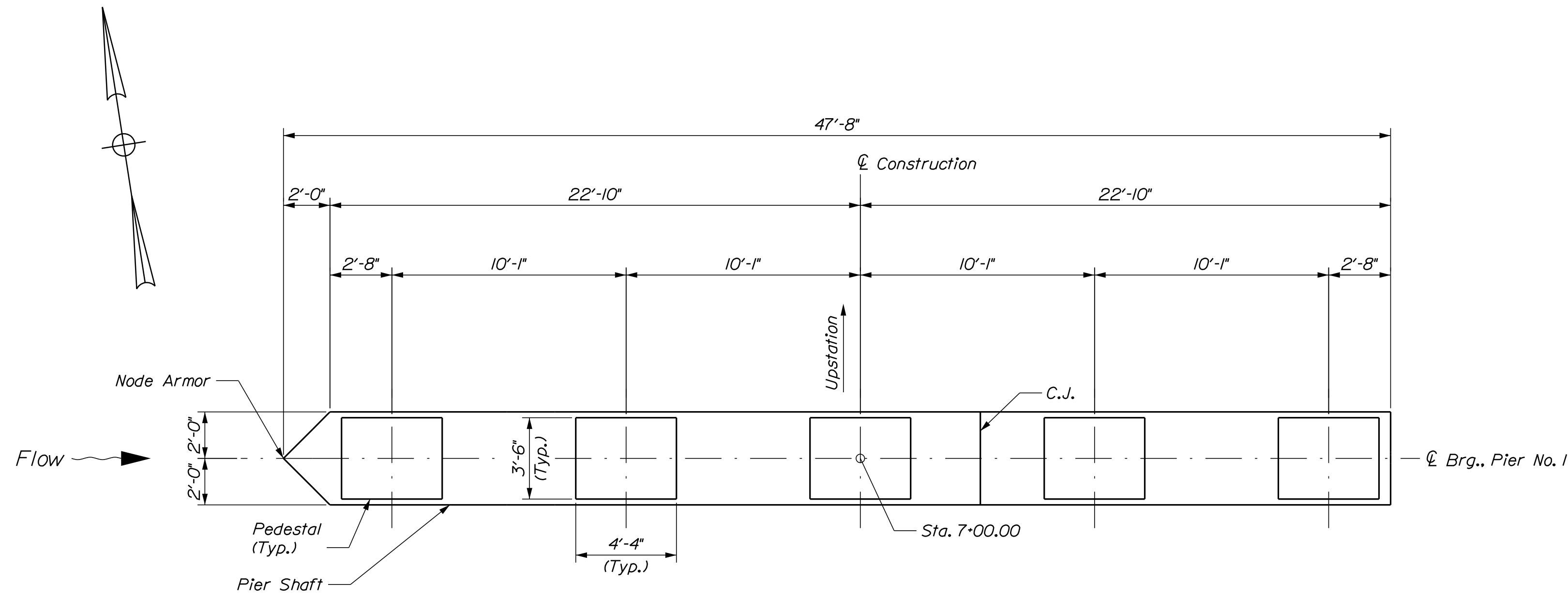
STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-2260(300)X		BRIDGE NO. 2016 WIN 22603.00 BRIDGE PLANS	
PROJ. MANAGER D. Bryant	CHECKED-REVIEWED R. Kravchuk	BY S. Morgan	DATE
DESIGN-DETAILED	DESIGN-REVIEWED	SIGNATURE	
DESIGNS-DETAILED	DESIGNS-DETAILED	P.E. NUMBER	
REVISIONS 1	REVISIONS 1	DATE	
REVISIONS 2	REVISIONS 2		
REVISIONS 3	REVISIONS 3		
REVISIONS 4	REVISIONS 4		
FIELD CHANGES			
FRANK J. WOOD BRIDGE ANDROSCOGGIN RIVER BRUNSWICK-TOPSHAM CUMBERLAND PIER NO. 1 FOOTING PLAN			
SHEET NUMBER 17 OF 30			

Date: 10/21/2019

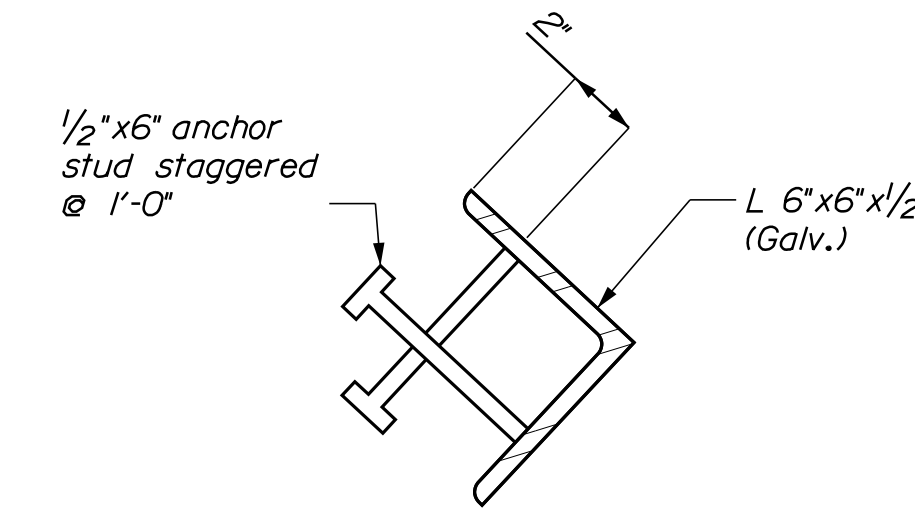
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Division: HIGHWAY

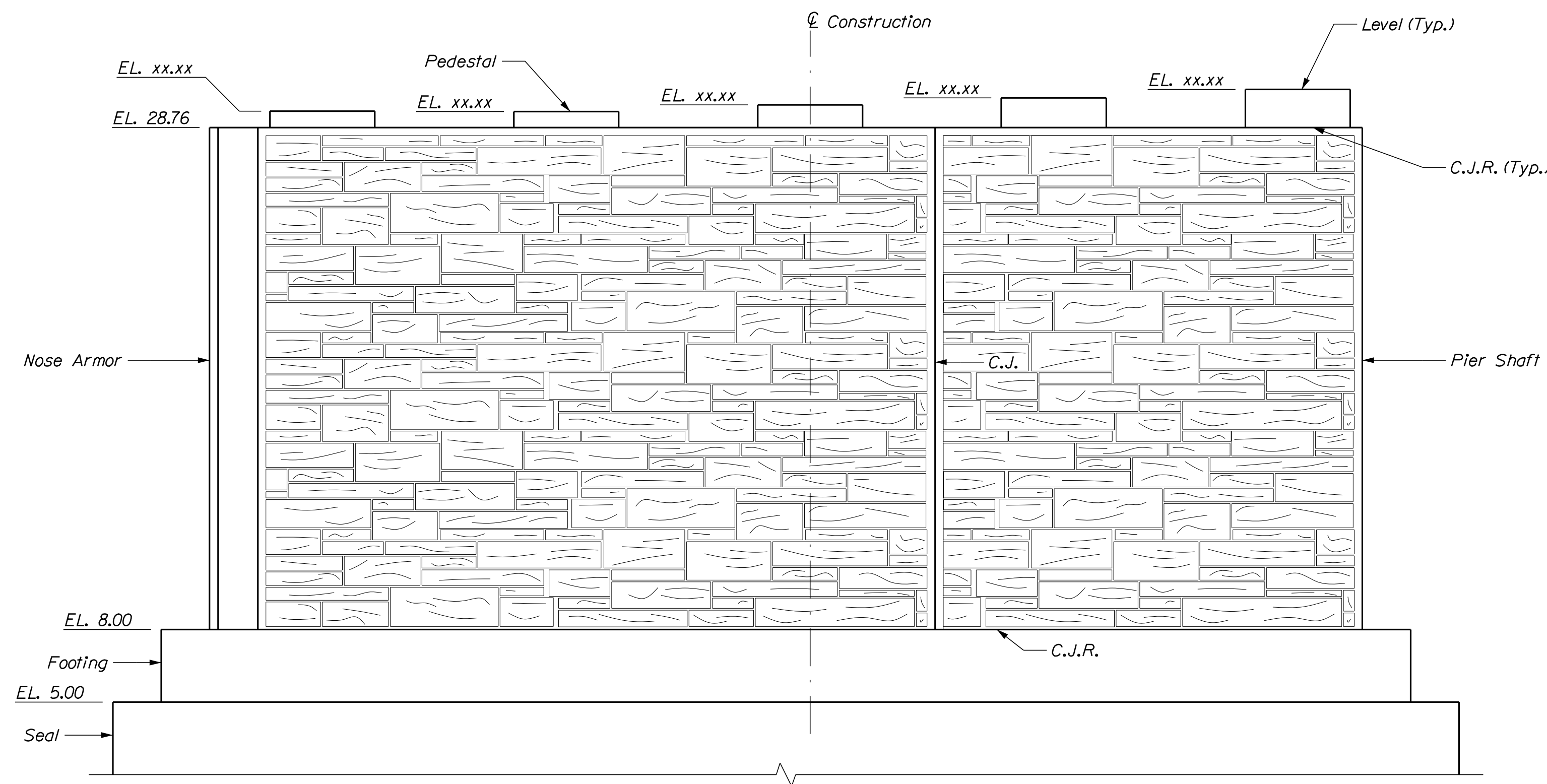
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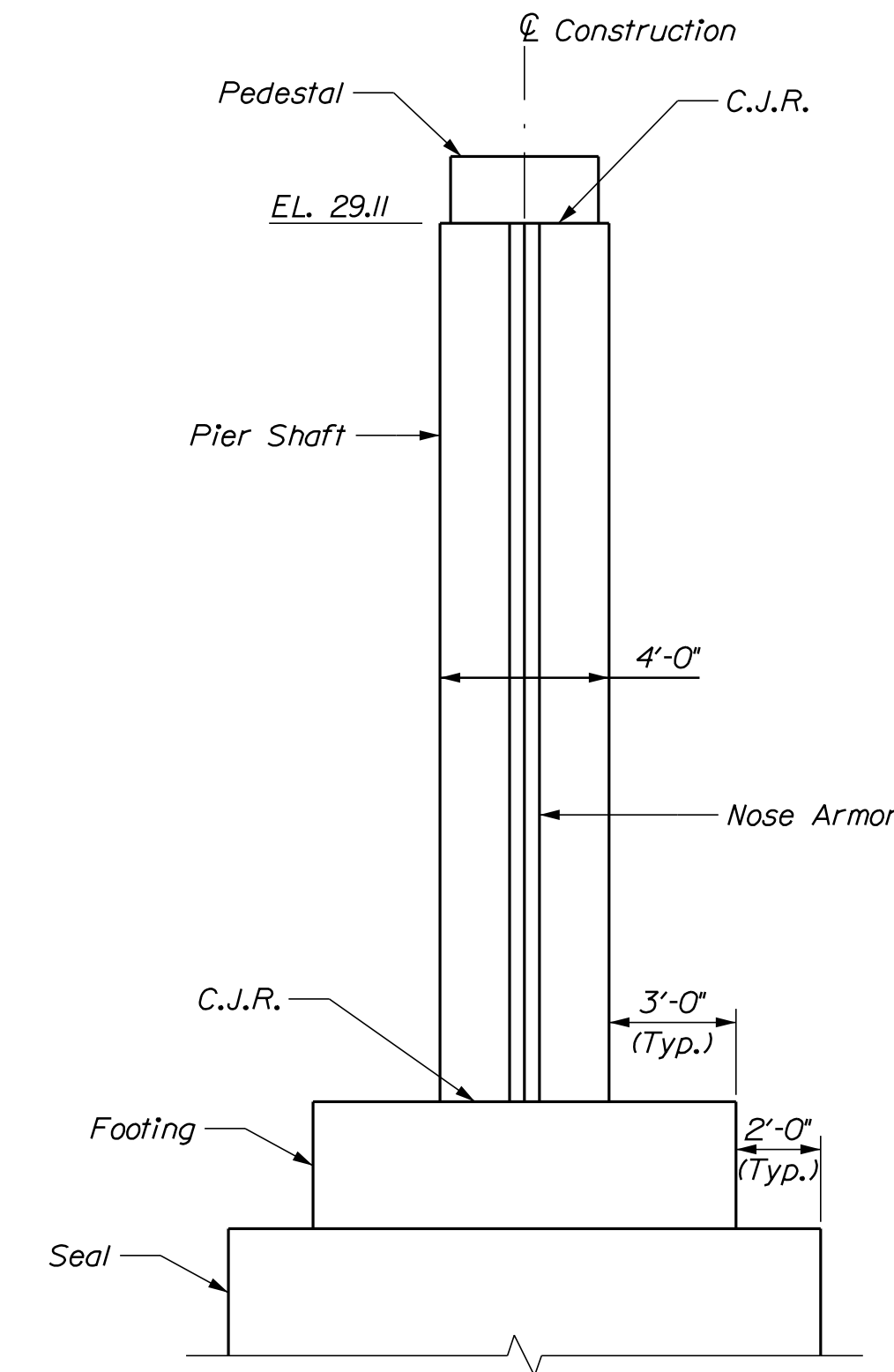
PIER NO. 1 SHAFT PLAN



NOSE ARMOR DETAIL



PIER NO. 1 ELEVATION



PIER NO. 1 END ELEVATION

Upstream End Shown, Downstream End Similar.

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

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

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
D. Bryant	R. Kravchuk	S. Morgan			
DESIGN/DETAILED	CHECKED/REVIEWED	DESIGN/DETAILED	DESIGN/DETAILED	REVISIONS 1	REVISIONS 2
				REVISIONS 3	REVISIONS 4
				FIELD CHANGES	

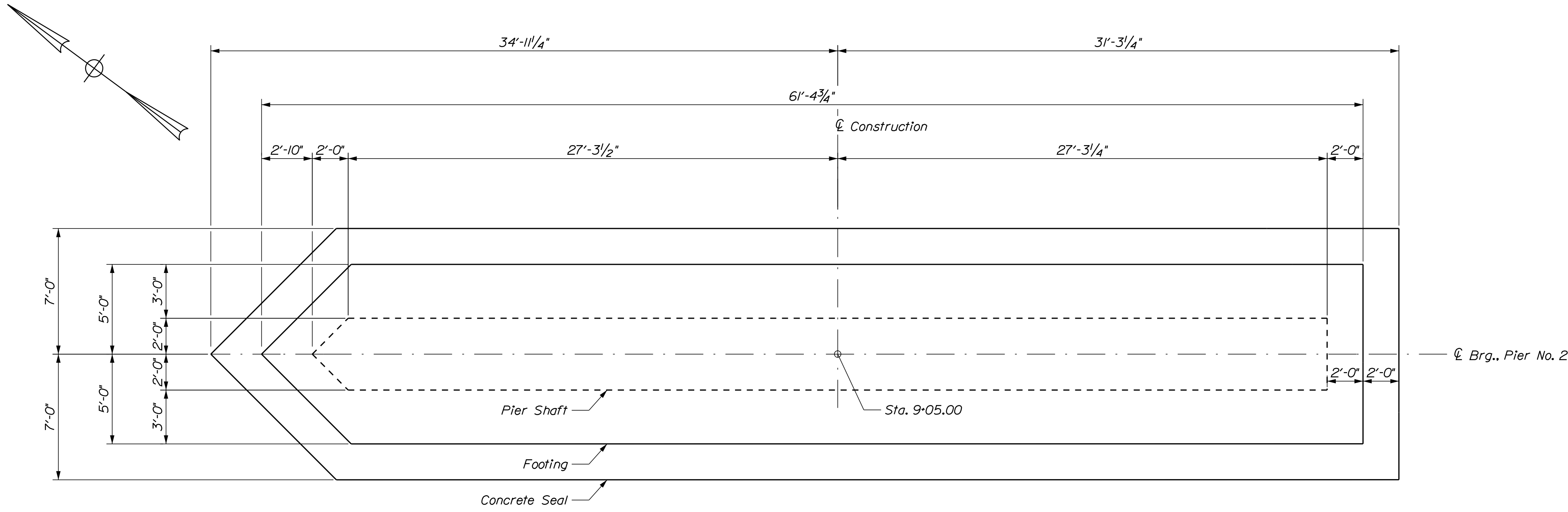
FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
 PIER NO. 1
 SHAFT PLAN & ELEVATIONS

SHEET NUMBER

18

OF 30

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PIER NO. 2 FOOTING PLAN

Flow →

LEGEND:

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

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

SIGNATURE
 P.E. NUMBER
 DATE

PROJ. MANAGER	BY	DATE
D. Bryant	S. Morgan	
CHECKED-REVIEWED		
DESIGN-DETAILED		
DESIGN-REVIEWED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
 PIER NO. 2
 FOOTING PLAN

SHEET NUMBER

19

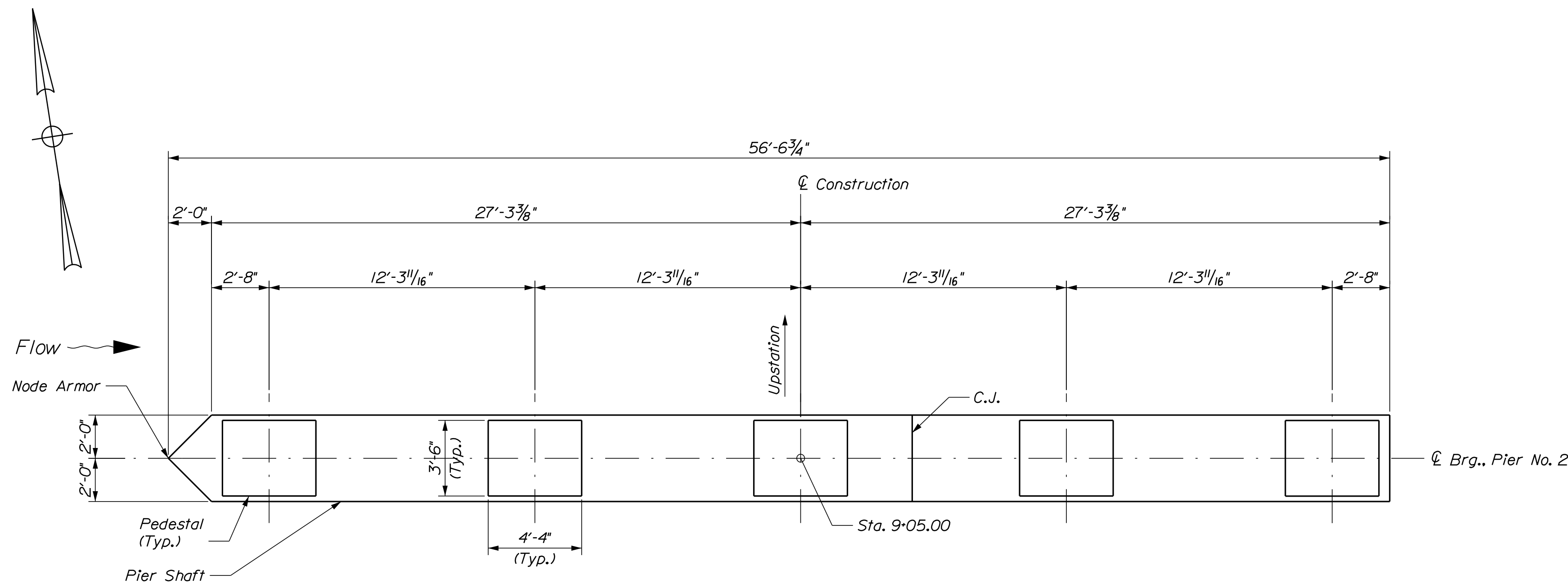
OF 30

Date: 10/21/2019

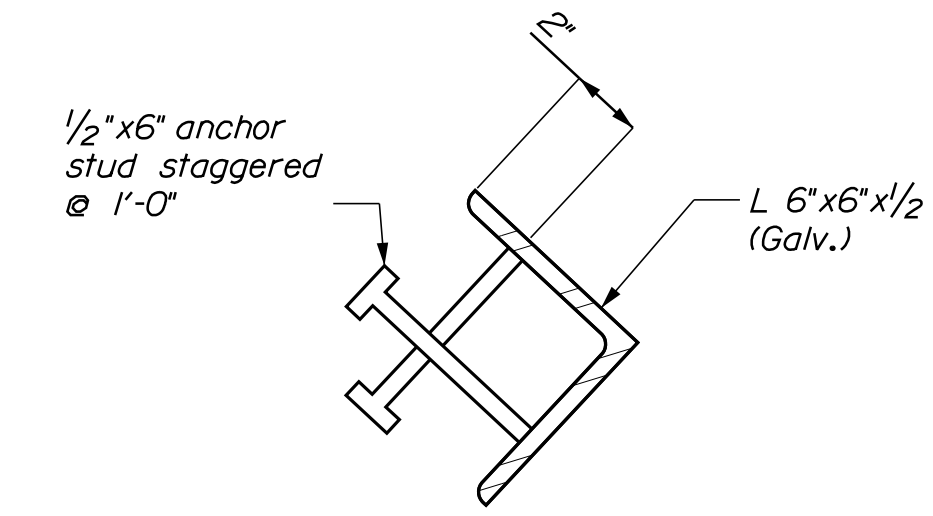
Username:

Division: HIGHWAY

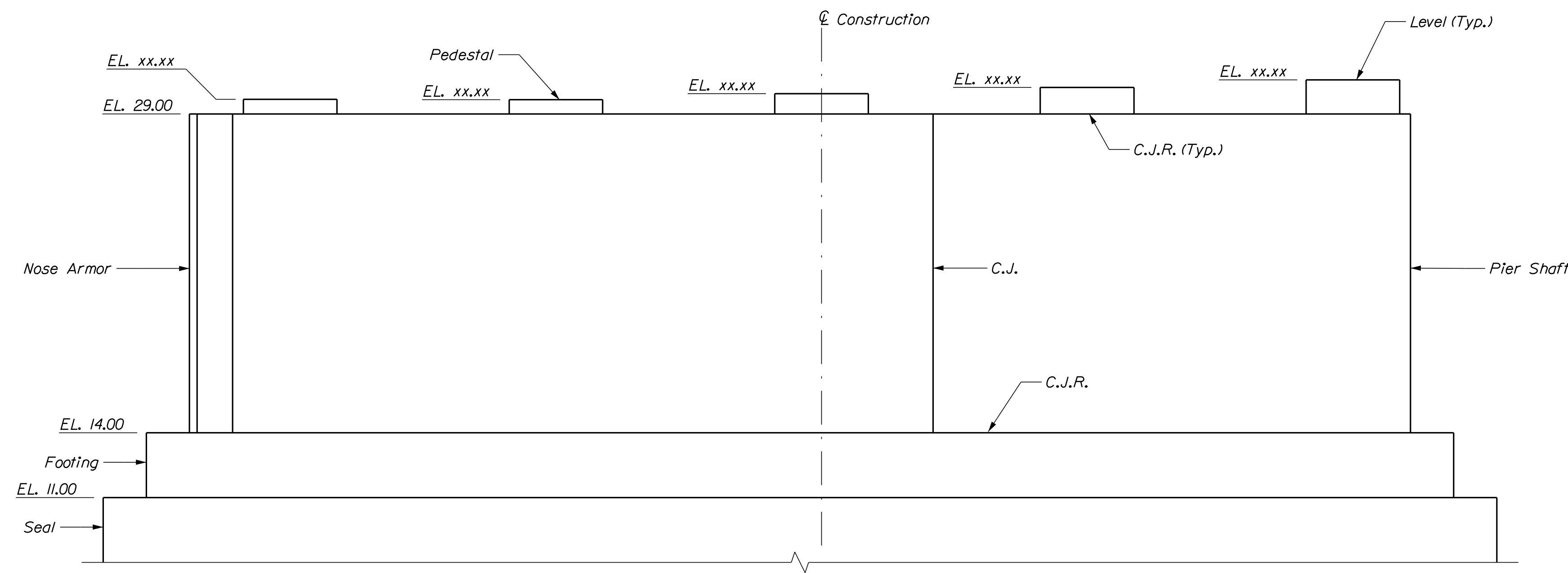
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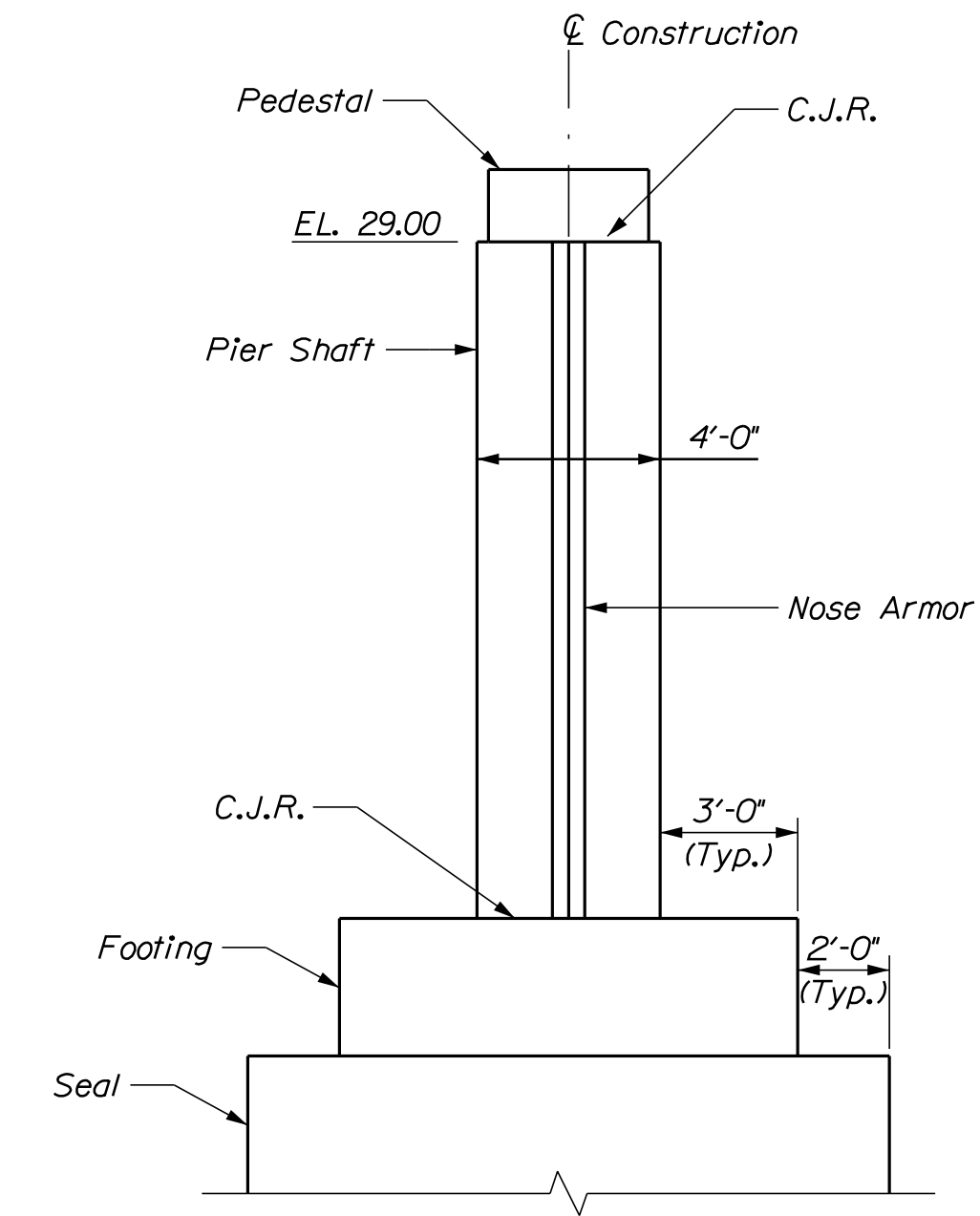
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NOSE ARMOR DETAIL



PIER NO. 2 ELEVATION



PIER NO. 2 END ELEVATION

Upstream End Shown. Downstream End Similar.

LEGEND:

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

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

DATE	BY	SIGNATURE	P.E. NUMBER	DATE

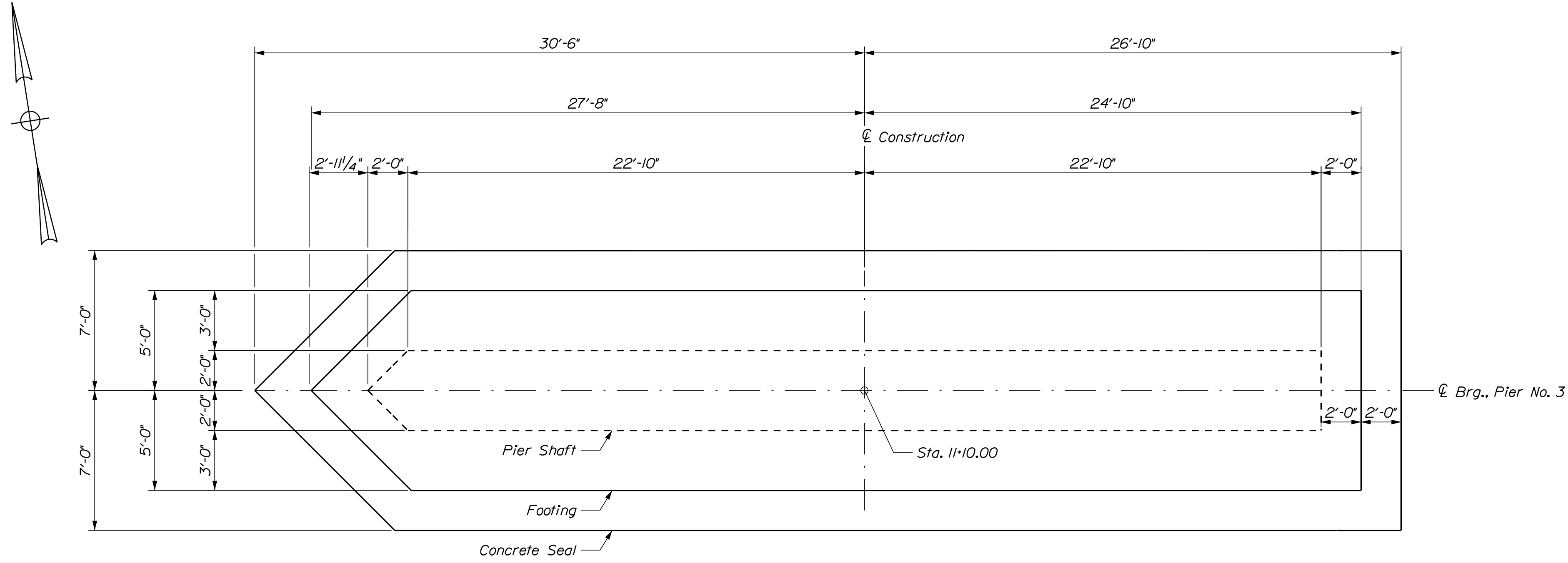
PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
D. Bryant	R. Kravchuk	S. Morgan							

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
PIER NO. 2
SHAFT PLAN & ELEVATION

SHEET NUMBER

20

OF 30



PIER NO. 3 FOOTING PLAN

Flow →

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

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
STP-2260(300)X

BRIDGE NO. 2016
 WIN
 22603.00
 BRIDGE PLANS

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
D. Bryant	R. Kravchuk	S. Morgan							

FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
**PIER NO. 3
 FOOTING PLAN**

SHEET NUMBER

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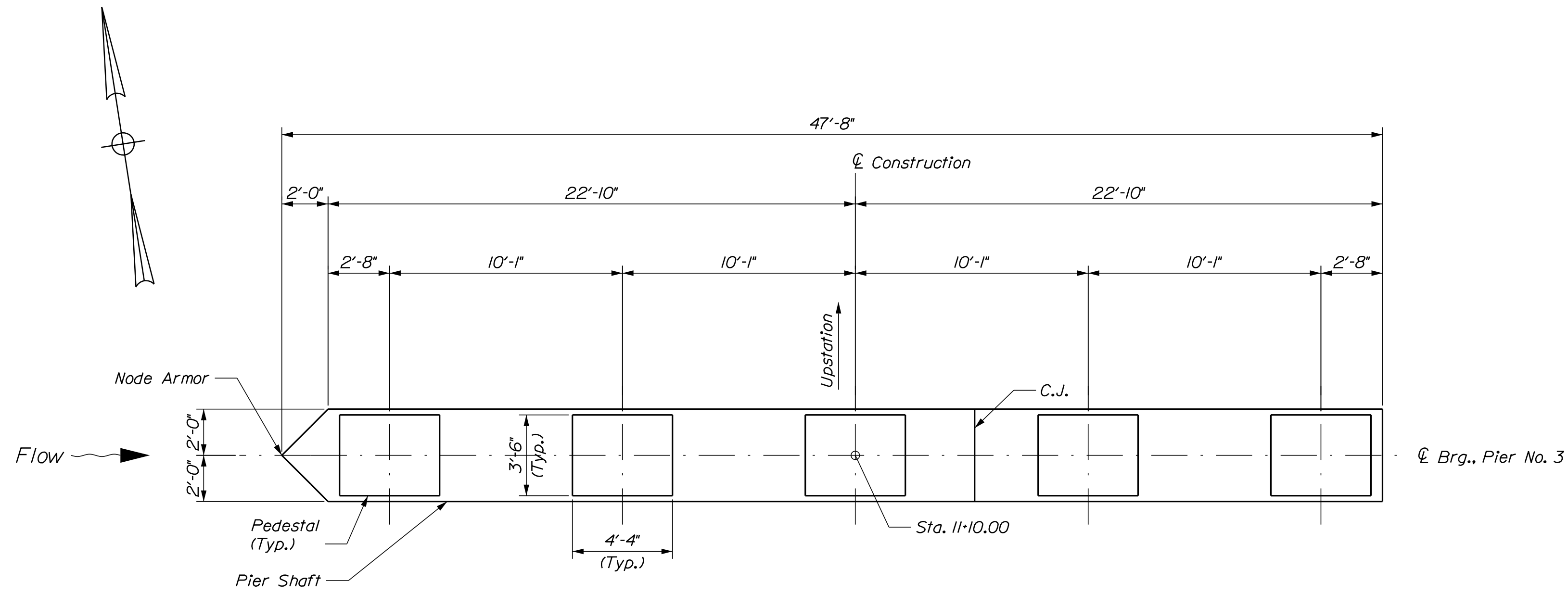
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Date: 10/21/2019

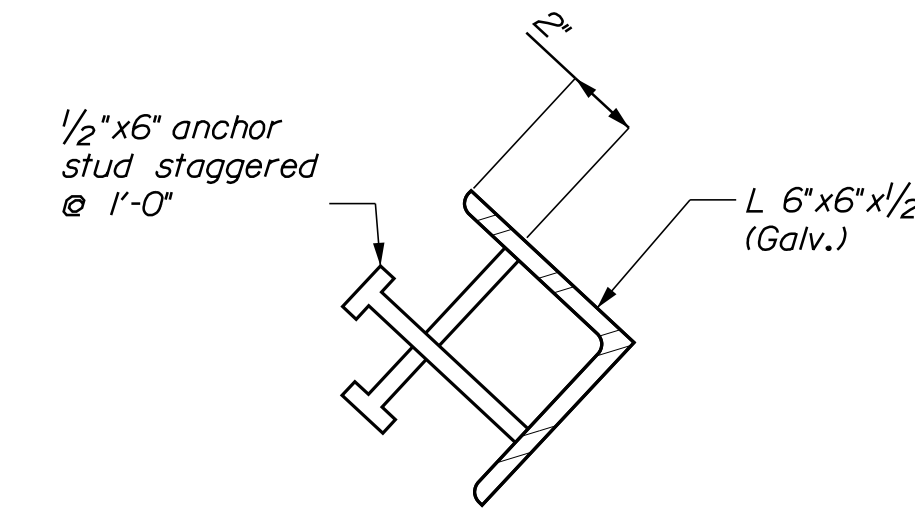
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Division: HIGHWAY

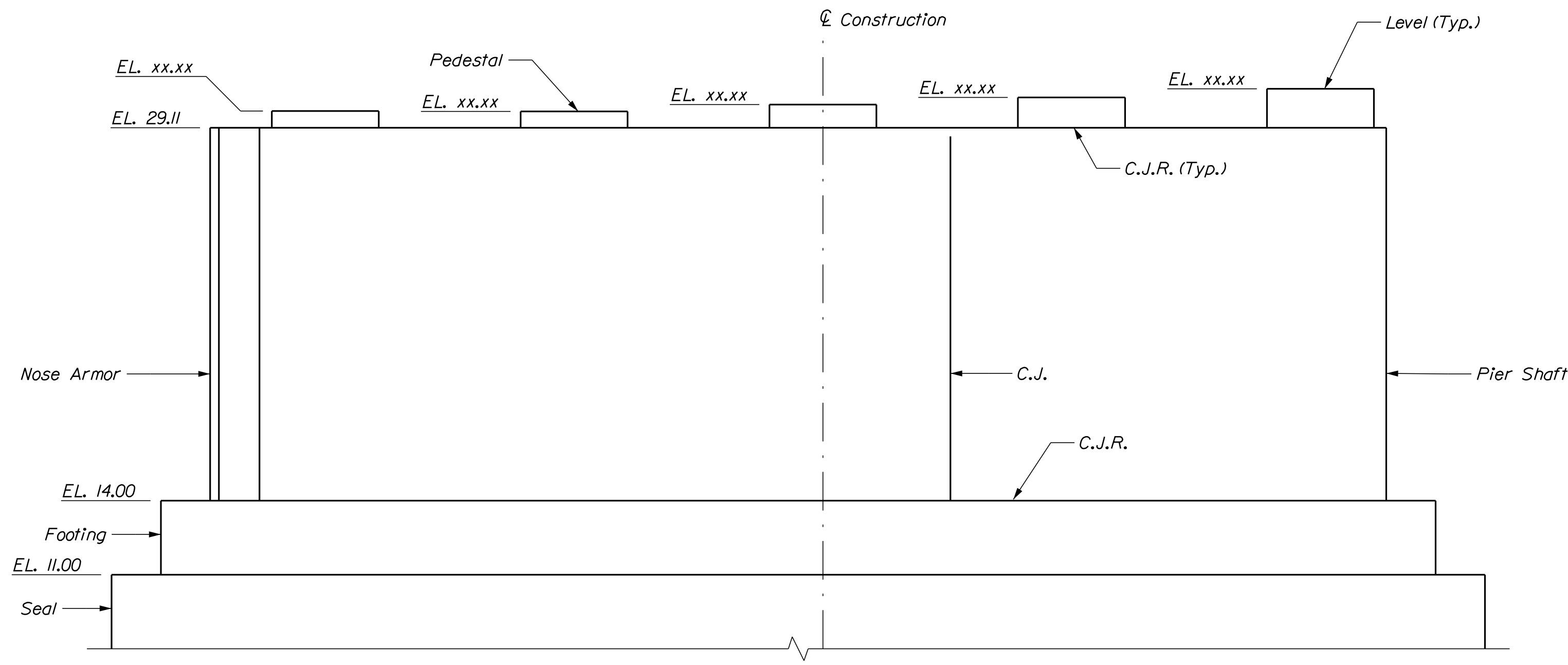
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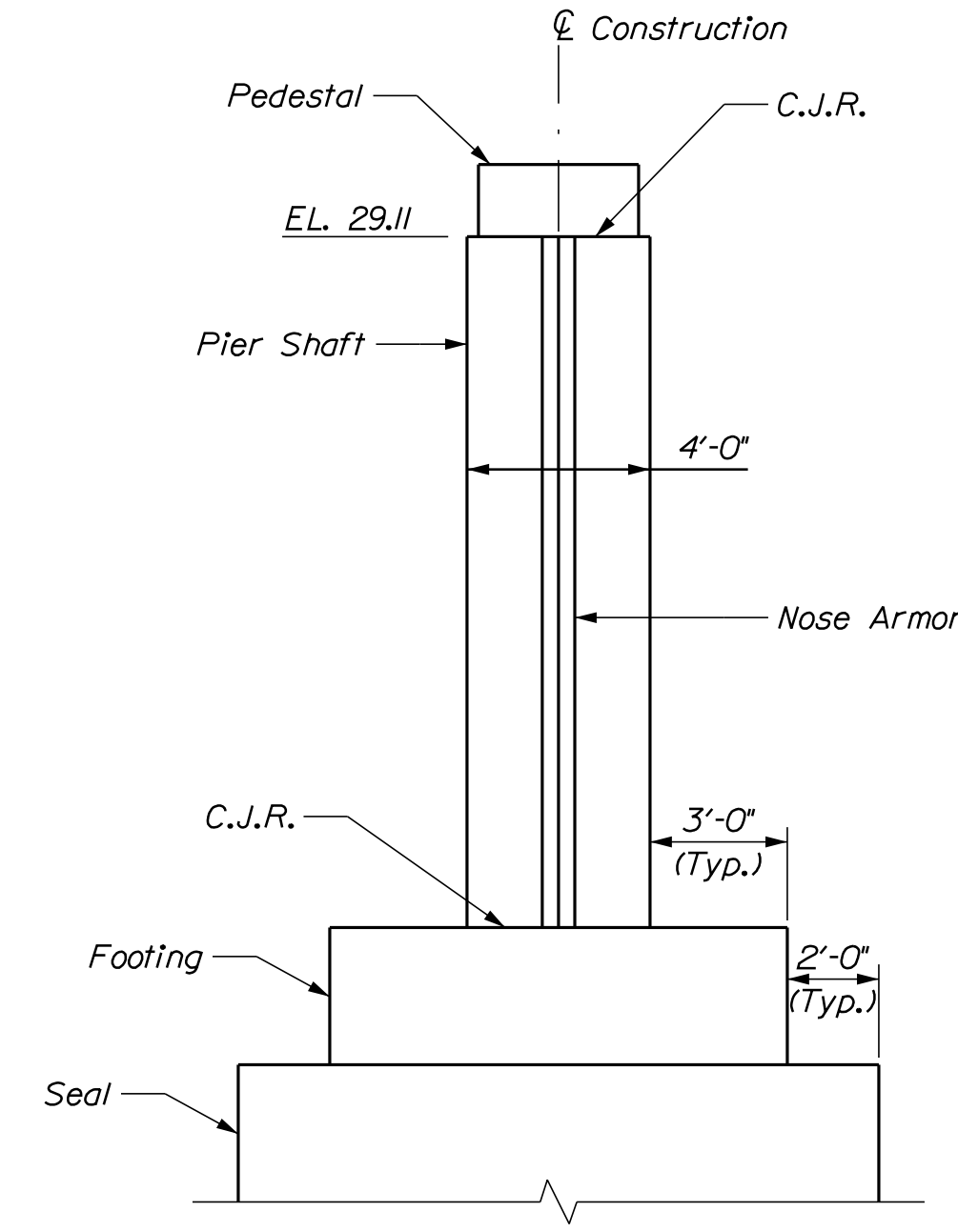
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NOSE ARMOR DETAIL



PIER NO. 3 ELEVATION



PIER NO. 3 END ELEVATION

Upstream End Shown. Downstream End Similar.

LEGEND:

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

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
D. Bryant	R. Kravchuk				
CHECKED/REVIEWED	S. Morgan				
DESIGNS DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

SHEET NUMBER

22

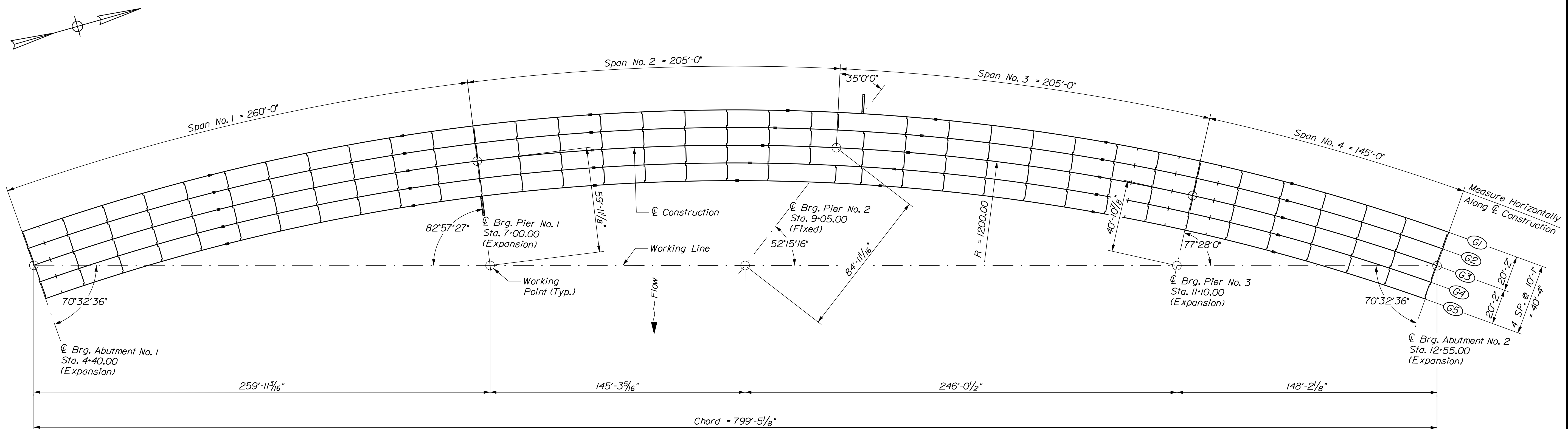
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Date: 10/21/2019

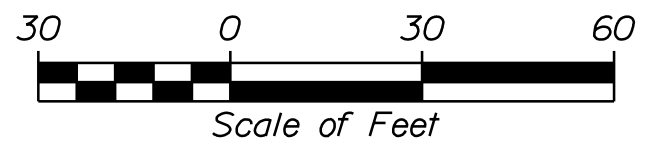
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Division: HIGHWAY

Filename: ... \MSTA\xxx_Framing_Layout.dgn



FRAMING PLAN LAYOUT



STRUCTURAL STEEL NOTES

- Girders may be either heat curved or cut curved in accordance with AASHTO specifications at the option of the Contractor.
- Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.
- No transverse butt-weld splices will be allowed in the flange plates or web plates within 10 ft. or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. Butt-weld splices in flanges shall be not less than 3 ft. from transverse butt-welds in the web plates and no transverse web or flange butt-welds shall be located within 3 ft. of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt-weld splices will be allowed in areas of stress reversal.
- Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be not less than 20 ft. in length unless otherwise shown on the plans.
- Filler plates may be steel conforming to the requirements of A709, Grade 36.
- At locations marked with an asterisk (*), the designated cross frames may be changed to a Type D, Modified cross frame to accommodate the Contractor's deck placement sequence. No extra compensation will be allowed for any cross frames so substituted, and any additional costs will be considered incidental to the contract items.
- Bolted field splice connections shall be made using 7/8" diameter, ASTM A325 Type 1 H.S. bolts. Hole size shall be 15/16" diameter unless otherwise shown. Bolt threads shall be excluded from the shear plane of field splice connections.
- Steel for cross frames, connection plates and stiffeners shall be ASTM A709, Grade 50.
- Bearing stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.
- Cross frame connection plates may be either plumb or normal to the top flange.
- All cross frames except those at Pier No. 2 are radial.
- Bolted cross frame connections shall be made using 7/8" diameter, ASTM A325 Type 1 H.S. bolts. Hole size shall be 15/16" diameter. The minimum edge distance shall be 1 1/2" unless otherwise shown. Oversized or short-slotted holes are not permitted for use in cross frame connections.
- Connection plates shall be 5/8" minimum thickness and 8" minimum width except where either flange exceeds 32 in. The connection plates shall be 9" minimum width. Intermediate stiffeners shall be 5/8"x6 3/4" minimum.
- Stiffeners not used as connection plates shall be tight fit to flanges and welded to the web only, except stiffeners on fascia girders shall also be welded to both flanges.
- Cross frames shall be detailed and fabricated to fit under full dead load.
- Girder webs shall be vertical under full dead load.
- Prior to structural steel erection, the Contractor shall submit an erection sequence to the Engineer for approval.
- All web, flange, field splice plates, and cross frame members (including connection plates) in tension or stress reversal areas shall conform to Zone 2 Charpy V-notch impact test requirements of AASHTO M270.

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

DATE	BY	SIGNATURE	P.E. NUMBER	DATE
	D. Bryant			
	C. Taylor			
	S. Morgan			

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

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
FRAMING LAYOUT PLAN

SHEET NUMBER

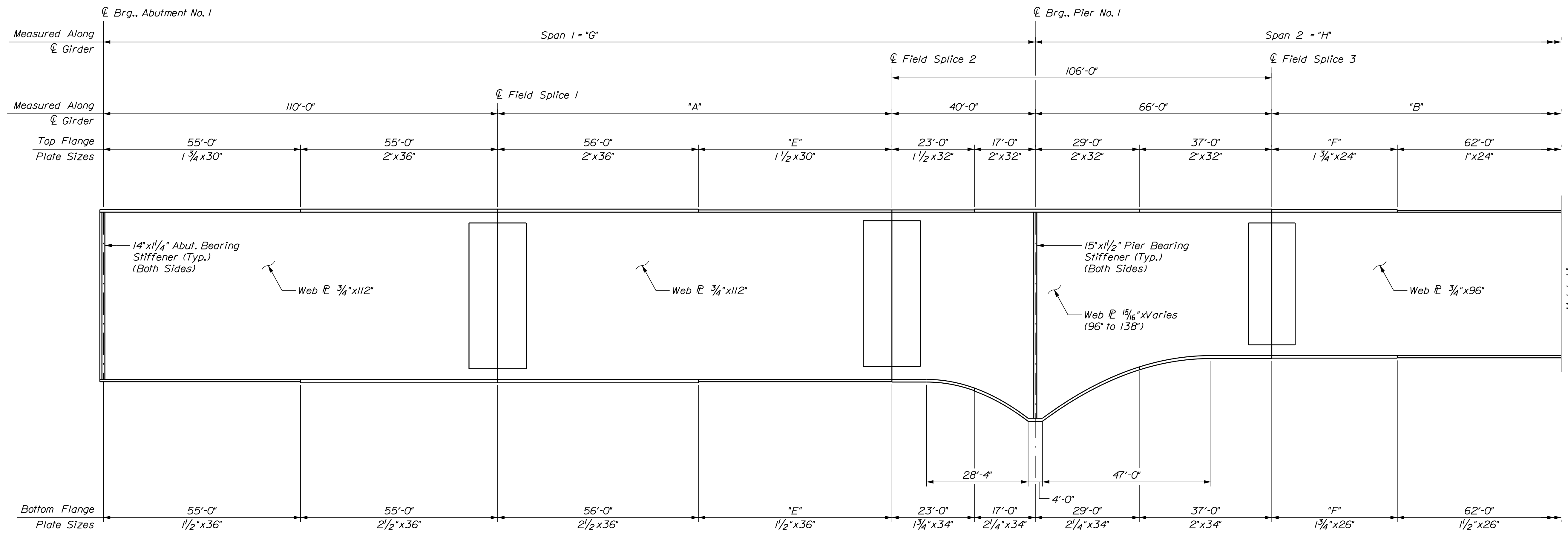
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OF 30

Filename: ... \MSTA\xxx_Girder_Elev_1.dgn

Date: 10/21/2019

Username: Division: HIGHWAY



GIRDER ELEVATION
GIRDERS 1-2

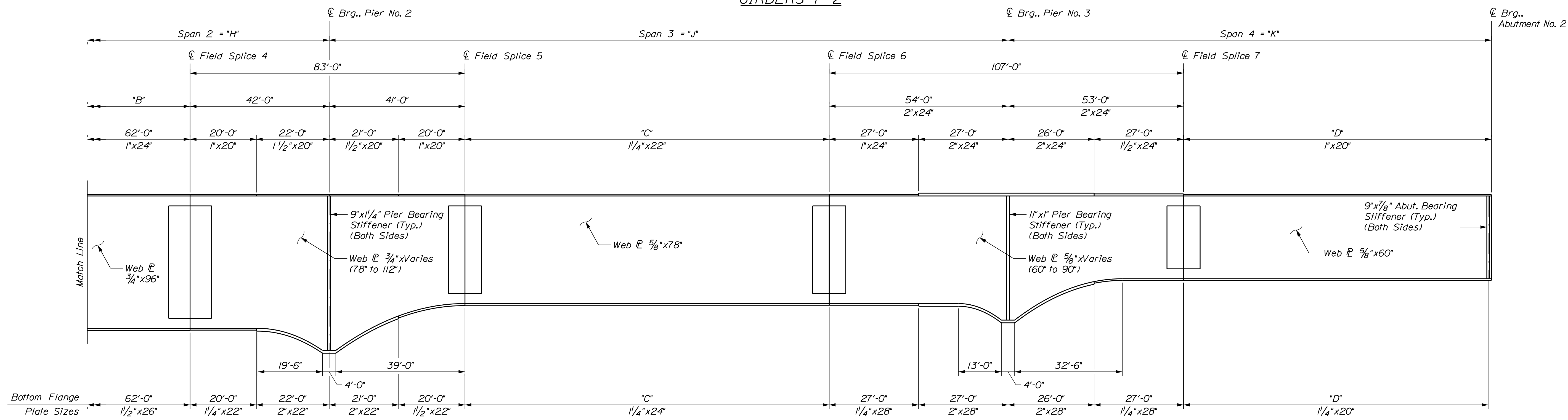


TABLE OF GIRDER DIMENSIONS

Girder	Radius	A	B	C	D	E	F	G	H	J	K
1	1220.17'	114'-4 1/16"	114'-6 3/16"	99'-4 1/2"	94'-5 1/4"	58'-4 1/16"	52'-6 3/16"	264'-4 1/16"	222'-6 3/16"	194'-4 1/2"	147'-5 1/4"
2	1210.08'	112'-2 3/16"	105'-9 1/4"	104'-8 1/16"	93'-2 3/8"	56'-2 3/16"	43'-9 1/4"	262'-2 3/16"	213'-9 1/4"	199'-8 1/16"	146'-2 3/8"
3	1200.00'	110'-0"	97'-0"	110'-0"	92'-0"	54'-0"	35'-0"	260'-0"	205'-0"	205'-0"	145'-0"
4	1189.92'	107'-9 3/16"	88'-2 1/2"	115'-4 3/16"	90'-9 3/8"	51'-9 3/16"	26'-2 1/2"	257'-9 3/16"	196'-2 1/2"	210'-4 3/16"	143'-9 3/8"
5	1179.83'	105'-7 3/16"	79'-3 3/16"	120'-9 3/4"	89'-6 3/4"	49'-7 3/16"	17'-3 3/16"	255'-7 3/16"	187'-3 3/16"	215'-9 3/4"	142'-6 3/4"

GIRDER ELEVATION
GIRDERS 1-2

NOTE:
One longitudinal butt weld splice will be allowed in the web of the haunched sections of the girders. Feather edges between the longitudinal welds and the bottom flanges will not be allowed.

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

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
D. Bryant		S. Morgan				
C. Taylor						

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND
GIRDER ELEVATION 1

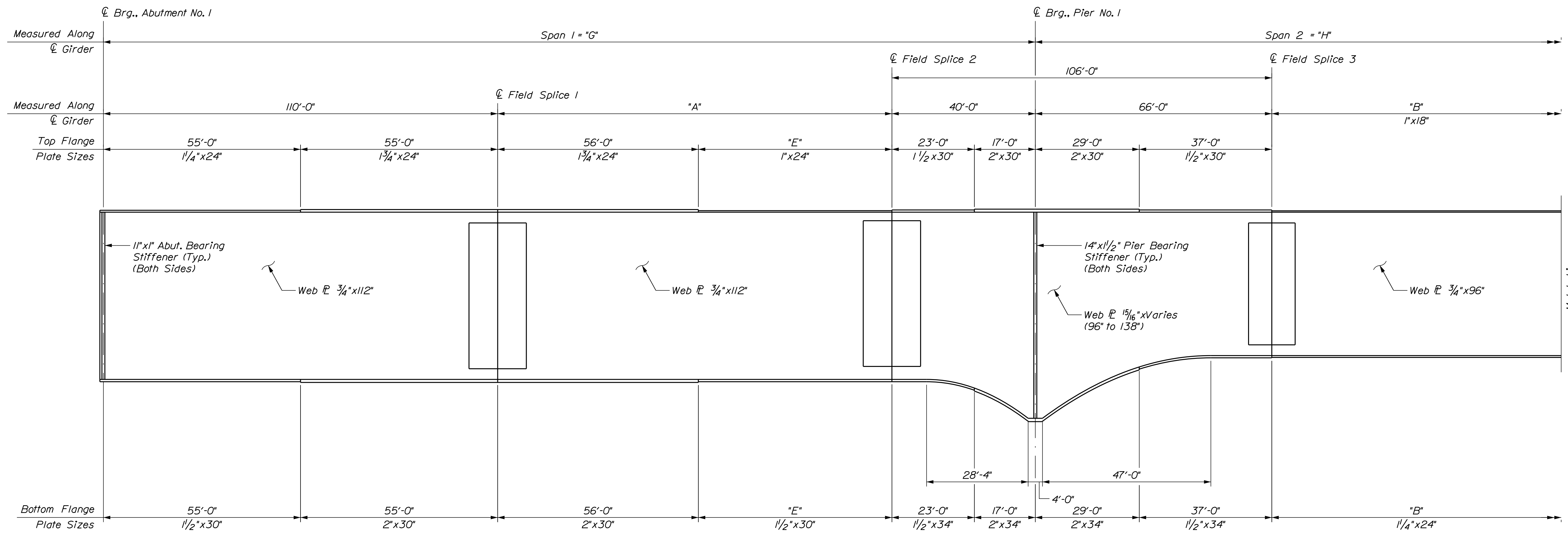
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OF 30

Date: 10/21/2019

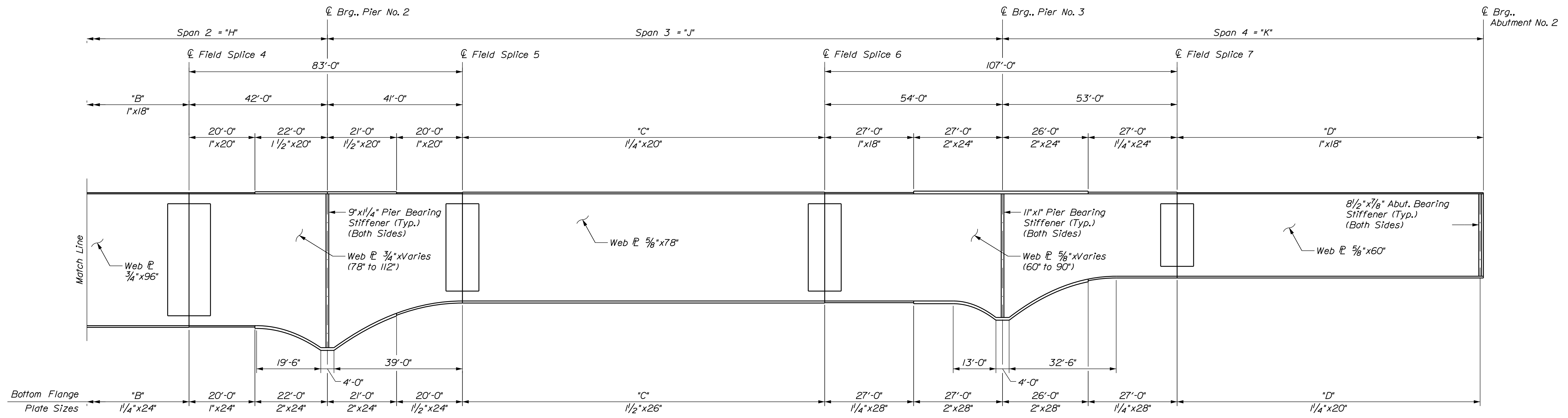
Username:

Division: HIGHWAY

Filename: ... \MSTA\xxx_Girder_Elev_2.dgn



GIRDER ELEVATION
GIRDERS 3 - 5



GIRDER ELEVATION
GIRDERS 3 - 5

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

PROJ. MANAGER	DESIGN DETAILED	CHECKED	REVIEWED	DESIGN DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
D. Bryant	C. Taylor	S. Morgan							

DATE	SIGNATURE	P.E. NUMBER	DATE

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM
CUMBERLAND
GIRDER ELEVATION 2

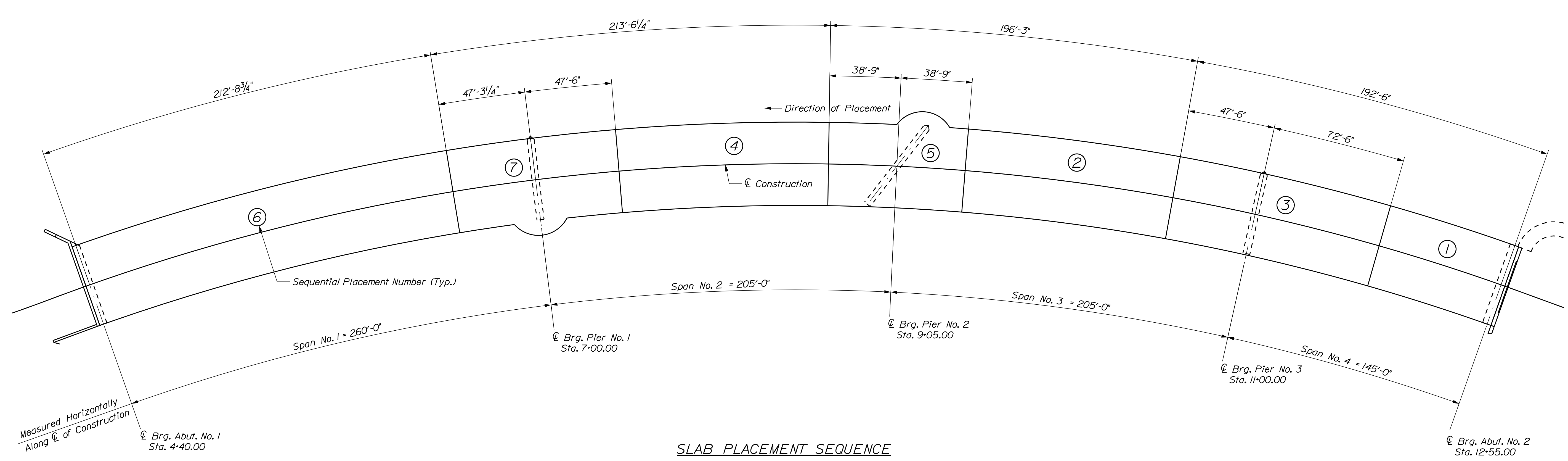
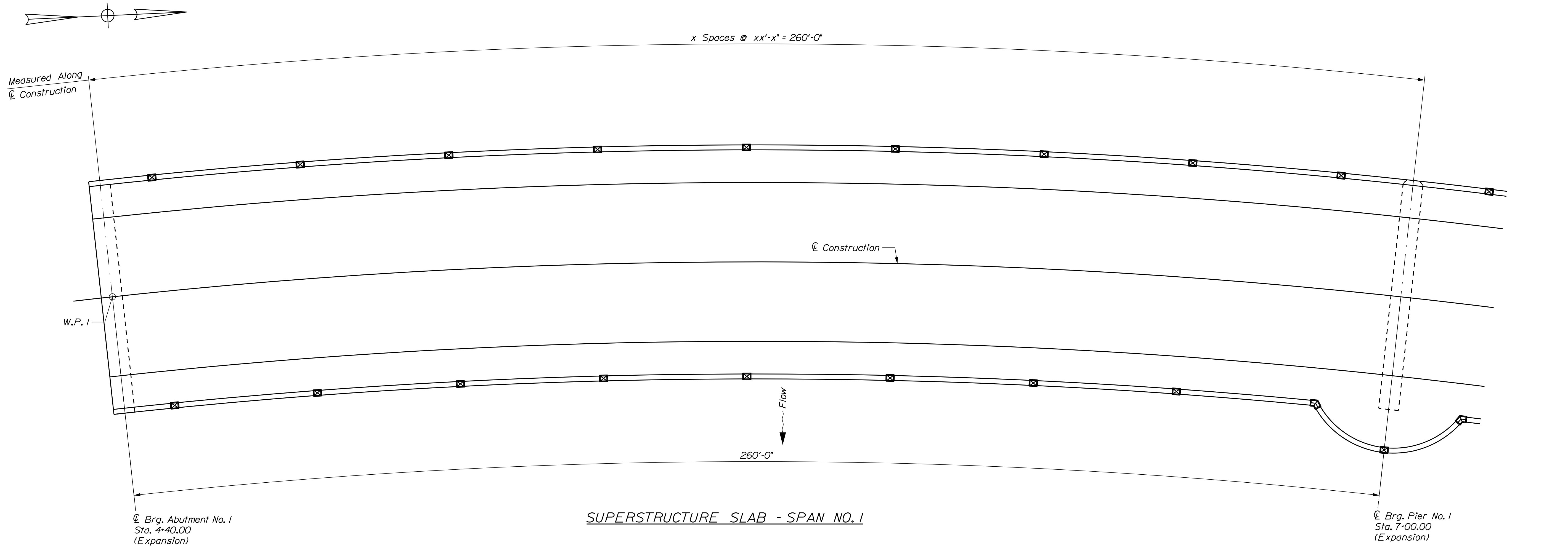
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60% REVIEW SET 10/21/2019 TYLIN INTERNATIONAL

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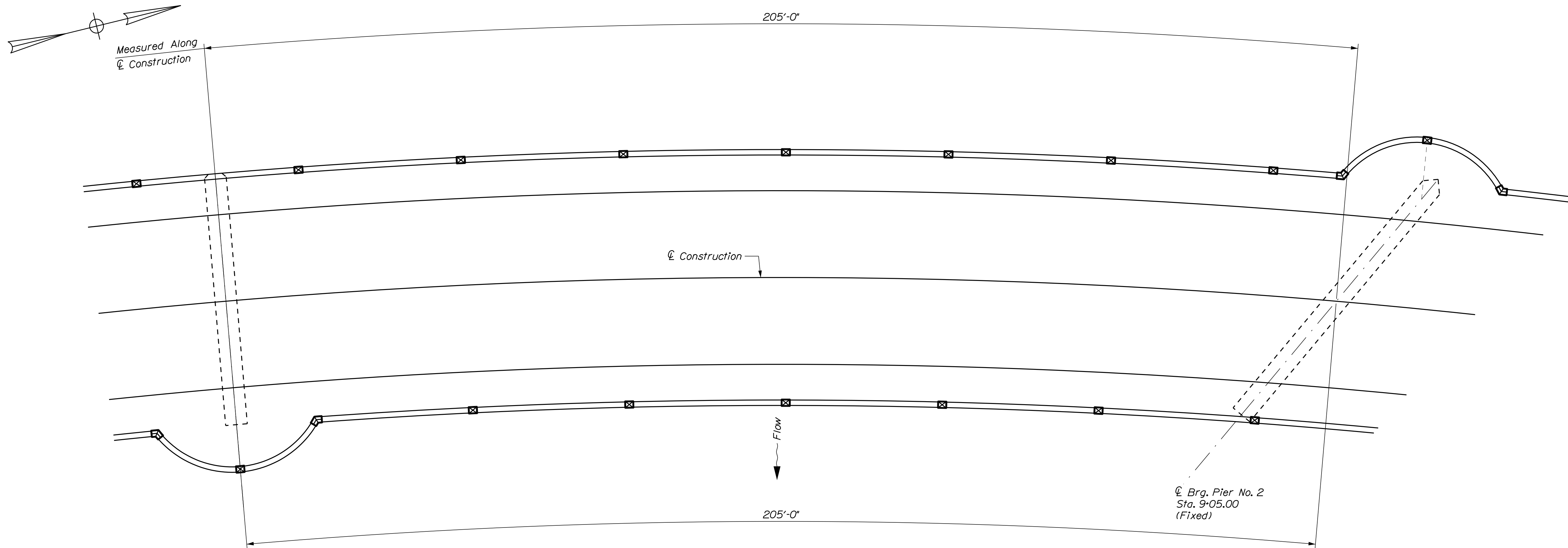


STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2260(300)X	
BRUNSWICK-TOPSHAM		FRANK J. WOOD BRIDGE		CUMBERLAND	
ANDROSCOGGIN RIVER		SUPERSTRUCT. SLAB SPAN NO. 1		& SLAB SEQUENCE PLACEMENT	
PROJ. MANAGER	D. Bryant	BY	S. Morgan	DATE	xx/xx
CHECKED-DESIGNED	J. L. L. L.	DESIGNED-REVIEWED		SIGNATURE	
DESIGNED-REVIEWED		DESIGNED-REVIEWED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
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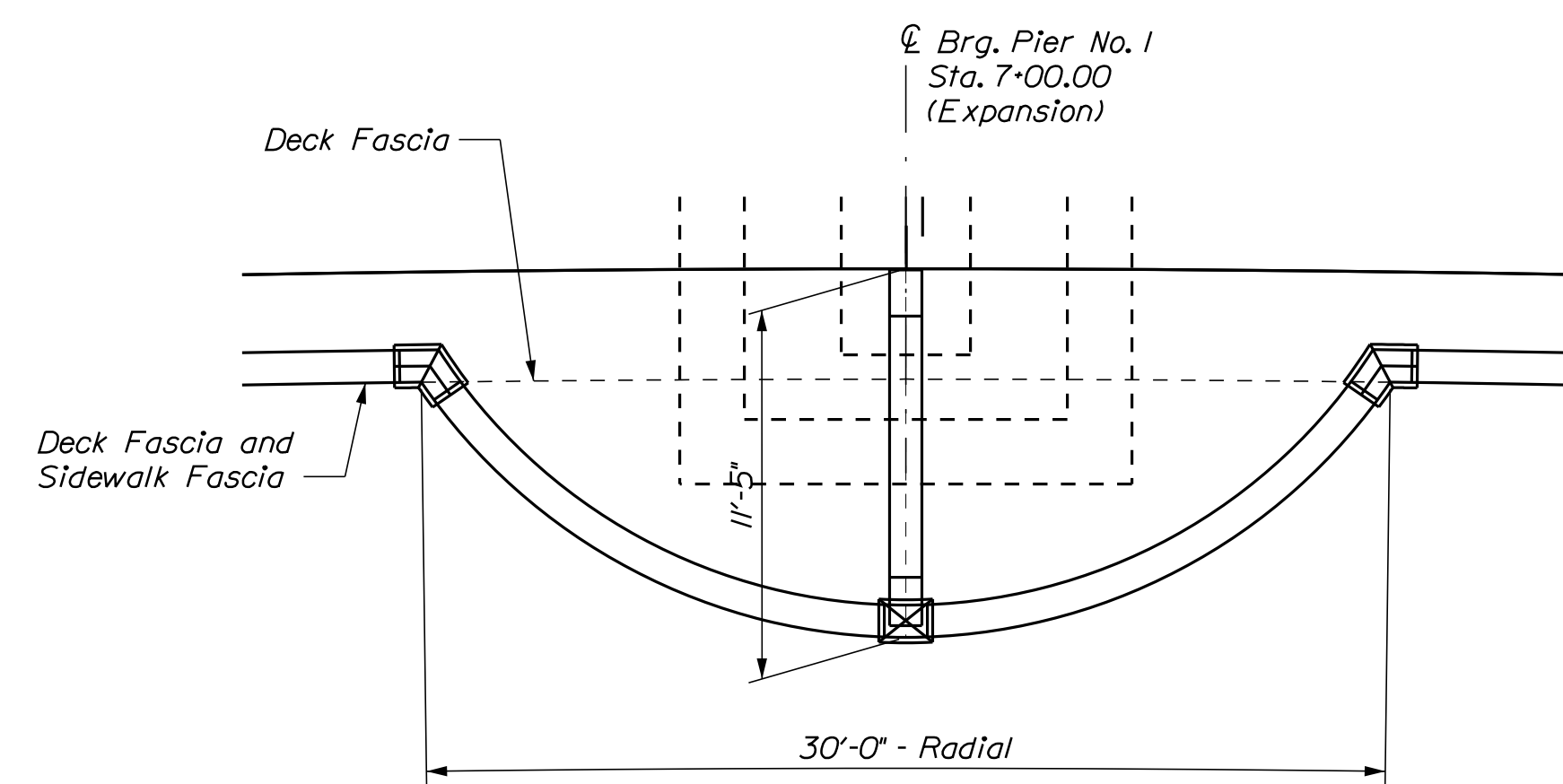
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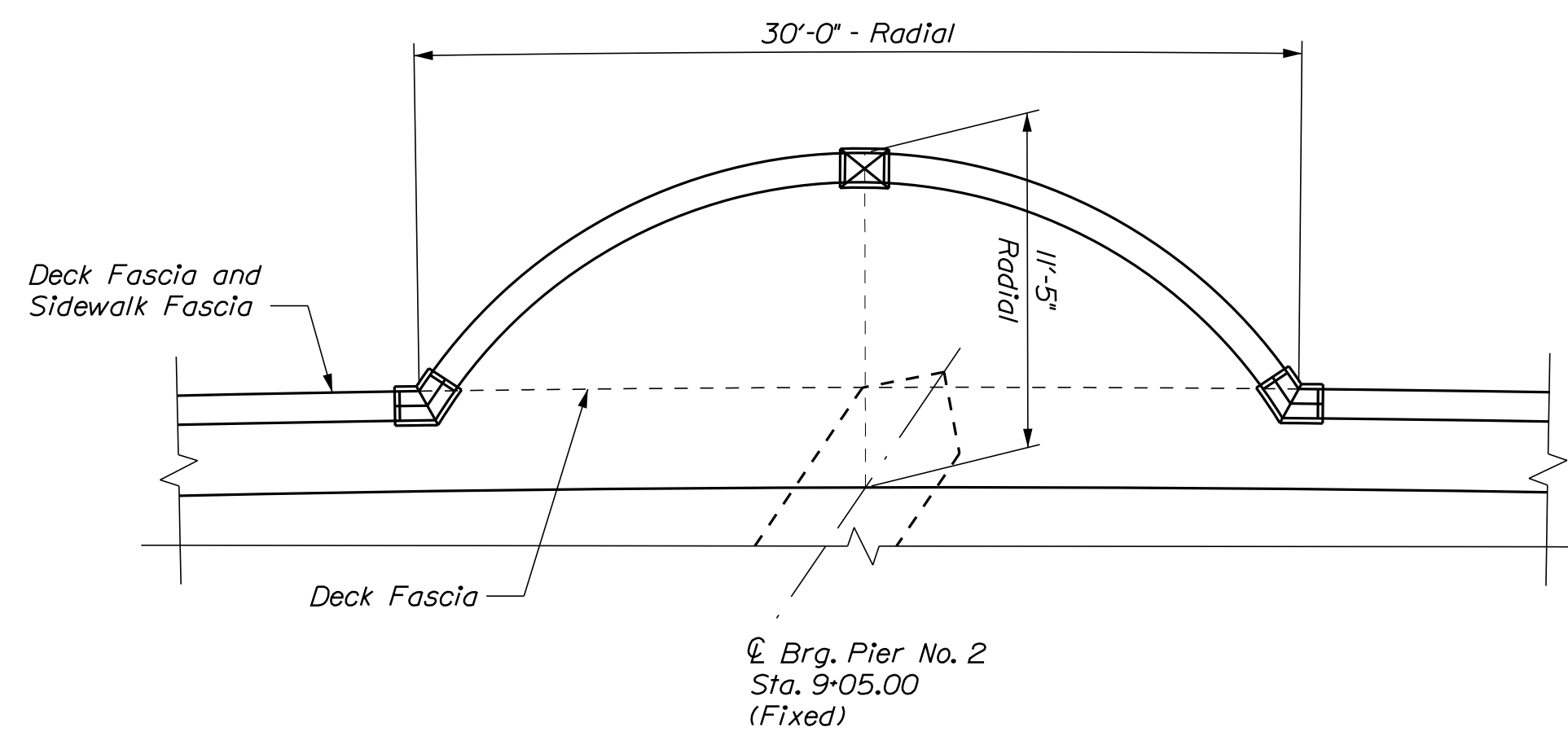
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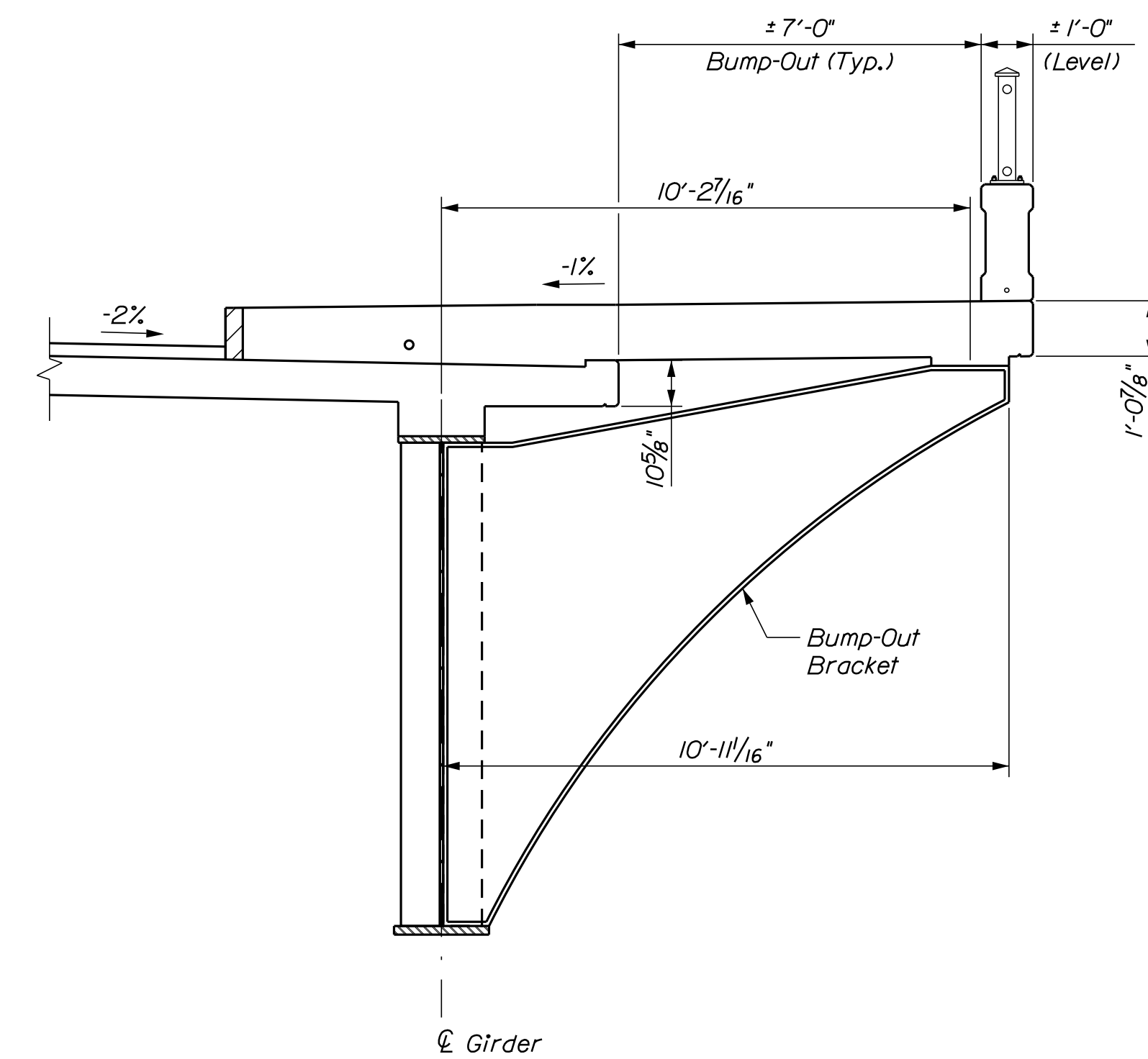
SUPERSTRUCTURE SLAB - SPAN NO. 2



PIER NO. 1 - BUMPOUT



PIER NO. 2 - BUMPOUT



SECTION

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

PROJ. MANAGER	DATE	BY	DATE
D. Bryant	xx/xx	S. Morgan	
DESIGN DETAILED			SIGNATURE
CHECKED/REVIEWED			P.E. NUMBER
DESIGNS DETAILED			DATE
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
 SUPERSTRUCTURE SLAB
 SPAN NO. 2

SHEET NUMBER

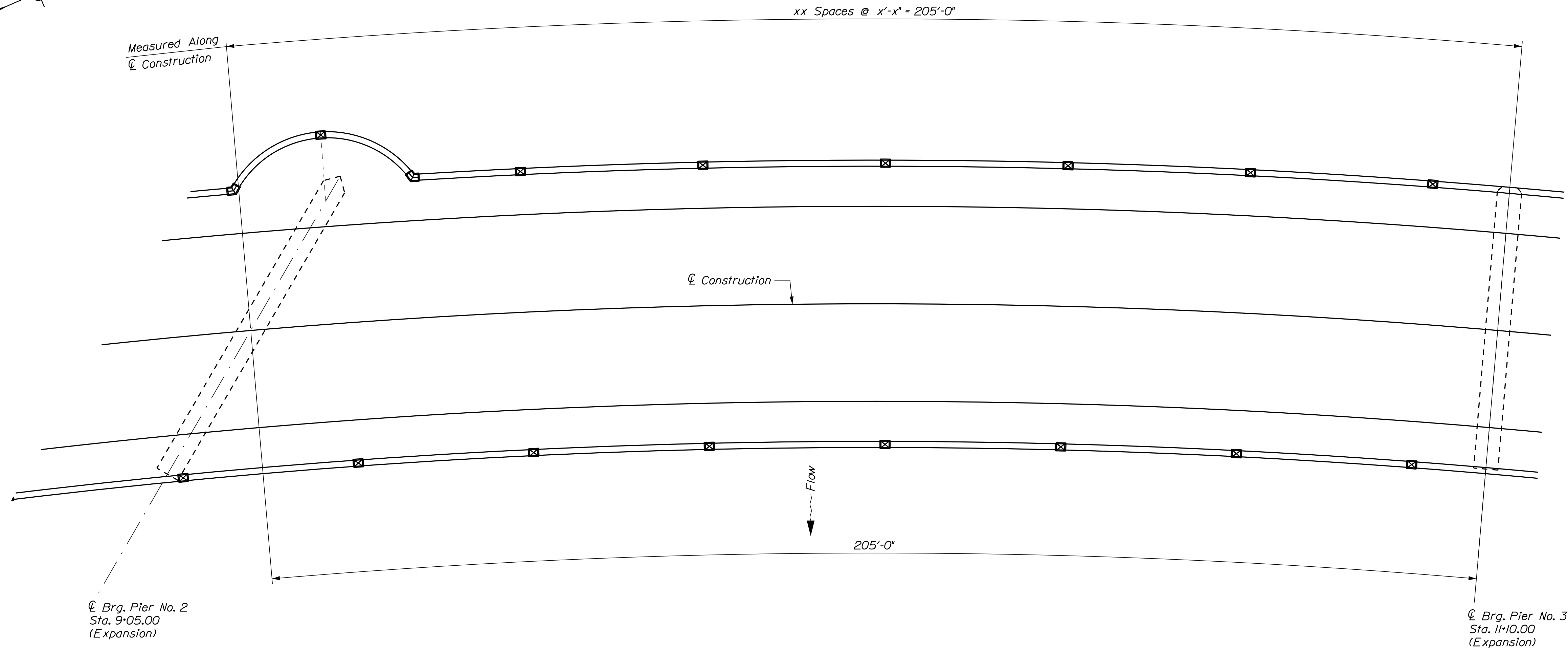
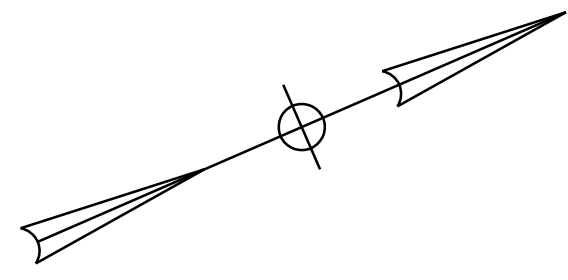
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Date: 10/21/2019

Username: HIGHWAY



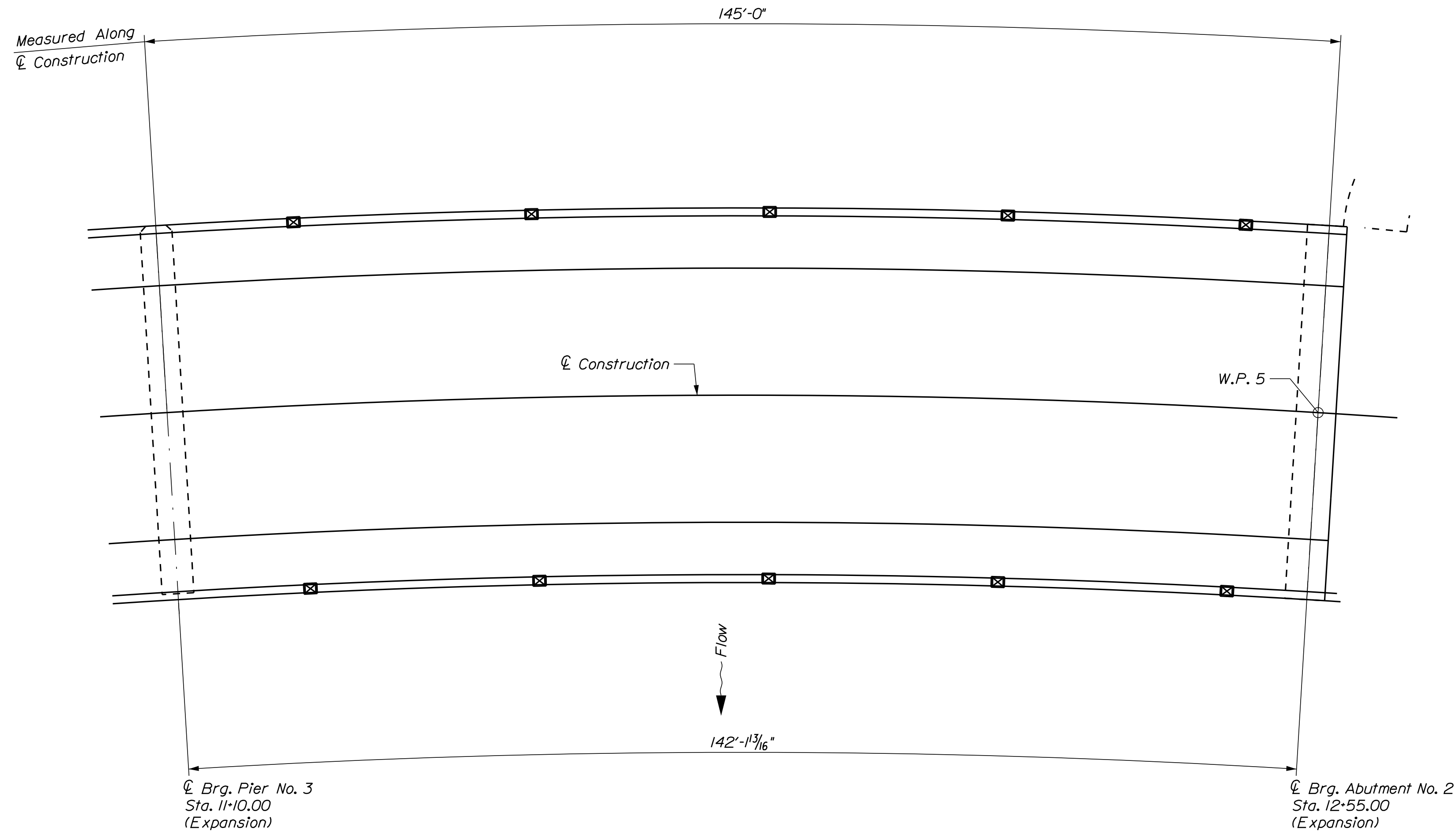
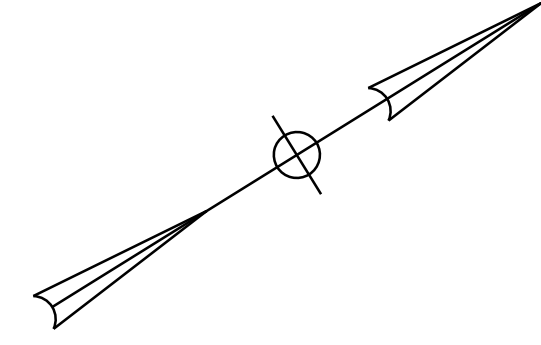
SUPERSTRUCTURE SLAB - SPAN NO. 3

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

PROJ. MANAGER	BY	DATE
D. Bryant	S. Morgan	xx/xx
DESIGN-DETAILED		SIGNATURE
CHECKED-REVIEWED		P.E. NUMBER
DESIGN-DETAILED		DATE
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
**SUPERSTRUCTURE SLAB
 SPAN NO. 3**

SHEET NUMBER
28
 OF 30



SUPERSTRUCTURE SLAB - SPAN NO. 4

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

PROJ. MANAGER	D. Bryant	BY	S. Morgan	DATE	xx/xx
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REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES					

FRANK J. WOOD BRIDGE
 ANDROSCOGGIN RIVER
 BRUNSWICK-TOPSHAM CUMBERLAND
 SUPERSTRUCTURE SLAB
 SPAN NO. 4

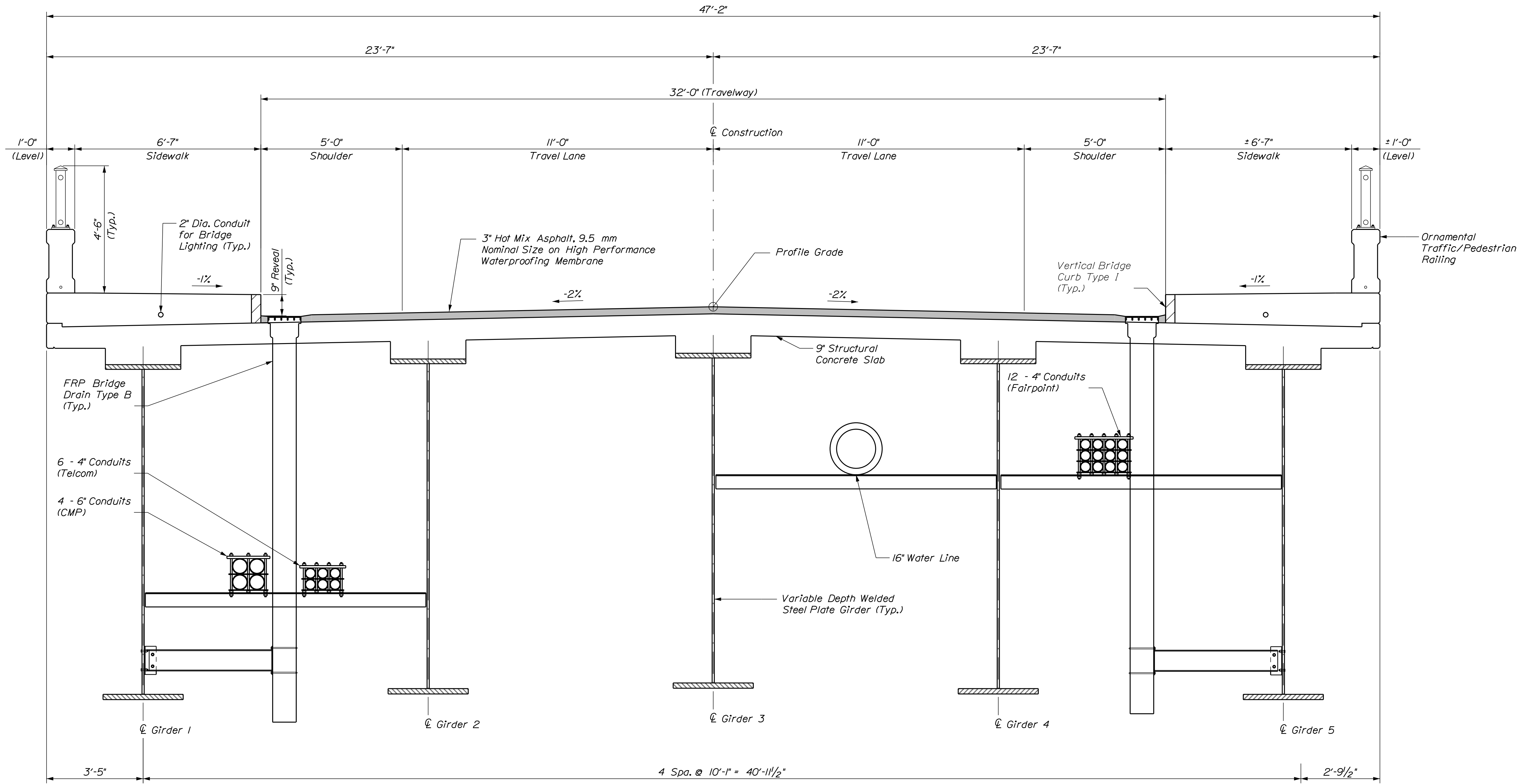
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 OF 30

Date: 10/21/2019

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TRANSVERSE SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2260(300)X

BRIDGE NO. 2016

WIN

22603.00

BRIDGE PLANS

SIGNATURE

DATE

BY

PROJ. MANAGER

CHECKED

DESIGN-REVIEWED

DESIGN-REVIEWED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

DATE

BY

PROJ. MANAGER

CHECKED

DESIGN-REVIEWED

DESIGN-REVIEWED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

FRANK J. WOOD BRIDGE
ANDROSCOGGIN RIVER
BRUNSWICK-TOPSHAM CUMBERLAND

TRANSVERSE SECTION

SHEET NUMBER

30

OF 30

60% REVIEW SET 10/21/2019

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