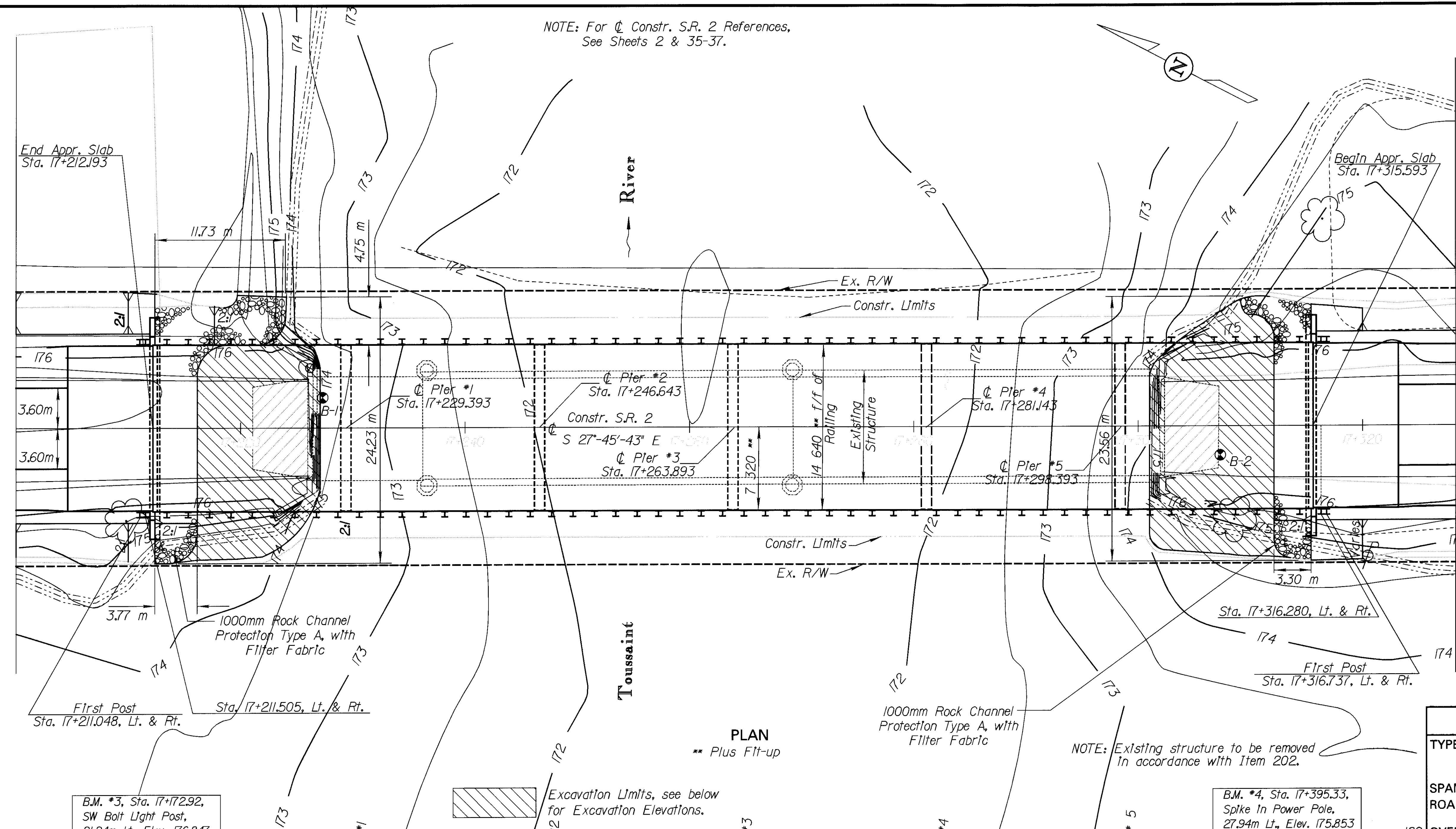


NOTE: For  $\phi$  Constr. S.R. 2 References,  
See Sheets 2 & 35-37.



**Hydraulic Data**

Drainage Area	= 319.3 km <sup>2</sup>
Q <sub>25</sub>	= 96.6 m <sup>3</sup> /s
HW <sub>25</sub>	= 175.83
V <sub>25</sub>	= 0.0 m/s
Q <sub>100</sub>	= 116.4 m <sup>3</sup> /s
HW <sub>100</sub>	= 176.17
V <sub>100</sub>	= 0.0 m/s

**Design Traffic**

Current ADT (1997) ~ 10280  
Design year ADT (2017) ~ 14120  
Design year ADTT (2017) ~ 3248

• - Indicates Soil Boring Location

NOTE: Earthwork Limits shown are approximate; actual slopes shall conform to plan cross sections.

The lowest elevation to the bottom of the superstructure clears the HW25 (Design year discharge) water surface elevation by approx. 0.12m

NOTE: All dimensions are in millimeters unless otherwise noted. Stations and elevations however are in meters.

**PLAN**  
\*\* Plus Fit-up

NOTE: Existing structure to be removed in accordance with Item 202.

**EXISTING STRUCTURE**

TYPE: Steel Truss on Wall Abutments with Column Piers, North Approach Span Prestressed Concrete Box Beam

SPANS: 9650±-32 000±-32 000± c/c Bearing

ROADWAY WIDTH: 8839± f/f of 610 Safety Curb

OVERALL WIDTH: 9817±

SKEW: None DISPOSITION: To Be Removed

ALIGNMENT: Tangent

DATE BUILT: 1931 CONDITION: Poor

APPROACH SLABS: AS-1-54 (4930± Long)

WEARING SURFACE: Bituminous Material (Approach) Concrete (Truss)

STRUCTURE FILE NUMBER: 6200125

**PROPOSED STRUCTURE**

TYPE: Six Span Prestressed Concrete Composite Box Beams and Integral Abutments on HP Piles with Cap and Column Piers on Drilled Shafts

SPAN: 16 450-16 800-16 800-16 800-16 800 16 450 c/c Bearings

ROADWAY WIDTH: 14 640 Plus Fitup f/f of Railing

SKEW: None ALIGNMENT: Tangent

APPROACH SLAB: 7600 (AS-1-81M)

WEARING SURFACE: 155 Mln. Rejn. Concrete

SUPERELEVATION: None

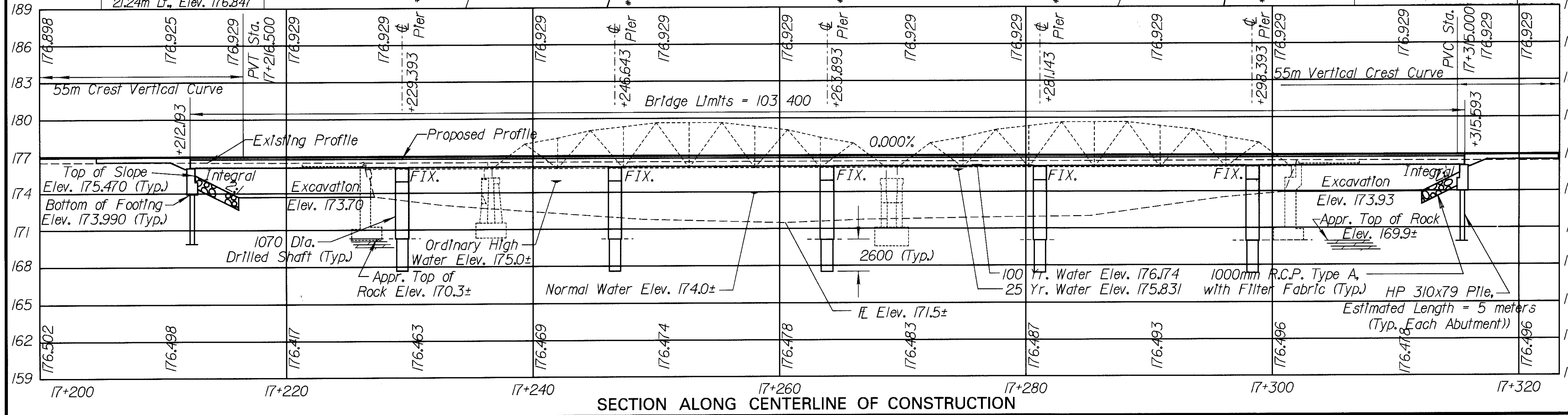
CROWN: 0.016

LOADING: MS18 and Alter. Military Loading

LONGITUDE: W83°-05'-45" LATITUDE: N41°-36'-05"

Excavation Limits, see below for Excavation Elevations.

B.M. #4, Sta. 17+395.33, Spike In Power Pole, 27.94m Lt., Elev. 175.853



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**GENERAL NOTES**



Reference shall be made to Standard Drawings:

AS-1-81M	Dated	10-25-94
DS-1-94M	Dated	12-15-94
PSBD-1-93M	Dated	12-19-94

and to Supplemental Specifications:

842	Dated	1-6-99
846	Dated	9-9-97
865	Dated	1-6-98
899	Dated	10-21-98
954	Dated	9-9-97

Design Specifications: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway and Transportation Officials, 1996 Specifications, including 1998 interim specifications and the ODOT Bridge Manual.

Design Data:

Design Loading - MS18 and the Alternate Military Loading  
 Concrete Class C - Compressive Strength 27.5 MPa (Substructure)  
 Concrete Class S - Compressive Strength 31.0 MPa (Superstructure)  
 Reinforcing Steel - ASTM A615M, A616M or A617M, Grade 420 - Yield Strength Grade 420 Spiral Steel may be plain bars, ASTM A82M or A615M  
 400 MPa Concrete for prestressed beams - Unit Stress:  
 15.2 MPa Compression  
 3.1 MPa Tension  
 Prestressing Strand ASTM A416M - f's = 1860 MPa  
 Initial stress = 0.75f's (Low Relaxation Strands)  
 Reinforcing Steel for prestressed beams shall be ASTM A615M, A616M or A617M,

Deck Protection Method: Epoxy coated reinforcing steel, Type 3 waterproofing, steel drip strip, sealing of concrete surfaces (Epoxy), and 65mm concrete cover.

Removal of Existing Structure: When no longer needed to maintain traffic, the existing structure shall be removed upon receiving permission from the Engineer. Abutments shall be removed to elev. 170.0, piers shall be removed to elev. 171.0.

Removals Over Water: Reasonable care shall be used by the Contractor to prevent removed materials from falling into the water. Any dropped materials shall be immediately recovered and disposed of away from the site except for approved masonry material which may be used as bank protection as directed by the Engineer.

Reinforcing Steel Size is indicated in the bar mark. The first letter identifies the bar location; the next two digits and letter indicates the metric bar size designation; and the remaining digits its sequence number.

Example: A16M01

- a) A = location of bar in the structure
- b) 16M = Metric bar size designation
- c) 01 = Sequence number

Item 503- Unclassified Excavation, as per plan: Unclassified excavation shall be in accordance with item 503 except that the backfill material behind the abutment shall be 304 granular material placed in lifts not to exceed a thickness of more than 150mm.

Abutment Backfill: Abutment Backfill shall be limited to 300mm below the bridge seat elevation until the beams have been in place for at least 3 days.

Item 507, Steel Points, as per plan: Steel pile points shall be used to protect the tips of the proposed steel "H" piling. The steel points shall be furnished by Associated Pile and Fitting Corporation, 262 Rutherford Blvd., Clifton, New Jersey 07014; Dougherty Foundation Products, Inc., P.O. Box 688, Franklin Lakes, New Jersey 07417; Versa Steel Inc., 3601 N.W. Yeon Ave., P.O. Box 10559, Portland, Oregon 97210; Piling Accessories, Inc., 3467 Gribble Road, Matthews, NC. 28105 or by a manufacturer that can furnish a steel point that is acceptable to the Director. The material used for the manufacturing of pile points shall conform to ASTM A27 65/35 - Class 2 - Heat Treated or AASHTO M103 65/35 - Heat Treated. A notarized copy of the mill test report shall be submitted to the Engineer.

Piles to Bedrock: Piles shall be driven to refusal on bedrock. Refusal shall be considered as obtained by penetrating soft bedrock for several millimeters with a minimum resistance of 20 blows per 25mm or refusal shall be considered as obtained after pile has contacted hard bedrock and the pile has then received at least 20 blows.

The Ultimate Bearing Value is 1172 kN per pile for the HP310x79 abutment piles.

Abutment piles:  
 18 piles 5 meters long, estimated length  
 18 piles of order length 5 meters long  
 9 splices

**ESTIMATED QUANTITIES**

Item	Ext.	Total	Unit	Description	Super.	Abut.	Piers	Gen'l
202	11002	Lump		Structure Removed, over 6 Meter Span				Lump
503	11100	Lump		Cofferdams, Cribbs and Sheeting				Lump
503	21301	Lump		Unclassified Excavation, As Per Plan (See This Sheet)				Lump
505	11100	Lump		Pile Driving Equipment Mobilization		Lump		
507	00200	90	Meter	Steel Pile HP310x79, Furnished		90		
507	00250	90	Meter	Steel Pile HP310x79, Driven		90		
507	50500	9	Each	Steel Pile Splices		9		
507	93301	18	Each	Steel Point (or Shoe), as per plan (See This Sheet)		18		
Special	51267510	317	Sq Meter	Sealing of Concrete Surface (Epoxy-Urethane) (See Proposal Note)	254	45	18	
516	13600	2	Sq Meter	25mm Preformed Expansion Joint Filler	2			
516	14015	31	Meter	Integral Abutment Expansion Joint Seal, as per plan (See This Sheet)	31			
516	43100	288	Each	Elastomeric Bearing with Internal Laminates Only (Neoprene) 25mmx127mmx178mm (50 Durometers)(See Proposal Note)		48	240	
517	76300	211.46	Meter	Railing Misc.: Twin Steel Tube Bridge Railing (SEE SHEET 1/2 + 1/2)	211.46			
518	21230	Lump		Porous Backfill with Filter Fabric		Lump		
Special	51822300	239	Meter	Steel Drip Strip	239			
518	40000	42	Meter	150mm Perforated Corrugated Plastic Pipe		42		
518	40010	4	Meter	150mm Non-Perforated Corrugated Plastic Pipe, Including Specials		4		
518	42300	5	Meter	200mm Non-Perforated Corrugated Steel Pipe, Including Specials, 707.01		5		
524	94704	52	Meter	Drilled Shafts, 915mm Diameter, Into Bedrock			52	
524	94802	88	Meter	Drilled Shafts, 1070mm Diameter, Above Bedrock			88	
842	31600	278	Cu Meter	Class S Concrete, Superstructure	271			
842	41000	99	Cu Meter	Class C Concrete, Pier Above Footing			95	
842	43500	74	Cu Meter	Class C Concrete, Abutment Including Footing		74		
846	73000	36	Sq Meter	Treating Bridge Decks with HMWM Resin	36			
865	12071	72	Each	Prestressed Concrete Composite Box Beam Bridge Members, Level 1, CB685-1220, as per plan (See Sheet 9/12)	72			

**ITEM 516 Integral Abutment Expansion Joint Seal, As Per Plan:**  
 Install a 900 mm wide strip, 2.5 mm thick, general purpose, heavy duty neoprene sheet with nylon fabric reinforcement at locations shown in the plans. Secure the 900 mm wide neoprene sheeting to the concrete with 32 x 3 mm (Length x Shank Diameter) galvanized button head spike through a 25 mm outside diameter, 3 mm galvanized washer. Maximum fastener spacing is 225 mm. Other similar galvanized devices which will not damage either the neoprene or the concrete may be used subject to the approval of the Engineer.  
 Center the neoprene on all joints. For horizontal joints, secure the horizontal neoprene strip by using a single line of fasteners, starting at 150 mm (+/-) from the top of the neoprene strip. For the vertical joints secure the vertical neoprene strip by using a single vertical line of fasteners, starting 150 mm (+/-) from the vertical edge of the neoprene strip nearest to the centerline of the roadway. For vertical joints, install 2 additional fasteners at 150 mm center to center across the top of the neoprene strip on the same side of the vertical joint as the single vertical row of fasteners is located.  
 The vertical neoprene strips should completely overlap the horizontal strips. Laps in the length of the horizontal strips due to the material manufacturing shall be at least 300 mm in length, if not vulcanized or adhesived, or 150 mm in length if the lap is vulcanized or adhesived. No laps are acceptable in vertically installed neoprene strips.  
 The neoprene sheeting shall be 2.5 mm thick general purpose, heavy duty neoprene sheet with nylon fabric reinforcement. The sheeting shall be "Fairprene Number NN-0003", by E.I. Dupont De Nemours and Company Inc., "Wingprene" by Goodyear Tire and Rubber Company, or an approved alternate. The neoprene sheeting shall conform to the following:

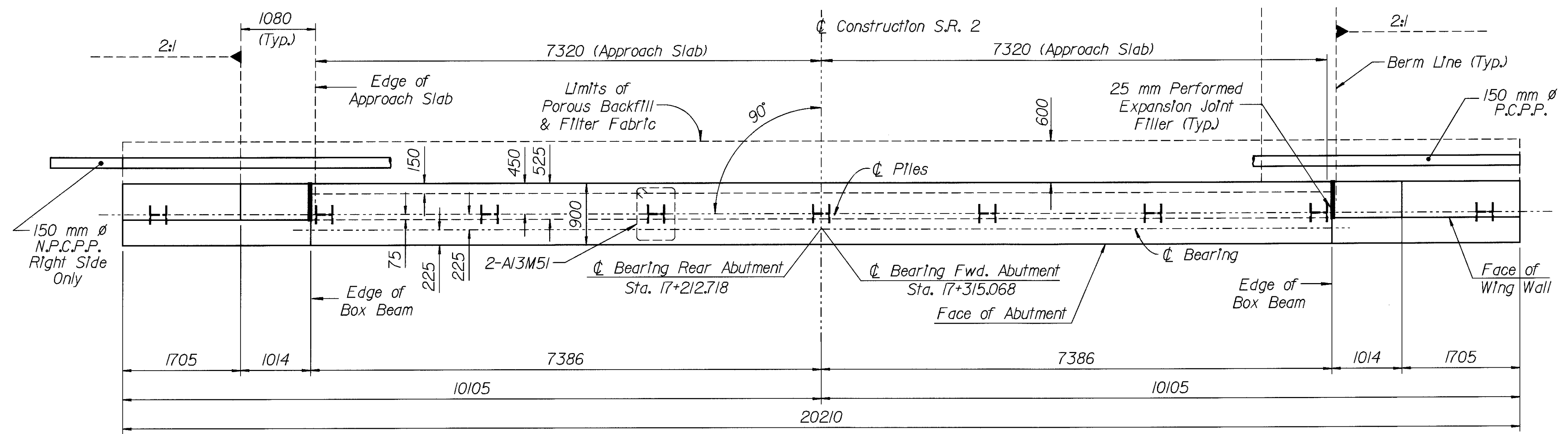
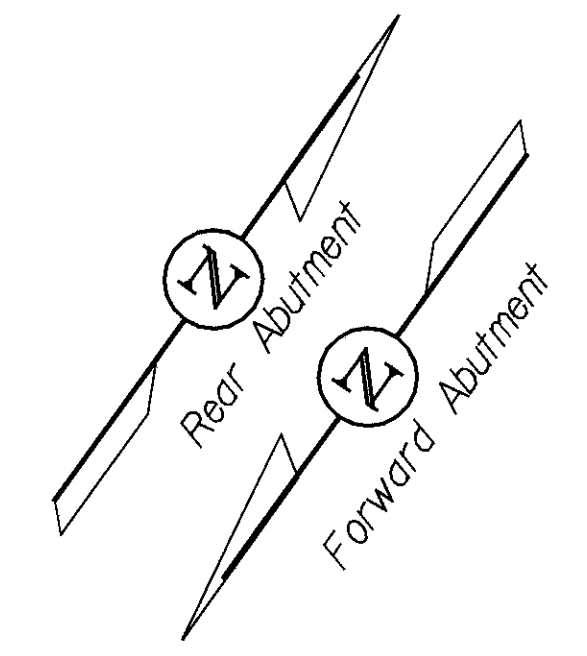
Description of test	ASTM Method	Requirement
Thickness, mm	D751	2.5 ± 0.25
Break Strength, grab WXF, N, minimum	D751	3130 x 3130
Adhesive 25 mm strip, 50 mm Min, N minimum	D751	27
Burst strength (mullen) MPa, minimum	D751	9.65
Heat aging 70 hours T 100°C 180° bend without cracking	D2136	No Cracking of Coating
Low temp. brittleness 1 hour at -40°C, bend around 6 mm mandrel	D2136	No Cracking of Coating

Payment for labor, materials and installation of these items shall be included in Item 516 Integral Abutment Expansion Joint Seal, As Per Plan.

**UTILITY LINES:** All expense involved in relocation (installing) the affected utility lines shall be borne by the Utility(ies). The Contractor and Utility(ies) are to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.

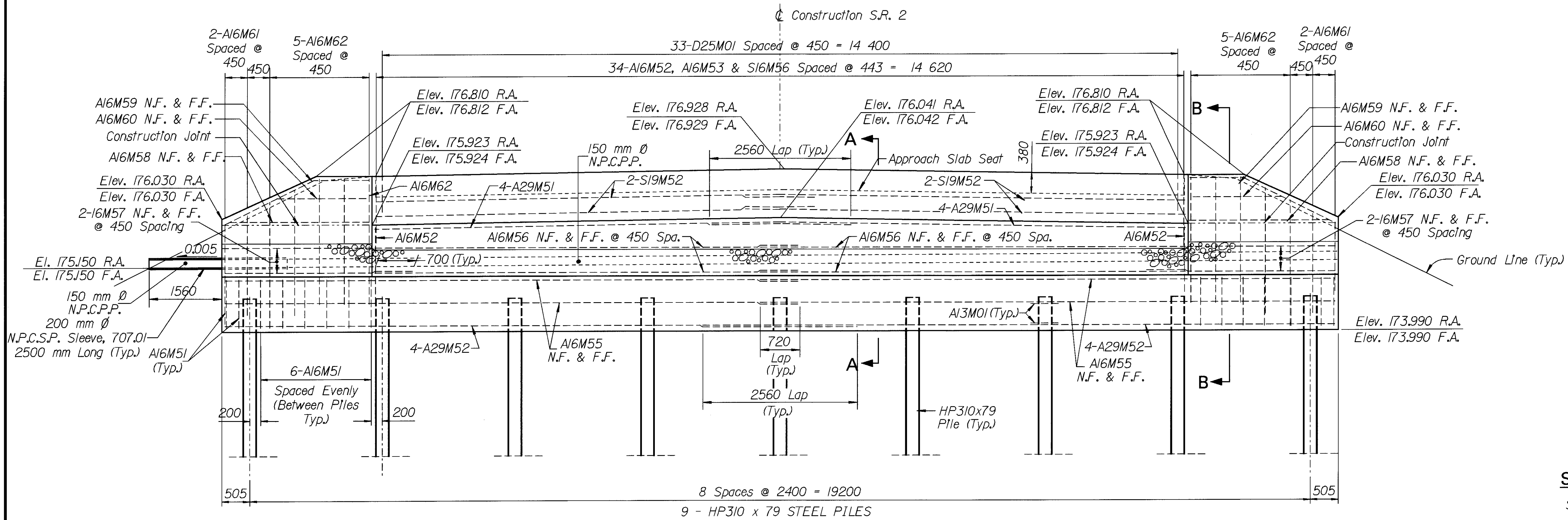
DESIGN AGENCY: DISTRICT ONE  
 PRODUCTION DEPARTMENT  
 REVIEWED: JCC 5-5-99  
 STRUCTURE FILE NUMBER: 6200133  
 DRAWN: EJS  
 DESIGNED: EJS  
 CHECKED: JTB  
 ESTIMATED QUANTITIES & GENERAL NOTES  
 Bridge No. OTT-2-17212  
 over Toussaint River  
 OTT-2-10.735/17.135  
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**LEGEND**

N.F. = Near Face  
 R.F. = Rear Face  
 R.A. = Rear Abutment  
 F.A. = Forward Abutment  
 P.C.P.P. = Perforated Corrugated Plastic Pipe  
 N.P.C.P.P. = Non-Perforated Corrugated Plastic Pipe  
 N.P.C.S.P. = Non-Perforated Corrugated Steel Pipe



**NOTES:**

Porous Backfill: With filter fabric, 600mm thick shall extend up to the plane of the subgrade, to 300mm below the embankment surface, and laterally to the ends of the wingwalls. Geotextile fabric shall conform with 712.09, Type A. The Bottom of the porous backfill shall be sloped (0.08 min.) laterally to drain. Geotextile fabric is included with porous backfill for payment.

**ABUTMENT ELEVATION**

Concrete above the beam seat shall not be placed until the prestressed box beams and concrete deck have been placed.

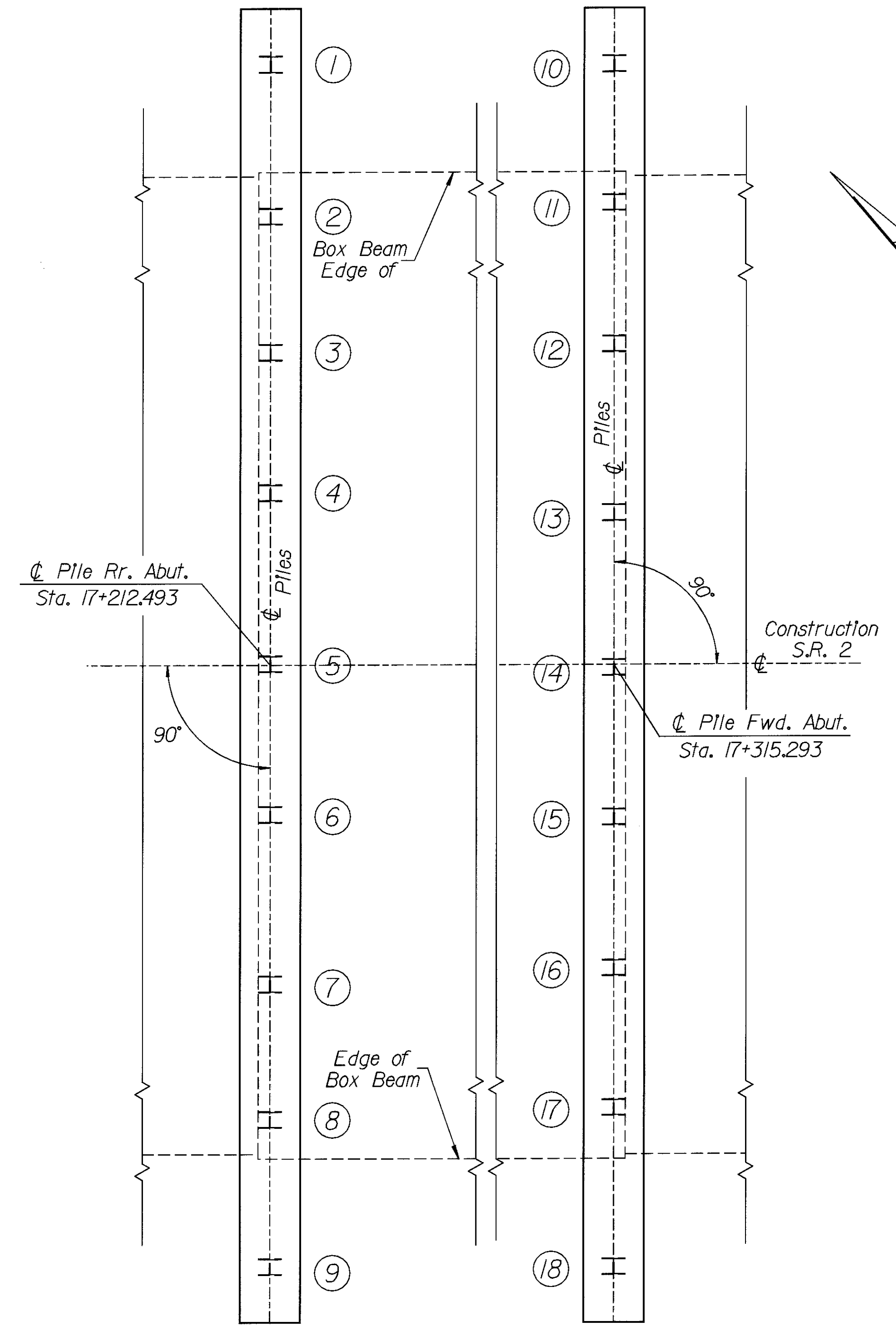
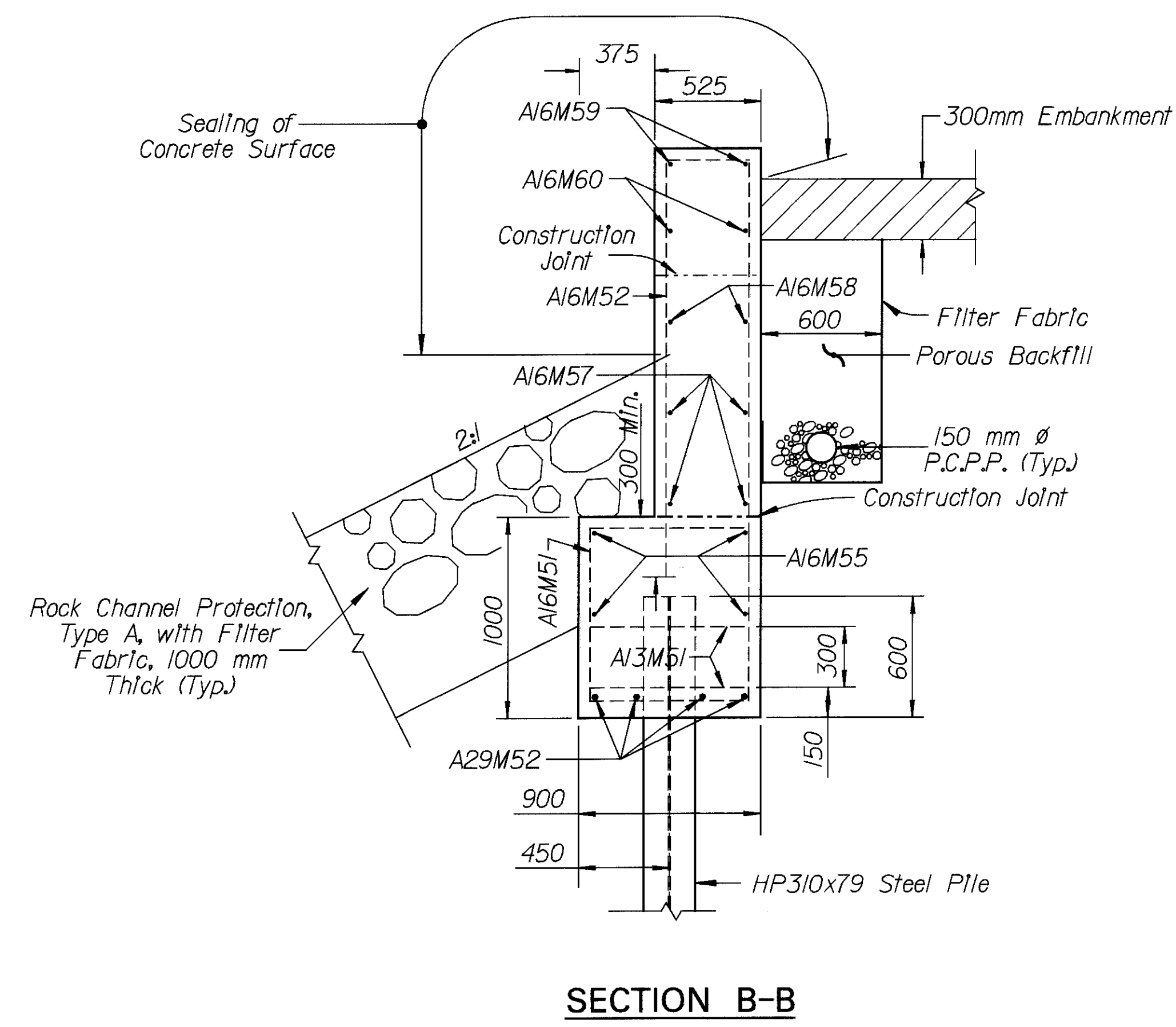
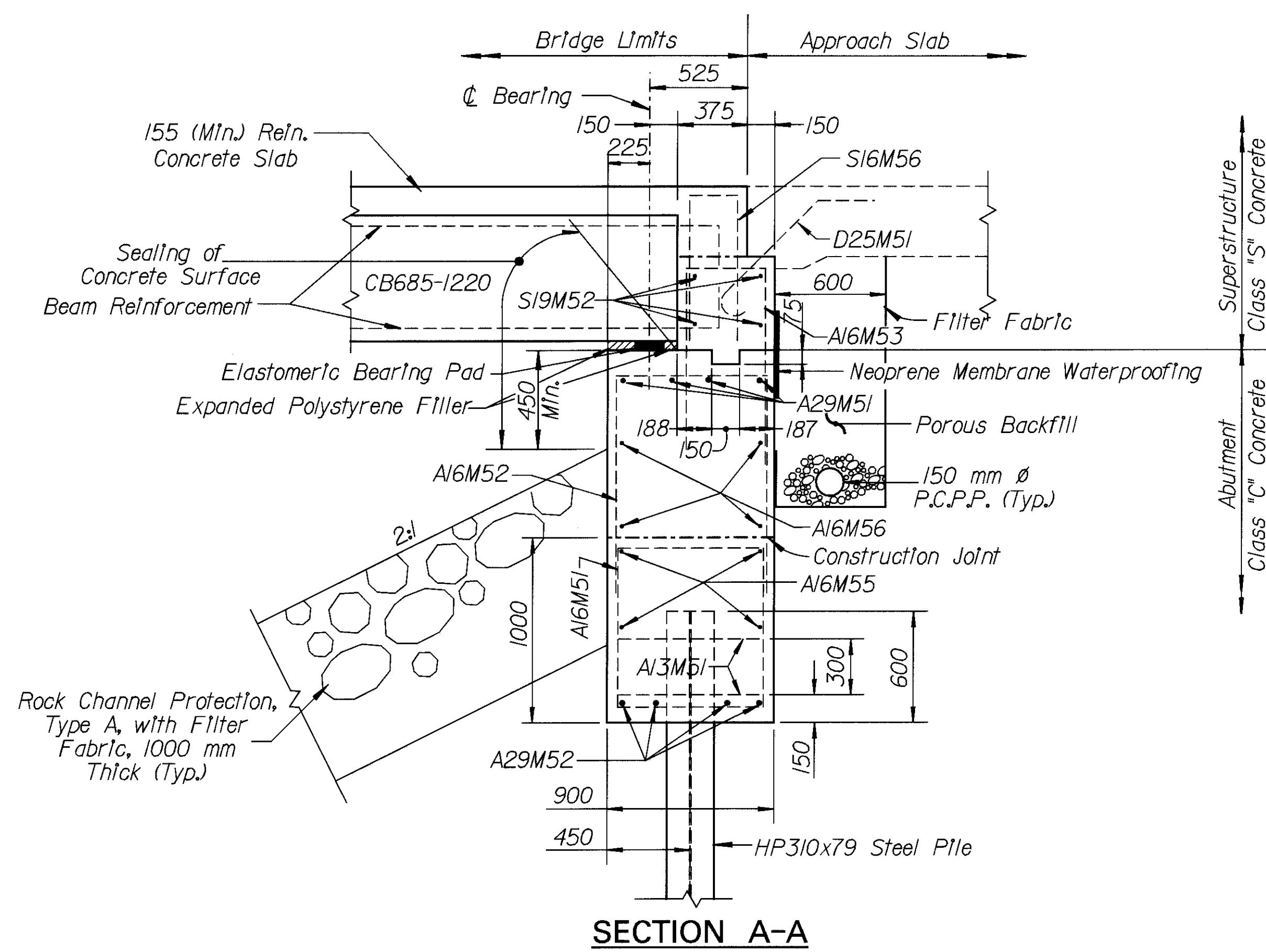
All dimensions are in millimeters, unless otherwise noted except for stations and elevations which are in meters.

**SECTION A-A**  
 See Sheet 4/12

**SECTION B-B**  
 See Sheet 4/12

Pile Numbering Diagram: See Sheet 4/12

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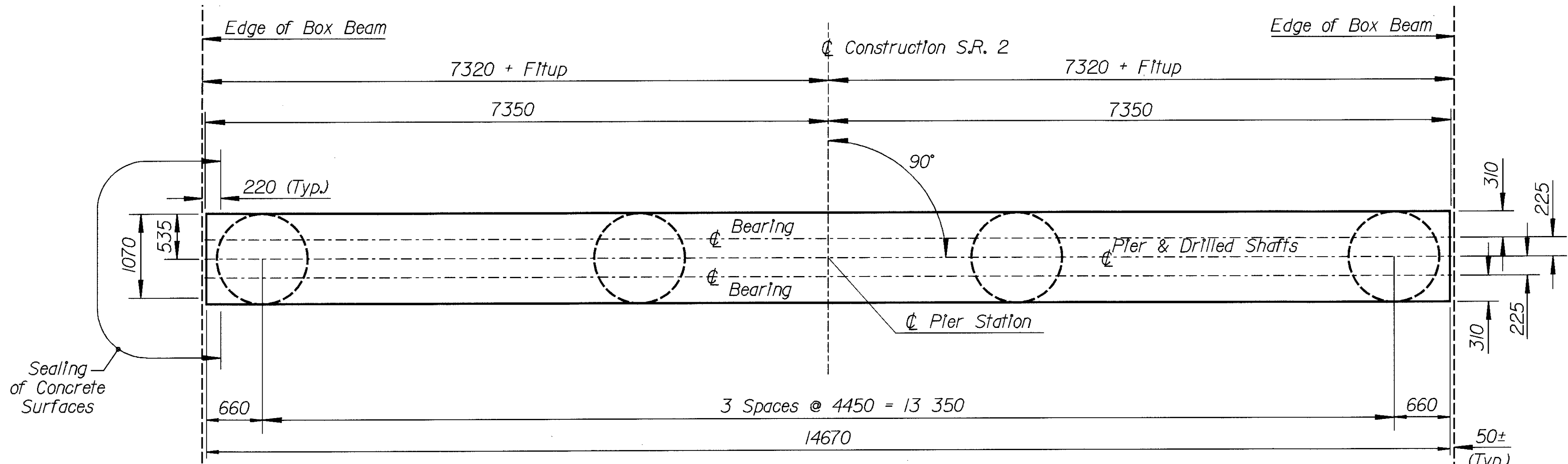


**LEGEND**  
 P.C.P.P. - Perforated Corrugated Plastic Pipe

REF. FILE \*1: \*\*\*\*\*  
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 REF. FILE \*3: \*\*\*\*\*  
 REF. FILE \*4: \*\*\*\*\*

FILENAME: \*\*\*\*\*  
 DATE & TIME: \*\*\*\*\*  
 USERNAME: \*\*\*\*\*  
 PROJECT: \*\*\*\*\*

LEVELS ON: \*\*\*\*\*  
 PLOT QUEUE: \*\*\*\*\*  
 PEN TABLE: \*\*\*\*\*



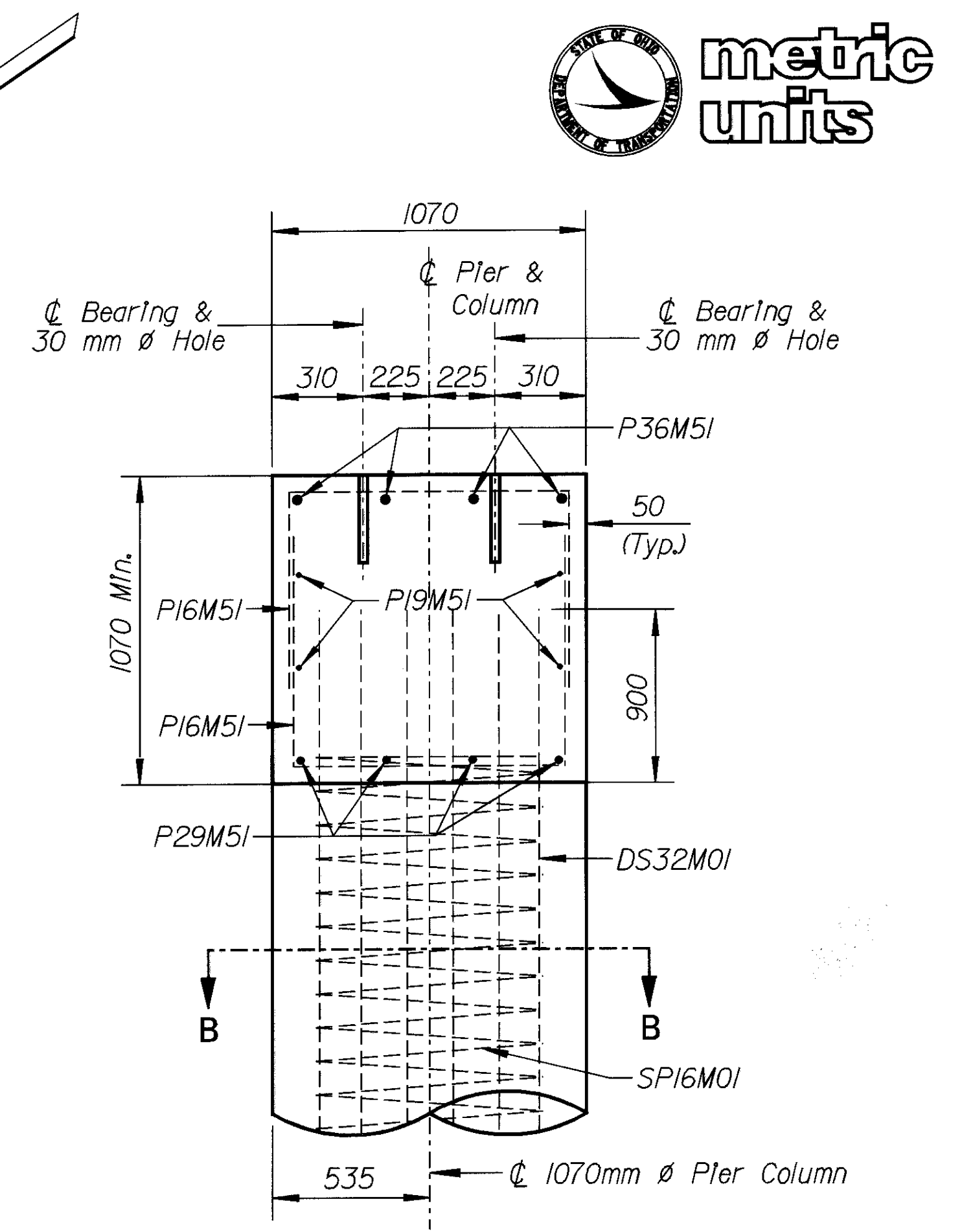
**PIER ELEVATION VIEW**

**CENTERLINE PIER STATIONS AND ELEVATIONS**

Pier Number	Cl. Pier Station	Lt. Elevation	Cl. Elevation	Rt. Elevation
Pier #1	Sta. 17+229.393	175.924	176.042	175.924
Pier #2	Sta. 17+246.643	175.924	176.042	175.924
Pier #3	Sta. 17+263.893	175.924	176.042	175.924
Pier #4	Sta. 17+281.143	175.924	176.042	175.924
Pier #5	Sta. 17+298.393	175.924	176.042	175.924

NOTE: Elevations are along the Cl. of the Piers

NOTATION: N.F. - Near Face  
 F.F. - Far Face

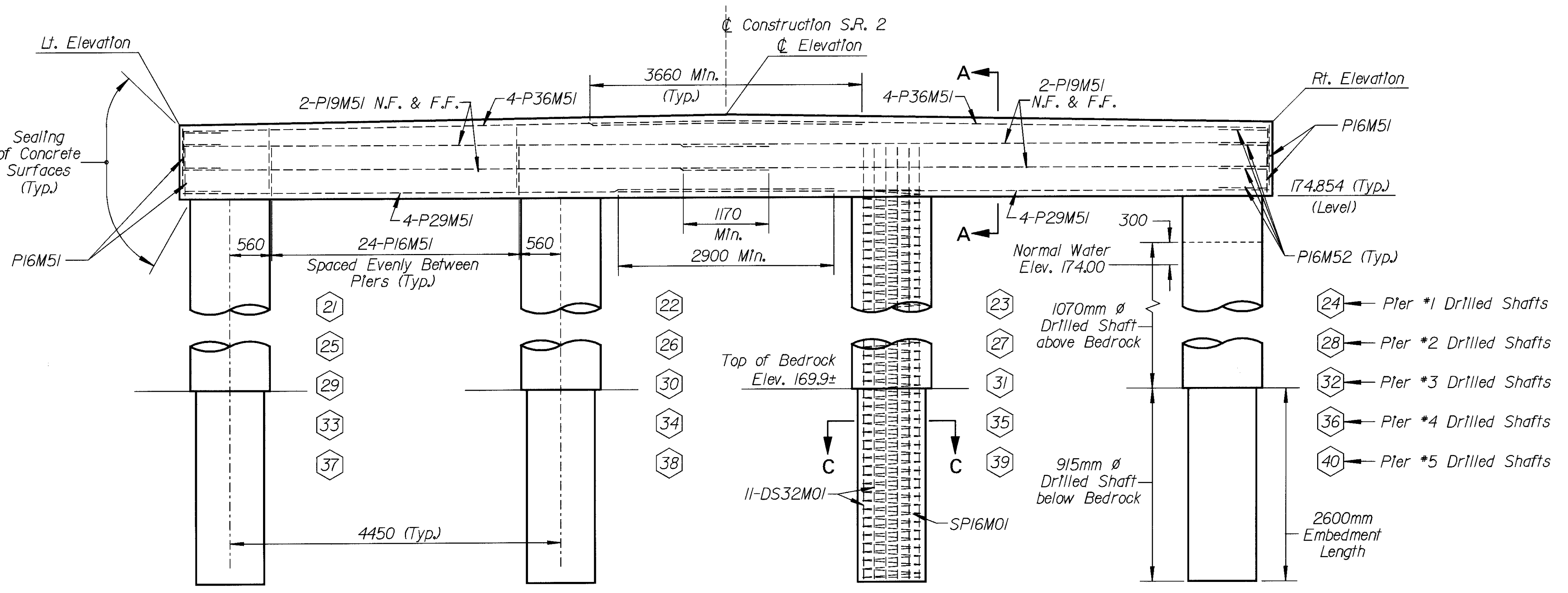


**SECTION A-A**

**SECTION B-B**

**SECTION C-C**

All dimensions are in millimeters, unless otherwise noted except for Stations and Elevations which are in Meters.  
 Bridge Seat Reinforcing: Reinforcing steel in the vicinity of the bridge seat shall be placed accurately to avoid interference with the drilling of anchor bar holes.



**PIER ELEVATION VIEW**

# INSPECTION RECORD FOR DRILLED SHAFTS



DESIGN AGENCY  
**DISTRICT ONE**  
 PRODUCTION DEPARTMENT

PROJECT NO. _____	GENERAL CONTRACTOR _____ DRILLED CONTRACTOR _____ PROJECT ENGINEER _____	TYPE AND MODEL OF DRILLING MACHINERY _____ MAX CONTINUOUS TORQUE _____ N·m CROWD (MAX. CONTINUOUS DOWNWARD FORCE) _____ N	TYPE OF CONCRETE PUMP _____ HOSE DIAMETER _____ mm CAPACITY _____ m <sup>3</sup> /MIN	COST PER LINEAL METER _____ ABOVE BEDROCK SOCKET _____ IN BEDROCK SOCKET _____ TYPE OF ROCK _____
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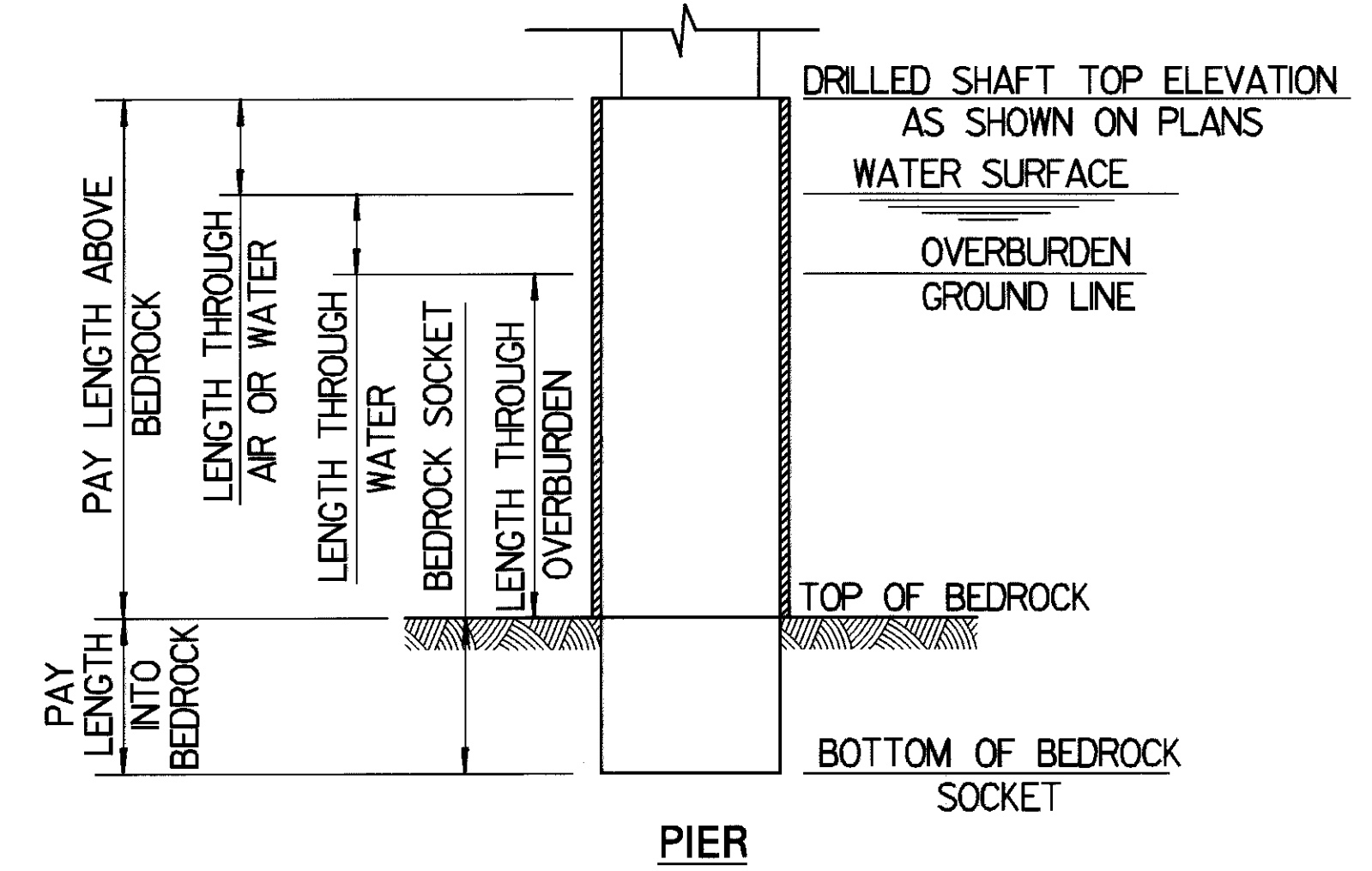
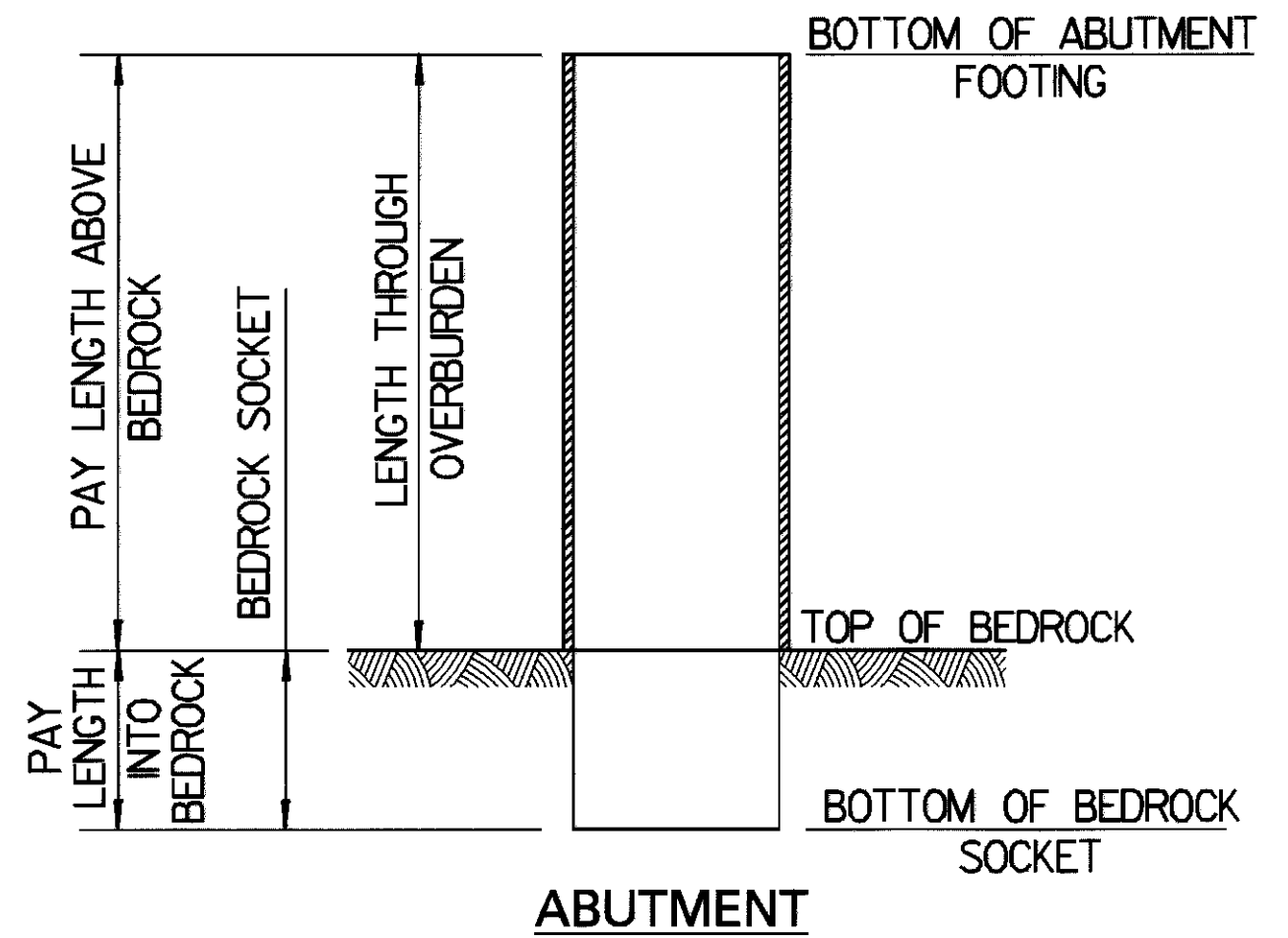
SUBSTRUCTURE UNIT		DATE AND TIME OF DRILLING		APPROX. ELEVATION OF TOP OF OVER BURDON	LENGTH OF DRILLED SHAFTS ABOVE THE BEDROCK SOCKET				OBSTRUCTIONS ENCOUNTERED			LENGTH OF DRILLED SHAFTS IN BEDROCK SOCKET			STEEL CASING			REINFORCING STEEL				CONCRETE					TOLERANCES			PLAN SHAFT DIAMETER (mm)	CONST. SHAFT DIAMETER (mm)
PIER OR ABUT.	SHAFT NO.	STARTED	FINISHED		THROUGH AIR (mm)	THROUGH WATER (mm)	THROUGH OVER BURDON (mm)	PAY LENGTH (mm)	NUMBER	SIZE (mm)	ELAPSED TIME FOR REMOVAL (HR)	APPROX. ELEV. OF TOP OF BEDROCK	ELEV. OF BOTTOM OF BEDROCK SOCKET	LENGTH OF BEDROCK SOCKET (mm)	LENGTH (mm)	CASING GAUGE	WAS CASING LEFT IN PLACE?	VERTICAL		SPIRAL		SLUMP TEST RESULT (mm)	CYLINDER STRENGTH f'c (kPa)	AIR TEMP (C)	TIME NEEDED TO PLACE CONCRETE (HR)	QUANTITY (m <sup>3</sup> )	DEVIATION FROM PLUMB		DEVIATION OF COLUMN TOP CENTER FROM PLAN LOCATION HORIZONTALLY (mm)		
		DATE TIME	DATE TIME															BAR SIZE NO.	NO. OF REBARS	BAR SIZE NO.	PITCH (mm)						N-S (mm)	E-W (mm)			
/	/	/	/																												

DATE  
 JEC 5-5-99  
 STRUCTURE FILE NUMBER  
 6200133  
 REVIEWED  
 DRAWN  
 DESIGNED  
 CHECKED

**INSPECTION RECORD FOR DRILLED SHAFTS**  
 Bridge No. OTT-2-17212  
 over Toussaint River

**PROJECT ENGINEER COMMENTS**

1. LOCATION AND EXTENT OF CAVITIES
2. PROCEDURES FOR CONTROLLING WATER
3. WERE UNEXPECTED SURFACE CONDITIONS ENCOUNTERED
4. ANY SUGGESTIONS FOR IMPROVING PLANS

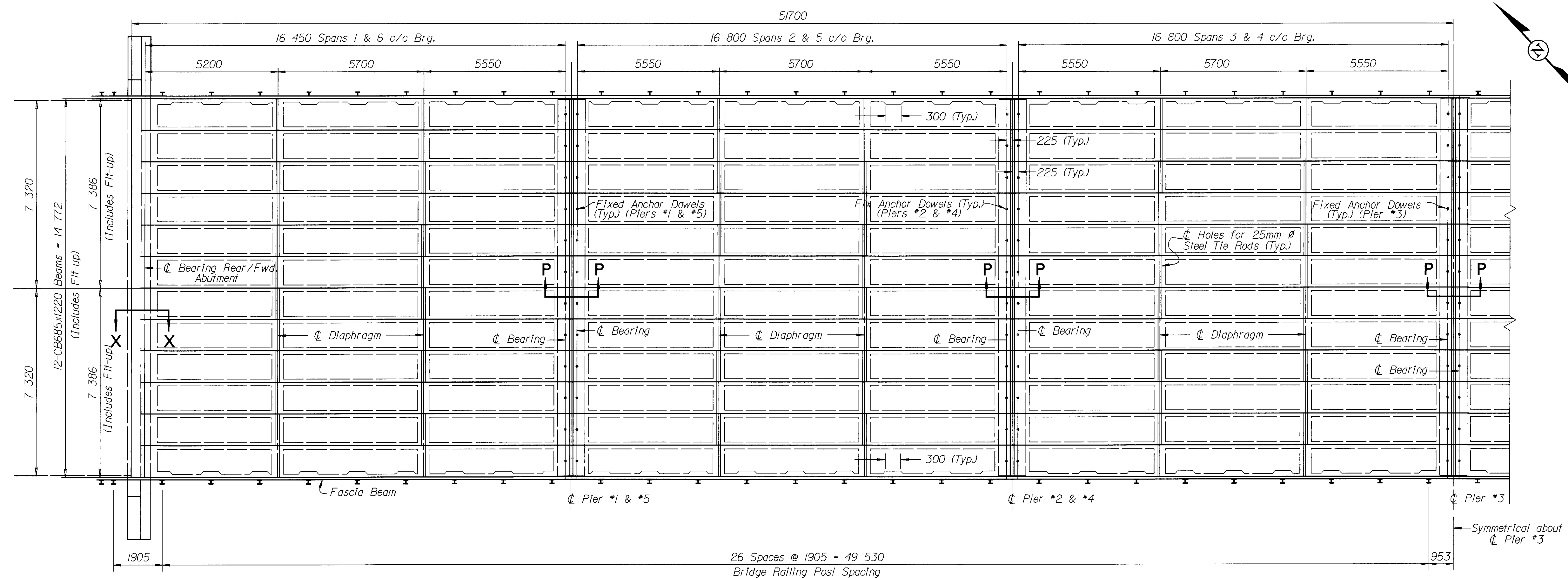


OTT-2-10.735/17.135

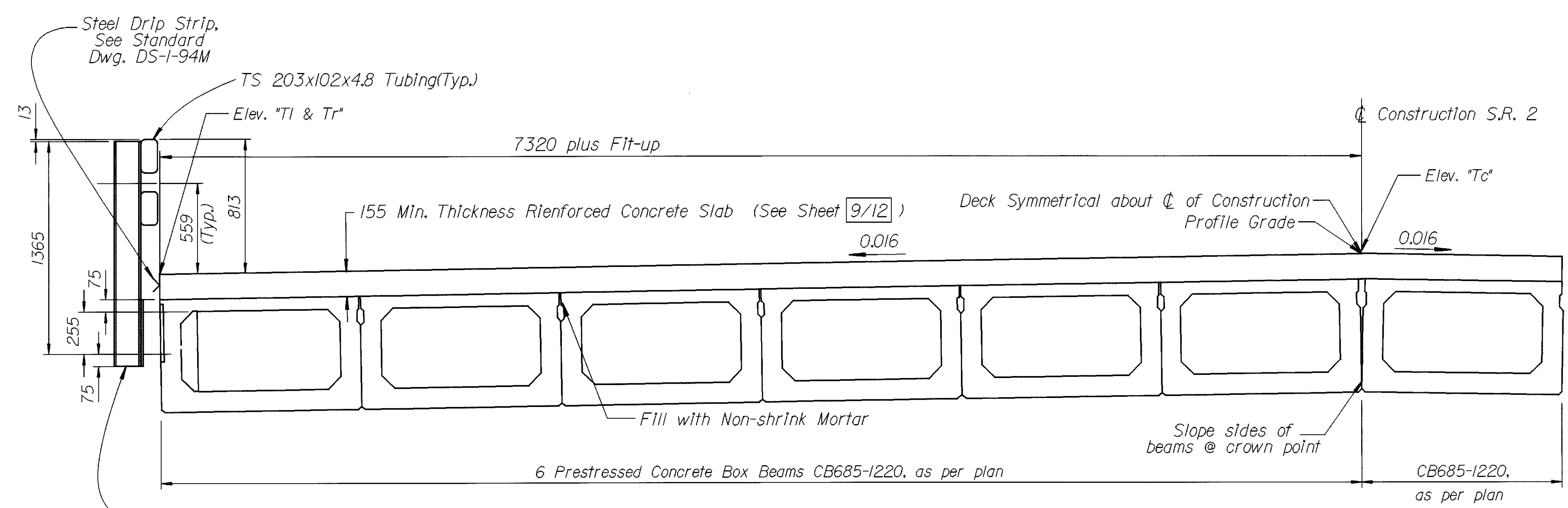
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 FILE NAME: I:\p\07598\07598.dwg  
 DATE & TIME: 05-MAR-1999 06:44  
 USERNAME: jbrk  
 PROJECT: NONE  
 LEVELS ON: L1, L2, L3, L4  
 PLOT QUEUE: \\\\p\d\plot\jbrk  
 PEN TABLE: I:\p\07598\pen.tbl

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REF. FILE #3: LEVELS ON:  
REF. FILE #4: LEVELS ON:

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PROJECT: NONE

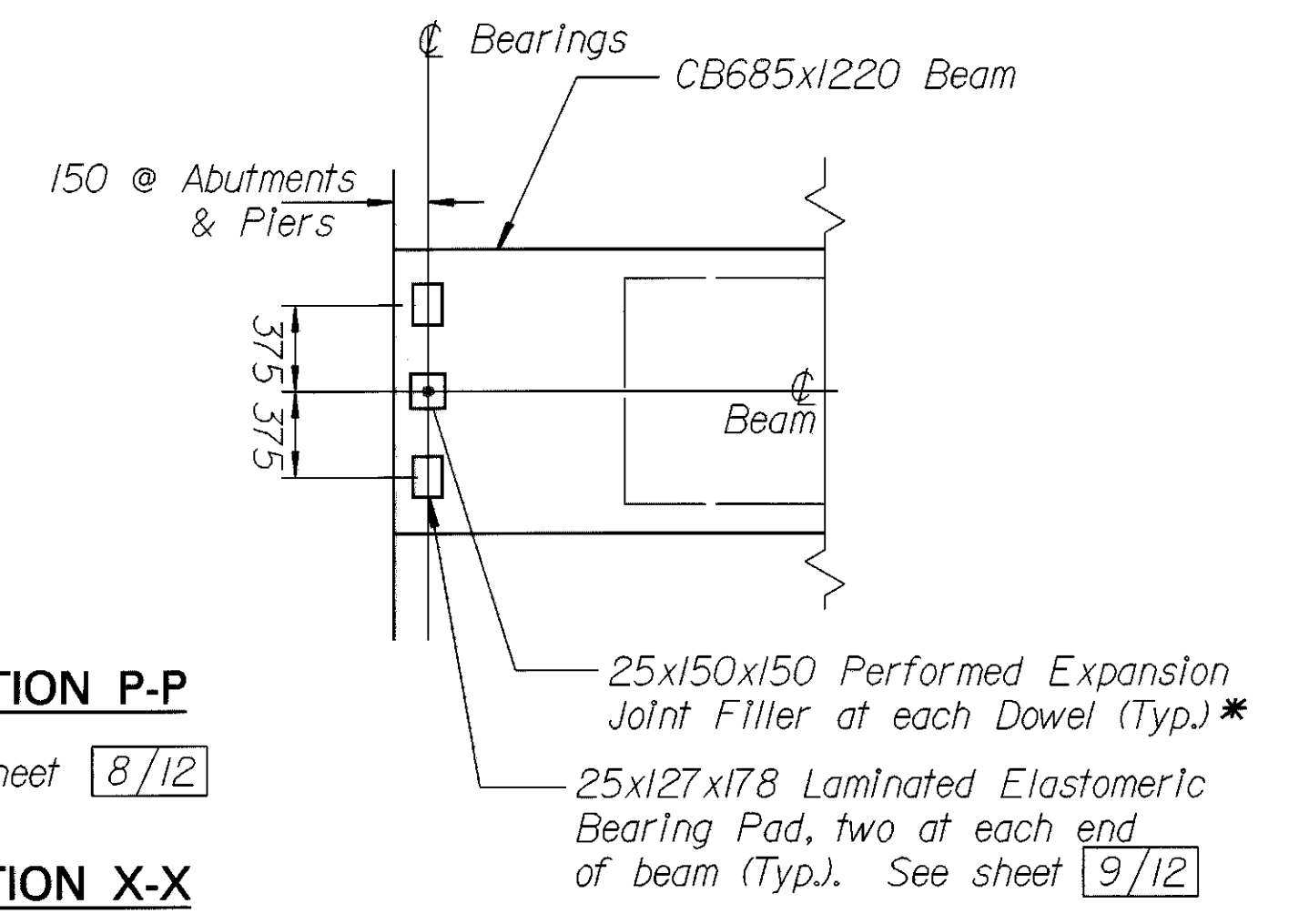


**SUPERSTRUCTURE FRAMING PLAN**



**HALF TRANSVERSE SECTION**

For Elevations "T1", "Tr" & "Tc", See Sheet 9/12



**SECTION P-P**

See Sheet 8/12

**SECTION X-X**

See Sheet 9/12

\* - Include with beams for payment.

NOTE: All dimensions are in millimeters unless otherwise noted. Stations and elevations however are in meters.

REF. FILE #1: LEVELS ON:  
REF. FILE #2: LEVELS ON:  
REF. FILE #3: LEVELS ON:  
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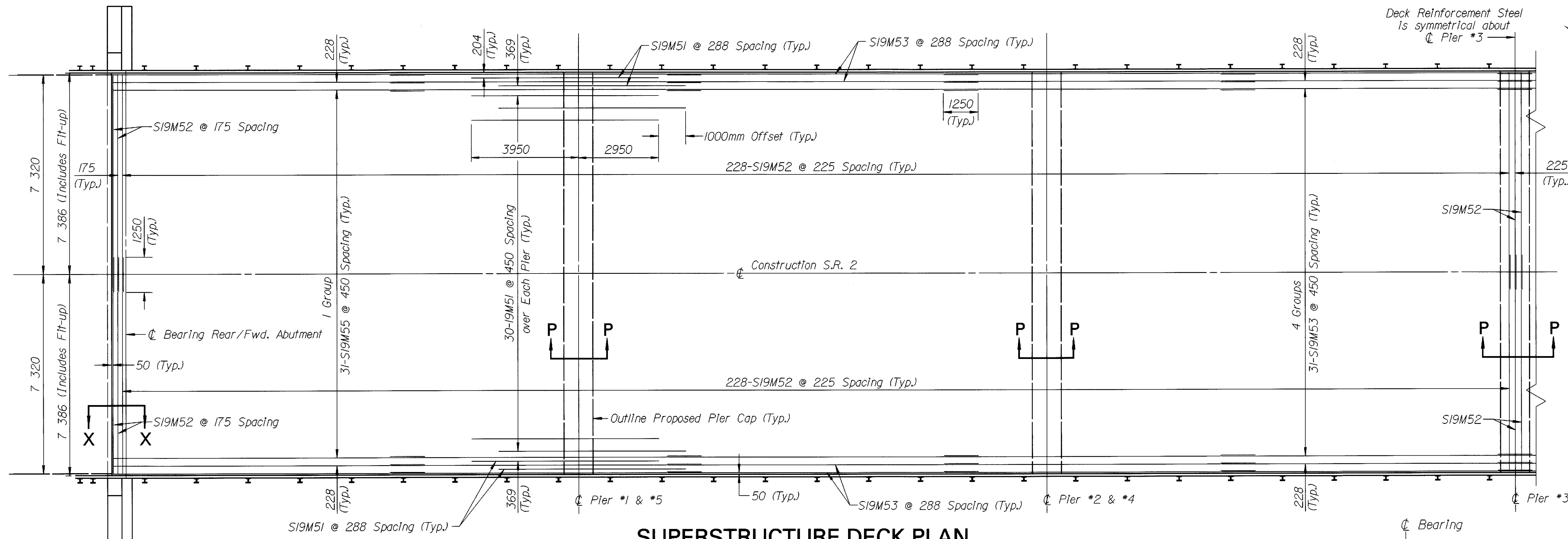
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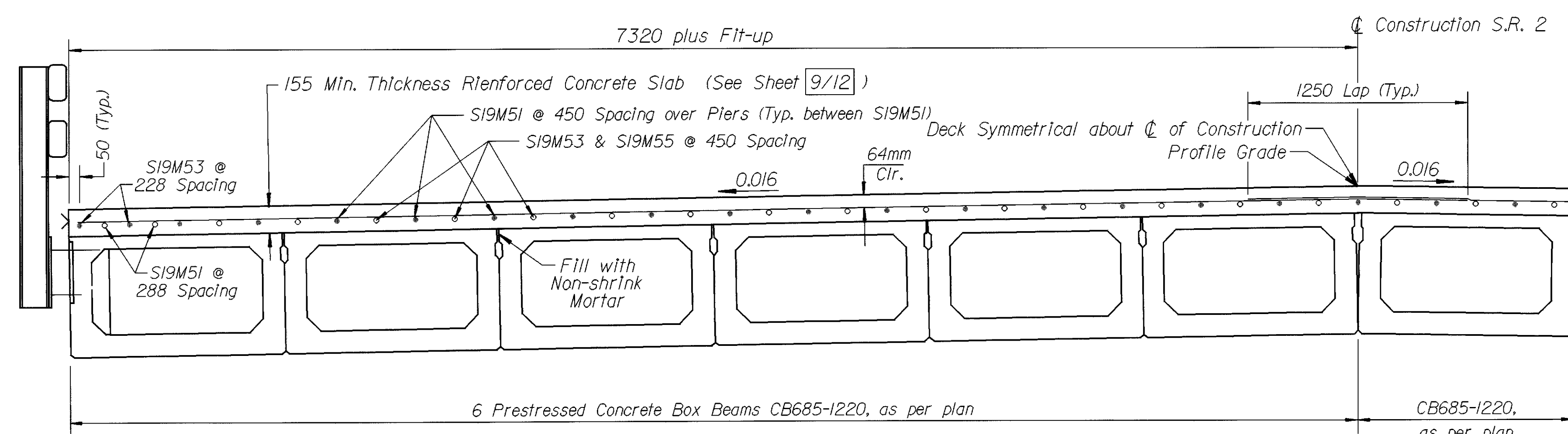
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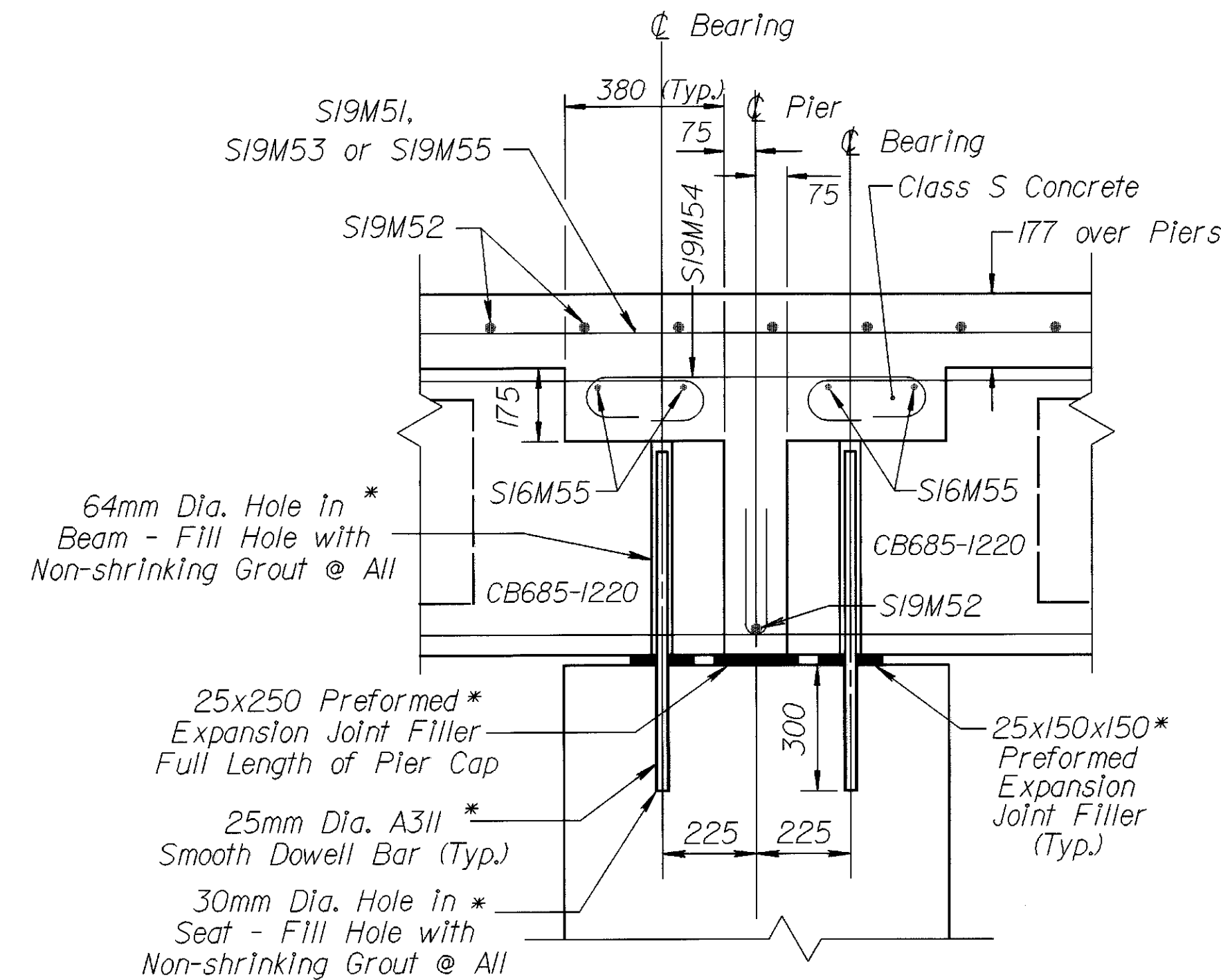


**SUPERSTRUCTURE DECK PLAN**  
(Reinforcement)

For Section X-X (See Sheet 9/12)



**HALF TRANSVERSE SECTION**



**SECTION P-P**

\* Include with Item 865 CB685-1220 Prestressed Concrete Beam

NOTE: All dimensions are in millimeters unless otherwise noted. Stations and elevations however are in meters.



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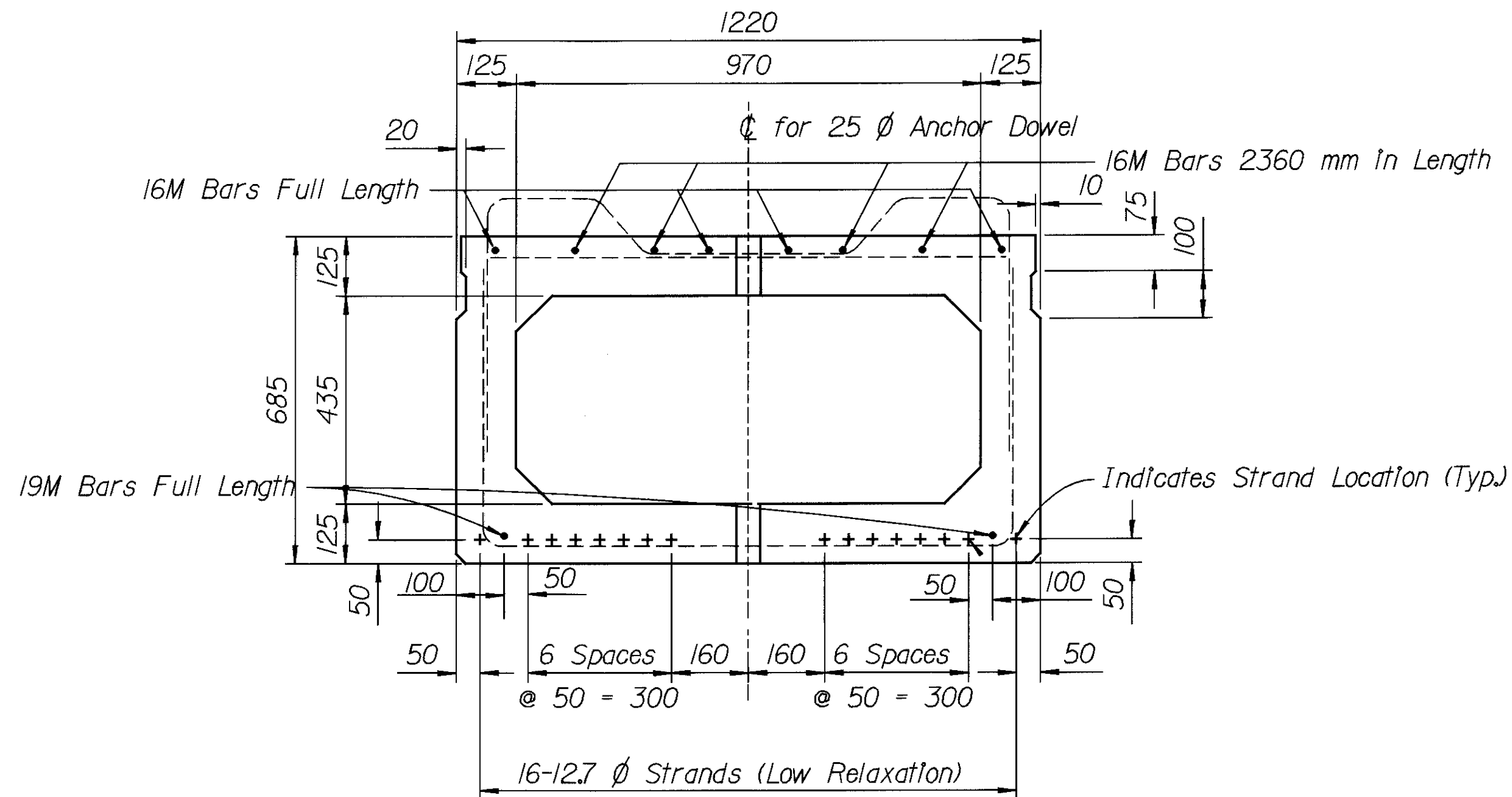
**Camber**

Calculated camber at time of paving, including allowance for camber growth due to creep, is 28mm.

Calculated deflection due to weight of Reinforced Concrete Slab and railing is 2mm.

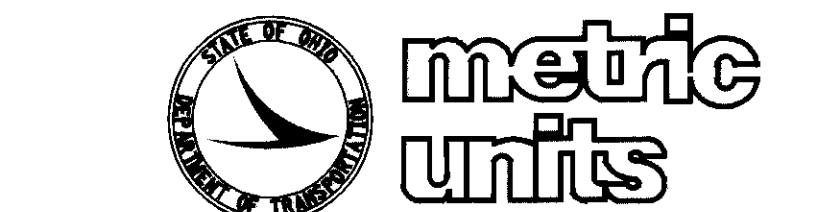
Net final camber of beams is 22mm. This is 22mm in excess of the amount required to place the top of the beam parallel to profile grade. This excess amount shall be compensated for by thickening the Reinforced Concrete Slab from 155mm at center of span to 177mm at the ends.

Elastomeric Bearings shall comply with Item 516 and AASHTO Standard Specification for Highway Bridges, Section 18, Bearing Devices, Division II, Construction, Articles 18.4.5J and 18.5.6.2. Bearings shall be Grade 3, 50 durometer elastomer, and shall be subjected to the load testing requirements defined in Article 18.7.4.5 of the AASHTO document listed above. Bearings were designed under section 14.6.6 of section 14, Bearings, Division I, Design. Testing shall be included in the unit price bid for the bearings, each.

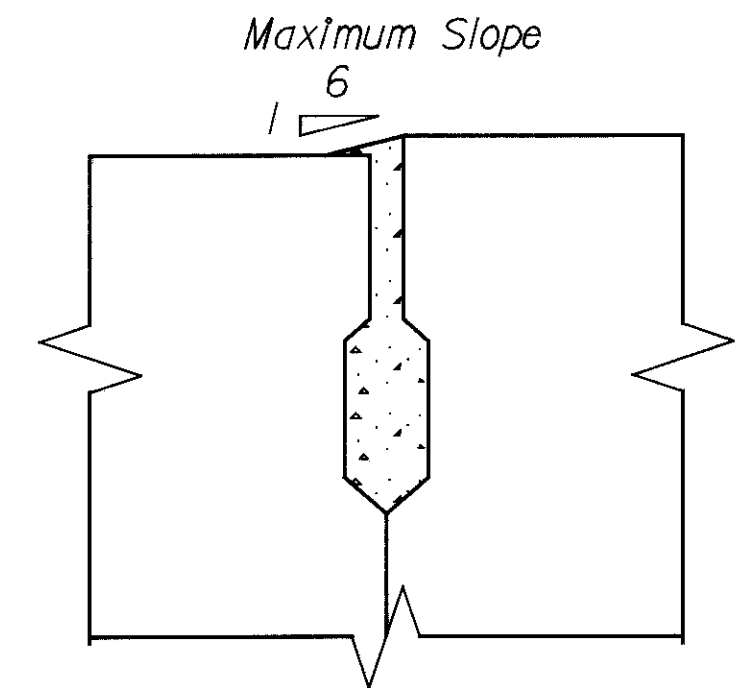


**CB685-1220, As Per Plan**

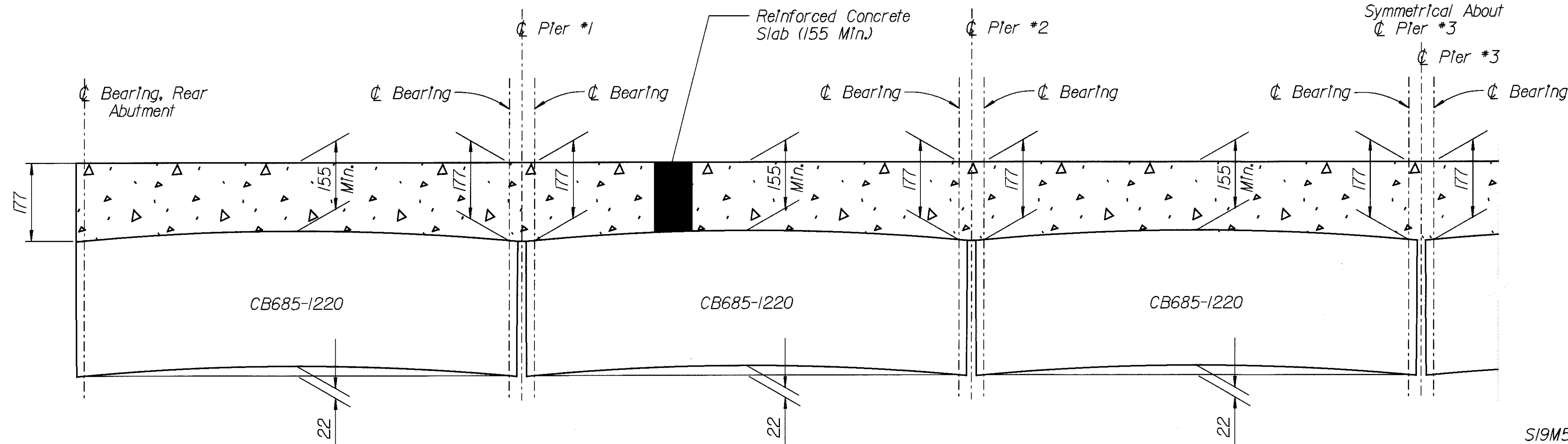
For Further Detail Information See Std. Dwg. PSBD-I-93M



Note: All dimensions are in millimeters unless otherwise noted.

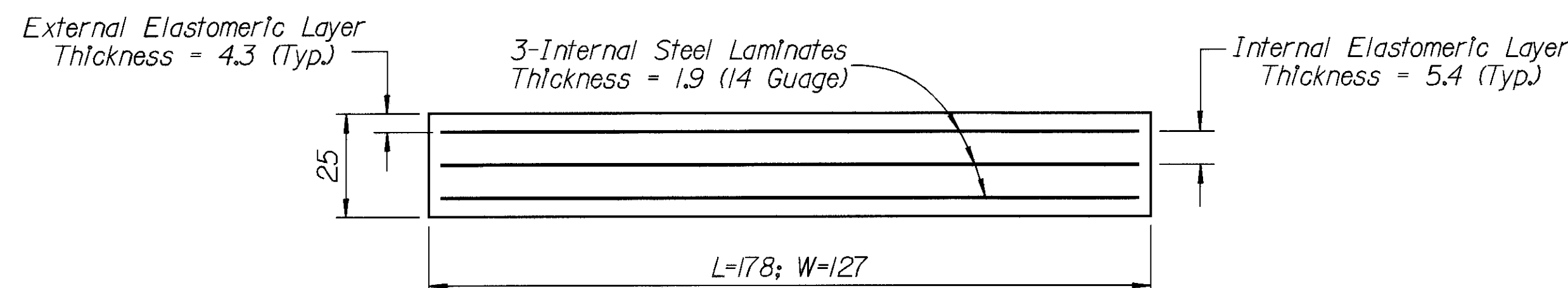
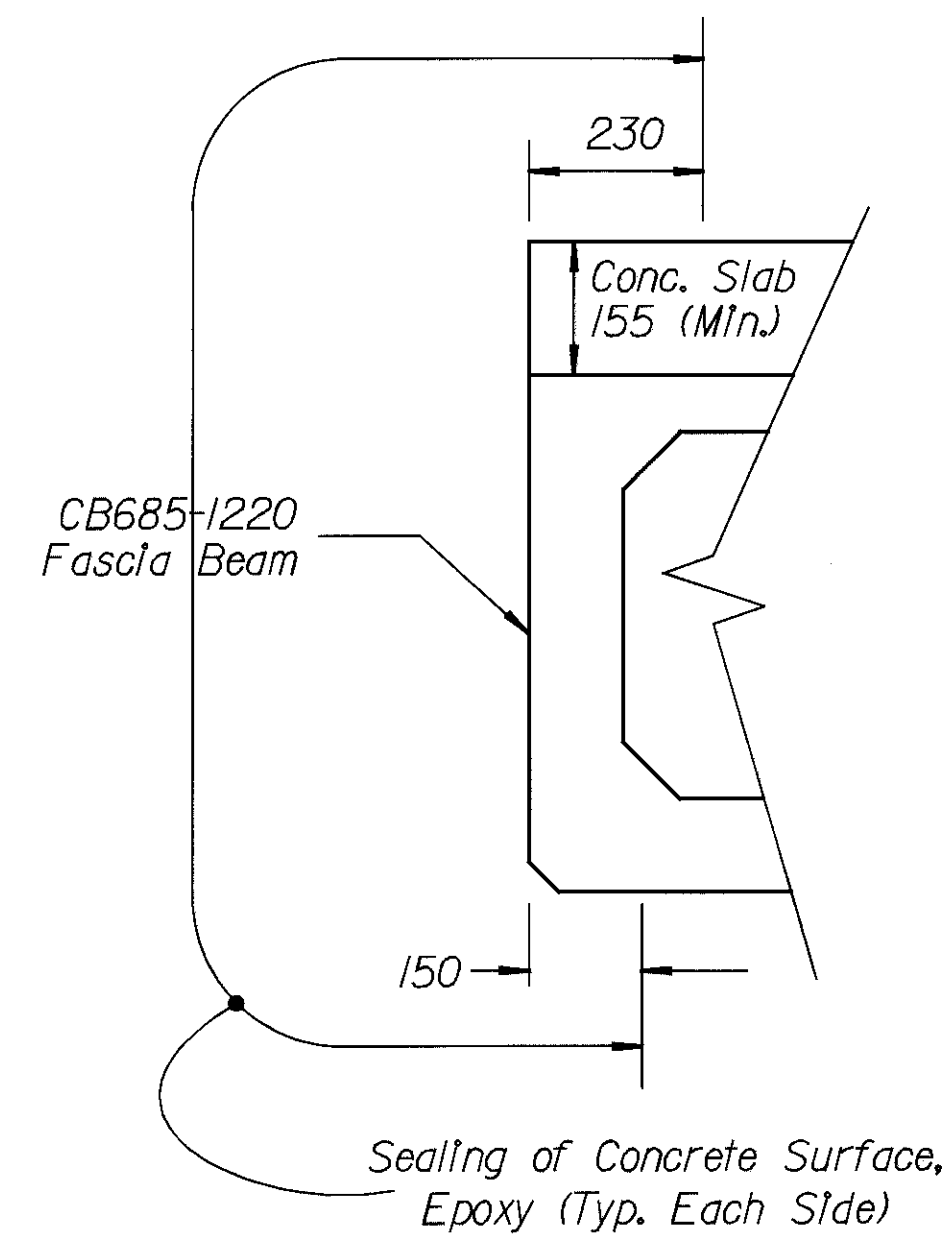


Detail of shear key mortar where adjacent beams have vertical offset due to different camber, skew effect.



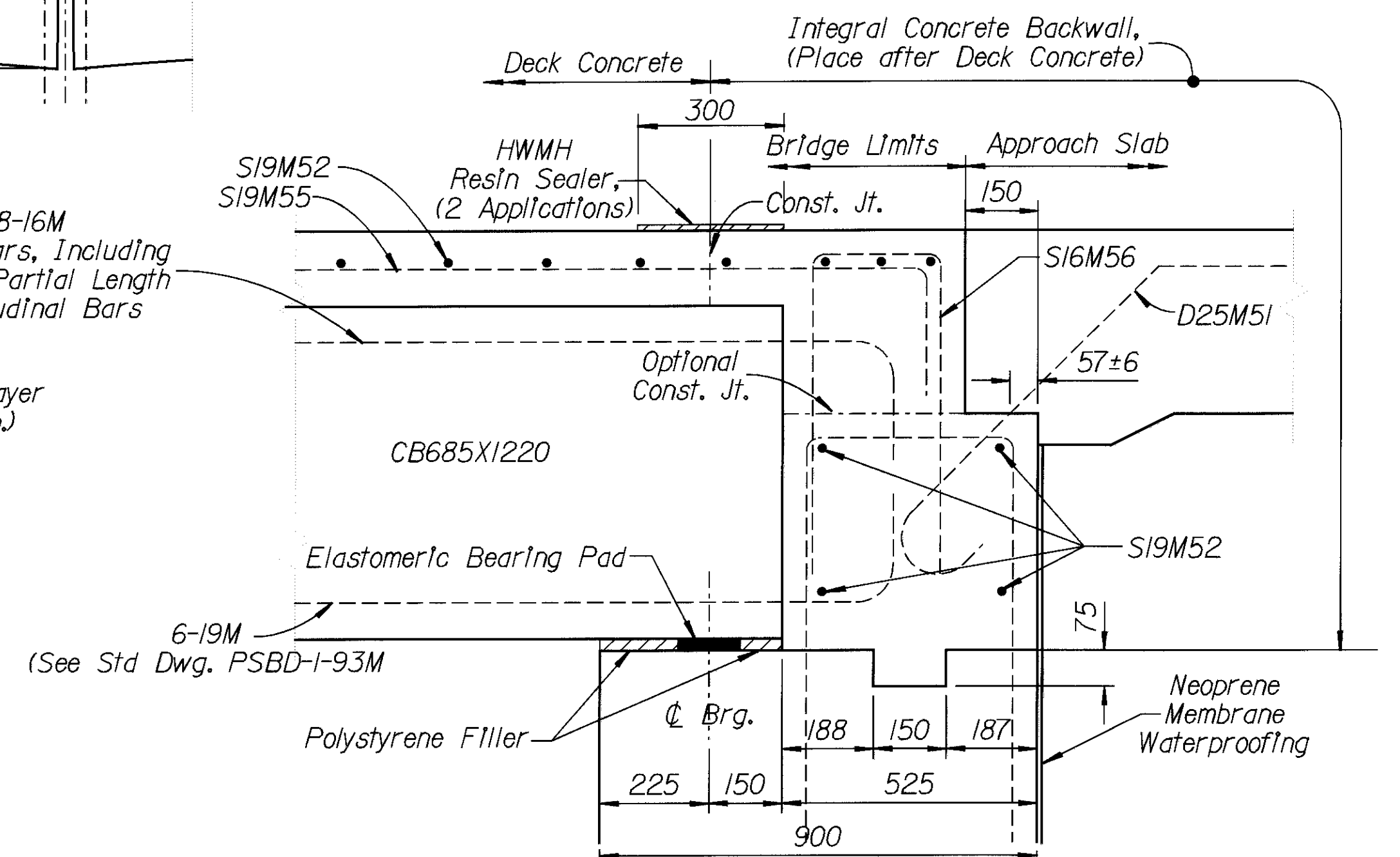
DECK SCREED ELEVATIONS(*)				
Location	¢ Brg. R.A.	1/2 Span 1 thru 6	¢ Pier 1 thru 5	¢ Brg. F.A.
Edge of bridge Deck El. "Tr & Tl"	176.811	176.813	176.811	176.811
Crown @ Construction El. "Tc"	176.927	176.931	176.929	176.929

(\*) Screed Elevations shown are for the deck surface prior to concrete placement. Allowance has been made for anticipated calculated dead load deflections.



**Laminated Elastomeric Bearing Details**

Bearing Design Loads: 63.8 kN Dead Load  
 49.8 kN Live Load (Excluding Impact)  
 Maximum Design Load = 113.6 kN



**SECTION X-X  
 INTEGRAL BACKWALL DETAIL**

DESIGN AGENCY  
 DISTRICT ONE  
 PRODUCTION DEPARTMENT

DATE  
 5-5-99

REVIEWED  
 JRC

DESIGNED  
 EJS

CHECKED  
 JTB

MISC. SUPERSTRUCTURE DETAILS  
 Bridge No. OTT-2-17212  
 over Toussaint Creek

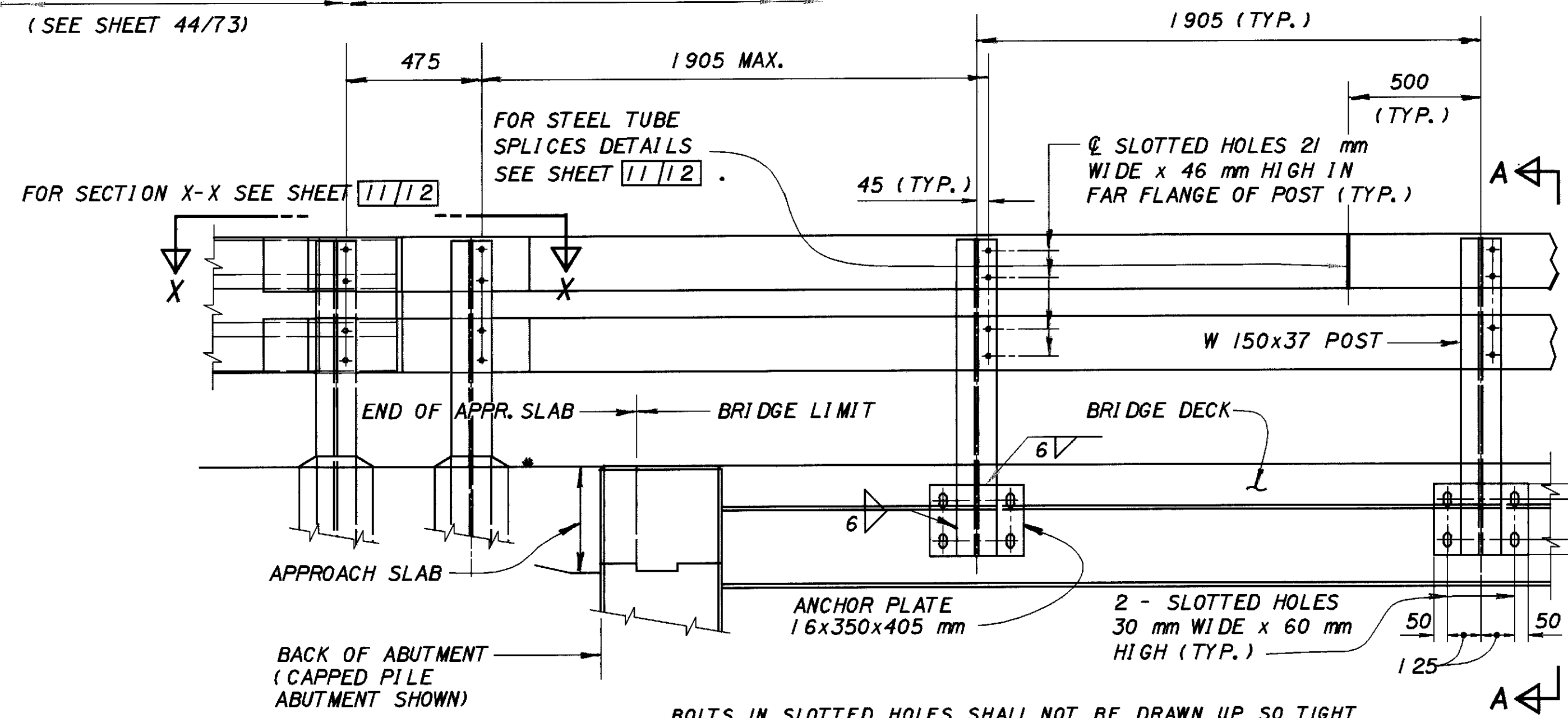
OTT-2-10.735/17.135

9/12

65  
 73

BRIDGE TERMINAL ASSEMBLY  
(SEE SHEET 44/73)

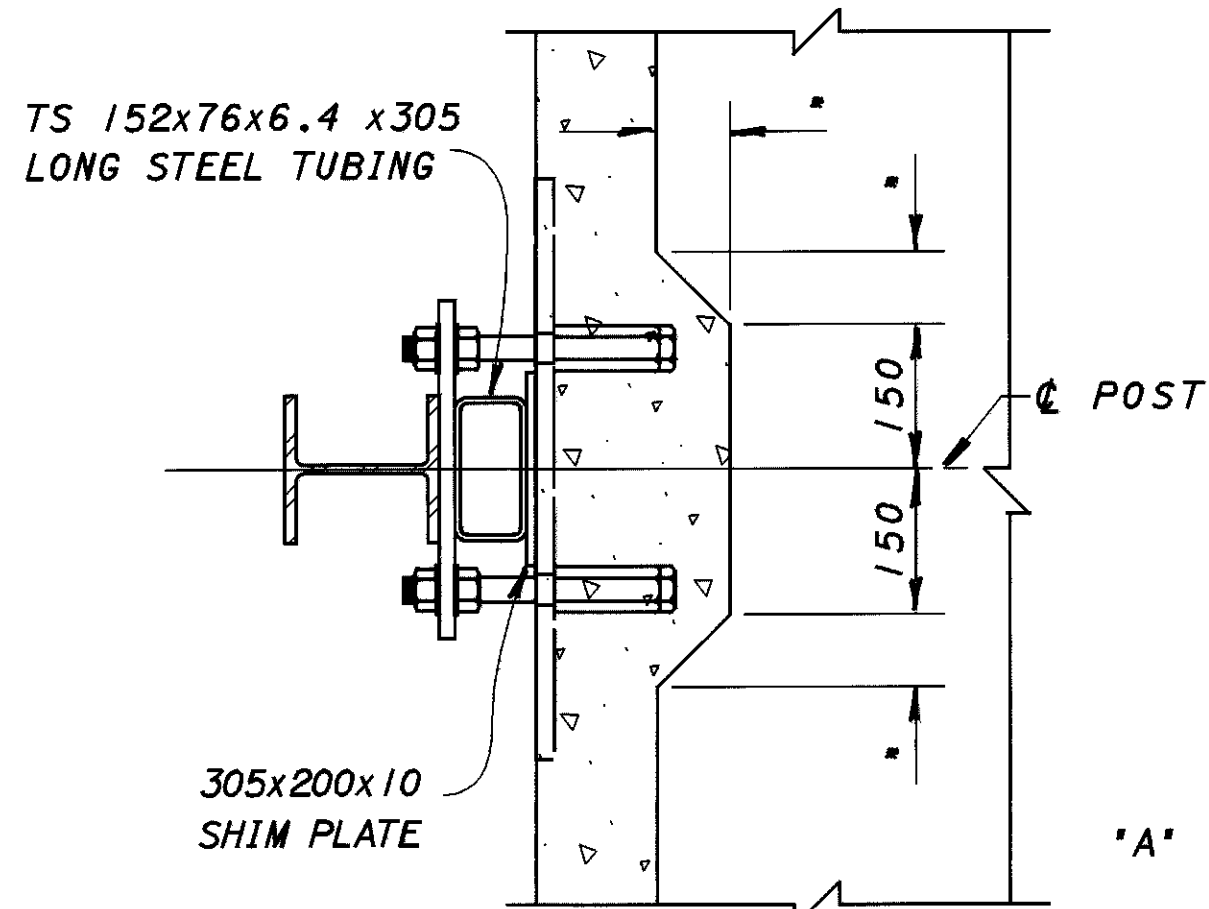
BRIDGE RAILING



BOLTS IN SLOTTED HOLES SHALL NOT BE DRAWN UP SO TIGHT AS TO PREVENT SLIDING BETWEEN THE TUBE AND CHANNEL.

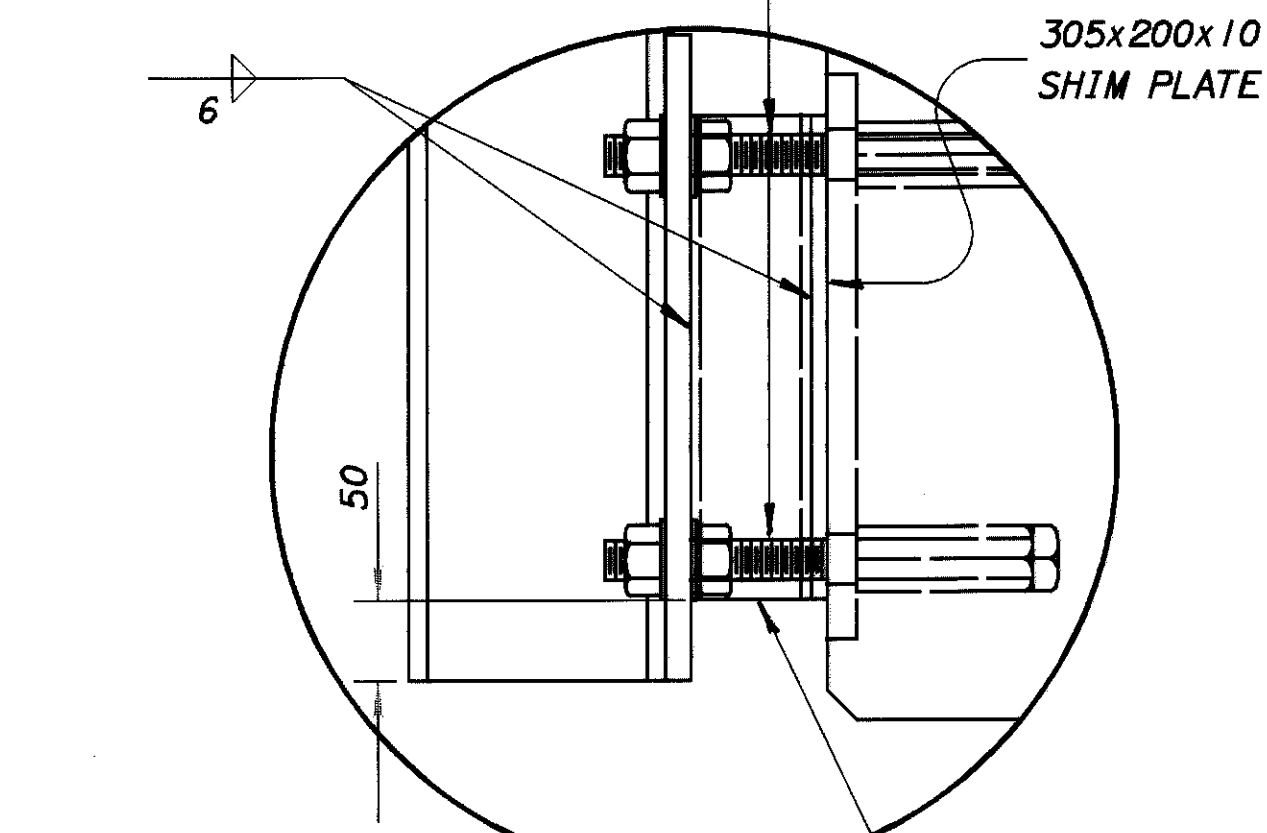
**RAILING ELEVATION**

TWIN TUBE RAILING WITH THRIE BEAM TERMINAL CONNECTOR AT THE FIRST POST OFF THE BRIDGE.



**SECTION J-J**

2 - 25 DIA. x 305 LONG ANCHOR BOLTS WITH MACHINE THREADS FULL LENGTH AND TWO HEX NUTS AND TWO WASHERS PER BOLT.



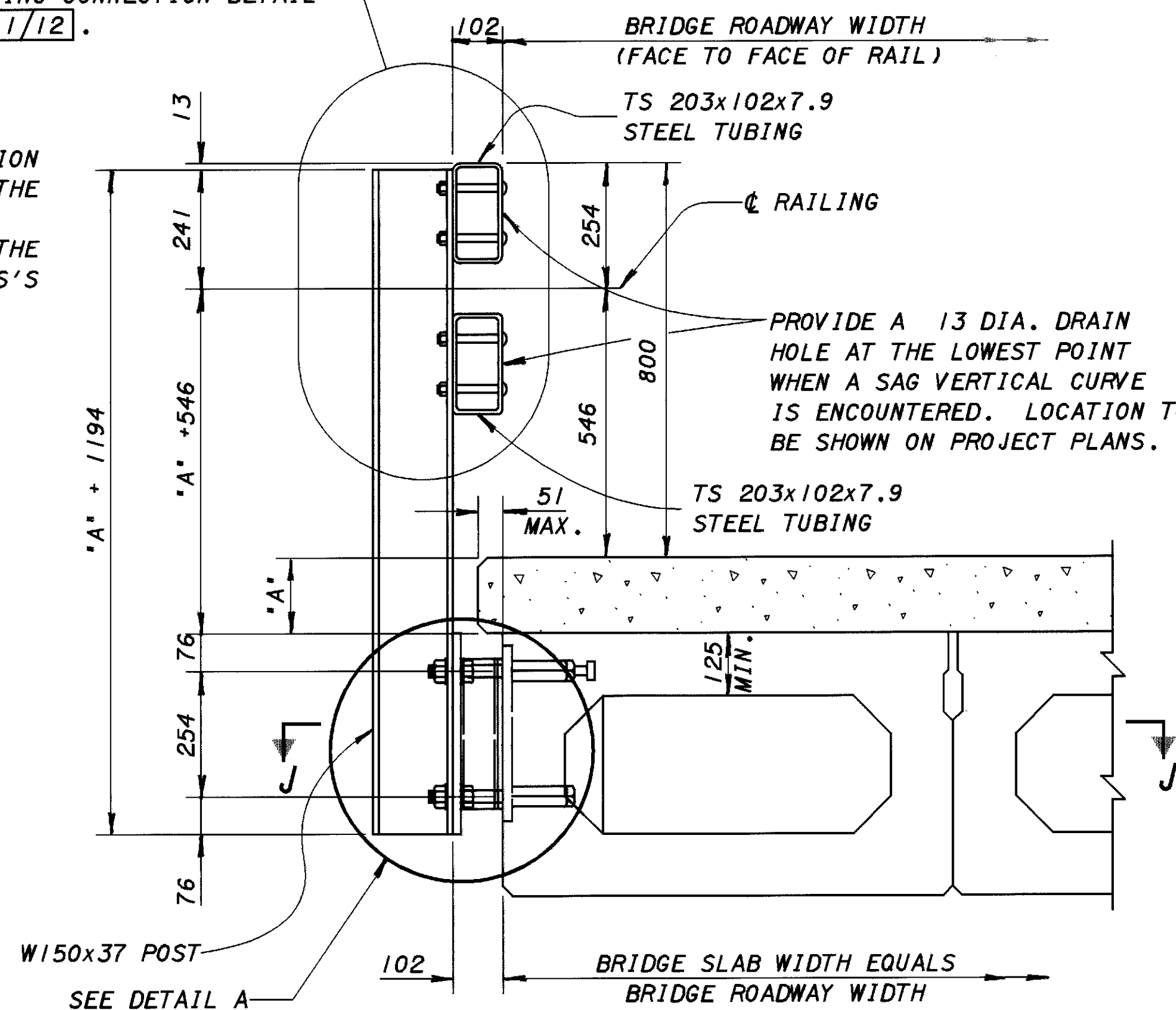
TS 152x76x6.4x305 LONG STEEL TUBING, WELD TO ANCHOR PLATE AND SHIM PLATE PRIOR TO GALVANIZING.

**DETAIL A**

SEE RAILING CONNECTION DETAIL SHEET 11/12.

**LEGEND**

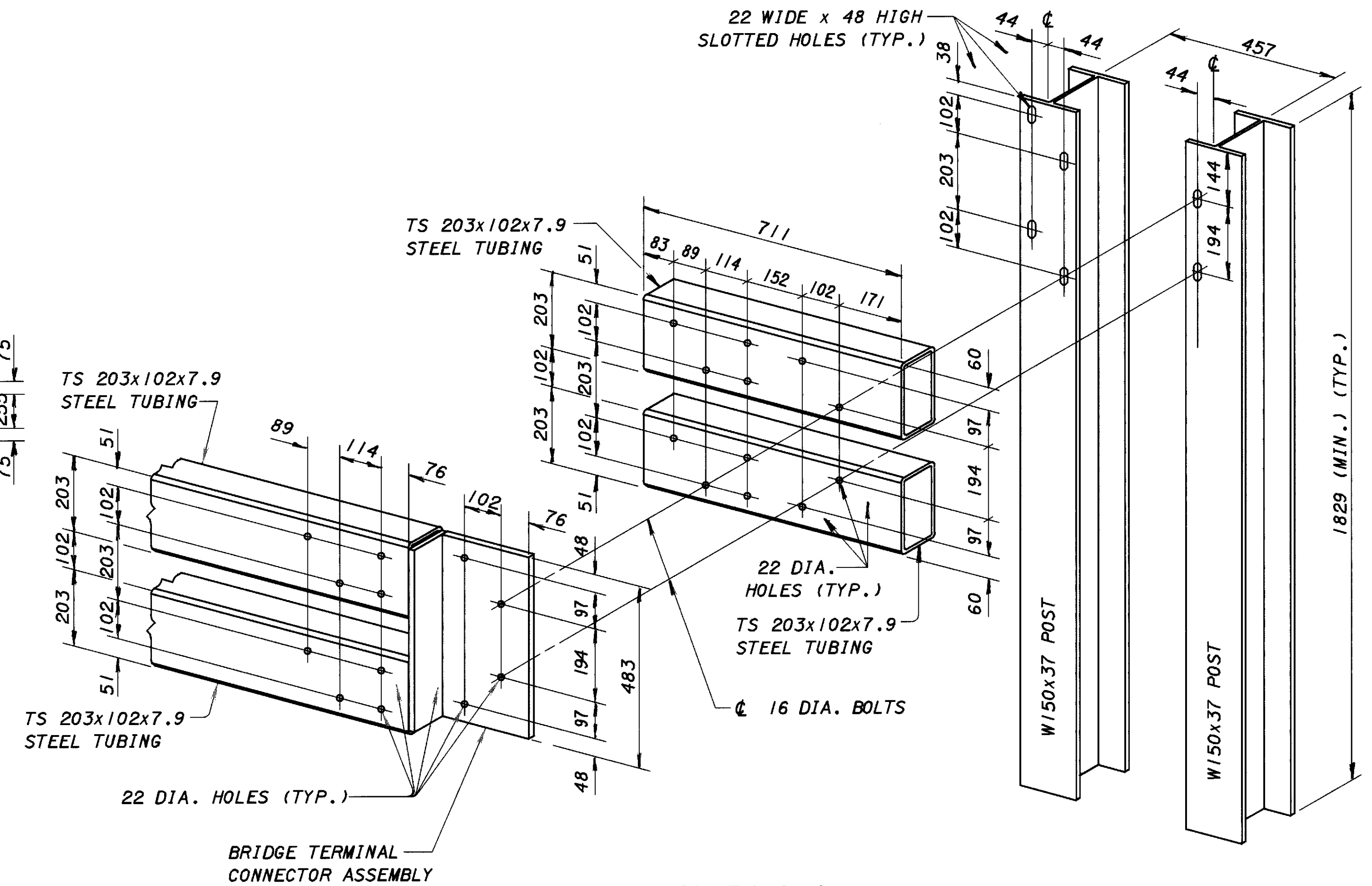
- \*A\* - OVERLAY THICKNESS. THIS DIMENSION VARIES ACROSS THE LENGTH OF THE BRIDGE.
- - THIS DIMENSION IS THE SAME AS THE WIDTH OF FILLET IN THE BOX BEAMS'S VOID.



**SECTION A-A**

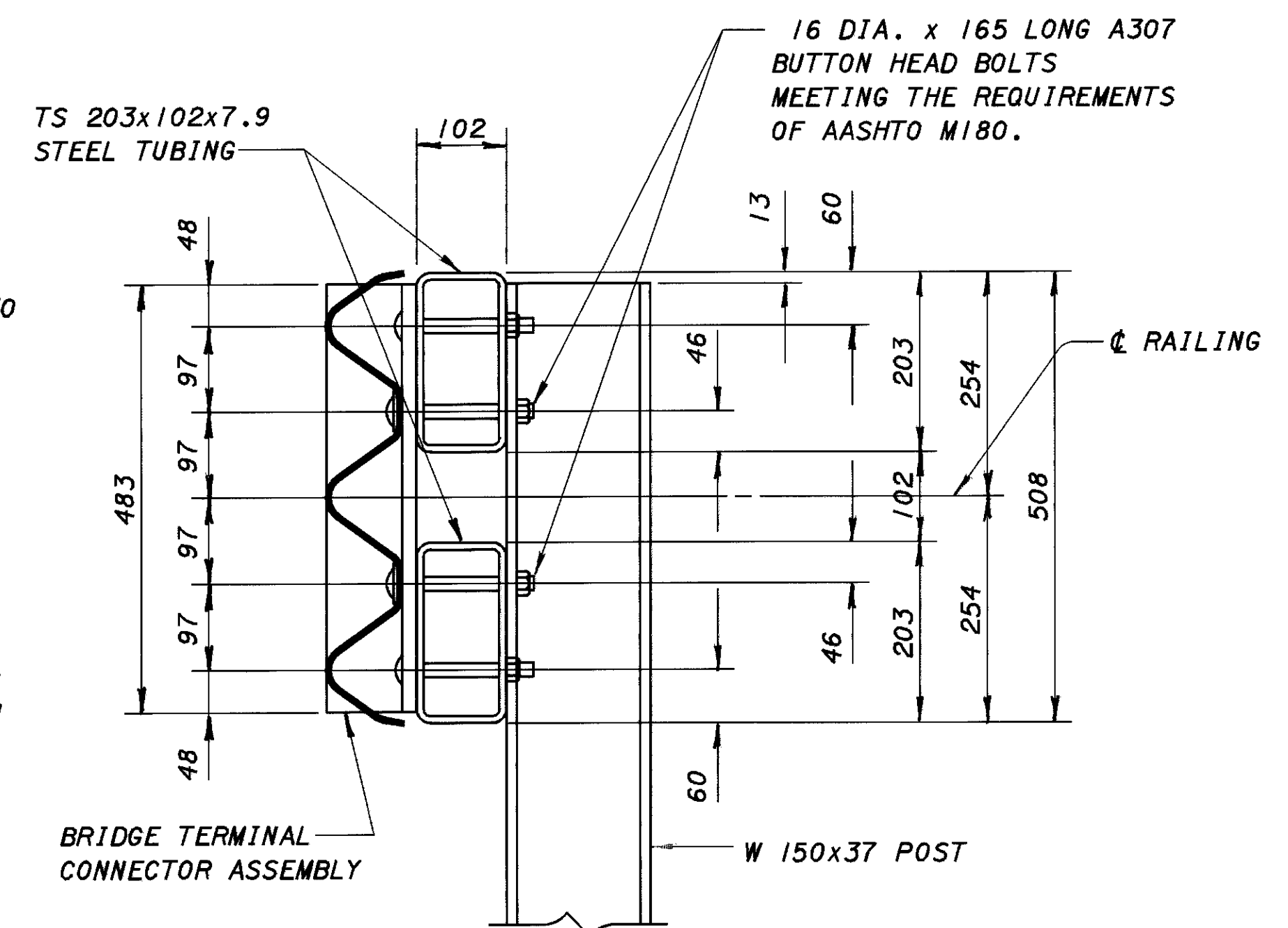
(FOR 430 AND DEEPER COMPOSITE PRESTRESSED BOX BEAM BRIDGES)

NOTE:  
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



**VIEW C-C**

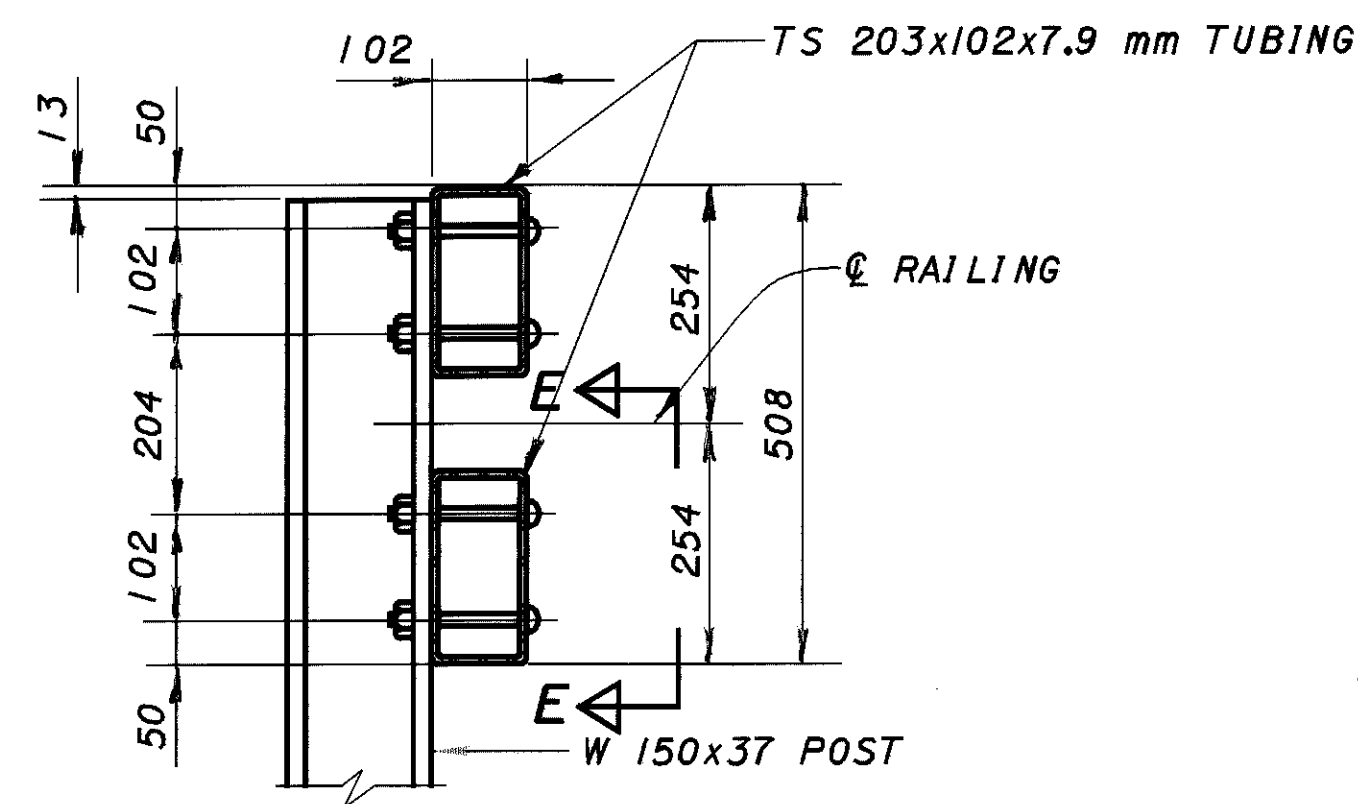
(NESTED THRIE BEAM RAILING NOT SHOWN)



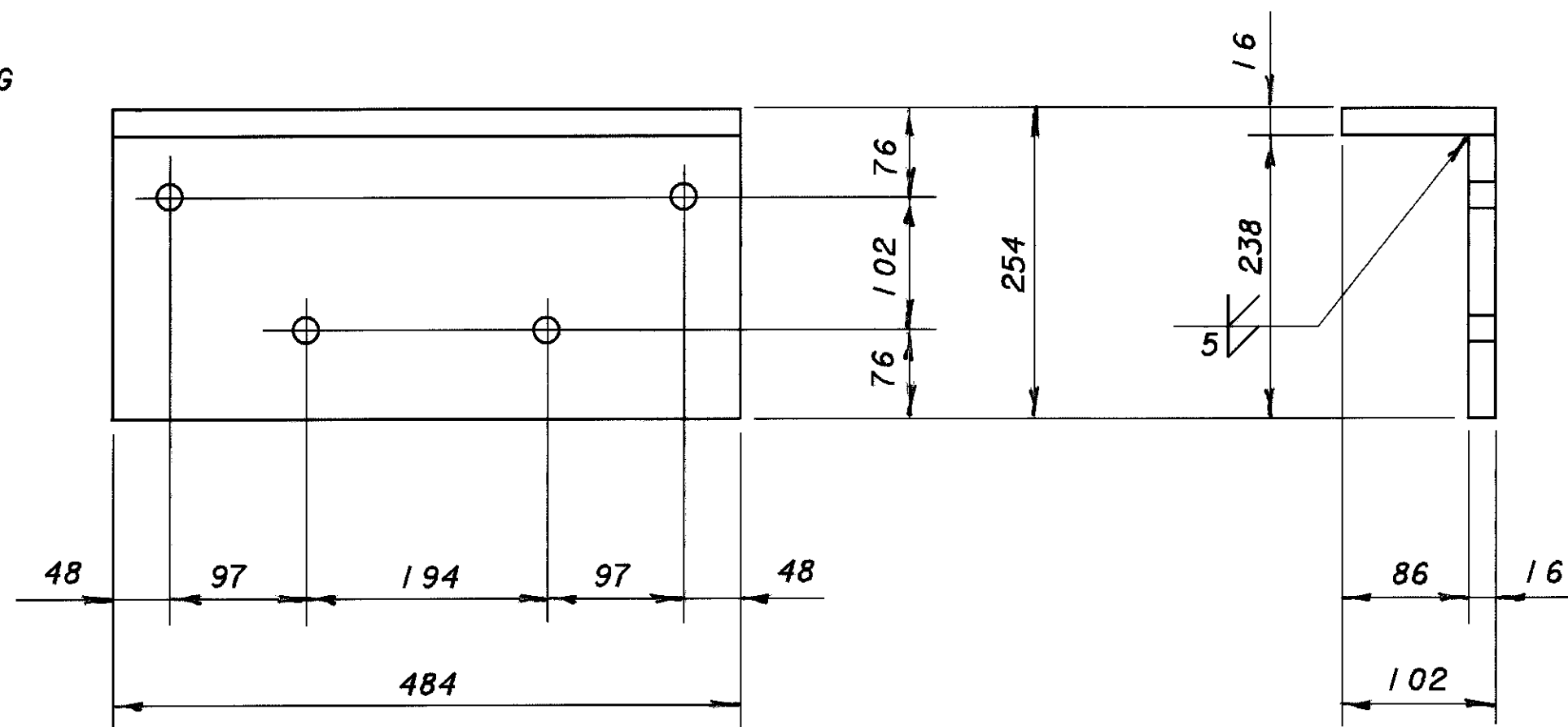
**VIEW F-F**

SECTION THRU RAIL AT THRIE BEAM BRIDGE TERMINAL CONNECTION ASSEMBLY

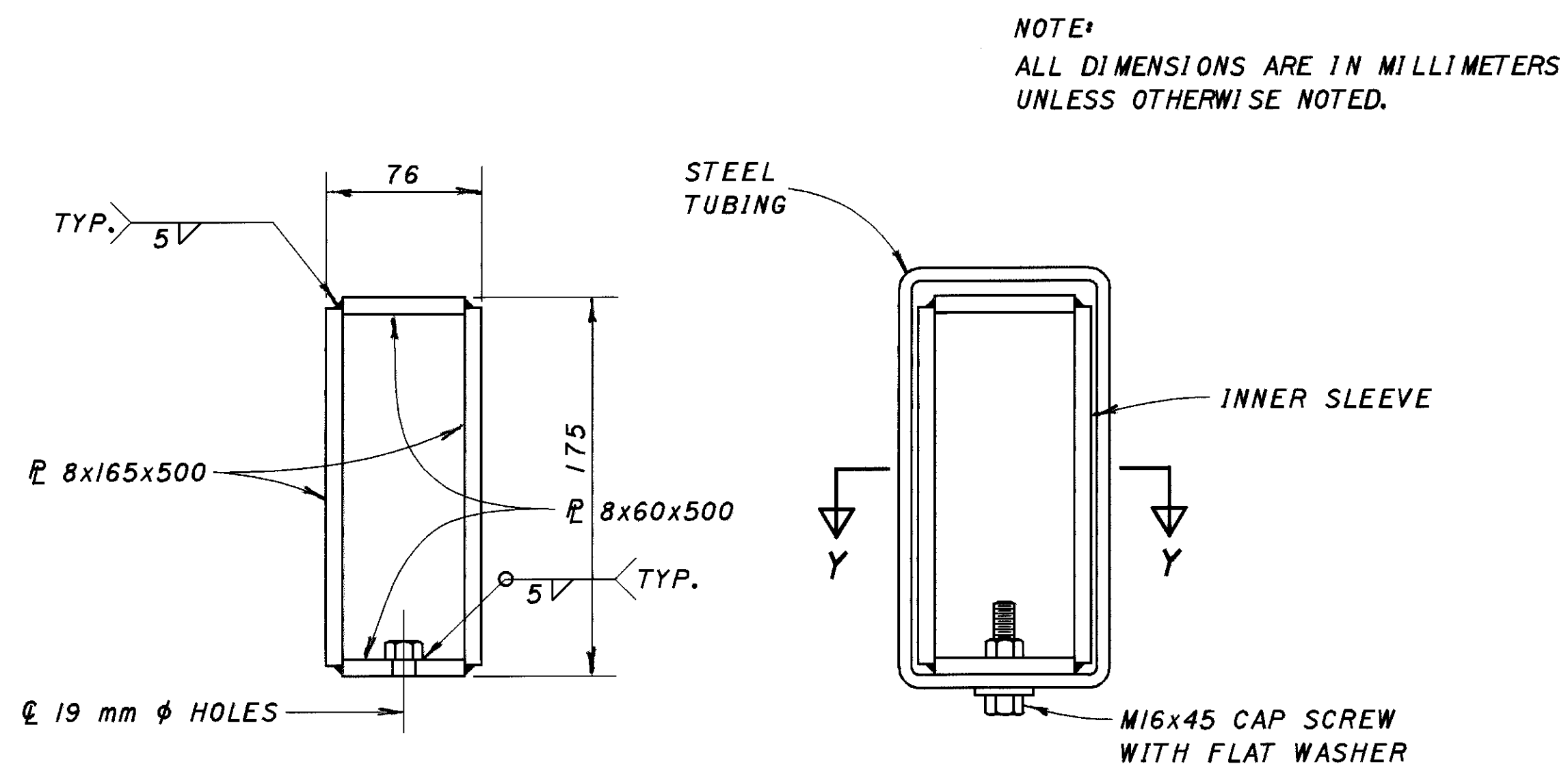
DESIGNED	DRAWN	REVIEWED	DATE	DESIGN AGENCY
ES	CS	JL	5-5-99	DISTRICT ONE
CHECKED	RETIRED		STRUCTURE FILE NUMBER	PRODUCTION DEPARTMENT
JTB			620009	
<b>RAILING DETAILS</b>				
BRIDGE No. OTT-2-17212				
over Tossaint River				
<b>OTT-2-10.735/17.135</b>				
10/12				
66				
73				



**TYPICAL SECTION THRU RAIL USING THRIE BEAM TERMINAL CONNECTOR**

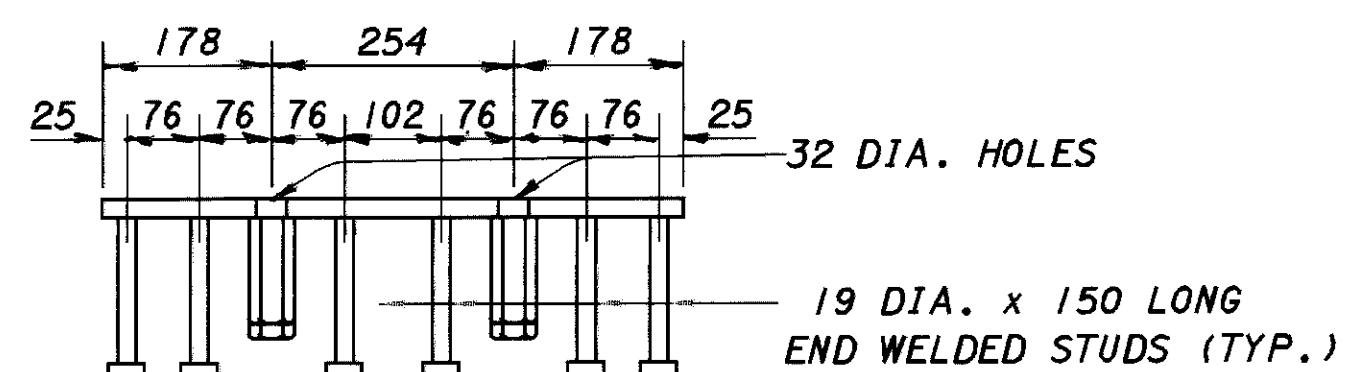


**BRIDGE TERMINAL CONNECTOR ASSEMBLY**

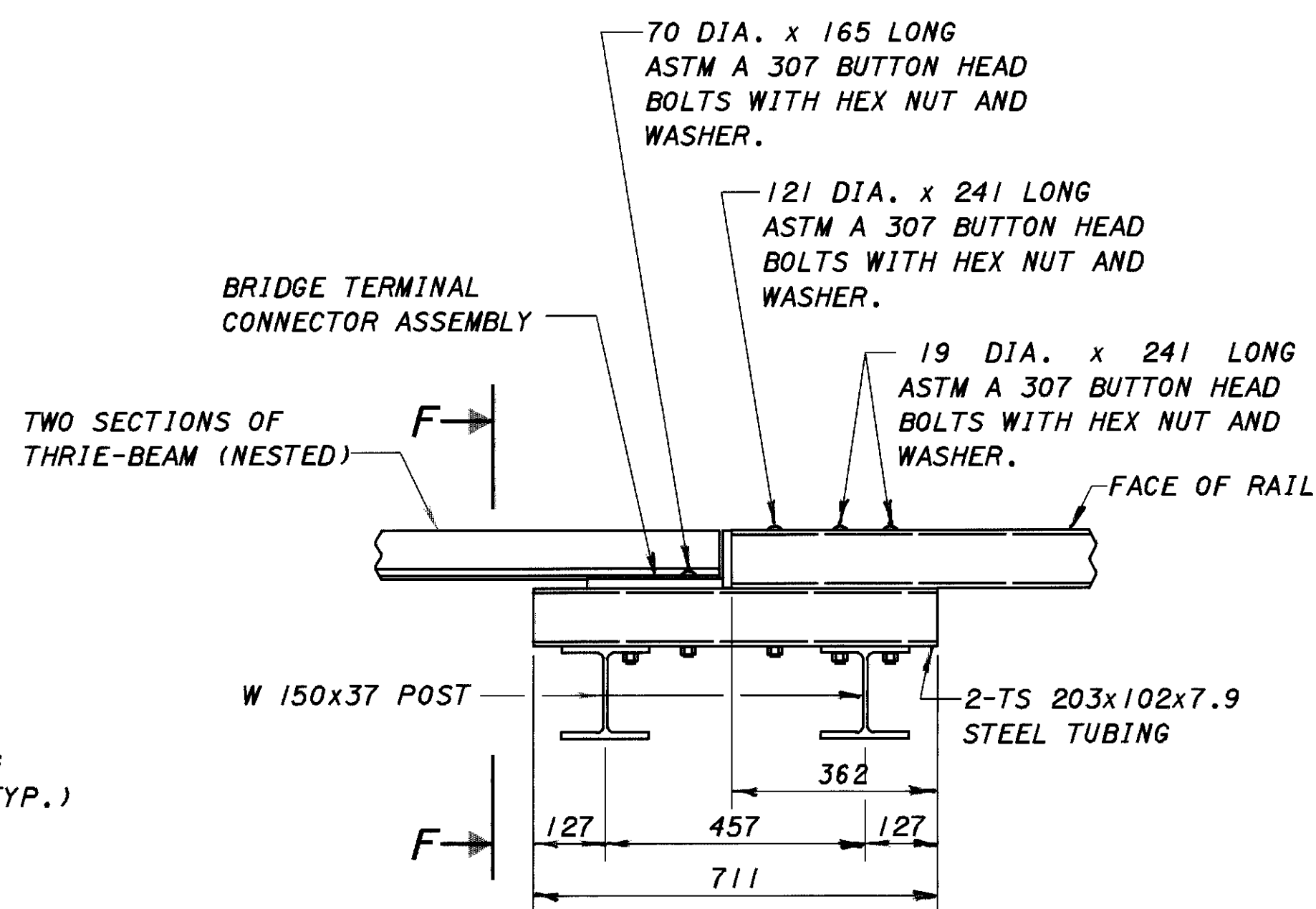


**FINISHED DIMENSIONS OF INNER SLEEVE**

**SECTION THRU SPLICE**

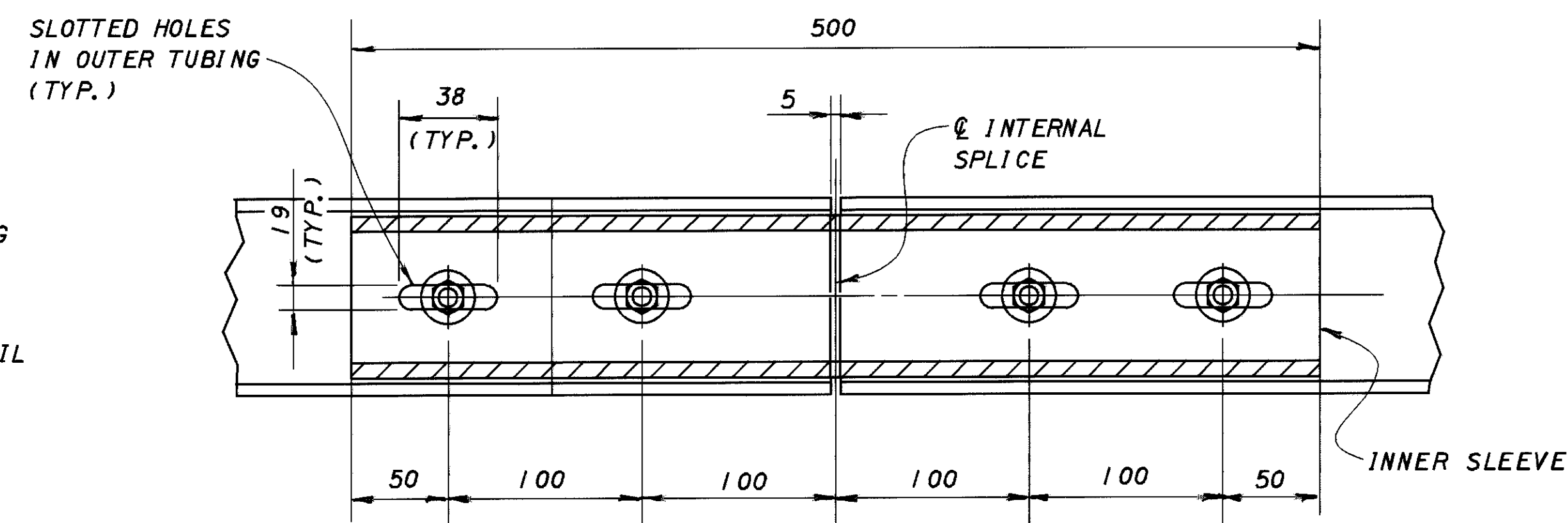


**VIEW D-D**

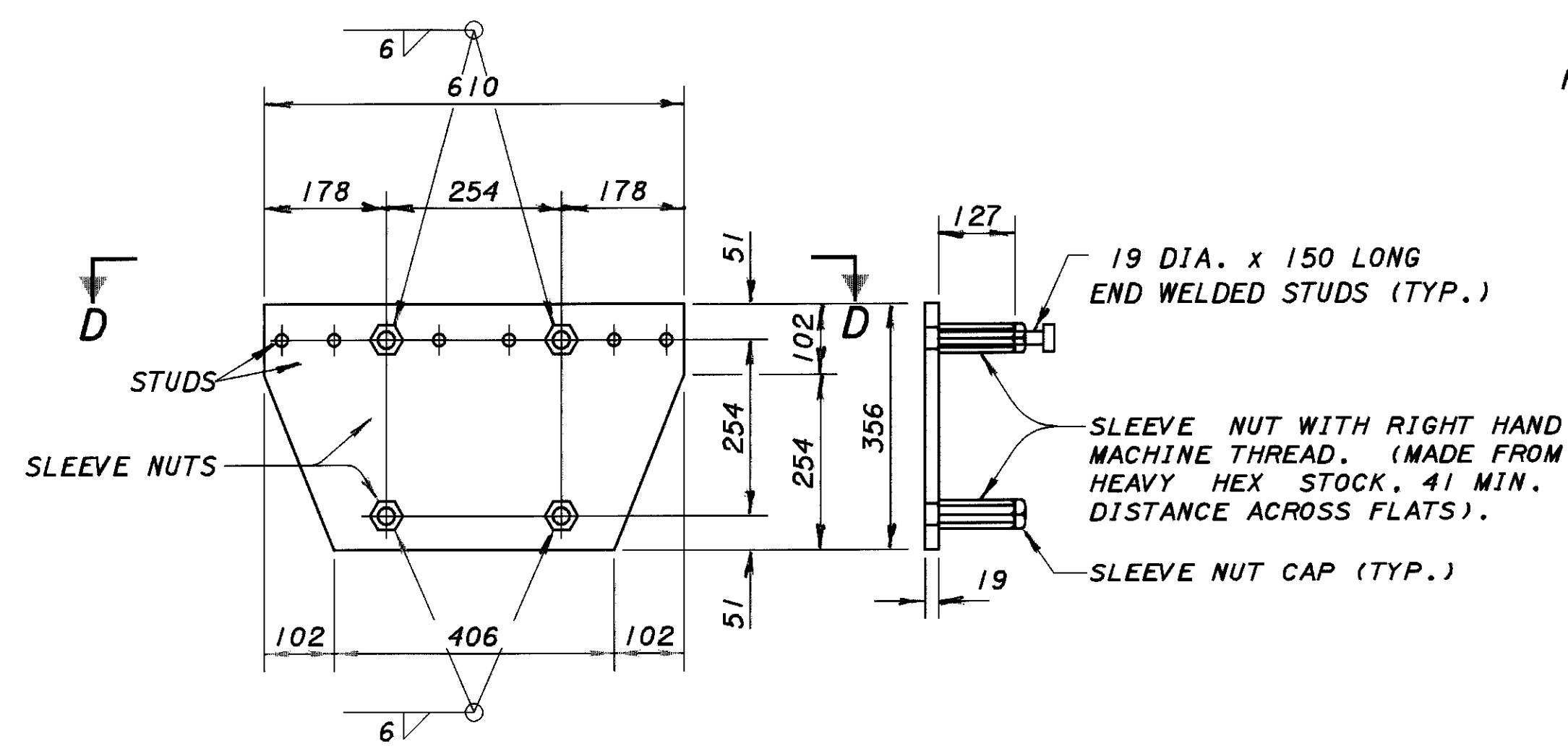


**SECTION X-X**

FOR VIEW F-F SEE SHEET 10/12



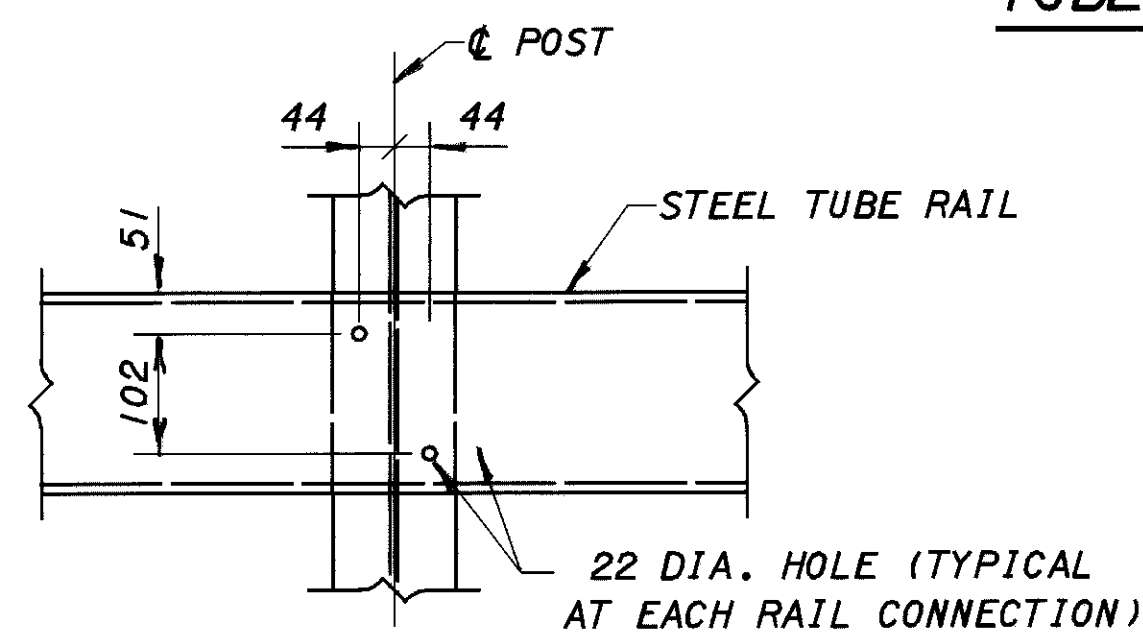
**SECTION Y-Y TUBE SPLICE DETAILS**



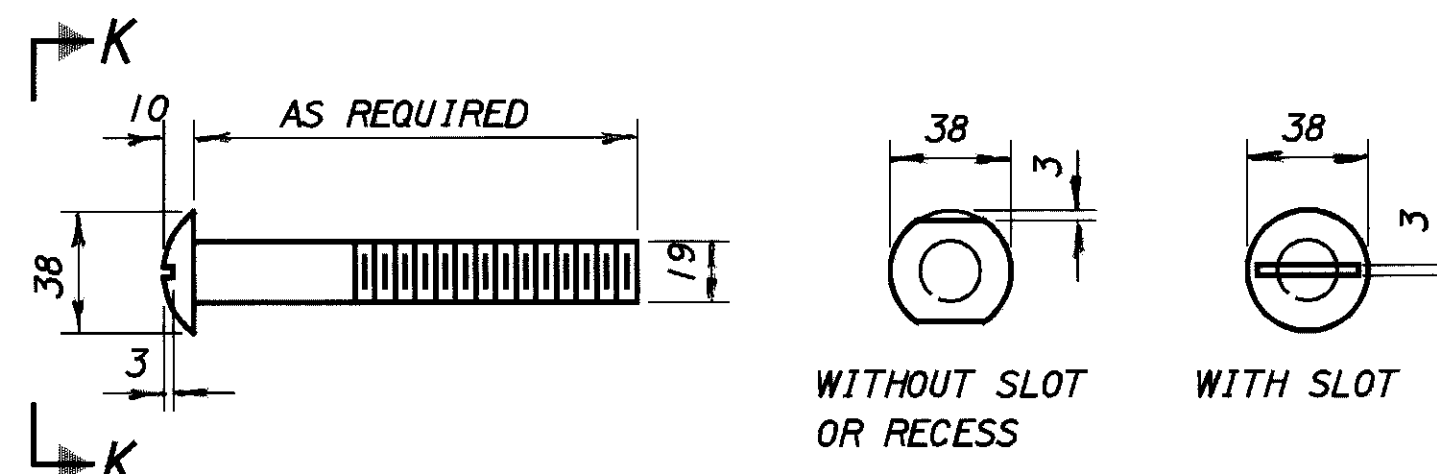
**ELEVATION**

**END VIEW**

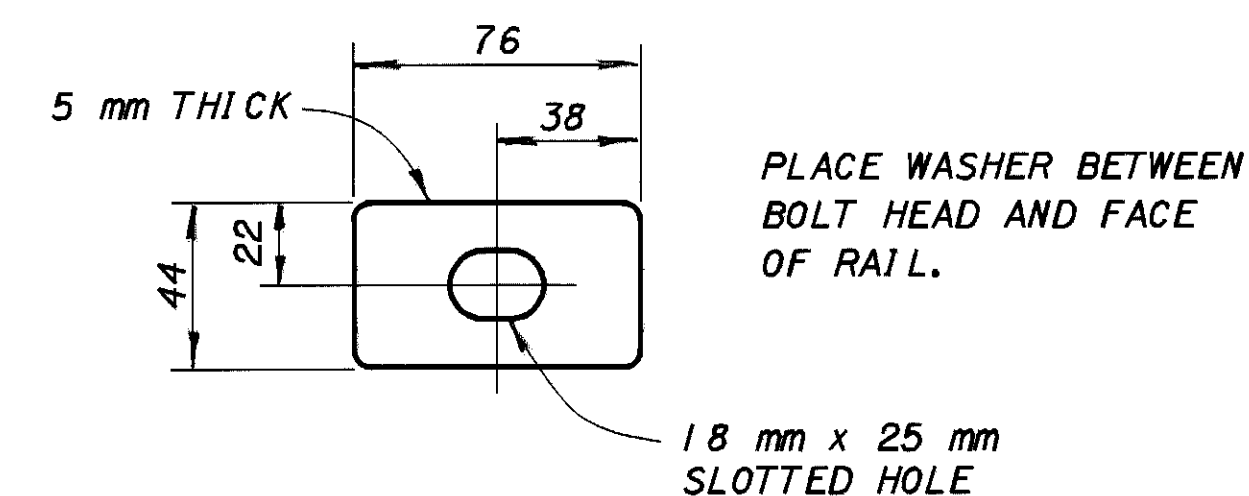
**POST ANCHOR DEVICE**



**VIEW E-E**



**DETAIL OF 19 DIA. ROUND HEAD BOLT**



**SPECIAL WASHER**

NOTE:  
ALL DIMENSIONS ARE IN MILLIMETERS  
UNLESS OTHERWISE NOTED.

DESIGNED	DESIGNED	DESIGN AGENCY
CHECKED	DATE	DISTRICT ONE
REVISED	REVIEWED	PRODUCTION DEPARTMENT
FILE NUMBER	STRUCTURE FILE NUMBER	
6200109	5-5-99	
DESIGNED	DESIGNED	
CHECKED	DATE	
FILE NUMBER	STRUCTURE FILE NUMBER	
6200109	5-5-99	
RAILING DETAIL	RAILING DETAIL	
BRIDGE No. OTT-2-17212	BRIDGE No. OTT-2-17212	
over Tousaint River	over Tousaint River	
OTT-2-10.735/17.135	OTT-2-10.735/17.135	
11/12	11/12	
67	67	
73	73	