

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



AUBURN - LEWISTON ANDROSCOGGIN COUNTY BERNARD LOWN PEACE BRIDGE OVER ANDROSCOGGIN RIVER AND CEDAR STREET IMPROVEMENTS PROJECT NO'S. STP-2259(900) NHPP-1865(000) PROJECT LENGTH 0.43 mi. BRIDGE NO. 3330

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Seventh Edition and Interim Specifications through 2016.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2018) AADT	14,920
Future (2038) AADT	17,900
DHV - % of AADT	10%
Design Hour Volume	1,790
Heavy Trucks (% of AADT)	1%
Heavy Trucks (% of DHV)	1%
Directional Distribution (% of DHV)	60%
18 kip Equivalent P 2.0	69
18 kip Equivalent P 2.5	66
Design Speed (mph)	25 mph

UTILITIES

Oxford Networks	Time Warner Cable
Fairpoint Communications	Lewiston Water and Sewer
Central Maine Power	Auburn Water and Sewer
Unitil	

MATERIALS

Concrete:	
Barriers & Transition Barriers	Class "LP"
All Other	Class "A"
Reinforcing Steel	ASTM A615/A 615M, Grade 60
Structural Steel:	
All Material (except as noted)	ASTM A709, Grade 50 (painted)
High Strength Bolts	ASTM F3125, Type 1

MAINTENANCE OF TRAFFIC

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

BASIC DESIGN STRESSES

Concrete	f 'c = 4,500 psi
Reinforcing Steel	f y = 60,000 psi
Structural Steel:	
ASTM A709, Grade 50	F y = 50,000 psi
ASTM F3125	F μ = 120,000 psi

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WIN 22599.00 & 18650.00

STP-2259(900) & NHPP-1865(000)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED: <i>[Signature]</i>
DATE: 12/14/17
COMMISSIONER: <i>[Signature]</i>
CHIEF ENGINEER: <i>[Signature]</i>

PROFESSIONAL ENGINEER	
DANIEL S. BAYERS	
No. 12572	
P.E. NUMBER	
December 9, 2017	
DATE	

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	J. KITTERIDGE
DESIGNER	D. WYERS
CONSULTANT	T.Y. LIN INTERNATIONAL
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

BERNARD LOWN PEACE BRIDGE	
ANDROSCOGGIN RIVER	
AUBURN-LEWISTON ANDROSCOGGIN CO.	
TITLE SHEET	

SHEET NUMBER
1
OF 20

PROJECT LOCATION:	Bernard Lown Peace Bridge # 3330 on the Auburn-Lewiston town line which carries Route 196 over the Androscoggin River and Cedar Street 0.14 miles to Lincoln Street. Latitude 44° 05' 21.11 N" Longitude 70° 13' 16.77 W"
PROGRAM AREA:	Bridge Program
OUTLINE OF WORK:	Bridge Rehabilitation and Operational and Safety Improvements.

TYLIN INTERNATIONAL






ESTIMATED QUANTITIES						
ITEM NO.	DESCRIPTION	PEACE BRIDGE QUANTITY	CEDAR STREET QUANTITY	TOTAL QUANTITY	UNIT	
202.127	REMOVING OF EXISTING BITUMINOUS PAVEMENT (3,200 SY)	1	-	1	LS	
202.14	REMOVED EXISTING RAILINGS PROPERTY OF CONTRACTOR	1,450	-	1450	FT	
202.202	REMOVING PAVEMENT SURFACE	2,900	1,450	4350	SY	
304.15	AGGREGATE BASE COURSE - TYPE B	5	85	90	CY	
403.2081	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)	500	130	630	Ton	
403.209	HOT MIX ASPHALT, 9.5MM NOMINAL MAX. SIZE (SIDEWALKS)	9	9	18	Ton	
403.211	HOT MIX ASPHALT, 9.5MM NOMINAL MAX. SIZE (SHIMMING)	84	42	126	Ton	
403.2131	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE BASE COURSE, POLYMER MODIFIED)	254	24	278	Ton	
409.15	BITUMINOUS TACK COAT, APPLIED	410	135	545	G	
502.35	STRUCTURAL CONCRETE, STAMPED COLORED	-	180	180	SY	
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	7,600	-	7600	LB	
503.13	REINFORCING STEEL, PLACING	7,600	-	7600	LB	
504.811	STRUCTURAL STEEL REPAIR	1,200	-	1200	LB	
506.142	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (9,700 LB)	1	-	1	LS	
506.17	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL (9,700 LB)	1	-	1	LS	
506.18	CONTAINMENT AND POLLUTION CONTROL MEASURE (9,700 LB)	1	-	1	LS	
506.191	DISPOSAL OF SPECIAL WASTE OR HAZARDOUS WASTE (9,700 LB)	1	-	1	LS	
506.9102	ZINC RICH COATING SYSTEM (SHOP APPLIED) (1,200 LB)	1	-	1	LS	
507.0846	BARRIER-MOUNTED STEEL BRIDGE RAILING: I-BAR, MODIFIED (1,424 LF)	1	-	1	LS	
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (3,000 SY)	1	-	1	LS	
511.07	COFFERDAM	1	-	1	LS	
515.20	PROTECTIVE COATING FOR CONCRETE SURFACES	2,150	-	2150	SY	
518.50	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	890	-	890	SF	
518.51	REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL < 8 IN.	880	-	880	SF	
518.60	REPAIR OF VERTICAL SURFACES < 8 IN.	1,100	-	1100	SF	
518.61	REPAIR OF VERTICAL SURFACES >=8 INCHES	95	-	95	CY	
518.70	REPAIR OF OVERHEAD SURFACES < 8 IN.	600	-	600	SF	
520.50	EXPANSION DEVICE - REMOVE AND REPLACE GLAND SEAL	3	-	3	EA	
520.55	EXPANSION DEVICE - REMOVE AND REPLACE COMPRESSION SEAL	1	-	1	EA	
526.301	TEMPORARY CONCRETE BARRIER, TYPE 1 (1,800 LF)	1	-	1	LS	
526.341	PERMANENT CONCRETE BARRIER, SPECIAL (1,432 LF)	1	-	1	LS	
527.34	WORK ZONE CRASH CUSHIONS	2	-	2	UN	
535.64	POST-TENSIONING SYSTEM	1	-	1	LS	
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	1	1	2	EA	
608.26	CURB RAMP DETECTABLE WARNING FIELD	20	61	81	SF	
608.46	REGRADE SIDEWALK	75	54	129	SY	
609.11	VERTICAL CURB TYPE 1	56	-	56	LF	
609.238	TERMINAL CURB TYPE 1 - 8'	1	4	5	EA	
609.2381	TERMINAL CURB TYPE 1 - 8' - CIRCULAR	4	4	8	EA	
609.34	CURB TYPE 5	-	600	600	LF	
609.35	CURB TYPE 5 - CIRCULAR	-	66	66	LF	
615.07	LOAM	-	75	75	CY	
619.13	BARK MULCH	-	20	20	CY	
627.325	RED PAVEMENT MARKINGS	440	-	440	SY	
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	3,050	3,150	6200	LF	
627.75	WHITE OR YELLOW PAVEMENT & CURB MARKING	1,000	1,400	2400	SF	
627.77	REMOVING EXISTING PAVEMENT MARKING	-	420	420	SF	
627.78	TEMPORARY 4" PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	4,600	1,575	6175	LF	
629.05	HAND LABOR - STRAIGHT TIME	20	-	20	HR	
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	8	-	8	HR	
631.172	TRUCK, LARGE (INCLUDING OPERATOR)	8	-	8	HR	
631.32	CULVERT CLEANER (INCLUDING OPERATOR)	8	-	8	HR	
634.160	HIGHWAY LIGHTING	1	-	1	LS	
639.18	FIELD OFFICE, TYPE A	1	-	1	EA	
643.62	RECTANGULAR RAPID FLASHING BEACON	-	1	1	EA	
645.106	DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	-	1	1	EA	
645.292	REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS TYPE II	-	91	91	SF	
652.33	DRUM	20	10	30	EA	
652.34	CONE	50	50	100	EA	
652.35	CONSTRUCTION SIGNS	540	200	740	SF	
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	180	30	210	CD	
652.38	FLAGGERS	400	460	860	HR	
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	5	-	5	EA	
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	.90	.10	1	LS	
658.2	ACRYLIC LATEX COLOR FINISH	-	22	22	SY	
659.10	MOBILIZATION	.929	.071	1	LS	

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)		BRIDGE NO. 3330		WIN		225999.00 & 18650.00		BRIDGE PLANS	
BERNARD LOW PEACE BRIDGE		ANDROSCOGGIN RIVER		AUBURN-LEWISTON ANDROSCOGGIN CO.		ESTIMATED QUANTITIES		SHEET NUMBER		2		OF 20	
PROJ. MANAGER	H. COWAN	DESIGN DETAILED	DSM	CHECKED/REVIEWED	BLT	DESIGN DETAILED	BLT	DESIGN DETAILED	BLT	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17	10/17
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER	
DATE		DATE		DATE		DATE		DATE		DATE		DATE	

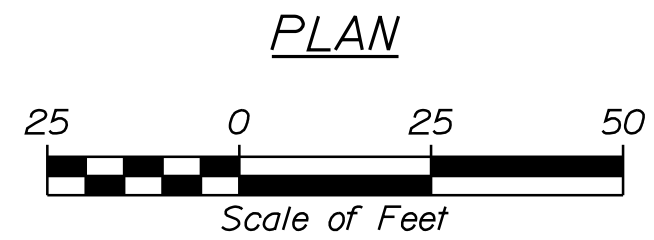
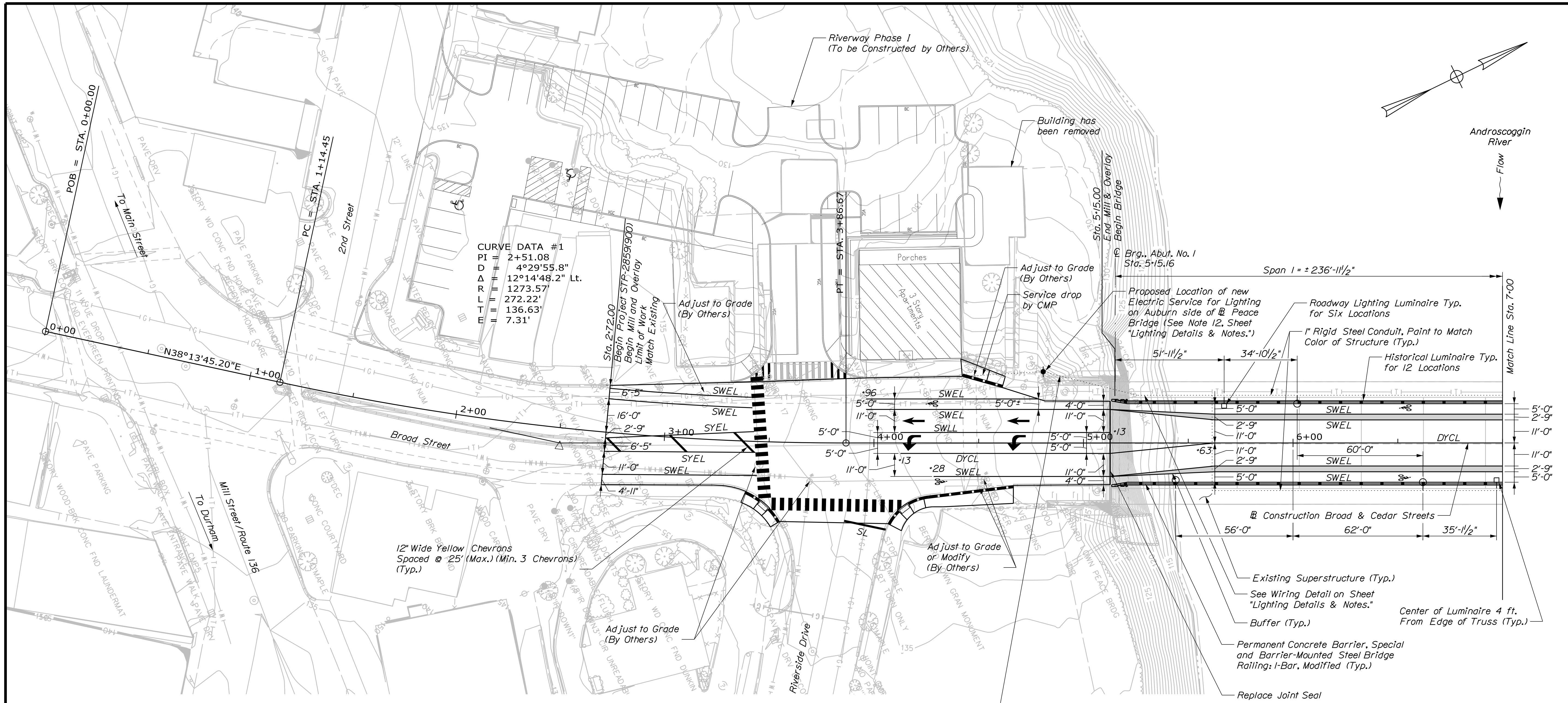
GENERAL NOTES:

1. All utility facilities shall be adjusted by the respective utilities unless otherwise noted. The utilities involved in this contract are as follows:
 - Fairpoint Communications
 - Central Maine Power
 - Time Warner Cable (Charter Communications)
 - Oxford Networks
 - Unifi
 - City Auburn Water & Sewer
 - City of Lewiston Water & Sewer
2. The contractor shall be responsible for costs associated with coordination with the utility companies, if needed.
3. No separate payment for superintendent or foreman will be made for the supervision of equipment being paid for under the equipment rental items.
4. Any damage to the roadway, sideslopes, existing structure to remain, or other on-site infrastructure caused by the Contractor's Equipment, Personnel, or Operation shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.
5. All work shall be done in accordance with the Maine Department of Transportation's (MaineDOT's) Best Management Practices for Erosion Control & Sediment Control, February, 2008.
6. Temporary Erosion control measures shall be maintained as specified in the Soil Erosion and Water Pollution Control Plan. Payment will be made under 656.75 ' Temporary Soil Erosion and Water Control, Lump sum.'
7. Curb Ramp Detectable Warning Fields shall be installed at the ends of all pedestrian ramps at side roads.
8. Protective Coating for Concrete Surfaces shall be applied to the following areas:
 - All exposed surfaces of concrete curbs, barriers, and sidewalks,
 - Fascia,
 - All exposed surfaces of Concrete Approach Railing
9. All dimensions shown in the plans are horizontal or vertical at 45° F, unless noted otherwise.
10. Existing abutments and existing piers shall be repaired in accordance with Section 518 of the Standard Specifications and as directed by the Resident. This work is in addition to the defined pier repairs shown on the plans.
11. 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 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.
12. Proposed connection contact surfaces on the existing steel girders shall be cleaned according to the requirements of Special Provision 506, Field Coating Application.
13. Details and dimensions of the existing bridge provided herein are based upon existing design plans and existing shop drawings; no field survey or verification measurements were obtained in preparation of these details. The Contractor is responsible for field verifying all dimensions prior to fabrication.
14. Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>
15. 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.
16. Bolts shall be 7/8" φ F3125, Type 1, unless otherwise noted.
17. Proposed new structural steel, including steel bridge railing, shall be painted with a zinc-rich coating system in accordance with Section 506, Shop Applied Protective Coating - Steel. Field repair at steel repair locations and railfield weld locations shall be performed in accordance with Special Provision Section 506, Field Coating Application. The finish topcoat color shall be green and match Federal Standard 595C, light green, color number: 14272.
18. The Contractor shall be responsible for removal and proper disposal of all existing and construction debris from the bridge seats, bearings, piers and steel repair areas at the conclusion of work in the area. Payment shall not be made directly, but shall be considered incidental to related contract items.

GENERAL NOTES - HIGHWAY:

1. A temporary ramp shall be constructed with HMA at the ends of the roadway section paved or milled each day. The uses of millings or RAP will not be allowed, but cold patch may be temporarily utilized until HMA plants are open for the season.
2. For all other roadways with speed limits less than 50 mph, temporary ramps shall be constructed at a length of four feet per inch of transition depth.
3. Prior to surface paving, existing culverts to remain shall be cleaned as directed by the Resident. Payment will be made under Item 631.32 Culvert Cleaner (Including Operator).
4. Existing culverts and catch basins will be cleaned as directed by the Resident under the appropriate pay items.
5. Pavement markings shall conform to the standard details and latest edition of the manual on uniform traffic control devices, the abbreviations shown on the plans are as follows:
 - SYCL - 4" Single Yellow Centerline
 - SWEL - 4" Single White Edge Line
 - SYEL - 4" Single Yellow Edge Line
 - SWLL - 4" Single White Lane Line
 - DYCL - 4" Double Yellow Center Line
 - BWLL - 4" Broken White Lane Line
 -  - White Turn Arrow
 -  - White Thru Turn Arrow
 -  - White Crosswalk
 - SL - 12" Stop Line
 -  - White Bike Lane Symbol
 -  - White Lettering

STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-2259(900) & NHPP-1865(000)	BRIDGE NO. 3330 WIN 22599.00 & 18650.00 BRIDGE PLANS
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.	GENERAL NOTES
SHEET NUMBER 3	



ITEM 608.46 - REGRADING SIDEWALK

STATION	TO	STATION
3+37.6 RT		3+55.9 RT
4+06.7 RT		4+66.6 RT
4+41.5 LT		4+61.7 LT

ITEM 609.11 - VERTICAL CURB TYPE 1

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
4+23.60	25.63' RT		4+66.6	20.3' RT	43.30'
4+42.2	31.8' LT		4+53.51	28.6' LT	11.8'

ITEM 609.238 - TERMINAL CURB TYPE 1 - 8'

STATION	OFFSET	TO	STATION	OFFSET
4+53.51	28.6' LT		4+61.21	26.44' LT

ITEM 609.2381 - TERMINAL CURB TYPE 1 - 8' CIRCULAR

STATION	OFFSET	TO	STATION	OFFSET	RADIUS
3+39.7	24.0' RT		3+46.6	27.8' RT	35.00'
3+51.1	31.6' RT		3+55.9	37.9' RT	35.00'
4+06.7	38.6' RT		4+11.4	32.2' RT	25.00'
4+16.2	28.5' RT		4+23.6	25.6' RT	25.00'

LEGEND

- Roadway Luminaire, see Sheet "Lighting Details & Notes."
- Historic Luminaire, see Sheet "Lighting Details & Notes."
- Electric Service Pole

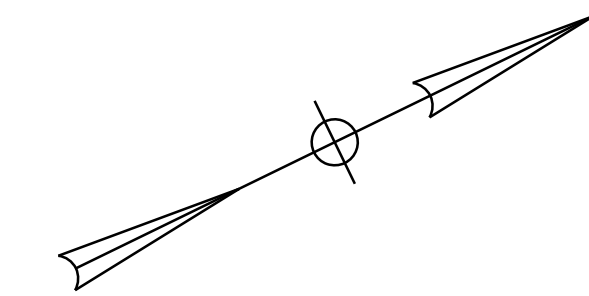
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)	
BRIDGE NO. 3330		WIN 22599.00 & 18650.00	
BRIDGE PLANS			
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.		PLAN SHEET 1 OF 4	
SHEET NUMBER		4	
OF 20		TYLINT INTERNATIONAL	

Date: 12/12/2017

Username:

Division: HIGHWAY

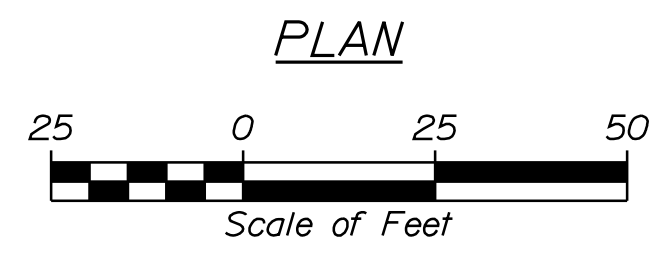
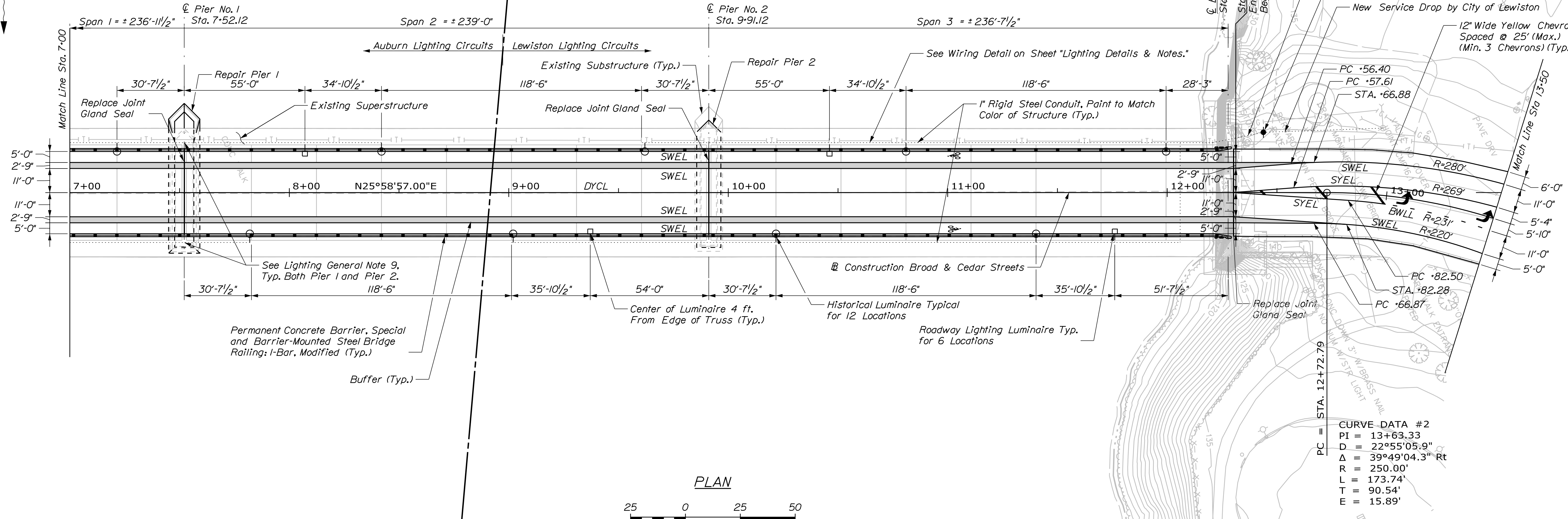
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Androscoggin River

Flow

AUBURN LEWISTON TOWN LINE



CURVE DATA #2
 PC = 13+63.33
 PI = 13+63.33
 D = 22°55'05.9"
 Δ = 39°49'04.3" Rt
 R = 250.00'
 L = 173.74'
 T = 90.54'
 E = 15.89'

1-inch Conduit underground, 3 #8 & 1 #8 Ground with flexible connection at Bridge per notes on Sheet "Lighting Details & Notes."
 Proposed Location of new Electric Service Pole with Disconnect switch and PC Control. (See Note 13, Sheet "Lighting Details & Notes.")
 New Service Drop by City of Lewiston

LEGEND

- Roadway Luminaire, see Sheet "Lighting Details & Notes."
- Historic Luminaire, see Sheet "Lighting Details & Notes."
- Electric Service Pole

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)	
BRIDGE NO. 3330		WIN 22599.00 & 18650.00	
BRIDGE PLANS			
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.		PLAN SHEET 2 OF 4	
SHEET NUMBER		5	
OF 20			

TYLINT INTERNATIONAL

Date: 12/12/2017

Username:

Division: HIGHWAY

Filename: ...HIGHWAY\MSTA\006_Plan_03.dgn

ITEM 609.34 - CURB TYPE 5

STATION	OFFSET	TO	STATION	OFFSET	LENGTH
13+70.87	4.77' RT		14+10.56	6.85' RT	38.83'
13+70.89	4.22' LT		14+55.23	7.50' LT	86.18'
14+10.56	6.85' RT		14+54.91	7.50' RT	43.30'
14+54.91	7.50' RT		16+34.61	7.50' RT	179.70'
14+55.23	7.50' LT		16+34.61	7.50' LT	179.38'
16+34.61	5.50' LT		16+36.61	5.50' RT	11.00'
16+42.61	5.50' LT		16+42.61	5.50' RT	11.00'
18+03.60	2.50' LT		18+24.88	2.50' LT	21.28'
18+03.82	8.19' LT		18+25.04	6.49' LT	21.28'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR

STATION	OFFSET	TO	STATION	OFFSET	LENGTH	RADIUS
13+70.87	4.77' RT		13+70.89	4.22' LT	13.71'	4.50'
16+34.61	7.50' LT		16+36.61	5.50' LT	3.14'	2.00'
16+34.61	7.50' RT		16+36.61	5.50' RT	3.14'	2.00'
16+42.61	5.50' LT		16+44.61	7.50' LT	3.14'	2.00'
16+42.61	5.50' RT		16+44.61	7.50' RT	3.14'	2.00'
16+44.61	7.50' LT		16+44.61	7.50' RT	23.56'	7.50'
18+03.60	2.50' LT		18+03.82	8.19' LT	9.18'	2.85'
18+24.88	2.50' LT		18+25.04	6.49' LT	6.12'	2.00'

ITEM 609.238 - TERMINAL CURB TYPE 1 - 8'

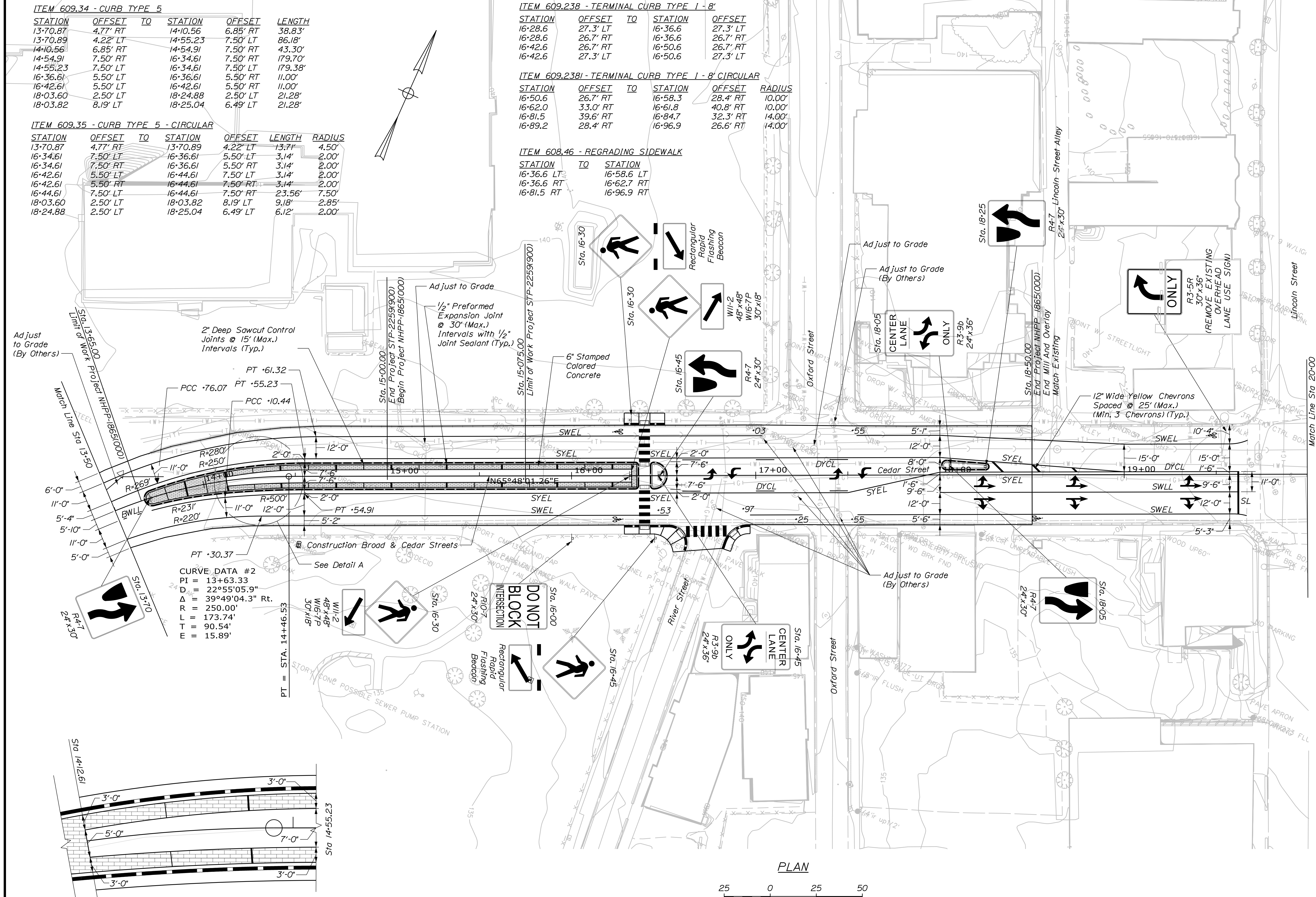
STATION	OFFSET	TO	STATION	OFFSET
16+28.6	27.3' LT		16+36.6	27.3' LT
16+28.6	26.7' RT		16+36.6	26.7' RT
16+42.6	26.7' RT		16+50.6	26.7' RT
16+42.6	27.3' LT		16+50.6	27.3' LT

ITEM 609.2381 - TERMINAL CURB TYPE 1 - 8' CIRCULAR

STATION	OFFSET	TO	STATION	OFFSET	RADIUS
16+50.6	26.7' RT		16+58.3	28.4' RT	10.00'
16+62.0	33.0' RT		16+61.8	40.8' RT	10.00'
16+81.5	39.6' RT		16+84.7	32.3' RT	14.00'
16+89.2	28.4' RT		16+96.9	26.6' RT	14.00'

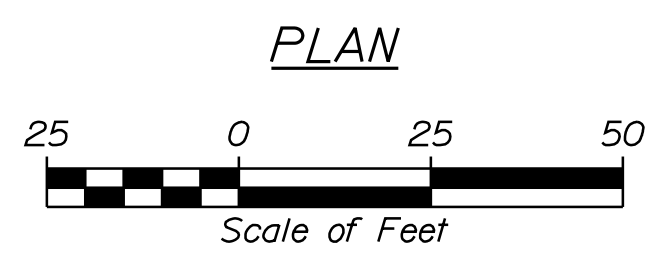
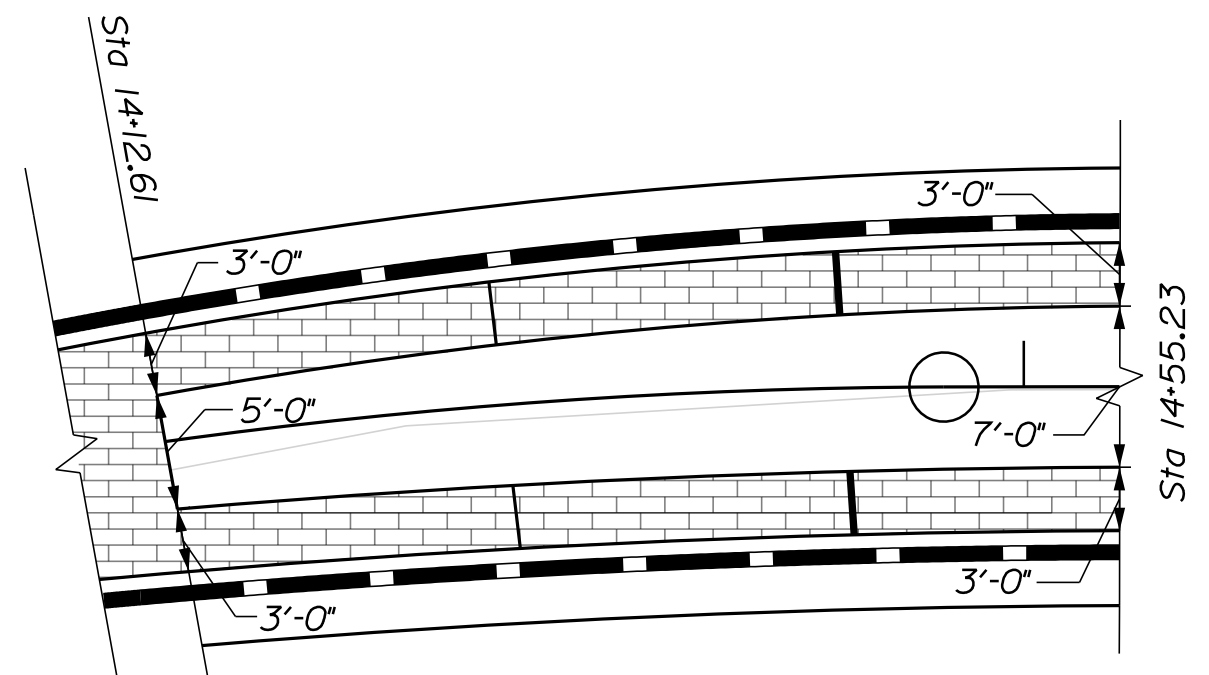
ITEM 608.46 - REGRADING SIDEWALK

STATION	TO	STATION
16+36.6 LT		16+58.6 LT
16+36.6 RT		16+62.7 RT
16+81.5 RT		16+96.9 RT



CURVE DATA #2

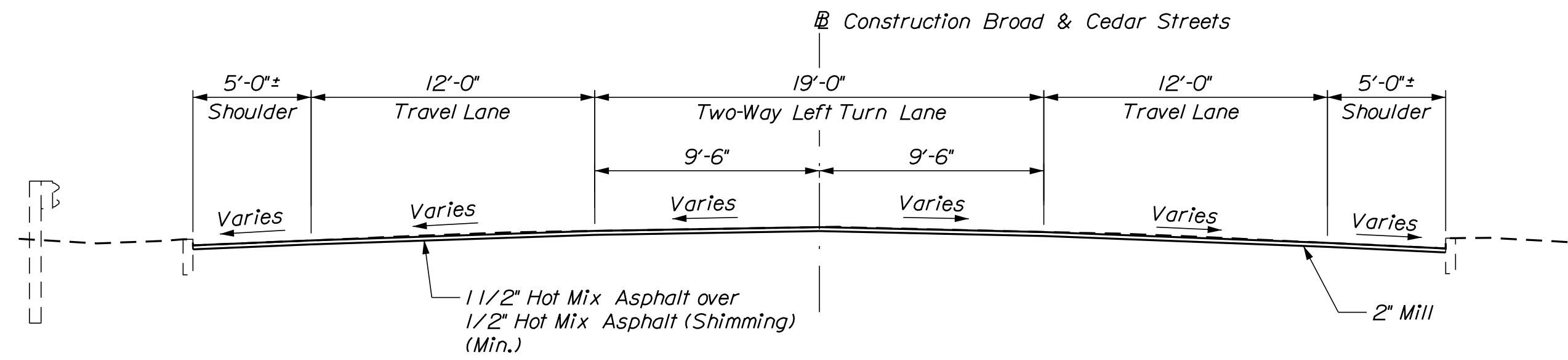
PI =	13+63.33
D =	22°55'05.9"
Δ =	39°49'04.3" RT.
R =	250.00'
L =	173.74'
T =	90.54'
E =	15.89'



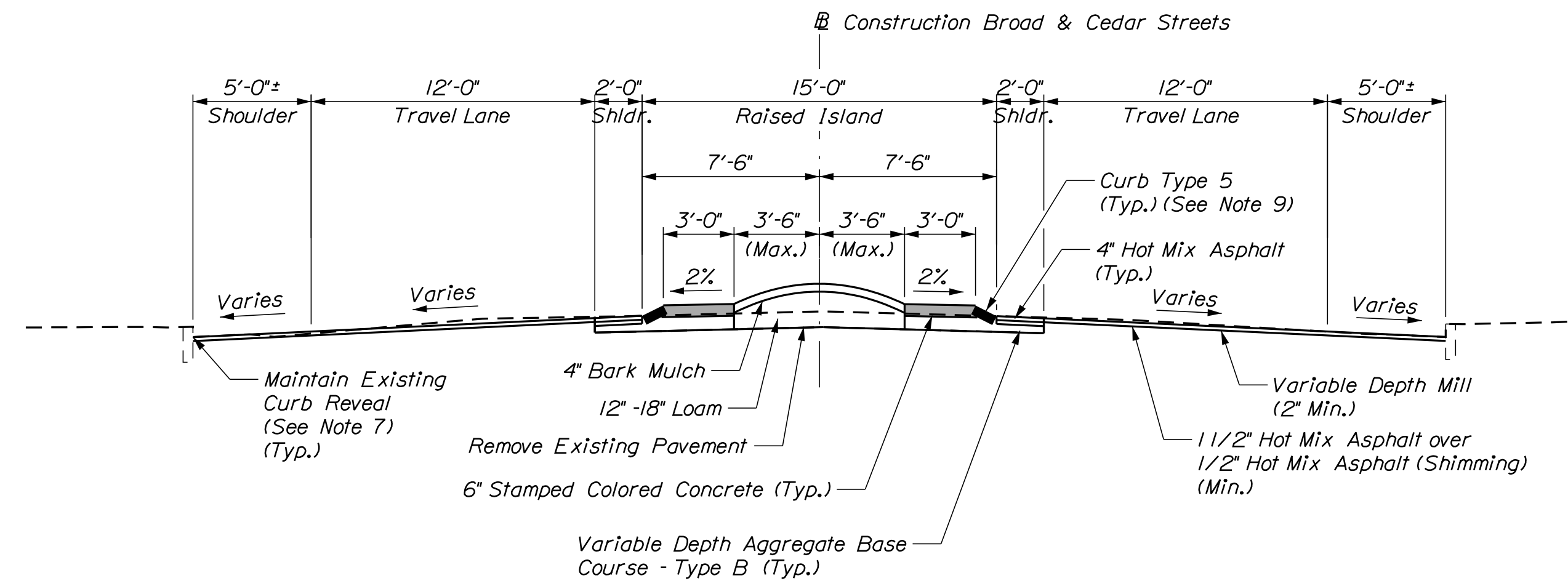
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)		WIN		BRIDGE NO. 3330		22599.00 & 18650.00	
BERNARD LOWN PEACE BRIDGE		ANDROSCOGGIN RIVER		AUBURN-LEWISTON		ANDROSCOGGIN CO.		PLAN		SHEET 3 OF 4	
SHEET NUMBER		6		DATE		SIGNATURE		P.E. NUMBER		DATE	
TYLINT INTERNATIONAL		OF 20		PROJ. MANAGER		H. COWAN		DESIGN-DETAILED		DESIGN-REVIEWED	
TYLINT INTERNATIONAL		OF 20		CHECKED		DESIGNED		REVISED 1		REVISED 2	
TYLINT INTERNATIONAL		OF 20		DESIGNED		REVISED 3		REVISED 4		FIELD CHANGES	



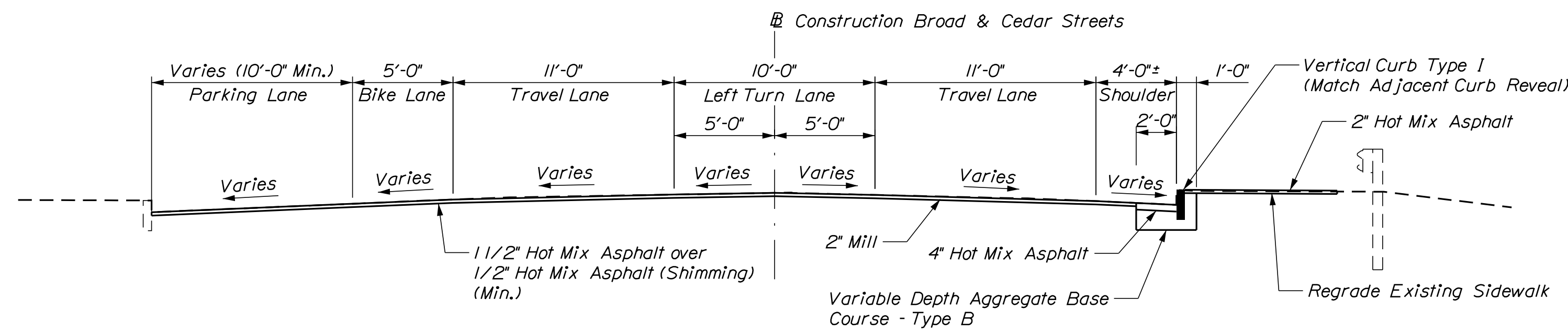
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	DATE	BY	SIGNATURE
	10/17	HEC	
	10/17	HEC	
			P.E. NUMBER
			DATE
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.		PLAN SHEET 4 OF 4	
SHEET NUMBER		OF 20	



CEDAR STREET APPROACH - 3 LANES
MILL AND OVERLAY



CEDAR STREET APPROACH - 2 LANES
MILL AND OVERLAY



BROAD STREET APPROACH
MILL AND OVERLAY

NOTES:

1. The pavement, base, and subbase depths as shown on the plans are intended to be nominal.
2. Crowns for both normal and superelevation sections for all courses of subbase and pavement shall be straight.
3. The algebraic difference between the shoulder and the travel lane cross slopes "rollover" shall not exceed 8 percent.
4. For typical bridge section, see Sheet "Transverse Section."
5. All pavement removal to install raised islands shall be incidental to the Curb Type 5 Items.
6. Islands at Sta. 16+50± and 18+00± shall be constructed with variable depth Aggregate Base Course - Type B and 2" Hot Mix Asphalt.
7. Milling in this area to meet cross slopes shall be controlled by gutter elevations, not centerline.
8. Loam and Aggregate Base Course depths shall be to bottom of existing pavement.
9. The Contractor shall place curb joints to coincide with Stamped Colored Concrete expansion and control joints.

SUPERELEVATION TABLE

CEDAR STREET				
LT. SHOULDER	LT. TRAVEL LANE	STATION	RT. TRAVEL LANE	RT. SHOULDER
Existing	Existing	14+50	Existing	Existing
-6.0%	-4.0%	15+00	-4.0%	-6.0%
-5.6%	-4.0%	15+50	-4.0%	-6.0%
-4.7%	-4.0%	16+00	-4.0%	-4.9%
-4.0%	-3.1%	16+50	-3.9%	-4.8%
Existing	Existing	17+00	Existing	Existing

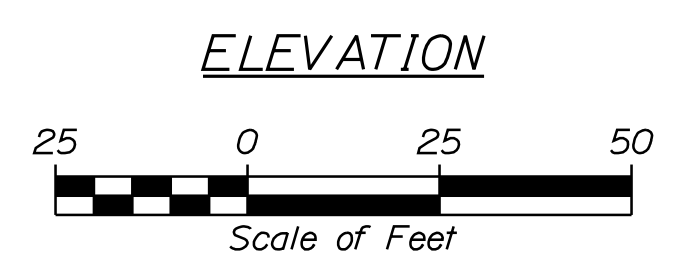
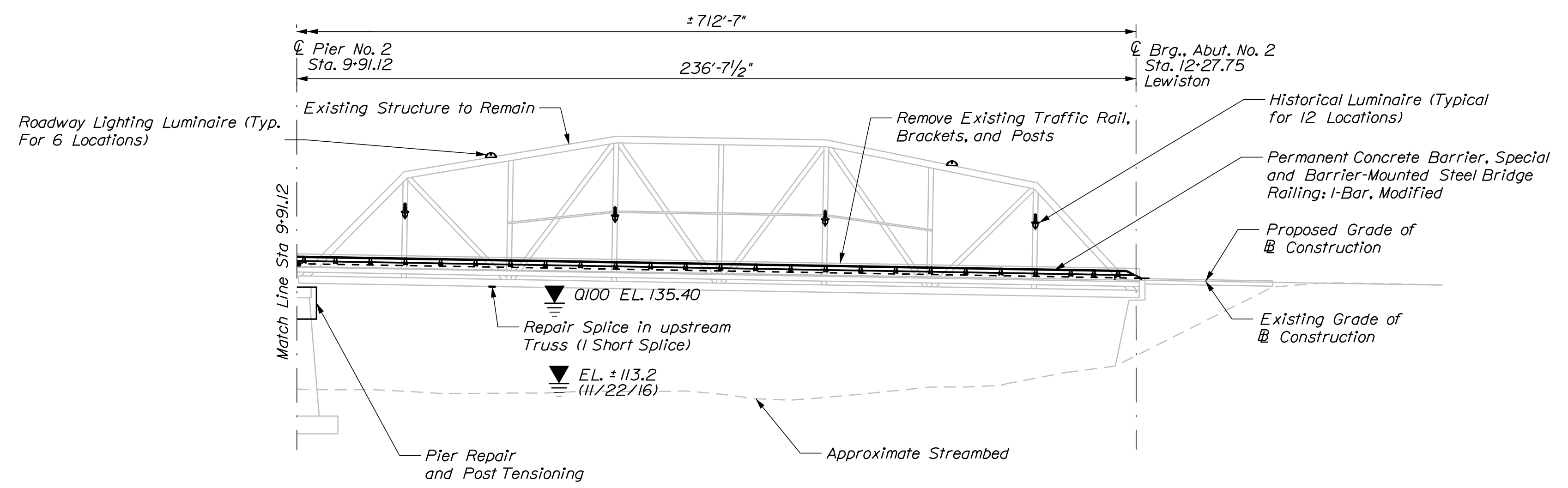
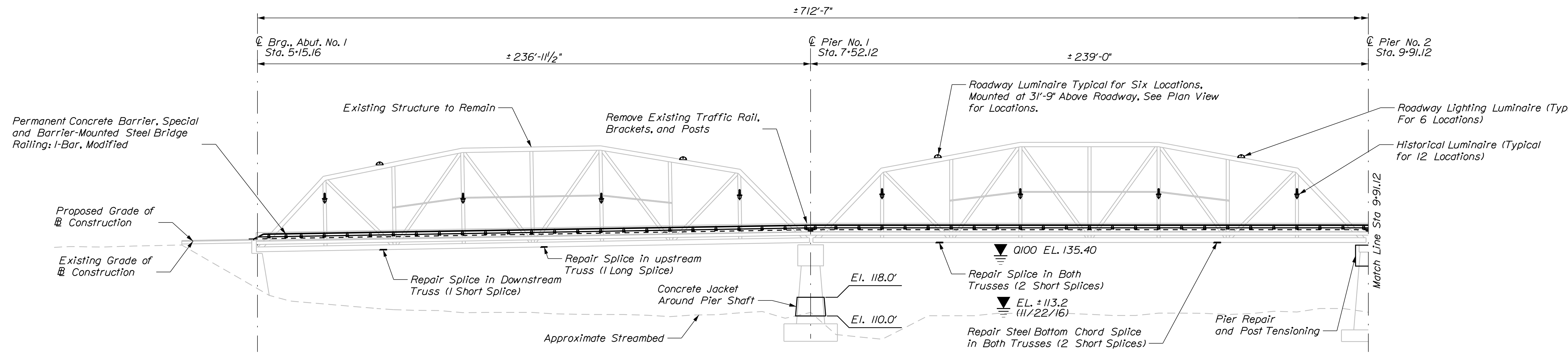
PROJ. MANAGER	DATE	BY	DATE
H. COWAN	10/17	HEC	
DESIGN-DETAILED	10/17	HEC	
CHECKED-REVIEWED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Date: 12/12/2017

Username:

Division: HIGHWAY

Filename: ...MSTAN009_Bridge_Elev_01.dgn



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)		WIN BRIDGE NO. 3330 22599.00 & 18650.00 BRIDGE PLANS
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.		BRIDGE ELEVATION		
SHEET NUMBER		9		
OF 20		TYLINTN INTERNATIONAL		

PROJ. MANAGER	H. COWAN	BY	DATE
DESIGN-DETAILED	DSM	BLT	10/17
CHECKED-REVIEWED	NLB	DSM	10/17
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REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

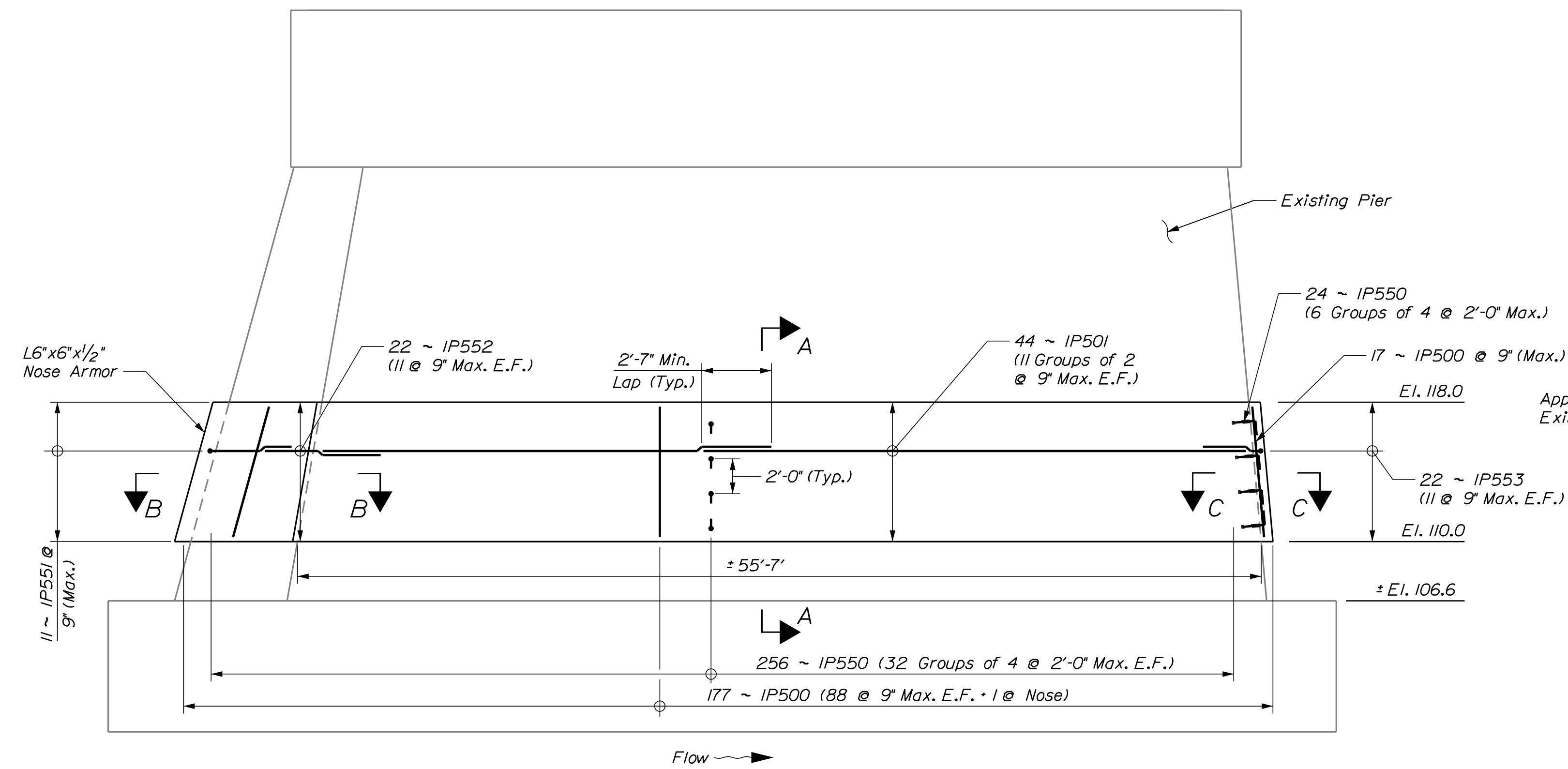
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P.E. NUMBER	DATE

Date: 12/12/2017

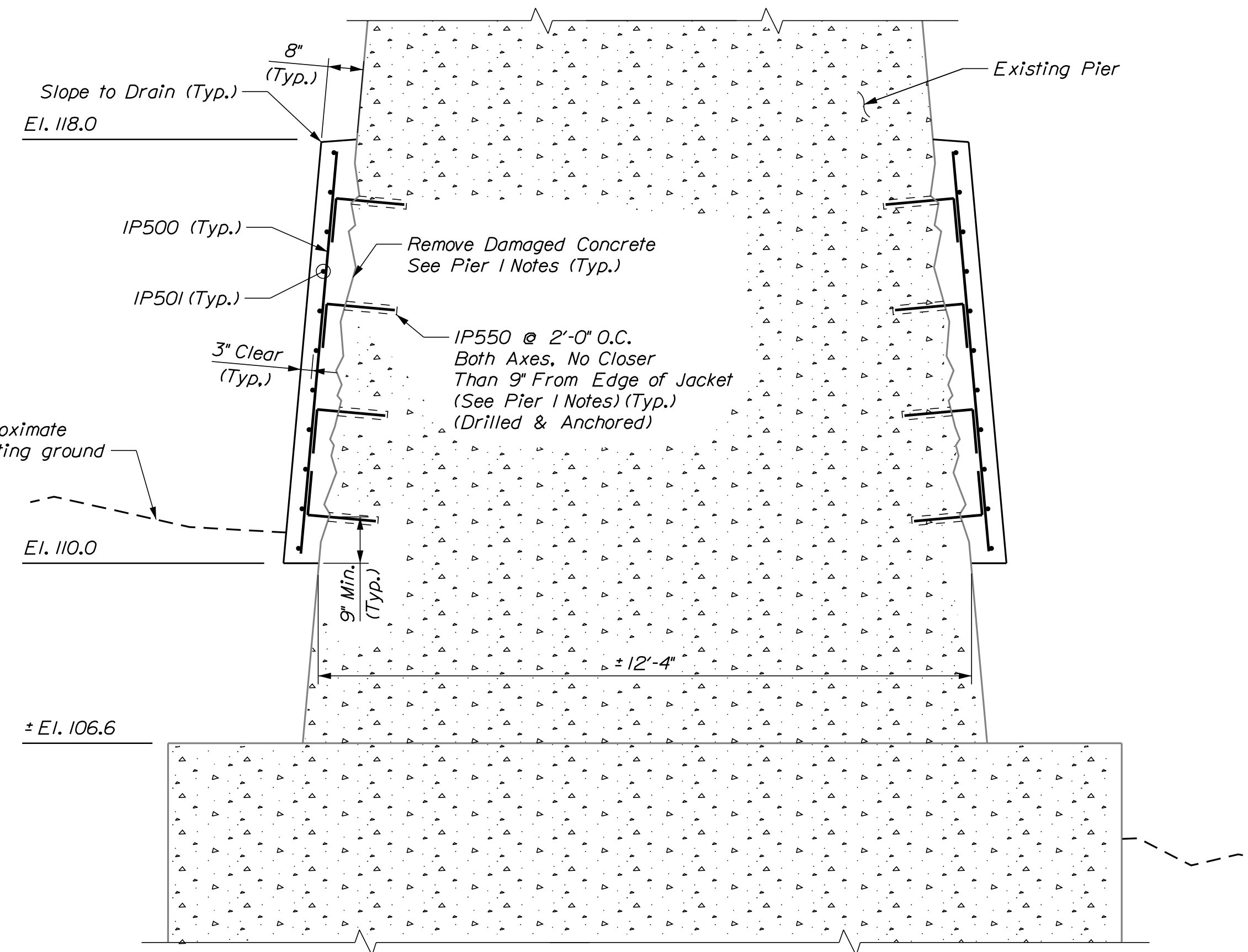
Username:

Division: HIGHWAY

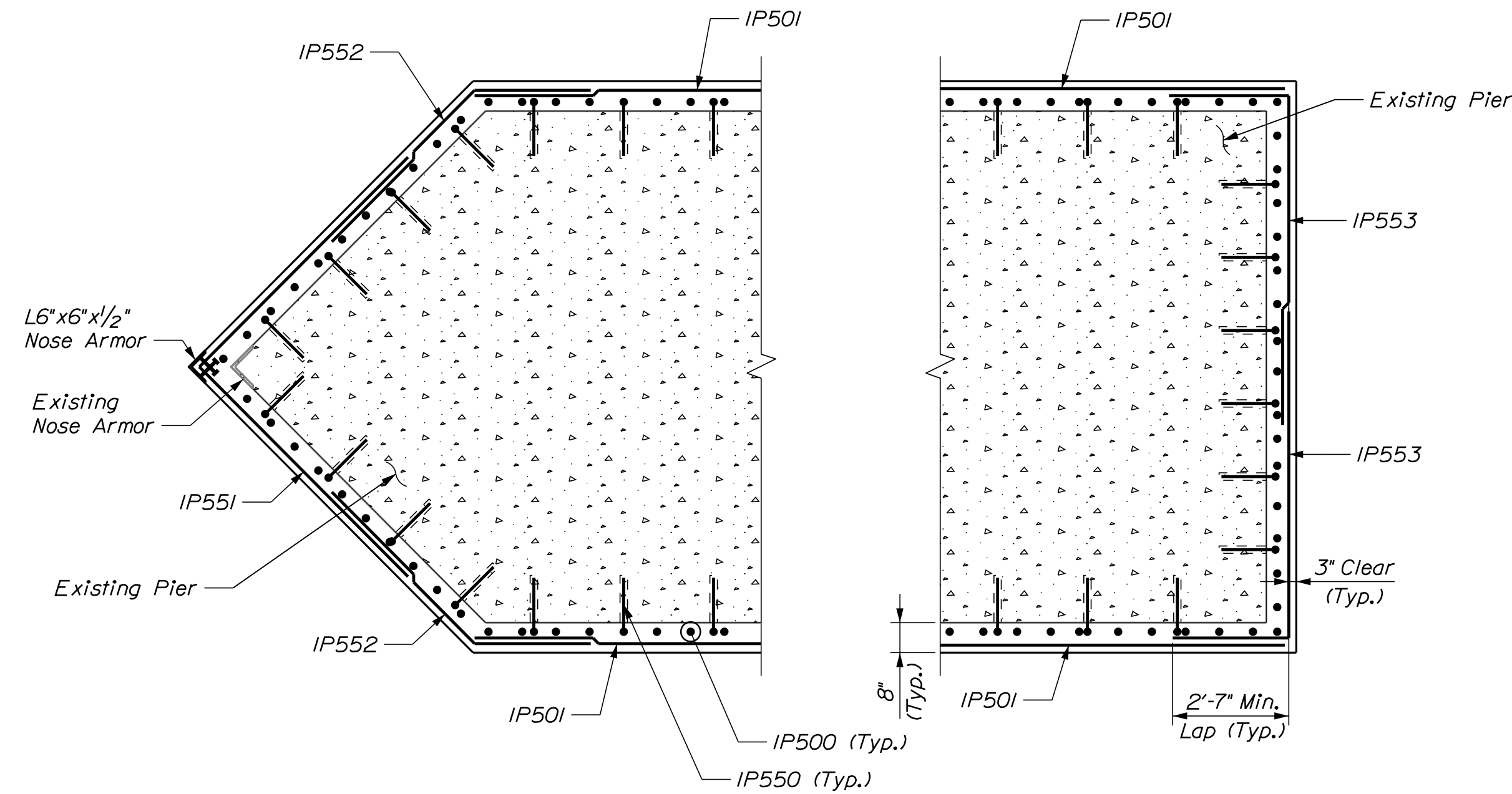
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PIER ELEVATION



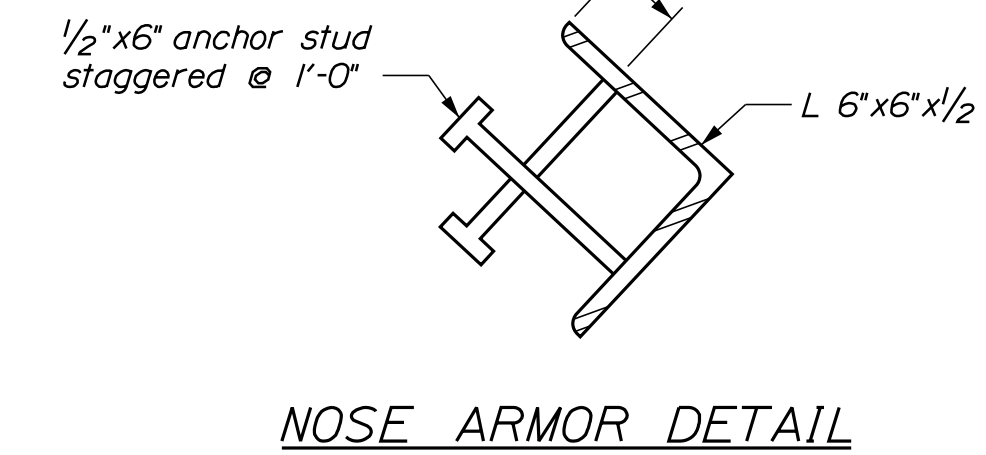
PIER SECTION A-A



SECTION B-B

SECTION C-C

LEGEND:
E.F. = Each Face



NOSE ARMOR DETAIL

PIER 1 NOTES:

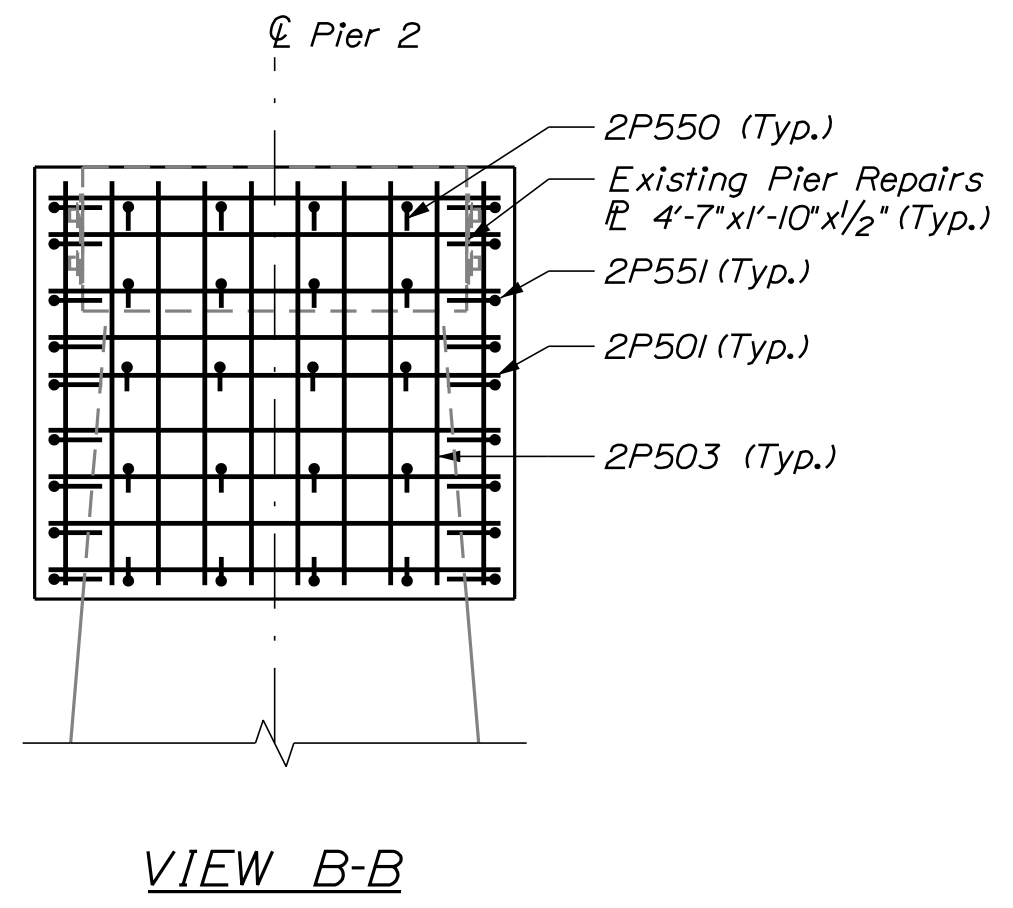
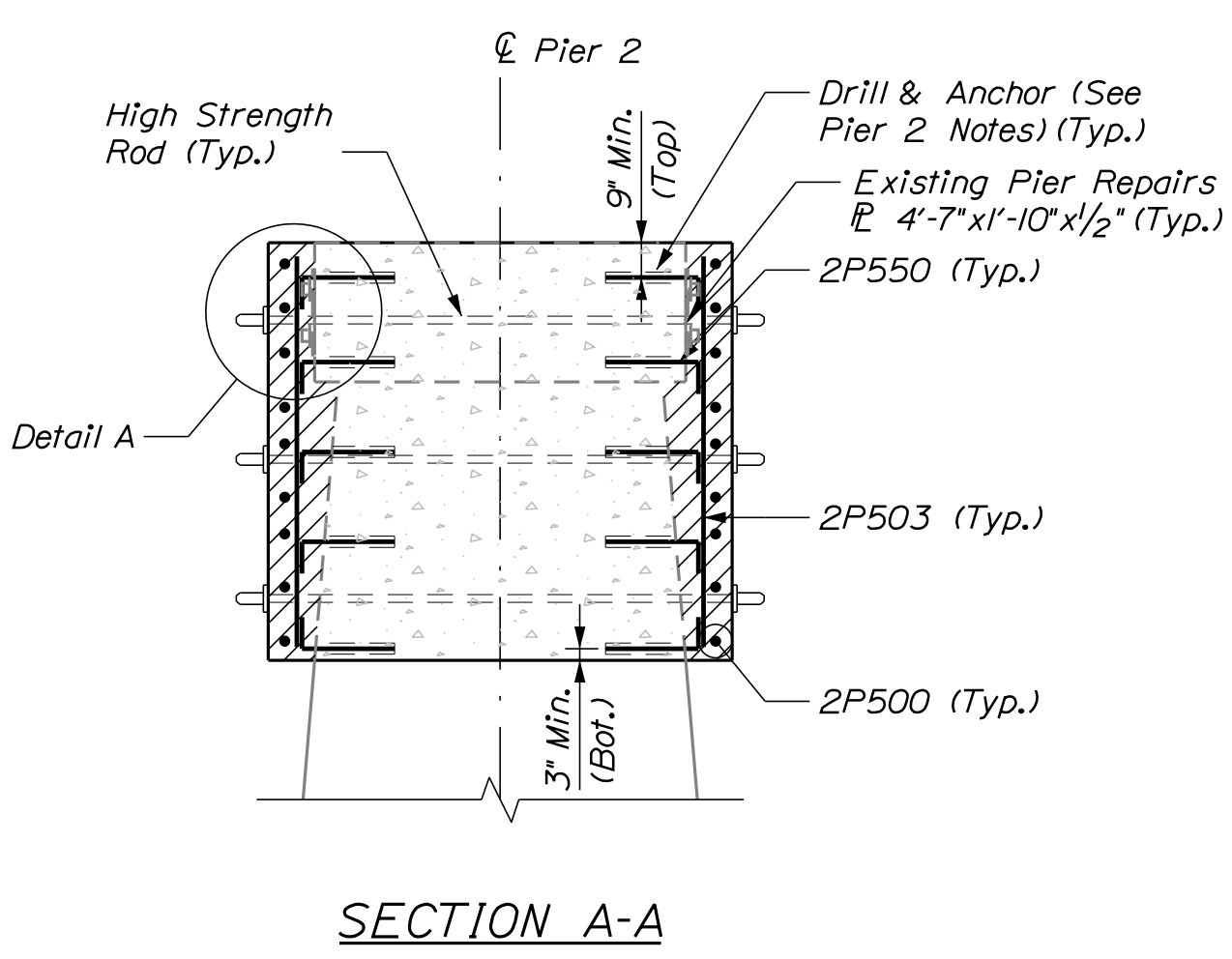
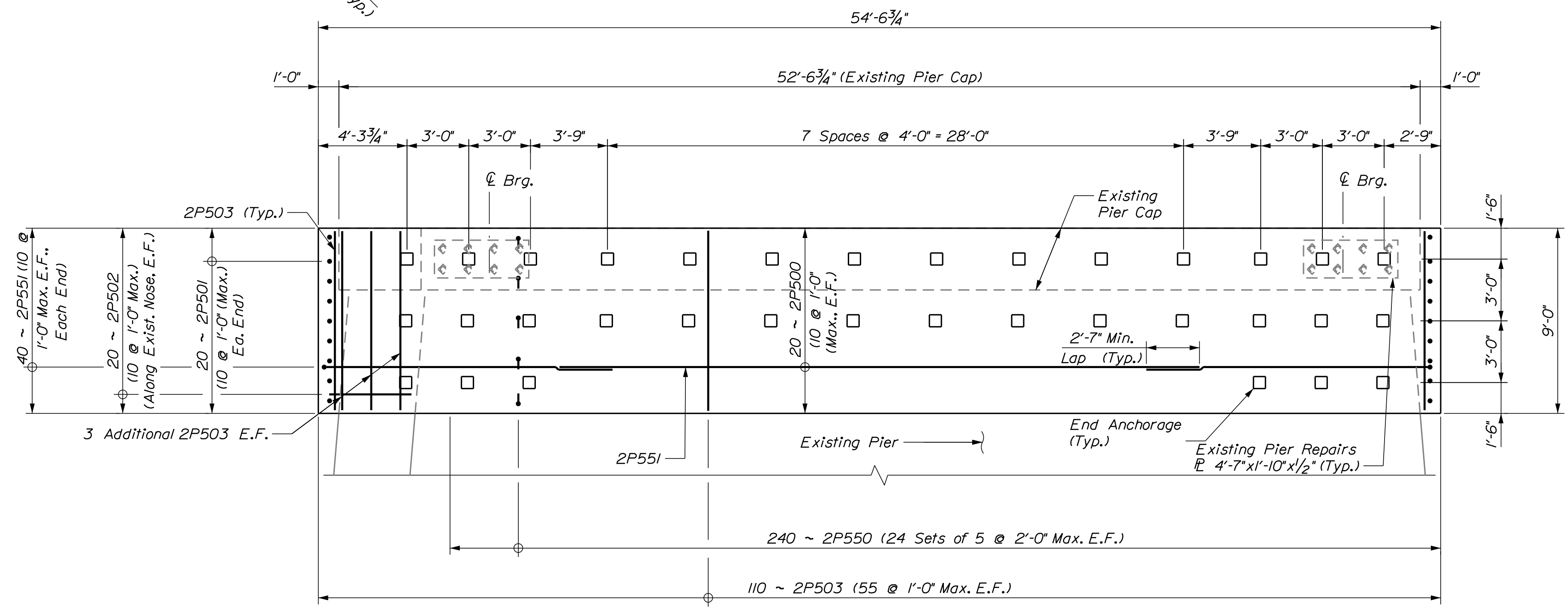
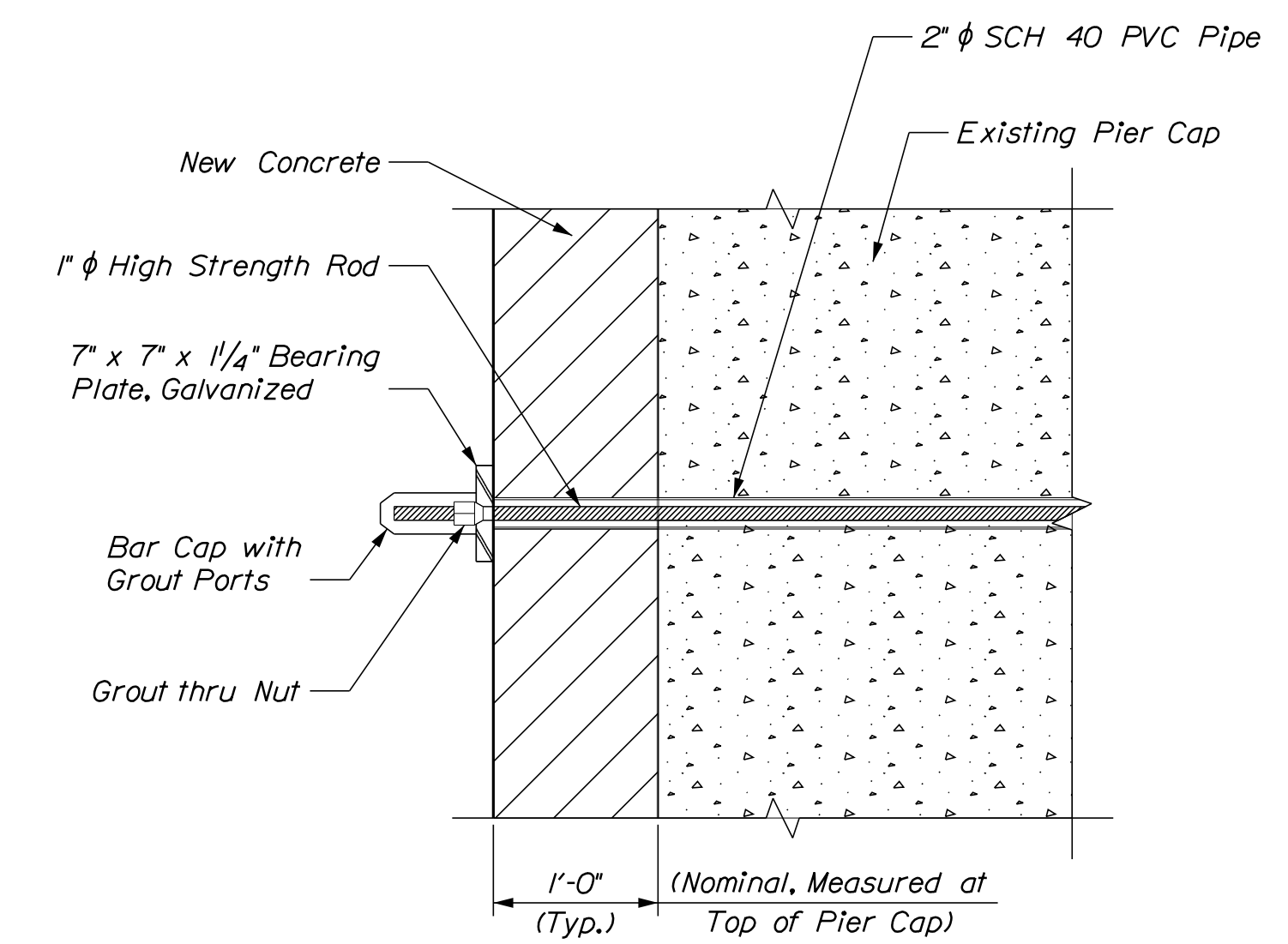
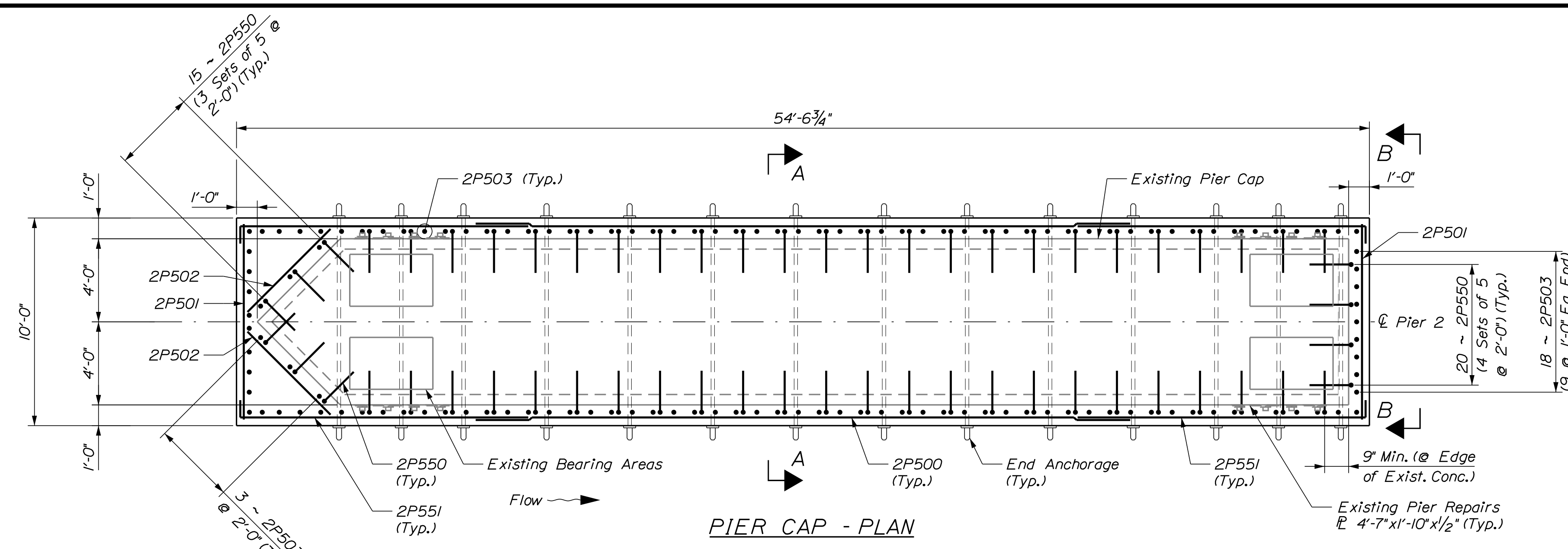
1. Chamfer all exposed edges of concrete $\frac{3}{4}$ " unless noted otherwise.
2. All unsound concrete, that would otherwise come in contact with the proposed concrete, shall be removed as directed by the Resident prior to any drilling and anchoring efforts. Payment for all efforts associated with removal of unsound concrete and placement of proposed concrete will be made under Item 518.61, "Repair of Vertical Surfaces \geq 8 Inches."
3. Nose armor including anchor studs, shall be incidental to Item 518.61, "Repair of Vertical Surfaces \geq 8 Inches." Nose armor, including studs, shall be Hot-Dip Galvanized in accordance with Standard Specification Section 506. Payment for galvanizing shall not be made directly, but shall be considered incidental to Item 518.61, "Repair of Vertical Surfaces \geq 8 Inches."
4. Drill and anchor #5 bars using a product from the Epoxy and Resin Based Adhesive Bonding Systems QPL. The embedment depth shall be as recommended by the manufacturer.
5. Reinforcement bars, including anchoring system, will be paid for under Items 503.12 and 503.13.
6. Anchoring system shall develop full rebar capacity. Contractor may adjust rebar length in accordance with selected anchoring system specifications.

PROJ. MANAGER	H. COWAN	DATE
DESIGN-DETAILED	DSM	10/17
CHECKED-REVIEWED	DSM	10/17
DESIGN-DETAILED		
REVISIONS 1		
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REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SHEET NUMBER

10

OF 20

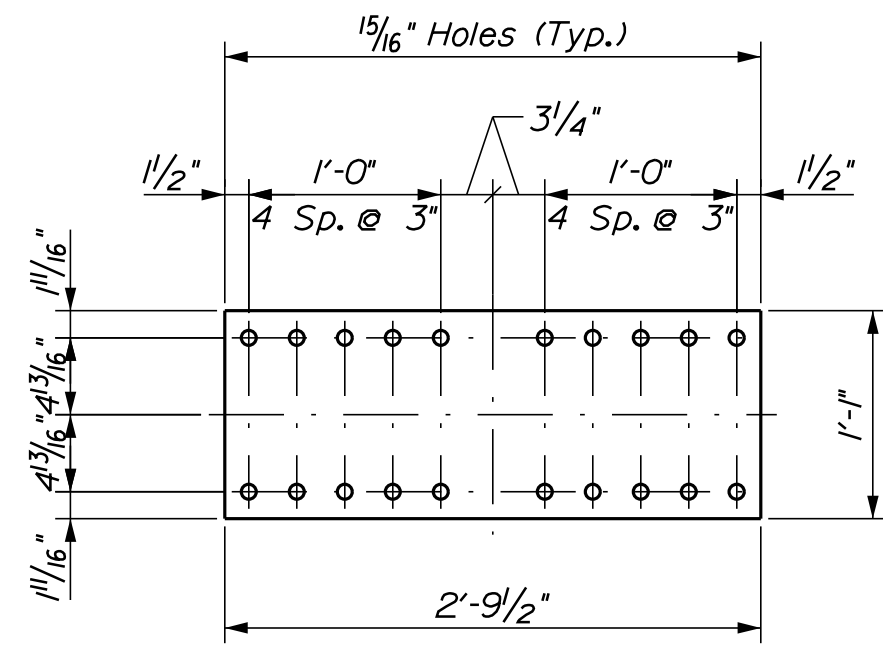


LEGEND:
E.F. = Each Face

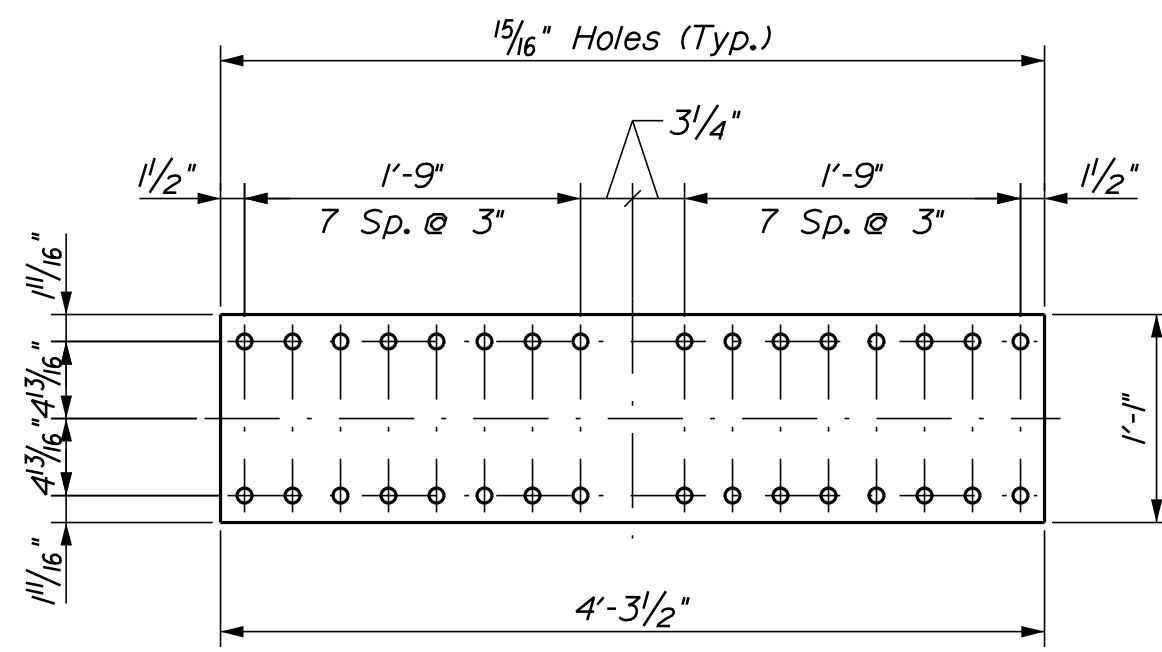
PIER 2 NOTES:

1. Chamfer all exposed edges of concrete $\frac{3}{4}$ \"/>
2. High strength rods shall conform to ASTM A722, Type 11, Grade 150. All hardware associated with the high strength rods, including bearing plates, stressing nuts, and protective caps, shall be purchased from the same vendor.
3. High strength rods shall each be tensioned and locked off at 89 kips. Tensioning shall not commence until proposed concrete has been cured for 7 days or until it has reached its design strength, whichever is later.
4. Anchor plates shall conform to ASTM A709, Grade 50 and shall be galvanized.
5. All cable grout shall conform to one of the following:
 - SikaGrout 300PT
 - Master Flow 816
 - Five Star Special Grout 400
 - Approved Equal
6. The Contractor shall provide an acceptable means of access to the pier-cap to allow the Resident to safely perform an inspection of all repair work. Payment for access shall be considered incidental to related items.
7. Concrete removal, repair, replacement, and additional concrete for pier cap collars will be paid for under Pay Item 518.61. Post-tensioning will be paid for under Pay item 535.64. Reinforcement bars, including anchoring, will be paid for under Items 503.12 and 503.13.
8. Payment for the removal and disposal of a damaged portion of the abandoned utility pipe below the downstream sidewalk at Pier 2 shall not be made directly, but shall be considered incidental to the contract.
9. Drill and anchor #5 bars using a product from the Epoxy and Resin Based Adhesive Bonding Systems QPL. The embedment depth shall be as recommended by the manufacturer.
10. Contractor is permitted to drill through the steel plate used in the existing pier repairs for the placement of proposed anchors and high strength rods. Existing post-tensioning strands and chucks shall remain in place, and shall not be disturbed during construction activities.

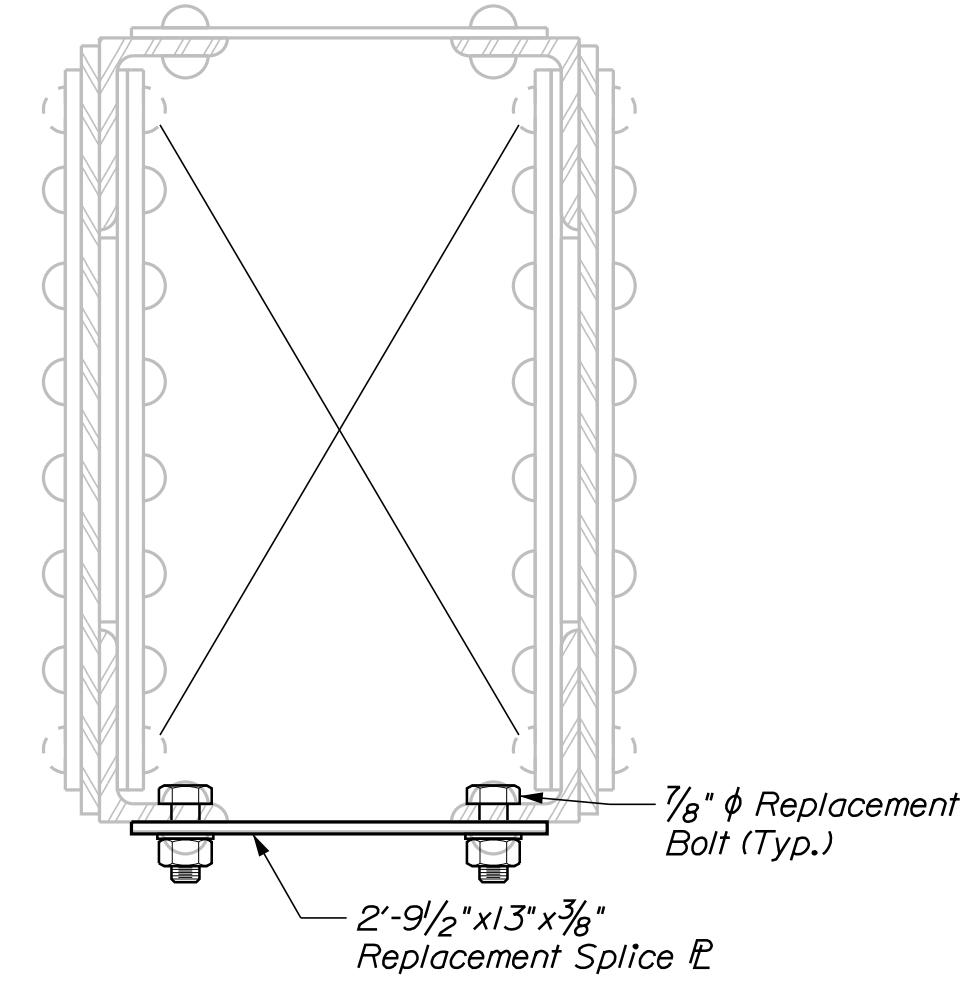
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)		WIN		BRIDGE NO. 3330		225999.00 & 18650.00		BRIDGE PLANS	
BERNARD LOW PEACE BRIDGE		ANDROSCOGGIN RIVER		AUBURN-LEWISTON		ANDROSCOGGIN CO.		PIER 2 REPAIR DETAILS		SHEET NUMBER		11	
PROJ. MANAGER	H. COWAN	DESIGN-DETAILED	J.KO	CHECKED-REVIEWED	DSM	DESIGN-DETAILED	DSM	REVISIONS 1		REVISIONS 2		REVISIONS 3	
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OF 20													



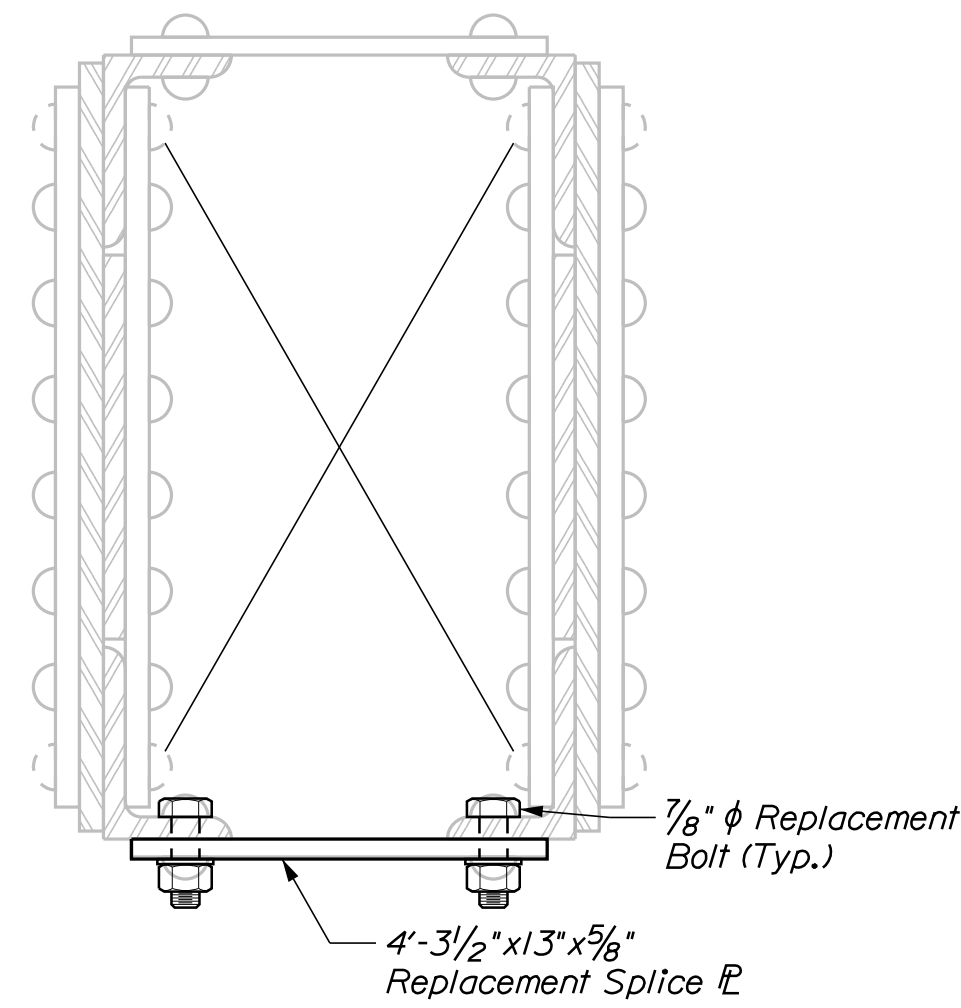
**BOTTOM CHORD SHORT SPLICE
REPLACEMENT SPLICE PLATE**
3/8\" Thick (6 Required) 46 lbs



**BOTTOM CHORD LONG SPLICE
REPLACEMENT SPLICE PLATE**
5/8\" Thick (1 Required) 119 lbs



BOTTOM CHORD SHORT SPLICE SECTION



BOTTOM CHORD LONG SPLICE SECTION

NOTES:

1. Replacement plates, bolts, and all labor, equipment, and incidentals required to install the repairs will be paid for under Item 504.B11, "Structural Steel Repairs"
2. See sheet "Bridge Elevation" for steel repair locations.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2259(900) & NHPP-1865(000)
WIN
BRIDGE NO. 3330 22599.00 & 18650.00 BRIDGE PLANS

DESIGNED BY: _____
CHECKED BY: _____
DESIGNED: _____
REVISIONS: _____
DATE: 10/17
SIGNATURE: _____
P.E. NUMBER: _____
DATE: _____

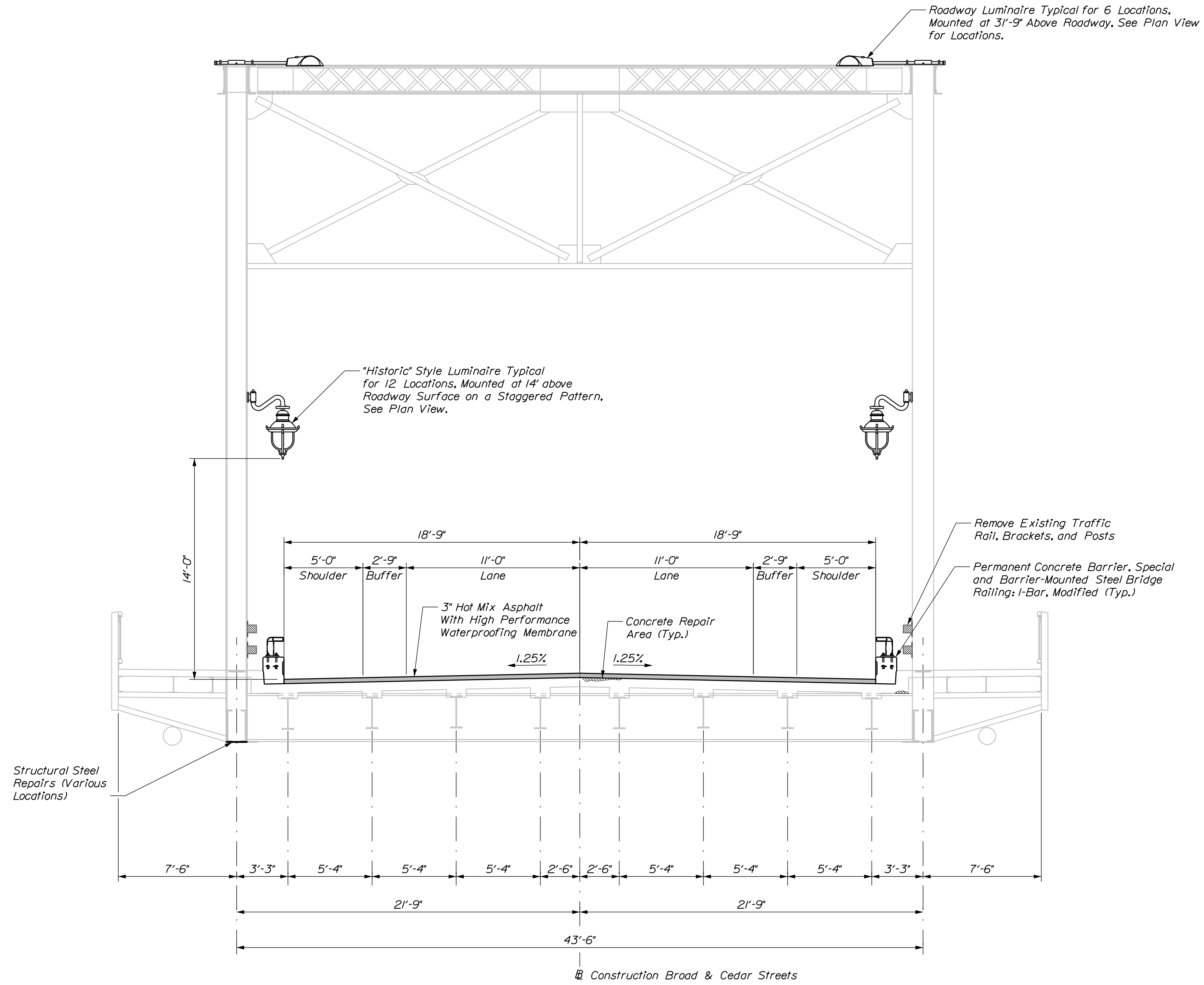
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REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BERNARD LOWN PEACE BRIDGE
ANDROSCOGGIN RIVER
AUBURN-LEWISTON ANDROSCOGGIN CO.
STEEL REPAIR DETAILS

SHEET NUMBER

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TRANSVERSE SECTION

Construction Broad & Cedar Streets

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2259(900) & NHPP-1865(000)

PROJ. MANAGER	H. COWAN	BY	DATE
DESIGN DETAILED	DSM	SAM	10/17
CHECKED/REVIEWED	BLT	BLT	10/17
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

BERNARD LOWN PEACE BRIDGE
ANDROSCOGGIN RIVER
AUBURN-LEWISTON ANDROSCOGGIN CO.
TRANSVERSE SECTION

SHEET NUMBER

13

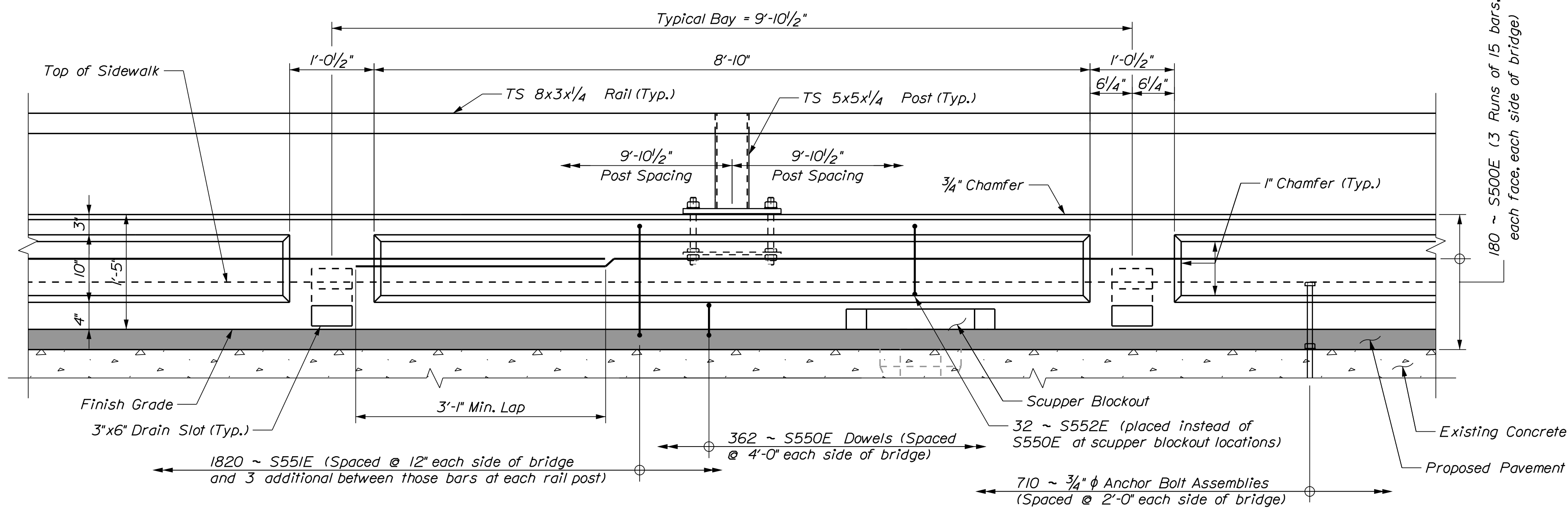
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Date: 12/12/2017

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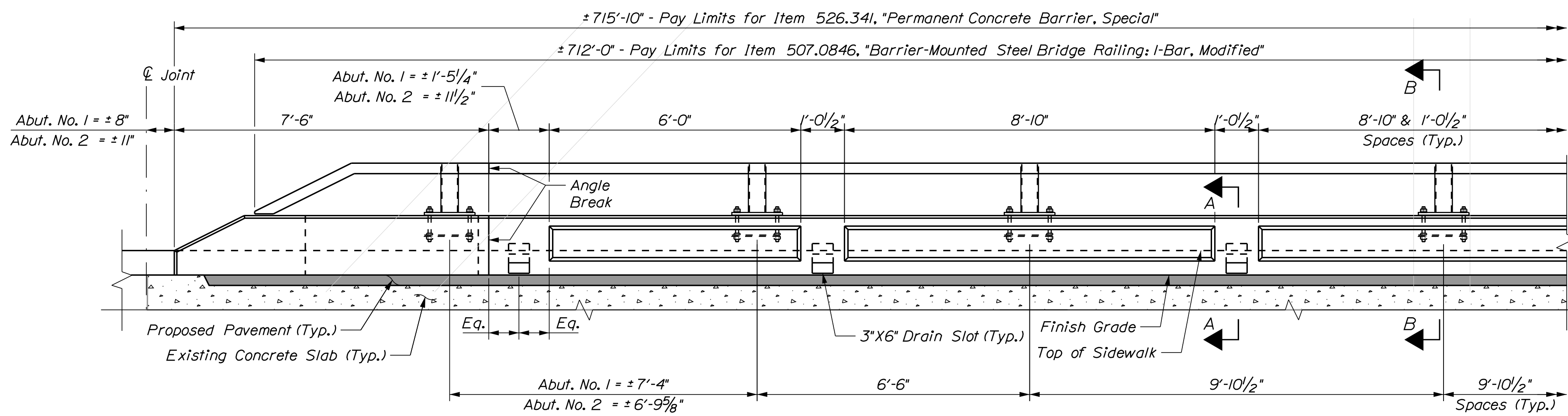
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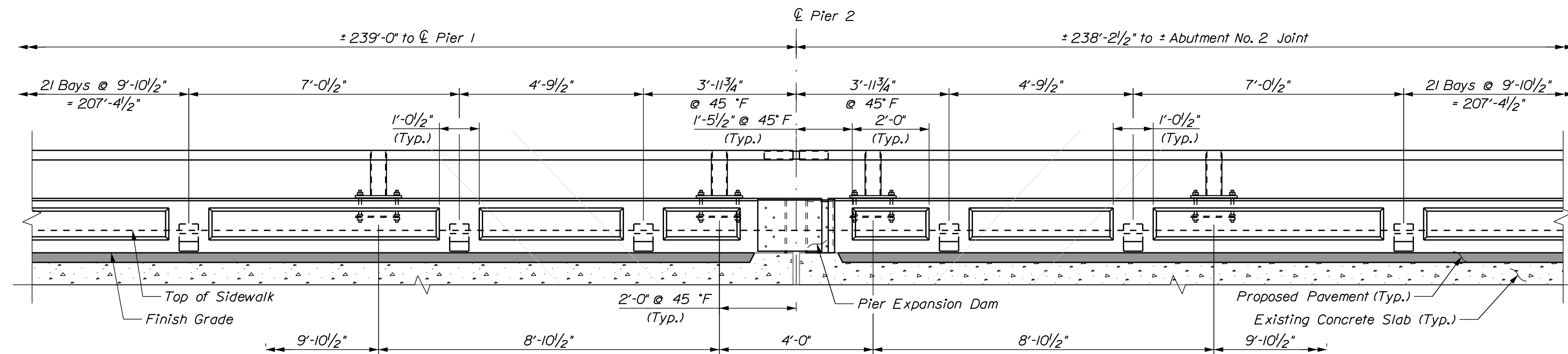
TYPICAL BAY

For Railing Reinforcement Section, see sheet "Railing Details Sheet 2 of 4"



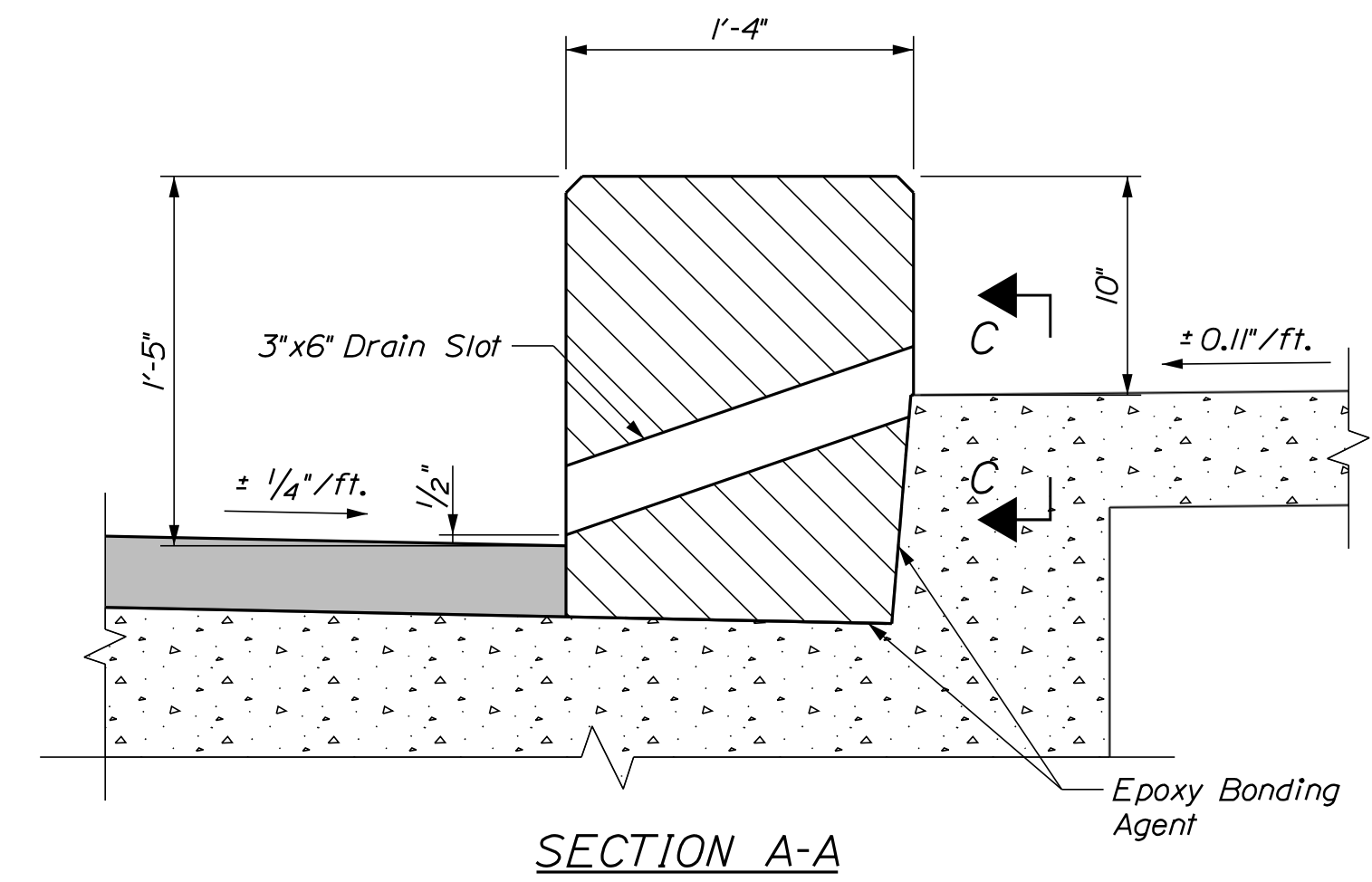
ELEVATION - ABUTMENT 1

(Traffic side of north railing shown)
(Abutment No. 1 shown, Abutment No. 2 similar)

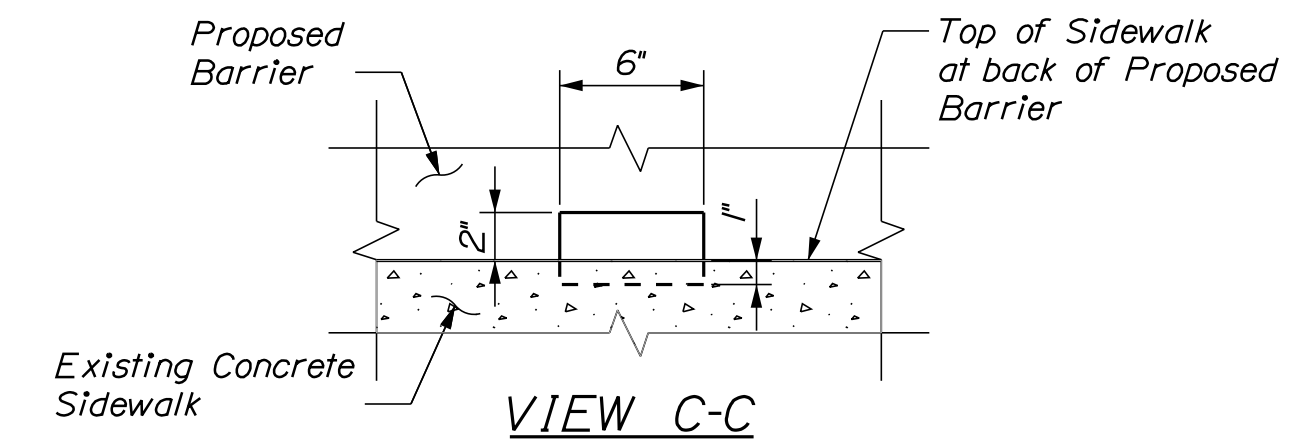


ELEVATION - PIER 2

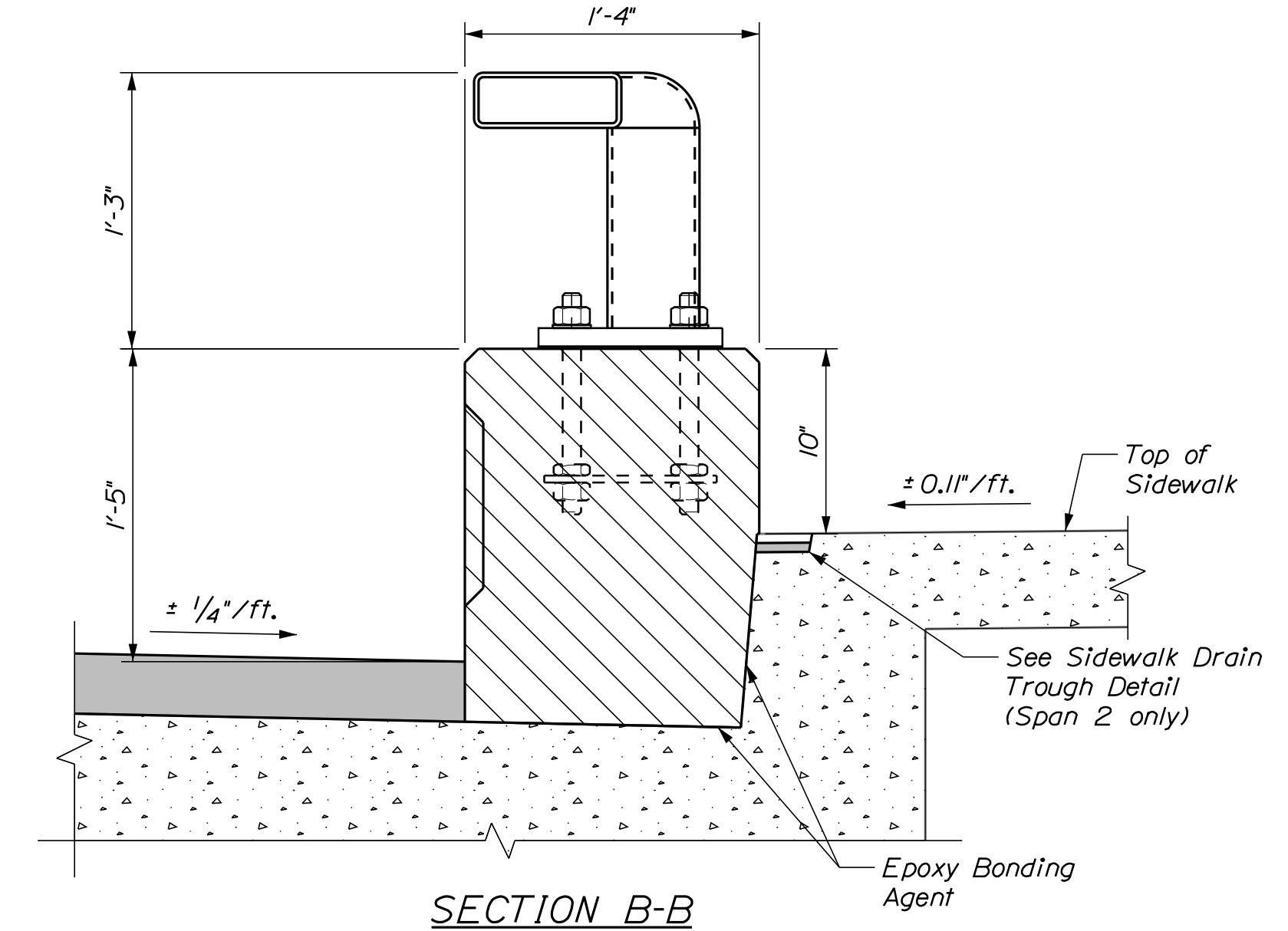
(Traffic side of north railing shown)
(Pier No. 2 shown, Pier No. 1 similar)



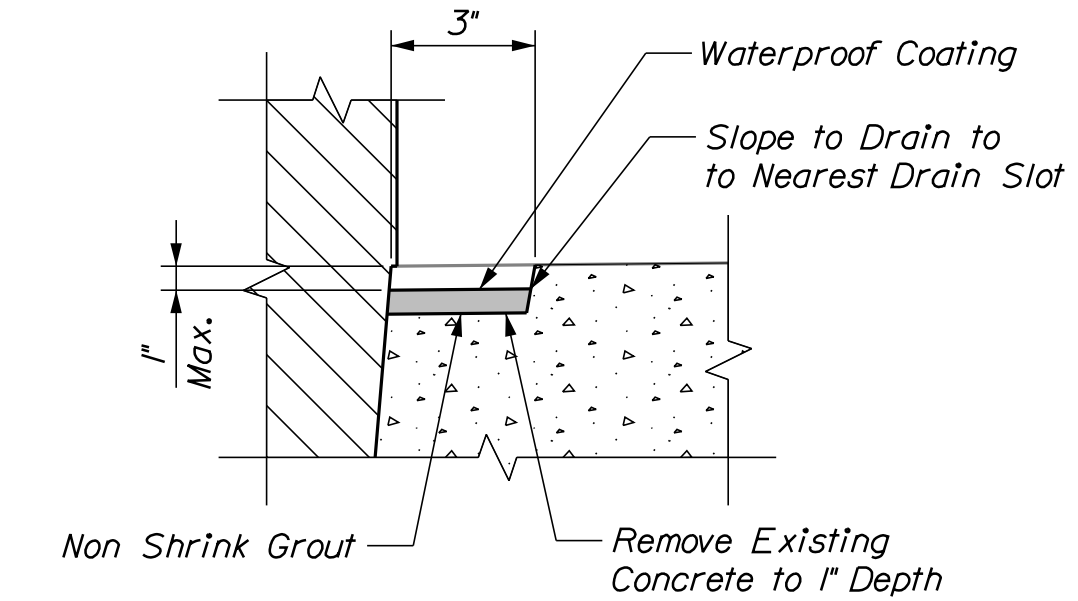
SECTION A-A



VIEW C-C



SECTION B-B



SIDEWALK DRAIN TROUGH DETAIL
(SPAN 2 ONLY)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2259(900) & NHPP-1865(000)
WIN
BRIDGE NO. 3330 22599.00 & 18650.00
BRIDGE PLANS

DATE	BY	DESIGNED	CHECKED	DESIGNED	REVISIONS	DATE
10/17	SAW	BLT	BLT		1	
10/17	BLT				2	
					3	
					4	

DATE	BY	DESIGNED	CHECKED	DESIGNED	REVISIONS	DATE
10/17	SAW	BLT	BLT		1	
10/17	BLT				2	
					3	
					4	

BERNARD LOW PEACE BRIDGE
ANDROSCOGGIN RIVER
AUBURN-LEWISTON ANDROSCOGGIN CO.
RAILING DETAILS
SHEET 1 OF 4

SHEET NUMBER

14

OF 20

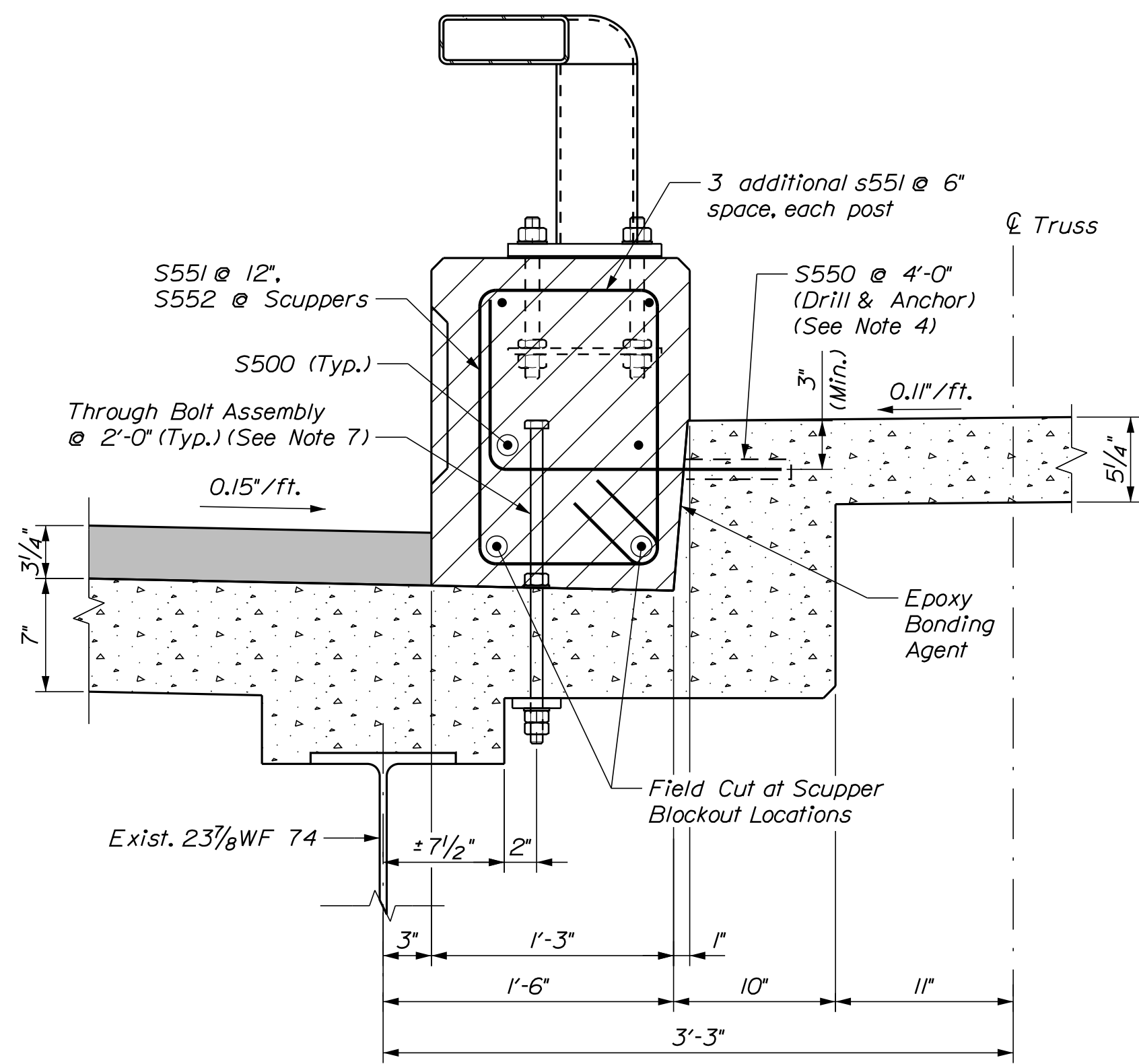
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Date: 12/12/2017

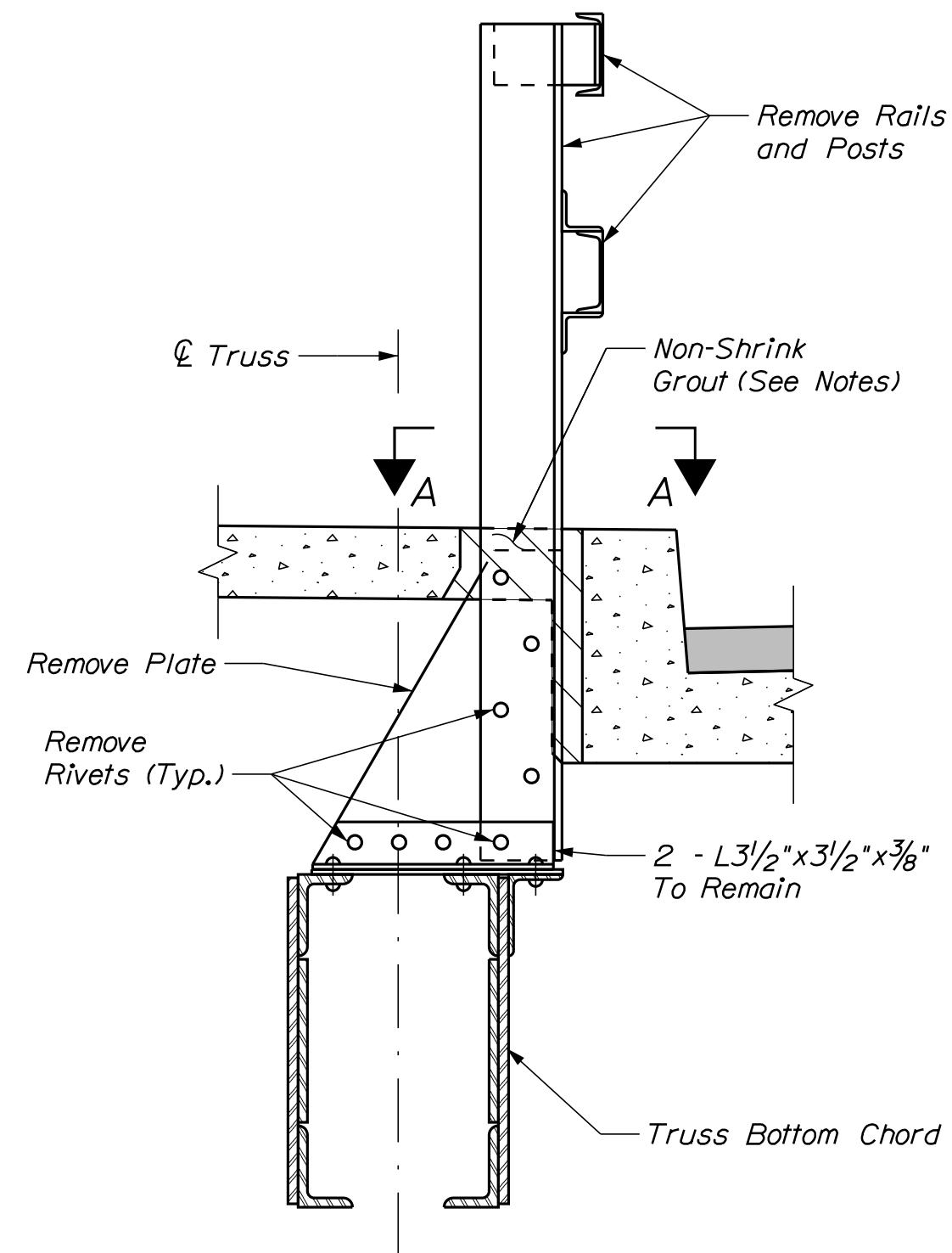
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Division: HIGHWAY

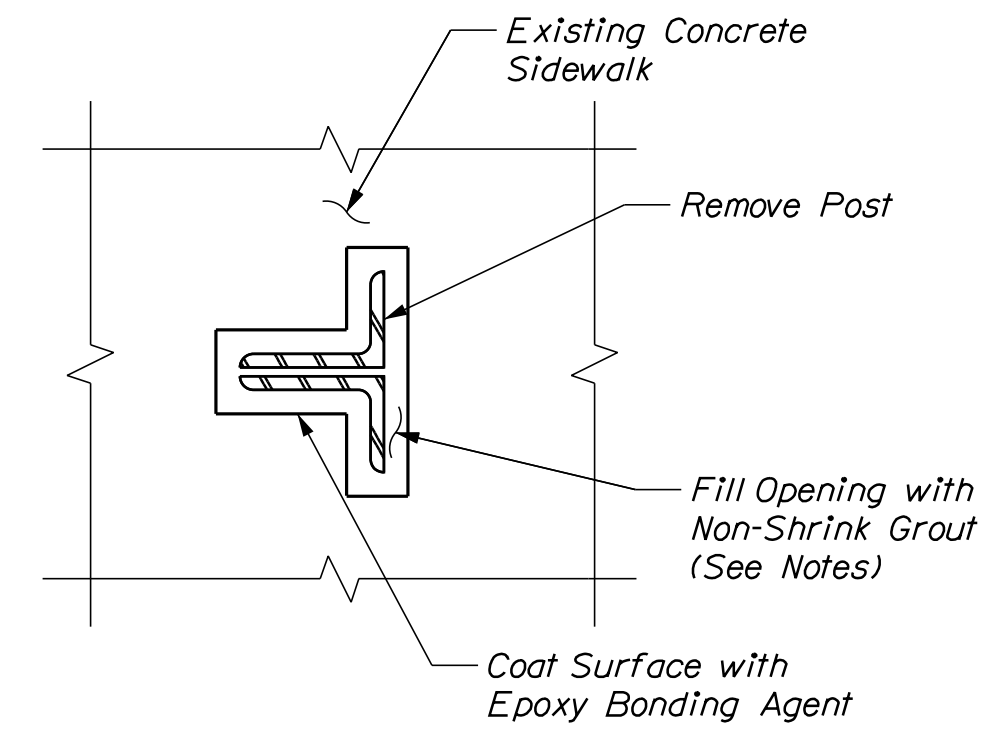
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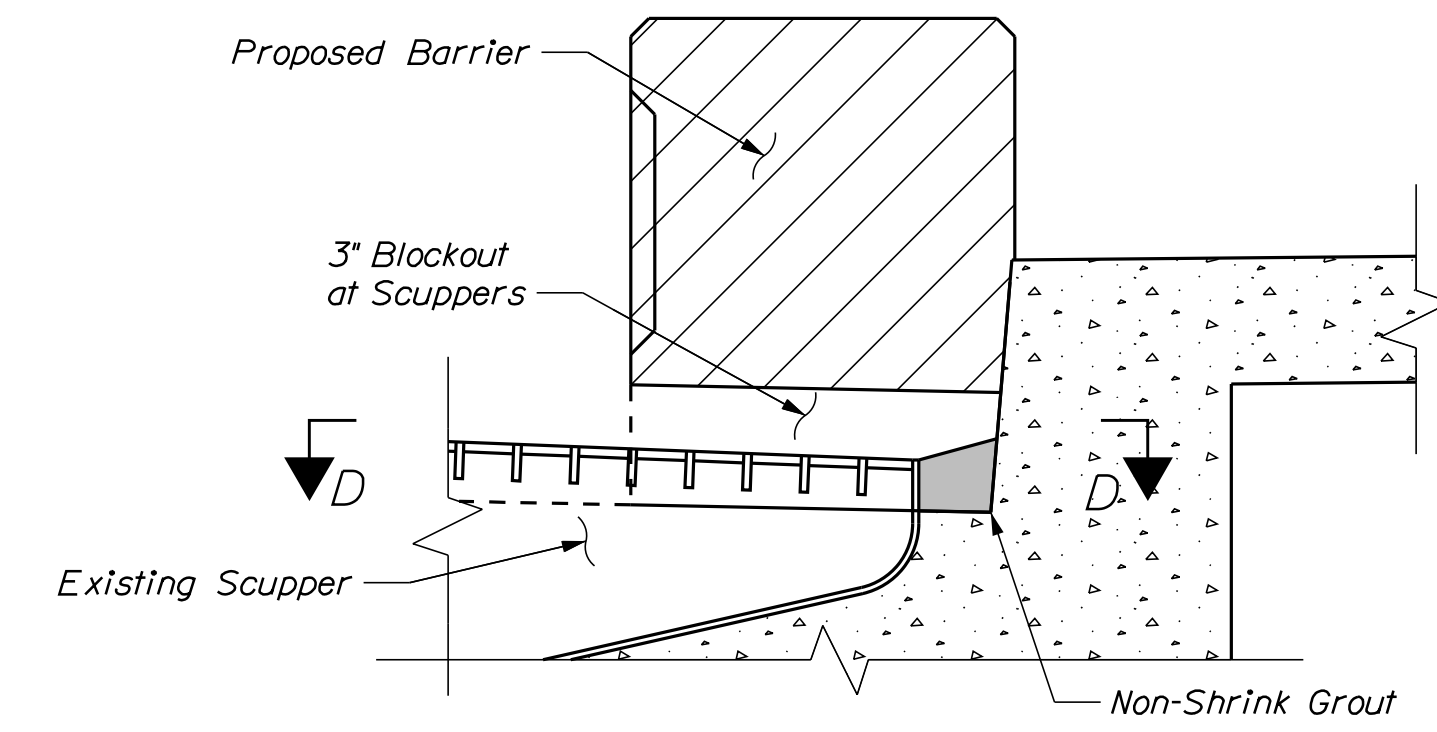
RAILING REINFORCEMENT SECTION



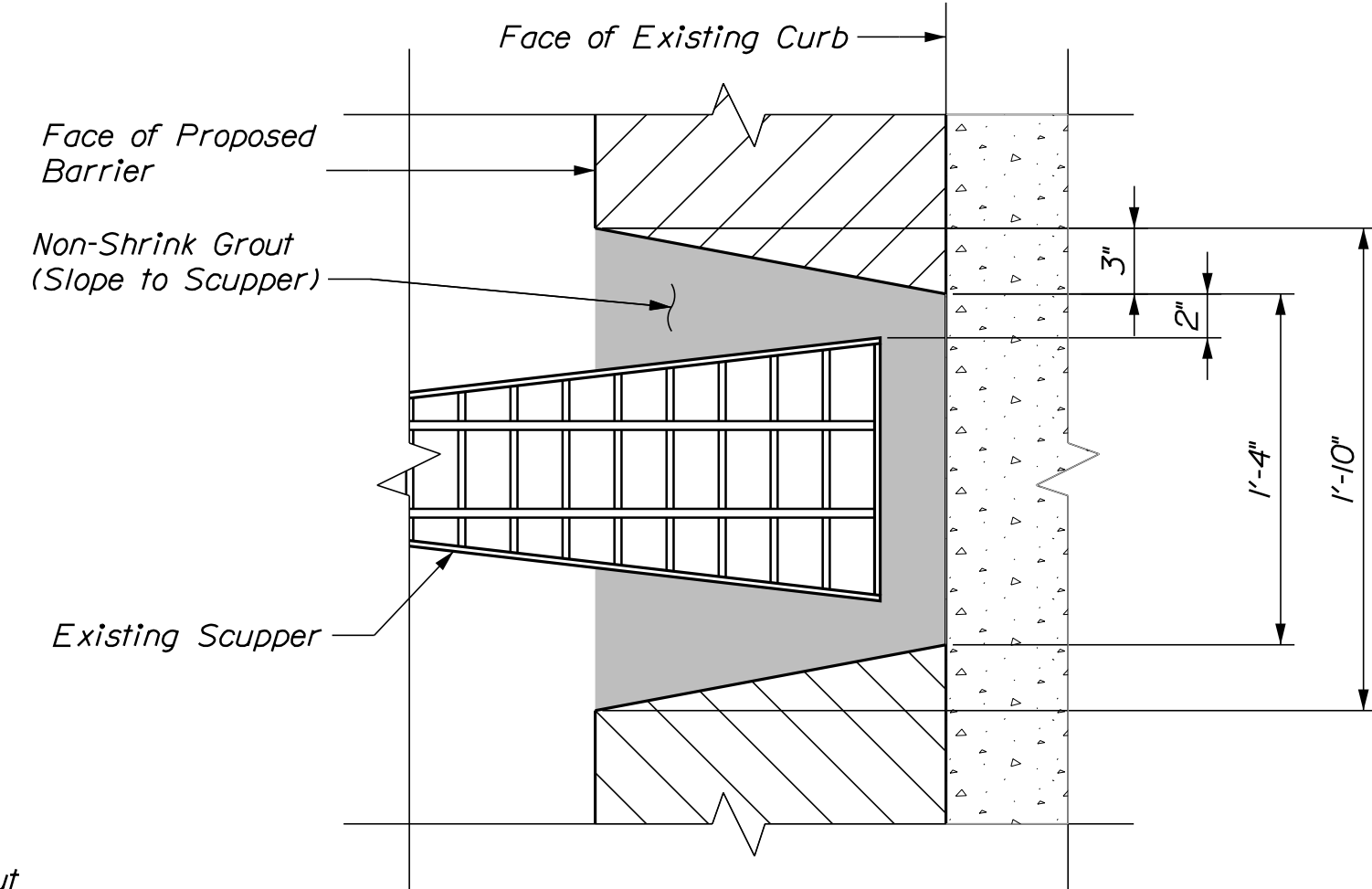
EXISTING RAIL REMOVAL SECTION
(See Note 6)



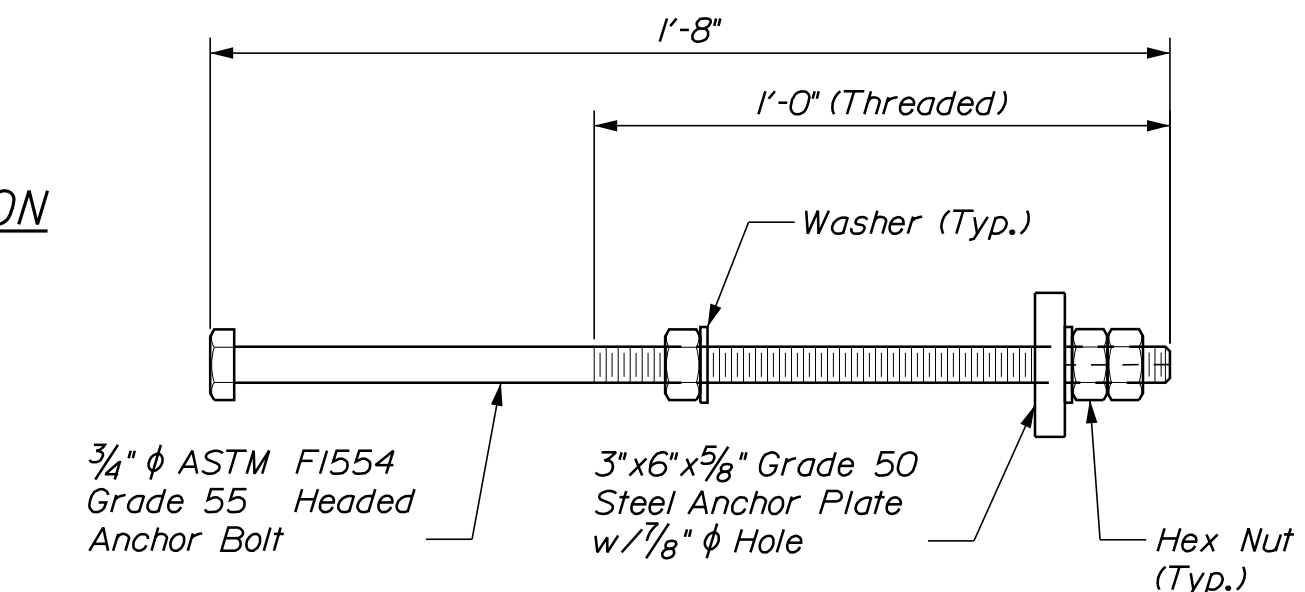
SECTION A-A



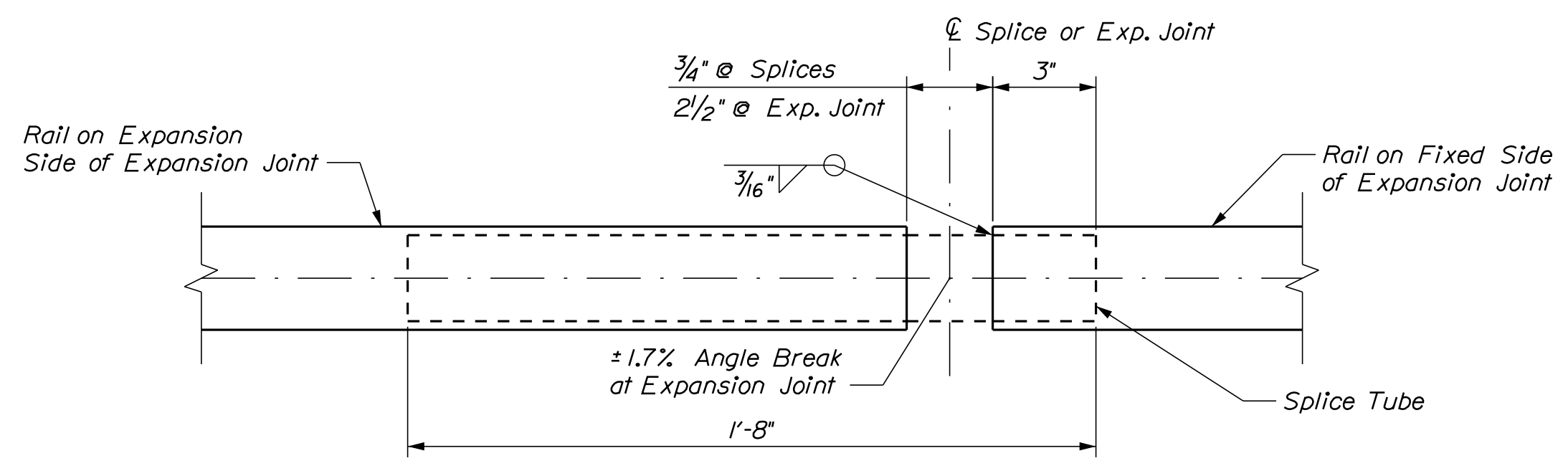
SCUPPER BLOCKOUT DETAIL



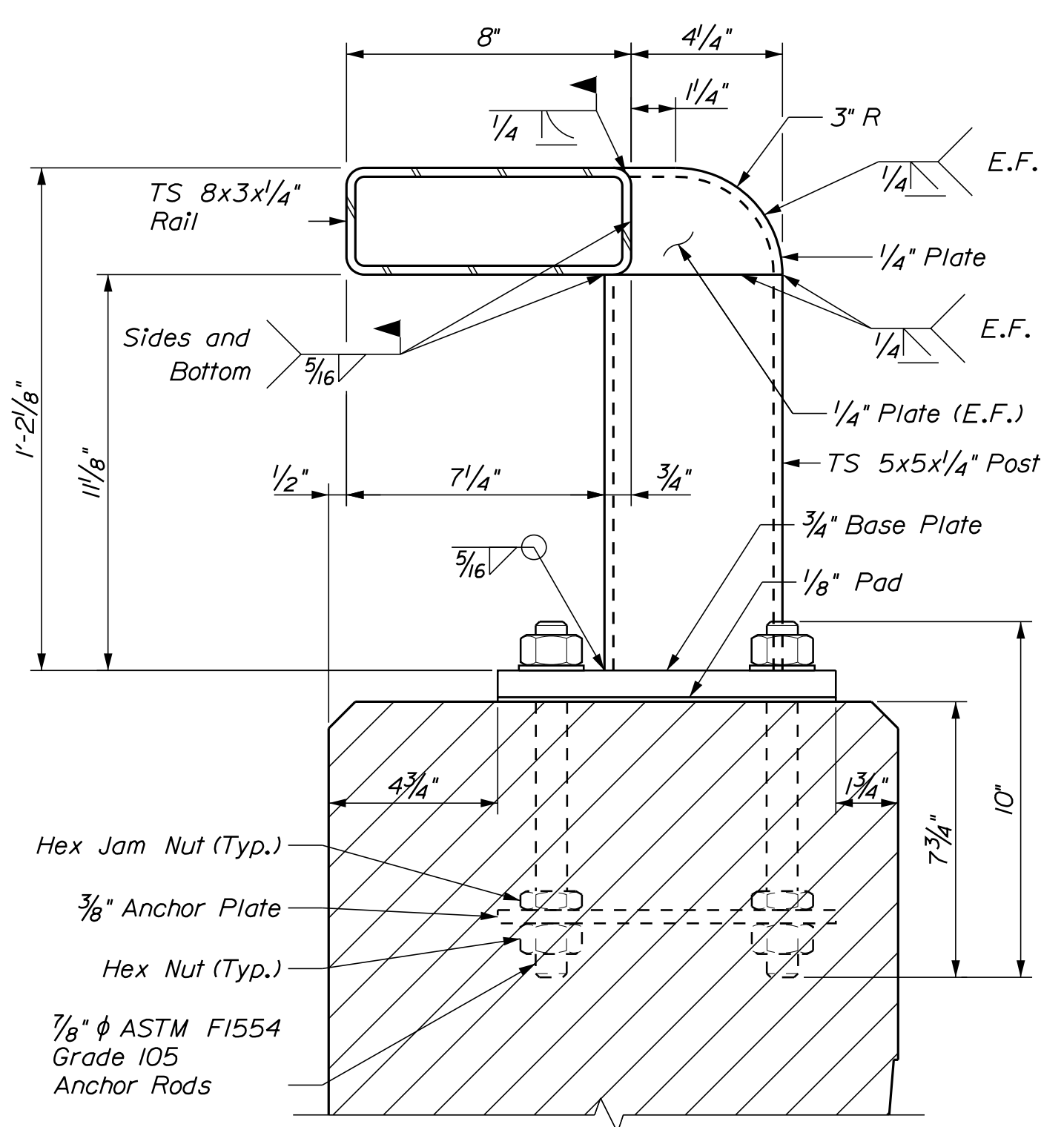
SCUPPER BLOCKOUT - SECTION D-D



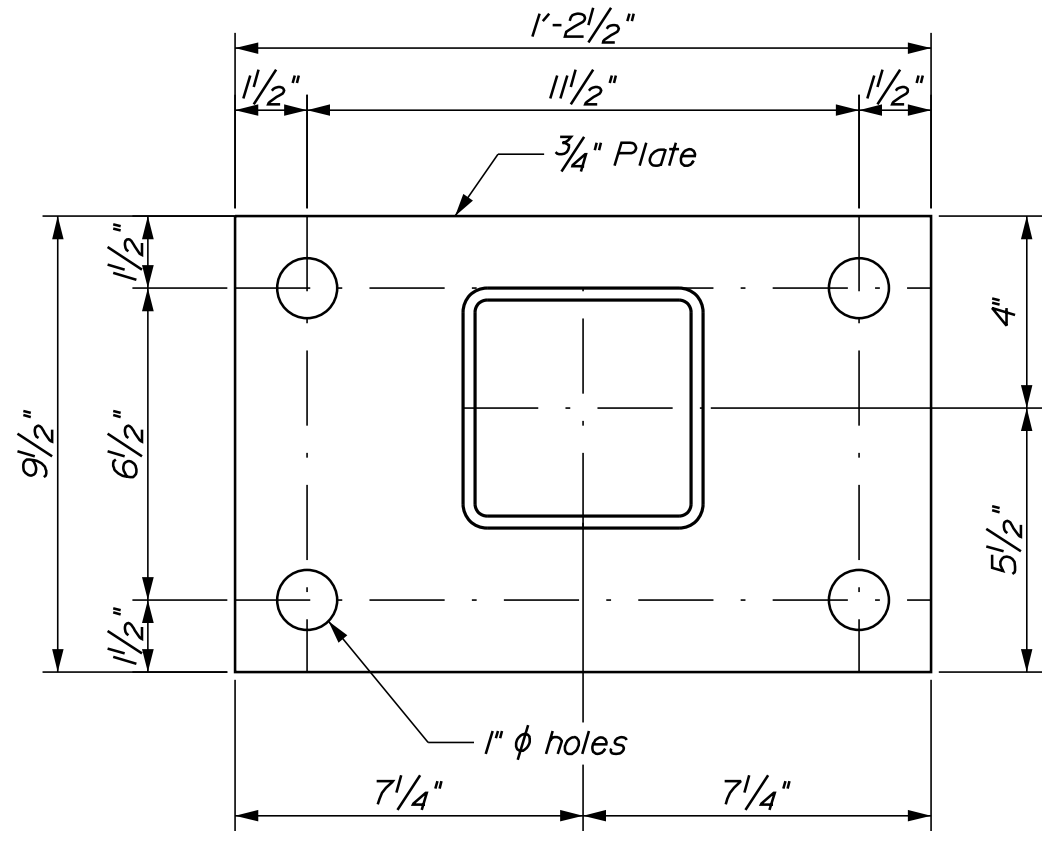
THROUGH BOLT ASSEMBLY



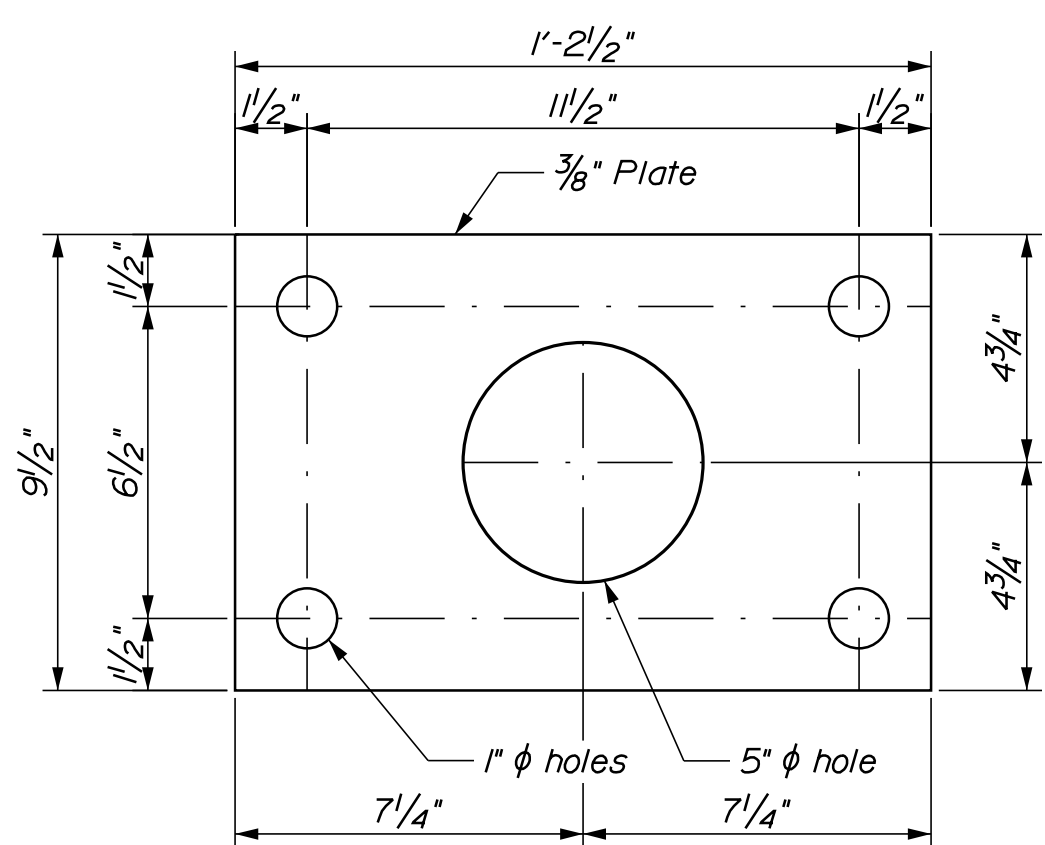
RAIL BAR SPICE/EXPANSION JOINT



RAILING DETAIL



BASE PLATE PLAN



ANCHOR PLATE PLAN

NOTES:

1. Payment for Non-Shrink Grout used to fill rail post openings shall be made under Item 518.51, "Repair of Upward Facing Surfaces - Below Reinforcing Steel < 8 In.
2. All elements of the Through Bolt Assembly shall be hot-dip galvanized.
3. Concrete barrier (including tapered ends), barrier reinforcement, and through bolt assembly are incidental to Item 526.341, "Permanent Concrete Barrier, Special."
4. Steel rail, posts, and anchorage to barrier (including at ends) are incidental to Item 507.0846, "Barrier-Mounted Steel Bridge Railing: I-Bar, Modified."
4. Drilled and anchored horizontal bars shall be embedded a minimum of 8" into existing concrete.
5. Rail bar splice/expansion joint splice tubes shall be fabricated and installed accordance with Standards 507(20), 507(21), 507(29), 507(30), and 507(31), unless noted otherwise. Contractor is responsible for verifying splice tube dimensions.
6. Removal of existing rails, posts, rivets, and plates shall be incidental to Item 202.14, "Removed Existing Railings Property of Contractor."
7. Where the deck is thickened at the floorbeams adjacent to the pier joints, 4 ~ S576E @ 12" on each side of the joint at each barrier (32 total) shall be drilled and anchored down into the existing deck in place of the anchor bolt assemblies. A minimum embedment of 8" shall be used.

PROJ. MANAGER	DATE	BY	DATE
DESIGN DETAILED	10/17	SAM	10/17
CHECKED/REVIEWED		BLT	
DESIGN DETAILED			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SHEET NUMBER

15

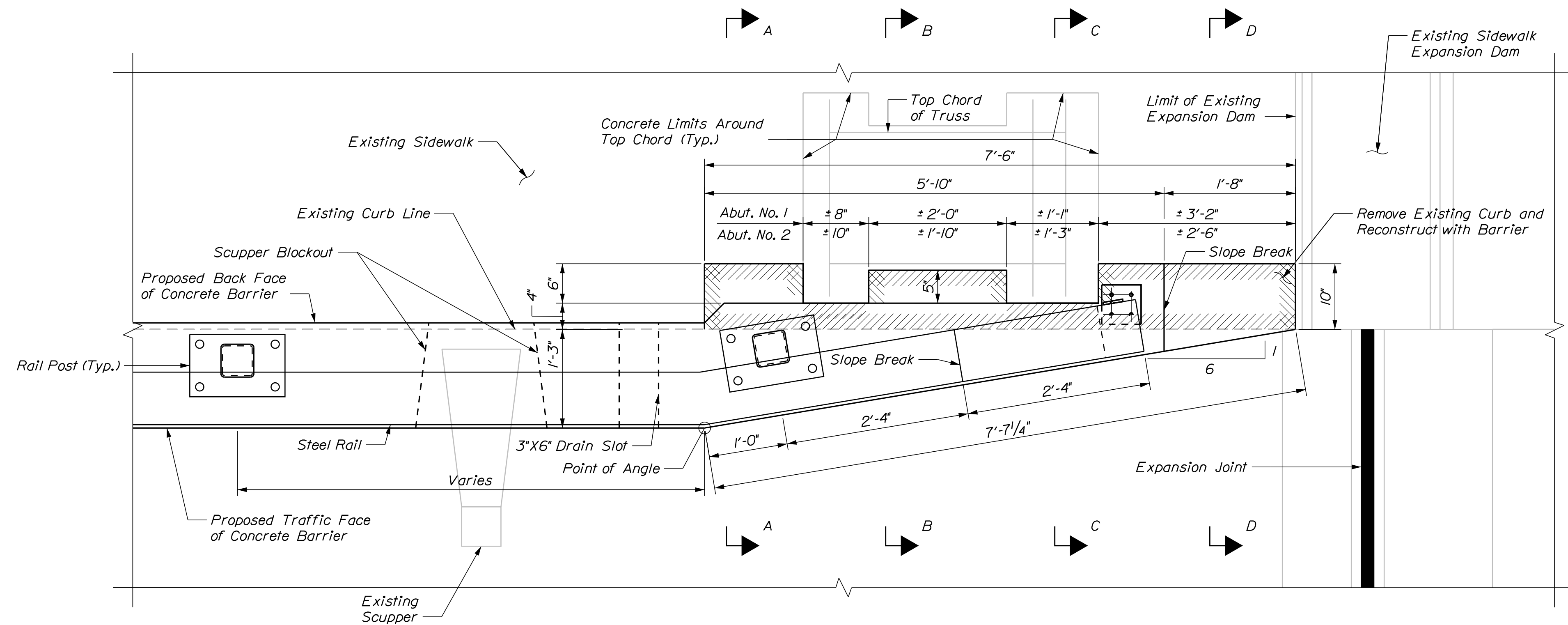
OF 20

Date: 12/12/2017

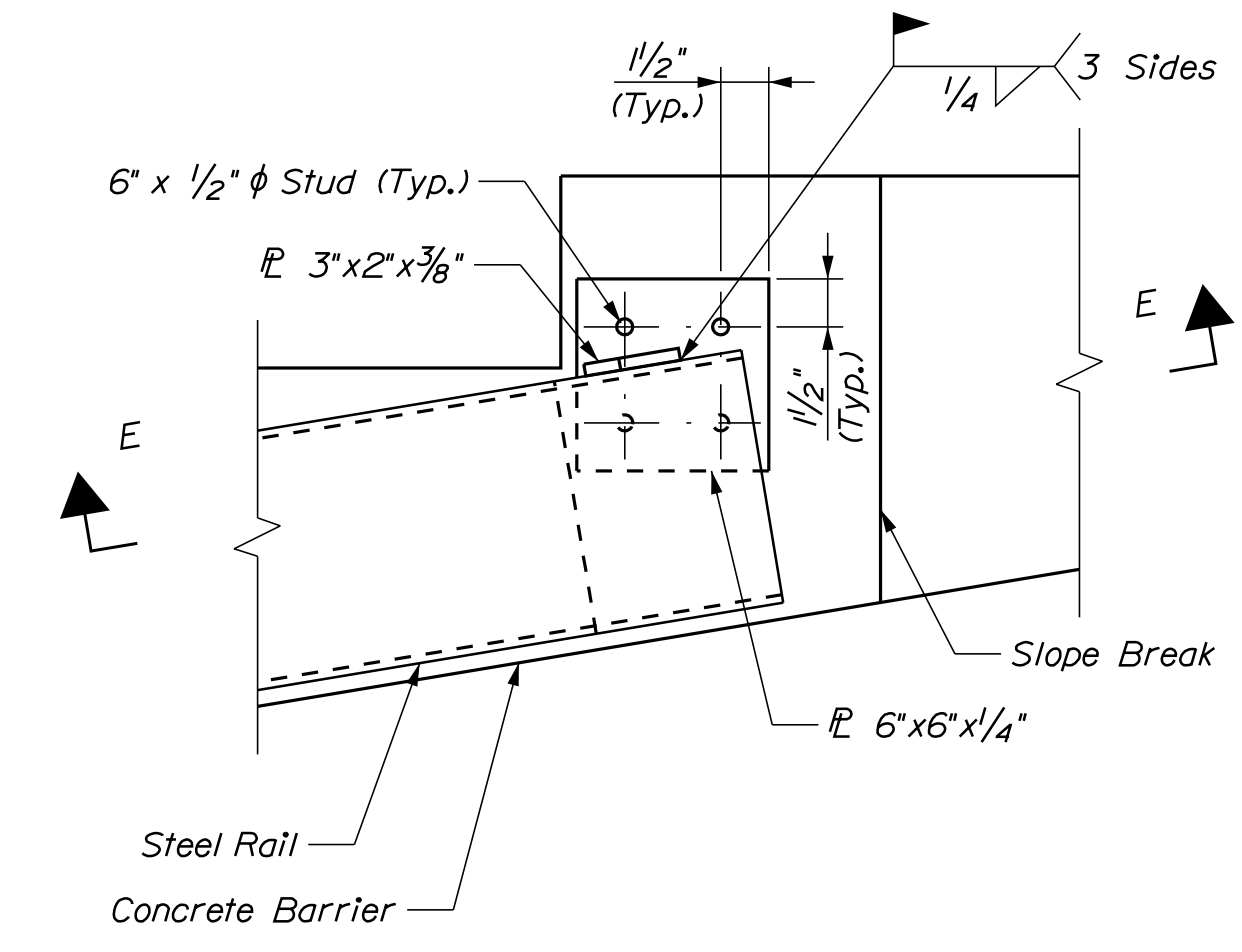
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Division: HIGHWAY

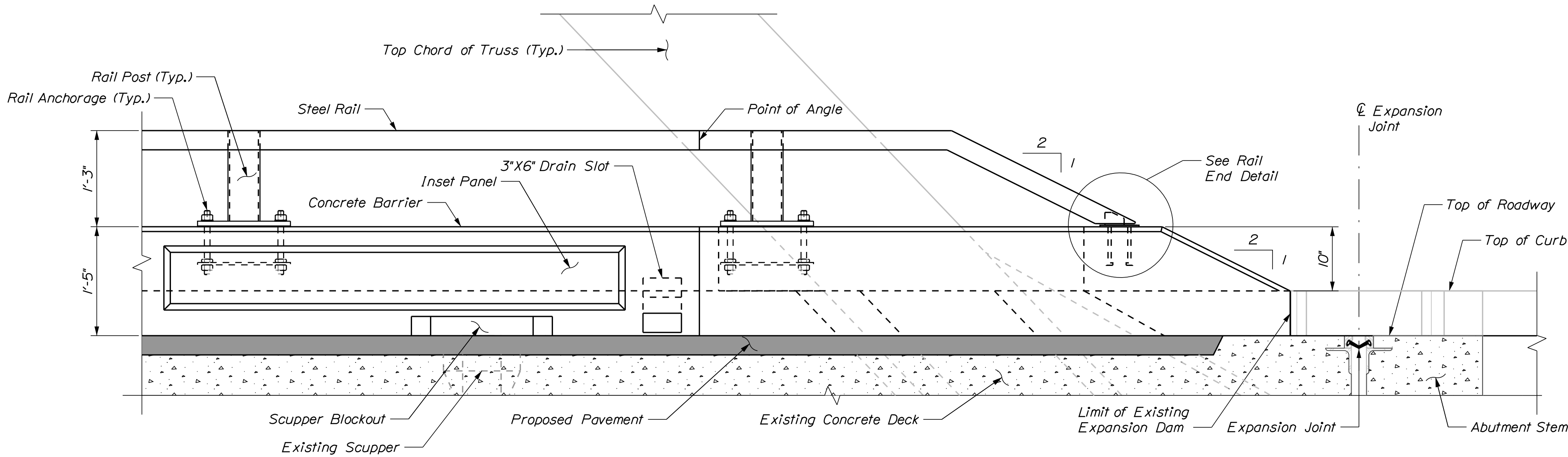
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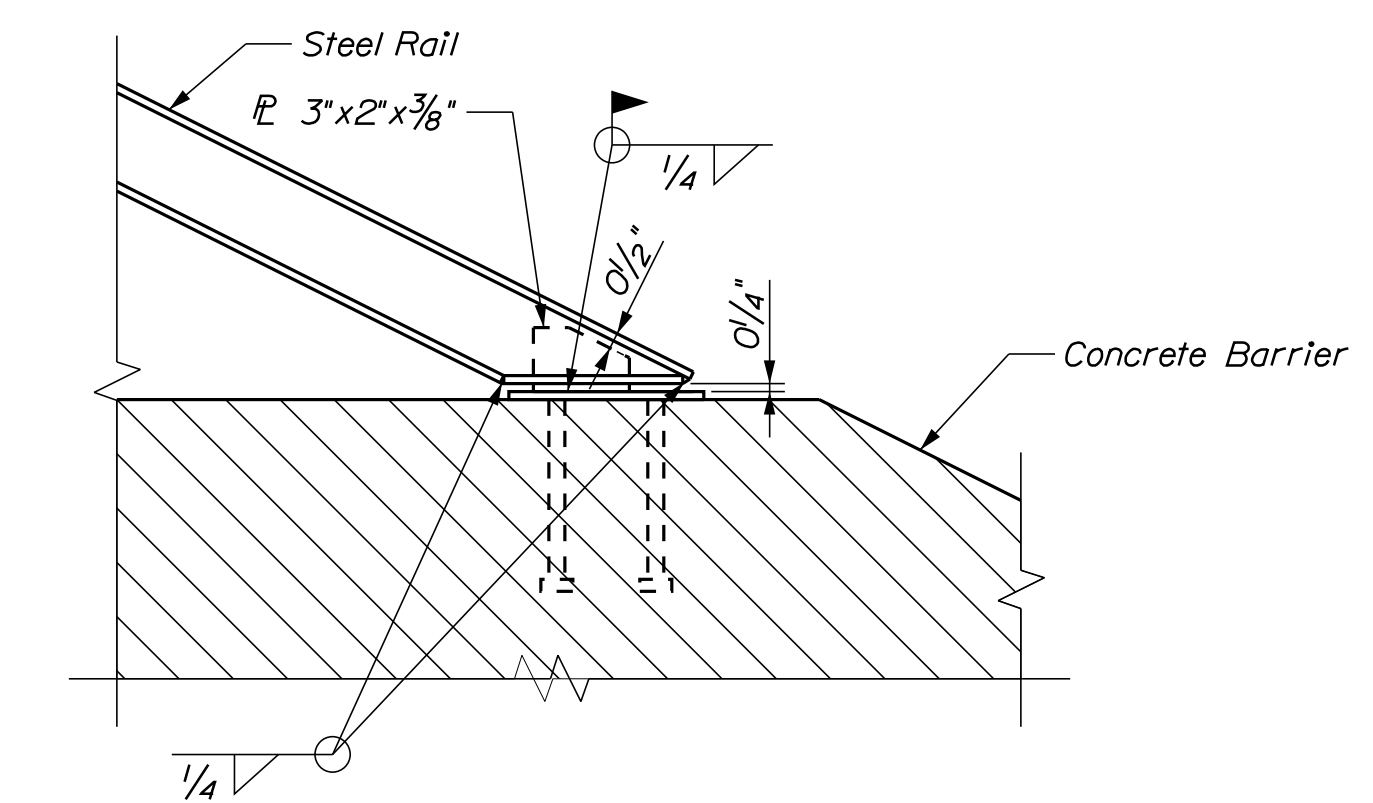
TRANSITION RAILING PLAN



RAIL END DETAIL



TRANSITION RAILING ELEVATION



SECTION E-E

NOTES:

1. For additional details and dimensions, see sheet "Railing Details Sheet 1 of 4."
2. For Notes, scupper blockout details, and steel rail details, see sheet "Railing Details Sheet 2 of 4."
3. For additional sections and reinforcing details, see sheet "Railing Details Sheet 4 of 4."

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-2259(900) & NHPP-1865(000)
 WIN
 BRIDGE NO. 3330 22599.00 & 18650.00 BRIDGE PLANS

DATE	SIGNATURE	P.E. NUMBER	DATE
10/17			
10/17			

PROJ. MANAGER	BY	DATE
H. COWAN	SAM	10/17
DESIGN-DETAILED	DSM	
CHECKED-REVIEWED	BLT	
DESIGN-DETAILED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BERNARD LOWN PEACE BRIDGE
 ANDROSCOGGIN RIVER
 AUBURN-LEWISTON ANDROSCOGGIN CO.
 RAILING DETAILS
 SHEET 3 OF 4

SHEET NUMBER

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OF 20

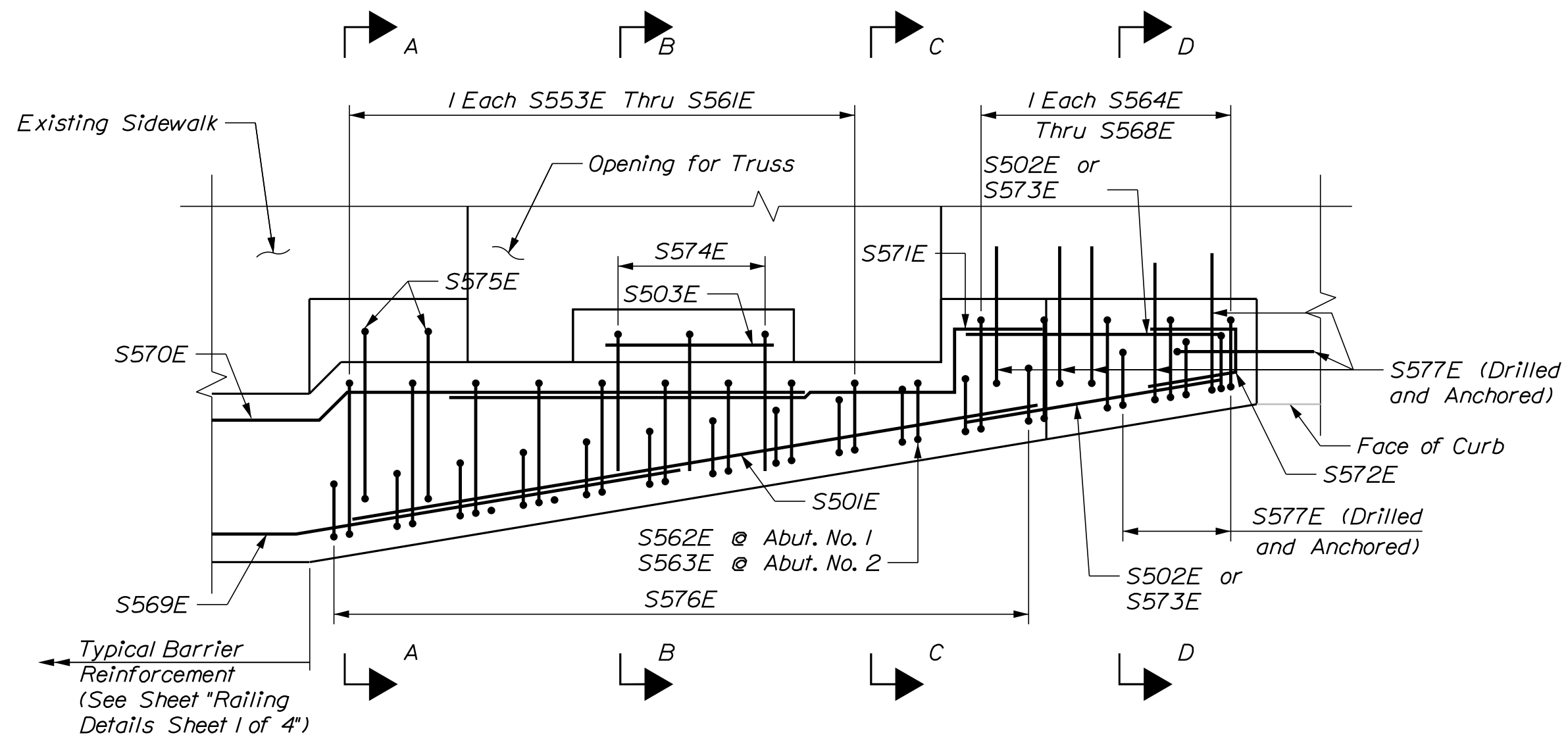
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Date: 12/12/2017

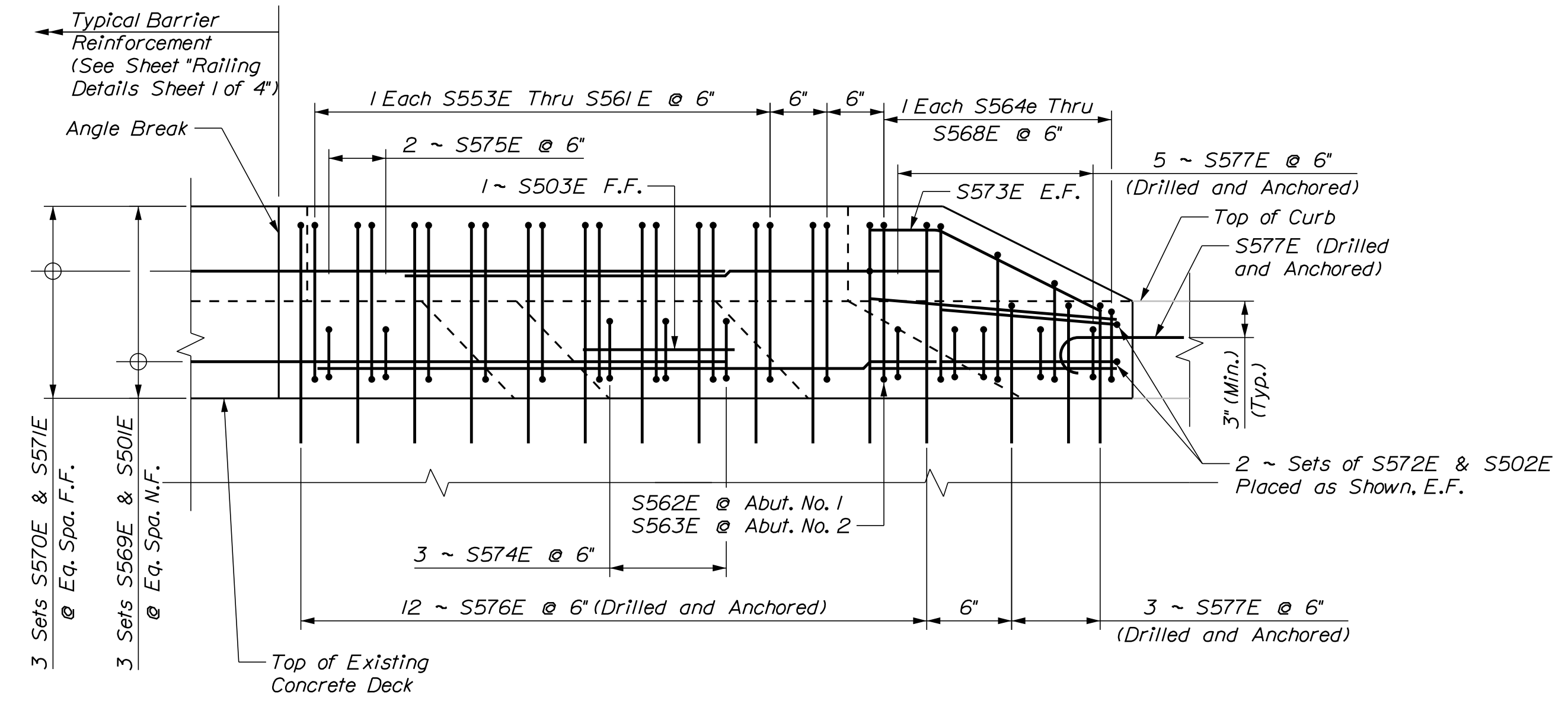
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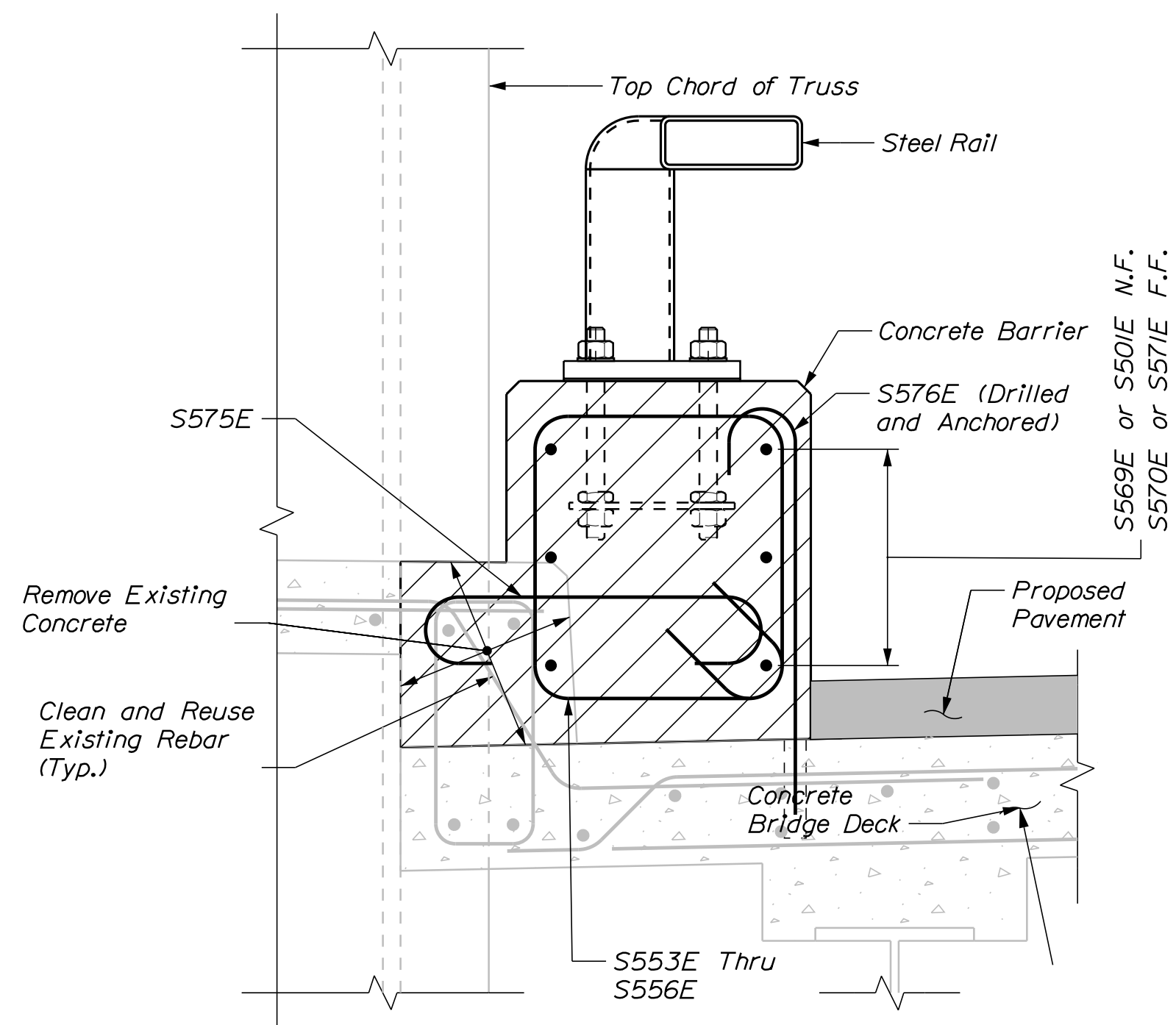
TRANSITION BARRIER REINFORCEMENT PLAN



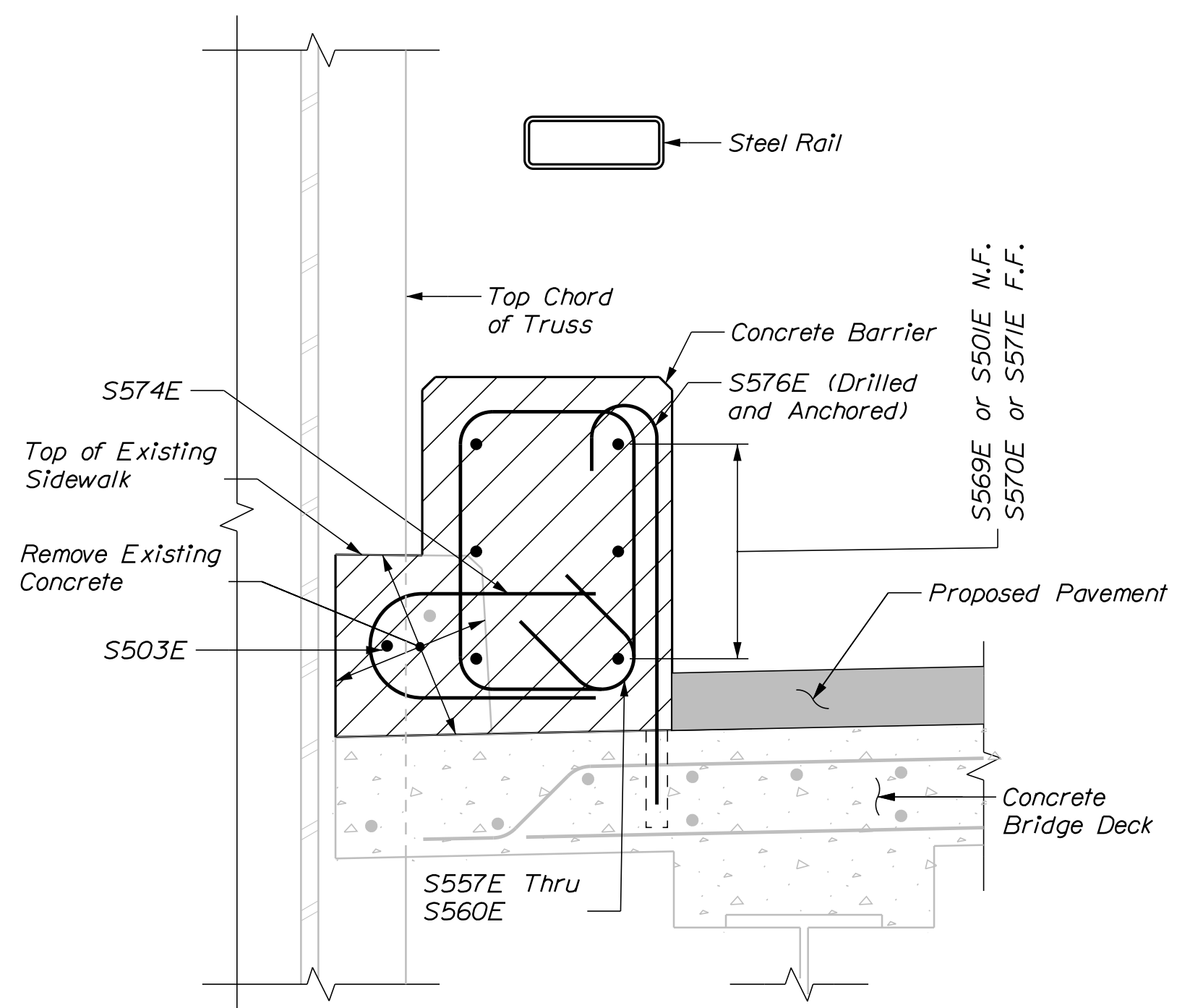
TRANSITION BARRIER REINFORCEMENT ELEVATION

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

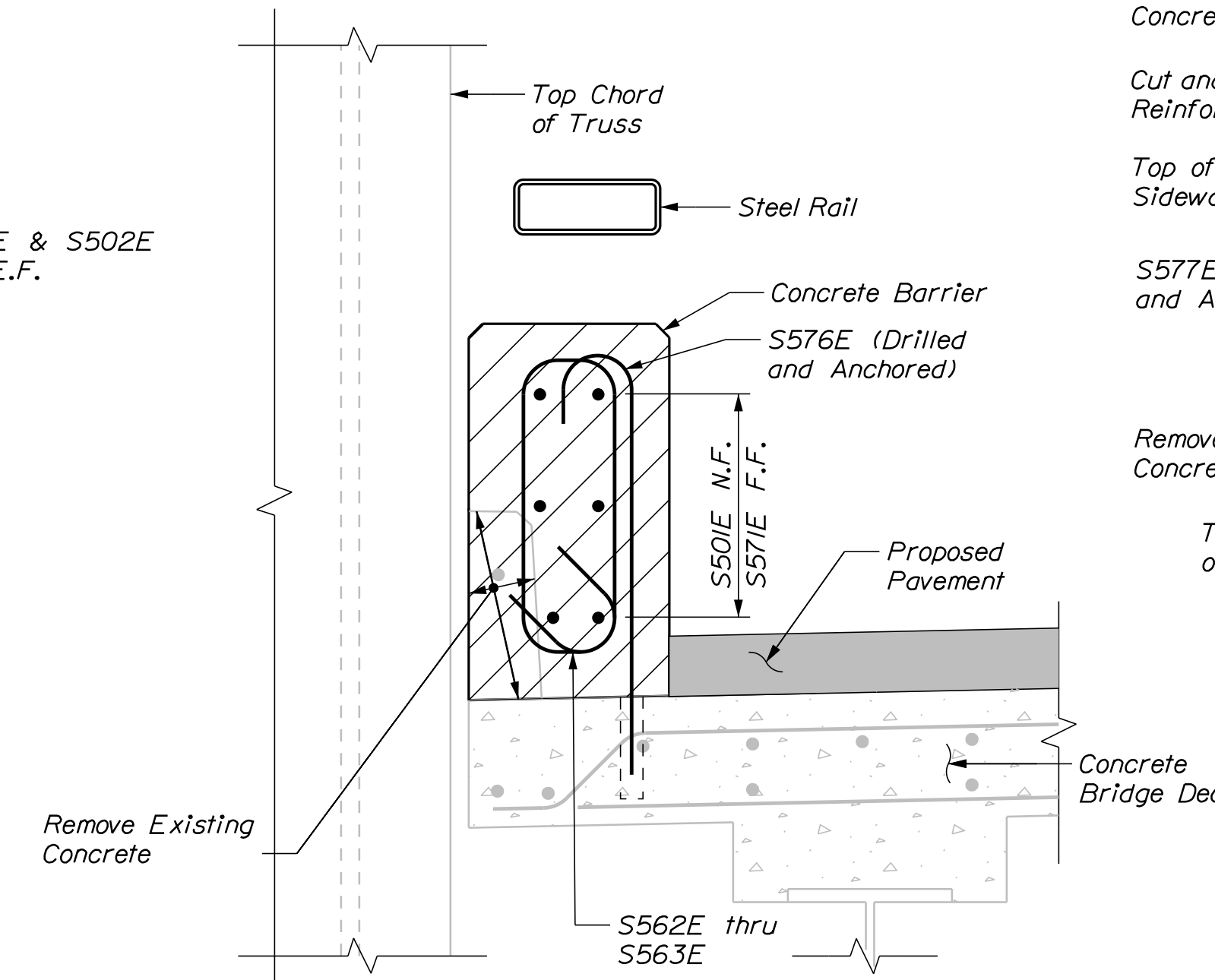
- NOTES:**
1. Payment for steel rail and concrete transition barrier shall be made under items 507,0846 and 526,341, respectively, as shown on sheet "Railing Details Sheet 1 of 4."
 2. Drilled and anchored bars in transition barrier shall be anchored a minimum of 5/2".



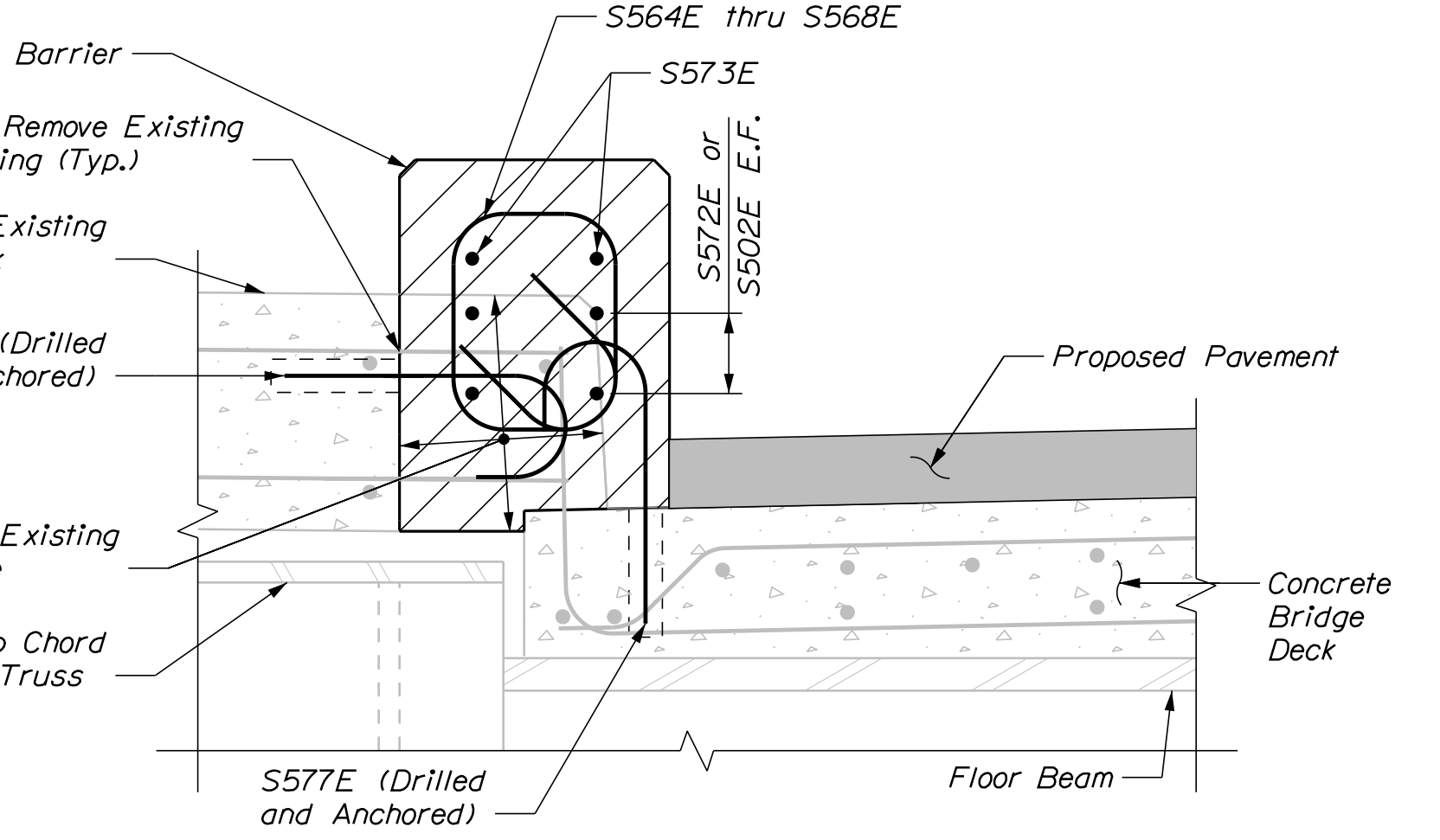
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-2259(900) & NHPP-1865(000)		BRIDGE NO. 3330 WIN 225999.00 & 18650.00 BRIDGE PLANS	
PROJ. MANAGER H. COWAN	DESIGN-DETAILED DSM	CHECKED-REVIEWED BLT DSM	DATE 10/17 10/17
DESIGN-DETAILED DSM	DESIGN-DETAILED BLT	REVISIONS 1 2 3 4	DATE
BERNARD LOWN PEACE BRIDGE ANDROSCOGGIN RIVER AUBURN-LEWISTON ANDROSCOGGIN CO.		SIGNATURE P.E. NUMBER DATE	
RAILING DETAILS SHEET 4 OF 4		SHEET NUMBER 17	

Date: 12/12/2017

Username:

Division: HIGHWAY

Filename: ...MSTAN018_Joint_Details_01.dgn

DATE	BY	DESIGN	CHECKED	DESIGNED	REVISIONS	FIELD CHANGES
10/17	BLT	BLT	DSM			
10/17	DSM					
					1	
					2	
					3	
					4	

PROJ. MGR.	H. COWAN	DATE	DATE	DATE	DATE	DATE

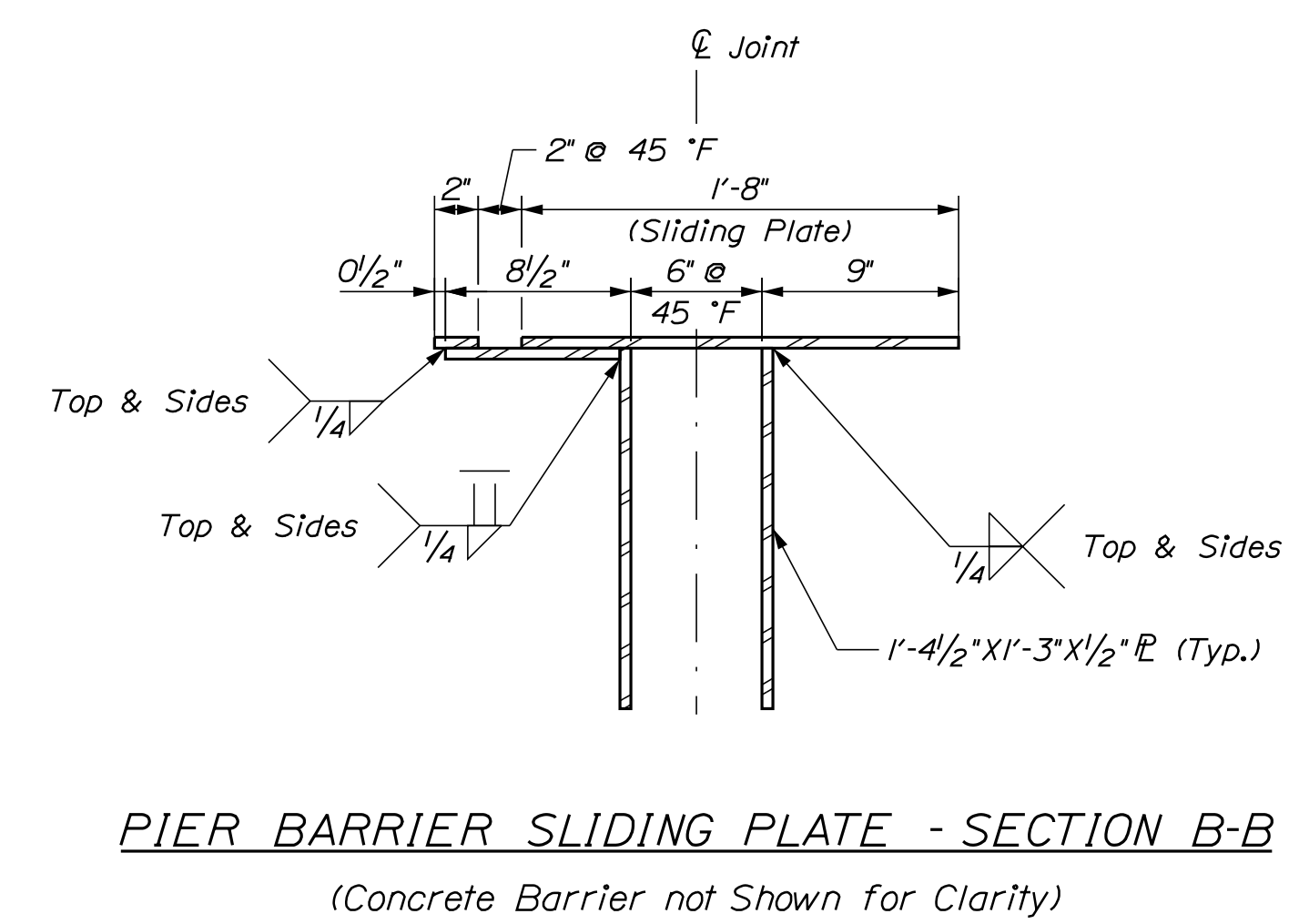
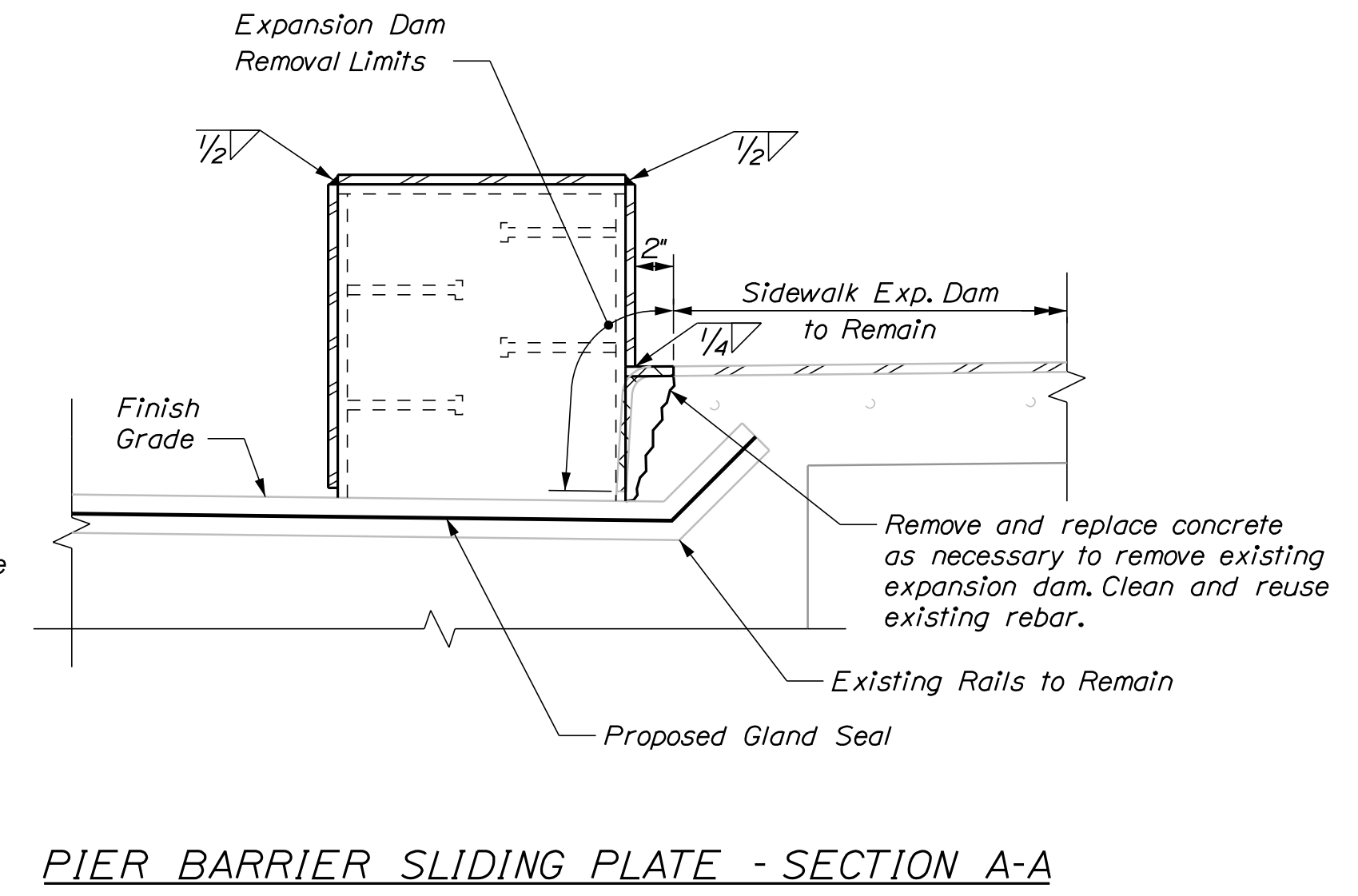
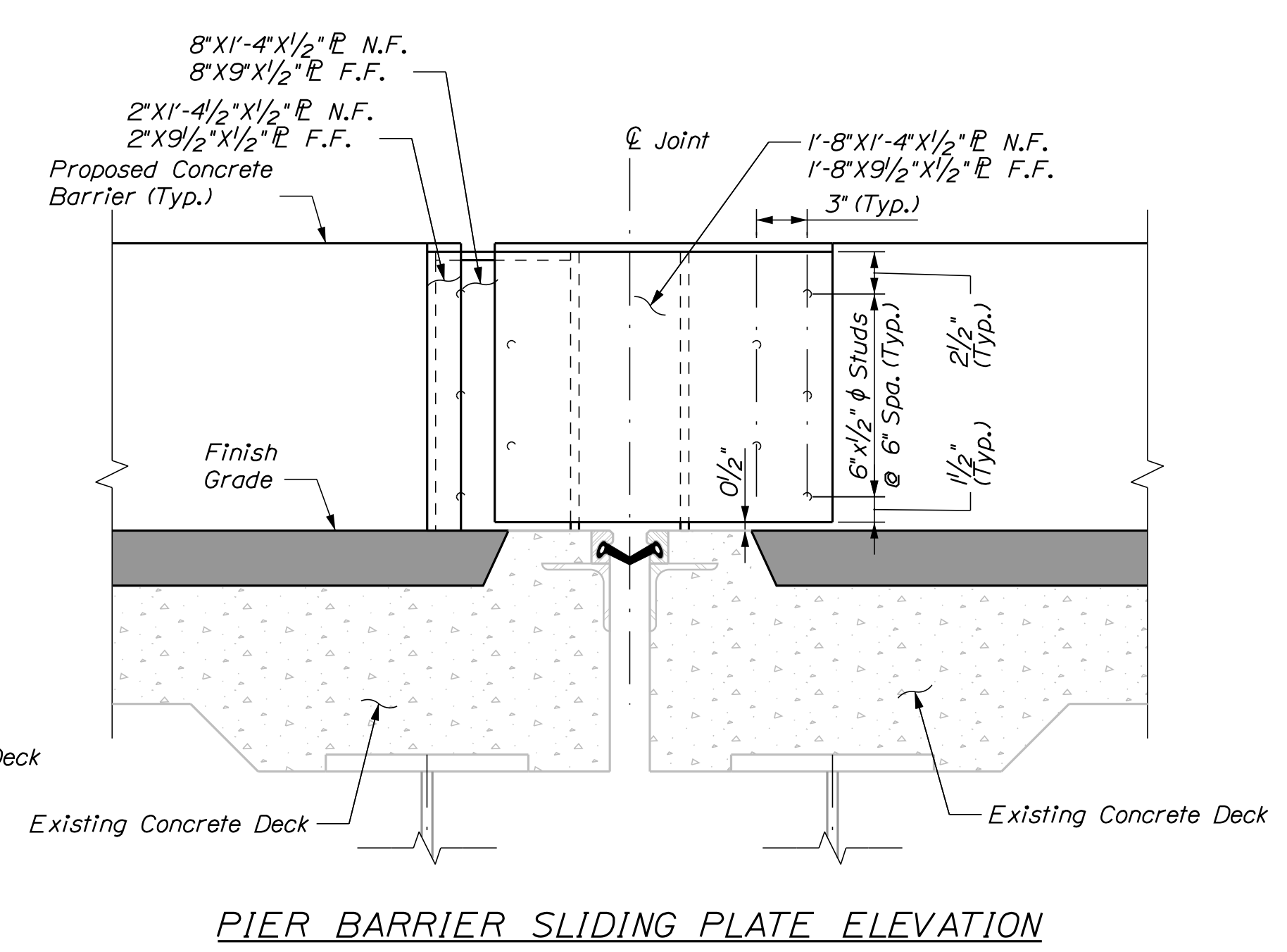
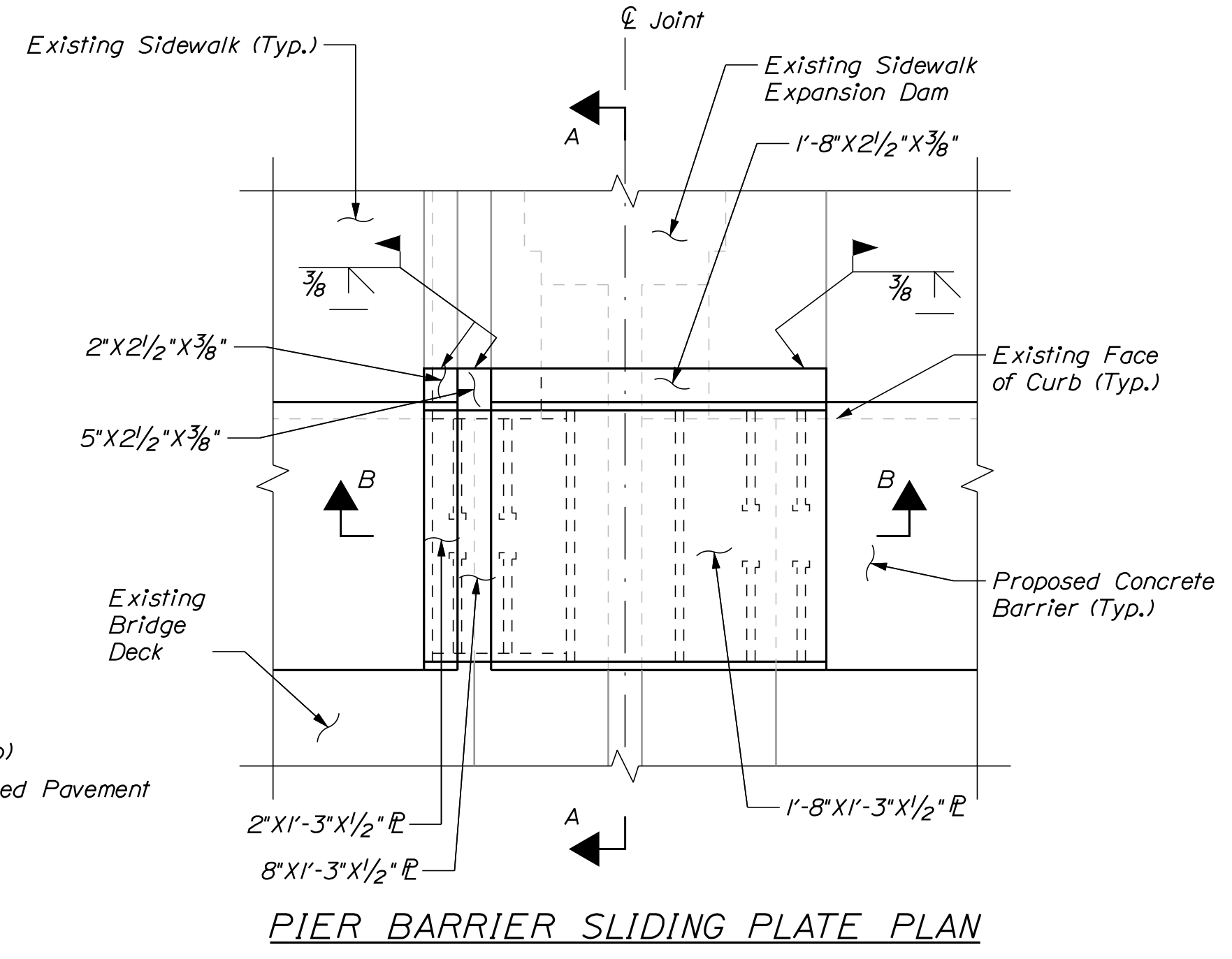
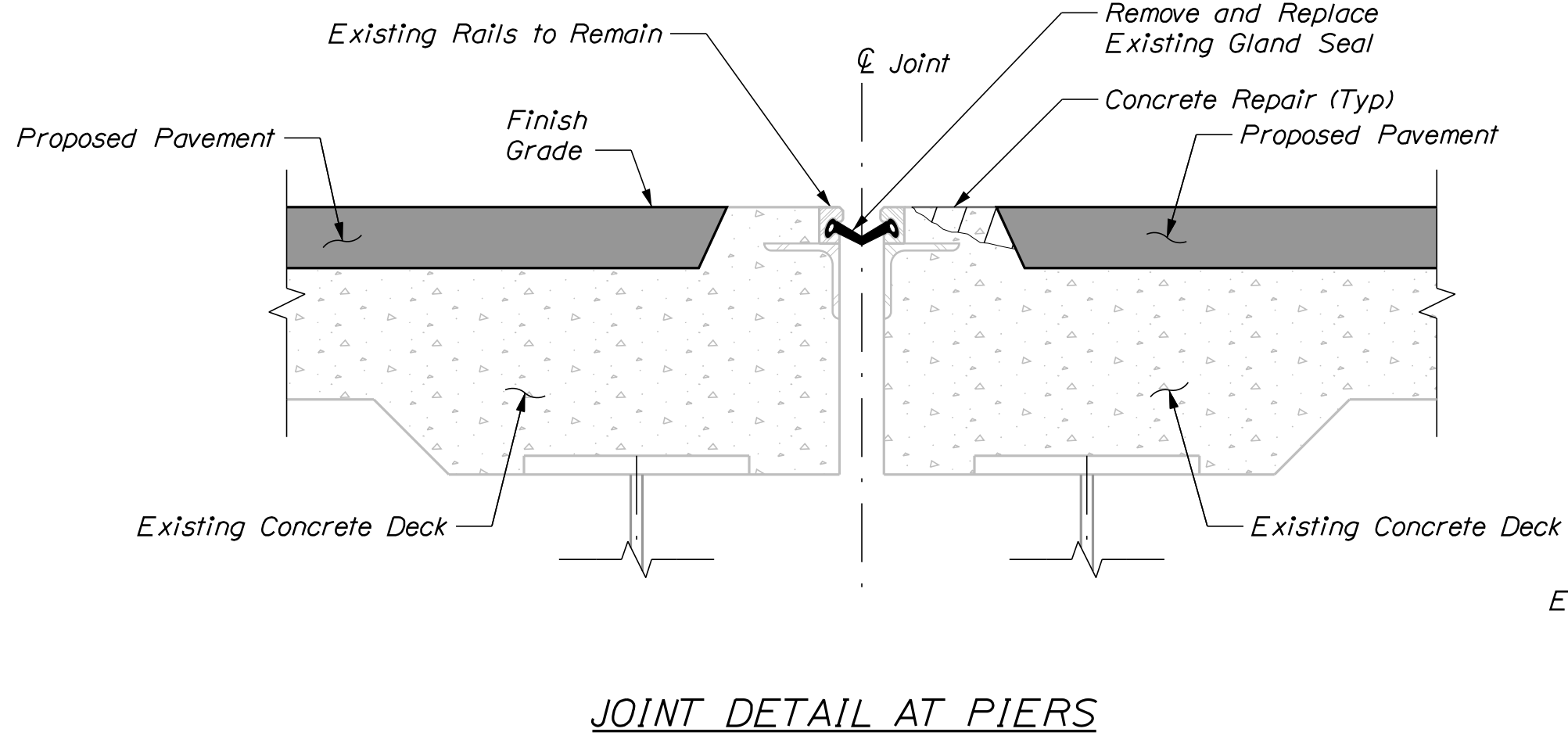
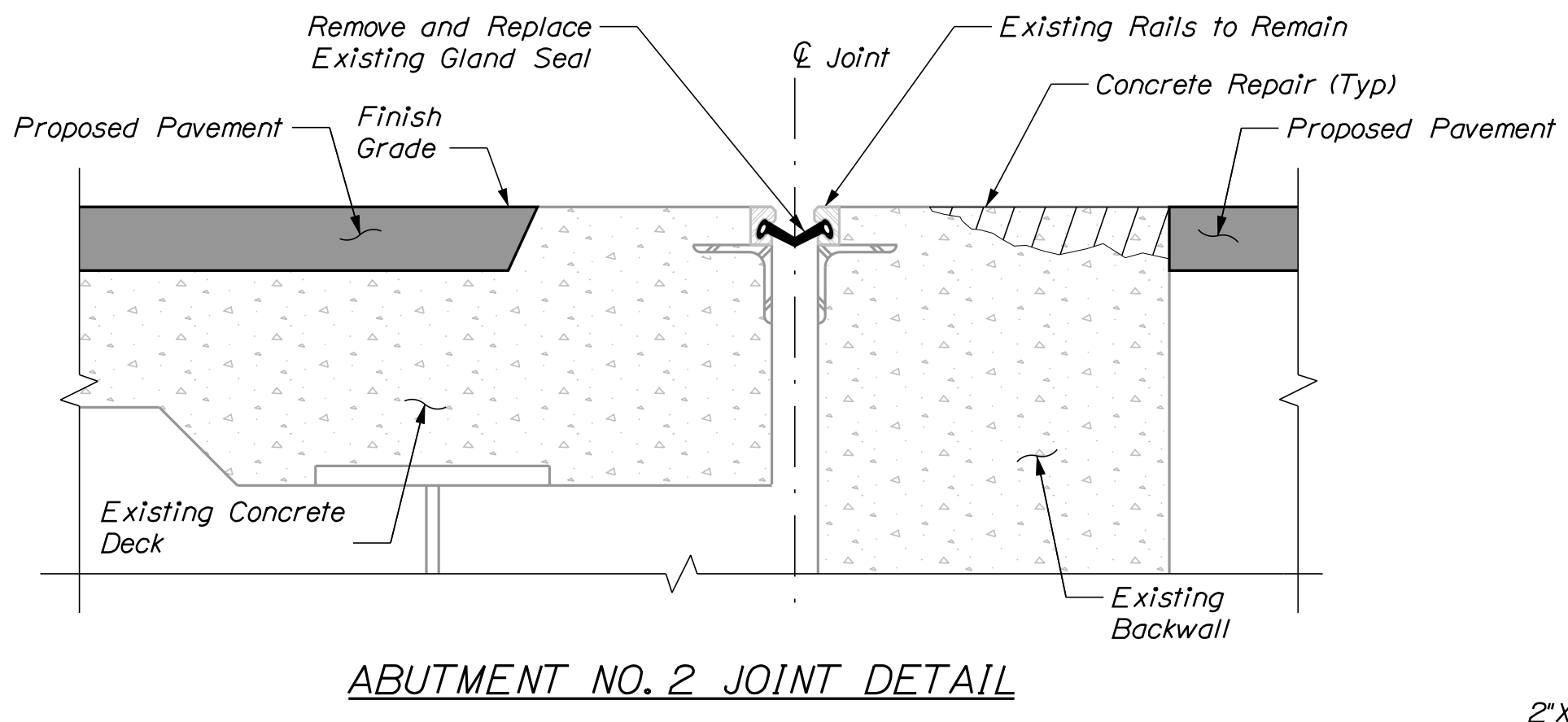
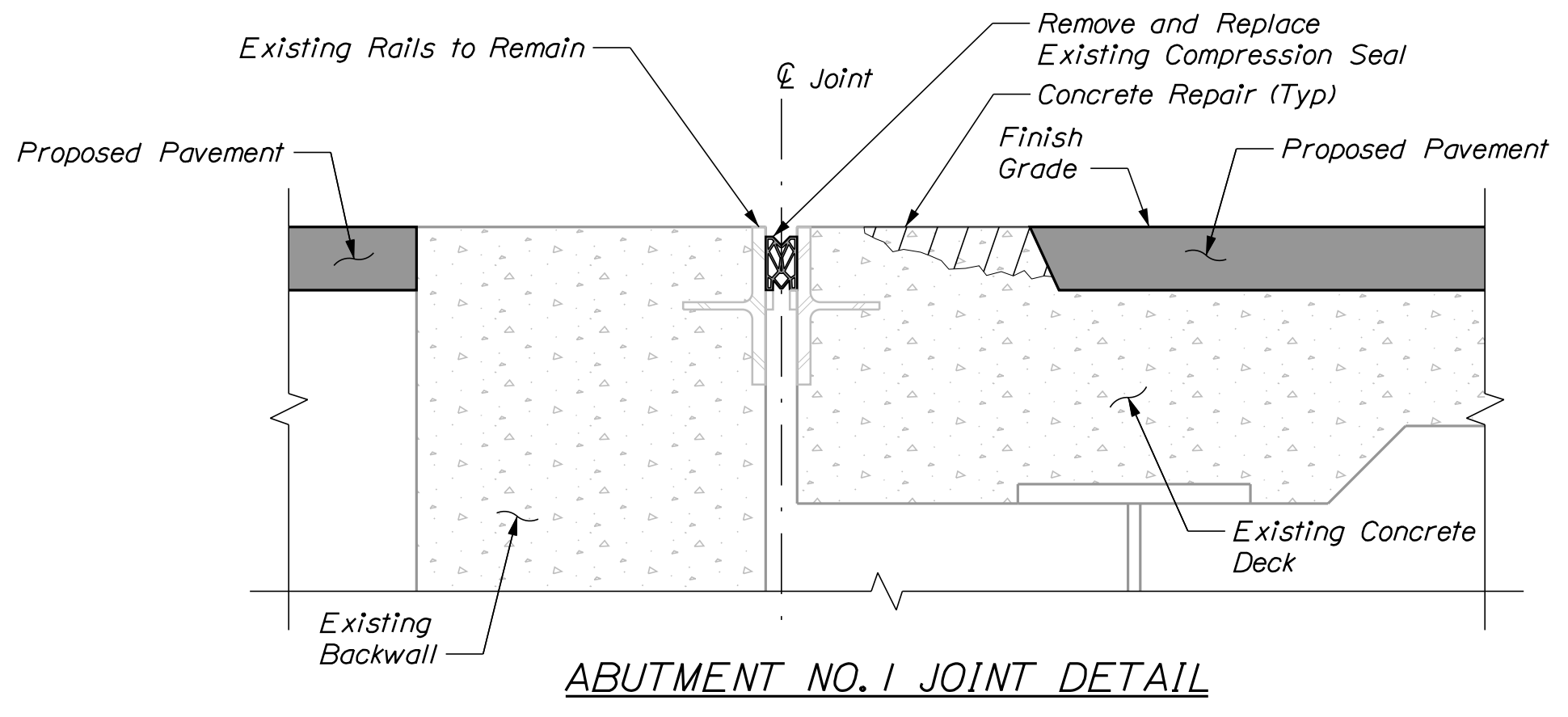
BERNARD LOWN PEACE BRIDGE
 ANDROSCOGGIN RIVER
 AUBURN-LEWISTON ANDROSCOGGIN CO.
 JOINT DETAILS

SHEET NUMBER

18

OF 20

TYLINT INTERNATIONAL

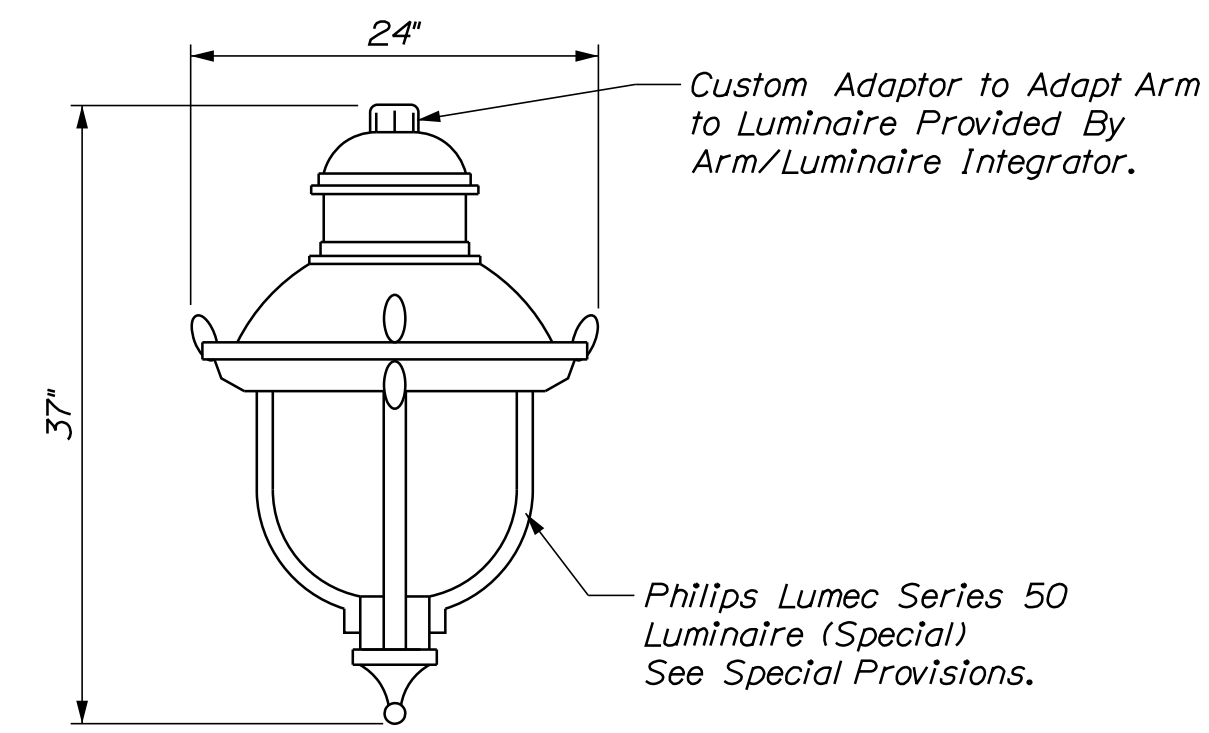


- NOTES:**
1. Repair existing concrete around joints. Payment shall be made under 518 Items.
 2. Repair any loose or damaged existing expansion dams at piers or abutments as directed by the resident. Partial existing sidewalk expansion dam removal & resetting may be necessary to replace joint seals. Payment shall be considered incidental to 520 Items.

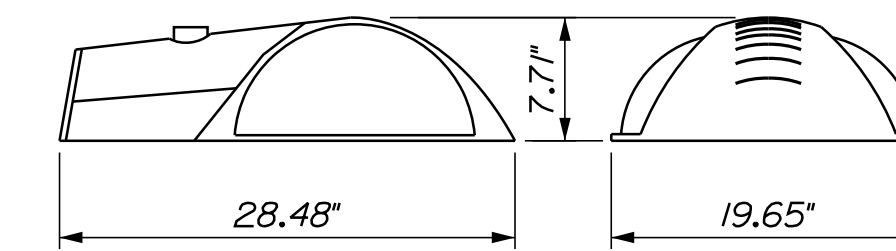
LEGEND:
 N.F. = Near Face
 F.F. = Far Face

GENERAL NOTES - LIGHTING:

- All materials and workmanship shall conform to the current edition of the National Electrical Code (NEC) as adopted by the State of Maine, to the Cities of Auburn and Lewiston requirements, to the MaineDOT Standard Specifications, Section 634 Highway Lighting and to the Maine DOT Standard Details unless noted otherwise.
- All conductors shall be copper with Type XHHW insulation.
- This Contractor shall coordinate all lighting work with all other Contractors working on this project and ensure that all lighting work is installed in such a way that it does not interfere with any bridge rehabilitation work.
- Provide expansion/deflection fittings (or a length of liquid-tight flexible metal conduit) wherever new conduits cross bridge expansion joints and wherever conduits are subject to relative movement of adjacent structural members or surfaces on which they are fastened to. Expansion fittings shall be O-Z/Gedney Type AX or approved equal.
- This Contractor shall make arrangements with the Cities of Auburn and Lewiston for disconnection of existing street lighting circuits on bridge to allow removal of existing lighting equipment and wiring and reconnection of the new lighting system following completion of work. This Contractor shall also maintain nighttime lighting of those traffic lanes open to traffic.
- Bridge roadway luminaires shall consist of Holophane LEDgend roadway luminaire Cat. No. LEDG-120-53-4K-AS-A-L3-F2 or an equal product approved by MaineDOT with field-fabricated luminaire bracket per lighting detail sheet, typical for six locations. Finish color of luminaire shall be as selected by MaineDOT.
- "Historic" style luminaires consist of a modified version of Philips AT50 series luminaires with a medium base lampholder and self-contained LED lamp, typical for twelve locations. See Special Provision Section 715.08
- "Historic" style wall bracket indicated on drawing is a product of Steel City Electric (or approved equal) with adapter to accommodate Philips AT50 series luminaire. Finish color of luminaire and bracket shall be as selected by MaineDOT.
- At the locations where conduits for lighting run between spans one and two, and two and three, run conduits down sloping part of truss to a point below bridge deck level and provide a length of liquid-tight flexible metal conduit where conduits traverse the gap between spans. Take care in installation of lighting conduits and conceal conduits to the maximum extent possible from view of pedestrians using sidewalks.
- Prior to starting work, this Contractor shall contact Dig Safe to identify all underground utilities within the work area and during work operations take care as to not disturb or damage existing utilities. This Contractor shall repair any damage to the utility owner's satisfaction at no expense to the Department.
- Coordinate the final placement of lighting electric service poles with CMP, MaineDOT and the Cities of Auburn and Lewiston. Ensure that placement remains within limits of right-of-way.
- Highway lighting service pole 120/240 volt (Auburn bridge lighting) in accordance with MaineDOT standard details 634-01 and 634-02 single circuit with 20A 2-pole main circuit breaker.
- Highway lighting service pole 120/240 volt (Lewiston bridge lighting) in accordance with MaineDOT standard details 634-01 and 634-02 (modified) single circuit with 20A 2-pole main circuit breaker, no utility company metering.

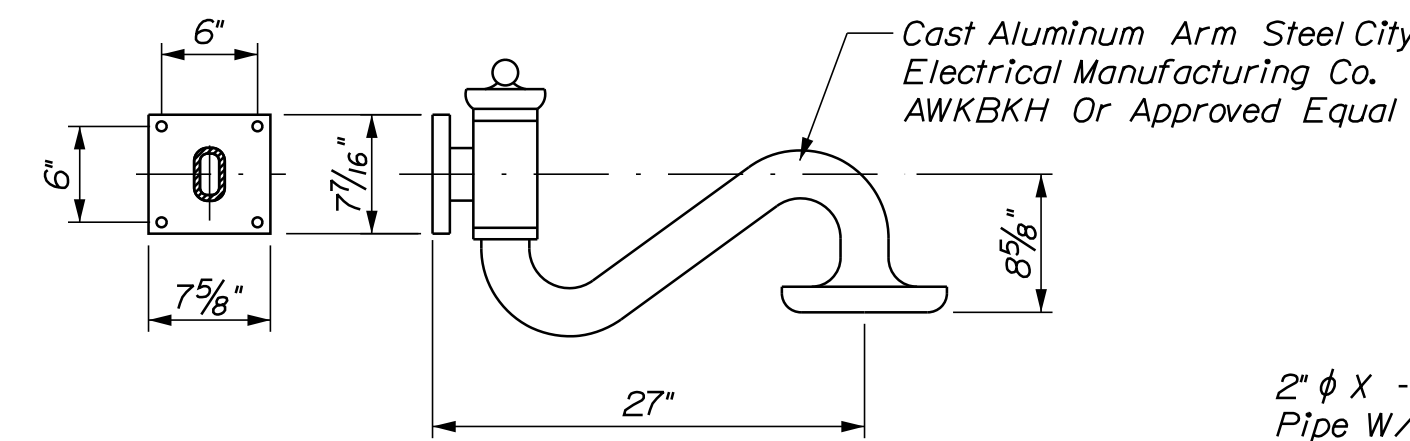


**HISTORIC STYLE LUMINAIRE
FIXTURE TYPE B**



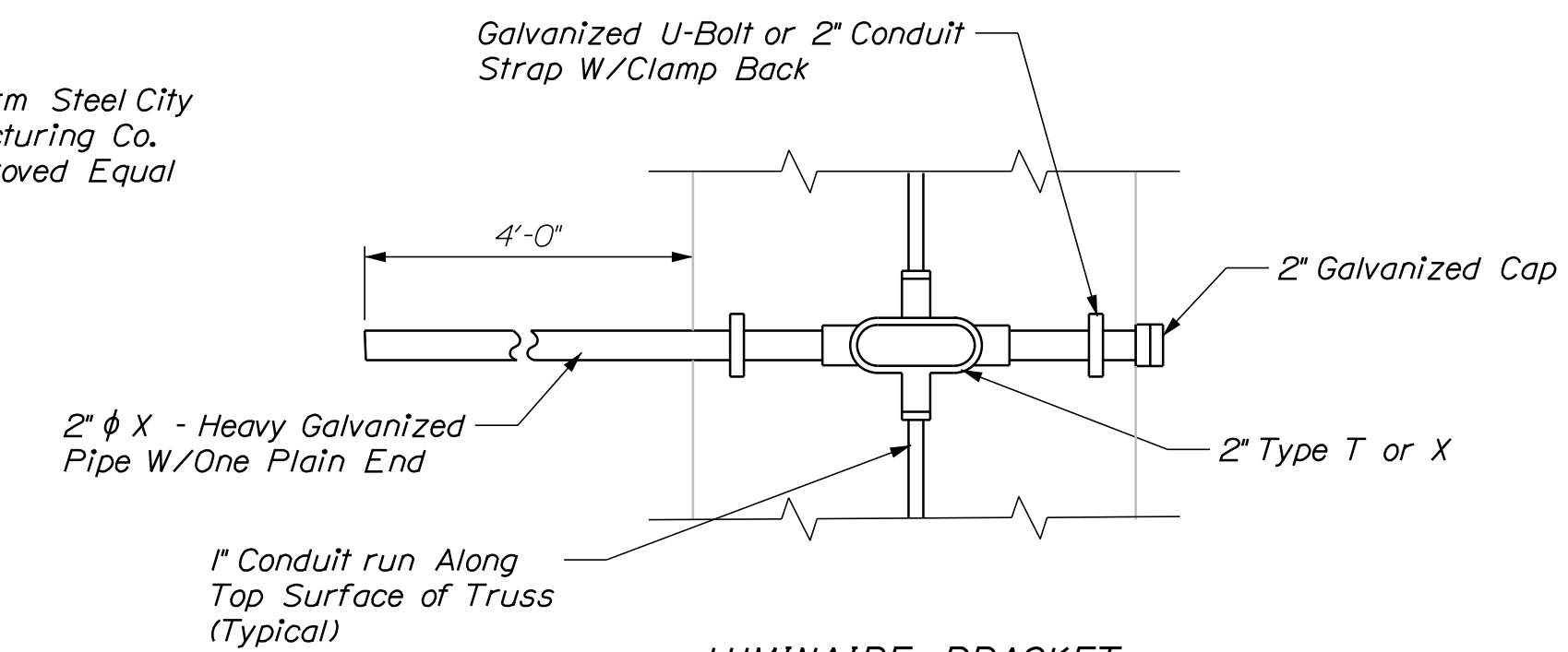
Maximum Weight: 28lbs
Maximum E.P.A.: 0.62 Sq. Ft

**ROADWAY LUMINAIRE
FIXTURE TYPE A**

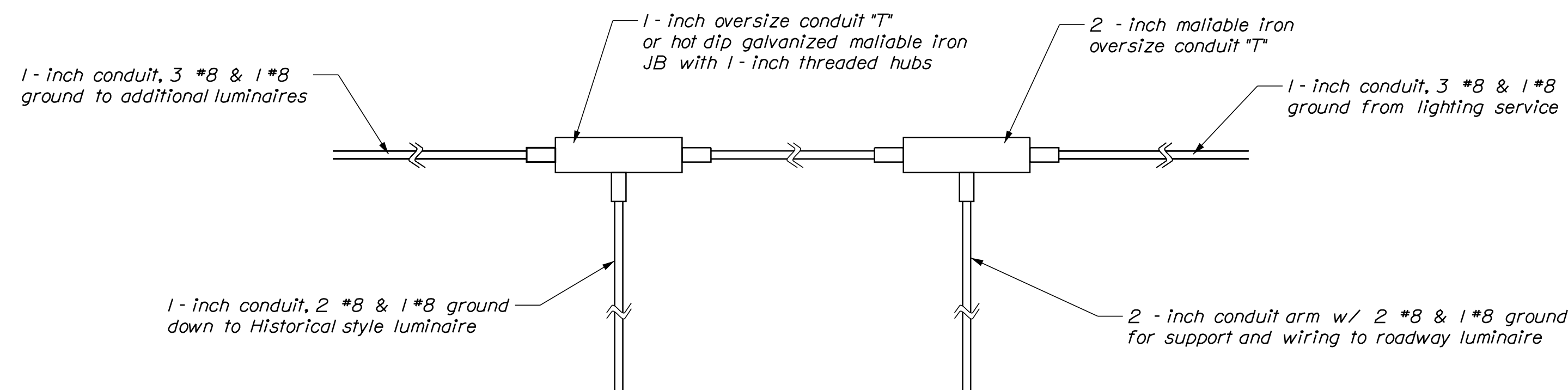


**HISTORIC STYLE WALL BRACKET
FIXTURE TYPE B**

Provide a surface mounted hot dip galvanized malleable iron junction box with threaded hub to accept 1 - inch conduit at each Historic style luminaire.



LUMINAIRE BRACKET



WIRING DETAIL ROADWAY & HISTORIC LIGHTING

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2259(900) & NHPP-1865(000)		WIN		BRIDGE NO. 3330		22599.00 & 18650.00		BRIDGE PLANS	
BERNARD LOWN PEACE BRIDGE		ANDROSCOGGIN RIVER		AUBURN-LEWISTON		ANDROSCOGGIN CO.		LIGHTING DETAILS & NOTES		SHEET NUMBER		19	
PROJ. MANAGER	H. COWAN	DESIGN-DETAILED	CIA	CHECKED-REVIEWED	CIC	DESIGN-DETAILED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES	DATE
DATE	10/17	DATE	10/17	DATE	10/17	DATE	10/17	DATE	10/17	DATE	10/17	DATE	10/17
BY	PEM	BY	CIC	BY	CIC	BY	CIC	BY	CIC	BY	CIC	BY	CIC
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER		P.E. NUMBER	

Date: 12/12/2017

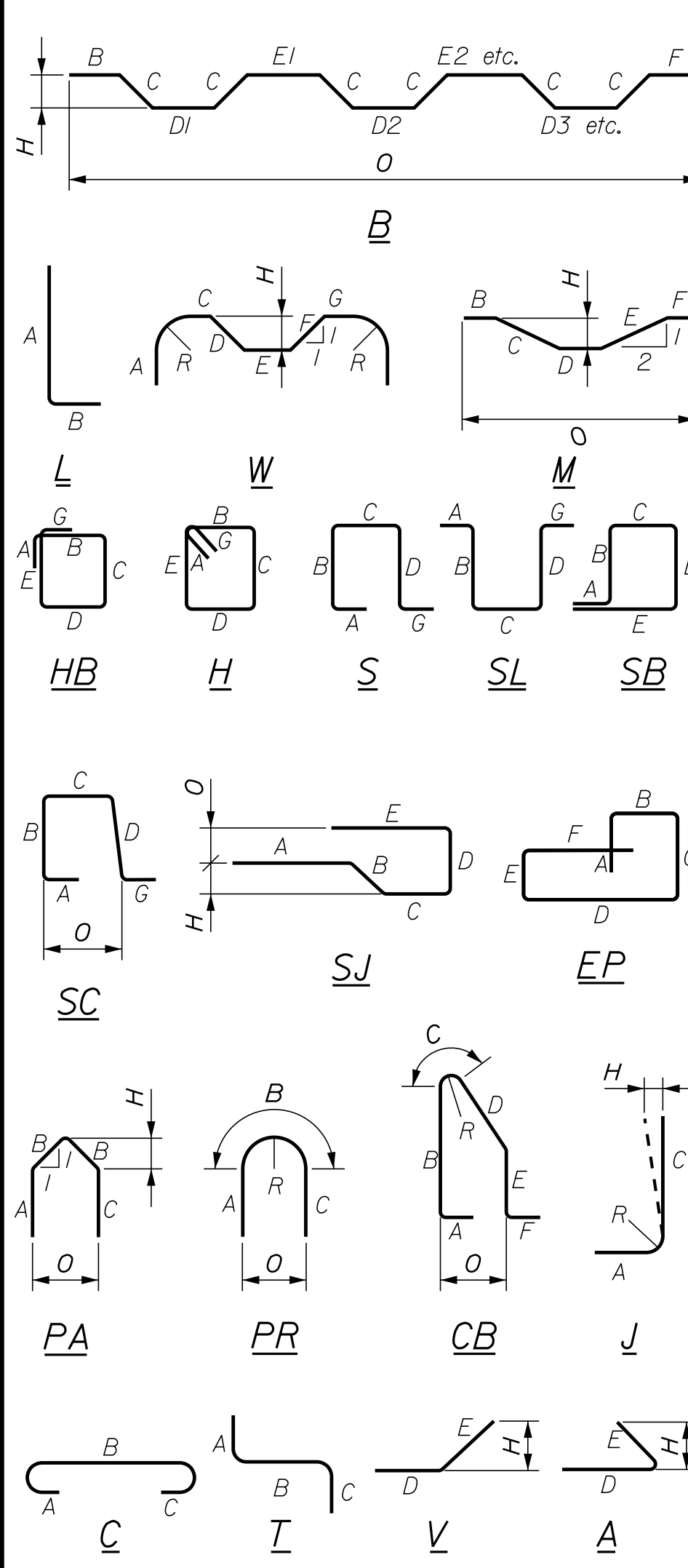
Username:

Division: HIGHWAY

Filename: ... \020_Reinforcing_Schedule.dgn

STRAIGHT BARS				BENT BARS																			
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	K	O/R	LOCATION	
Pier 1				Pier 1																			
IP500	194	7'-6"	Vert. sides & ends	IP550	280	2'-0"	L	1'-2"	10"	-	-	-	-	-	-	-	-	-	-	-	-	Dowels	
IP501	44	29'-5"	Horiz. sides	IP551	11	14'-4"	L	7'-2"	7'-2"	-	-	-	-	-	-	-	-	-	-	-	-	Nose horizontal	
				IP552	22	7'-9"	V	-	-	-	-	5'-2"	2'-7"	-	-	-	-	-	1'-10"	-	-	-	Nose to side horizontal
				IP553	22	10'-11"	L	8'-4"	2'-7"	-	-	-	-	-	-	-	-	-	-	-	-	Downstream end horizontal	
Pier 2				Pier 2																			
2P500	20	31'-7"	Horiz. sides	2P550	290	2'-4"	L	1'-6"	10"	-	-	-	-	-	-	-	-	-	-	-	-	Dowels	
2P501	20	9'-6"	Horiz. ends	2P551	40	14'-9"	L	13'-11"	10"	-	-	-	-	-	-	-	-	-	-	-	-	Corner horizontal	
2P502	20	5'-8"	Horiz. existing nose face																				
2P503	134	8'-6"	Vert. all sides																				
Superstructure				Superstructure																			
SP500E	180	50'-3"	Longitudinal barrier	S550E	362	2'-1"	C	7"	1'-6"	0"	-	-	-	-	-	-	-	-	-	-	-	Barrier dowels to curb	
SP501E	12	5'-6"	Horiz. transition front face	S551E	1820	5'-5"	H	5.5"	11"	1'-4"	11"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Barrier stirrup	
SP502E	16	2'-0"	Horiz. transition nose	S552E	32	4'-5"	H	5.5"	11"	10"	11"	10"	-	-	5.5"	-	-	-	-	-	-	Barrier stirrup @ scupper	
SP503E	4	1'-4"	Horiz. transition truss curb	S553E	4	5'-11"	H	5.5"	1'-2"	1'-4"	1'-2"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S554E	4	5'-9"	H	5.5"	1'-1"	1'-4"	1'-1"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S555E	4	5'-7"	H	5.5"	1'-0"	1'-4"	1'-0"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S556E	4	5'-5"	H	5.5"	11"	1'-4"	11"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S557E	4	5'-3"	H	5.5"	10"	1'-4"	10"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S558E	4	5'-1"	H	5.5"	9"	1'-4"	9"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S559E	4	4'-11"	H	5.5"	8"	1'-4"	8"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S560E	4	4'-9"	H	5.5"	7"	1'-4"	7"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S561E	4	4'-7"	H	5.5"	6"	1'-4"	6"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S562E	2	5'-5"	H	5.5"	11"	1'-4"	11"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S563E	2	4'-5"	H	5.5"	5"	1'-4"	5"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S564E	4	5'-3"	H	5.5"	10"	1'-4"	10"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S565E	4	5'-1"	H	5.5"	9"	1'-4"	9"	1'-4"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S566E	4	4'-5"	H	5.5"	8"	1'-1"	8"	1'-1"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S567E	4	3'-9"	H	5.5"	7"	10"	7"	10"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S568E	4	3'-1"	H	5.5"	6"	7"	6"	7"	-	-	5.5"	-	-	-	-	-	-	Transition stirrup	
				S569E	12	6'-2"	V	-	-	-	3'-1"	3'-1"	-	-	6"	-	-	-	-	-	-	Transition horiz. front face	
				S570E	12	8'-6"	W	0"	-	4'-1"	4"	4'-1"	0"	0"	3"	-	-	0"	-	-	-	Transition horiz. back face	
				S571E	12	5'-0"	T	4'-0"	6"	6"	-	-	-	-	-	-	-	-	-	-	-	Transition horiz. back face	
				S572E	8	4'-0"	SC	0"	1'-10"	4"	1'-10"	-	-	-	0"	-	-	-	-	-	7"	Transition horiz. nose	
				S573E	8	2'-4"	V	-	-	-	6"	1'-10"	-	-	-	-	-	-	-	-	-	Transition top slope	
				S574E	12	3'-9"	PR	1'-1"	1'-7"	1'-1"	-	-	-	-	-	-	-	-	-	-	6"	Transition curb hairpin	
				S575E	8	2'-9"	C	7"	1'-7"	7"	-	-	-	-	-	-	-	-	-	-	-	Transition transverse curb	
				S576E	80	2'-6"	C	7"	1'-11"	0"	-	-	-	-	-	-	-	-	-	-	-	Vertical dowels into deck	
				S577E	36	1'-8"	C	7"	1'-1"	0"	-	-	-	-	-	-	-	-	-	-	-	Transition dowels at nose	

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.
 Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

GENERAL NOTES

- The first two digits following the letter(s) of the mark indicate the size of the bar:
 Mark "A0502" = bar size #5
 Mark "P0805" = bar size #8
 Mark "S1150" = bar size #11
- Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.
- Bar marks ending with an "E" indicate epoxy coating required. Bar marks ending with an "S" indicate stainless steel bar is required. Bar marks ending with a "G" indicate Glass Fiber Reinforced Polymer (GFRP) bar is required.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2259(900) & NHPP-1865(000)
 WIN
 BRIDGE NO. 3330 22599.00 & 18650.00 BRIDGE PLANS

PROJ. MANAGER	H. COWAN	DATE	10/17	SIGNATURE
CHECKED-REVIEWED	BLT	DATE	10/17	
DESIGN-DETAILED	DSM	DATE		
DESIGN-REVIEWED	BLT	DATE		
DESIGN-DETAILED	DSM	DATE		
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

BERNARD LOWN PEACE BRIDGE
ANDROSCOGGIN RIVER
AUBURN-LEWISTON ANDROSCOGGIN CO.

REINFORCING SCHEDULE

SHEET NUMBER
20
 OF 20

TYLINT INTERNATIONAL