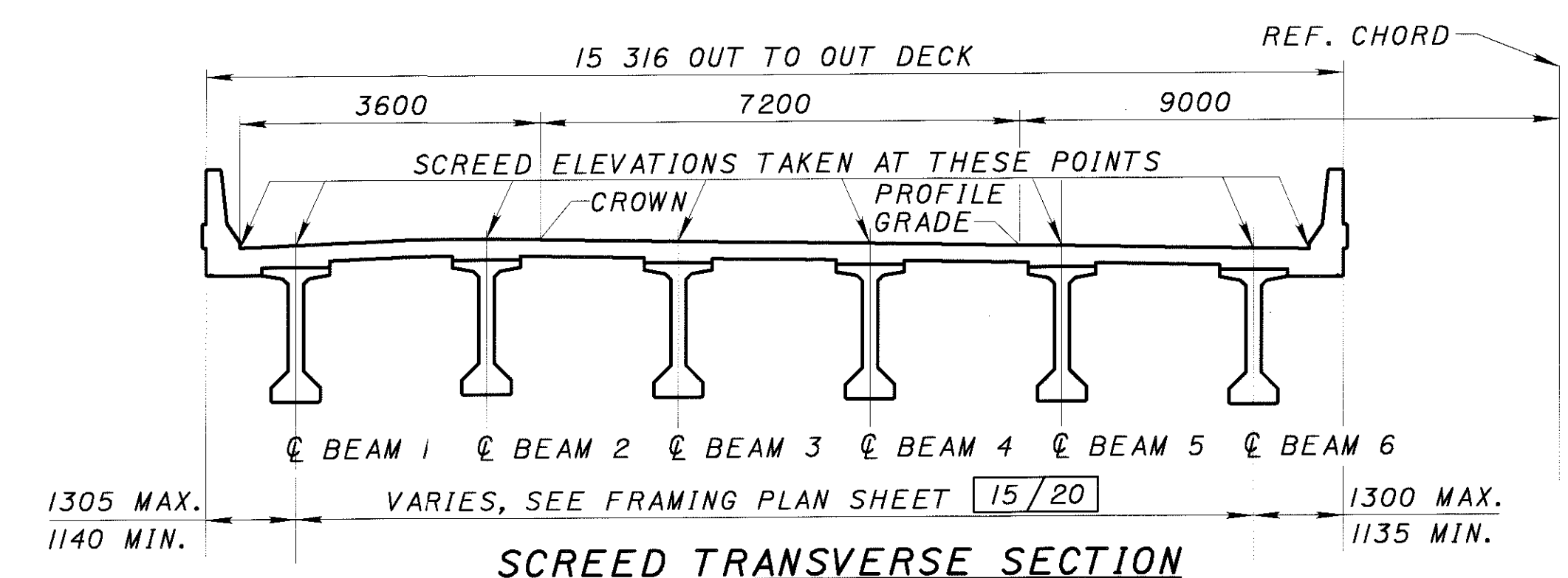


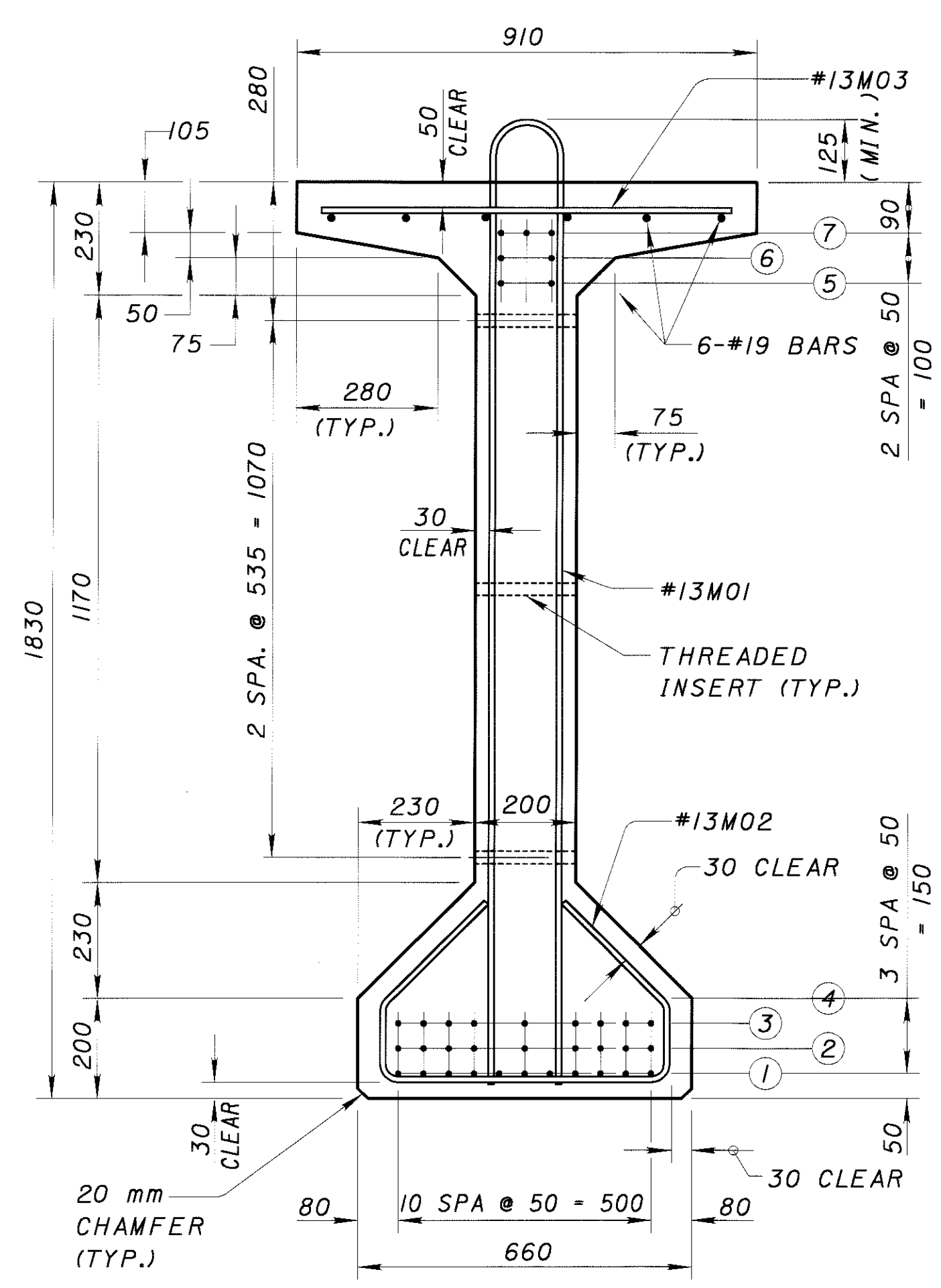
SCREED PLAN



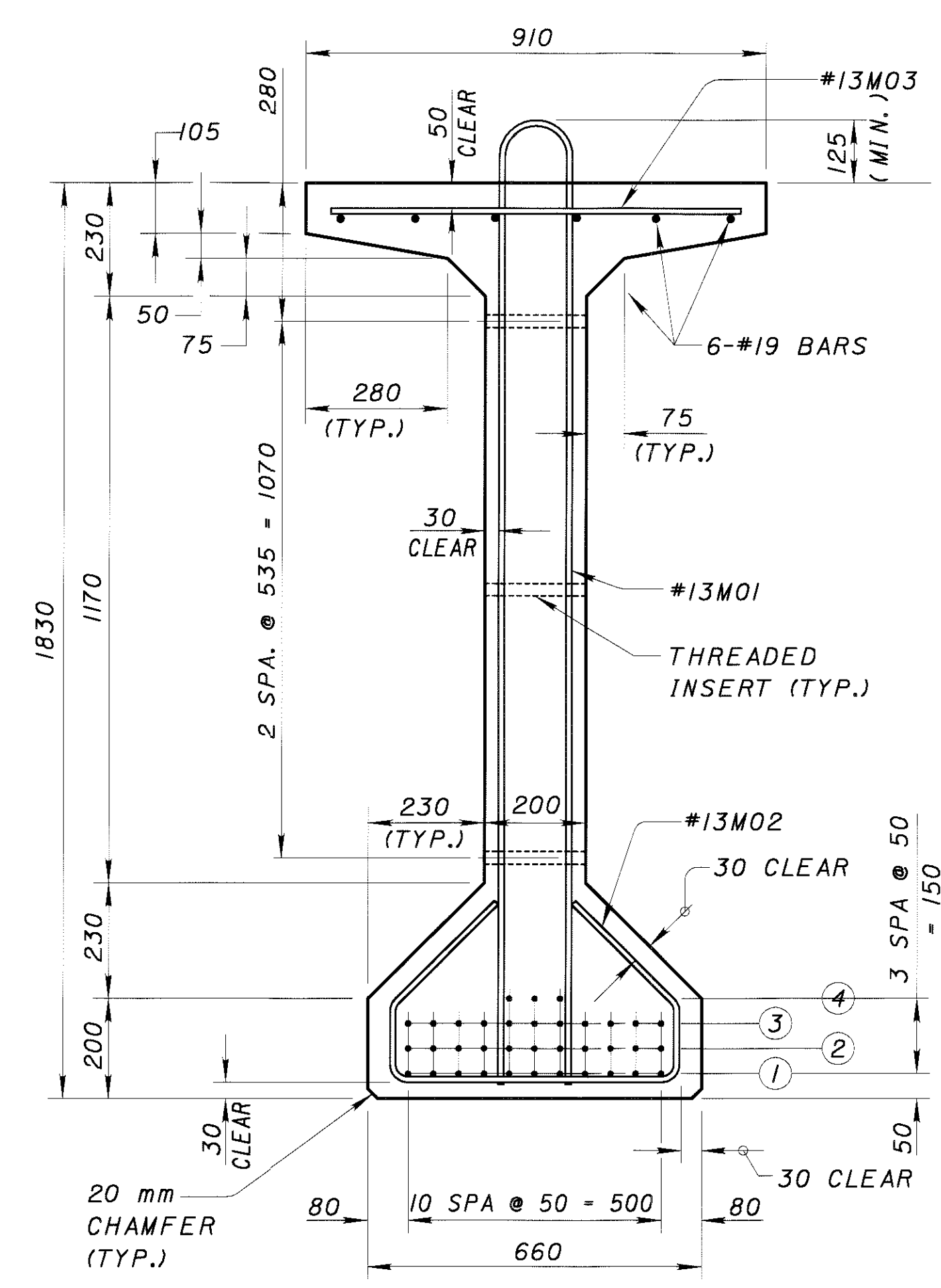
NOTE:
 SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

		SCREED ELEVATIONS																				
LOCATION		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
P.G.	STATION	255.795	263.744	271.687	279.625	287.559	295.489	303.416	311.340	319.263	327.185	335.106	343.026	350.948	358.871	366.795	374.722	382.652	390.586	398.524	406.467	414.416
	OFFSET	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000
	ELEVATION	260.039	260.139	260.238	260.337	260.436	260.536	260.635	260.734	260.833	260.932	261.031	261.130	261.221	261.328	261.427	261.526	261.625	261.724	261.824	261.923	262.022
CROWN	STATION	256.420	264.306	272.186	280.061	287.933	295.800	303.665	311.527	319.388	327.247	335.106	342.964	350.823	358.684	366.546	374.411	382.278	390.150	398.025	405.905	413.791
	ELEVATION	260.122	260.367	260.323	260.459	260.538	260.654	260.758	260.851	260.932	261.065	261.152	261.262	261.324	261.440	261.544	261.637	261.718	261.835	261.940	262.050	262.112
LEFT TOE OF PARAPET	STATION	256.729	264.583	272.433	280.277	288.117	295.954	303.788	311.619	319.449	327.278	335.106	342.933	350.762	358.592	366.423	374.257	382.094	389.934	397.778	405.628	413.482
	ELEVATION	260.064	260.162	260.261	260.359	260.457	260.555	260.653	260.750	260.848	260.946	261.044	261.142	261.240	261.338	261.435	261.533	261.631	261.729	261.827	261.926	262.024
BEAM 1	STATION	256.667	264.520	272.374	280.228	288.081	295.920	303.759	311.599	319.437	327.271	335.106	342.940	350.774	358.612	366.452	374.291	382.130	389.983	397.837	405.691	413.544
	OFFSET	19.080	18.977	18.945	18.983	19.090	18.991	18.961	19.001	19.111	19.006	18.971	19.006	19.111	19.001	18.961	18.991	19.090	18.983	18.945	18.977	19.080
	ELEVATION	260.092	260.216	260.323	260.412	260.485	260.606	260.712	260.802	260.876	260.998	261.104	261.194	261.267	261.390	261.496	261.586	261.660	261.784	261.891	261.981	262.053
BEAM 2	STATION	256.446	264.321	272.198	280.074	287.949	295.809	303.671	311.533	319.393	327.249	335.106	342.962	350.818	358.678	366.540	374.402	382.262	390.137	398.013	405.890	413.765
	ELEVATION	260.155	260.270	260.373	260.467	260.549	260.662	260.765	260.859	260.943	261.055	261.158	261.252	261.336	261.448	261.551	261.644	261.728	261.842	261.946	262.039	262.122
BEAM 3	STATION	256.224	264.122	272.020	279.918	287.816	295.698	303.582	311.466	319.349	327.227	335.106	342.984	350.862	358.745	366.629	374.513	382.395	390.293	398.191	406.089	413.987
	ELEVATION	260.124	260.240	260.344	260.437	260.519	260.633	260.737	260.830	260.913	261.027	261.131	261.224	261.307	261.421	261.525	261.618	261.701	261.817	261.922	262.014	262.096
BEAM 4	STATION	256.001	263.921	271.841	279.762	287.682	295.587	303.493	311.399	319.304	327.204	335.106	343.007	350.907	358.812	366.718	374.624	382.529	390.449	398.370	406.290	414.210
	ELEVATION	260.080	260.196	260.301	260.394	260.476	260.590	260.694	260.788	260.871	260.986	261.090	261.183	261.266	261.381	261.485	261.578	261.661	261.778	261.883	261.976	262.057
BEAM 5	STATION	255.777	263.719	271.662	279.605	287.547	295.475	303.403	311.332	319.259	327.182	335.106	343.029	350.952	358.879	366.808	374.736	382.664	390.606	398.549	406.492	414.434
	ELEVATION	260.036	260.152	260.257	260.351	260.433	260.548	260.652	260.746	260.829	260.944	261.049	261.142	261.225	261.340	261.445	261.538	261.622	261.738	261.844	261.937	262.019
BEAM 6	STATION	255.551	263.515	271.481	279.447	287.412	295.362	303.313	311.264	319.214	327.159	335.106	343.052	350.997	358.947	366.898	374.849	382.799	390.764	398.730	406.696	414.660
	ELEVATION	259.992	260.111	260.217	260.310	260.390	260.507	260.613	260.706	260.787	260.905	261.011	261.104	261.185	261.302	261.408	261.501	261.582	261.702	261.808	261.901	261.981
RIGHT TOE OF PARAPET	STATION	255.479	263.459	271.434	279.404	287.369	295.331	303.290	311.246	319.200	327.153	335.106	343.058	351.011	358.965	366.921	374.880	382.842	390.807	398.777	406.752	414.732
	ELEVATION	259.978	260.078	260.177	260.277	260.377	260.476	260.576	260.675	260.774	260.874	260.973	261.073	261.172	261.271	261.371	261.470	261.570	261.669	261.769	261.869	261.969

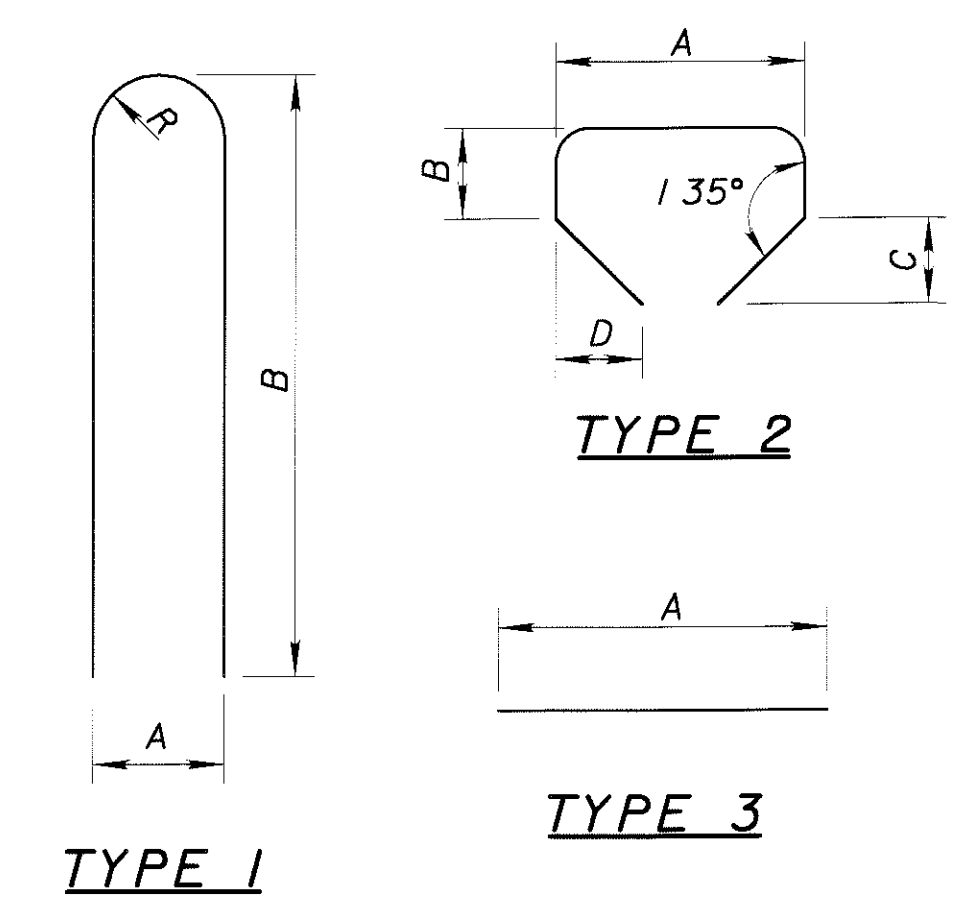
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**MODIFIED AASHTO TYPE 4
BEAM END SECTION**



**MODIFIED AASHTO TYPE 4
BEAM MID-SPAN SECTION**

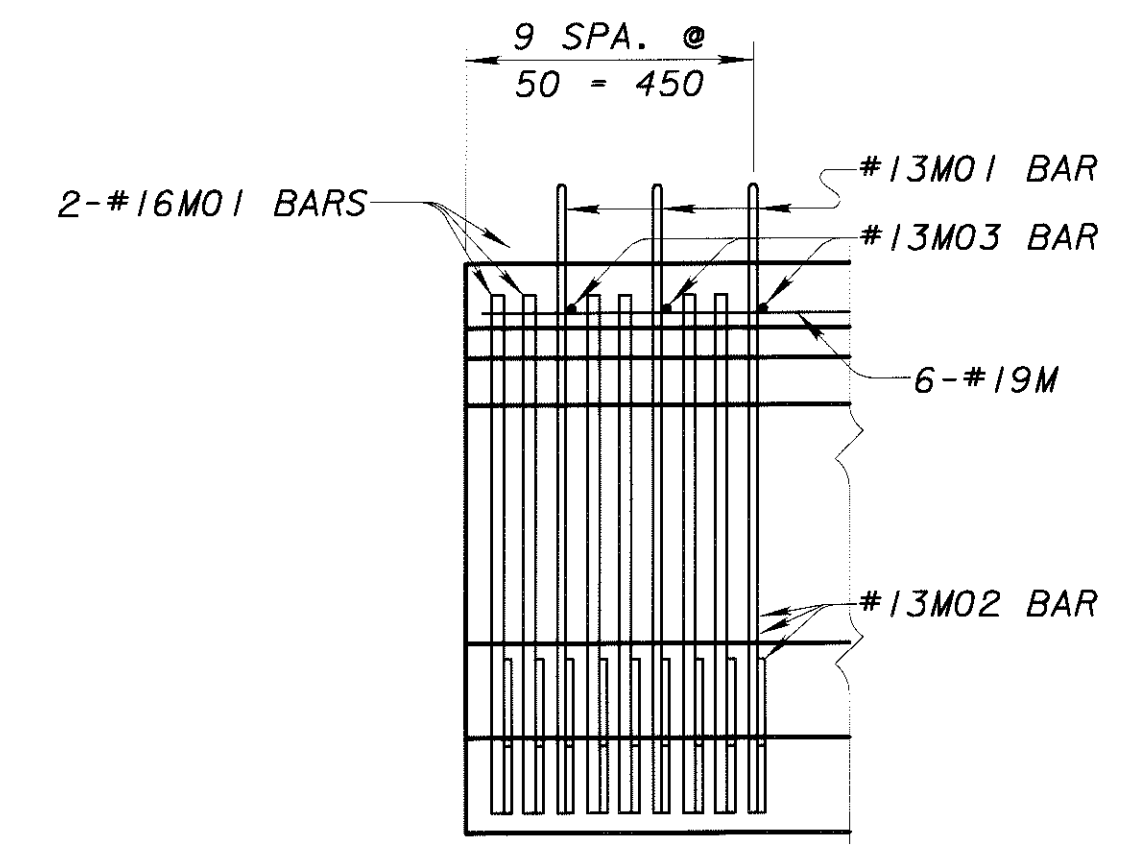


BENDING DIAGRAMS
(ALL DIMENSIONS ARE OUT-TO-OUT)

MARK	TYPE	DIMENSIONS				
		A	B	C	D	R
#13M01	1	140	1925			70
#13M02	2	600	155	220	220	
#13M03	3	810				
#16M01	3	1750				
#19M02	3					

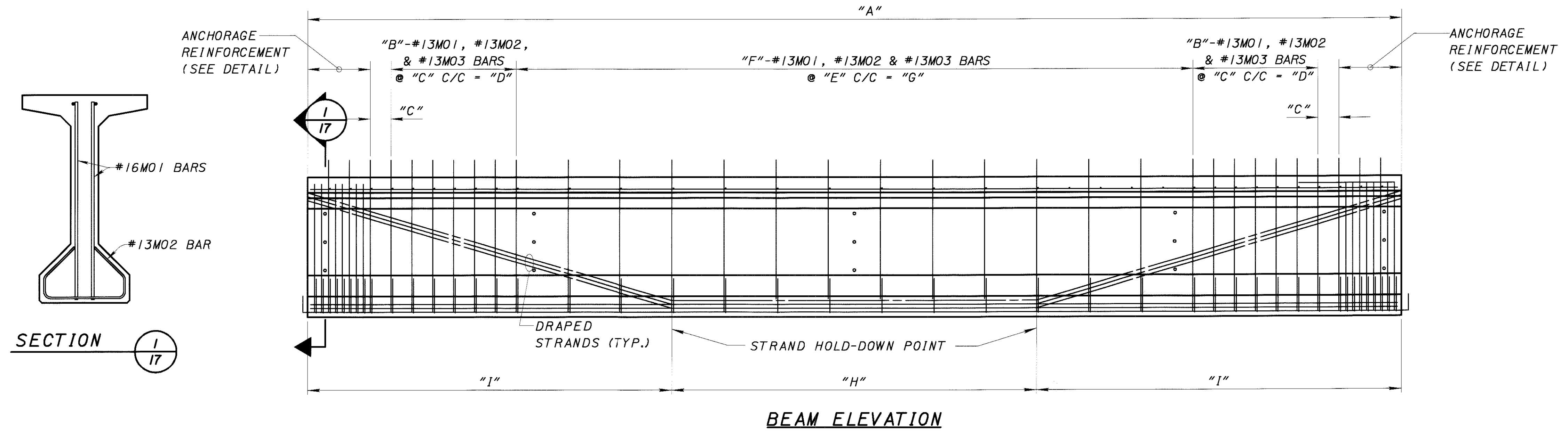
BEAM MARK	NUMBER OF STRANDS PER ROW							CONCRETE STRENGTHS		#13M01 BARS REQ'D	#13M02 BARS REQ'D	#13M03 BARS REQ'D				
	END SPAN			MID SPAN				TOTAL STRANDS	f'ci				f'c			
	ROW NUMBER	ROW NUMBER	ROW NUMBER	ROW NUMBER	ROW NUMBER	ROW NUMBER	ROW NUMBER									
B1	11	9	9	2	2	3	11	11	11	3	36	5000	7000	120	132	120
B2	11	8	6	2	2	2	11	10	8	2	31	5000	7000	119	131	119
B3	11	8	6	2	2	2	11	10	8	2	31	5000	7000	119	131	119

BEAM MARK	NO. REQ'D.	DIMENSIONS (mm)									APPROXIMATE WEIGHT (kg)
		A	B	C	D	E	F	G	H	I	
B1	12	32244	14	200	2600	302(+)	86	25744	6450	12897	47785
B2	12	31790	14	200	2600	301(+)	85	25290	6354	12718	47112
B3	6	31770	14	200	2600	300(+)	85	25270	6354	12708	47082



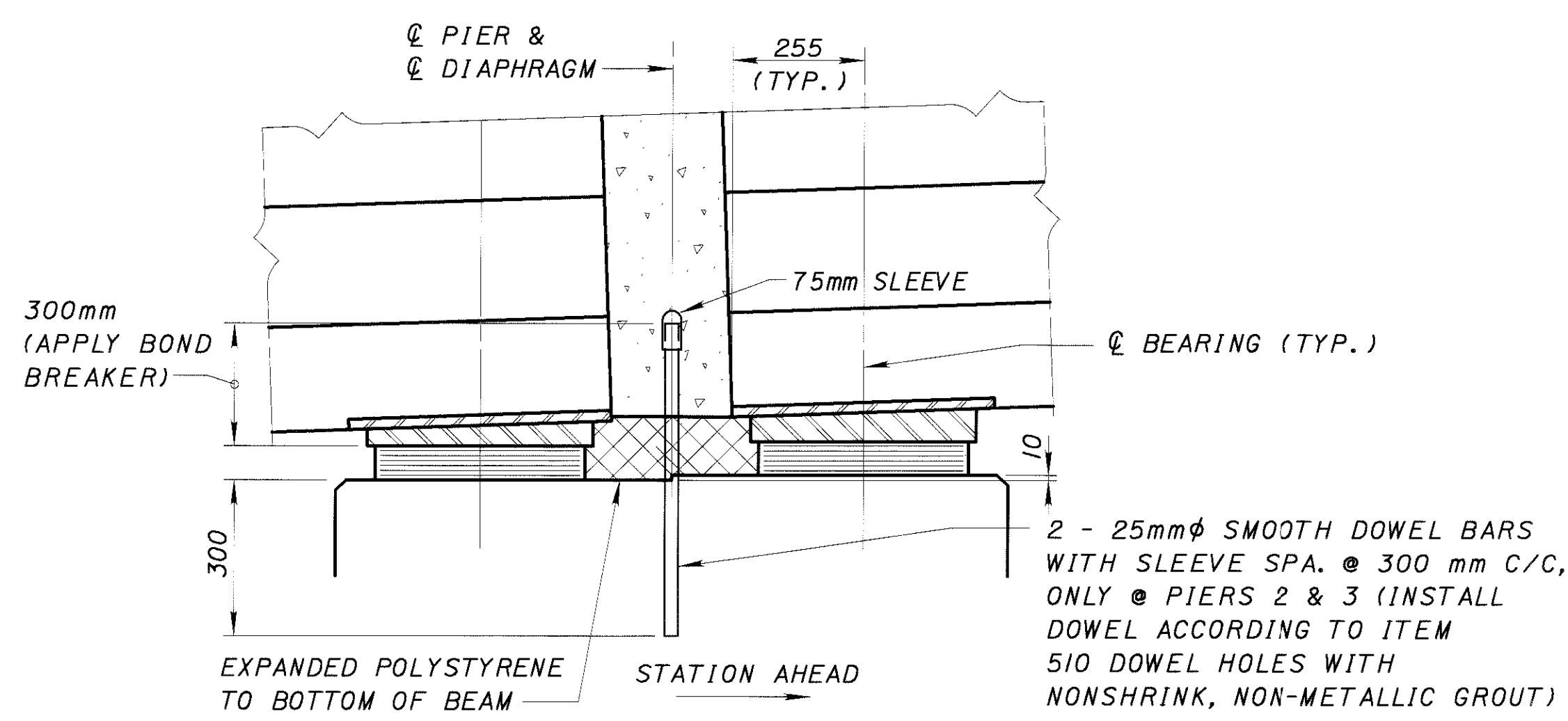
ANCHORAGE REINFORCEMENT
(STRANDS NOT SHOWN FOR CLARITY)

NOTE:
1. FOR ADDITIONAL DETAILS AND NOTES, SEE BRIDGE STANDARD DRAWINGS PSID-1-99.

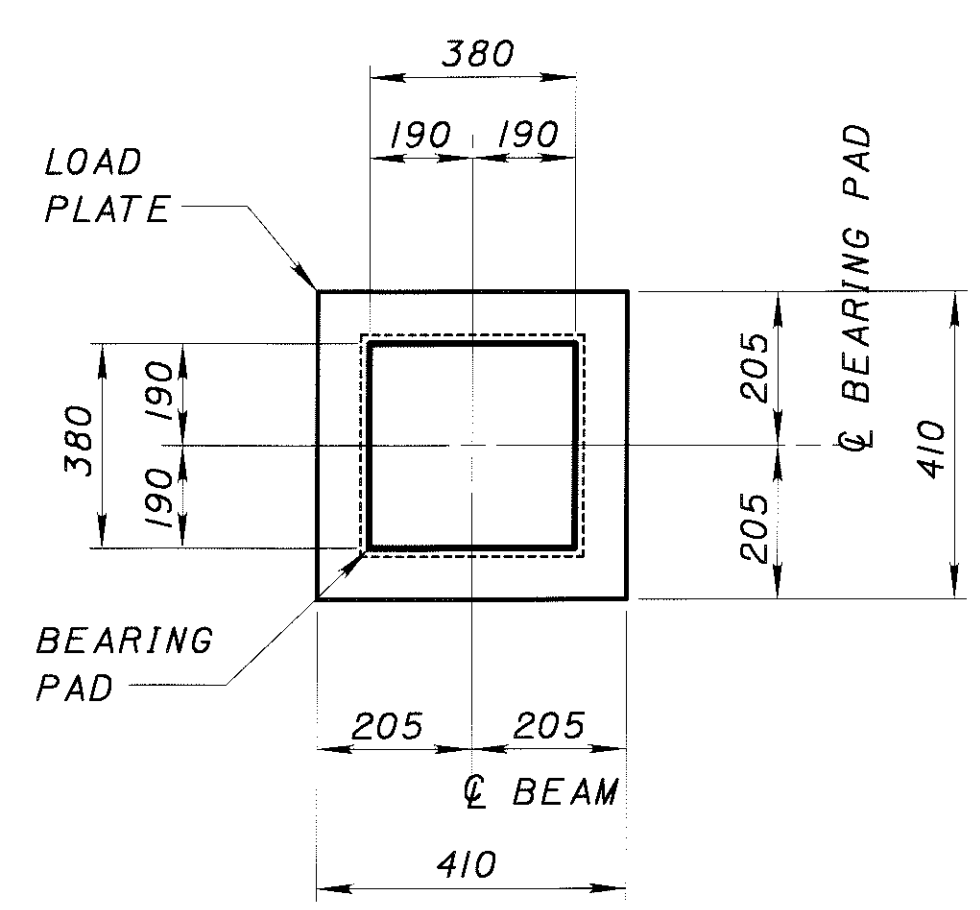


BEAM ELEVATION

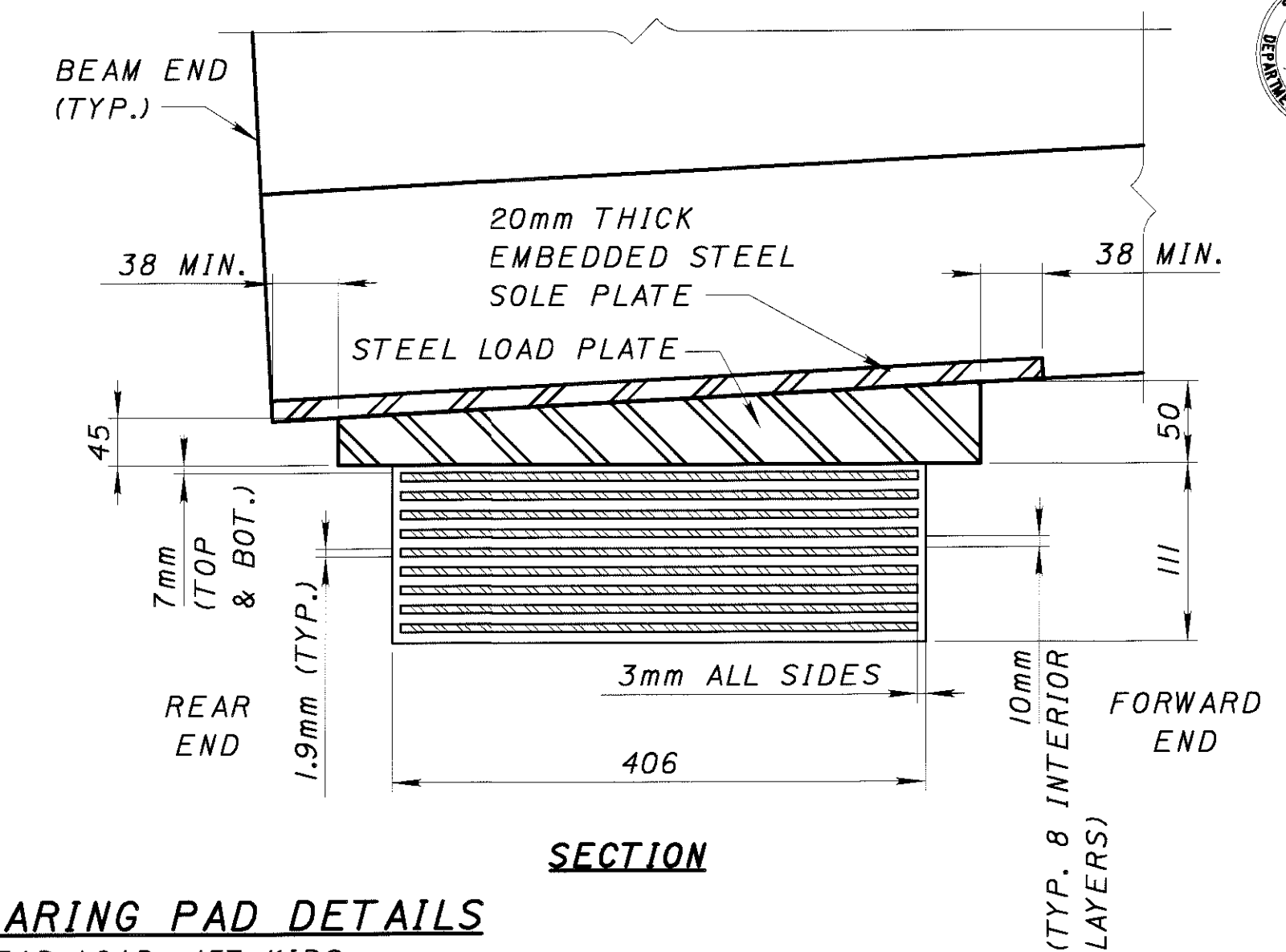
LEGEND
MID = MIDDLE
SPA. = SPACES
TYP. = TYPICAL



BEARING DETAIL



PLAN



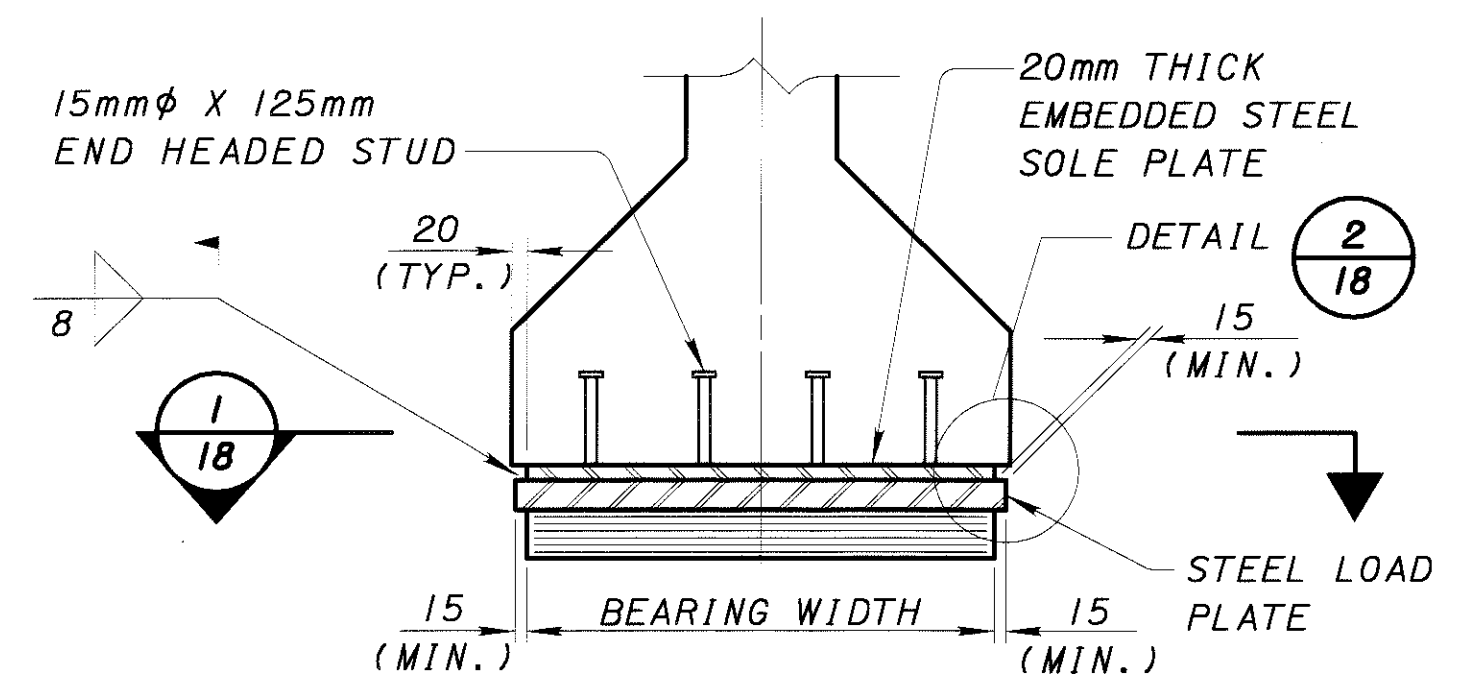
SECTION

ELASTOMERIC BEARING PAD DETAILS

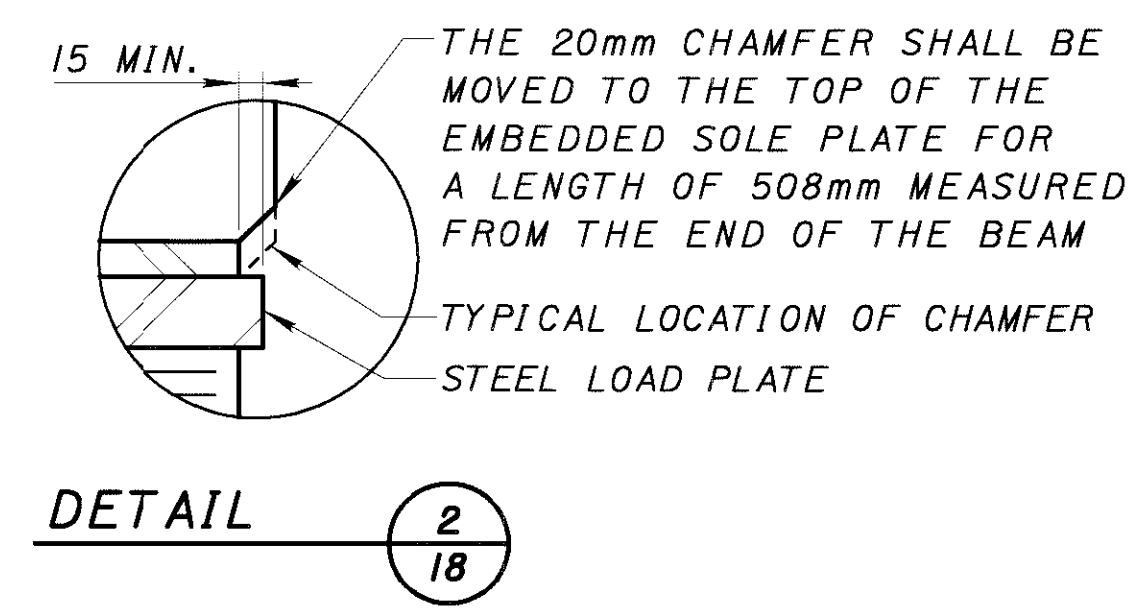
UNFACTORED DEAD LOAD 157 KIPS
UNFACTORED LIVE LOAD 64 KIPS
TOTAL LOAD REACTION 217 KIPS

BEARING PAD NOTES

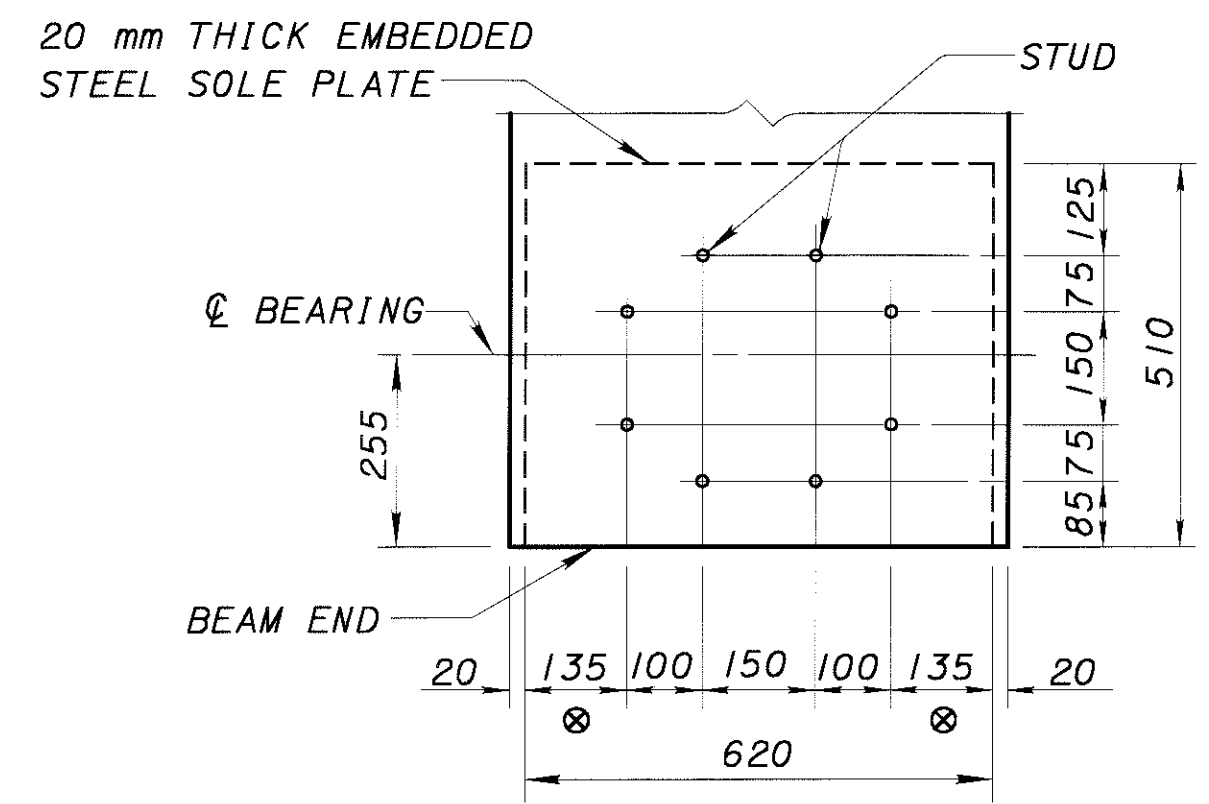
- ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED 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.
- BEARING REPOSITIONING: IF THE BEAM IS PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 26°C OR LOWER THAN 4°C, AND THE BEARING SHEAR DEFLECTION EXCEEDS ONE-SIXTH OF THE BEARING HEIGHT AT 15°C +/- 5°C; THE GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 15°C +/- 5°C.
- BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS INCLUDING LOAD PLATE. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE AS LISTED UNDER THE ESTIMATED QUANTITIES.
- REFER TO STANDARD BRIDGE DRAWING PSID-I-99 FOR OTHER DETAILS.



END VIEW



DETAIL 2/18



DETAIL 1/18

(BEARING AND LOAD PLATE NOT SHOWN)

STEEL LOAD PLATE NOTES

END WELDED STUDS MAY BE MOVED SLIGHTLY IN ORDER TO AVOID REINFORCING STEEL AND PRESTRESSING STRANDS.

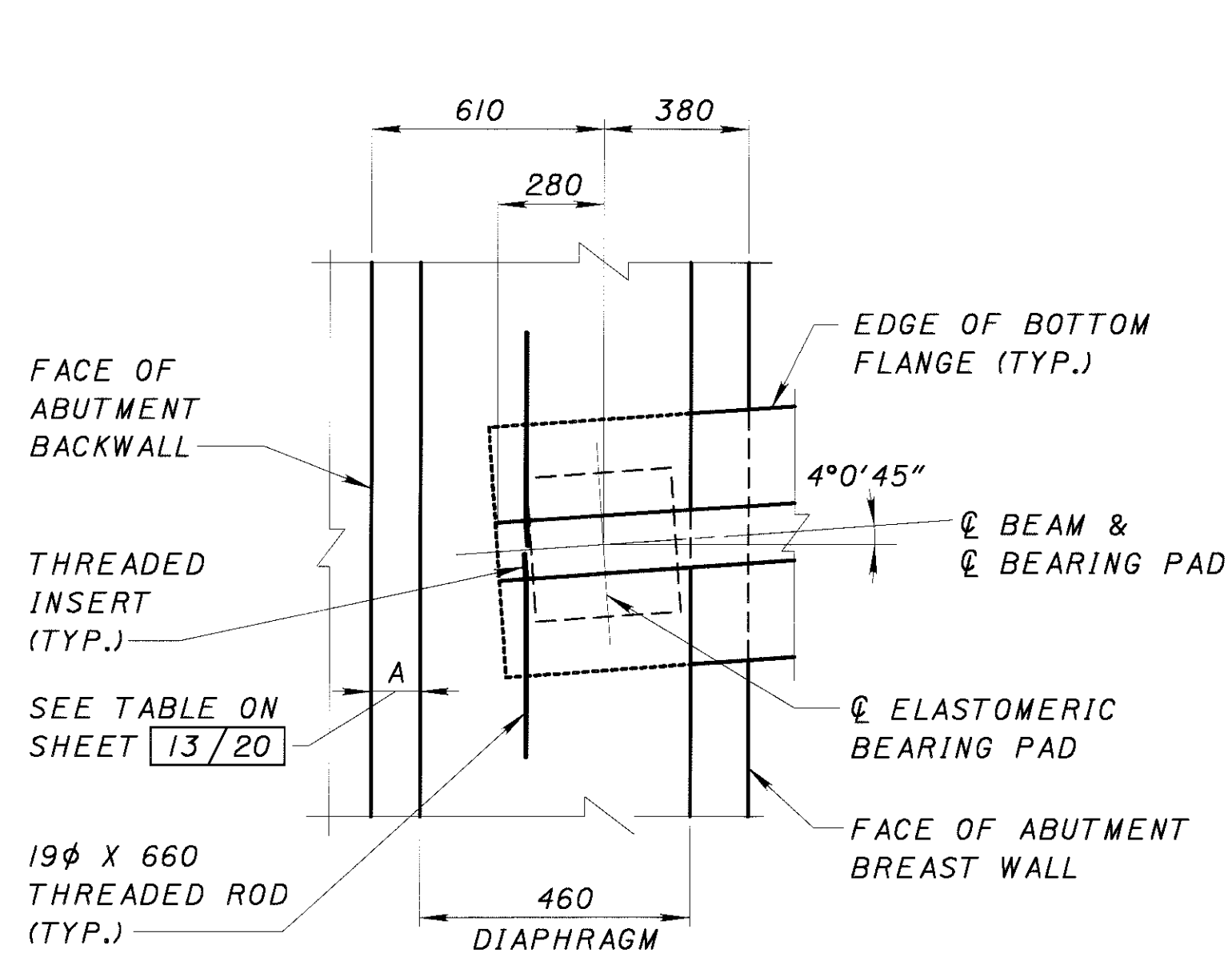
A BEVELED LOAD PLATE IS REQUIRED TO BE VULCANIZED TO THE TOP OF BEARING PAD. FIELD WELDING SHALL BE CONTROLLED SO THE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 150°C AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

⊗ - IN ORDER TO ALLOW FOR FIT-UP, THE PLATE WIDTH MAY BE DECREASED BY 10 mm. DIMENSION SHALL BE CORRECTED ACCORDINGLY.

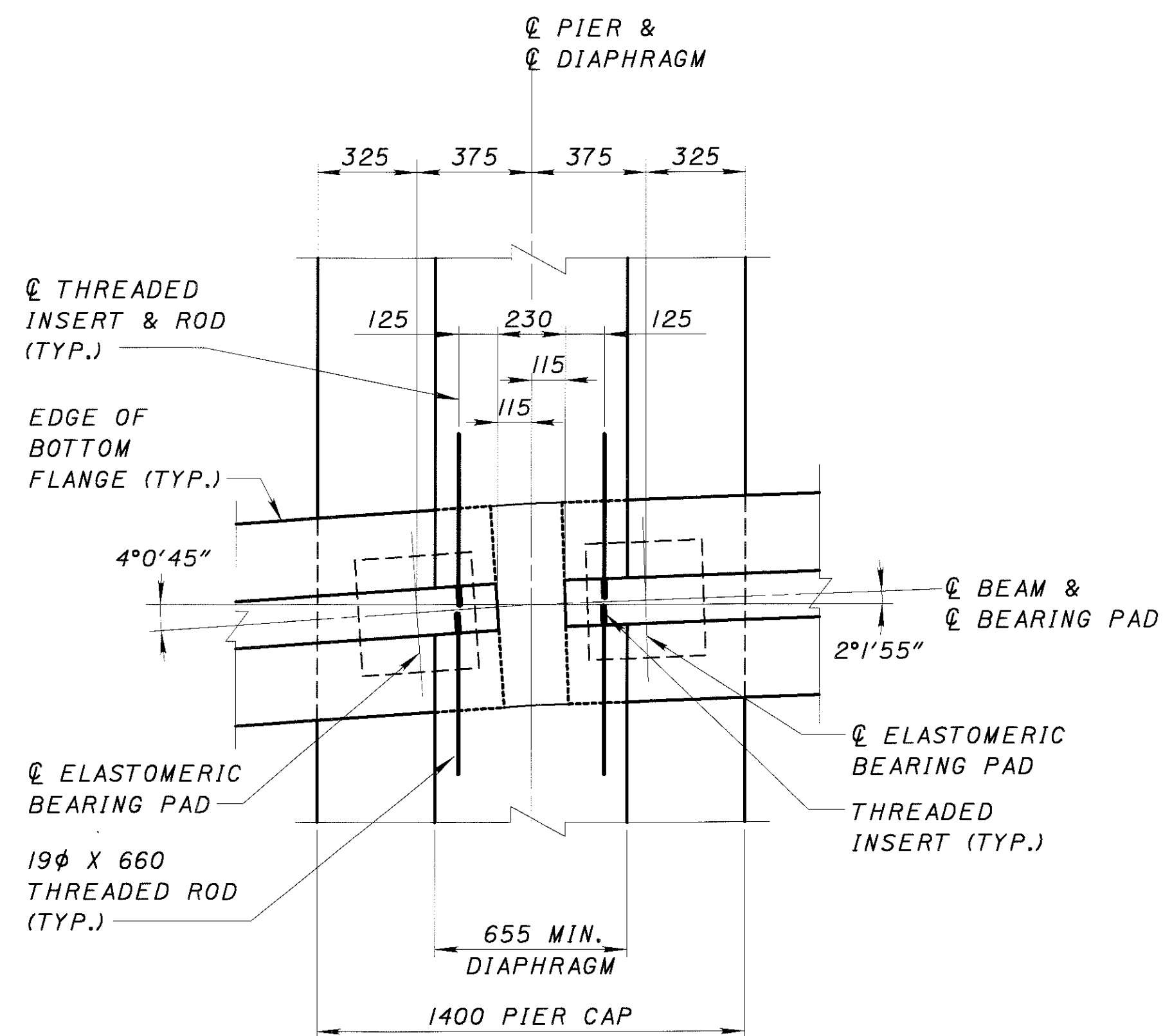
STEEL LOAD PLATES SHALL BE A709M GRADE 36 OR 50.

LEGEND

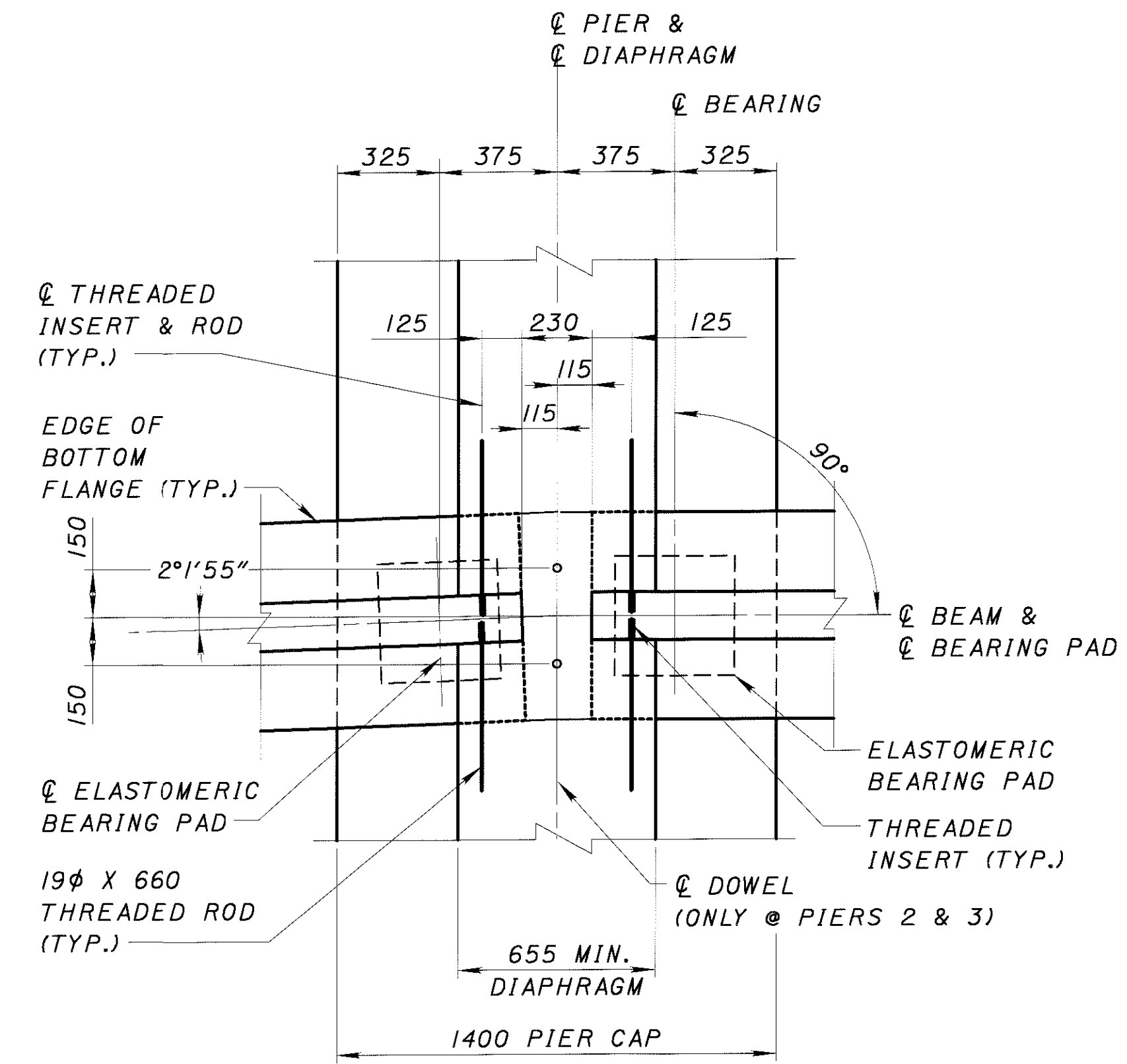
BOT.	=	BOTTOM
⊕	=	CENTERLINE
φ	=	DIAMETER
MIN.	=	MINIMUM
TYP.	=	TYPICAL



DETAIL 1/15



DETAIL 2/15



DETAIL 3/15

NOTE:

1. REFER TO STANDARD BRIDGE DRAWING PSID-I-99 FOR OTHER DETAILS.

LEGEND

- & = AND
- CL = CENTERLINE
- φ = DIAMETER
- DIM. = DIMENSION
- MIN. = MINIMUM
- TYP. = TYPICAL

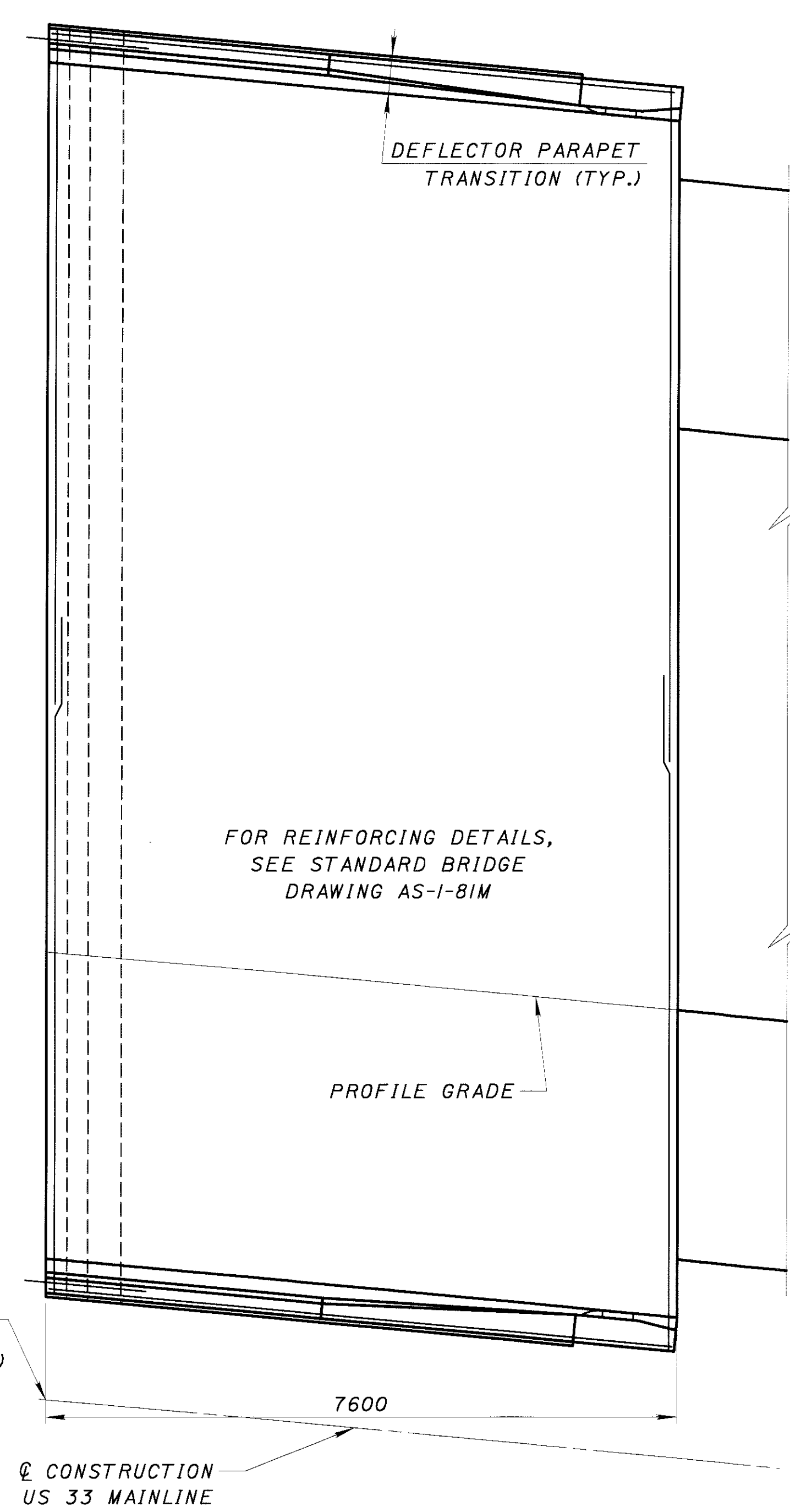
DESIGNED	FAO	CHECKED	REK
DRAWN	RTP	REVISED	-
REVIEWED	JN	DATE	09/19/00
STRUCTURE FILE NUMBER		FILE NUMBER	0501204

APPROACH SLAB DETAILS
BRIDGE NO. ATH-33-42635
OVER TRIBUTARY TO PRATTS FORK CREEK

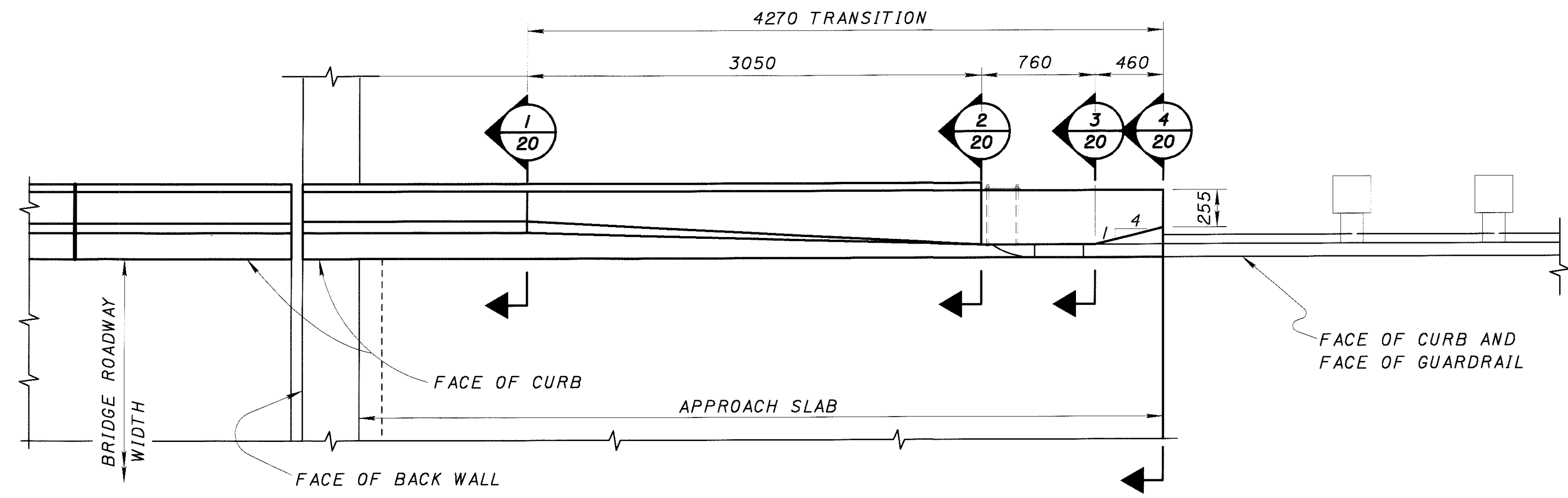
ATH-33-40.981

20/20

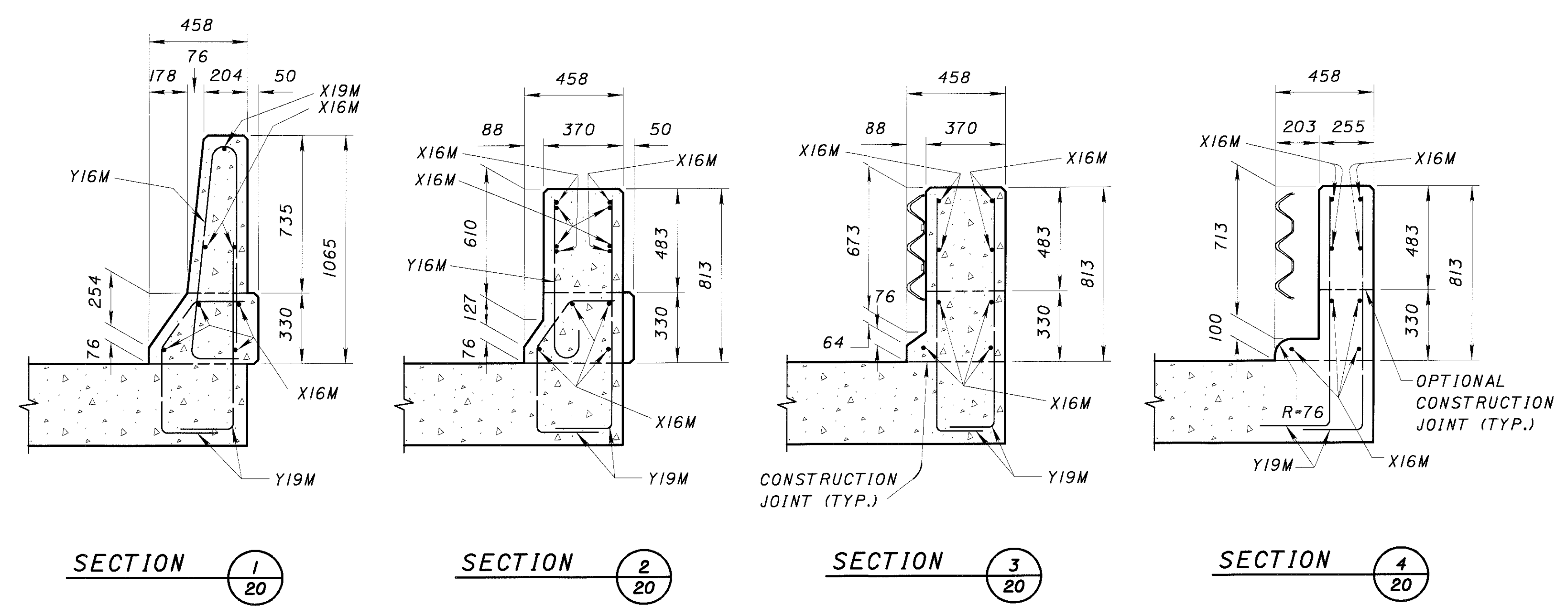
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PLAN
FORWARD APPROACH SLAB SHOWN,
REAR APPROACH SLAB SYMMETRICAL



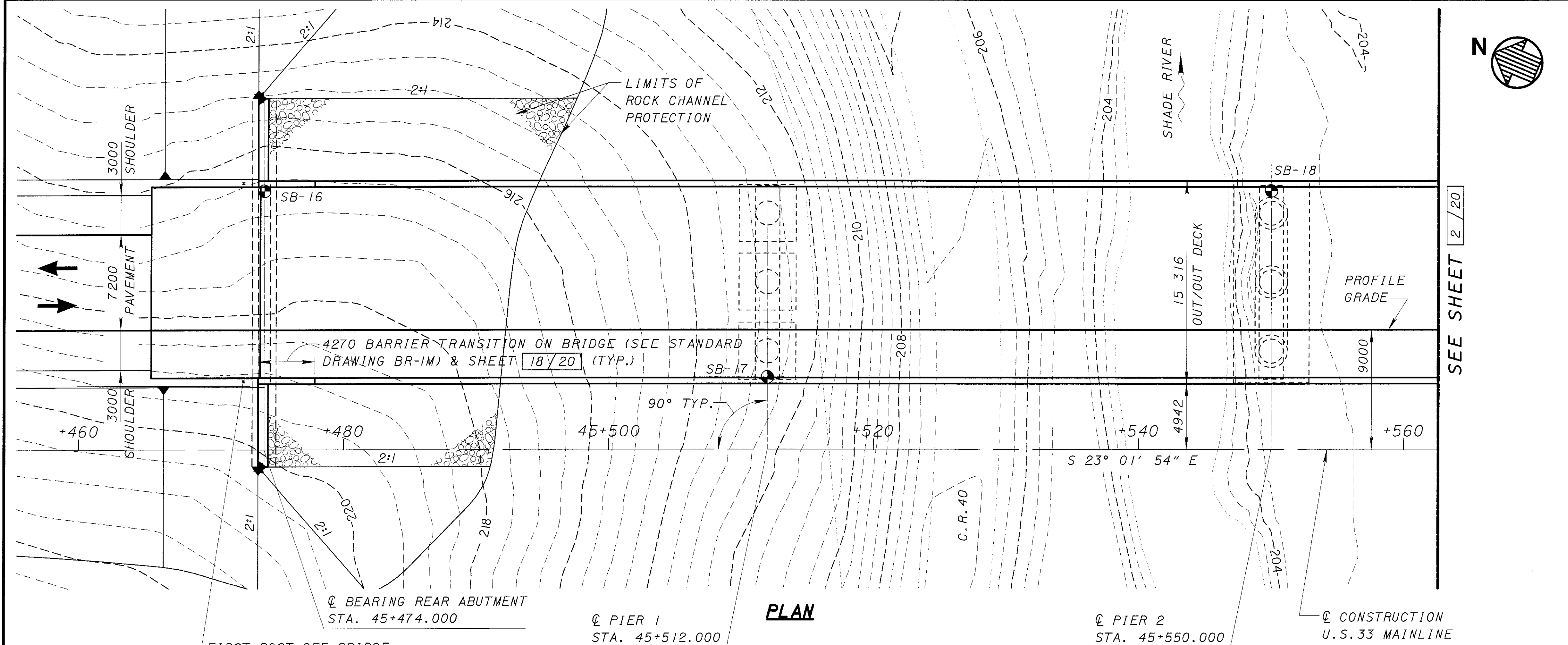
PART PLAN AT ABUTMENT



- NOTES:**
1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE BRIDGE STANDARD DRAWINGS AS-I-81M.
 2. FOR ADDITIONAL BRIDGE RAILING DEFLECTOR PARAPET DETAILS, SEE BRIDGE STANDARD DRAWING BR-1M, SHEET 2 OF 2.

- LEGEND**
- P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
 - STA. = STATION
 - TYP. = TYPICAL

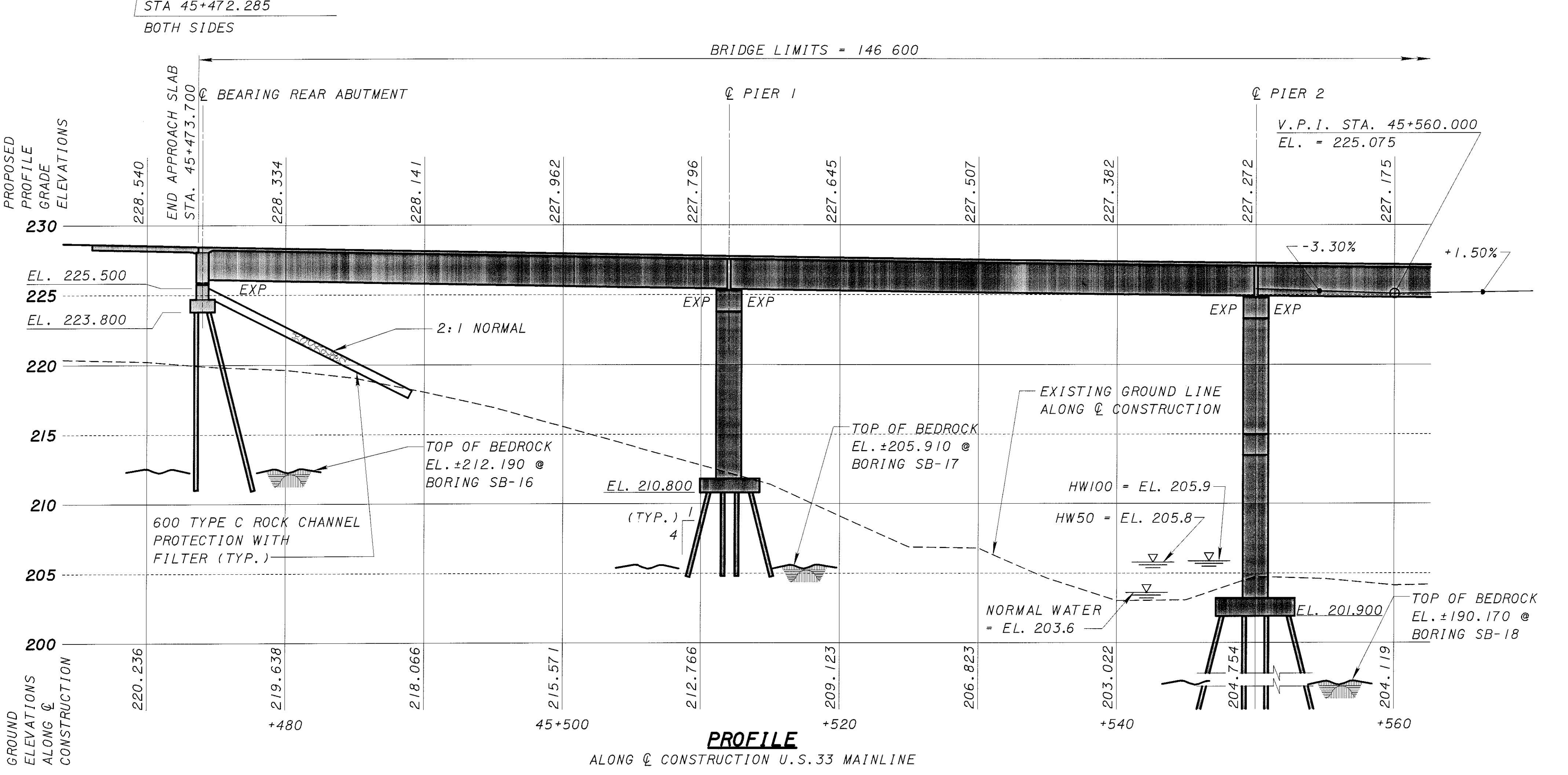
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- NOTES:
1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
 2. = BORING LOCATIONS.
 3. = 600 TYPE C ROCK CHANNEL PROTECTION WITH FILTER.
 4. ALL UNITS ARE MILLIMETERS UNLESS NOTED OTHERWISE. STATIONS AND ELEVATIONS ARE GIVEN IN METERS.
 5. R/W IS BEYOND LIMITS OF THIS DRAWING. SEE R/W PLANS FOR DETAILS.

VERTICAL CURVE DATA
V.P.I. STA. = 45+560.000
EL. = 225.075
G1 = -3.30%
G2 = +1.50%
LENGTH = 350.000

ESTIMATED AVERAGE PILE LENGTHS FOR HP310x79 STEEL PILES:
REAR ABUTMENT: 14 m
PIER 1: 7 m
PIER 2: 15 m
PIER 3: 13 m
FORWARD ABUTMENT: 32 m



BENCHMARK	
BENCHMARK IRON PIN AND CAP STA. 45+480 ALONG U.S. 33	EL. 219.76
BENCHMARK IRON PIN AND CAP STA. 45+600 ALONG U.S. 33	EL. 204.68
LOCATION	
LATITUDE: N 39° 10' 19"	
LONGITUDE: W 82° 02' 33"	
USGS QUADRANGLE: SHADE	
TRAFFIC	
2001 ADT = 4170	ADTT = 375
2021 ADT = 5740	ADTT = 517
HYDRAULIC DATA	
DRAINAGE AREA = 60.7 km ²	
Q50 = 94.8 m ³ /S	
HW50 = 205.8	
V50 = 2.2 m/S	
CLEARANCE ABOVE HW50 = 18.9 m	
Q100 = 109.2 m ³ /S	
HW100 = 205.9	
V100 = 2.4 m/S	
PROPOSED STRUCTURE DATA	
TYPE: FOUR-SPAN PRESTRESSED CONCRETE I-BEAM AND COMPOSITE DECK WITH SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN TYPE PIERS	
SPANS: 38 000, 38 000, 35 000, 35 000 C/C	
BEARINGS ALONG CENTERLINE U.S. 33 MAINLINE	
ROADWAY: 14 400 T/T BARRIER	
SKEW: 0°	
DESIGN LOADING: MS-22.5 AND THE ALTERNATE MILITARY LOADING	
WEARING SURFACE: MONOLITHIC CONCRETE	
ALIGNMENT: TANGENT	
CROWN: 0.016	
APPROACH SLABS: AS-I-81M (7600 LONG) AS PER PLAN	

DATE	REVIEWED	DRAWN
09/22/00	JN	RTP

DESIGNED	CHECKED
FAQ	TEU

MEIGS COUNTY
STA. 45+473.700
STA. 45+620.300

SITE PLAN
BRIDGE NO. MEG-33-02439
OVER SHADE RIVER & C.R. 40

ATH-33-40.981

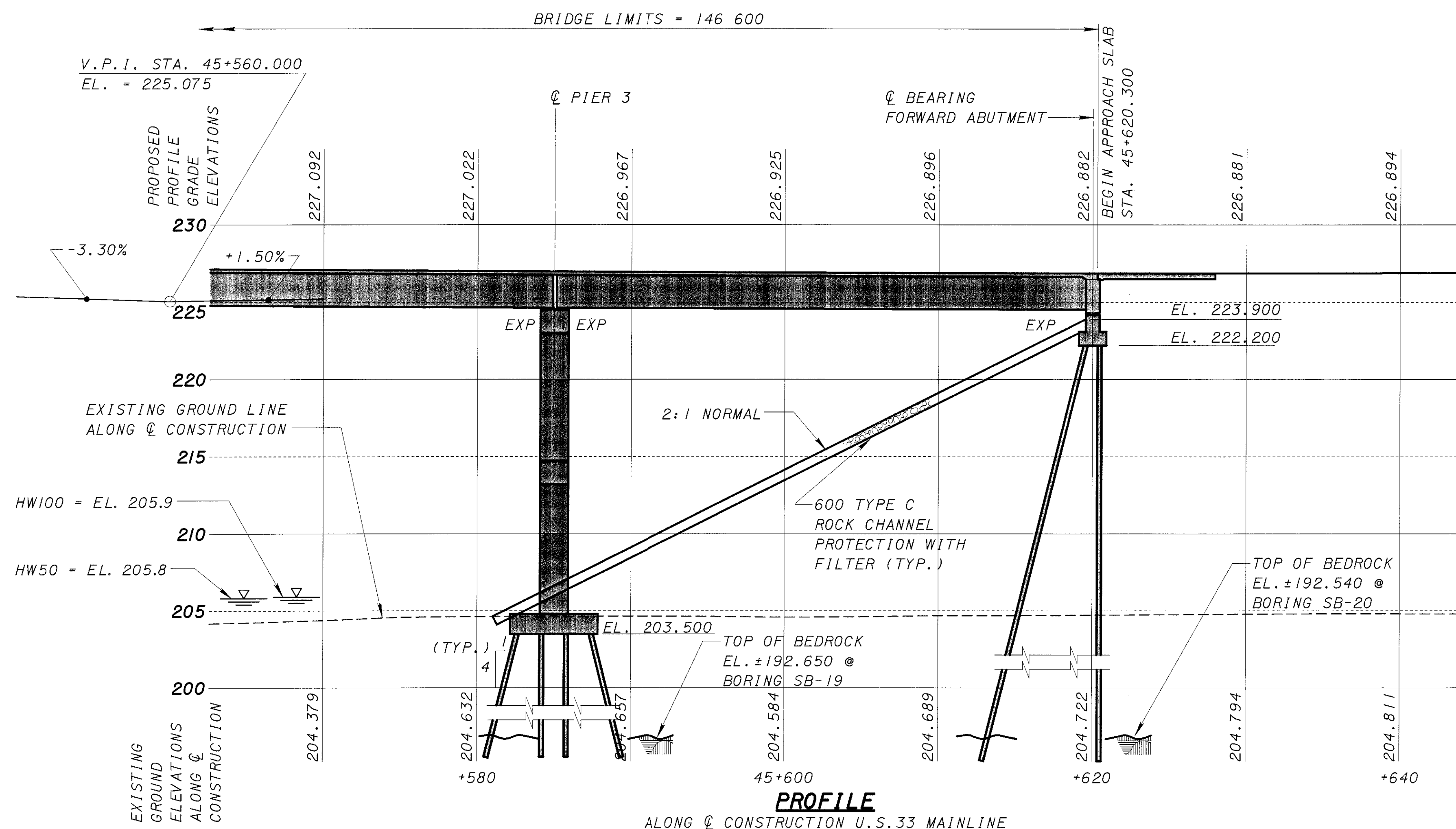
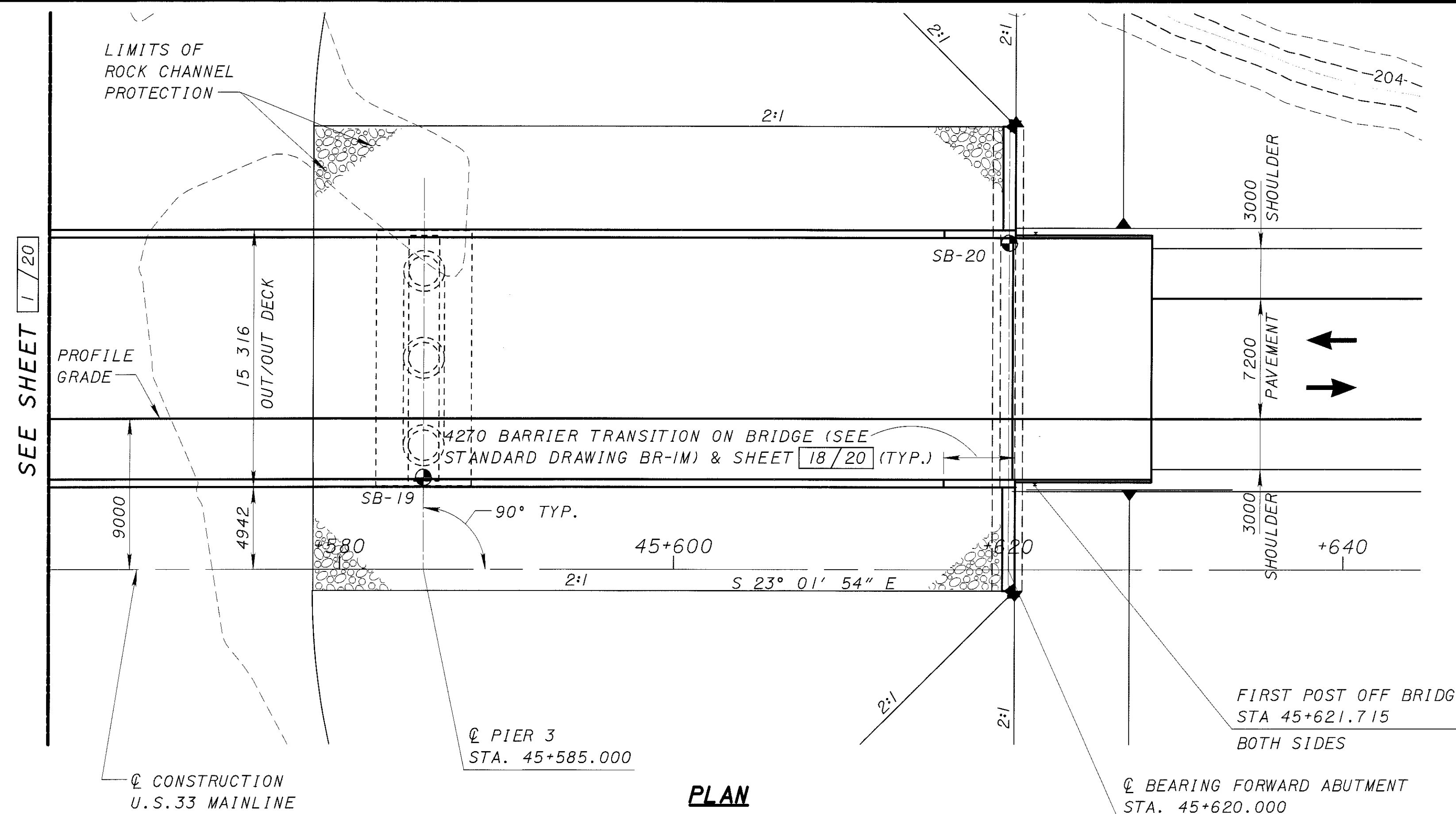
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NOTE:

1. FOR SITE PLAN NOTES AND PROJECT DATA, SEE SHEET 1/20.
2. R/W IS BEYOND LIMITS OF THIS DRAWING. SEE R/W PLANS FOR DETAILS.



LEGEND

- ADT = AVERAGE DAILY TRAFFIC
- ADTT = AVERAGE DAILY TRUCK TRAFFIC
- ± = CENTERLINE
- C/C = CENTER TO CENTER
- φ = DIAMETER
- EL. = ELEVATION
- EXP = EXPANSION
- FIX = FIXED
- MIN. = MINIMUM
- STA. = STATION
- T/T = TOE TO TOE
- TYP. = TYPICAL
- V.P.I. = VERTICAL POINT OF INTERSECTION
- R/W = RIGHT-OF-WAY

STANDARD DRAWING REFERENCES:

DWG. NO.	SHT.	DATE
AS-1-81M	1-3	10-25-94
BR-1M	2	1-06-99(R)
PSID-1-99	1-8	10-20-00(R)
SICD-1-96M	1-7	2-12-97
SCDBP-2.3	1	7-28-00

SUPPLEMENTAL SPECIFICATION REFERENCES:

DESCRIPTION	NO.	DATE
TREATING OF CONCRETE SURFACES WITH SRS	841	10-12-99
CONCRETE FOR STRUCTURES	842	1-6-99
HIGH PERFORMANCE CONCRETE FOR STRUCTURES	844	1-6-99
TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN	846	9-9-97
CONCRETE - GENERAL	899	10-21-98
HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) RESIN	954	9-9-97
PRESTRESSED CONCRETE BRIDGE MEMBERS	865	2-22-00
HIGH PERFORMANCE CONCRETE (H.P.C.) FOR BRIDGE DECK WITH WARRANTY	894	10-12-99

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996 INCLUDING THE 1997, 1998, 1999 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

MS-22.5 AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 2.87 kPa.

DESIGN DATA:

CONCRETE HIGH PERFORMANCE CONCRETE HPC SS 844 FOR SUPERSTRUCTURE
- COMPRESSIVE STRENGTH 31.0 MPa (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 27.5 MPa (SUBSTRUCTURE)
REINFORCING STEEL - A615M, A616M OR A617M
GRADE 420 MINIMUM YIELD STRENGTH 420 MPa
AND EPOXY COATED
SPIRAL REINFORCEMENT - SPIRAL REINFORCEMENT MAY BE PLAIN BARS,
ASTM A82 OR A615 [A82M OR A615M]
CONCRETE FOR PRESTRESSED BEAMS - COMPRESSIVE STRENGTH (FINAL)
- 48.3 MPa
COMPRESSIVE STRENGTH (RELEASE)
- 34.5 MPa
UNIT STRESS - 19.3 MPa COMPRESSION
- 3.5 MPa TENSION
PRESTRESSING STRAND - ASTM A416M, 13 mm DIAMETER AREA = 99 mm²
f's = 1860 MPa
INITIAL STRESS = 0.75 f's (LOW
RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL.
SEALING CONCRETE SURFACES.
65 mm CONCRETE COVER.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES,
TO BE 25 mm THICK.

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING PILES, THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 60 METERS BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN:

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 203 MATERIAL PLACED IN 150 mm LIFTS

PILES TO BEDROCK:

PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER 25 mm OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

THE ULTIMATE BEARING VALUE IS 1141 kN PER PILE FOR THE HP310x79 ABUTMENT PILES.

THE ULTIMATE BEARING VALUE IS 1225 kN PER PILE FOR THE HP310x79 PIER PILES.

REAR ABUTMENT PILES:

28 PILES 14 METERS LONG, ESTIMATED LENGTH
28 PILES OF ORDER LENGTH 15.5 METERS LONG
14 SPLICES

PIER 1 PILES:

36 PILES 7 METERS LONG, ESTIMATED LENGTH
36 PILES OF ORDER LENGTH 8.5 METERS LONG
18 SPLICES

PIER 2 PILES:

48 PILES 15 METERS LONG, ESTIMATED LENGTH
48 PILES OF ORDER LENGTH 16.5 METERS LONG
24 SPLICES

PIER 3 PILES:

48 PILES 13 METERS LONG, ESTIMATED LENGTH
48 PILES OF ORDER LENGTH 14.5 METERS LONG
24 SPLICES

FORWARD ABUTMENT PILES:

28 PILES 32 METERS LONG, ESTIMATED LENGTH
28 PILES OF ORDER LENGTH 18 METERS LONG
28 PILES OF ORDER LENGTH 15.5 METERS LONG
28 SPLICES

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; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 3601 NW YEON AVE., P.O. BOX 10559, PORTLAND, OREGON 97210; PILING ACCESSORIES, INC., 3467 GRIBBLE ROAD, MATHEWS, NORTH CAROLINA 28105; OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO DIRECTOR. THE MATERIAL USED FOR THE MANUFACTURING OF PILE POINTS SHALL CONFORM TO ASTM A27/A27M 65/35 [450/240] - CLASS 2 - HEAT TREATED OR AASHTO M103/M103M 65/35 [450/240] - HEAT TREATED. WELDING OF THE PILE POINTS TO THE PILE SHALL BE IN ACCORDANCE WITH AWS D1.5 OR THE MANUFACTURER'S WRITTEN WELDING PROCEDURE SUPPLIED THE ENGINEER BEFORE THE WELDING IS PERFORMED. A NOTARIZED COPY OF THE MILL TEST REPORT SHALL BE SUBMITTED TO THE ENGINEER.

ITEM 611, REINFORCED CONCRETE APPROACH SLAB, T=380 mm, AS PER PLAN:

CONCRETE FOR THIS ITEM SHALL BE SS 844, HIGH PERFORMANCE CONCRETE, MIX 3 OR 4. THE HIGH PERFORMANCE CONCRETE TRIAL MIX AND TESTING, AS DESCRIBED IN SS 844, SHALL BE WAIVED.

CONVERSION OF STANDARD BRIDGE DRAWINGS:

THE STANDARD BRIDGE DRAWING PSID-1-99 REFERENCED IN THIS PLAN IS ENGLISH. ANY CONVERSION OF DIMENSIONS REQUIRED TO CONSTRUCT THE ITEMS SHOWN ON THE STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONVERSIONS SHALL BE MADE USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

CONCRETE, AS PER PLAN

A REINFORCING STEEL LIST HAS NOT BEEN PROVIDED WITH THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING THE REINFORCING STEEL LIST AND ALL REINFORCING STEEL DETAILS, IN ACCORDANCE WITH SECTIONS 301.4 THROUGH 301.4.8 (INCLUSIVE) OF THE ODOT BRIDGE DESIGN MANUAL, APRIL 2000 EDITION. THE COMPLETED REINFORCING STEEL LIST SHALL BE SUBMITTED TO THE DIRECTOR FOR REVIEW AND ACCEPTANCE IN ACCORDANCE WITH CMS 509.05. FABRICATION OF THE REINFORCING STEEL SHALL NOT BEGIN UNTIL WRITTEN ACCEPTANCE OF THE SUBMITTED DRAWINGS HAS BEEN RECEIVED FROM THE DIRECTOR. ALL COSTS FOR PREPARING THE REINFORCING STEEL LIST SHALL BE INCLUDED FOR PAYMENT WITH THE APPROPRIATE 842/844 CONCRETE ITEMS.

WHEN THE SHAPE OF A BAR IS NOT APPARENT IN THE PLAN DETAILS, A BEND DIAGRAM HAS BEEN SHOWN WITH THE BAR SIZE.

ITEM 865, PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, MISC.: CONCRETE INTERMEDIATE DIAPHRAGMS, AS PER PLAN:

STANDARD DRAWING PSID-1-99 SHOWS THAT STEEL OR CONCRETE MAY BE USED FOR THE INTERMEDIATE DIAPHRAGMS. DISTRICT 10 HAS CHANGED THIS REQUIRING THAT ONLY CONCRETE IS TO BE USED.

SEALING OF CONCRETE SURFACE (EPOXY-URETHANE):

EPOXY-URETHANE SHALL BE A LIGHT NEUTRAL COLOR MEETING FEDERAL COLOR STANDARD NO. 17778 AS PER THE DETAIL IN THE PLANS.

PIER TYPE:

HAMMER HEAD PIERS OF THE SAME SIZE AND SHAPE AS THE ONES SHOWN FOR BRIDGE NO. 42635 MAY BE USED FOR THIS STRUCTURE. IF THE CONTRACTOR CHOOSES TO DO SO, HE/SHE MUST SUBMIT REVISED PIER DETAILS FOR REVIEW AND APPROVAL. REVIEW TIME SHALL BE THREE WEEKS. "THE REVISED PIER DESIGN PACKAGE WOULD REQUIRE DESIGN CALCULATIONS AND REVISED DRAWINGS. AFTER APPROVAL THE CONTRACTOR WOULD BE REQUIRED TO REVISE THE PLANS AND PROVIDE "AS-BUILT DRAWINGS" TO REFLECT ALL THE CHANGES SUCH AS QUANTITIES, REINFORCING STEEL, PIER DETAILS, ETC. THIS CHANGE SHALL INCLUDE ALL SUCH WORK AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE STATE."

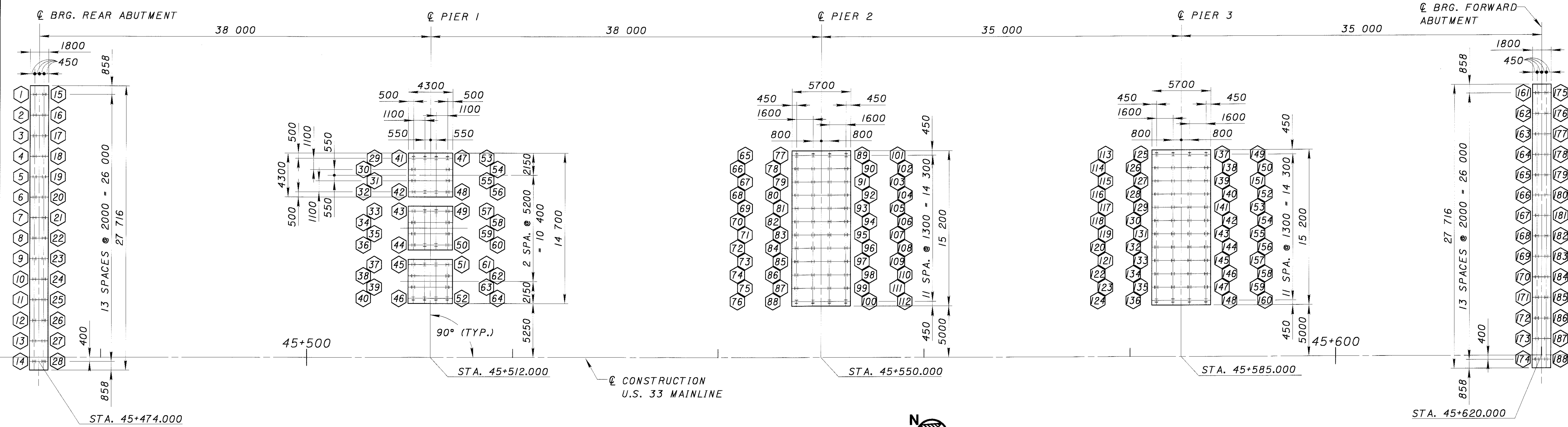
ESTIMATED QUANTITIES

CALC. BY: SGM DATE: 9-07-00
 CHKD. BY: KFS DATE: 9-12-00

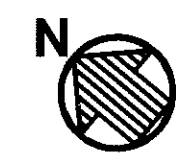
ITEM	ITEM EXTENSION	TOTAL	UNITS	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL
203	20000	28223	CU M	EMBANKMENT	28223			
503	11100	LUMP	LUMP	COFFERDAMS, CRIBS AND SHEETING				LUMP
503	21101	1060	CU M	UNCLASSIFIED EXCAVATION, AS PER PLAN	508	552		
505	11100	LUMP	LUMP	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
507	00200	3166	M	STEEL PILES HP 310x79, FURNISHED	1372	1794		
507	00250	3166	M	STEEL PILES HP 310x79, DRIVEN	1372	1794		
507	50500	108	EACH	STEEL PILE SPLICES	42	66		
507	93301	188	EACH	STEEL POINT (OR SHOE), AS PER PLAN	56	132		
SPECIAL	51267510	3675.2	SQ M	SEALING OF CONCRETE SURFACES, (EPOXY-URETHANE)	32.2		3643	
516	13900	8.5	SQ M	51 mm PREFORMED EXPANSION JOINT FILLER	8.5			
516	43300	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY NEOPRENE (600x350x79)		12		
516	44100	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATES NEOPRENE (600x350x50)		12		
516	44200	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATES NEOPRENE (600x350x79)		12		
516	44300	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATES NEOPRENE (600x350x109)	12			
518	21200	124	CU M	POROUS BACKFILL WITH FABRIC FILTER	124			
518	40000	55.5	M	150 mm PERFORATED CORRUGATED PLASTIC PIPE	55.5			
518	40010	12	M	150 mm NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	12			
601	32200	1097	CU. M	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	1097			
841	10000	2224	SQ. M	TREATING OF CONCRETE SURFACES, SRS			2224	
842	31509	95	CU M	CLASS S CONCRETE, SUPERSTRUCTURE (PARAPETS), AS PER PLAN *			95	
842	41001	712	CU M	CLASS C CONCRETE, PIER ABOVE FOOTINGS (CAP AND COLUMN), AS PER PLAN		712		
842	44101	30	CU M	CLASS C CONCRETE, ABUTMENT, NOT INCLUDING FOOTING, AS PER PLAN	30			
842	46001	48	CU M	CLASS C CONCRETE, WINGWALL ABOVE FOOTING, AS PER PLAN	48			
842	46501	370	CU M	CLASS C CONCRETE, FOOTING, AS PER PLAN	89	281		
865	16000	24	EACH	PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, MISC.: DRAPED STRAND, TYPE 4 MOD. (2134 mm)			24	
865	16000	60	EACH	PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, MISC.: CONCRETE INTERMEDIATE DIAPHRAGMS, AS PER PLAN			60	
894	10001	675	CU M	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN **			675	

* PARAPET ON APPROACH SLAB IS INCLUDED WITH THIS PAY ITEM
 ** INCLUDES CONCRETE FOR PIER AND ABUTMENT DIAPHRAGMS

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PILE LAYOUT



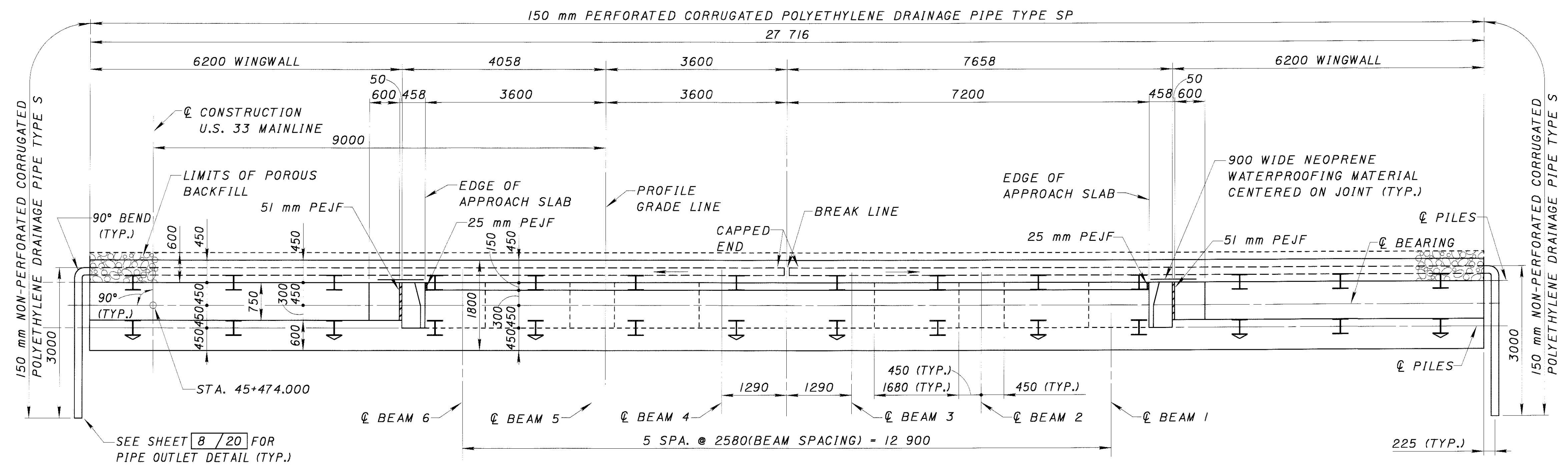
H - VERTICAL HP310x79 STEEL PILES
H - 1:4 BATTERED HP310x79 STEEL PILES

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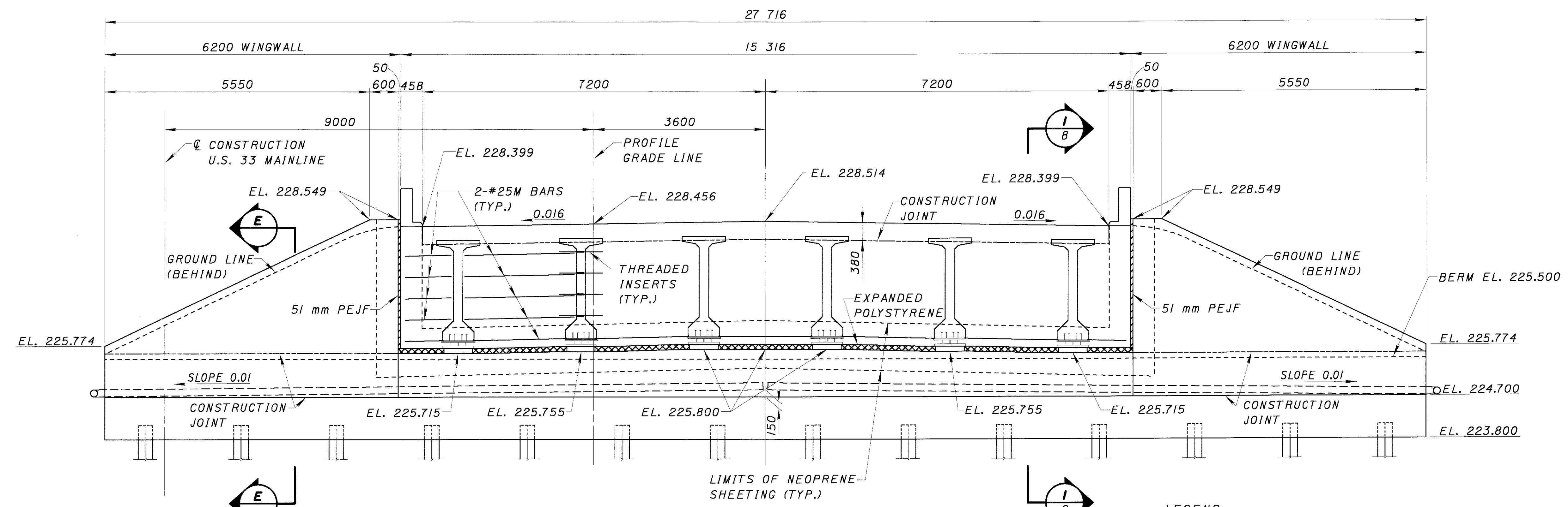
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DRAWN	JSS	REVIEWED	
REVIEWED	JN	DATE	09/22/00
STRUCTURE FILE NUMBER	5300509		

PILE LAYOUT PLAN
BRIDGE NO. MEG-33-02439
OVER SHADE RIVER & C.R.40

ATH-33-40.981



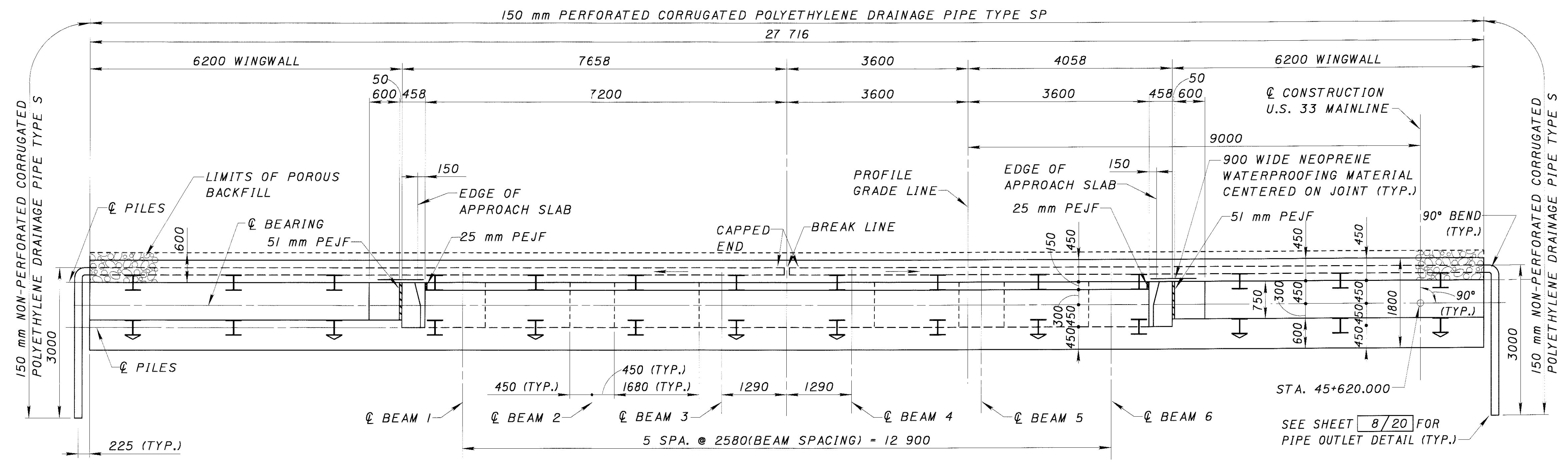
PLAN



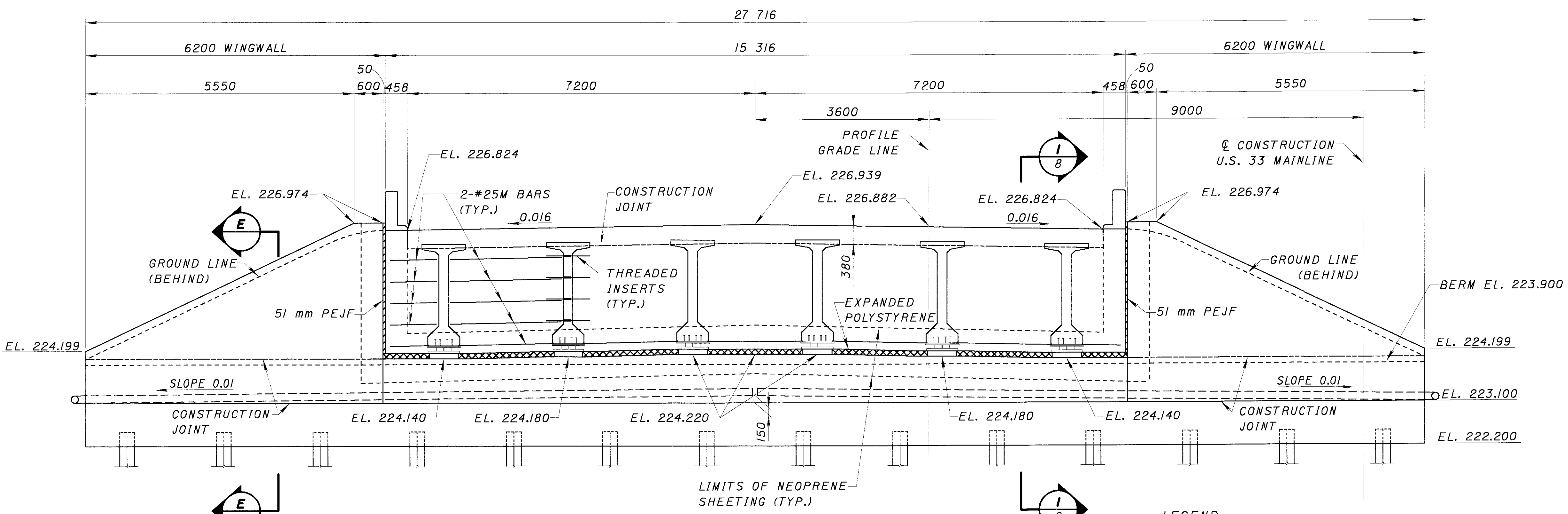
ELEVATION

NOTE:
1. FOR NOTES, SEE SHEET 8 / 20.

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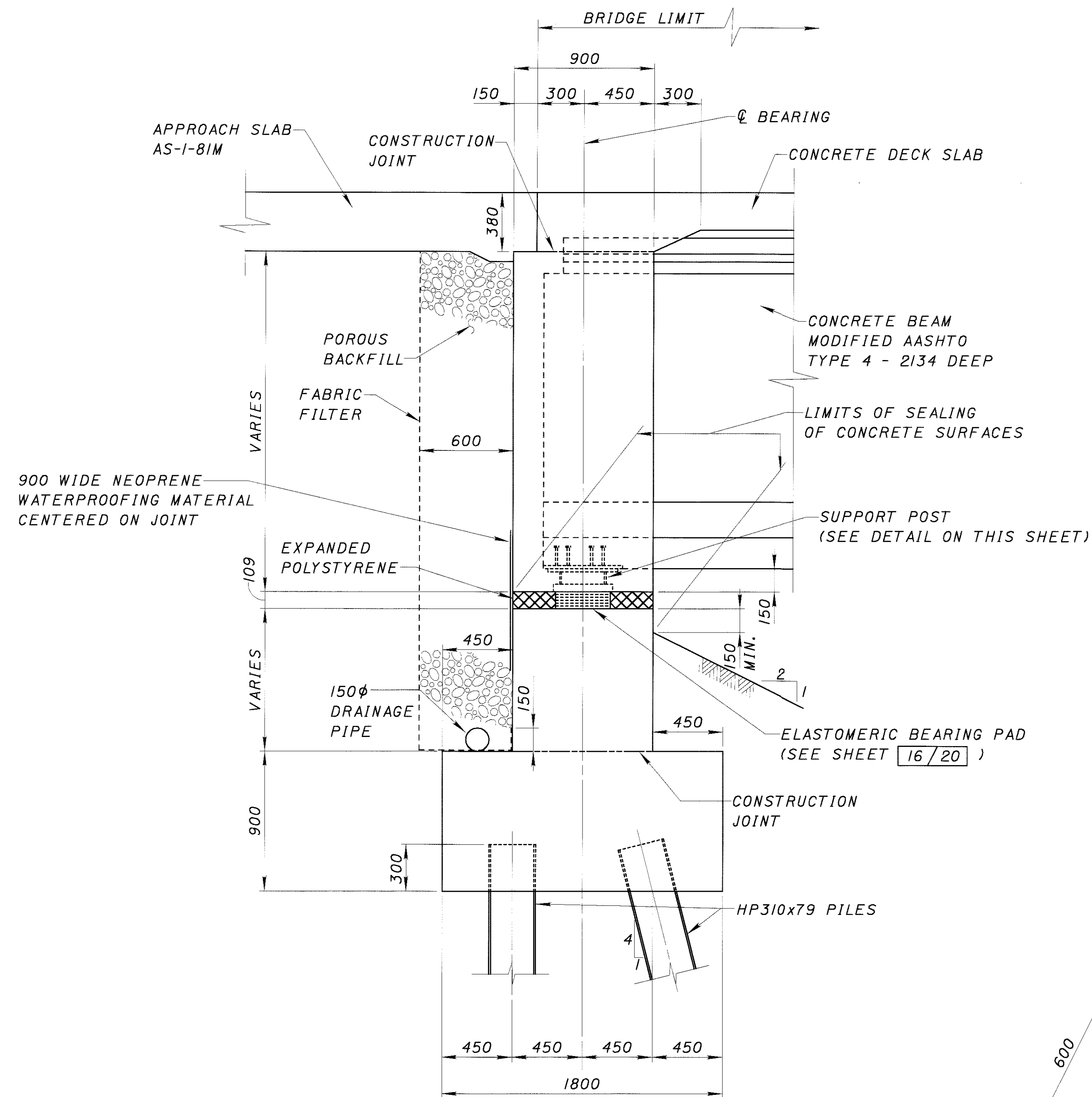


PLAN

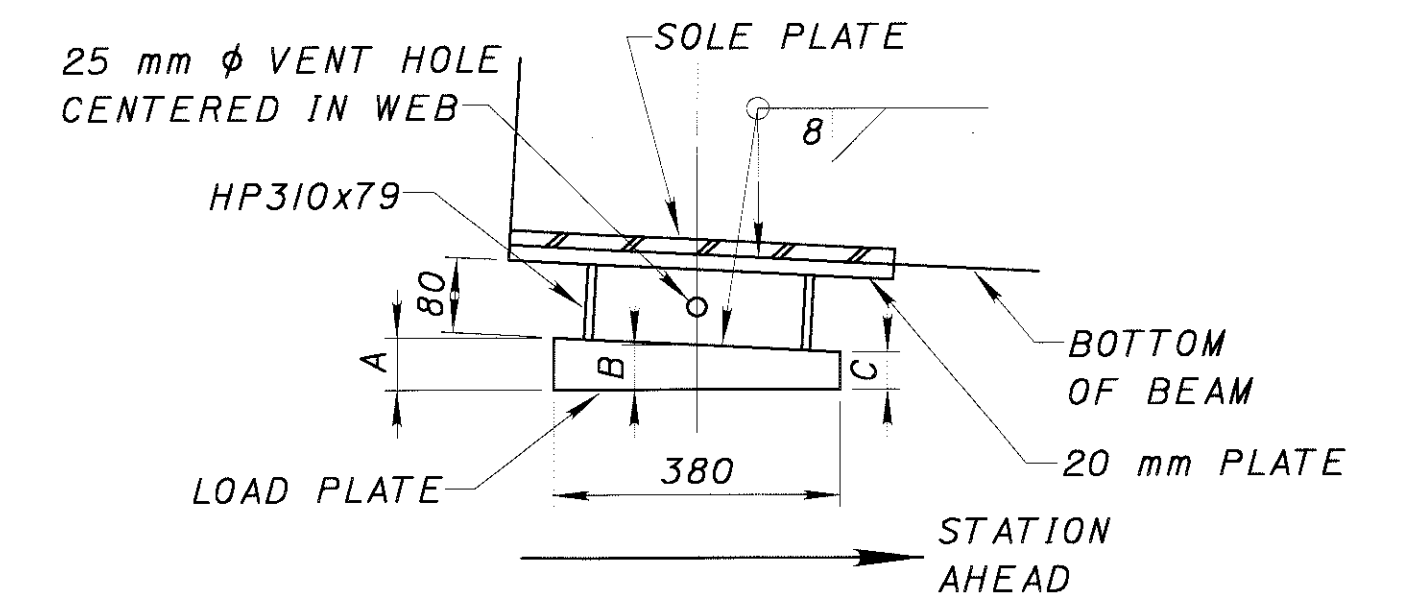
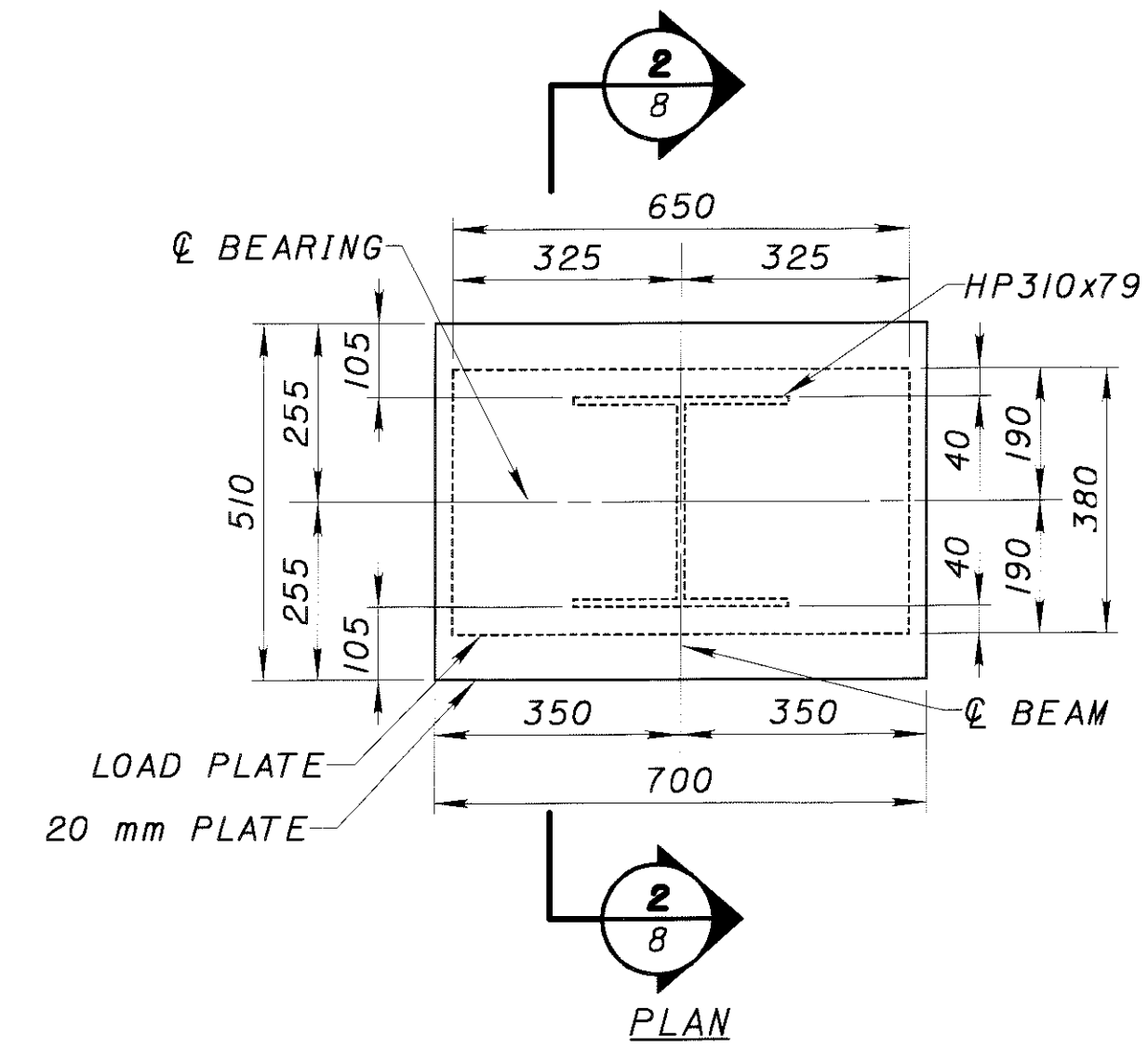


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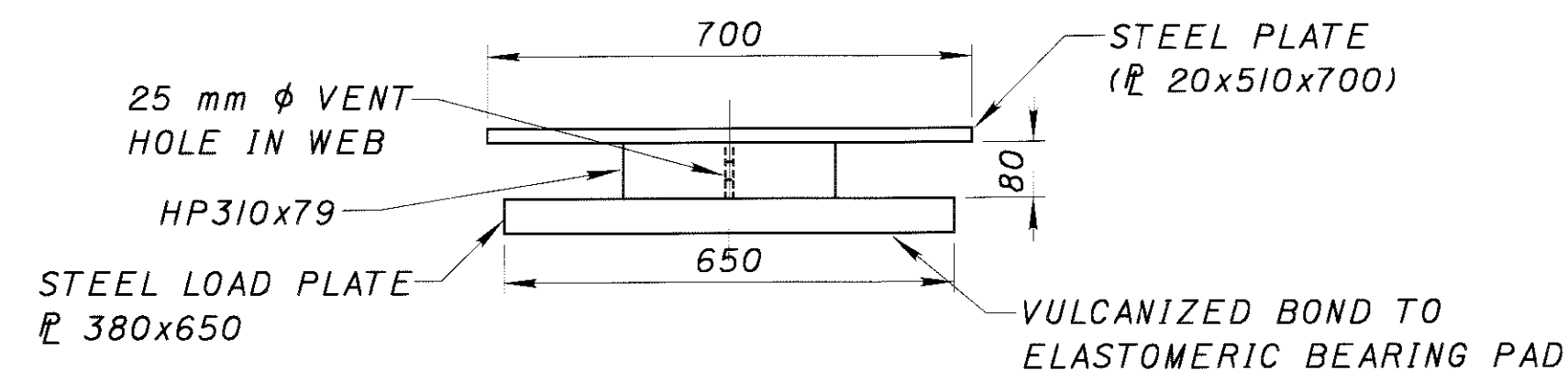


SECTION **1**
6,7



SECTION **2**
8

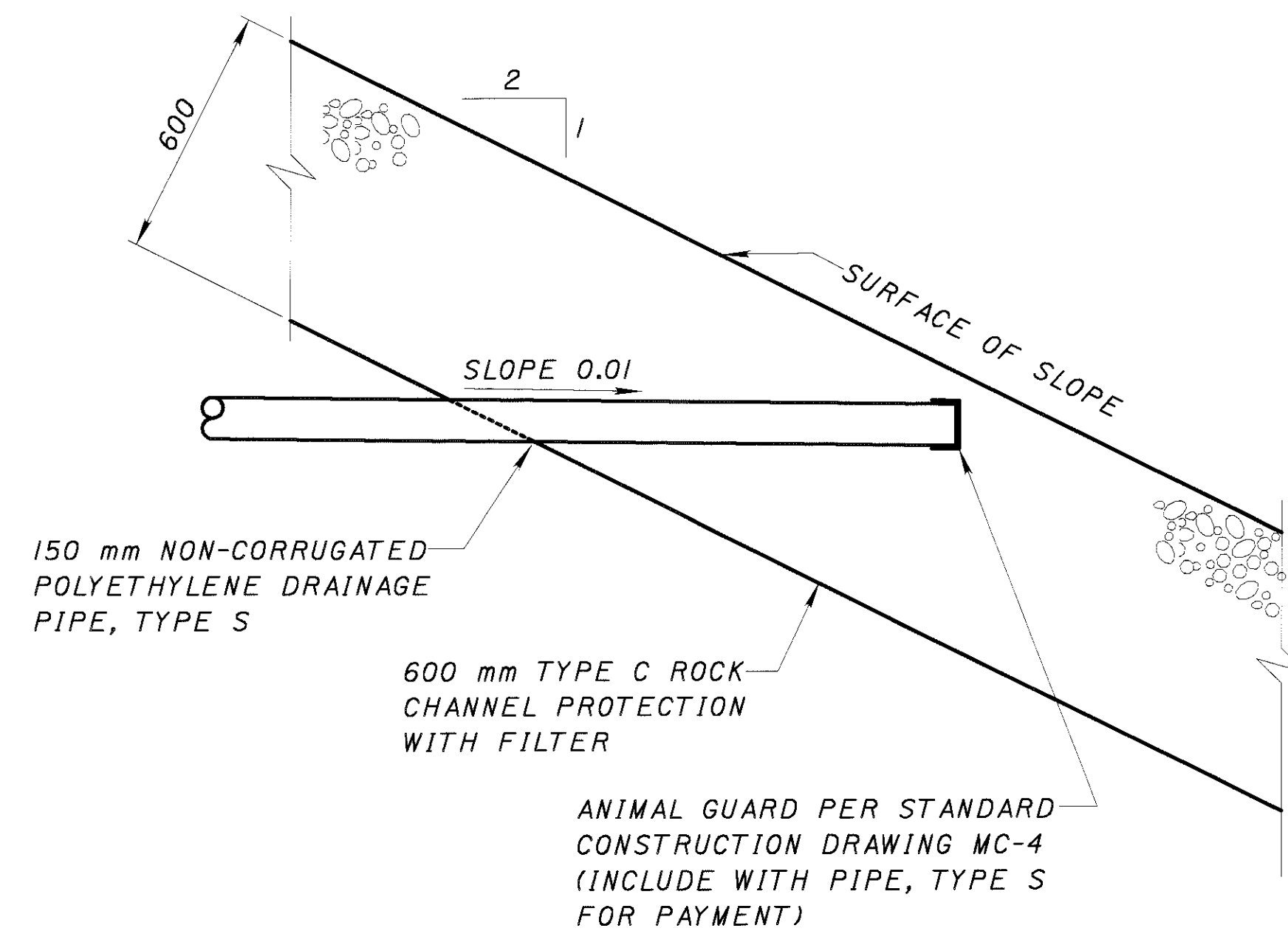
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



ELEVATION

SUPPORT POST DETAILS

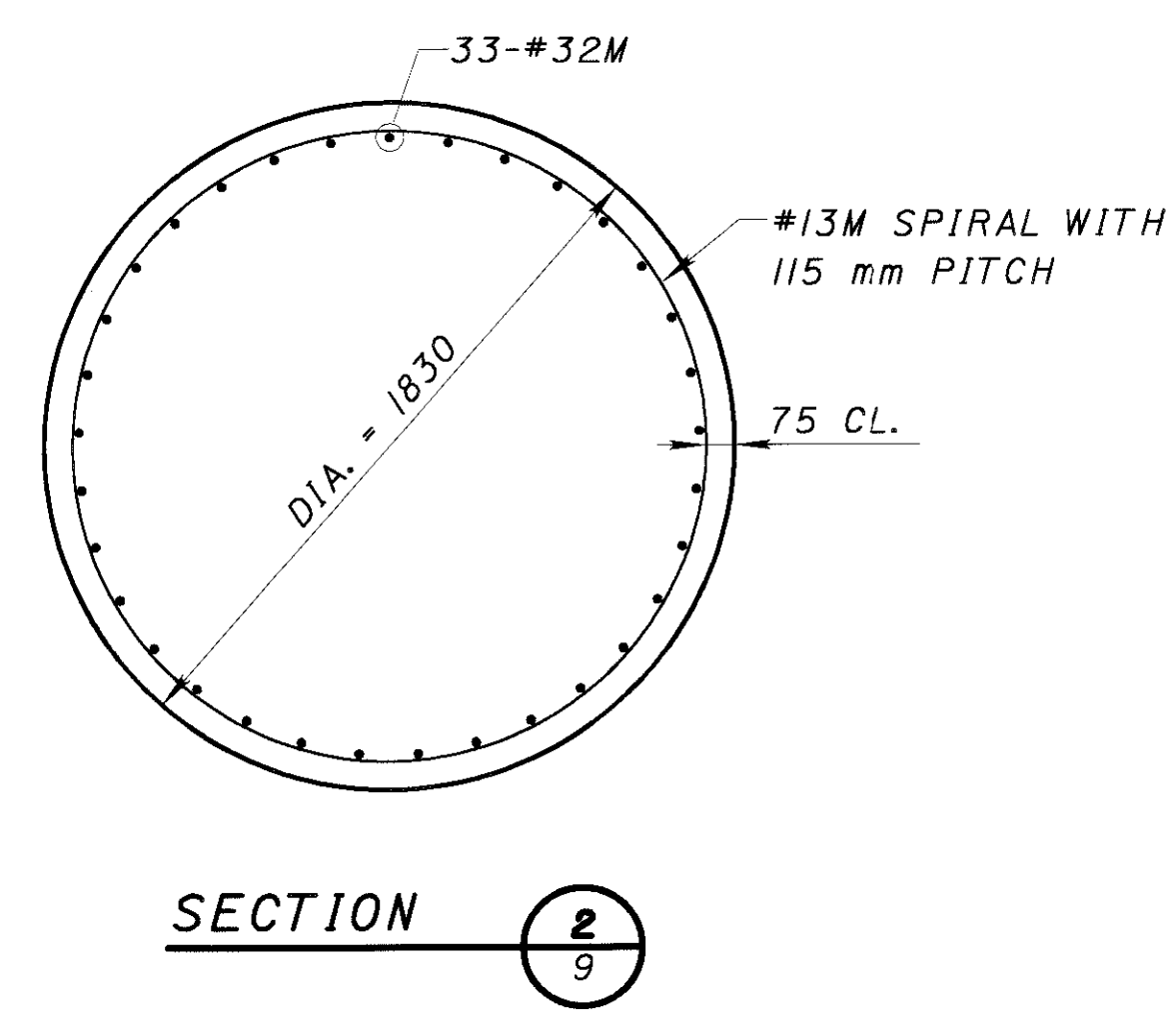
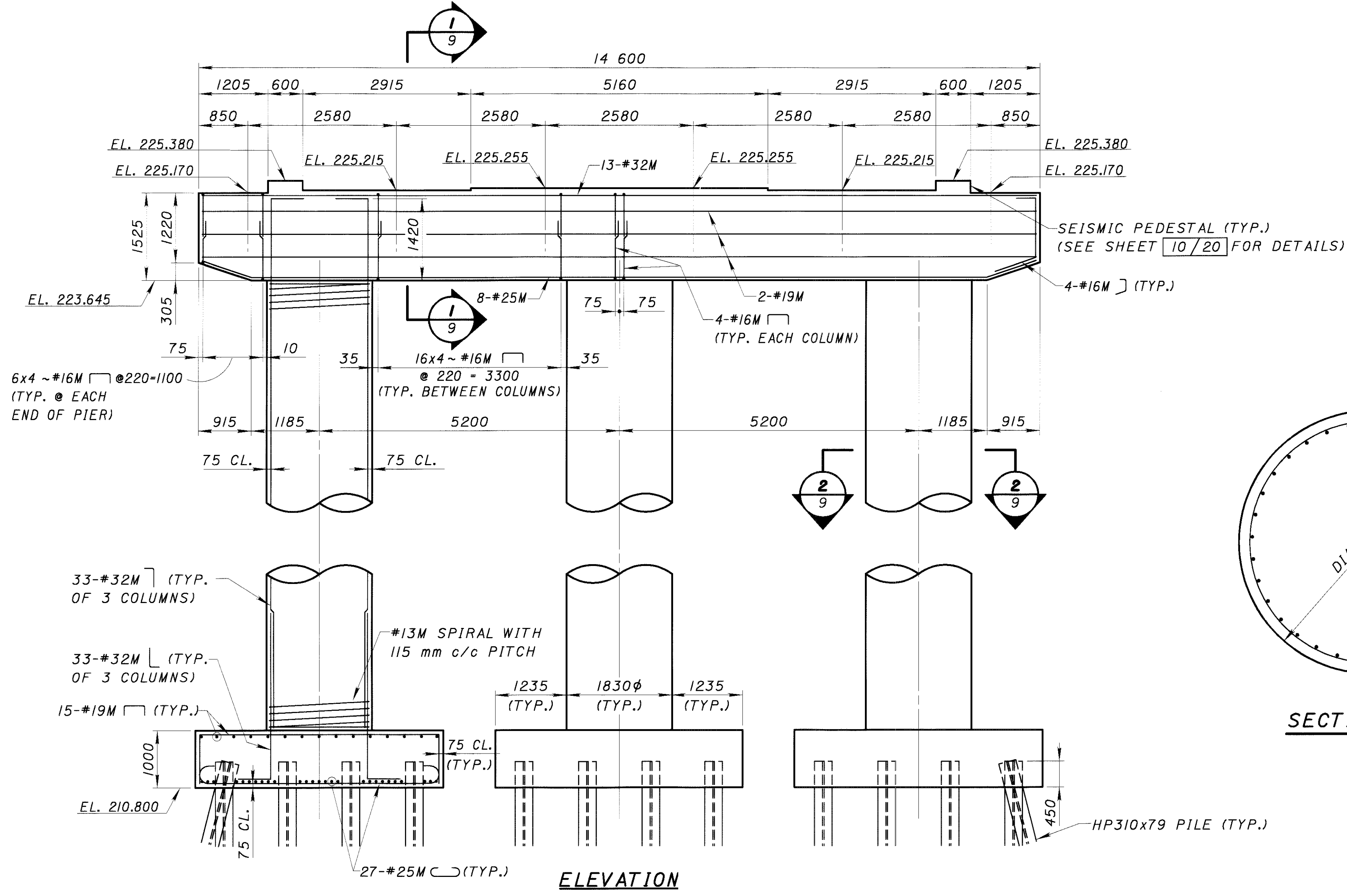
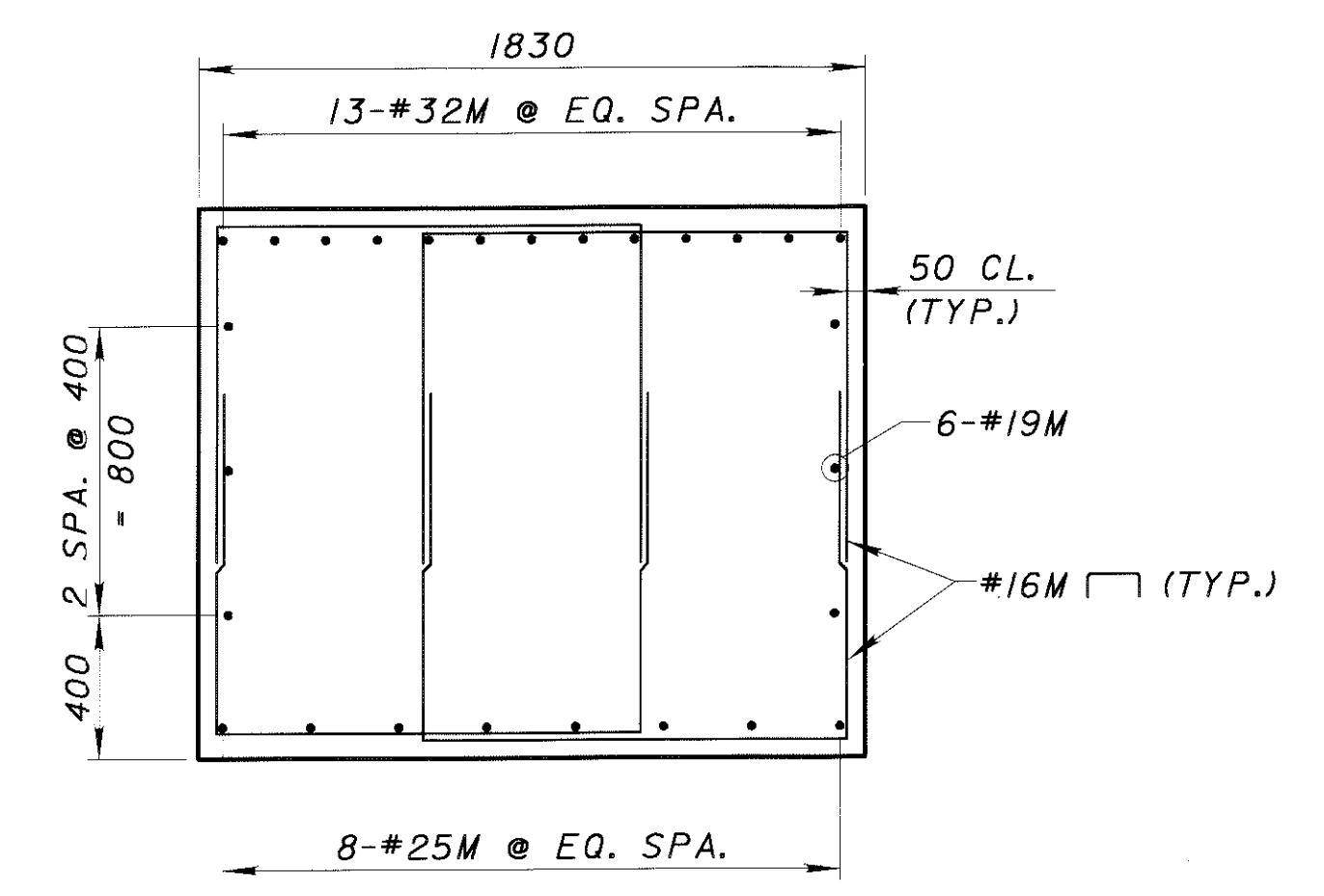
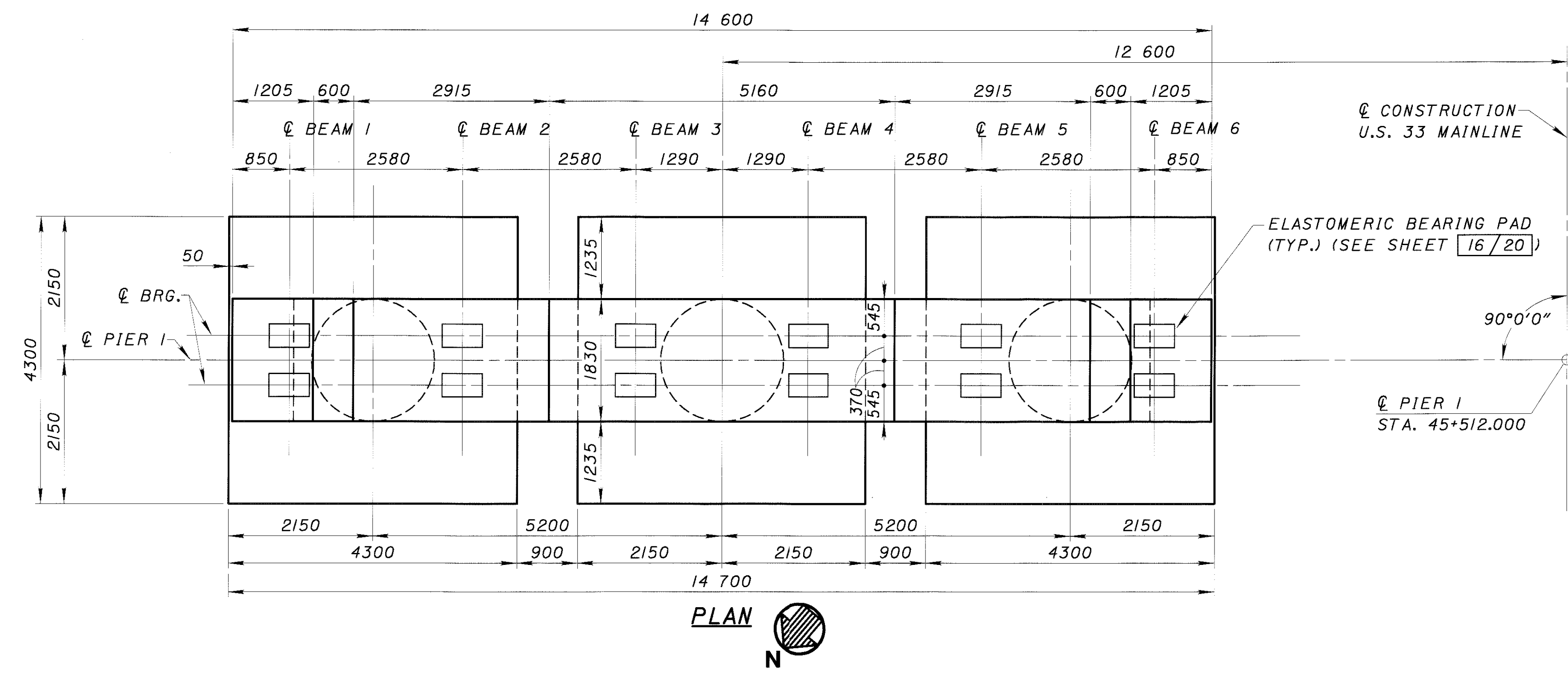
LOAD PLATE DIMENSIONS			
	A	B	C
REAR ABUTMENT	56	53	50
FORWARD ABUTMENT	50	50	50



TERMINATION OF 150 mm PIPE
AT THE FRONT SLOPE

NOTES:

- FOR ADDITIONAL DETAILS, NOTES AND REINFORCING STEEL, SEE BRIDGE STANDARD DRAWING SICD-I-96M.
- FOR SECTION E-E, SEE BRIDGE STANDARD DRAWING SICD-I-96M, SHEET 3 OF 7.
- FOR PILE LAYOUT PLAN, SEE SHEET 5/20.
- ALL REINFORCEMENT SHALL BE PLACED TO PROVIDE A MINIMUM COVER 50 mm UNLESS OTHERWISE SHOWN.
- POROUS BACKFILL WITH FILTER FABRIC 600 mm THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, 300 mm BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALL.
- THE SEALING OF THE CONCRETE SURFACES SHALL BE SEALED WITH EPOXY-URETHANE SEALER.
- BRIDGE SEAT ELEVATIONS HAVE BEEN ADJUSTED UPWARD 4 mm AT ABUTMENTS TO COMPENSATE FOR THE VERTICAL DEFORMATION OF THE BEARINGS.
- STEEL FOR SUPPORT POST SHALL BE A36M STEEL AND INCLUDED WITH ITEM 516, ELASTOMERIC BEARING FOR PAYMENT.
- CONCRETE ENCASEING PRESTRESSED I-BEAM STRUCTURAL MEMBERS MAY BE PLACED AT LEAST 48 HOURS BEFORE THE ACTUAL DECK CONCRETE IS PLACED, OR PLACED AS PART OF DECK POUR.
- LAP LENGTH:
#16M = 840 (TOP), 600 (OTHER)
#25M = 2200 (TOP), 1940 (OTHER)

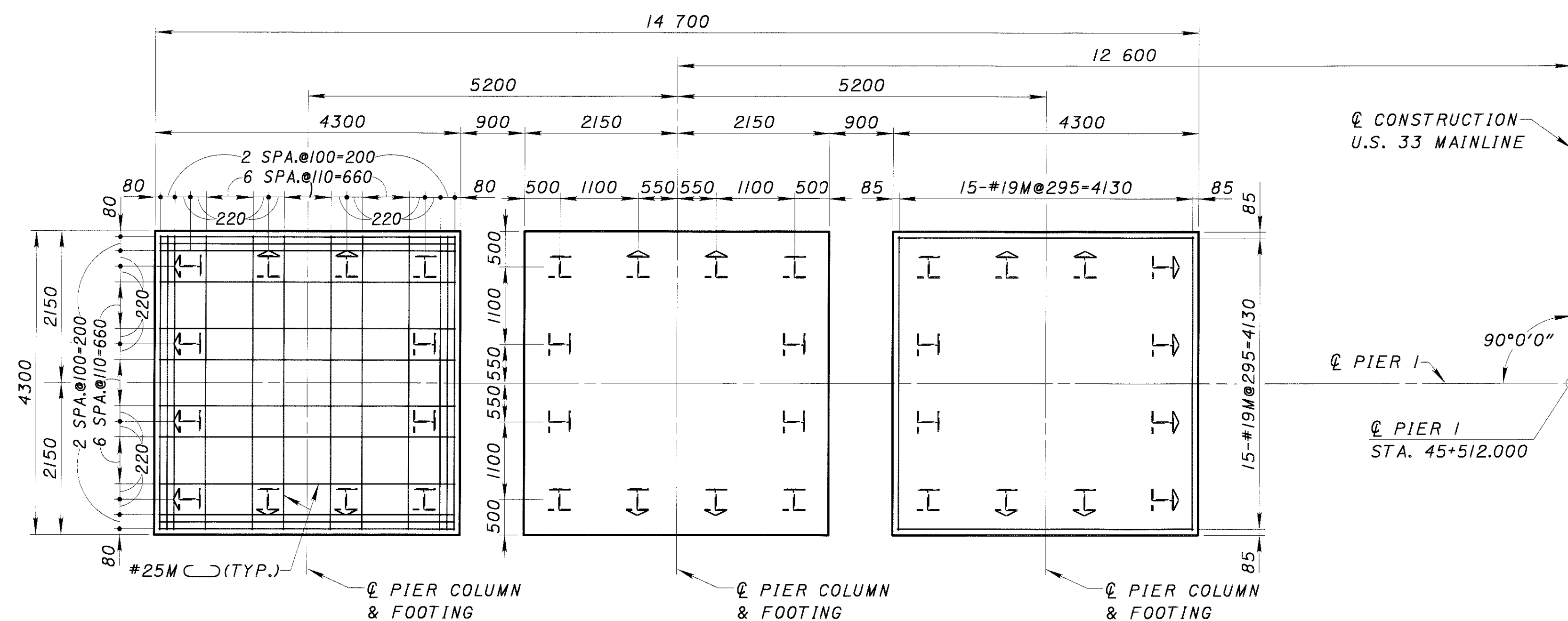


- NOTES:**
- FOR OTHER DETAILS NOT SHOWN, REFER TO STANDARD BRIDGE DRAWING PSID-I-99.
 - ALL REINFORCING STEEL SHOULD BE PLACED TO PROVIDE A MINIMUM COVER OF 50 mm UNLESS OTHERWISE SHOWN.
 - SEE SHEET 5/20 FOR PILE LAYOUT.
 - BRIDGE SEAT ELEVATIONS HAVE BEEN ADJUSTED UPWARD 3 mm @ PIER 1 TO COMPENSATE FOR THE VERTICAL DEFORMATION OF THE BEARINGS.
 - LAP LENGTH:
 #16M = 1090 (TOP), 970 (OTHER)
 #19M = 1320 (TOP), 1170 (OTHER)
 #25M = 2210 (TOP), 1930 (OTHER)
 #32M = 3540 (TOP), 3120 (OTHER)
 #36M = 4340 (TOP), 3840 (OTHER)
 - ANCHORAGE OF SPIRAL REINFORCEMENT SHALL BE PROVIDED BY 1-1/2 EXTRA TURNS OF BAR AT EACH END OF A SPIRAL UNIT.

SPIRALS SHALL EXTEND TO THE LEVEL OF THE HIGHEST HORIZONTAL REINFORCEMENT IN THE FOOTING AND LOWEST HORIZONTAL REINFORCEMENT IN THE CAP.

CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES SHALL BE USED AT SUFFICIENT INTERVALS (NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 3050 mm) TO INSURE CONCENTRIC SPACING FOR THE ENTIRE CAGE LENGTH. SPACERS SHALL BE CONSTRUCTED OF APPROVED MATERIAL EQUAL IN QUALITY AND DURABILITY TO THE CONCRETE SPECIFIED FOR THE COLUMN. THE SPACERS SHALL HAVE ADEQUATE DIMENSIONS TO ENSURE A MINIMUM 75 mm CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE DESIGN DIMENSION OF THE COLUMN.

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TYPICAL BOTTOM OF
FOOTING STEEL SPACING

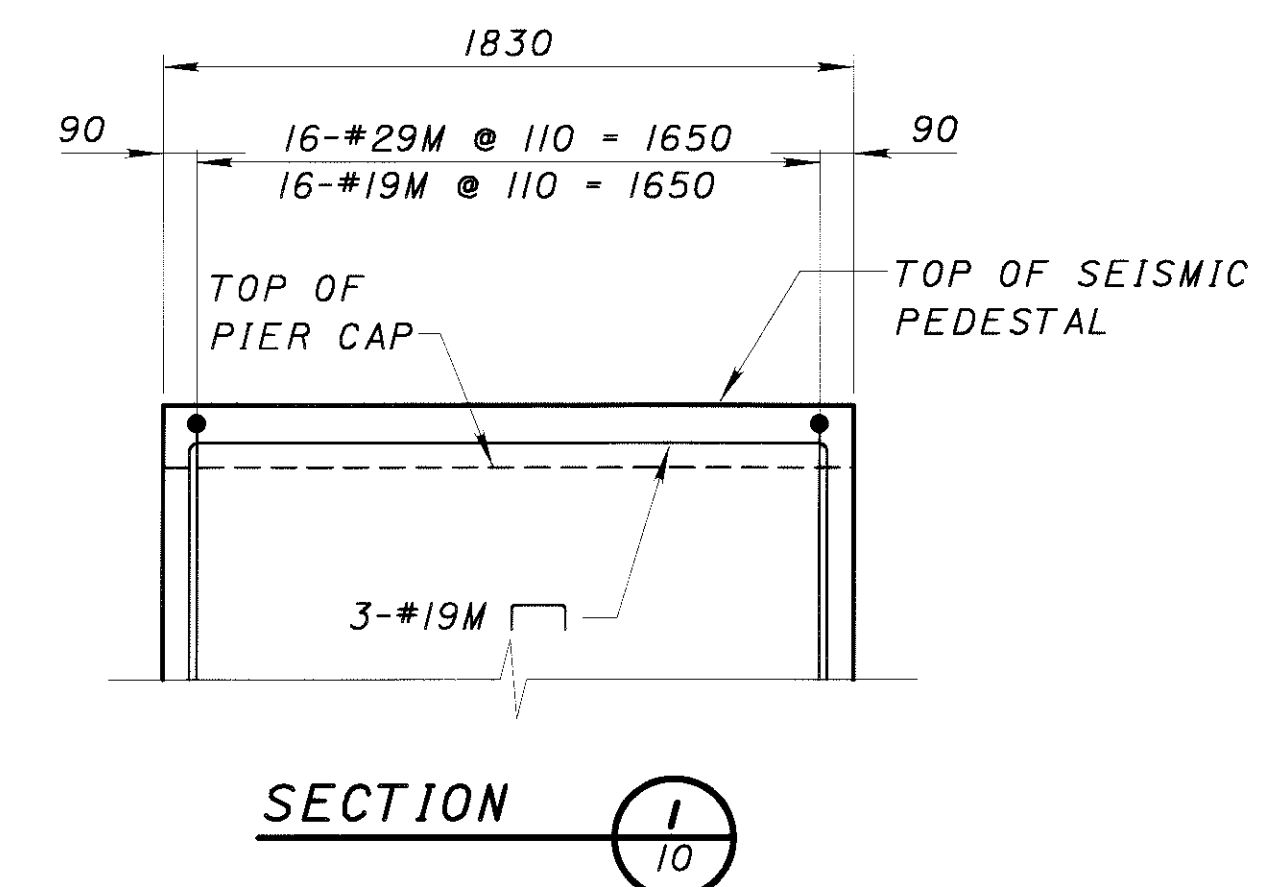
TYPICAL PILE SPACING

TYPICAL TOP OF
FOOTING STEEL SPACING

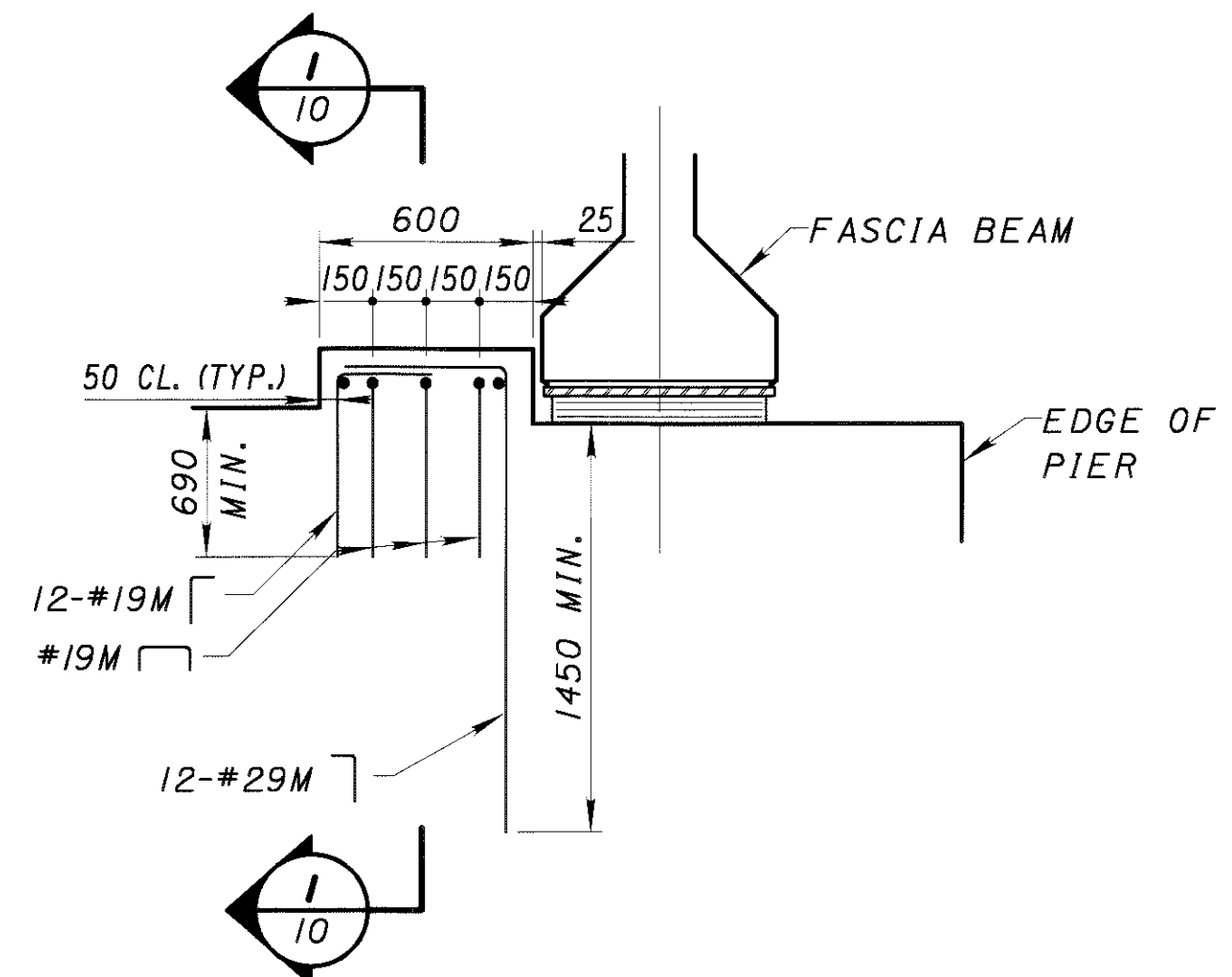
FOUNDATION PLAN



- LEGEND**
- VERTICAL HP310x79 STEEL PILE
 - 1:4 BATTERED HP310x79 STEEL PILE



SEISMIC PEDESTAL DETAILS
(SHOWN FOR BEAM LINE 6, BEAM LINE I OPPOSITE HAND)



DESIGNED BY	SGM	CHECKED BY	KFS
DRAWN BY	JSS	REVISED BY	
REVIEWED BY	JN	DATE	09/22/00
STRUCTURE FILE NUMBER	5300509		

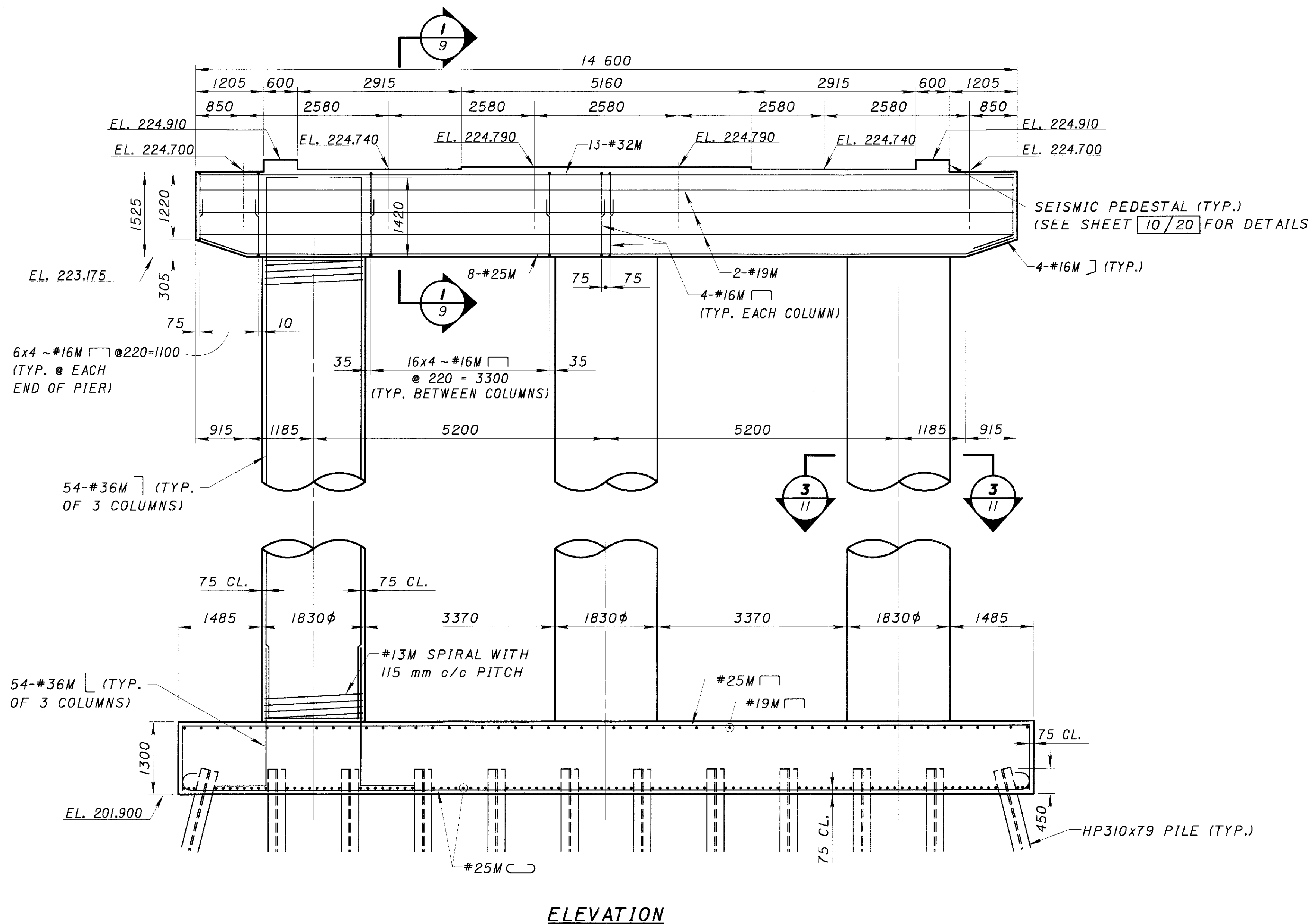
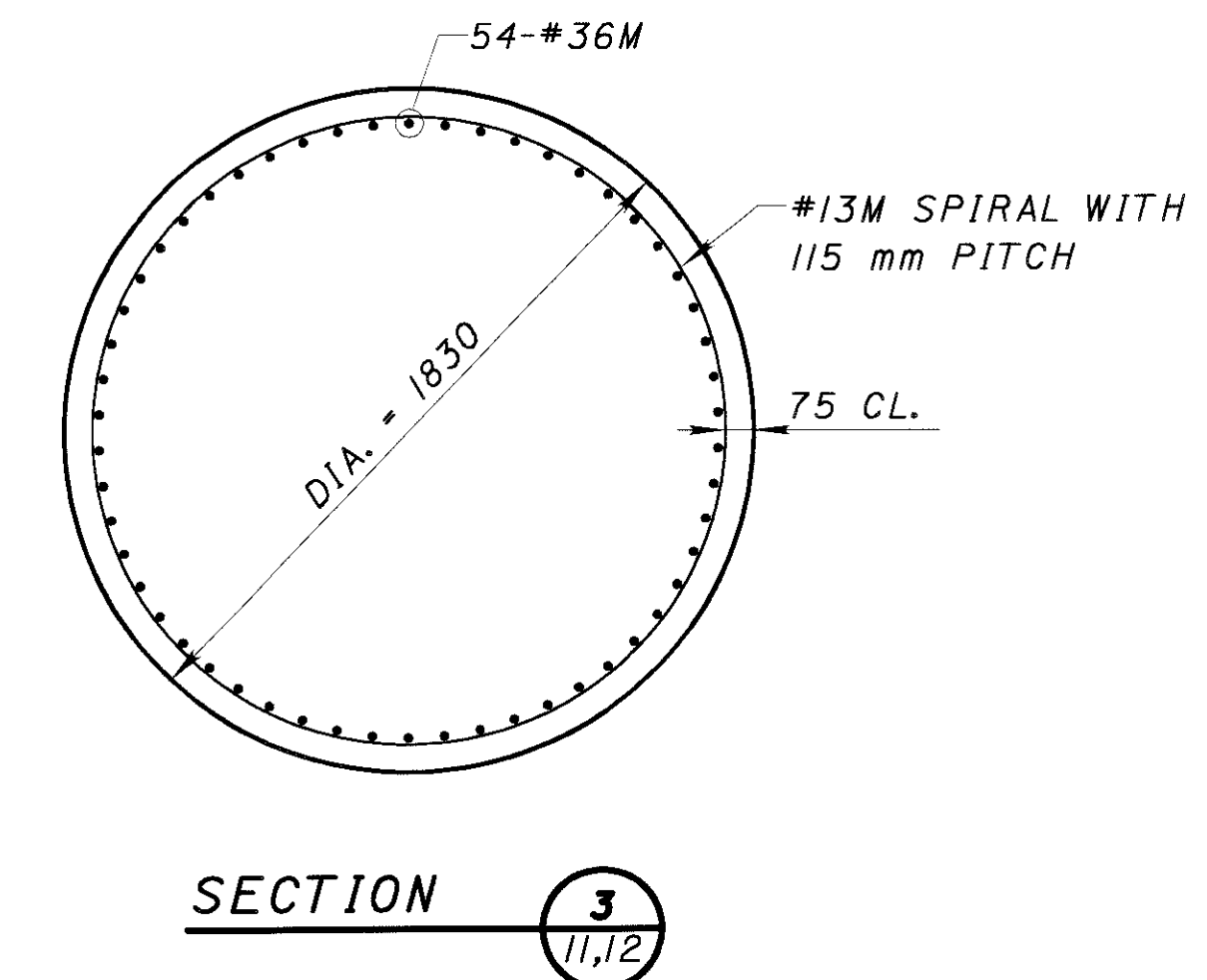
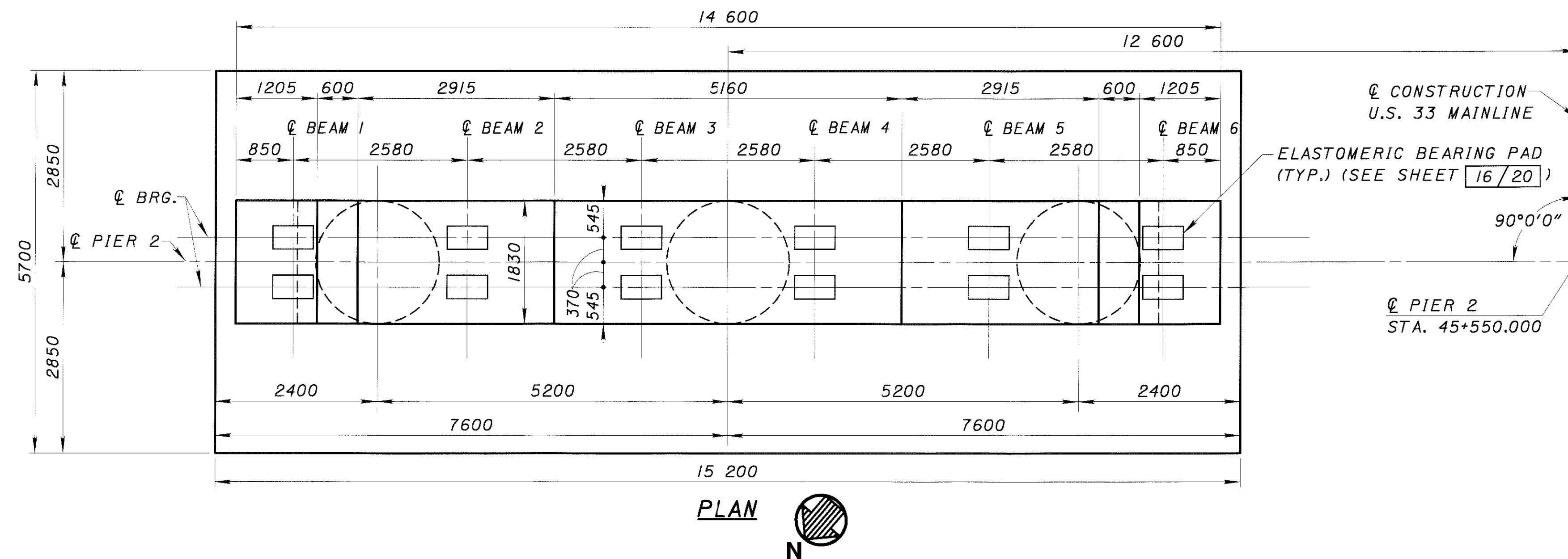
PIER I DETAILS
BRIDGE NO. MEG-33-02439
OVER SHADE RIVER & C.R.40

ATH-33-40.981

10/20

914
949

NOTE:
1. FOR NOTES, SEE SHEET 9/20.



DESIGNED	SGM	CHECKED	KFS
DRAWN	JSS	REVISED	
REVIEWED	JN	DATE	09/22/00
STRUCTURE FILE NUMBER	5300509		

PIER 2 DETAILS
BRIDGE NO. MEG-33-02439
OVER SHADE RIVER & C.R.40

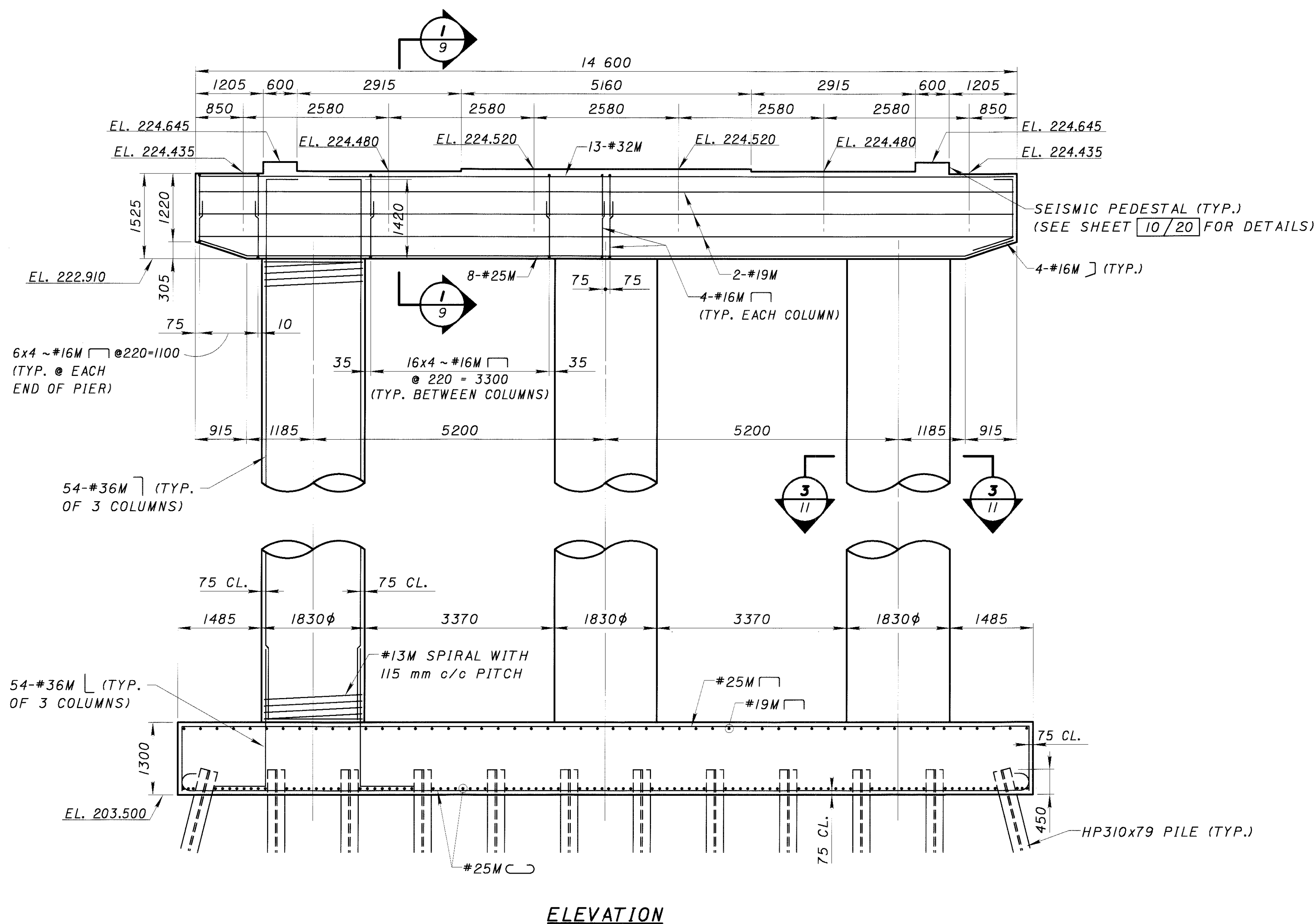
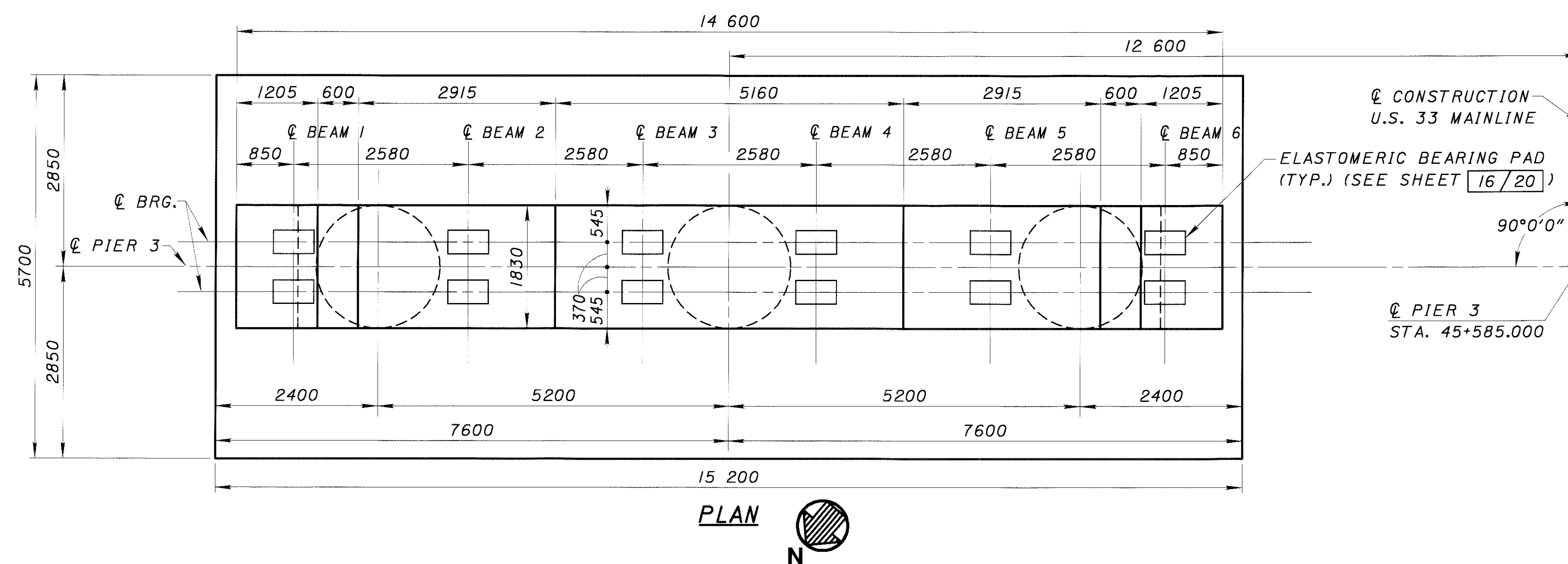
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11/20

915
949

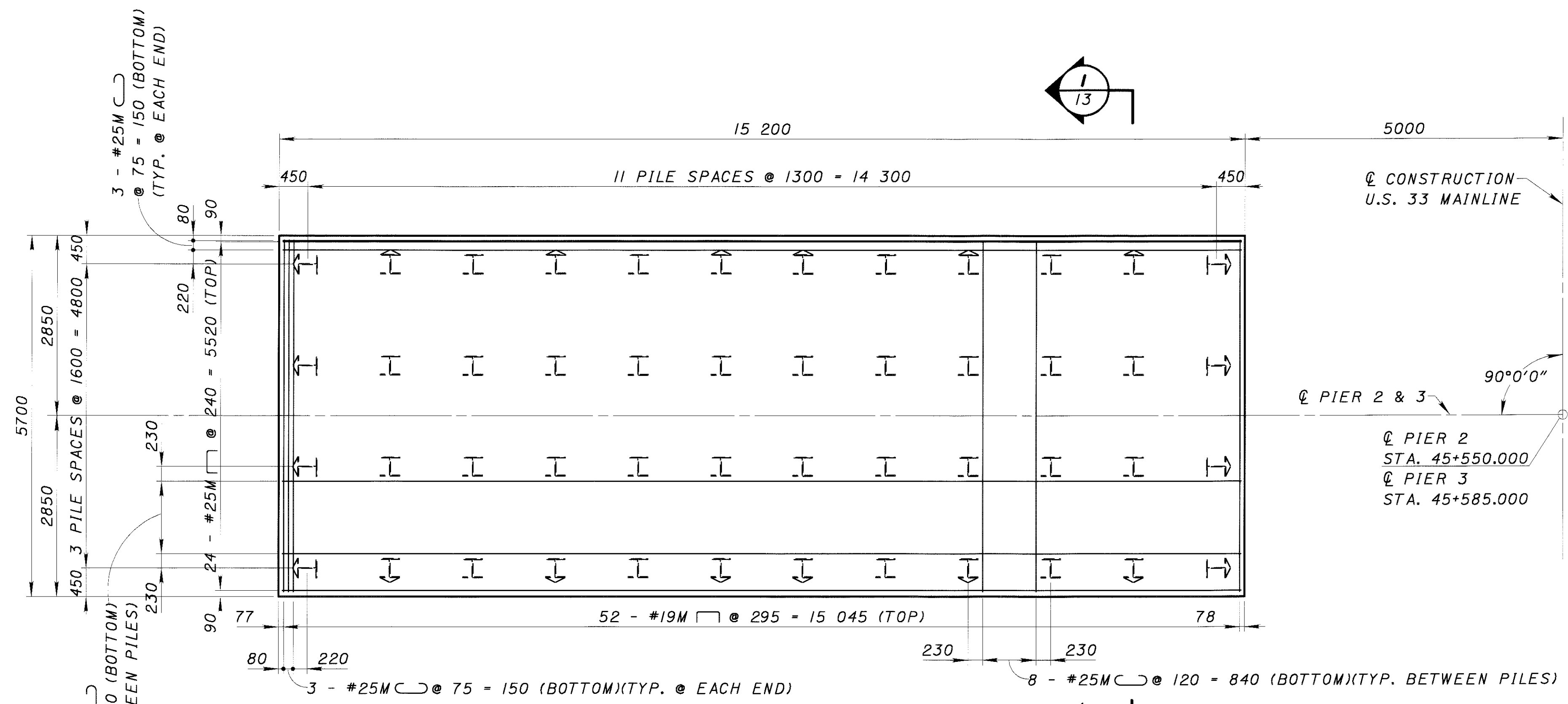
NOTE:
1. FOR NOTES, SEE SHEET 9/20.

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NOTES:

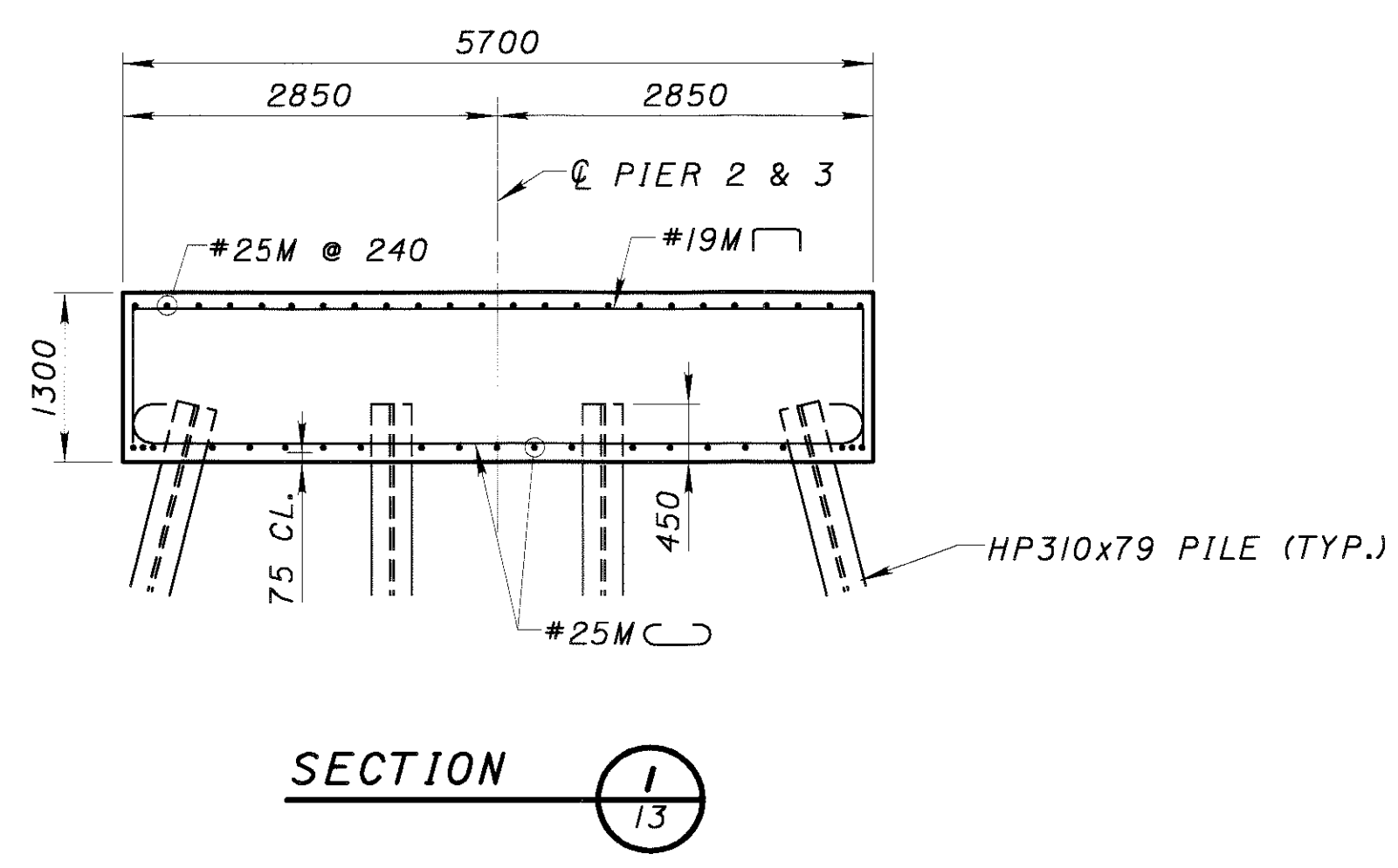
- FOR NOTES, SEE SHEET 9/20.
- BRIDGE SEAT ELEVATIONS HAVE BEEN ADJUSTED UPWARD 3 mm @ PIER 3 TO COMPENSATE FOR THE VERTICAL DEFORMATION OF THE BEARINGS.



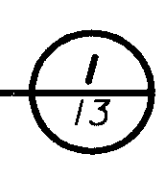
FOUNDATION PLAN



- LEGEND**
- VERTICAL HP310x79 STEEL PILE
 - 1:4 BATTERED HP310x79 STEEL PILE



SECTION



Q CONSTRUCTION
U.S. 33 MAINLINE

Q PIER 2 & 3

90°0'0"

Q PIER 2
STA. 45+550.000

Q PIER 3
STA. 45+585.000

DESIGNED	SGM	CHECKED	KFS
DRAWN	JSS	REVISED	
REVIEWED	JN	DATE	09/22/00
STRUCTURE FILE NUMBER	5300509		

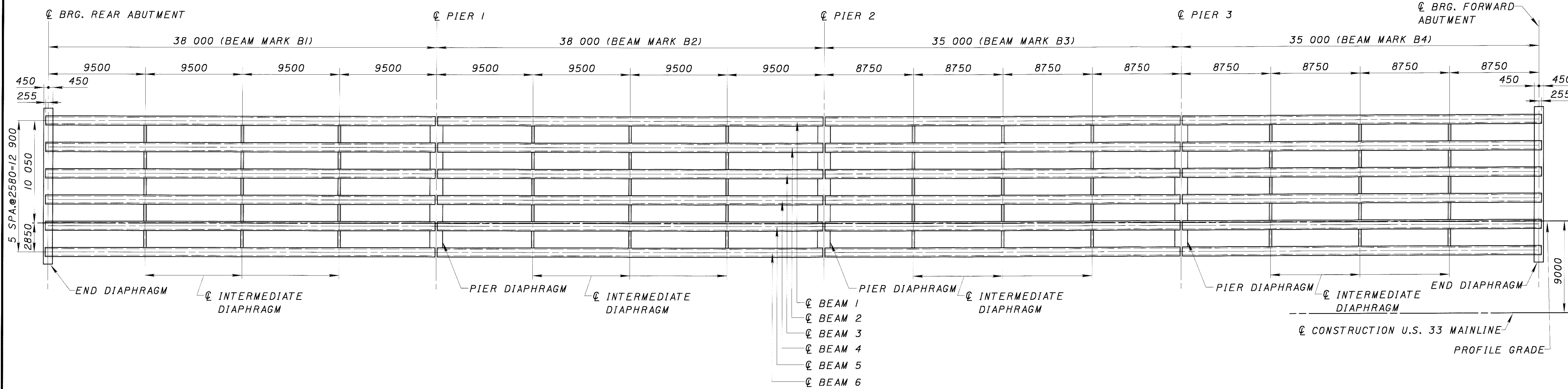
PIER 2 & 3 DETAILS
BRIDGE NO. MEG-33-02439
OVER SHADE RIVER & C.R.40

ATH-33-40.981

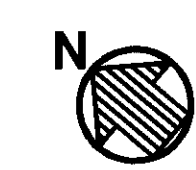
13/20

917
949

NOTE:
1. FOR NOTES, SEE SHEET 9/20.



FRAMING PLAN



- NOTES:**
1. FOR PIER AND INTERMEDIATE DIAPHRAGM DETAILS, SEE BRIDGE STANDARD DRAWING PSID-I-99 AND SHEET 17/20.
 2. FOR END DIAPHRAGM DETAILS, SEE ABUTMENT DETAIL SHEETS 6/20, 7/20, 8/20 AND STANDARD DRAWING SICD-I-96M.

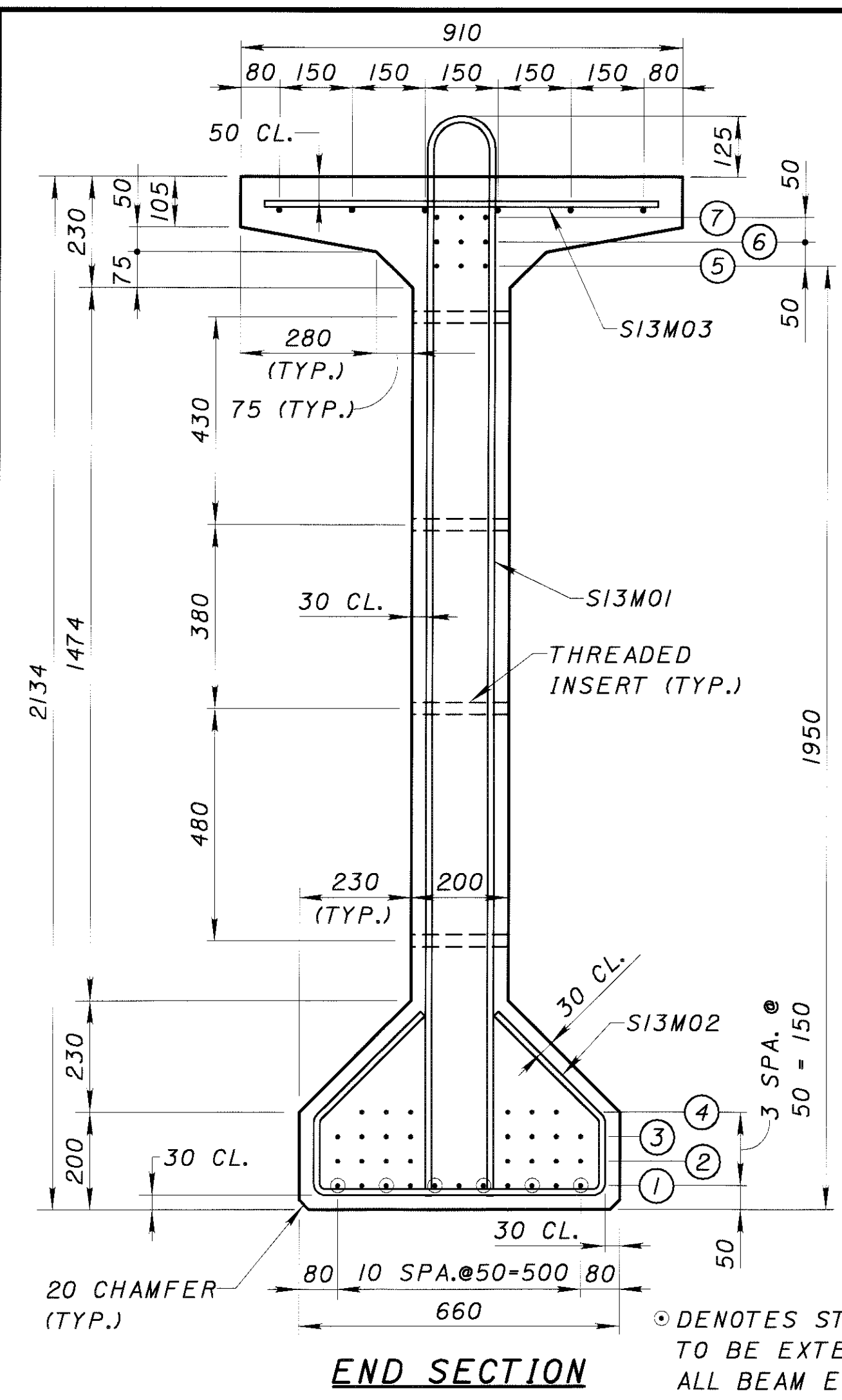
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DRAWN	JSS	REVIEWED	
REVIEWED	JN	DATE	09/22/00
STRUCTURE FILE NUMBER	5300509		

SUPERSTRUCTURE DETAILS, FRAMING PLAN
 BRIDGE NO. MEG-33-02439
 OVER SHADE RIVER & C.R.40

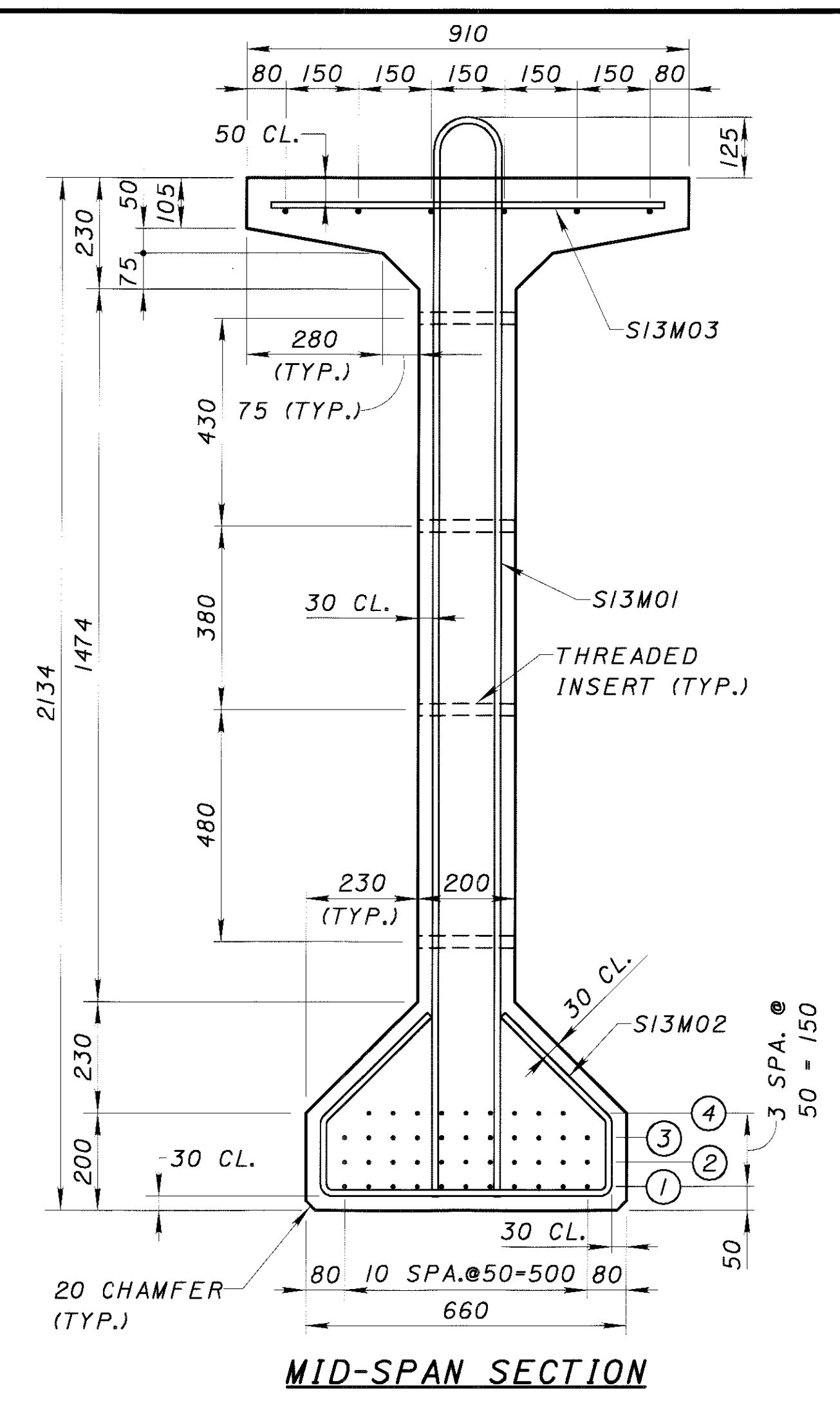
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14/20

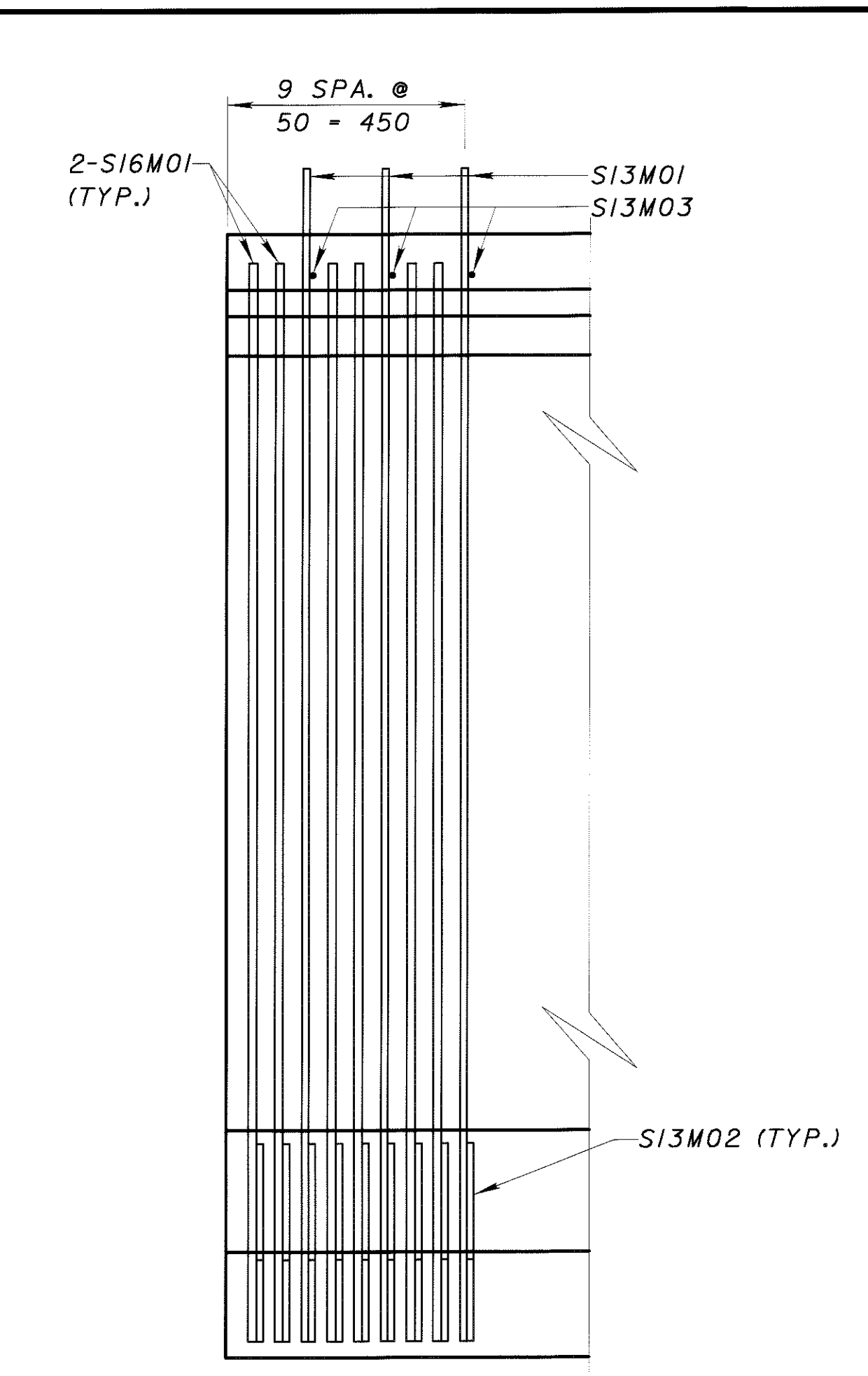
918
949



⊙ DENOTES STRANDS TO BE EXTENDED AT ALL BEAM ENDS

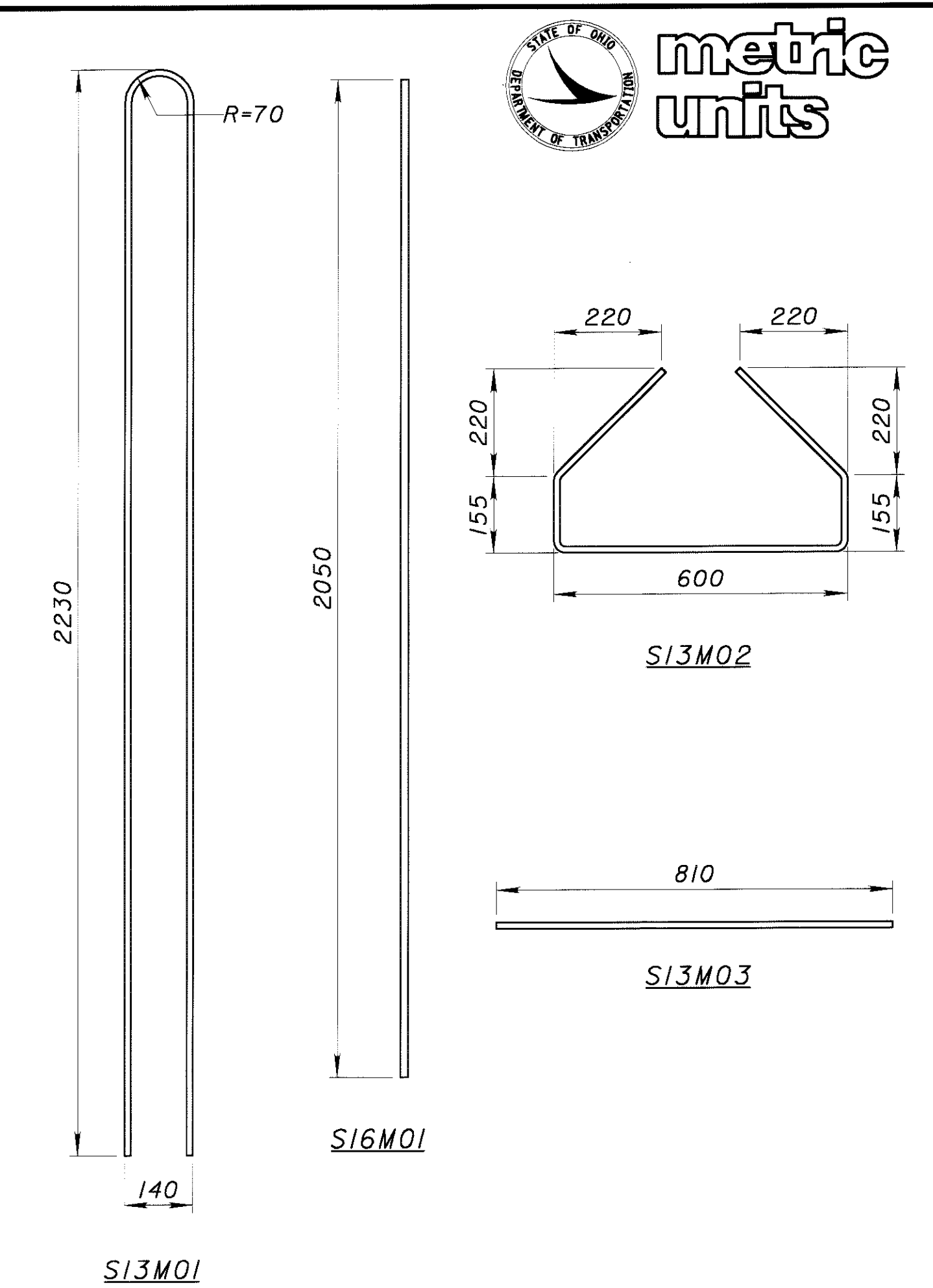


ANCHORAGE REINFORCEMENT DETAIL



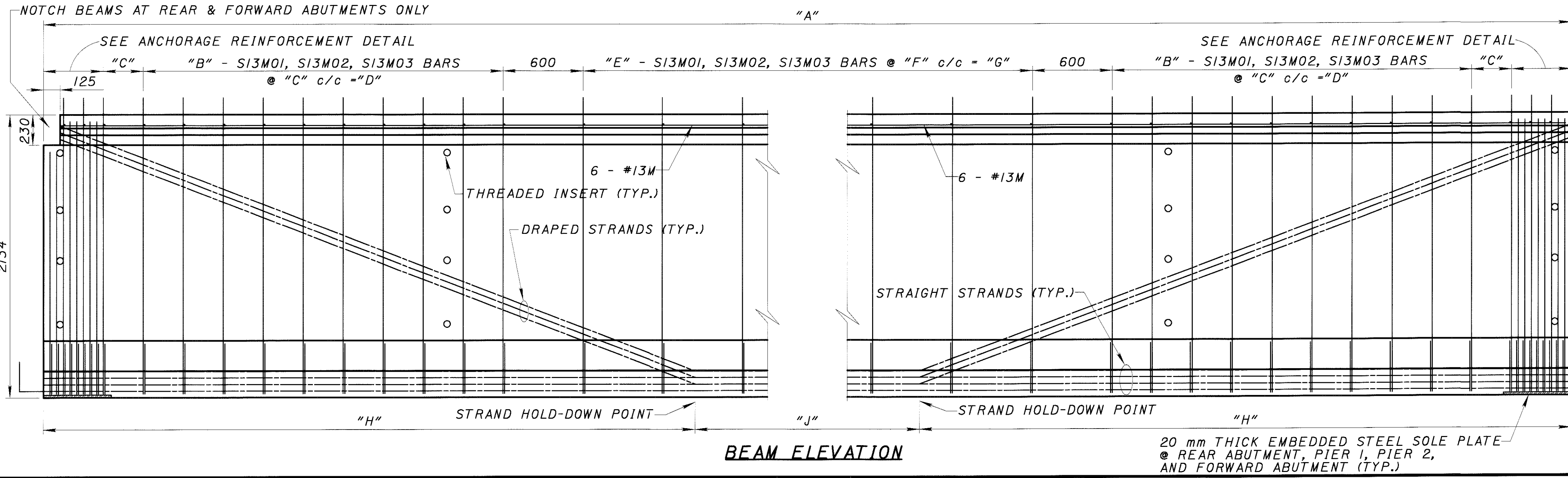
BENDING DIAGRAMS

(ALL DIMENSIONS ARE OUT-TO-OUT)



BEAM DIMENSIONS											
BEAM MARK	NO. REQ'D.	DIMENSIONS									APPROXIMATE MASS (EA.)
		A	B	C	D	E	F	G	H	J	
B1	6	38 140	10	300	2700	52	600 (-)	30 040	15 250	7640	61 700 kg
B2	6	37 770	10	300	2700	51	600 (-)	29 670	15 100	7570	61 100 kg
B3	6	34 770	10	300	2700	46	600 (-)	26 670	13 900	6970	56 300 kg
B4	6	35 140	10	300	2700	47	600 (-)	27 040	14 050	7040	56 900 kg

SPAN	BEAM MARK	NUMBER OF STRANDS PER ROW														TOTAL STRANDS	CONCRETE STRENGTHS		S13M01 BARS REQ'D.	S13M02 BARS REQ'D.	S13M03 BARS REQ'D.	S16M01 BARS REQ'D.
		END							MIDSPAN								f'ci	f'c				
		1	2	3	4	5	6	7	1	2	3	4	5	6	7							
1	B1	11	8	8	6	3	3	3	11	11	11	9				42	34.5 MPa	48.3 MPa	78	90	78	24
2	B2	11	8	8	6	3	3	3	11	11	11	9				42	34.5 MPa	48.3 MPa	77	89	77	24
3	B3	11	8	8	2		3	3	11	11	11	2				35	34.5 MPa	48.3 MPa	72	84	72	24
4	B4	11	8	8	2		3	3	11	11	11	2				35	34.5 MPa	48.3 MPa	73	85	73	24



STD. DWG. PSID-I-99 DIMENSIONS	
A	135
B	100
C	150
D	450*
E	530

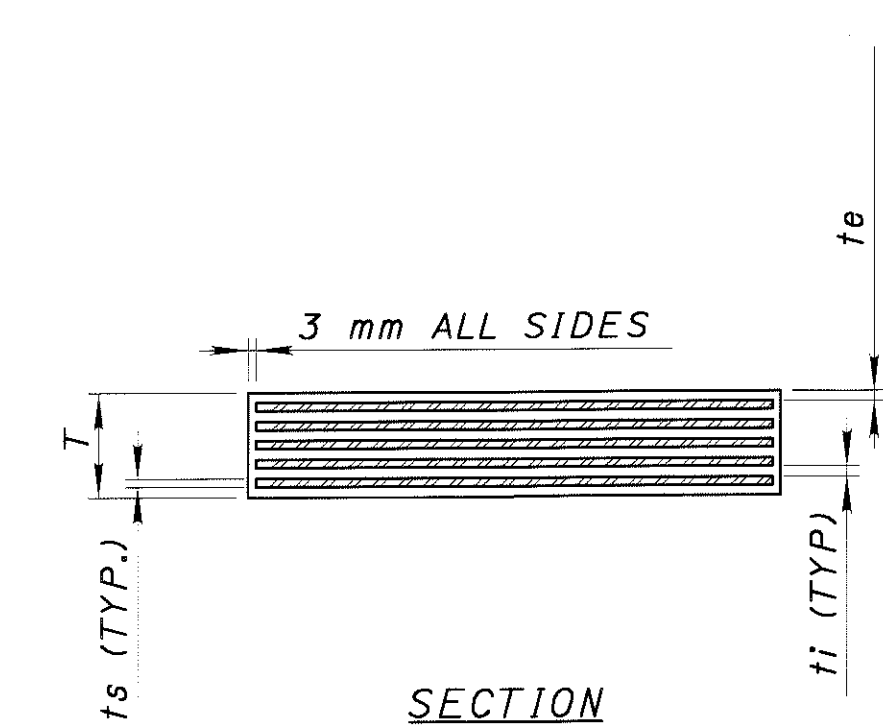
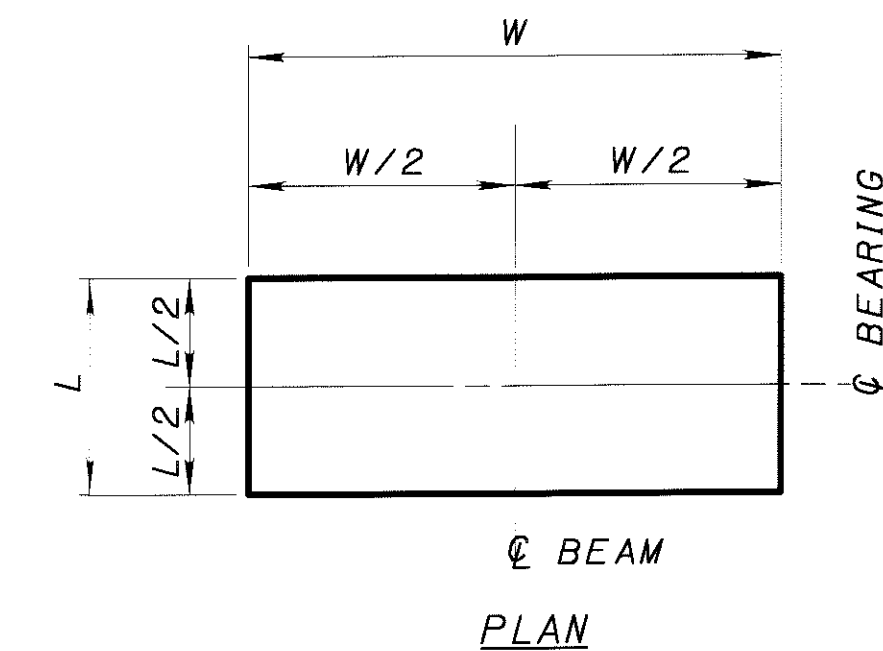
* SEE SPACING IN TYPICAL SECTION THIS SHEET AND IN TRANSVERSE SECTION SHEET 17/20.

NOTES:

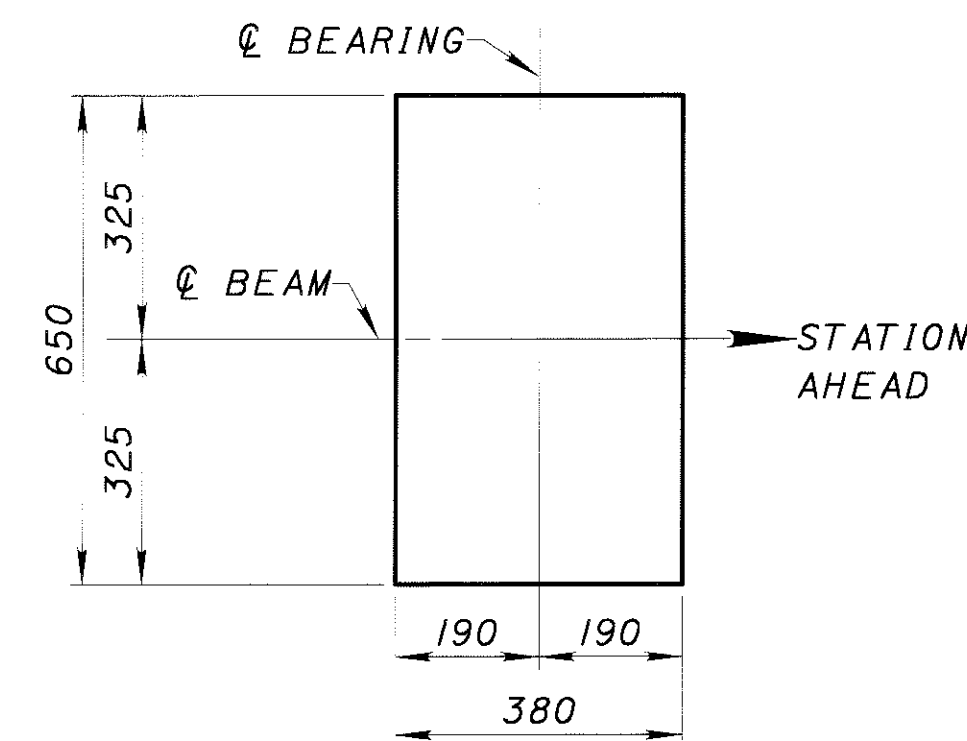
- SEE BRIDGE STANDARD DRAWING PSID-I-99 SHEET 1 TO 8 FOR OTHER DETAILS AND NOTES NOT SHOWN.
- SEE GENERAL NOTES FOR CONVERSION OF ENGLISH STANDARD BRIDGE DRAWING.

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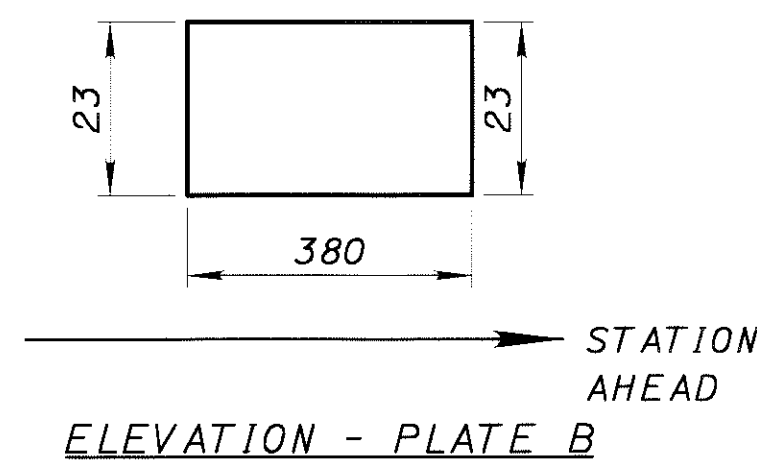
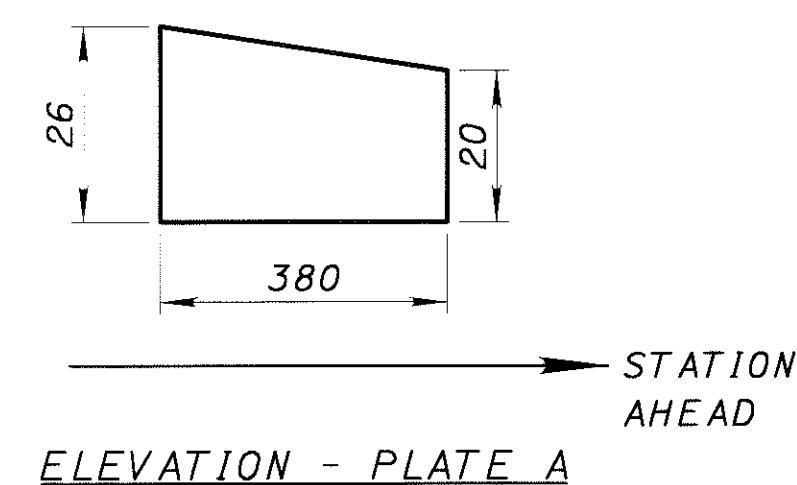
BEARING DESIGN LOADS AND DIMENSIONS								
SPAN	1	1	2	2	3	3	4	4
LOCATION	R. ABUT.	PIER 1	PIER 1	PIER 2	PIER 2	PIER 3	PIER 3	F. ABUT.
TYPE (EXPANSION OR FIXED)	E	E	E	E	E	E	E	E
DESIGN DEAD LOAD (kN)	751	830	799	767	713	733	766	695
DESIGN LIVE LOAD (kN)	279	263	263	243	243	249	249	276
DESIGN TOTAL LOAD (kN)	1030	1093	1062	1010	956	982	1015	971
NUMBER OF BEARINGS REQUIRED	6	6	6	6	6	6	6	6
WIDTH, W (mm)	600	600	600	600	600	600	600	600
LENGTH, L (mm)	350	350	350	350	350	350	350	350
THICKNESS, T (mm)	109	79	79	50	50	79	79	109
NUMBER OF EXTERNAL LAYERS, Ne	2	2	2	2	2	2	2	2
THICKNESS OF EXTERNAL LAYER, te (mm)	9	9	9	9	9	9	9	9
NUMBER OF INTERNAL LAYERS, Ni	6	4	4	2	2	4	4	6
THICKNESS OF INTERNAL LAYER, ti (mm)	13	13	13	13	13	13	13	13
NUMBER OF STEEL LAYERS, Ns	7	5	5	3	3	5	5	7
THICKNESS OF STEEL LAYER, ts (mm)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9



ELASTOMERIC BEARING PAD DETAILS



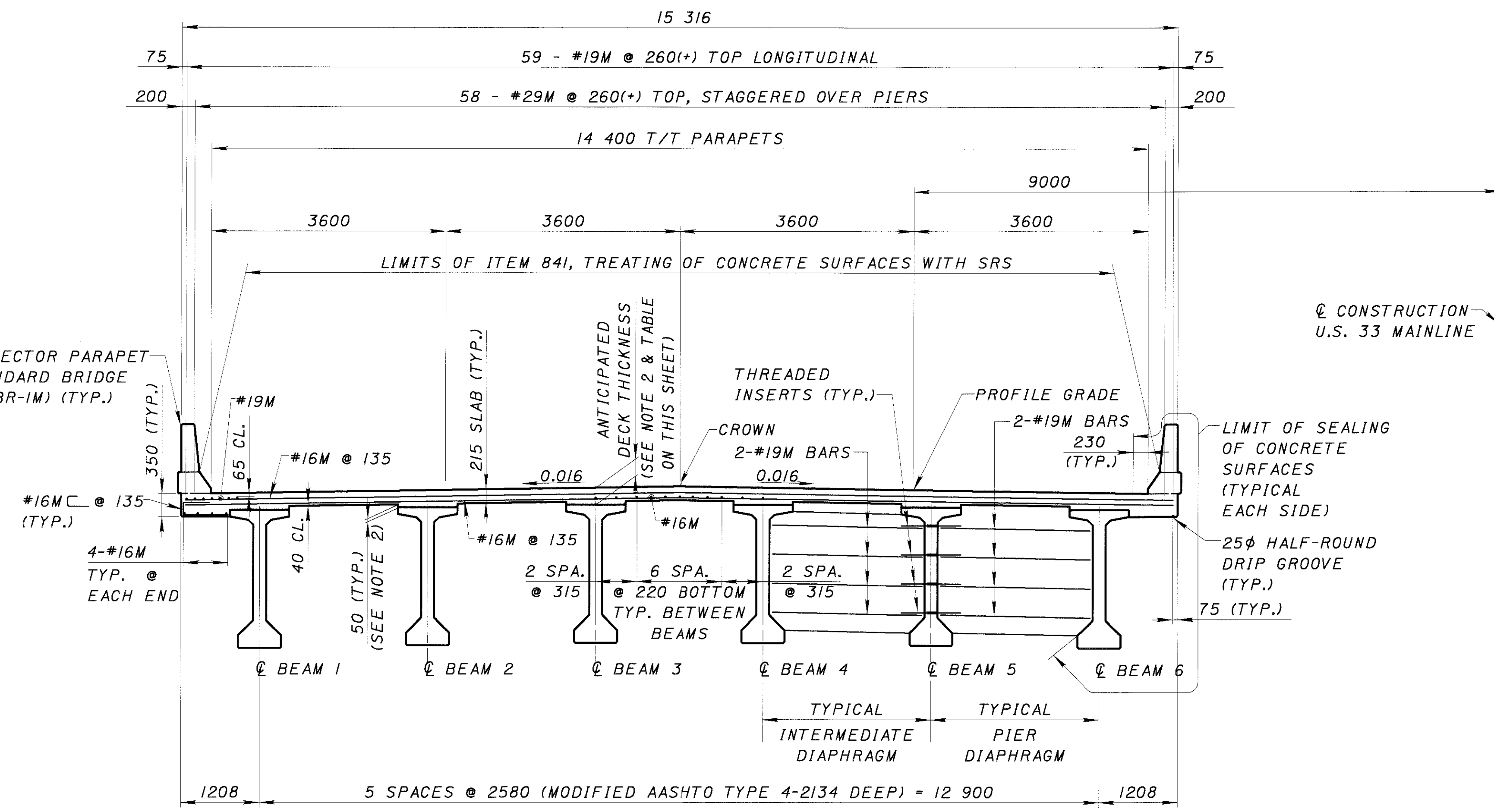
STEEL LOAD PLATE TABLE		
LOCATION	SPAN	PLATE
REAR ABUTMENT	1	SEE ABUTMENT DETAILS
PIER 1	1	A
PIER 1	2	A
PIER 2	2	A
PIER 2	3	B
PIER 3	3	NO PLATE
PIER 3	4	NO PLATE
FORWARD ABUTMENT	4	SEE ABUTMENT DETAILS



STEEL LOAD PLATE DETAIL

BEARING PAD NOTES:

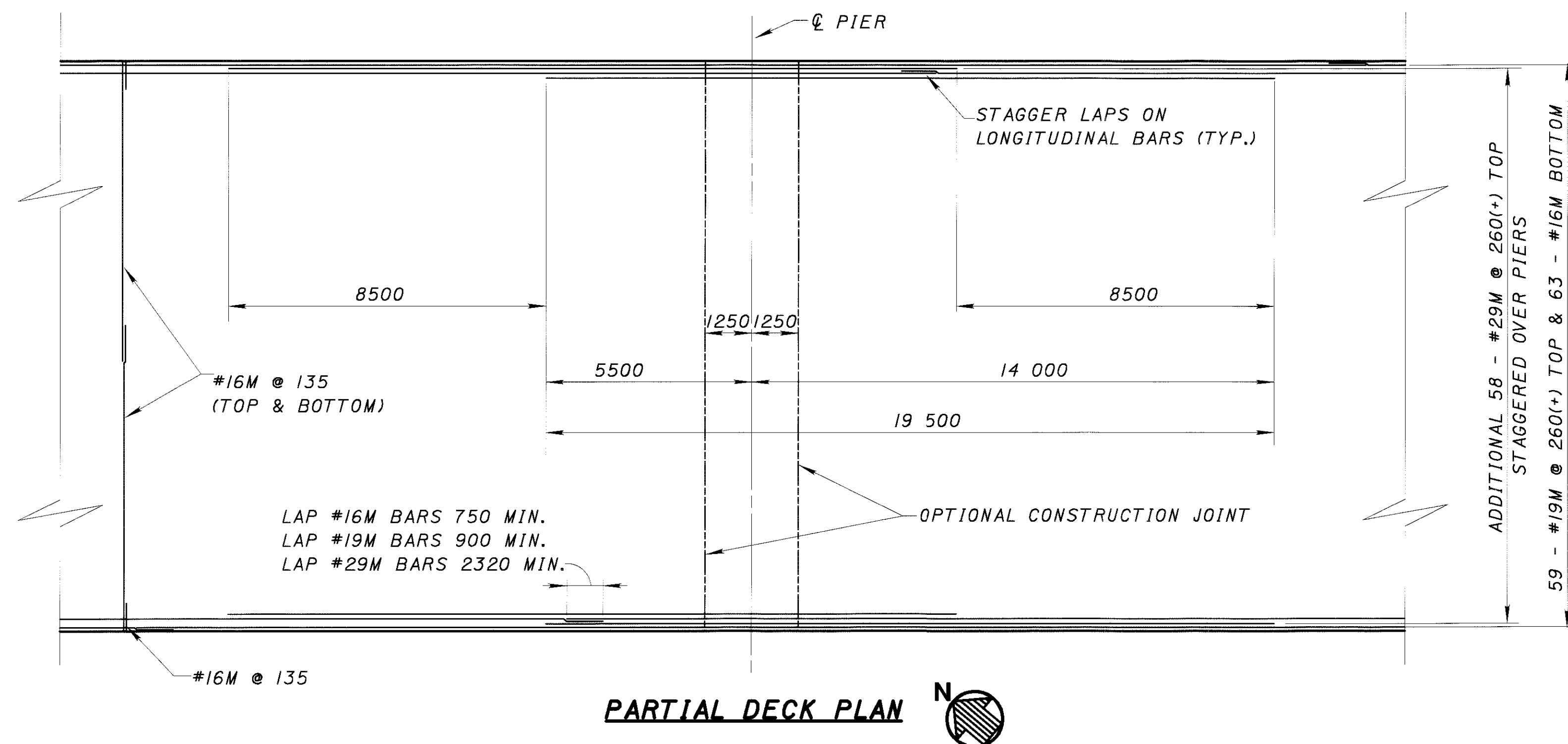
- ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED 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.
- BEARING REPOSITIONING: IF DECK CONCRETE IS PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 26°C OR LOWER THAN 4°C, AND THE BEARING SHEAR DEFLECTION EXCEEDS ONE-SIXTH OF THE BEARING HEIGHT AT 15°C+/-5°C; THE GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 15°C+/-5°C.
- BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, STEEL LOAD PLATES AND HP STEEL SUPPORT POST AT ABUTMENTS. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AS LISTED UNDER THE ESTIMATED QUANTITIES.
- WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 150°C AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- STEEL LOAD PLATES SHALL BE A709M GRADE 36 OR 50 STEEL.
- FOR ADDITIONAL DETAILS, SEE STANDARD DRAWING PSID-I-99.



TRANSVERSE SECTION

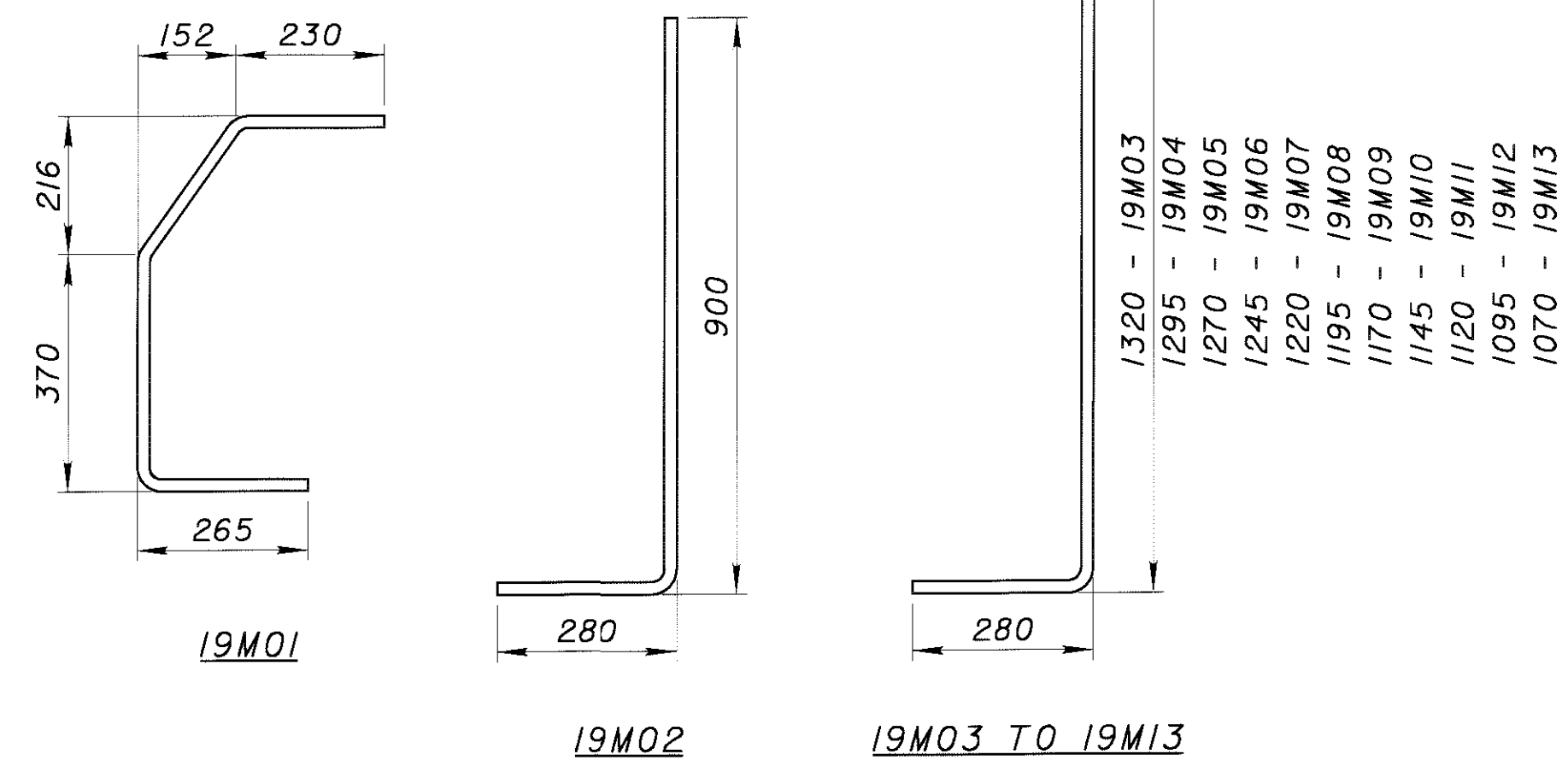
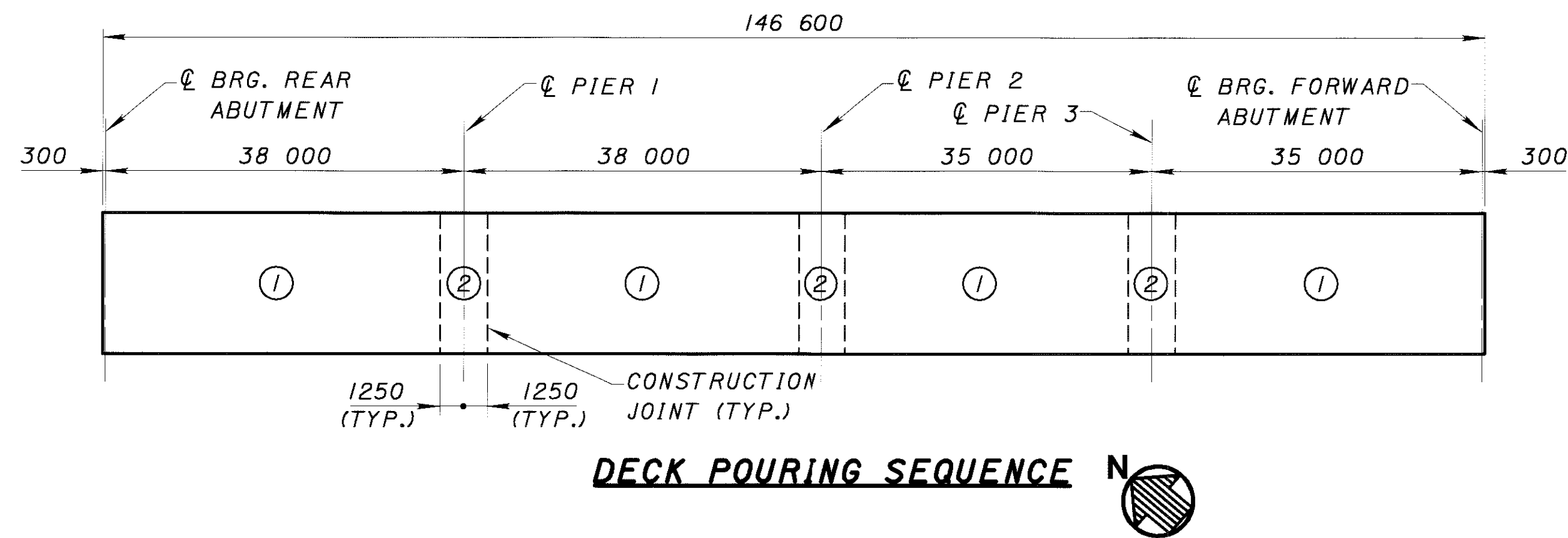
ANTICIPATED DECK THICKNESS						
LOCATION*	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6
1	304	305	301	301	305	304
4	267	268	267	267	268	267
7	322	318	320	320	318	322
9	311	307	308	308	307	311
12	267	268	265	265	268	267
15	323	324	316	316	324	323
17	315	317	308	308	317	315
20	268	269	265	265	269	268
23	304	301	302	302	301	304
25	300	297	298	298	297	300
28	265	266	267	267	266	265
31	307	309	310	310	309	307

* LOCATIONS CORRESPOND TO SCREED LOCATIONS. SEE SHEET 19/20.

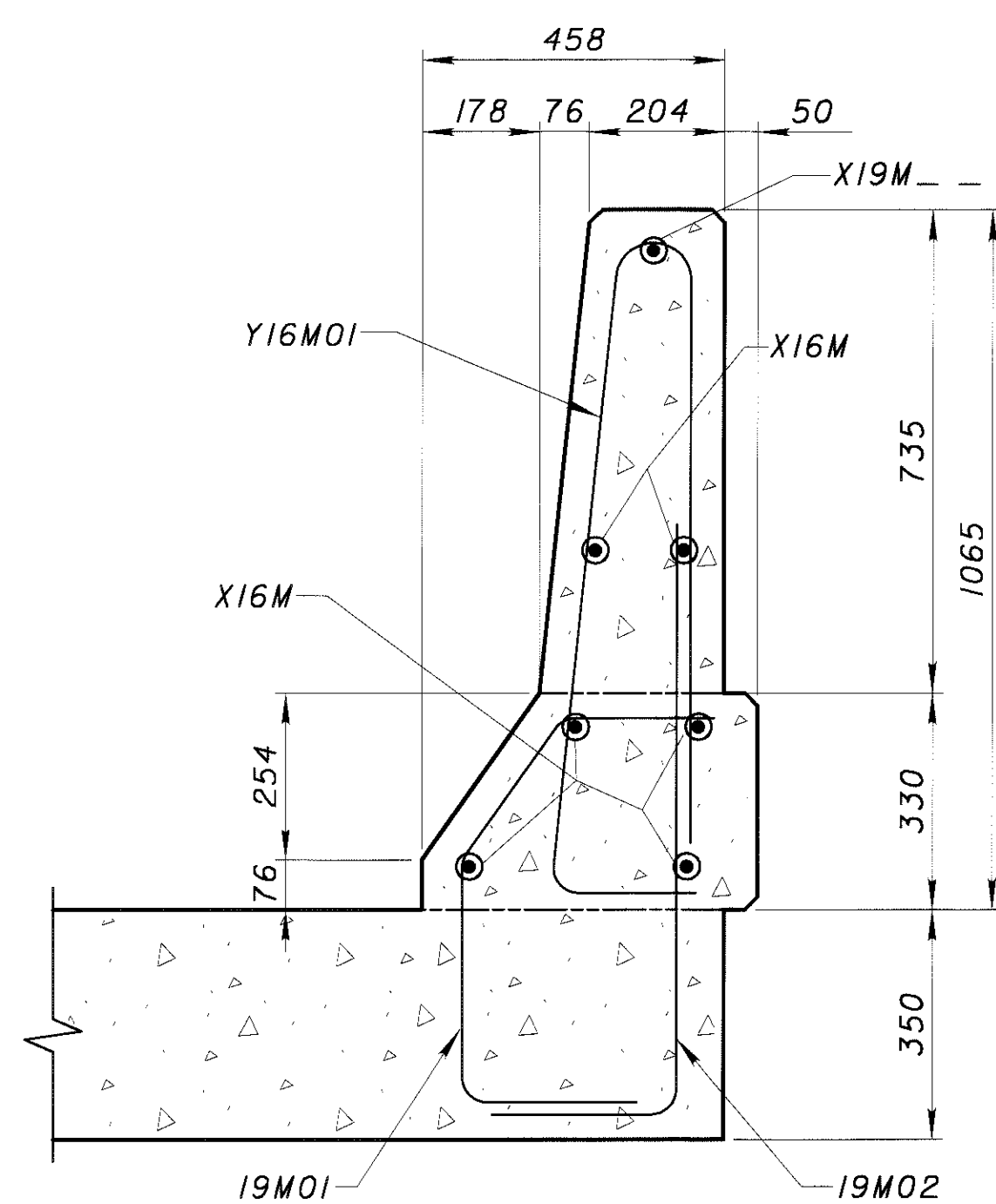


NOTES:

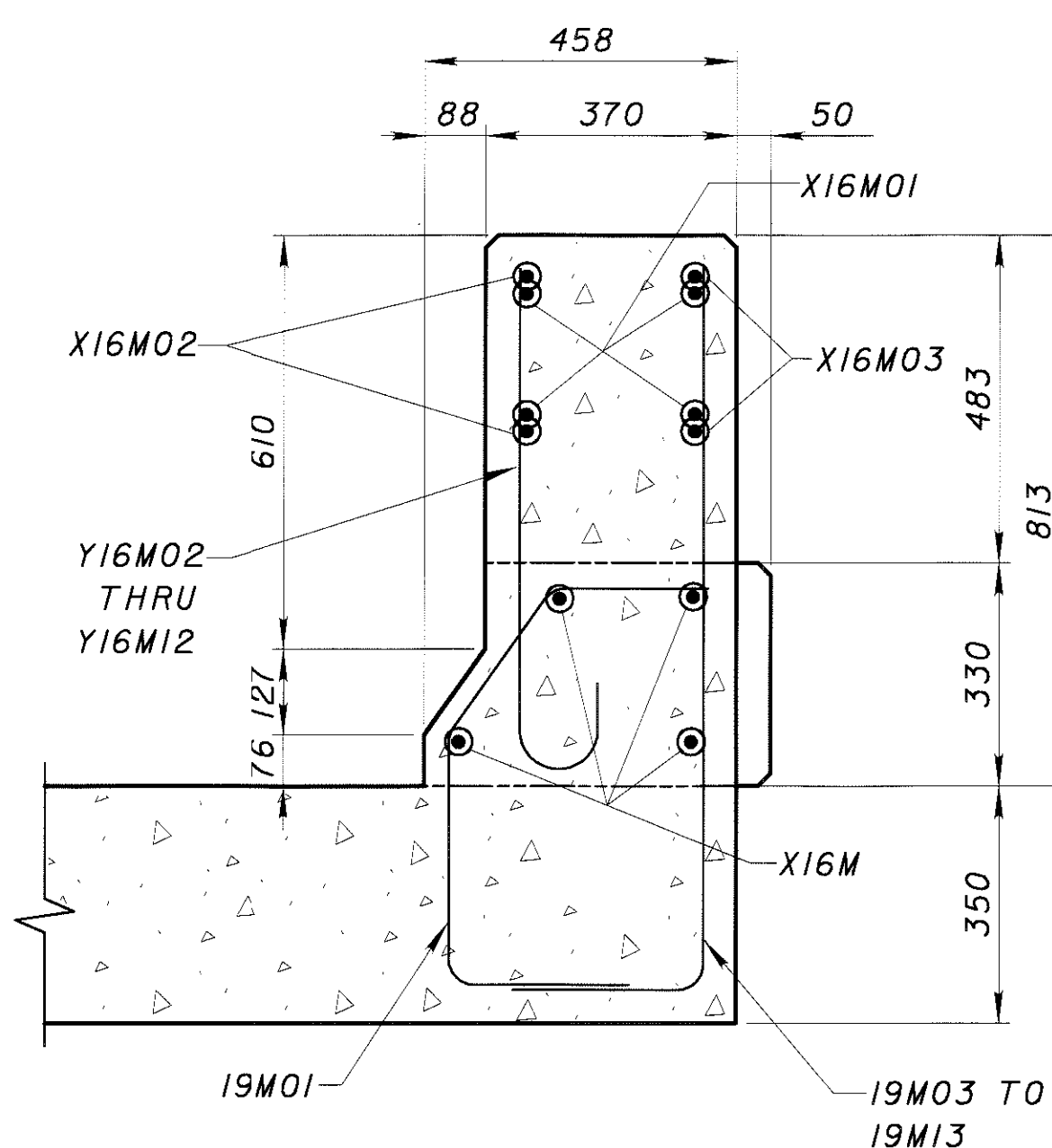
- SEE BRIDGE STANDARD DRAWING PSID-I-95M SHEET 6 OF 7 FOR SEALING OF FASCIA BEAMS.
- THE TOPPING THICKNESSES SHOWN ARE NOMINAL DIMENSIONS. THE PAY QUANTITY FOR DECK CONCRETE SHALL BE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE NOMINAL HAUNCH DEPTHS AT MID-SPAN AND AT THE BEAM BEARINGS. THE HAUNCH DEPTHS ARE THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. DEVIATION FROM THIS AVERAGE MAY OCCUR BECAUSE THE TOP OF THE BEAM MAY NOT HAVE THE CAMBER ANTICIPATED BY DESIGN DUE TO CONTRACTOR'S TIME OF ERECTION, MIX DESIGN, AND OTHER FABRICATION FACTORS. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE CONTRACTOR SHALL RECORD THE TOP OF BEAM ELEVATIONS AT EACH BEARING AND AT MID-SPAN. THE ACTUAL CAMBER FOR EACH MEMBER SHALL BE THE MEASURED ELEVATION AT MID-SPAN MINUS THE AVERAGE ELEVATION AT EACH BEARING. THE ACTUAL HAUNCH DEPTH AT MID-SPAN SHALL BE THE NOMINAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE THE ACTUAL AND ANTICIPATED CAMBER.
- THE SEALING OF CONCRETE SURFACE SHALL BE SEALED WITH EPOXY-URETHANE SEALER.
- FOR ADDITIONAL DIAPHRAGM DETAILS, SEE STANDARD DRAWING PSID-I-99.



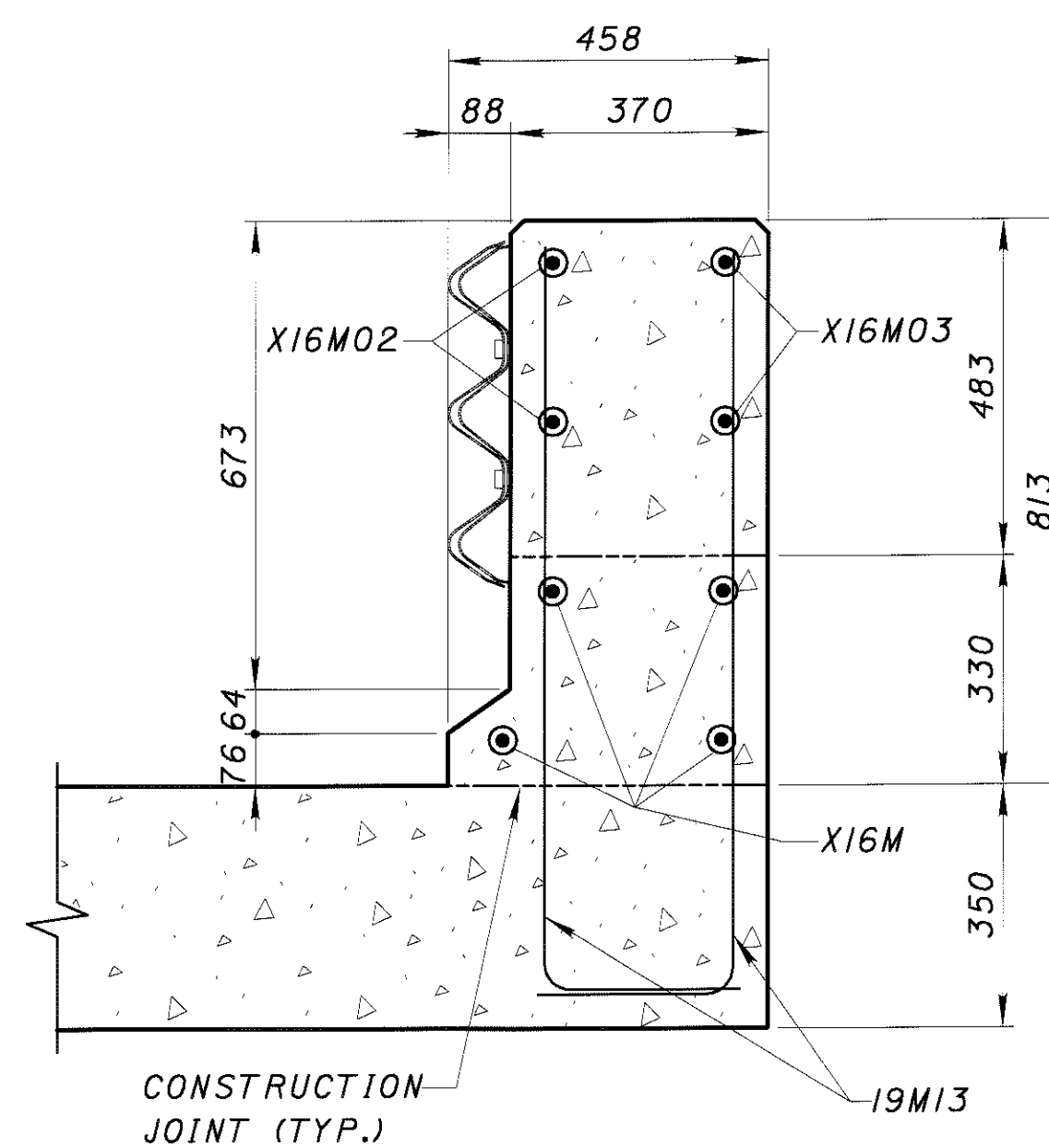
BENDING DIAGRAMS
(ALL DIMENSIONS ARE OUT-TO-OUT)



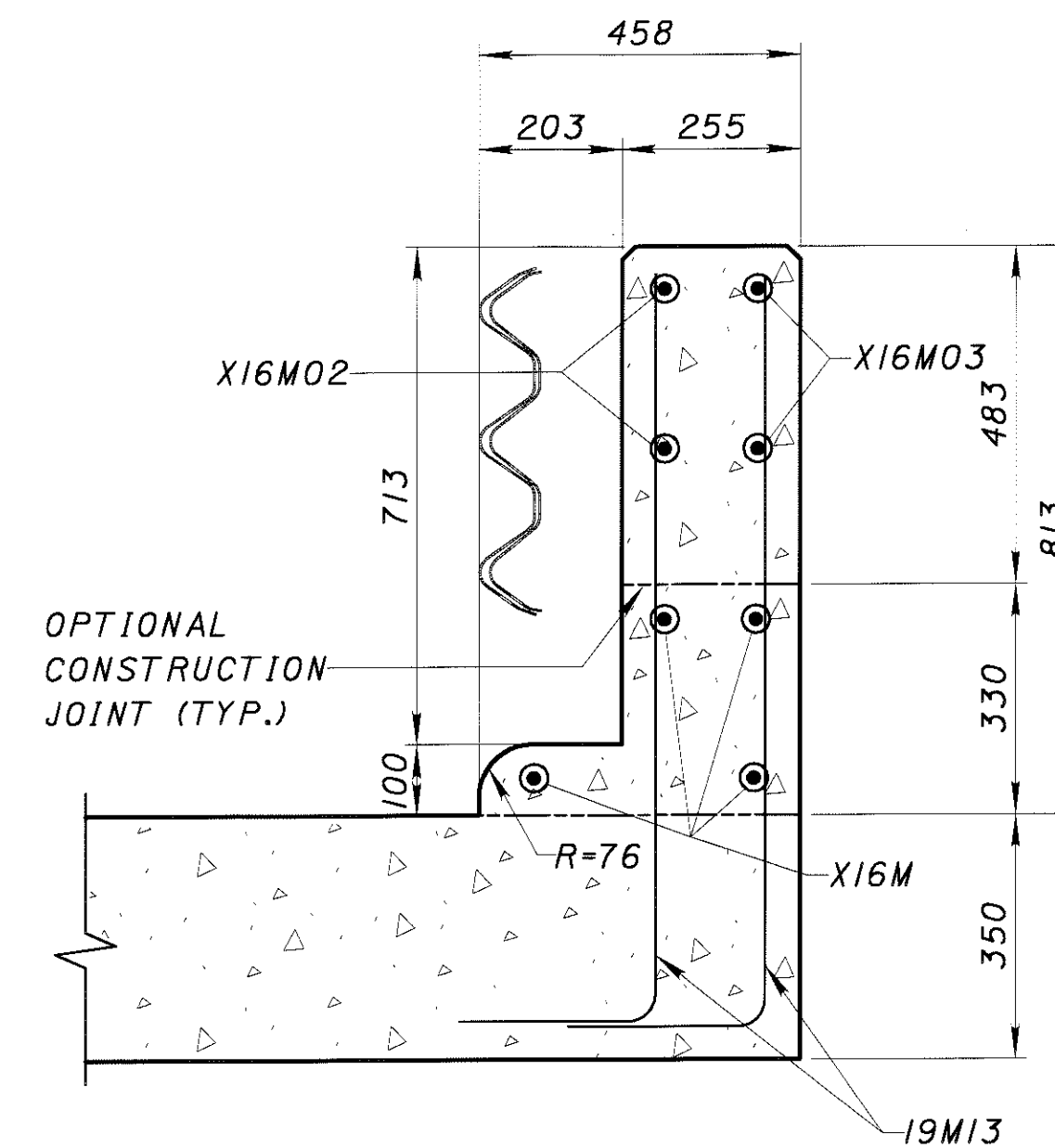
SECTION C-C



SECTION D-D



SECTION E-E

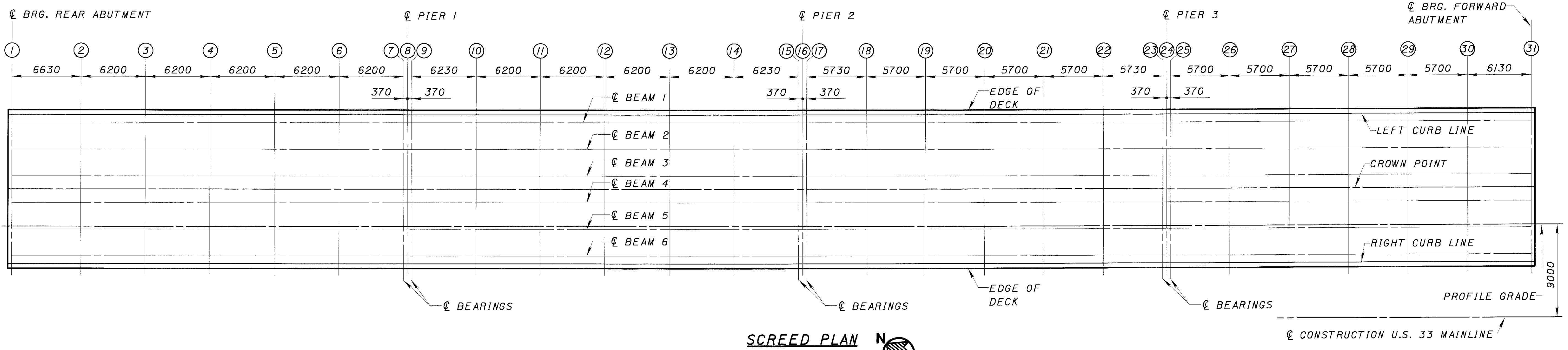


SECTION F-F

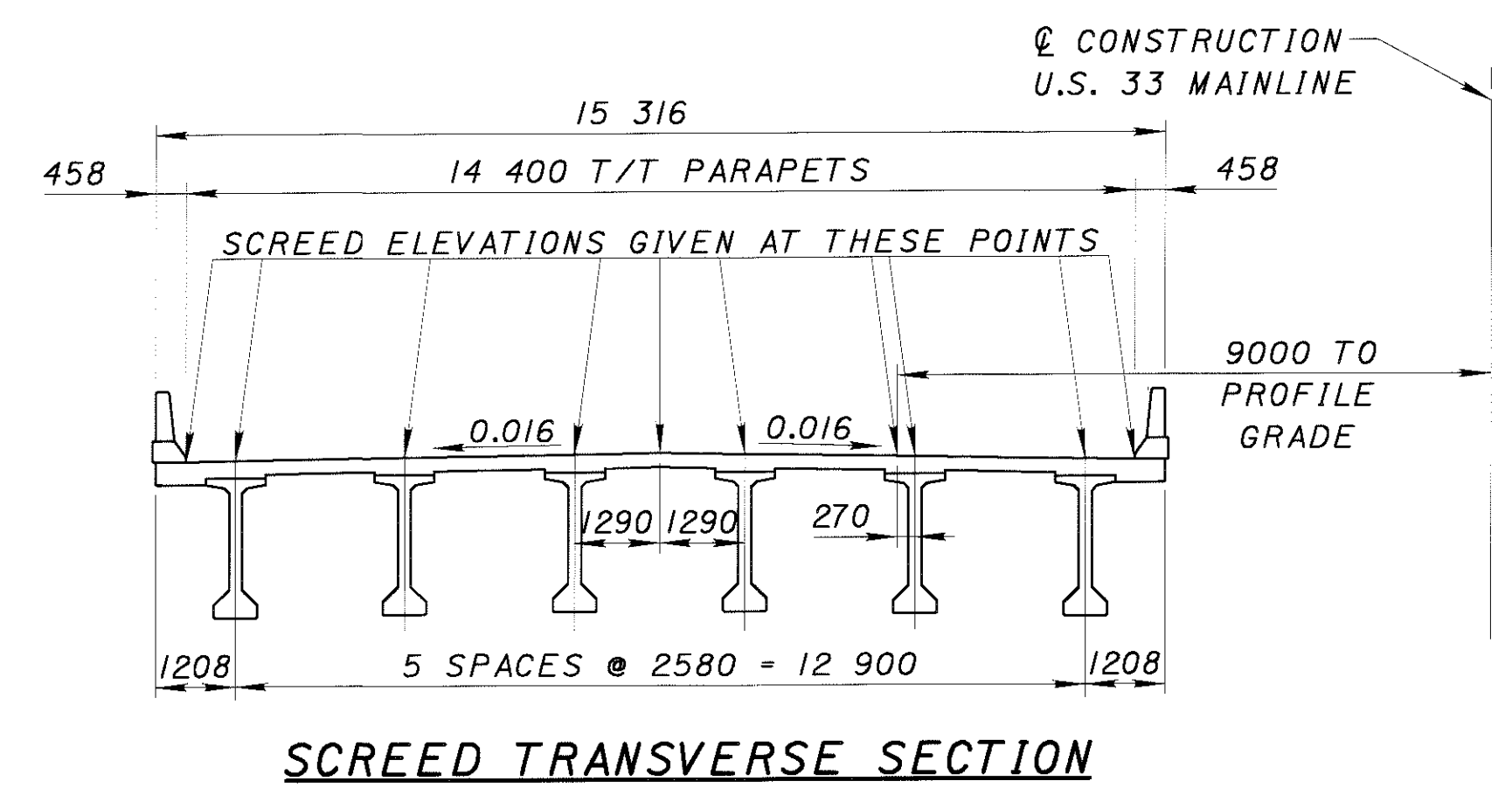
NOTES:

1. SECTIONS C-C, D-D, E-E AND F-F ARE REFERENCED FROM STANDARD DRAWING BR-1M, SHEET 2 OF 2.

2. FOR ADDITIONAL RAILING AND RAILING TRANSITION DETAILS, SEE STANDARD DRAWING BR-1M, SHEET 2 OF 2.

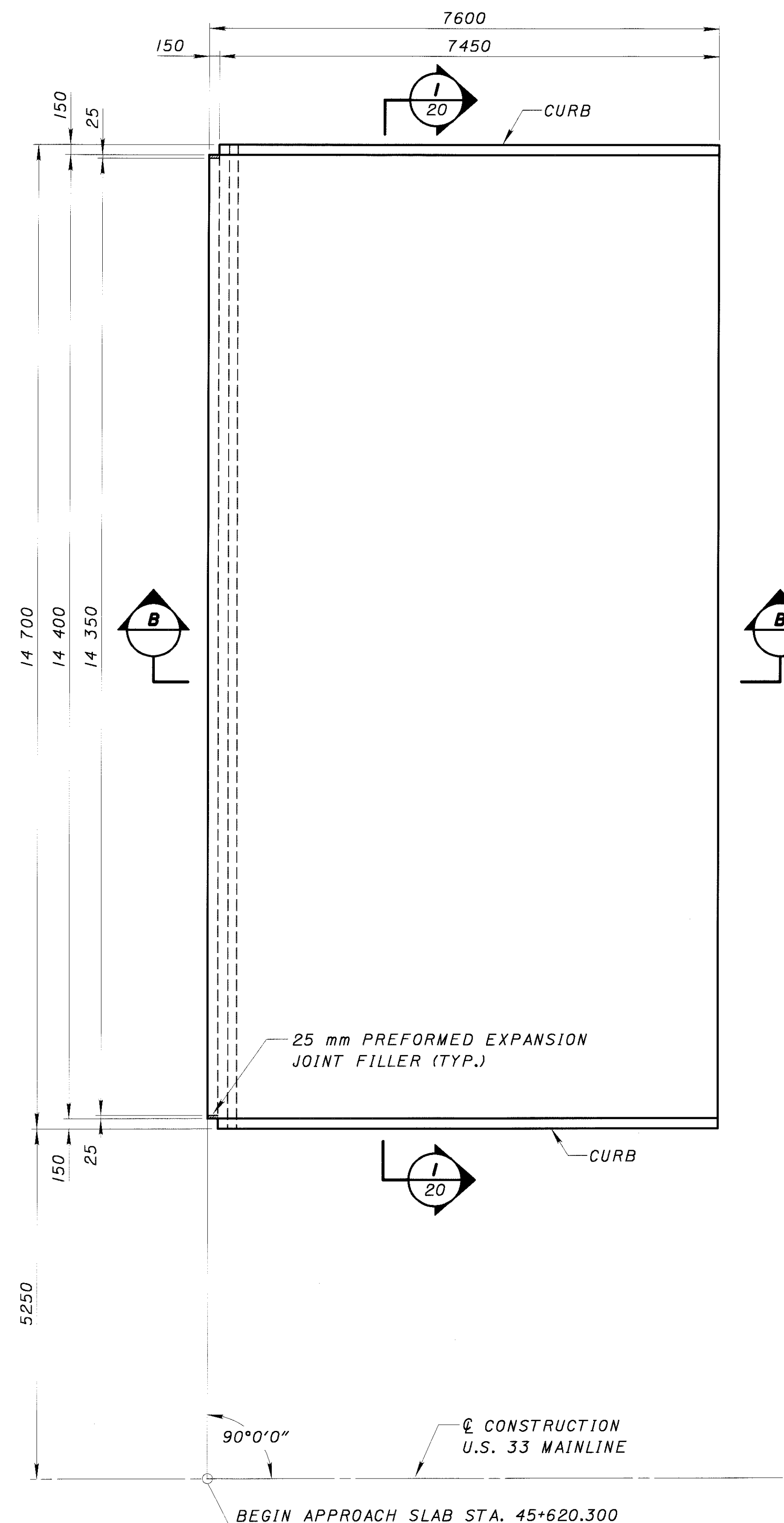


SCREED ELEVATIONS											
LOCATION	LOCATION	LEFT CURB LINE	BEAM 1	BEAM 2	BEAM 3	CROWN POINT	BEAM 4	PROFILE GRADE	BEAM 5	BEAM 6	RIGHT CURB LINE
	OFFSET FROM CONSTR. STATION	19 800 LEFT	19 050 LEFT	16 470 LEFT	13 890 LEFT	12 600 LEFT	11 310 LEFT	9000 LEFT	8730 LEFT	6150 LEFT	5400 LEFT
1	45+474.000	228.399	228.411	228.452	228.493	228.514	228.493	228.456	228.452	228.411	228.399
2	45+480.630	228.281	228.293	228.334	228.375	228.396	228.375	228.338	228.334	228.293	228.281
3	45+486.830	228.172	228.184	228.224	228.266	228.286	228.266	228.229	228.224	228.184	228.172
4	45+493.030	228.061	228.073	228.113	228.154	228.175	228.154	228.117	228.113	228.073	228.061
5	45+499.230	227.946	227.958	227.998	228.039	228.060	228.039	228.002	227.998	227.958	227.946
6	45+505.430	227.829	227.841	227.882	227.923	227.944	227.923	227.886	227.882	227.841	227.829
7	45+511.630	227.713	227.725	227.766	227.808	227.828	227.808	227.771	227.766	227.725	227.713
8	45+512.000	227.707	227.719	227.761	227.802	227.823	227.802	227.765	227.761	227.719	227.707
9	45+512.370	227.702	227.714	227.755	227.796	227.817	227.796	227.759	227.755	227.714	227.702
10	45+518.600	227.624	227.636	227.676	227.717	227.738	227.717	227.680	227.676	227.636	227.624
11	45+524.800	227.546	227.558	227.599	227.641	227.661	227.641	227.604	227.599	227.558	227.546
12	45+531.000	227.467	227.479	227.519	227.561	227.581	227.561	227.524	227.519	227.479	227.467
13	45+537.200	227.385	227.397	227.439	227.480	227.500	227.480	227.443	227.439	227.397	227.385
14	45+543.400	227.302	227.314	227.354	227.395	227.416	227.395	227.358	227.354	227.314	227.302
15	45+549.630	227.218	227.230	227.271	227.313	227.333	227.313	227.276	227.271	227.230	227.218
16	45+550.000	227.214	227.226	227.268	227.309	227.330	227.309	227.272	227.268	227.226	227.214
17	45+550.370	227.210	227.222	227.264	227.305	227.326	227.305	227.268	227.264	227.222	227.210
18	45+556.100	227.165	227.177	227.218	227.259	227.280	227.259	227.222	227.218	227.177	227.165
19	45+561.800	227.121	227.133	227.174	227.215	227.236	227.215	227.178	227.174	227.133	227.121
20	45+567.500	227.077	227.089	227.129	227.170	227.191	227.170	227.133	227.129	227.089	227.077
21	45+573.200	227.031	227.043	227.083	227.124	227.145	227.124	227.087	227.083	227.043	227.031
22	45+578.900	226.983	226.995	227.036	227.077	227.098	227.077	227.040	227.036	226.995	226.983
23	45+584.630	226.937	226.949	226.991	227.032	227.053	227.032	226.995	226.991	226.949	226.937
24	45+585.000	226.935	226.947	226.989	227.030	227.050	227.030	226.993	226.989	226.947	226.935
25	45+585.370	226.933	226.945	226.987	227.028	227.048	227.028	226.991	226.987	226.945	226.933
26	45+591.070	226.916	226.928	226.969	227.011	227.031	227.011	226.974	226.969	226.928	226.916
27	45+596.770	226.899	226.911	226.953	226.994	227.014	226.994	226.957	226.953	226.911	226.899
28	45+602.470	226.883	226.895	226.935	226.976	226.997	226.976	226.939	226.935	226.895	226.883
29	45+608.170	226.864	226.876	226.916	226.958	226.978	226.958	226.921	226.916	226.876	226.864
30	45+613.870	226.844	226.856	226.897	226.938	226.959	226.938	226.901	226.897	226.856	226.844
31	45+620.000	226.824	226.836	226.878	226.919	226.940	226.919	226.882	226.878	226.836	226.824

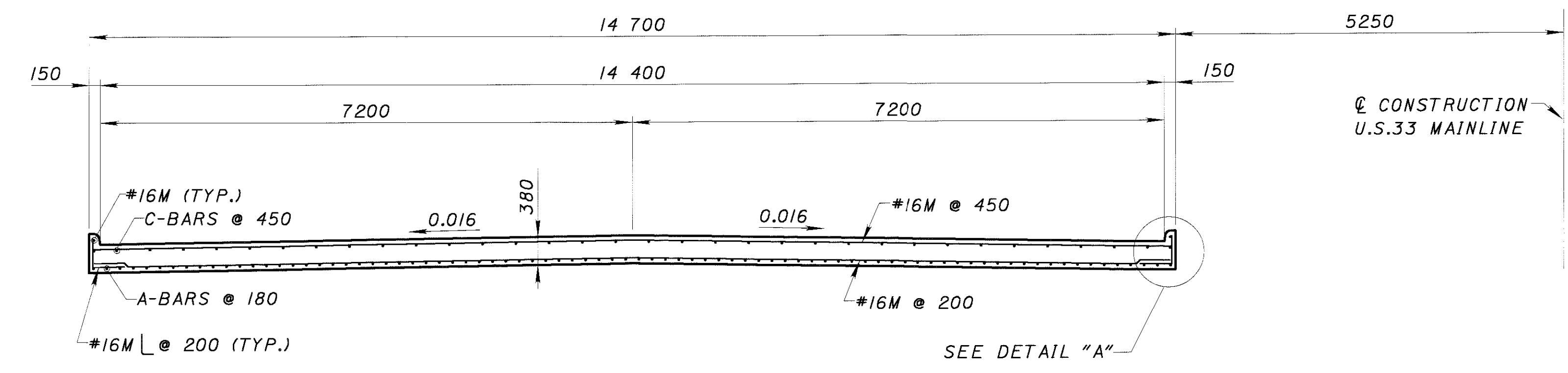


NOTES:
 1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

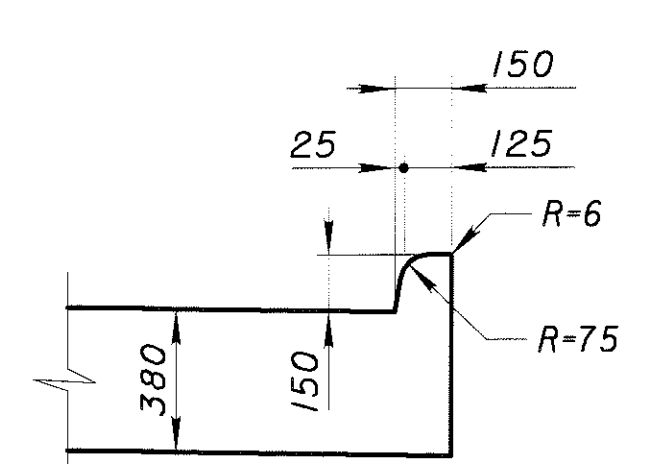
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PLAN - FORWARD APPROACH SLAB



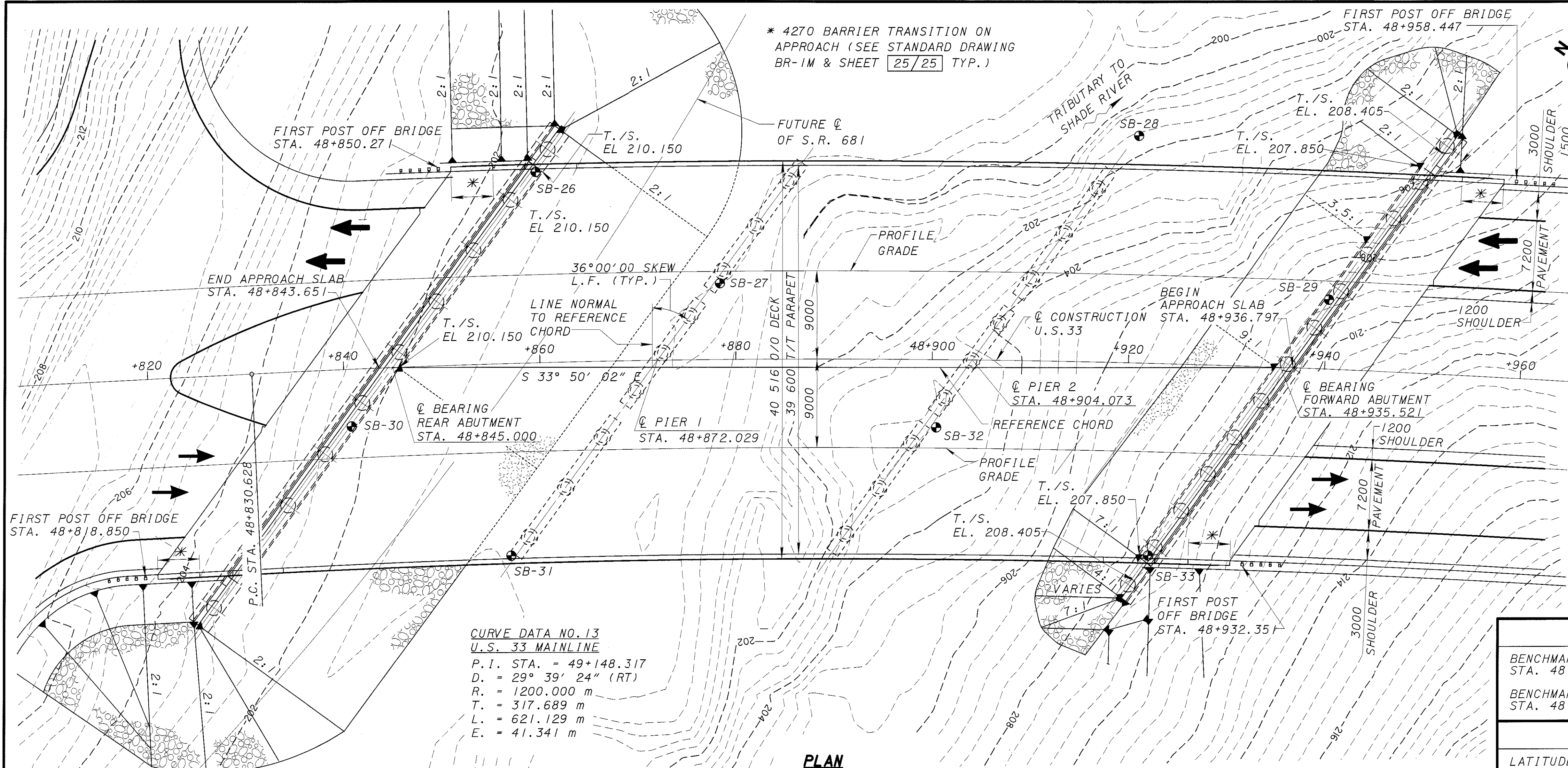
SECTION I-20



DETAIL "A"

NOTES:
1. FOR SECTION B-B, ADDITIONAL DETAILS, NOTES AND REAR APPROACH SLAB DETAILS, SEE STANDARD DRAWING AS-I-81M.

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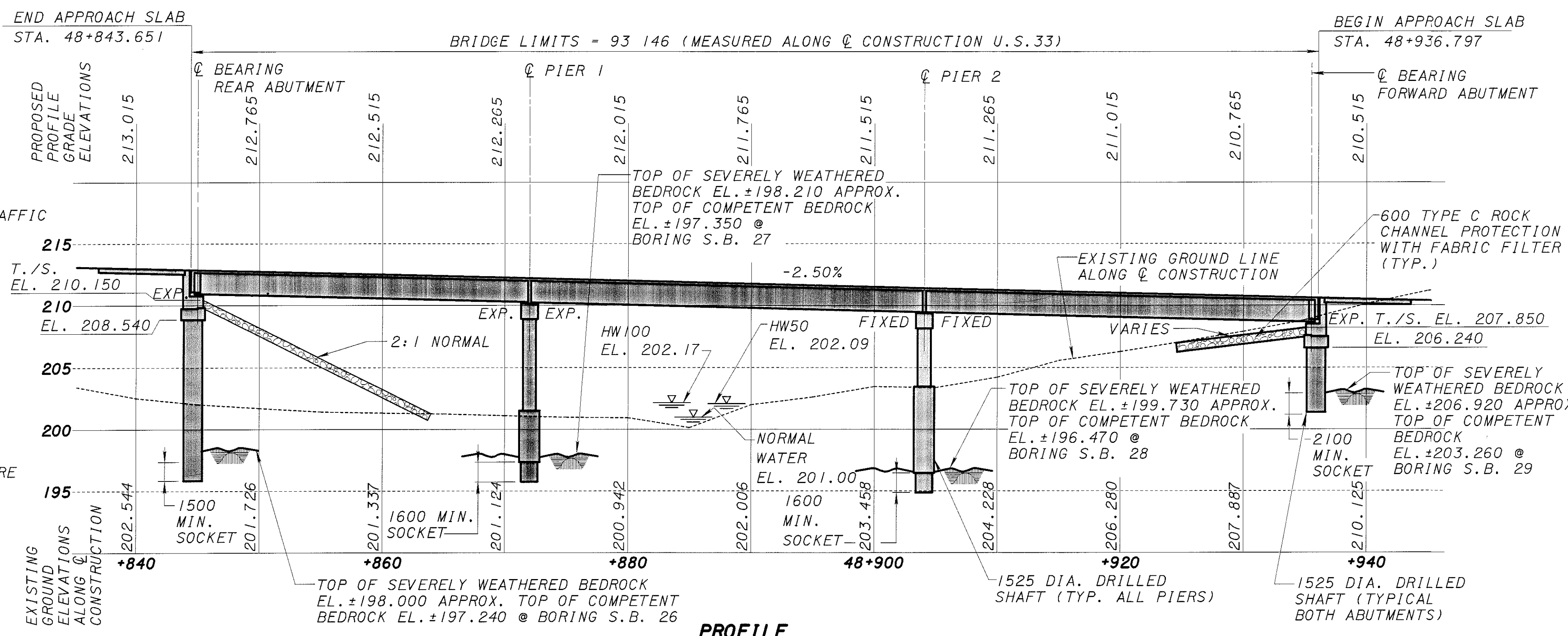


* 4270 BARRIER TRANSITION ON APPROACH (SEE STANDARD DRAWING BR-1M & SHEET 25/25 TYP.)

CURVE DATA NO. 13
U.S. 33 MAINLINE
P.I. STA. = 49+148.317
D. = 29° 39' 24" (RT)
R. = 1200.000 m
T. = 317.689 m
L. = 621.129 m
E. = 41.341 m

PLAN

- NOTES:**
- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
 - = BORING LOCATIONS.
 - = 600 TYPE C ROCK CHANNEL PROTECTION WITH FILTER.
 - ALL UNITS ARE MILLIMETERS UNLESS NOTED OTHERWISE. STATIONS AND ELEVATIONS ARE GIVEN IN METERS.
 - REFERENCE CHORD IS DEFINED AS THE STRAIGHT LINE CHORD BETWEEN STA. 48+845.000 (¢ BRG., REAR ABUTMENT) AND STA. 48+935.521 (¢ BRG., FORWARD ABUTMENT).
 - FOR REFERENCE CHORD DIAGRAM, SEE SHEET 2/25.
 - FOR SUPERELEVATION TRANSITION DIAGRAMS, SEE SHEETS 2/25.
 - R/W IS BEYOND LIMITS OF THIS DRAWING. SEE R/W PLANS FOR DETAILS.



PROFILE

LEGEND

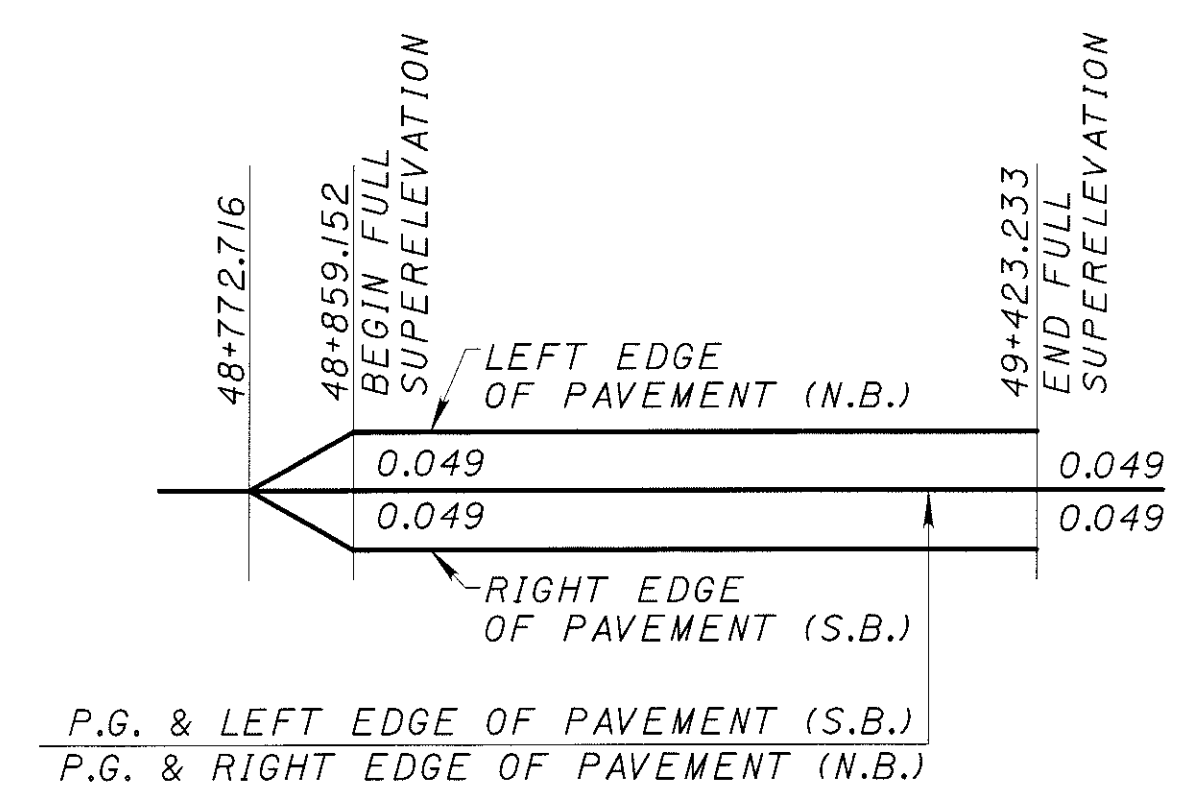
- ADT = AVERAGE DAILY TRAFFIC
- ADTT = AVERAGE DAILY TRUCK TRAFFIC
- APPROX. = APPROXIMATE
- ¢ = CENTERLINE
- C./C. = CENTER TO CENTER
- DIA. = DIAMETER
- D.S. = DRILLED SHAFT
- EL. = ELEVATION
- EXP. = EXPANSION
- FIX. = FIXED
- L.F. = LEFT FORWARD
- MAX. = MAXIMUM
- P.C. = POINT OF CURVATURE
- STA. = STATION
- T./T. = TOE TO TOE
- T./S. = TOP OF SLOPE
- TYP. = TYPICAL

BENCHMARK	
BENCHMARK IRON PIN AND CAP STA. 48+840 ALONG ¢ U.S.33	EL. 202.44
BENCHMARK IRON PIN AND CAP STA. 48+960 ALONG ¢ U.S.33	EL. 212.81
LOCATION	
LATITUDE: N39°08'43"	
LONGITUDE: W 82°01'29"	
USGS QUADRANGLE: SHADE	
TRAFFIC	
2001 ADT = 4170	ADTT = 375
2021 ADT = 5740	ADTT = 517
HYDRAULIC DATA	
DRAINAGE AREA = 4.37 km ²	
Q50 = 18.82 m ³ /S	
HW50 = 202.09	
V50 = 1.4 m/S	
CLEARANCE ABOVE HW50 = 6.8 m	
Q100 = 22.01 m ³ /S	
HW100 = 202.17	
V100 = 1.5 m/S	
PROPOSED STRUCTURE DATA - LEFT	
TYPE: THREE-SPAN PRESTRESSED CONCRETE I-BEAM AND COMPOSITE DECK WITH STUB ABUTMENTS AND CAP AND COLUMN TYPE PIERS	
SPANS: 26 500, 32 000, 32 000 C./C. BEARINGS ALONG REFERENCE CHORD	
ROADWAY: 39 600 T/T BARRIER	
SKEW: 36° LEFT FORWARD REFERENCE CHORD	
DESIGN LOADING: MS 22.5 AND THE ALTERNATE MILITARY LOADING	
WEARING SURFACE: MONOLITHIC CONCRETE	
ALIGNMENT: 1200m RADIUS CURVE RIGHT	
SUPERELEVATION: 0.049 MAX.	
APPROACH SLABS: AS-1-B1M (7600 LONG)	

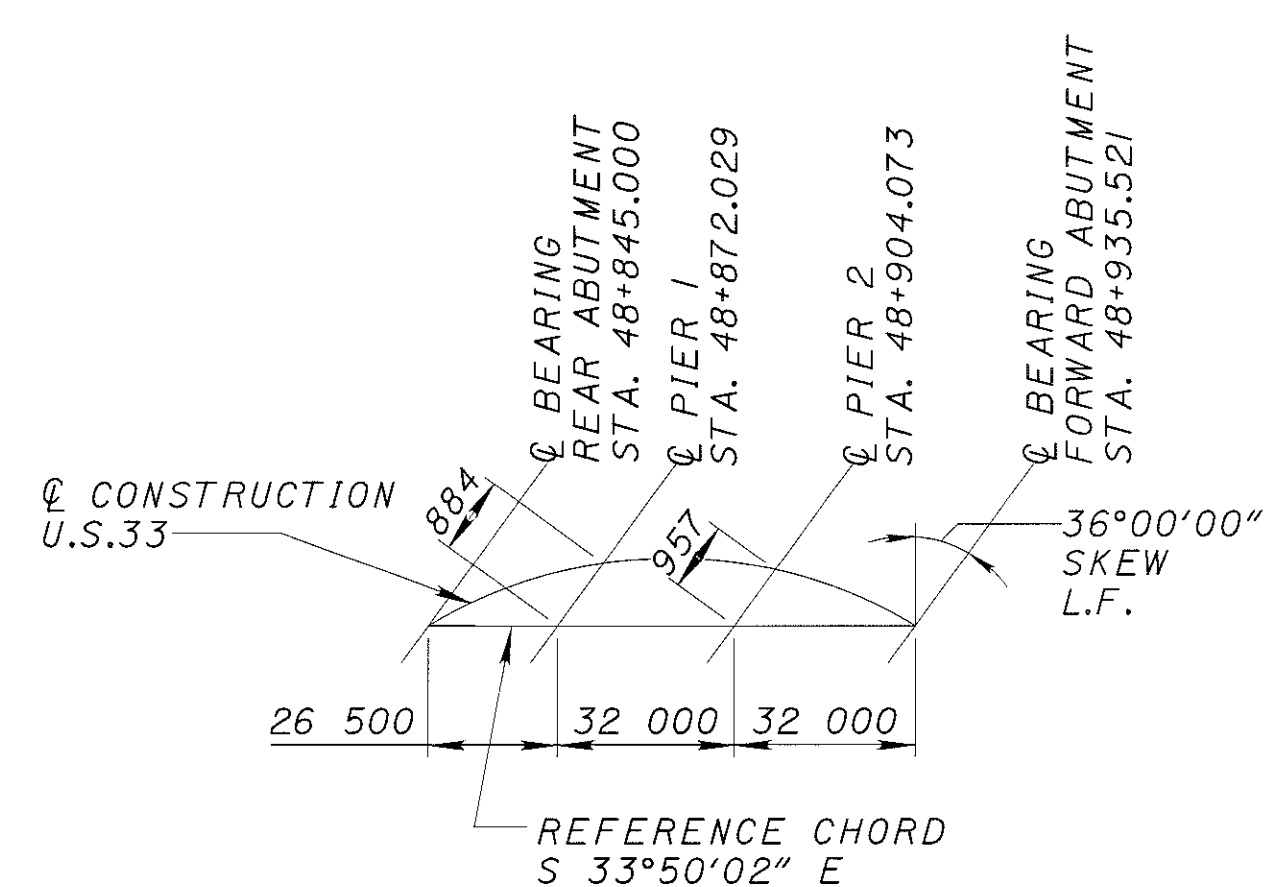
DATE: 02/02/01
REVIEWED: JN
DRAWN: RTP
DESIGNED: FAO
CHECKED: TEU
MEIGS COUNTY
STA. 48+843.651
STA. 48+936.797

SITE PLAN
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

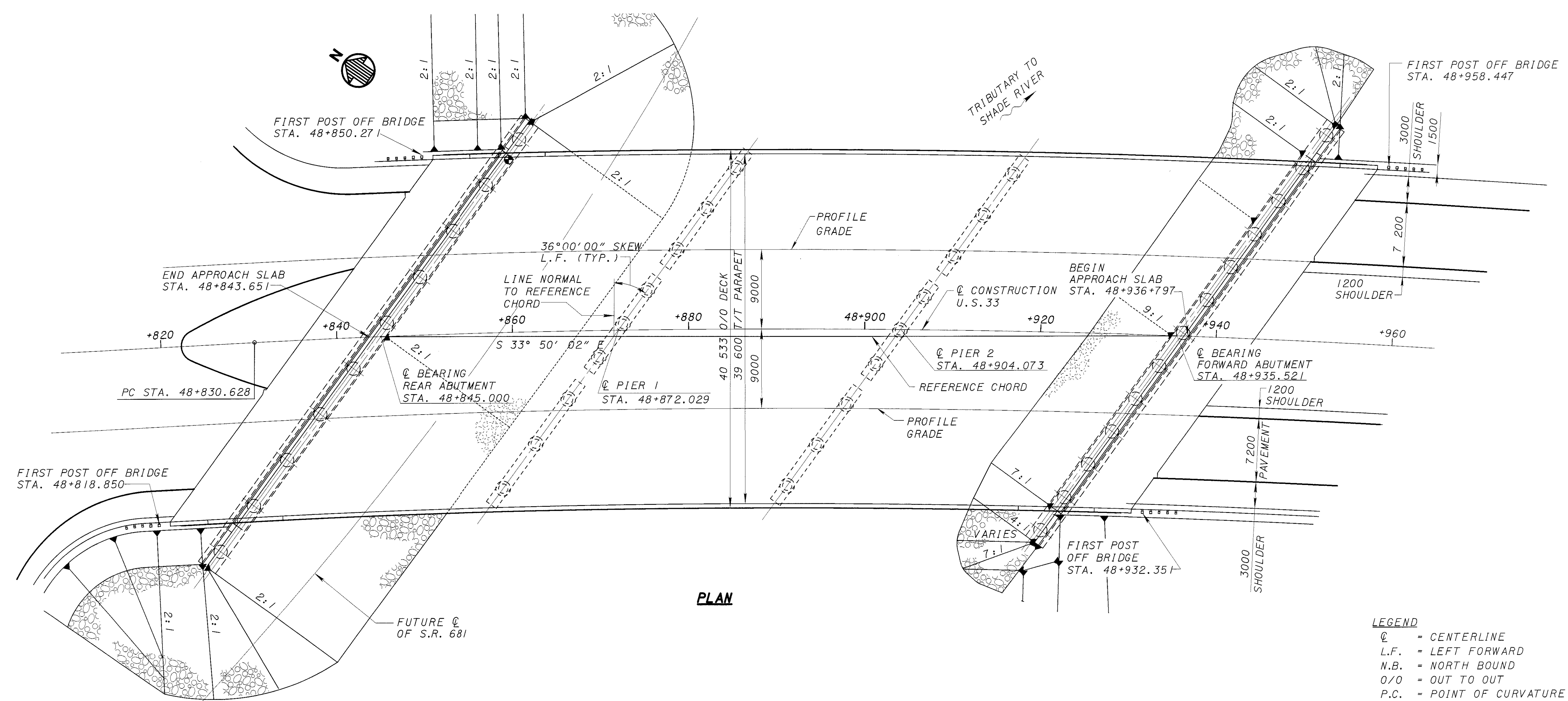


SUPERELEVATION TRANSITION DIAGRAMS



REFERENCE CHORD DIAGRAM

- NOTES:**
1. ALL UNITS ARE MILLIMETERS UNLESS NOTED OTHERWISE. STATIONS AND ELEVATIONS ARE GIVEN IN METERS.
 2. REFERENCE CHORD IS DEFINED AS THE STRAIGHT LINE CHORD BETWEEN STA. 48+845.00 (C BEARING, REAR ABUTMENT) AND STA. 48+935.521 (C BEARING, FORWARD ABUTMENT).



- LEGEND**
- C = CENTERLINE
 - L.F. = LEFT FORWARD
 - N.B. = NORTH BOUND
 - O/O = OUT TO OUT
 - P.C. = POINT OF CURVATURE
 - S.B. = SOUTHBOUND
 - STA. = STATION
 - T/T = TOE TO TOE

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BRIDGE GENERAL NOTES

STANDARD DRAWING REFERENCES

DWG. NO.	SHT.	DATE
AS-I-81M	1-3	10-25-94
BR-1M	2	01-06-99(R)
EXJ-6-95M	1-5	03-18-97(R)
PSID-I-99	1-8	10-20-00(R)

SUPPLEMENTAL SPECIFICATION REFERENCES

DESCRIPTION	NO.	DATE
SOLUBLE REACTIVE SILICATE (SRS) CONCRETE TREATMENT FOR STRUCTURES	841	10-12-99
HIGH PERFORMANCE CONCRETE FOR STRUCTURES	842	01-06-99
TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN CONCRETE - GENERAL	844	01-06-99
HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) RESIN	846	09-09-97
PRESTRESSED CONCRETE BRIDGE MEMBERS	899	10-21-98
HIGH PERFORMANCE CONCRETE (H.P.C.) FOR BRIDGE DECK WITH WARRANTY	954	09-09-97
	865	02-22-00
	894	10-12-99

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996 INCLUDING THE 1997, 1998, 1999 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2000.

DESIGN LOADING

MS-22.5 AND THE ALTERNATE MILITARY LOADING.
 FUTURE WEARING SURFACE (FWS) OF 2.87 kPa.

DESIGN DATA

CONCRETE HIGH PERFORMANCE CONCRETE HPC SS 844 FOR SUPERSTRUCTURE
 - COMPRESSIVE STRENGTH 31.0 MPa (SUPERSTRUCTURE)
 CONCRETE CLASS C - COMPRESSIVE STRENGTH 27.5 MPa (SUBSTRUCTURE)
 CONCRETE CLASS S MODIFIED - COMPRESSIVE STRENGTH 27.5 MPa (DRILLED SHAFT)
 REINFORCING STEEL - A615M, A616M OR A617M
 GRADE 420 MINIMUM YIELD STRENGTH 420 MPa AND EPOXY COATED
 SPIRAL REINFORCEMENT - SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 [A82M OR A615M]
 CONCRETE FOR PRESTRESSED BEAMS - COMPRESSIVE STRENGTH (FINAL)
 - 48.3 MPa
 COMPRESSIVE STRENGTH (RELEASE)
 - 34.5 MPa
 UNIT STRESS - 19.3 MPa COMPRESSION
 - 3.5 MPa TENSION
 PRESTRESSING STRAND - ASTM A416M, 13 mm DIAMETER AREA = 99 mm²
 f's = 1860 MPa
 INITIAL STRESS = 0.75 f's (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL.
 SEALING CONCRETE SURFACES.
 65 mm CONCRETE COVER.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 25 mm THICK.

CONSTRUCTION CONSTRAINTS:

PRIOR TO CONSTRUCTING THE ABUTMENT DRILLED SHAFT FOUNDATIONS, THE BRIDGE APPROACH EMBANKMENTS BEHIND THE ABUTMENT SHALL BE CONSTRUCTED UP AT A 1:1 SLOPE FROM THE BOTTOM OF THE HEEL OF THE FOOTING TO THE SUBGRADE ELEVATION AND FOR A MINIMUM DISTANCE 75 METERS. AFTER THE ABUTMENT FOOTING AND BREASTWALL ARE COMPLETED THE EMBANKMENT IMMEDIATELY BEHIND THE ABUTMENT SHALL BE CONSTRUCTED OF 203 MATERIAL UP TO THE BEAM SEAT ELEVATION AND ON A 1:1 SLOPE UP TO THE SUBGRADE ELEVATION PRIOR TO SETTING SUPERSTRUCTURE MEMBERS.

ITEM 503, UNCLASSIFIED EXCAVATION INCLUDING ROCK, AS PER PLAN:

UNCLASSIFIED EXCAVATION INCLUDING ROCK SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 203 MATERIAL PLACED IN 150 mm LIFTS.

DRILLED SHAFTS:

THE DESIGN LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS:
 3598 kN AT REAR ABUTMENT

4653 kN AT PIERS 1 AND 2

2424 kN AT FORWARD ABUTMENT

THE LOADS ARE RESISTED BY SHAFT ADHESION WITHIN A PORTION OF THE BEDROCK SOCKET AND ALSO BY END BEARING. THE ALLOWABLE BEDROCK SOCKET ADHESION IS 458.5 kN/m FOR A 1.525 m DIAMETER SOCKET AND 412.7 kN/m FOR A 1.372 m DIAMETER SOCKET, ASSUMED TO ACT ALONG THE LENGTH OF THE BEDROCK SOCKET EXCEPT FOR THE TOP 0.600 METERS. THE SHAFT ADHESION RESISTANCE FORCE IS:

NOT USED AT REAR ABUTMENT

413 kN AT PIERS, ASSUMED TO ACT ALONG THE BOTTOM 1.000 METERS OF BEDROCK SOCKET, 1.372 METERS IN DIAMETER.

688 kN AT FORWARD ABUTMENT, ASSUMED TO ACT ALONG THE BOTTOM 1.5 METERS OF BEDROCK SOCKET, 1.525 METERS IN DIAMETER.

THE CALCULATED AND ALLOWABLE END BEARING PRESSURES ARE:

1.980 MPa < 2.880 MPa AT REAR ABUTMENT

2.868 MPa < 2.880 MPa AT PIERS 1 AND 2

0.952 MPa < 0.960 MPa AT FORWARD ABUTMENT

CONVERSION OF STANDARD BRIDGE DRAWINGS:

THE STANDARD BRIDGE DRAWING PSID-I-99 REFERENCED IN THIS PLAN IS ENGLISH. ANY CONVERSION OF DIMENSIONS REQUIRED TO CONSTRUCT THE ITEMS SHOWN ON THE STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONVERSIONS SHALL BE MADE USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

CONCRETE, AS PER PLAN:

A REINFORCING STEEL LIST HAS NOT BEEN PROVIDED WITH THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING THE REINFORCING STEEL LIST AND ALL REINFORCING STEEL DETAILS, IN ACCORDANCE WITH SECTIONS 301.4 THROUGH 301.4.8 (INCLUSIVE) OF THE ODOT BRIDGE DESIGN MANUAL, APRIL 2000 EDITION. THE COMPLETED REINFORCING STEEL LIST SHALL BE SUBMITTED TO THE DIRECTOR FOR REVIEW AND ACCEPTANCE IN ACCORDANCE WITH CMS 509.05. FABRICATION OF THE REINFORCING STEEL SHALL NOT BEGIN UNTIL WRITTEN ACCEPTANCE OF THE SUBMITTED DRAWINGS HAS BEEN RECEIVED FROM THE DIRECTOR. ALL COSTS FOR PREPARING THE REINFORCING STEEL LIST SHALL BE INCLUDED FOR PAYMENT WITH THE APPROPRIATE 842/844/894 CONCRETE ITEMS.

WHEN THE SHAPE OF A BAR IS NOT APPARENT IN THE PLAN DETAILS, A BEND DIAGRAM HAS BEEN SHOWN WITH THE BAR SIZE.

ITEM 865, PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS; MISC.: CONCRETE INTERMEDIATE DIAPHRAGMS: AS PER PLAN

STANDARD DRAWING PSID-I-99 SHOWS THAT STEEL OR CONCRETE MAY BE USED FOR THE INTERMEDIATE DIAPHRAGMS. DISTRICT 10 HAS CHANGED THIS REQUIRING THAT ONLY CONCRETE IS TO BE USED.

SEALING OF CONCRETE SURFACE (EPOXY - URETHANE):

EPOXY - URETHANE SHALL BE A LIGHT NEUTRAL COLOR MEETING FEDERAL COLOR STANDARD NO. 17778 AS PER THE DETAILS IN THE PLANS.

ITEM 611, REINFORCED CONCRETE APPROACH SLAB, T-380 mm, AS PER PLAN:

CONCRETE FOR THIS ITEM SHALL BE SS 844, HIGH PERFORMANCE CONCRETE, MIX 3 OR 4. THE HIGH PERFORMANCE CONCRETE TRAIL MIX AND TESTING, AS DESCRIBED IN SS 844, SHALL BE WAIVED.

DLZ
 810 HUNLEY ROAD • COLUMBUS, OHIO 43229

DATE	02/02/01
REVIEWED	JN
STRUCTURE FILE NUMBER	5300584
DRAWN	PSP
DESIGNED	PHB
CHECKED	CXW
REVISOR	
REVISION	

GENERAL NOTES
 BRIDGE NO. MEG-33-05810
 OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

3 / 25

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949

02/09/2001
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ESTIMATED QUANTITIES

CALC. BY: PHB DATE: 01-31-01
 CHKD. BY: JAM DATE: 02-01-01

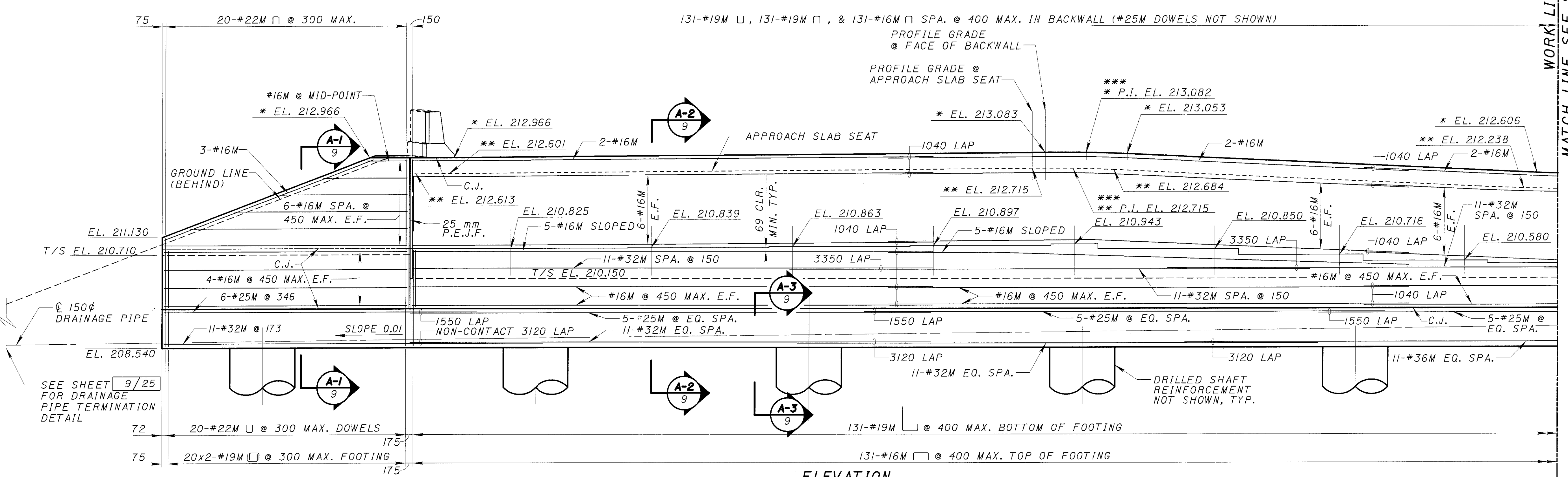
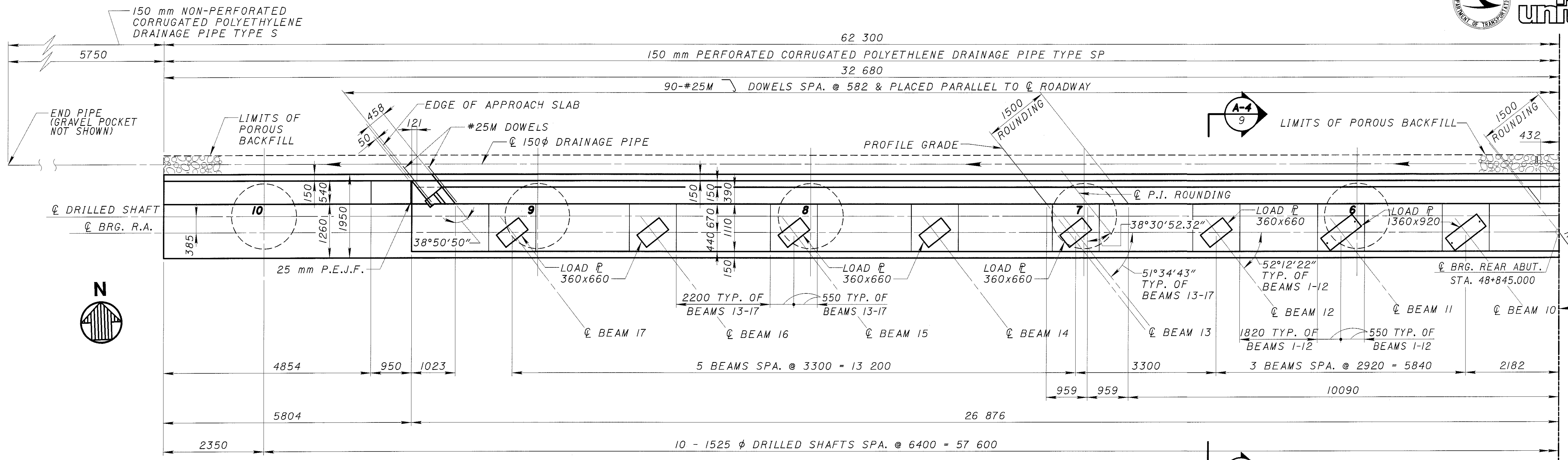
ITEM	ITEM EXTENSION	TOTAL	UNITS	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL
203	20000	7700	CU M	EMBANKMENT	7700			
503	11100	LUMP	LUMP	COFFERDAMS, CRIBS AND SHEETING				LUMP
503	21105	420	CU M	UNCLASSIFIED EXCAVATION INCLUDING ROCK, AS PER PLAN	420			
SPECIAL	51267510	1391	SQ M	SEALING OF CONCRETE SURFACES, (EPOXY-URETHANE)	211		1180	
516	11210	99.8	M	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	99.8			
516	13600	7.5	SQ M	25 mm PREFORMED EXPANSION JOINT FILLER	7.5			
516	44201	68	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATES NEOPRENE (600x300x75), AS PER PLAN		68		
516	44201	34	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATES NEOPRENE (600x330x98), AS PER PLAN	34			
518	21200	260	CU M	POROUS BACKFILL WITH FABRIC FILTER	260			
518	40000	121	M	150 mm PERFORATED CORRUGATED PLASTIC PIPE	121			
518	40010	24	M	150 mm NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	24			
524	94000	LUMP	LUMP	PROOF TESTING FOR DRILLED SHAFTS				LUMP
524	94908	29	M	DRILLED SHAFTS, 1370 mm DIAMETER, INTO BEDROCK		29		
524	94918	43	M	DRILLED SHAFTS, 1525 mm DIAMETER, INTO BEDROCK	43			
524	94914	234	M	DRILLED SHAFTS, 1525 mm DIAMETER, ABOVE BEDROCK	156	78		
601	32200	1710	CU M	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	1710			
841	10000	3703	SQ M	TREATING OF CONCRETE SURFACES WITH SRS			3703	
842	31509	70	CU M	CLASS S CONCRETE, SUPERSTRUCTURE (PARAPETS), AS PER PLAN *			70	
842	41001	273	CU M	CLASS C CONCRETE, PIER ABOVE FOOTINGS (CAP AND COLUMN), AS PER PLAN		273		
842	44101	320	CU M	CLASS C CONCRETE, ABUTMENT, NOT INCLUDING FOOTING, AS PER PLAN	320			
842	46001	28	CU M	CLASS C CONCRETE, WINGWALL ABOVE FOOTING, AS PER PLAN	28			
842	46501	221	CU M	CLASS C CONCRETE, FOOTING, AS PER PLAN	221			
865	15040	51	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (1675 mm)			51	
865	16000	144	EACH	PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, MISC.: CONCRETE INTERMEDIATE DIAPHRAGMS, AS PER PLAN			144	
894	10001	1173	CU M	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WARRANTY, AS PER PLAN **			1173	

* PARAPET ON APPROACH SLAB IS INCLUDED WITH THIS PAY ITEM.
 ** INCLUDES CONCRETE FOR PIER AND ABUTMENT DIAPHRAGMS.

DATE: 02/02/01
 REVIEWED: JN
 DRAWN: PSP
 DESIGNED: PHB
 CHECKED: JAM

STRUCTURE FILE NUMBER: 5300584
 ESTIMATED QUANTITIES
 BRIDGE NO. MEG-33-05810
 OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981
 4/25
 928
 949

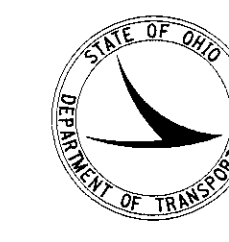


* = EL. @ FACE OF BACKWALL
 ** = EL. @ APPROACH SLAB SEAT
 *** = EL. FOR ROUNDING ADJUSTED

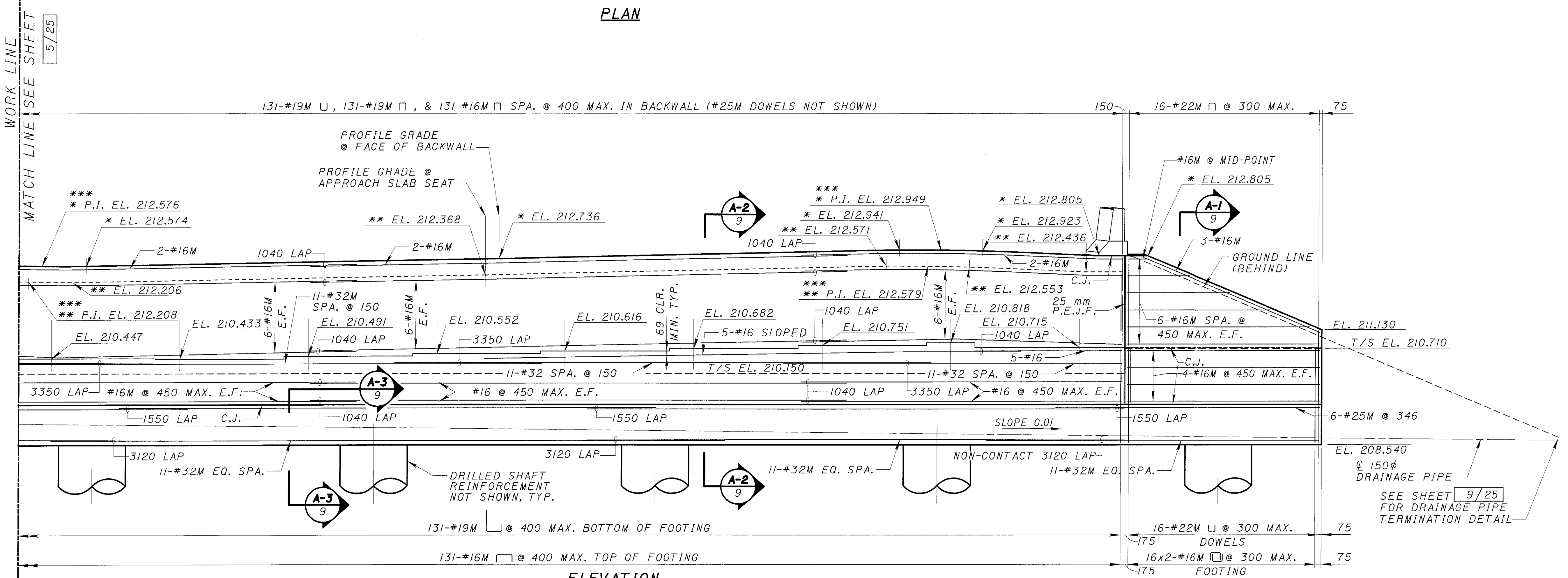
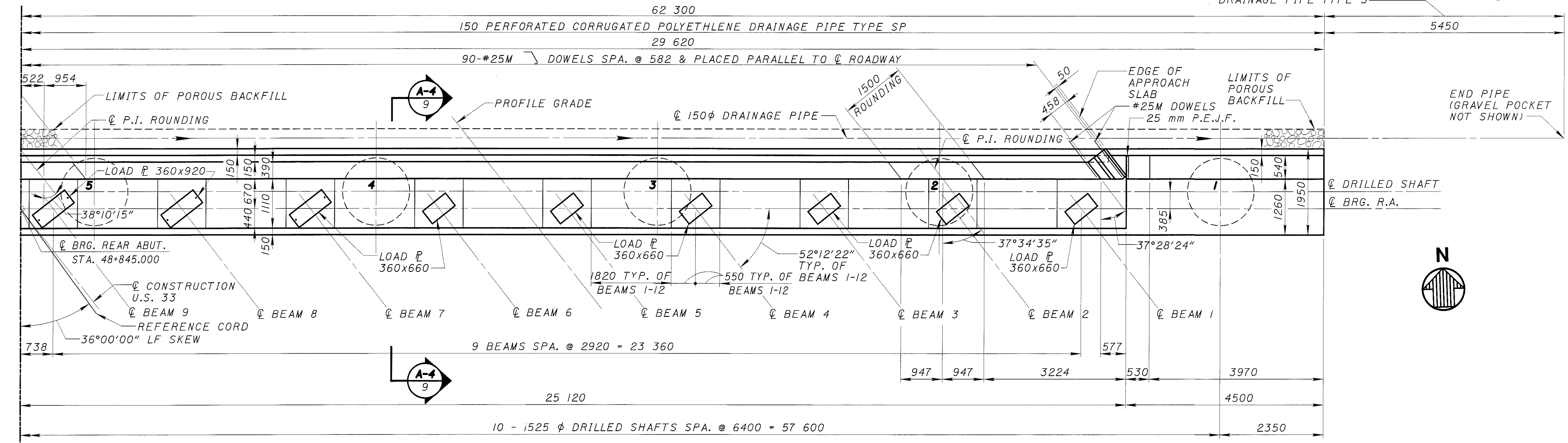
NOTE:
 1. FOR NOTES & LEGEND, SEE SHEET 9/25.

MATCH LINE SEE SHEET 6/25

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150 mm NON-PERFORATED
CORRUGATED POLYETHYLENE
DRAINAGE PIPE TYPE S

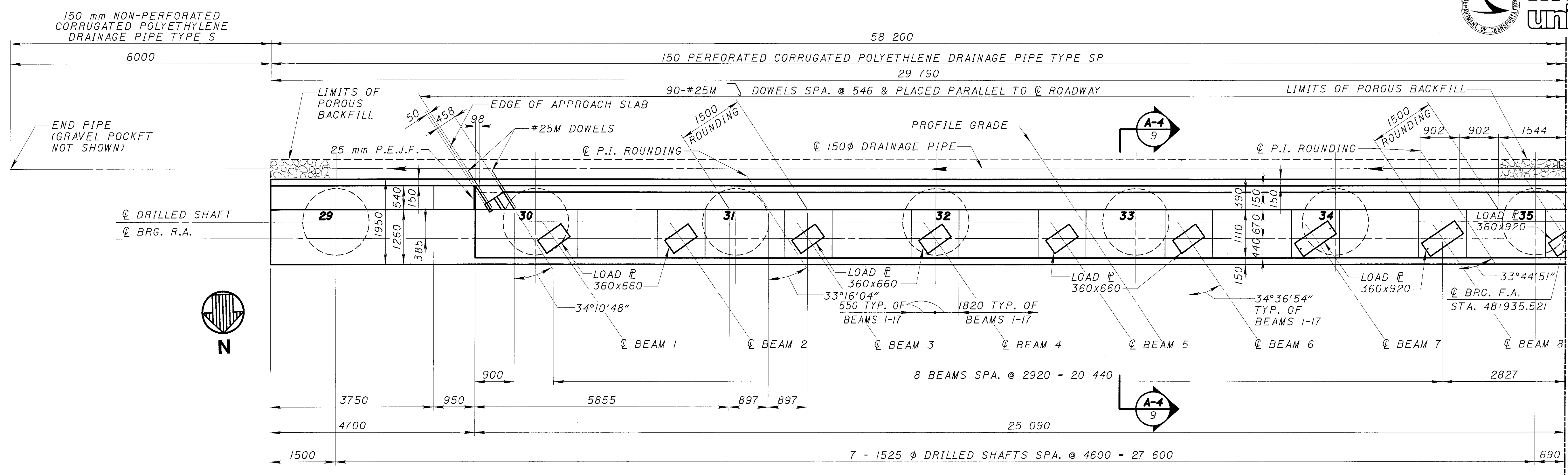


*** = EL. @ FACE OF BACKWALL
** = EL. @ APPROACH SLAB SEAT
* = EL. FOR ROUNDING ADJUSTED

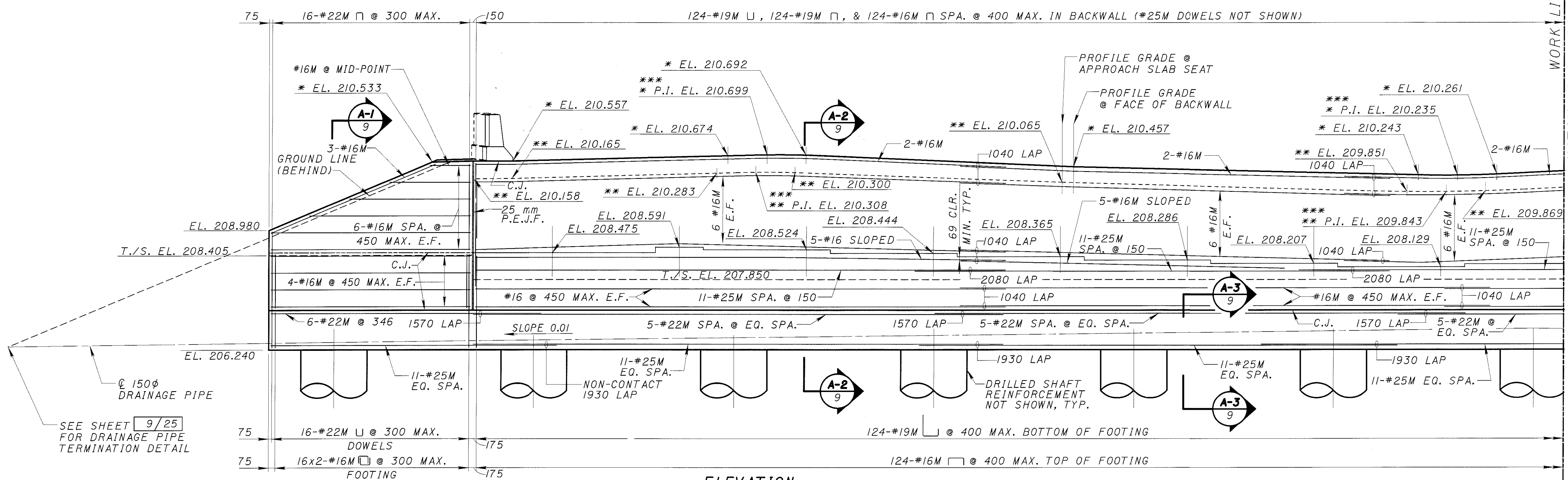
NOTE:
1. FOR NOTES & LEGEND, SEE SHEET 9/25.

WORK LINE
MATCH LINE SEE SHEET 5/25

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PLAN



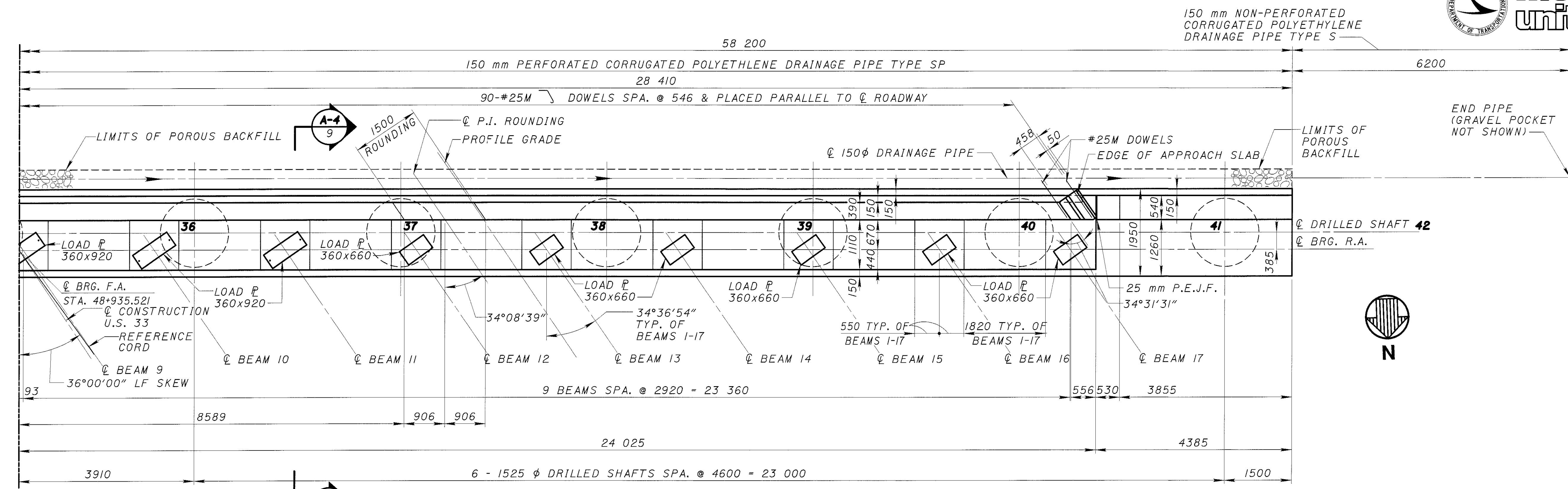
ELEVATION

* = EL. @ FACE OF BACKWALL
** = EL. @ APPROACH SLAB SEAT
*** = EL. FOR ROUNDING ADJUSTED

NOTE:
1. FOR NOTES & LEGEND, SEE SHEET 9/25.

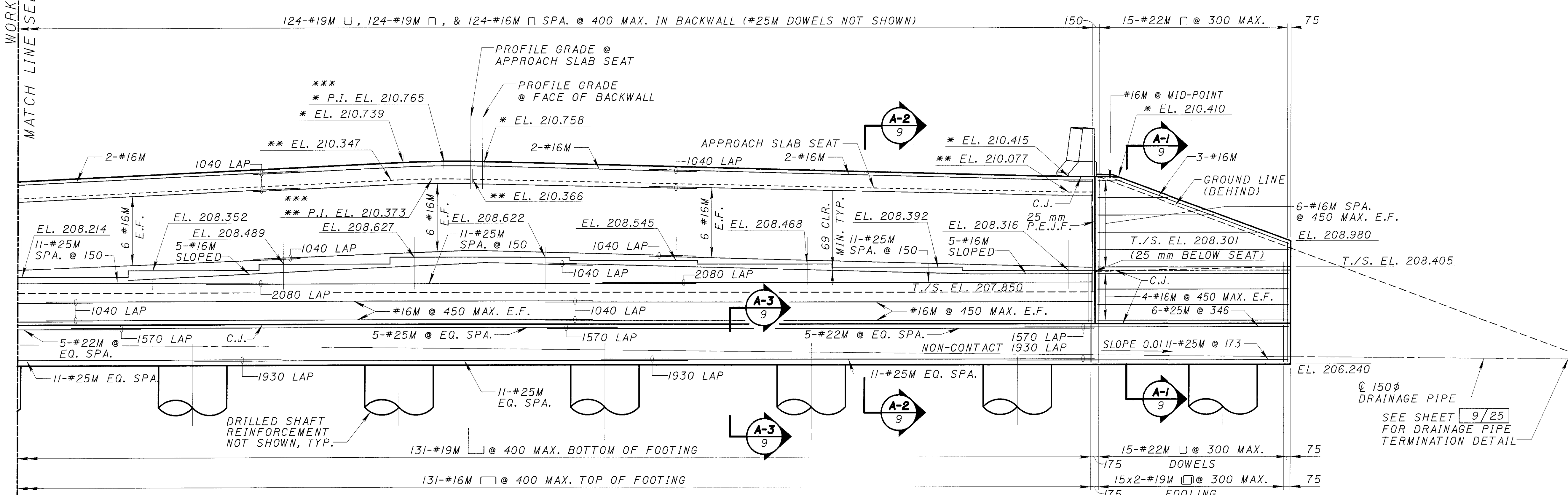
MATCH LINE SEE SHEET 8/25

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PLAN

WORK LINE
MATCH LINE SEE SHEET 7/25

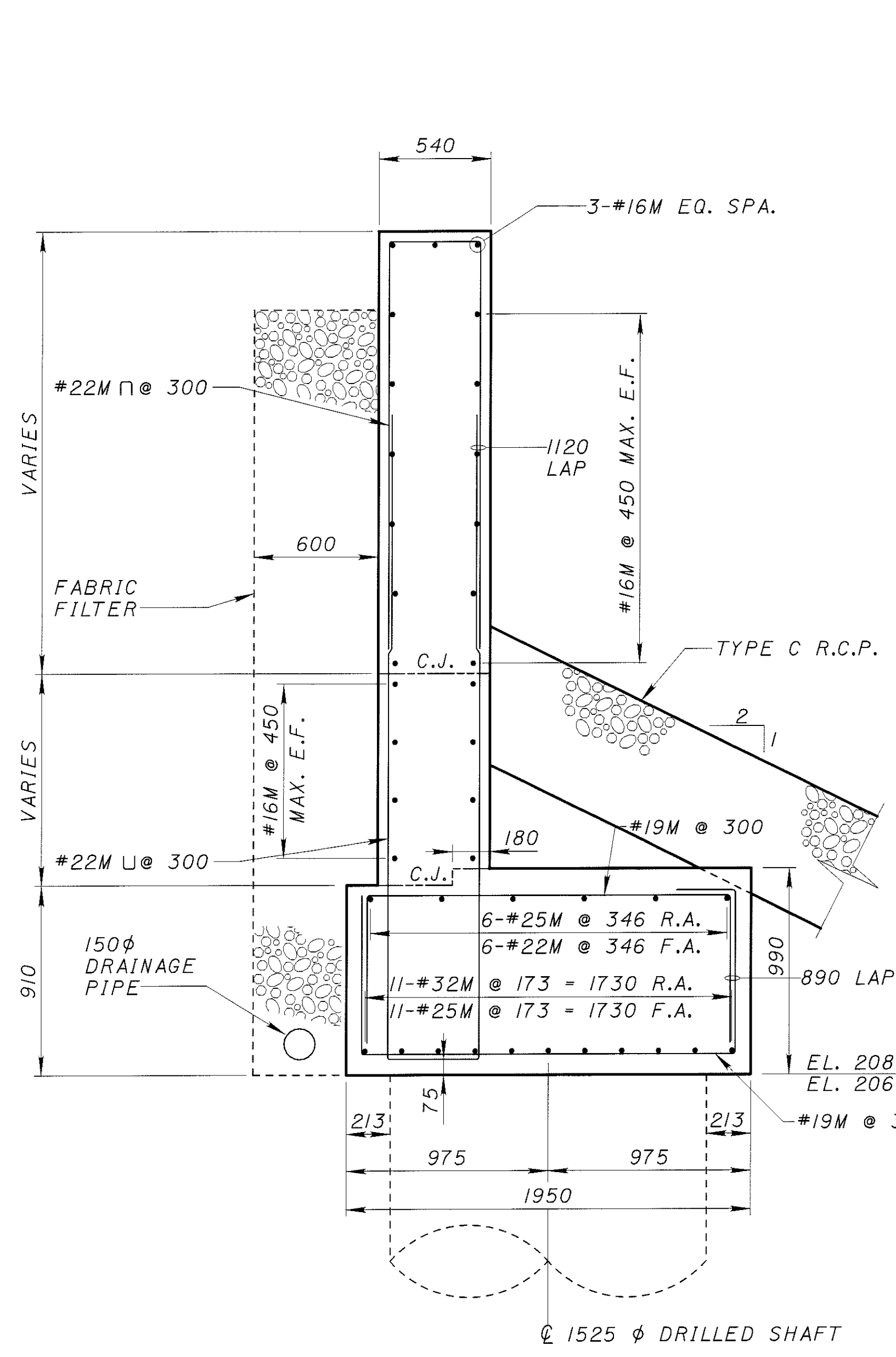


ELEVATION

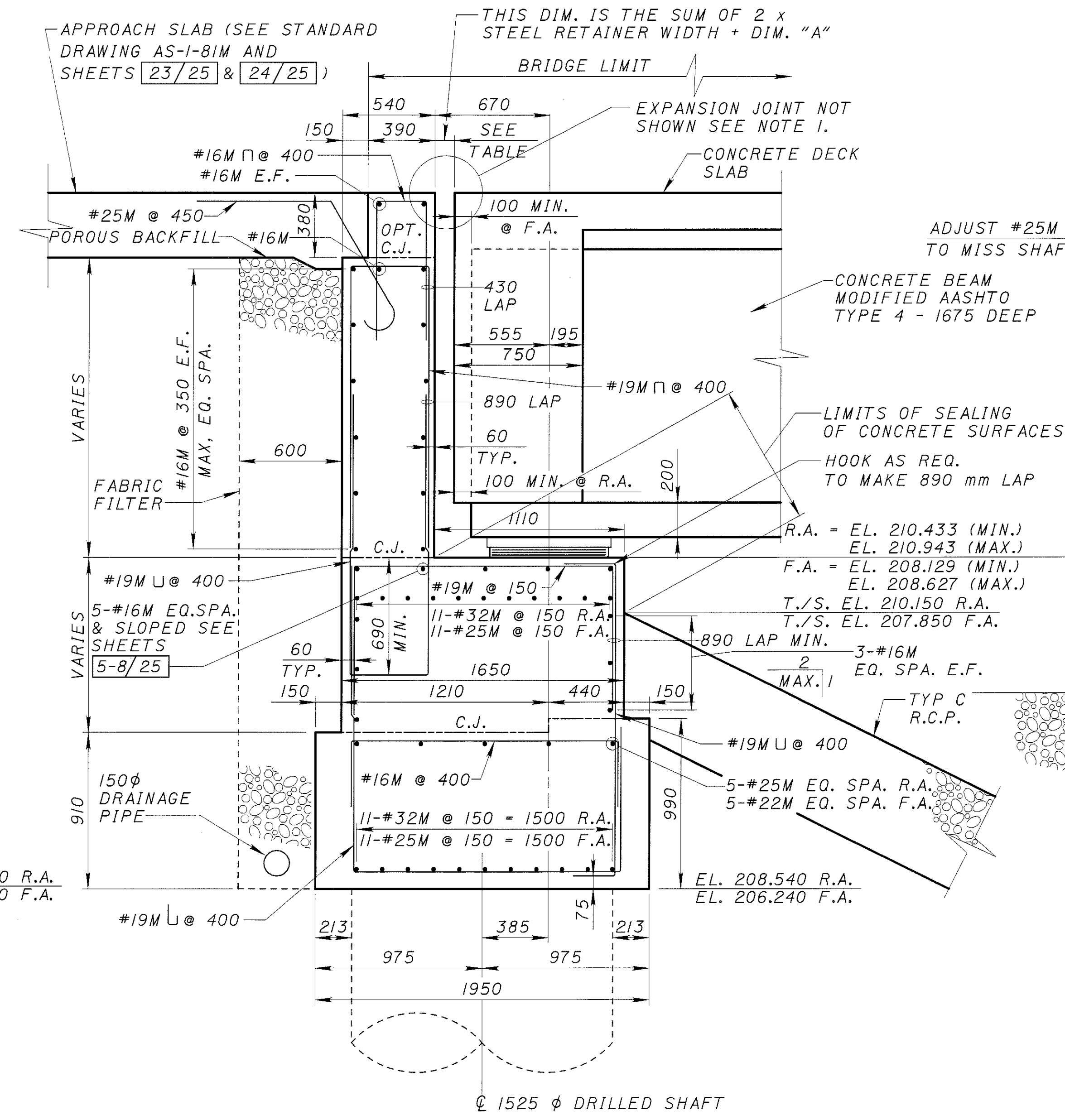
* = EL. @ FACE OF BACKWALL
** = EL. @ APPROACH SLAB SEAT
*** = EL. FOR ROUNDED ADJUSTED

NOTE:
1. FOR NOTES & LEGEND, SEE SHEET 9/25.

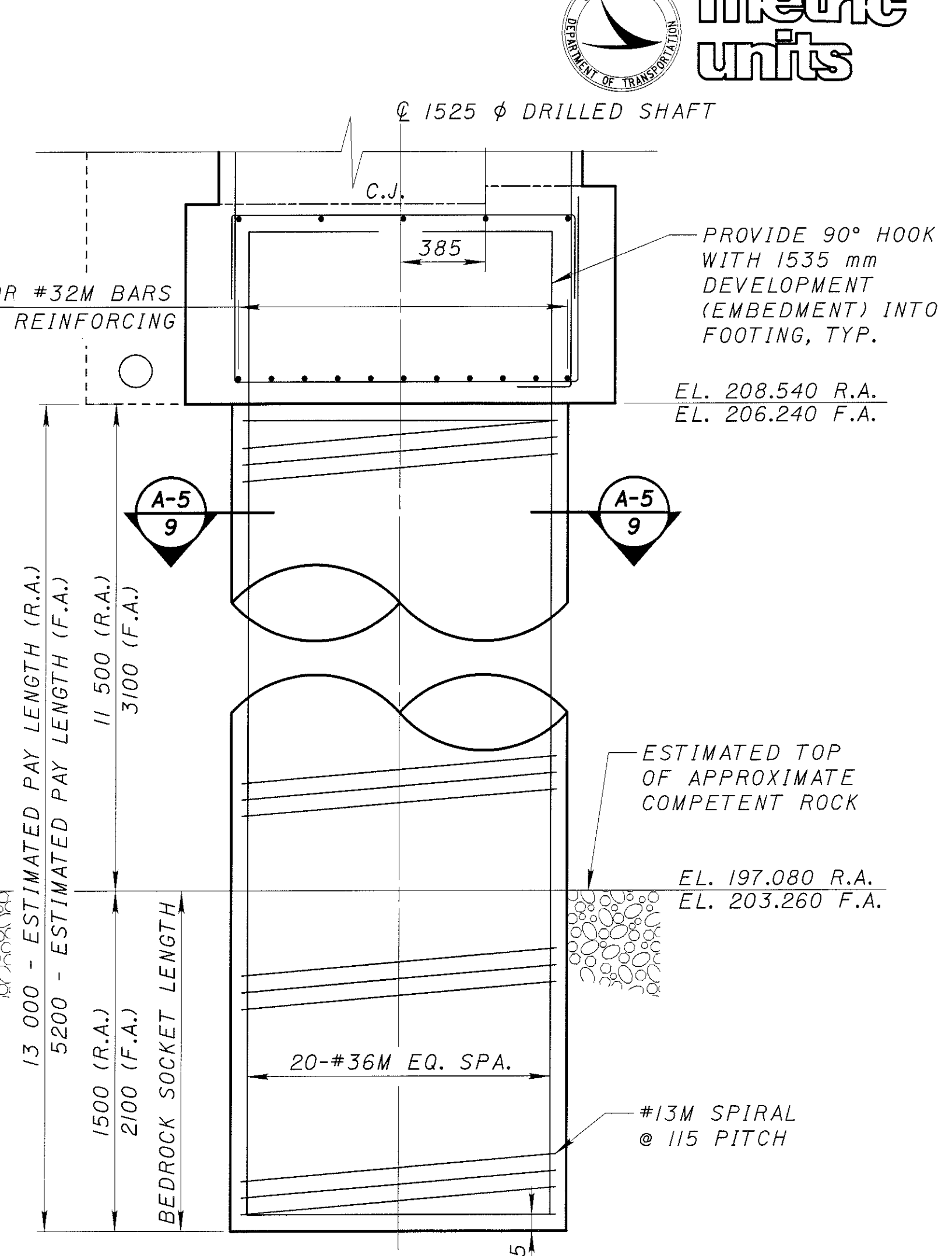
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SECTION A-1
5-8



SECTION A-2
5-8



SECTION A-3
5-8

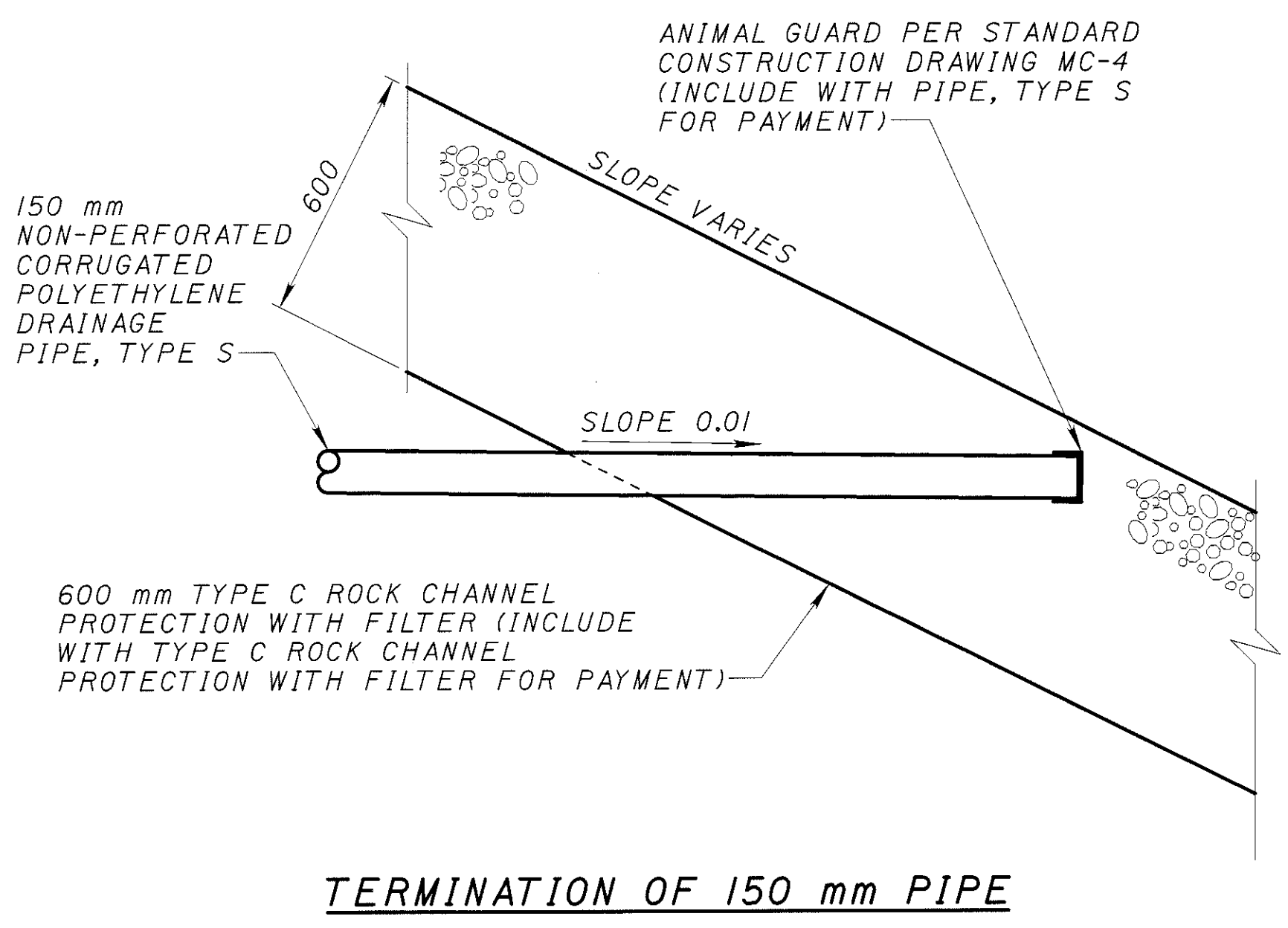
- LEGEND**
- BRG. = BEARING
 - C.L. = CENTERLINE
 - C.J. = CONSTRUCTION JOINT
 - CLR. = CLEAR
 - φ = DIAMETER
 - DIM. = DIMENSION
 - E.F. = EACH FACE
 - EL. = ELEVATION
 - EQ. SPA. = EQUALLY SPACED
 - F.A. = FORWARD ABUTMENT
 - MAX. = MAXIMUM
 - MIN. = MINIMUM
 - OPT. = OPTIONAL
 - P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
 - P.I. = POINT OF INTERSECTION
 - R.A. = REAR ABUTMENT
 - R.C.P. = ROCK CHANNEL PROTECTION
 - STA. = STATION
 - T./S. = TOP OF SLOPE
 - TYP. = TYPICAL

- NOTES:**
- FOR ADDITIONAL STRIP SEAL EXPANSION JOINT DETAILS, NOTES AND GENERAL NOTES, SEE STANDARD BRIDGE DRAWING EXJ-6-95M.
 - ALL REINFORCEMENT SHALL BE PLACED TO PROVIDE A MINIMUM COVER 50 mm UNLESS OTHERWISE SHOWN.
 - POROUS BACKFILL WITH FILTER FABRIC 600 mm THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, 300 mm BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALLS.
 - THE CONCRETE SURFACES SHALL BE SEALED WITH EPOXY-URETHANE SEALER.
 - ABUTMENT DIAPHRAGM CONCRETE SHALL BE PLACED AS PART OF THE DECK POUR.
 - BRIDGE SEAT REINFORCING, SETTING ANCHORS: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF ANCHORS. SHIFT LONGITUDINAL AND STIRRUP REINFORCING 60 mm MAX. WHERE NECESSARY TO PROVIDE 25 mm CLEARANCE BETWEEN ANCHOR BOLT AND REINFORCING.
 - BACKWALL CONCRETE: IN ADDITION TO SS 842.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

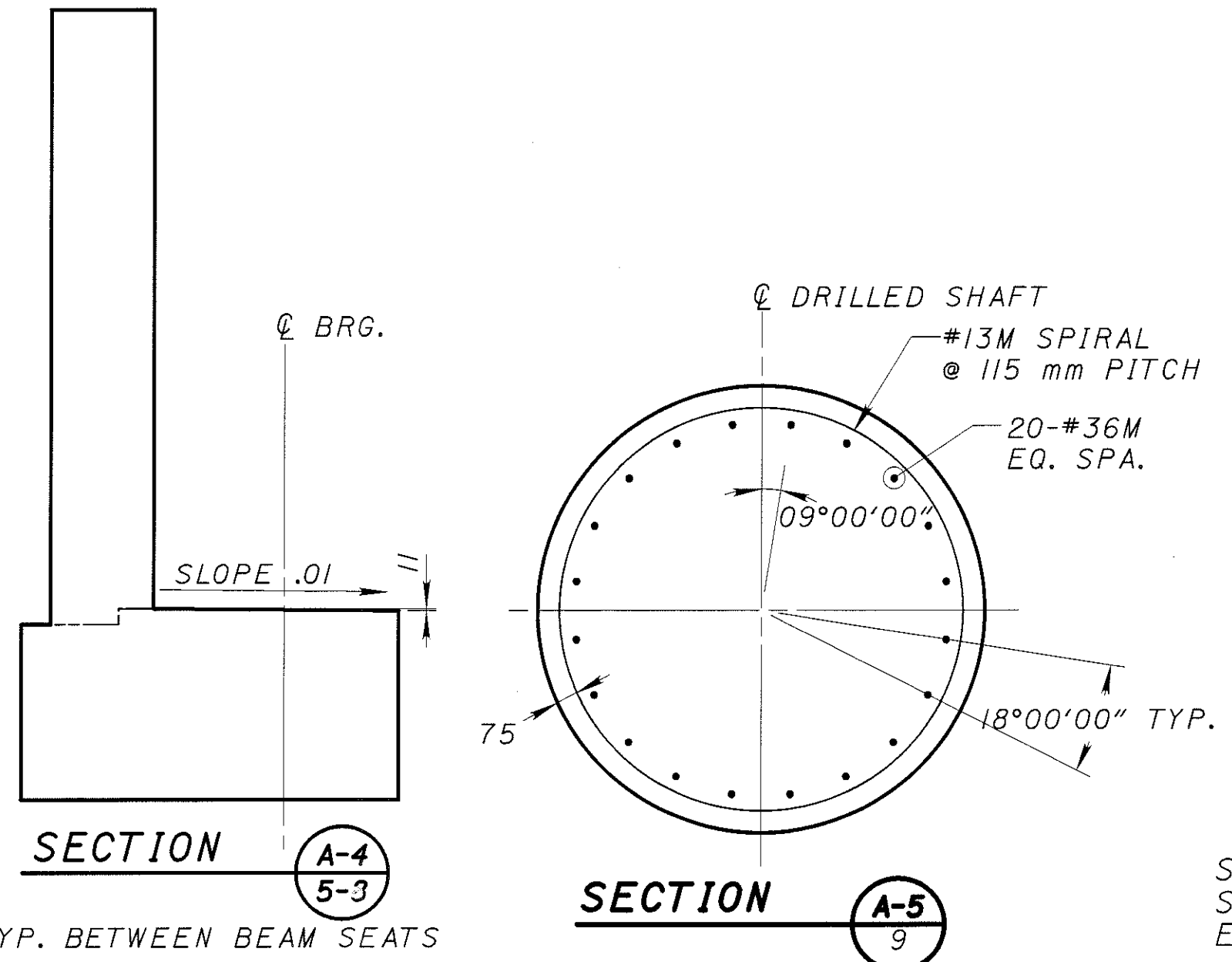
DECK JOINT OPENING, 75 mm STRIP SEAL GLAND

DIMENSION "A"		TEMPERATURE °C
IN	mm	
48	49	0
45	45	5
42	42	10
39	39	15
37	36	20
34	33	25
31	30	30
28	27	35

SEE SECTION X-X ON SHEET 2 OF 5, STANDARD BRIDGE DRAWING EXJ-6-95M FOR DIMENSION "A".

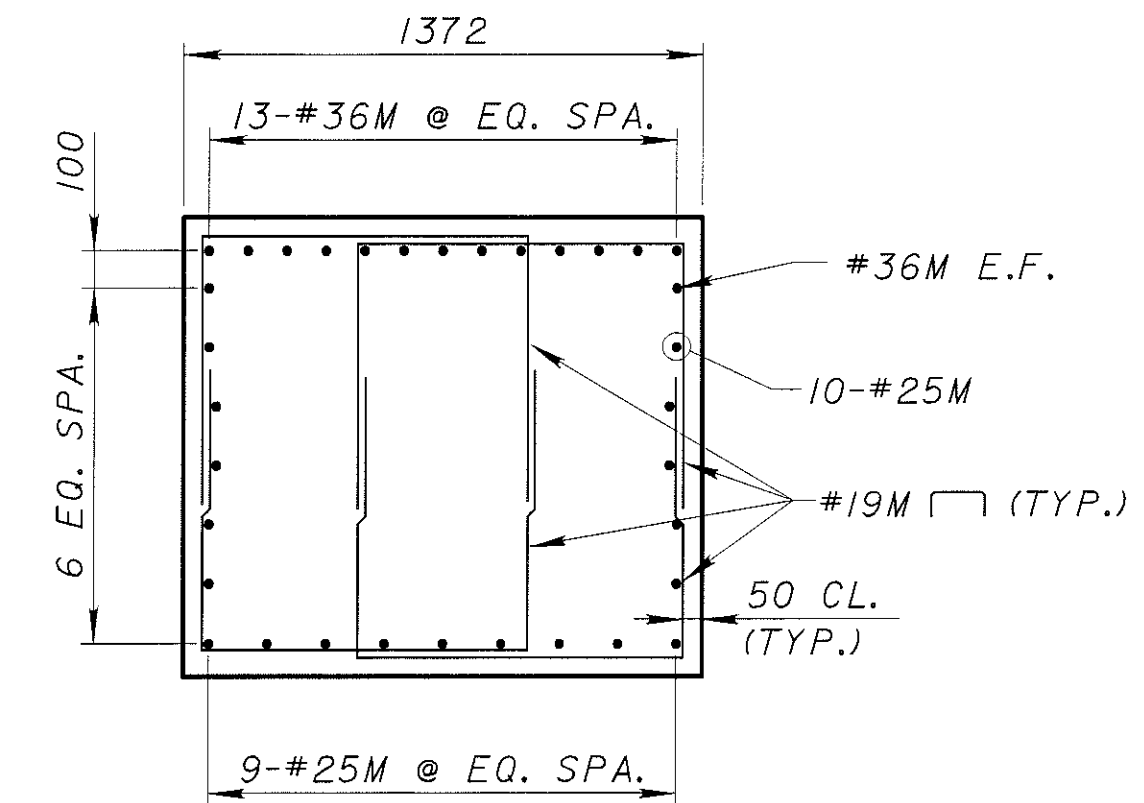
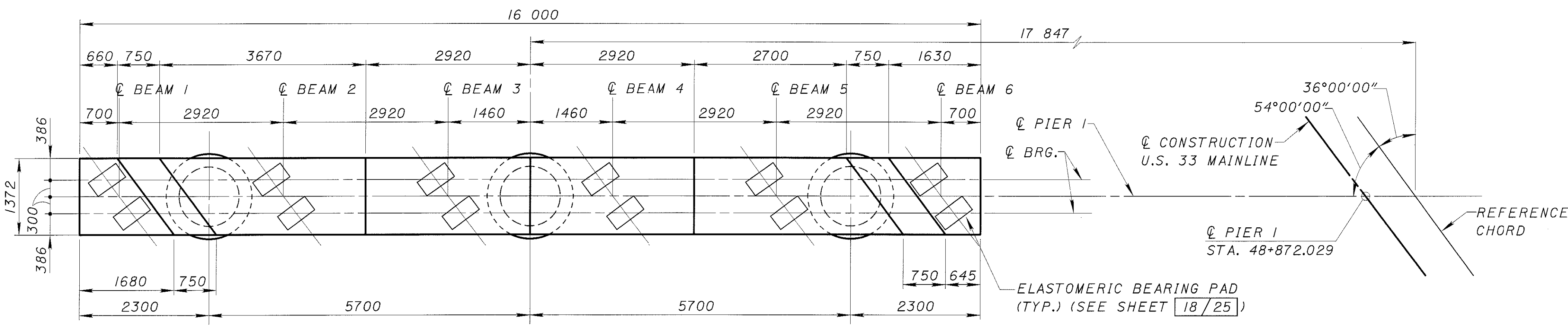


TERMINATION OF 150 mm PIPE



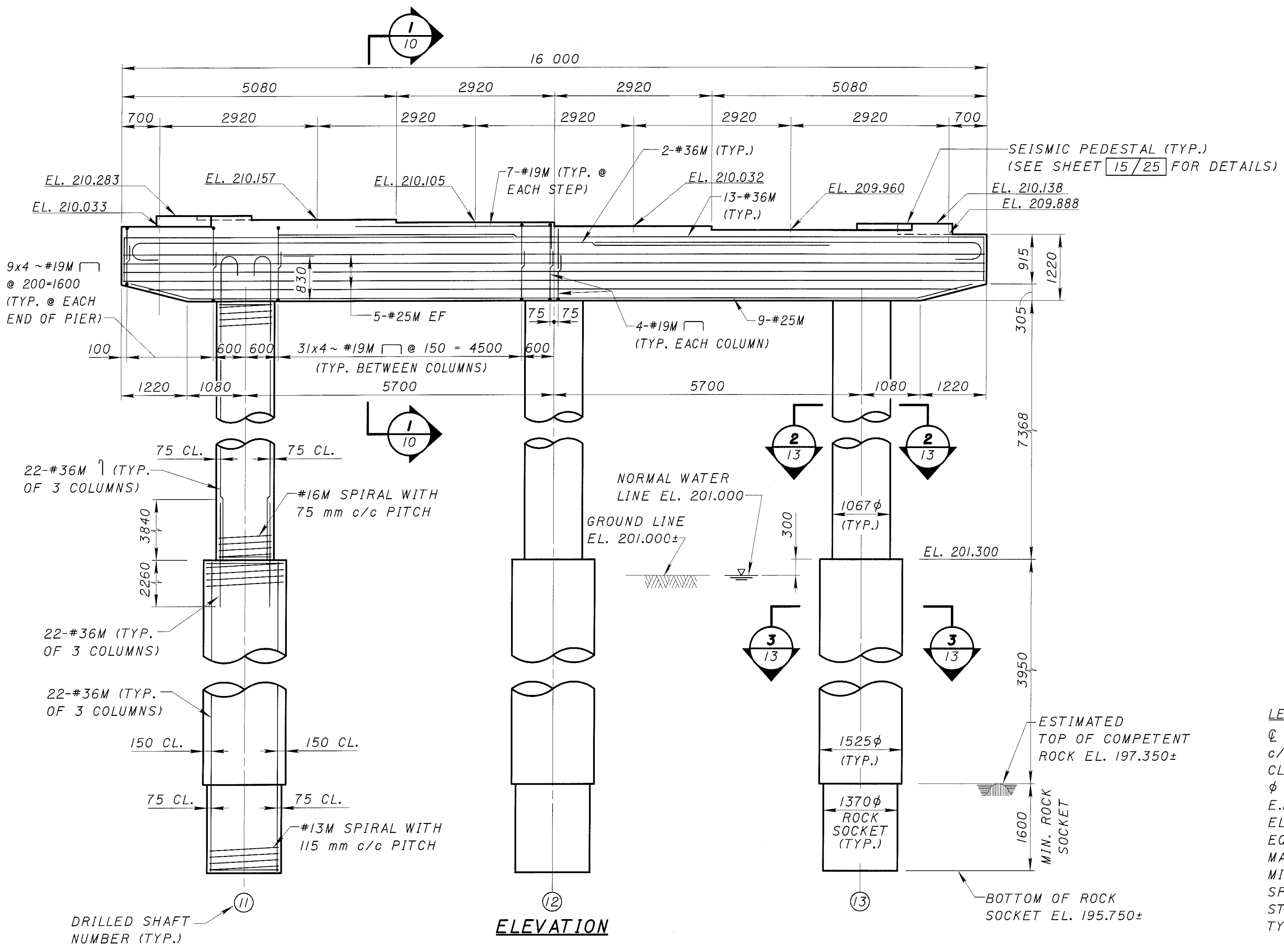
SECTION A-4
5-3

SECTION A-5
9



PLAN

SECTION 1/10 1/13,15



ELEVATION

NOTES:

- FOR OTHER DETAILS NOT SHOWN, REFER TO STANDARD BRIDGE DRAWING PSID-I-99.
- ALL REINFORCING STEEL SHOULD BE PLACED TO PROVIDE A MINIMUM COVER OF 50 mm UNLESS OTHERWISE SHOWN.
- LAP LENGTH:
 #16M = 840 (TOP), 600 (OTHER)
 #19M = 1000 (TOP), 720 (OTHER)
 #25M = 2200 (TOP), 1940 (OTHER)
 #32M = 3540 (TOP), 3120 (OTHER)
 #36M = 4350 (TOP)
- ANCHORAGE OF SPIRAL REINFORCEMENT SHALL BE PROVIDED BY 1-1/2 EXTRA TURNS OF BAR AT EACH END OF A SPIRAL UNIT.

COLUMN SPIRALS SHALL EXTEND TO THE BOTTOM OF THE #36M SPLICE BARS IN THE SHAFT AND LOWEST HORIZONTAL REINFORCEMENT IN THE CAP. DRILLED SHAFT SPIRALS SHALL EXTEND FROM 75 mm FROM THE BOTTOM OF THE SHAFT TO 75 mm FROM THE TOP OF THE SHAFT.

CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES SHALL BE USED AT SUFFICIENT INTERVALS (NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 3050 mm) TO INSURE CONCENTRIC SPACING FOR THE ENTIRE CAGE LENGTH. SPACERS SHALL BE CONSTRUCTED OF APPROVED MATERIAL EQUAL IN QUALITY AND DURABILITY TO THE CONCRETE SPECIFIED FOR THE COLUMN AND DRILLED SHAFT. THE SPACERS SHALL HAVE ADEQUATE DIMENSIONS TO ENSURE A MINIMUM 75 mm CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE DESIGN DIMENSION OF THE COLUMN AND 150 mm IN THE DRILLED SHAFT.

- BRIDGE SEAT REINFORCING, SETTING ANCHORS: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF ANCHORS. SHIFT LONGITUDINAL AND STIRRUP REINFORCING 60 mm MAX. WHERE NECESSARY TO PROVIDE 25 mm CLEARANCE BETWEEN ANCHOR BOLT AND REINFORCING.

LEGEND

- ∅ = CENTERLINE
- c/c = CENTER TO CENTER
- CL. = CLEAR
- φ = DIAMETER
- E.F. = EACH FACE
- EL. = ELEVATION
- EQ. = EQUAL
- MAX. = MAXIMUM
- MIN. = MINIMUM
- SPA. = SPACES
- STA. = STATION
- TYP. = TYPICAL

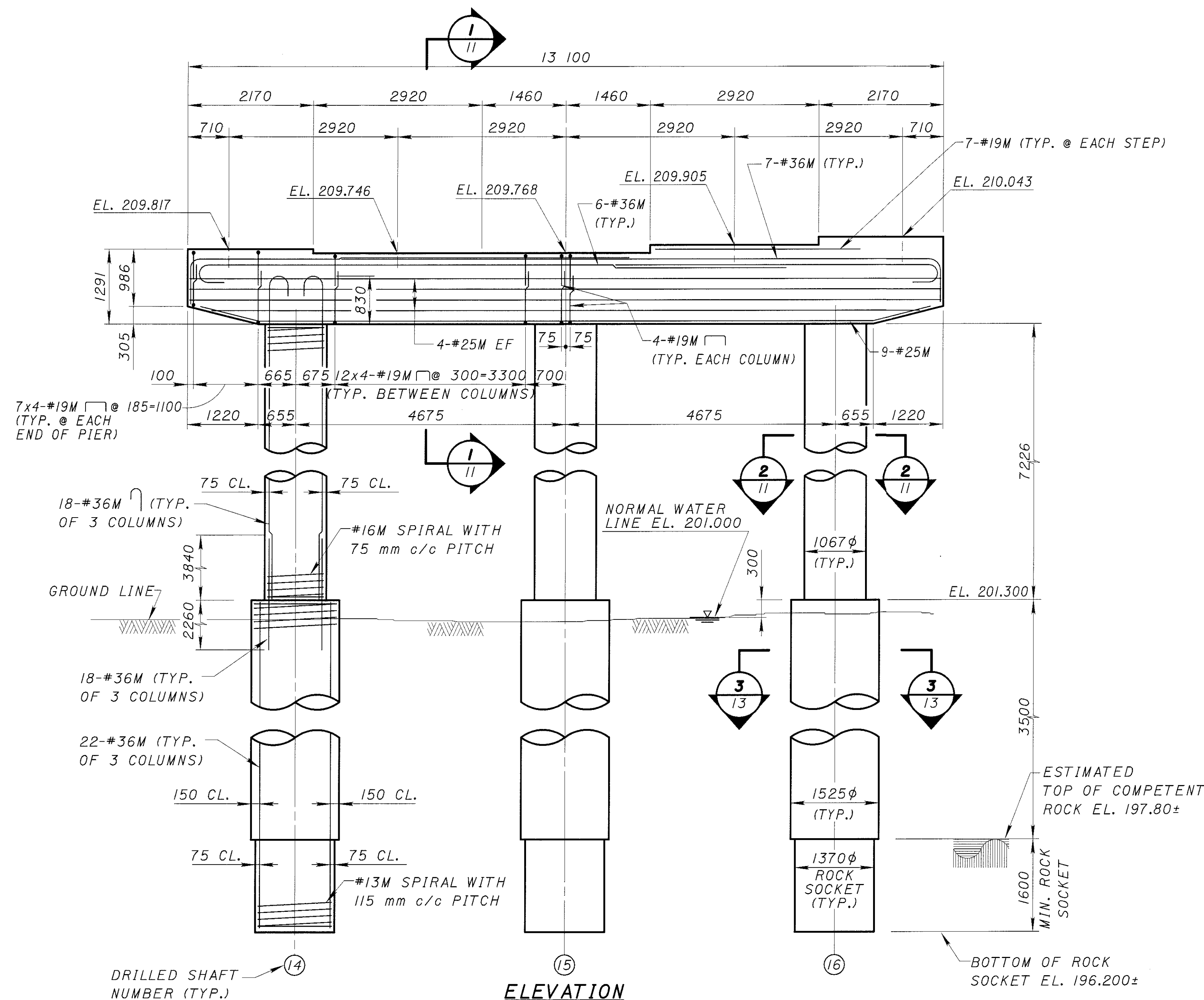
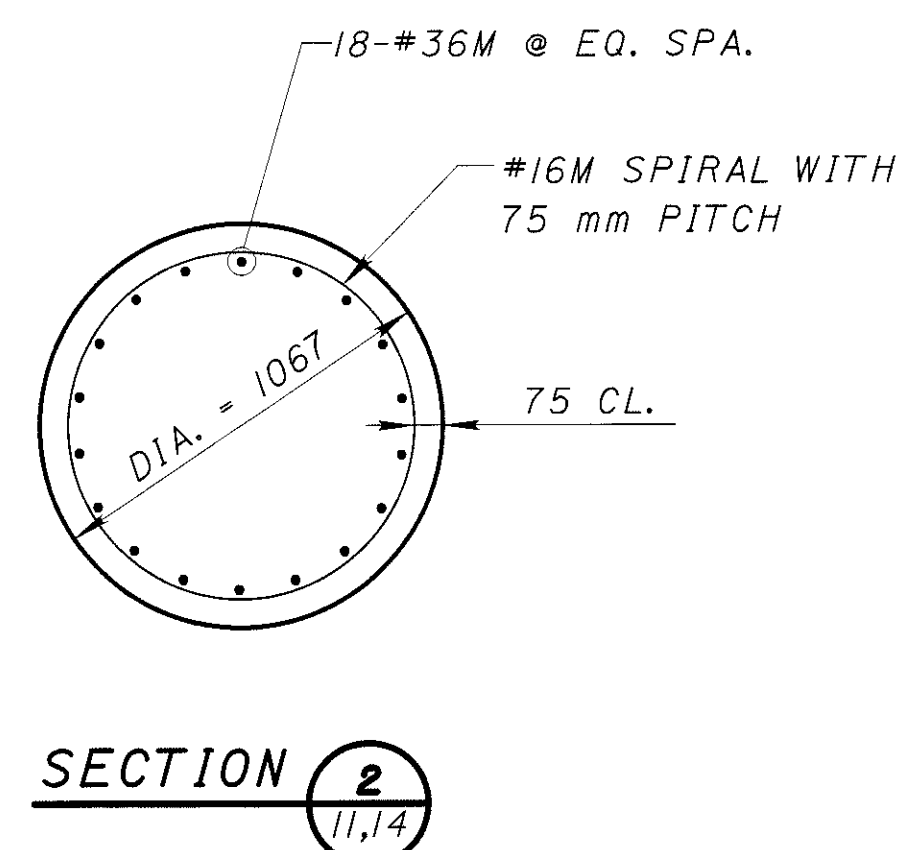
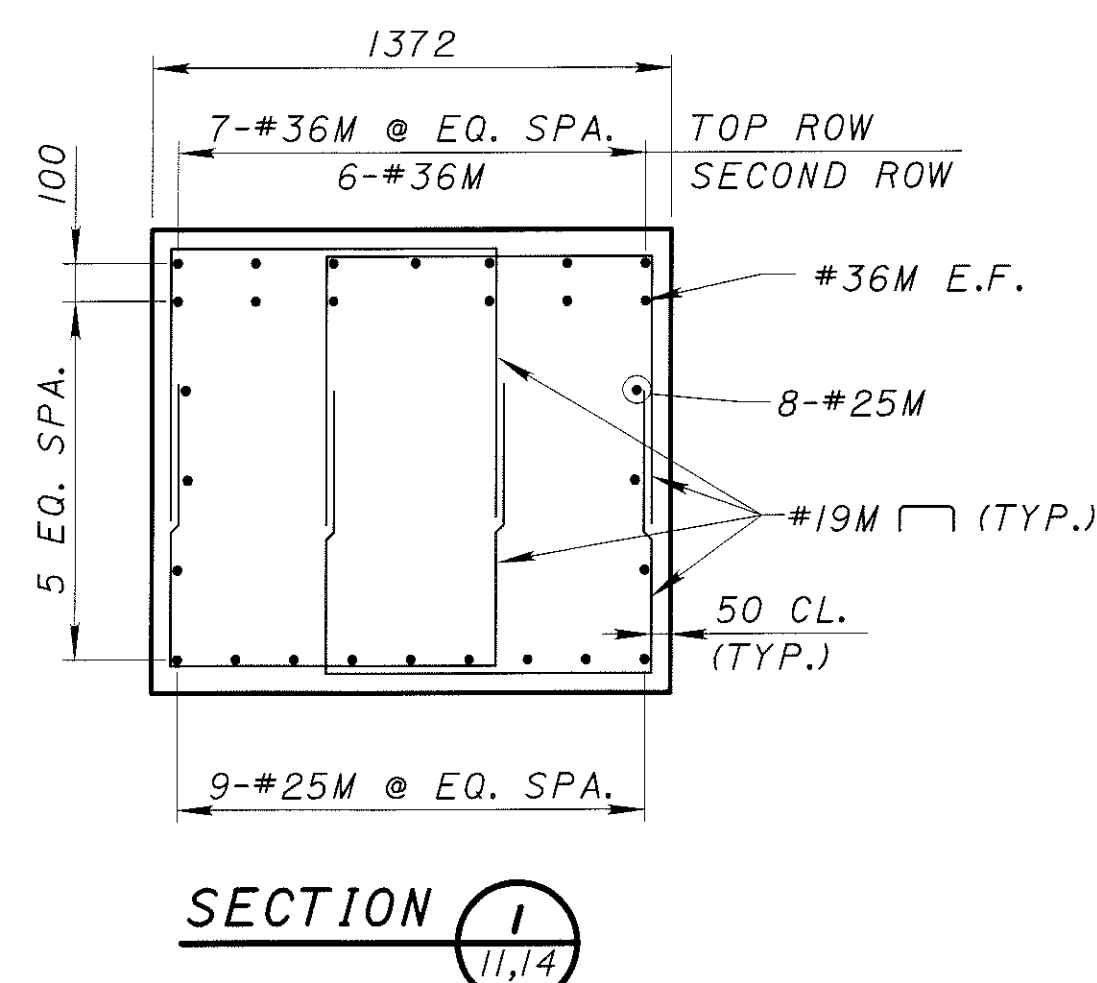
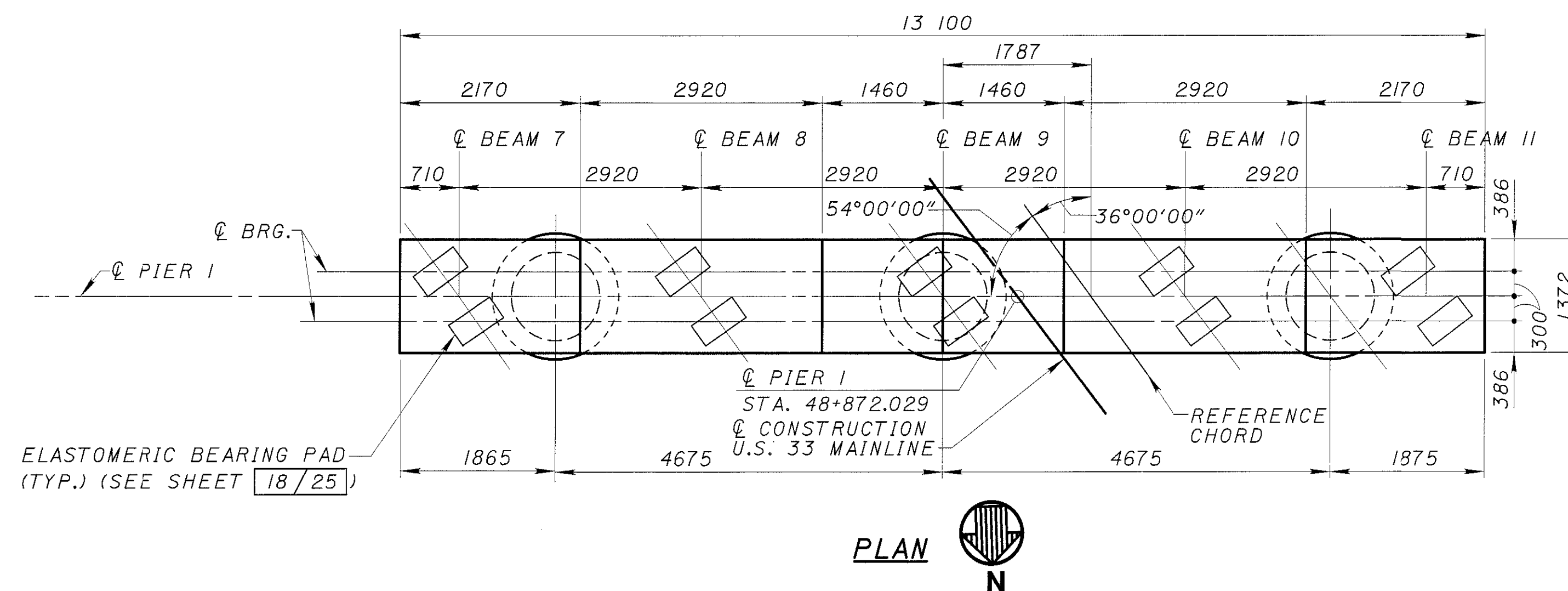
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PIER 1 DETAILS - LEFT PIER
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

10 / 25

934
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DESIGNED	DOR	CHECKED	CYW
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02/02/01		5300584	

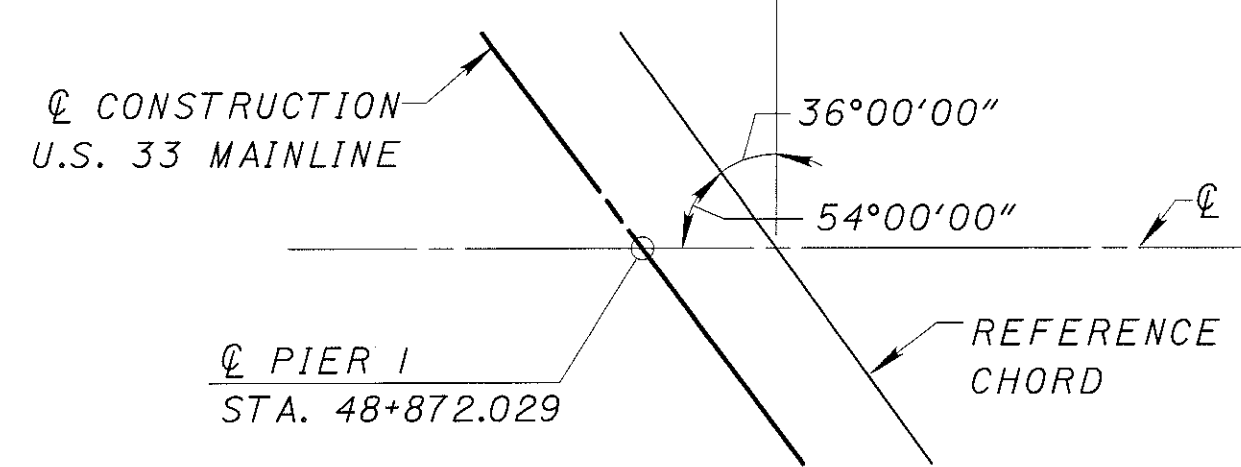
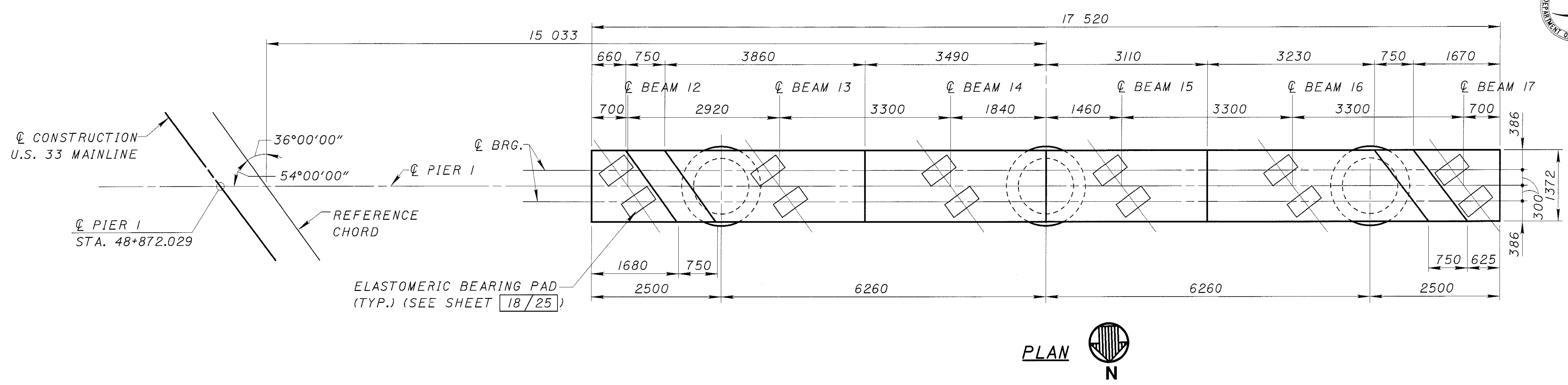
PIER 1 DETAILS - CENTER PIER
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

11/25

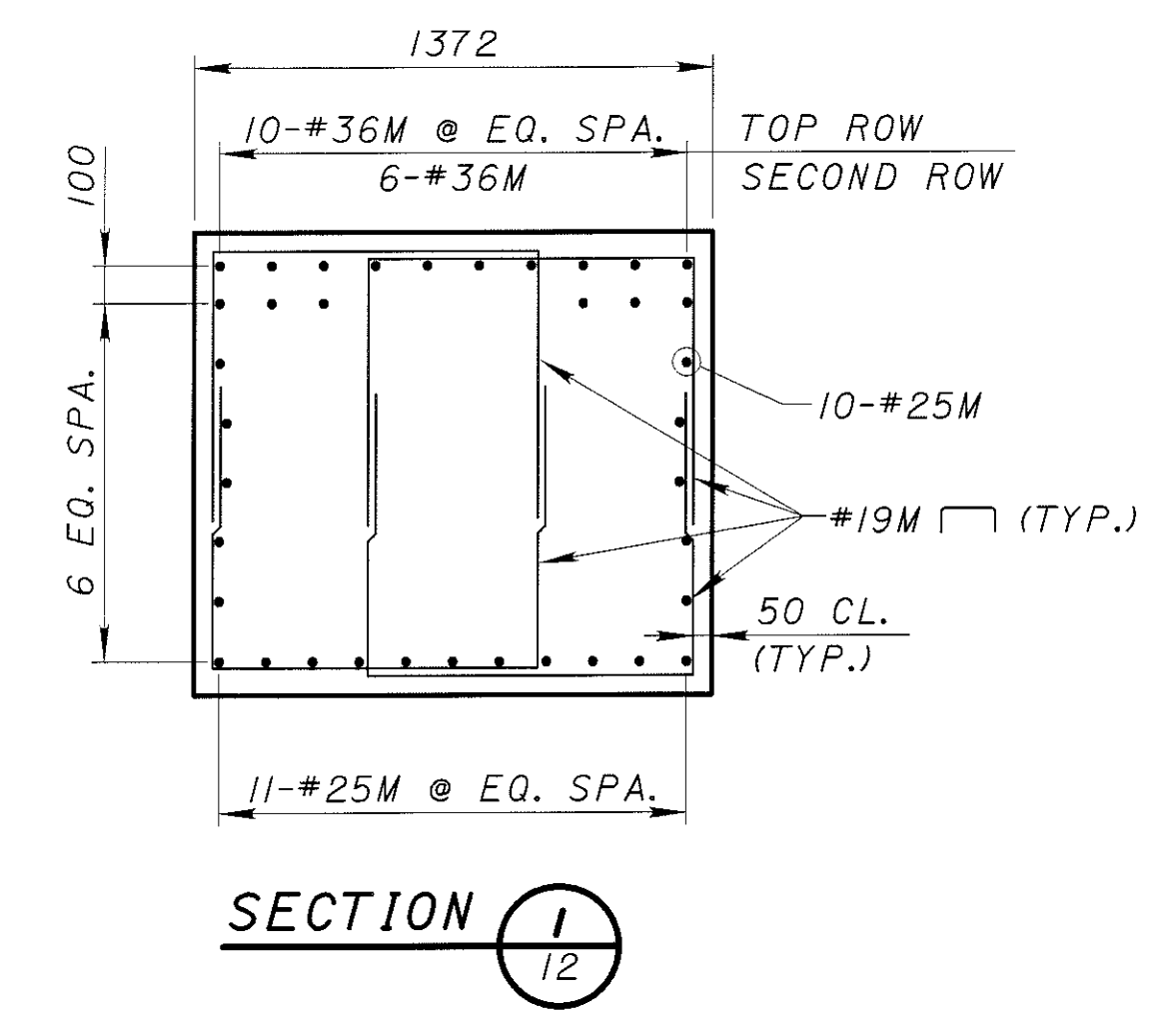
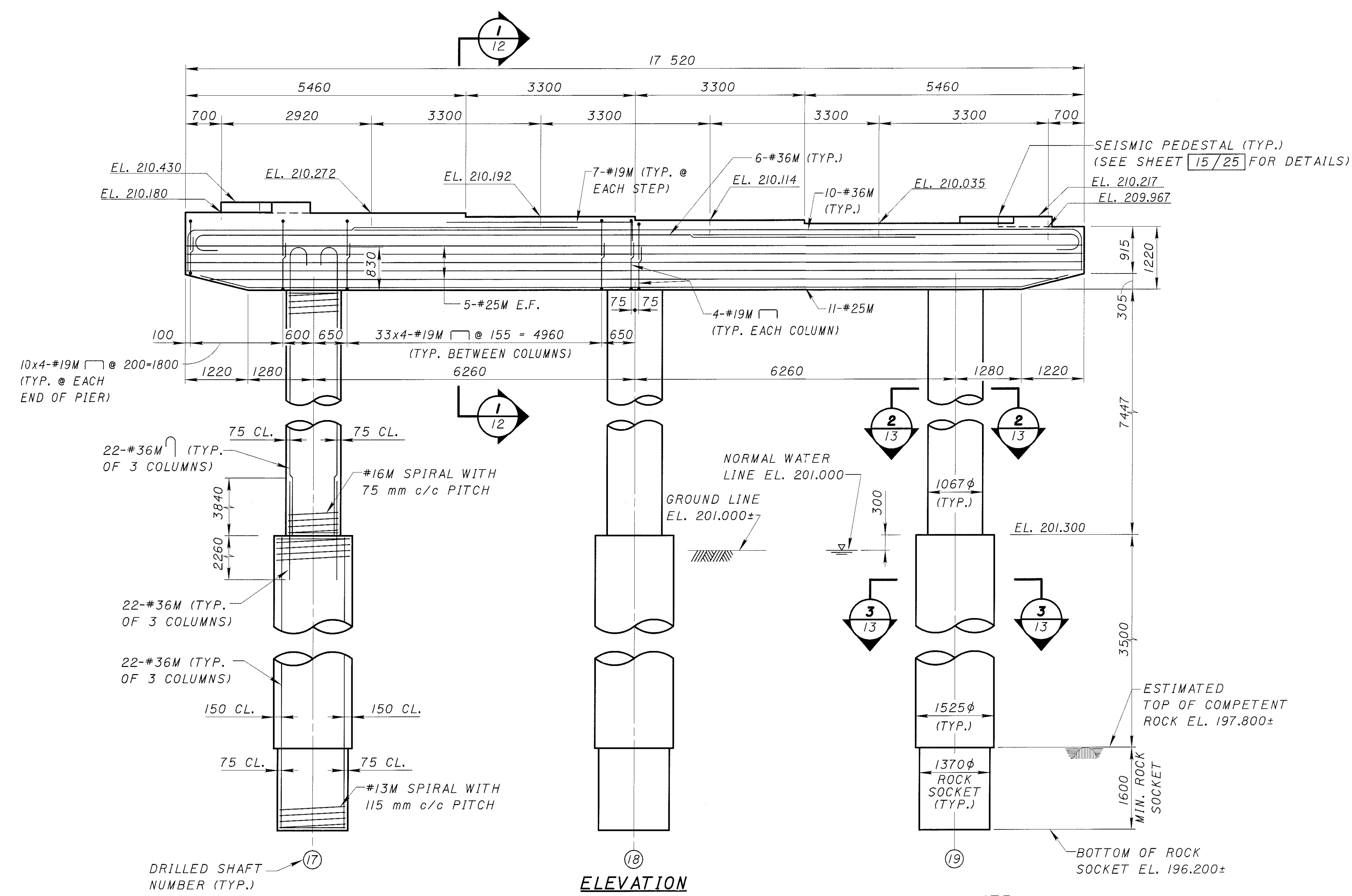
935
949

NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET 10/25.



ELASTOMERIC BEARING PAD (TYP.) (SEE SHEET 18/25)

PLAN



SECTION 1-12

ELEVATION

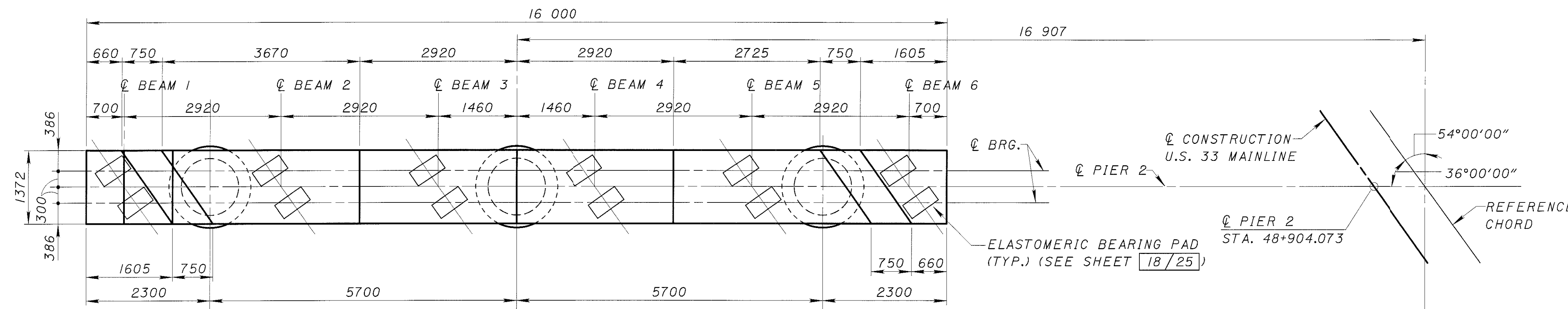
NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET 10/25.

30. MAR. 2001 09:55:51 me:\p\ro\19821\016-00\dsl\br\bridge_sr681\mg33rpl.dgn

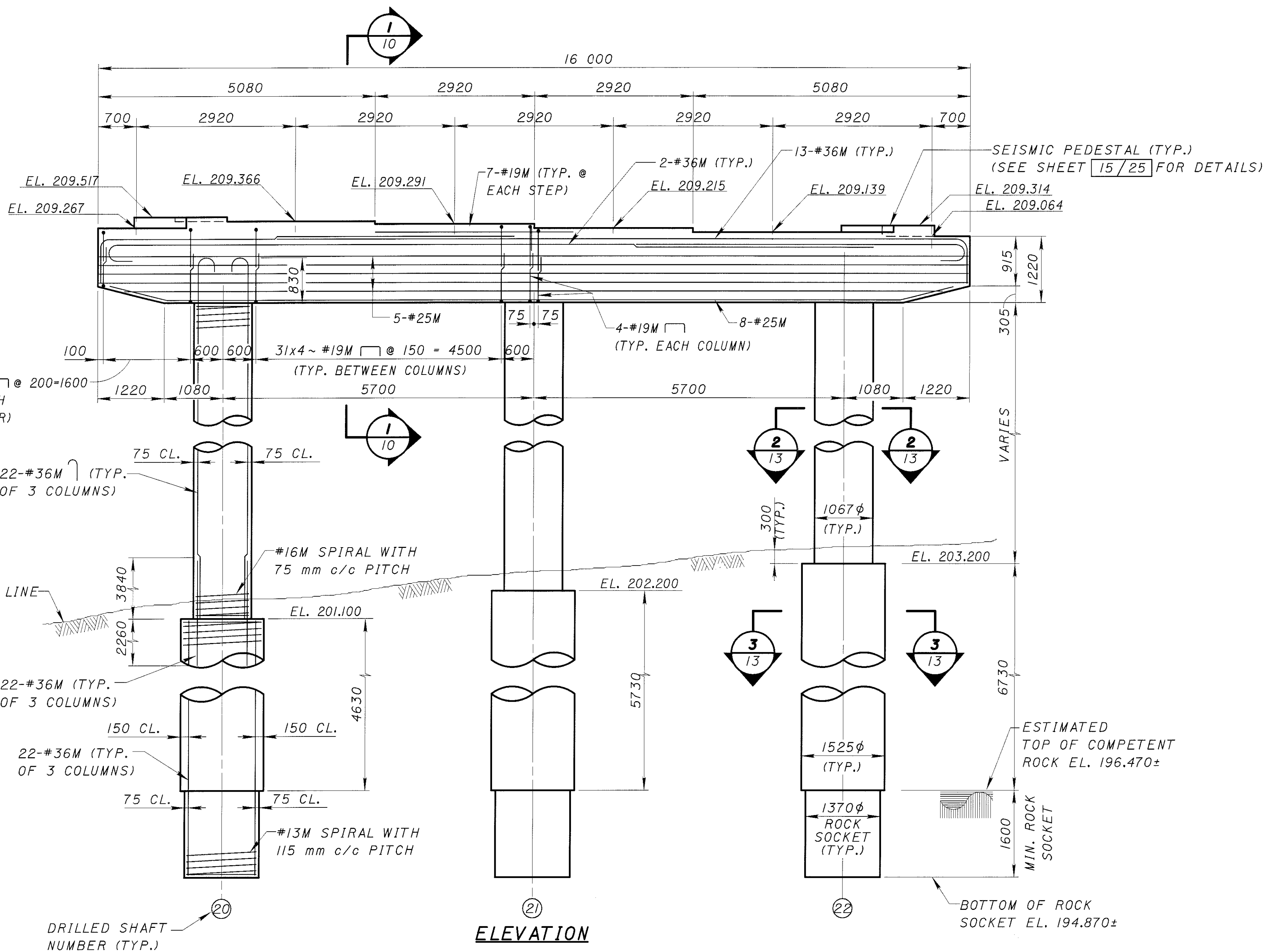
DESIGNED	DOR	CHECKED	CXW
DRAWN	GV	REVISED	
REVIEWED	JN	DATE	02/02/01
STRUCTURE FILE NUMBER	5300584		

PIER 1 DETAILS - RIGHT PIER
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

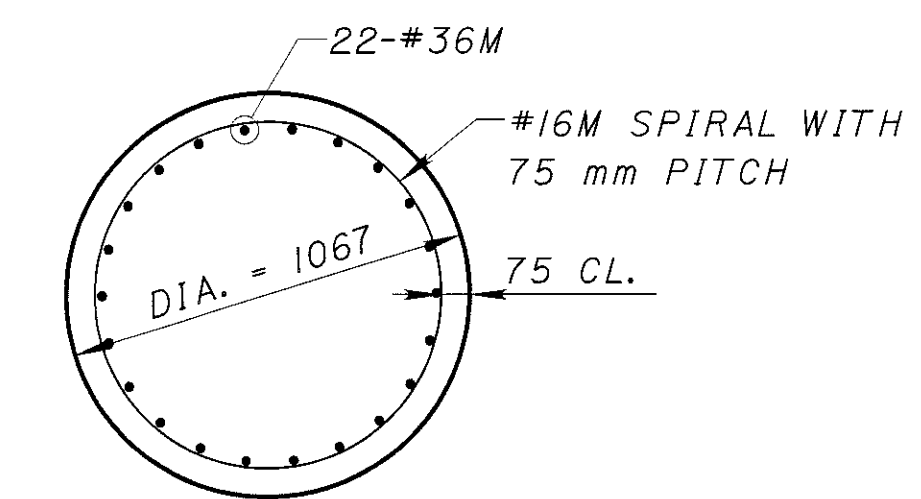
ATH-33-40.981



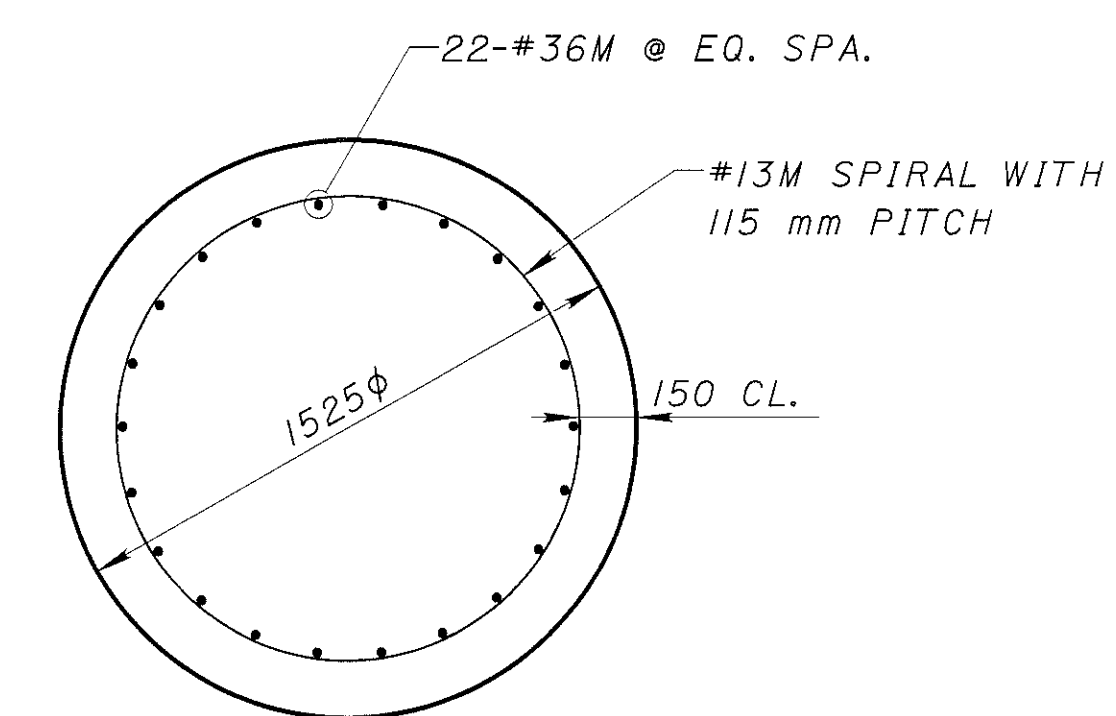
PLAN



ELEVATION



SECTION 2-2
10,12 13,15



SECTION 3-3
10-15

NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET 10/25.

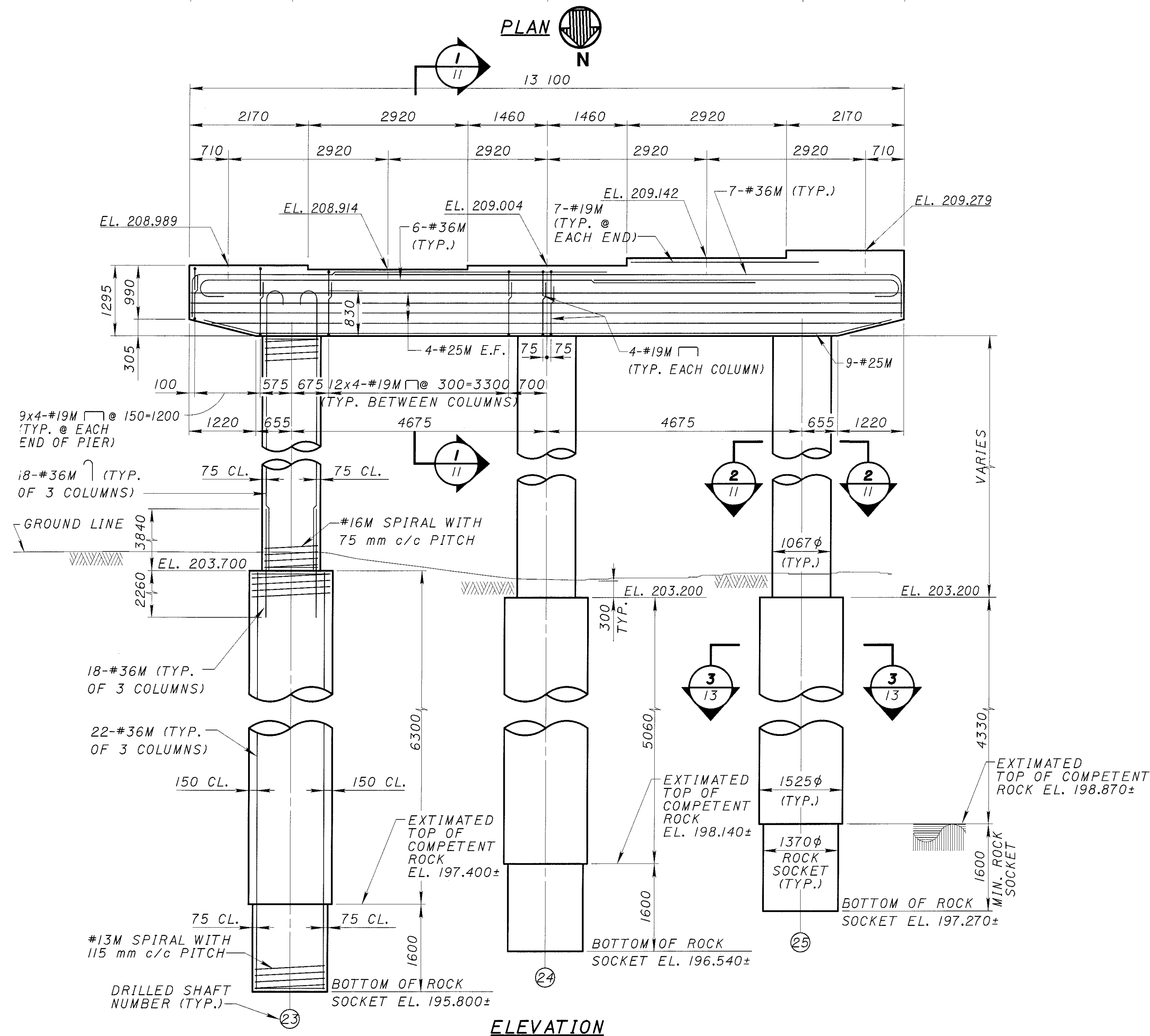
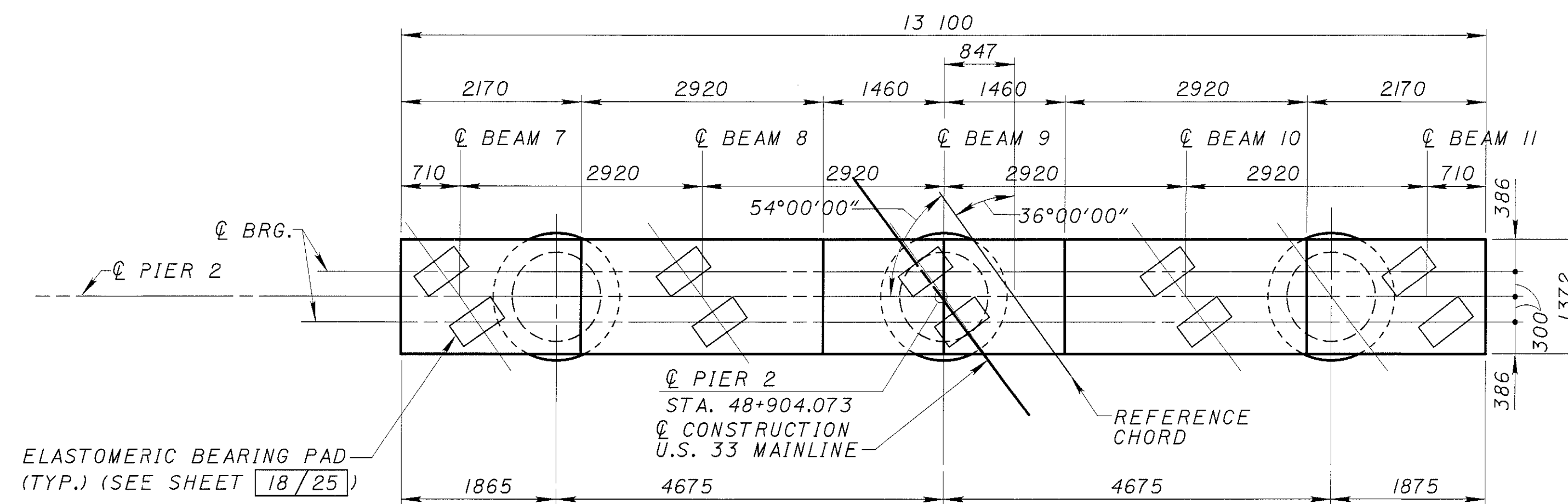
30. MAR. 2001
09:59:07
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DESIGNED	DOR	CHECKED	CXW
DRAWN	PSP	REVIEWED	
REVIEWED	JN	DATE	02/02/01
STRUCTURE FILE NUMBER	5300584		

PIER 2 DETAILS - LEFT PIER
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

13/25
937
949



NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET 10/25.

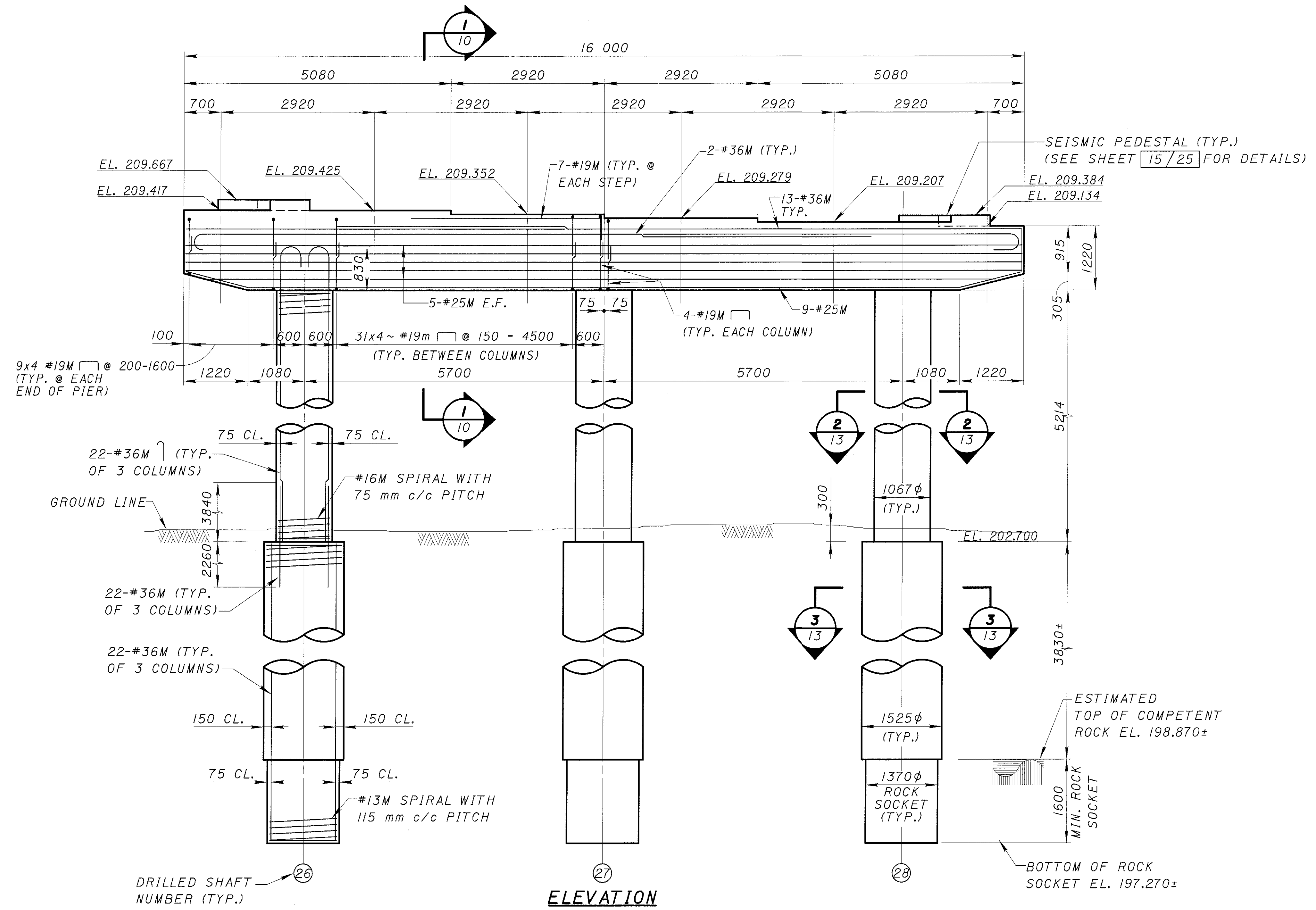
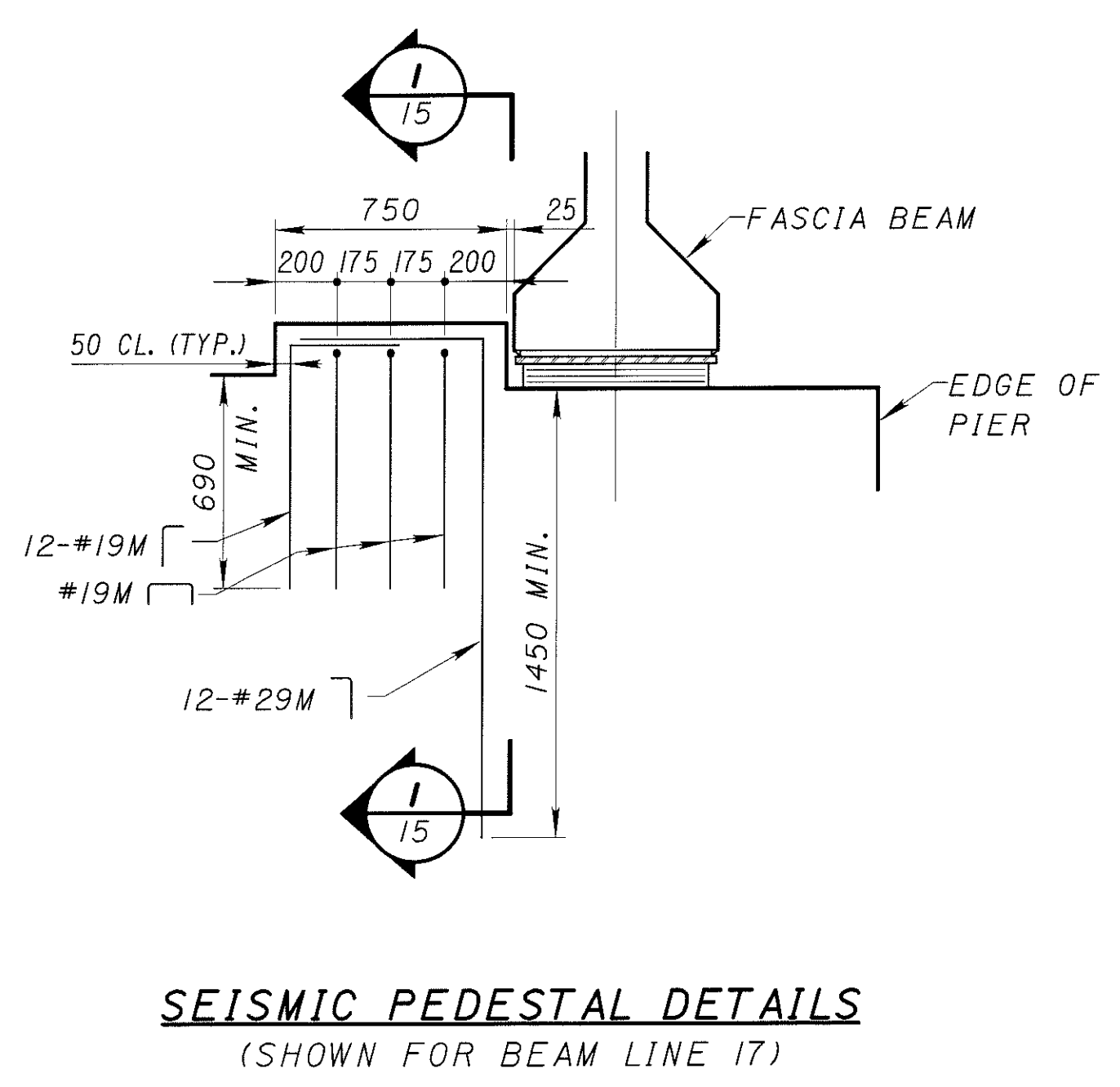
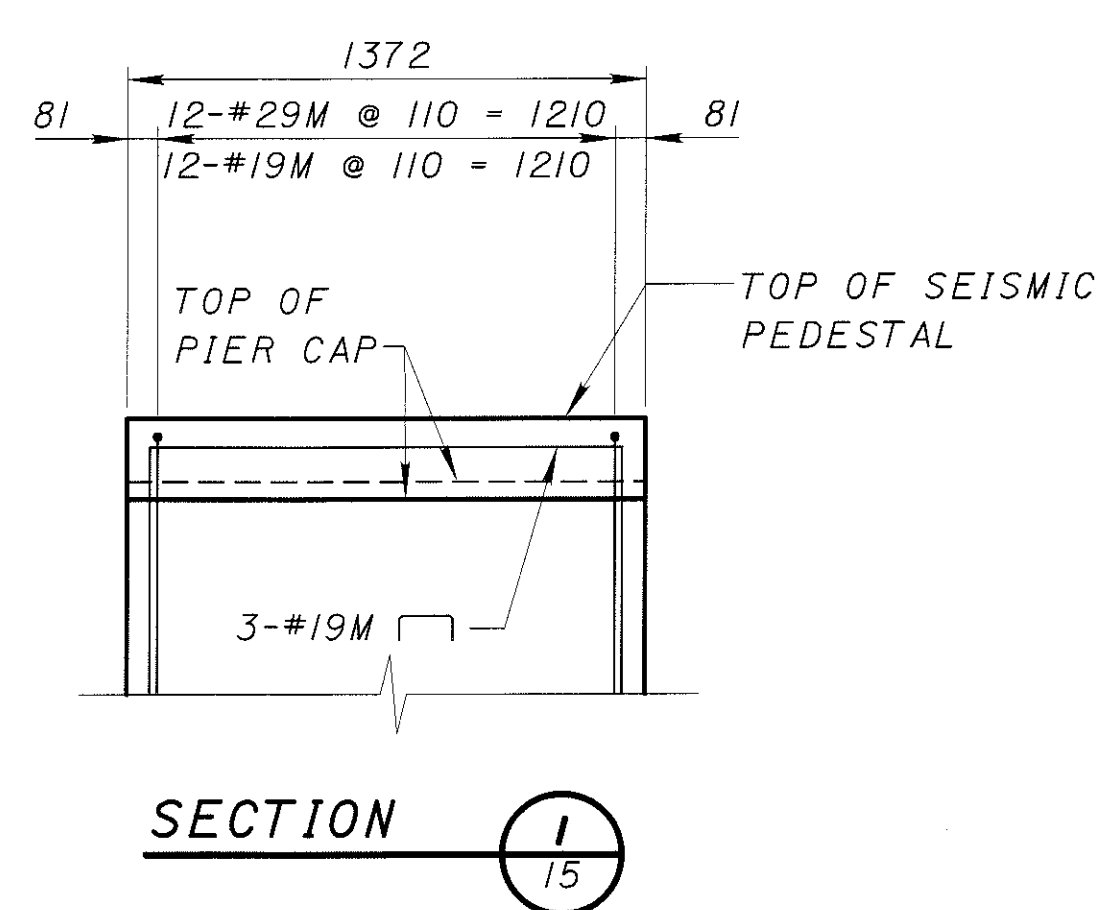
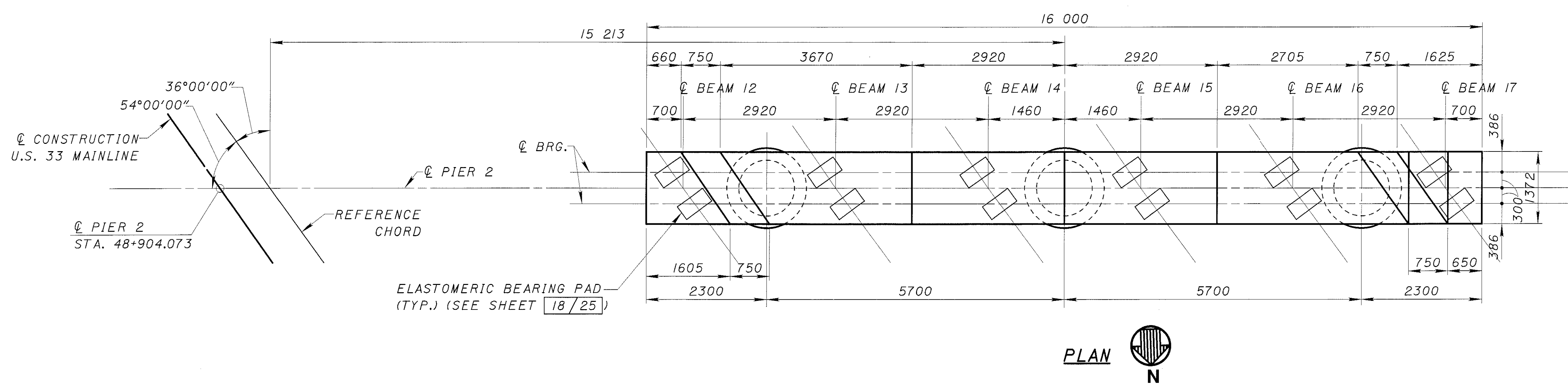
DESIGNED	DOR	CHECKED	CXW
DRAWN	PSP	REVIEWED	
REVIEWED	JN	DATE	02/02/01
STRUCTURE FILE NUMBER	5300584		

PIER 2 DETAILS - CENTER PIER
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981

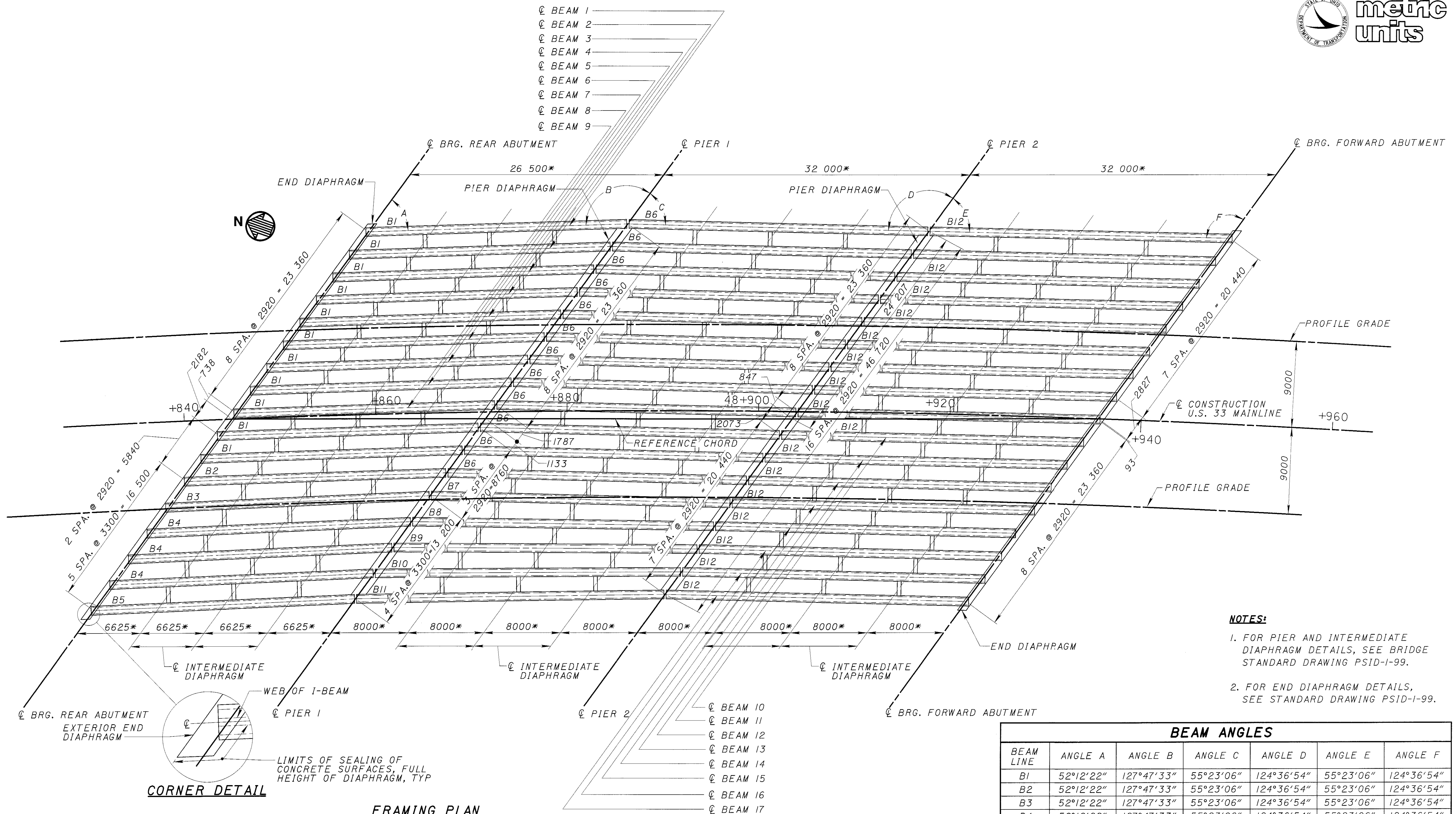
14/25

938
949



NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET 10/25.

30 MAR 2001 10:00:09 m:\p\c\j\9821\016-00\dsl\bridge\sr681\ng33rpl2.dgn



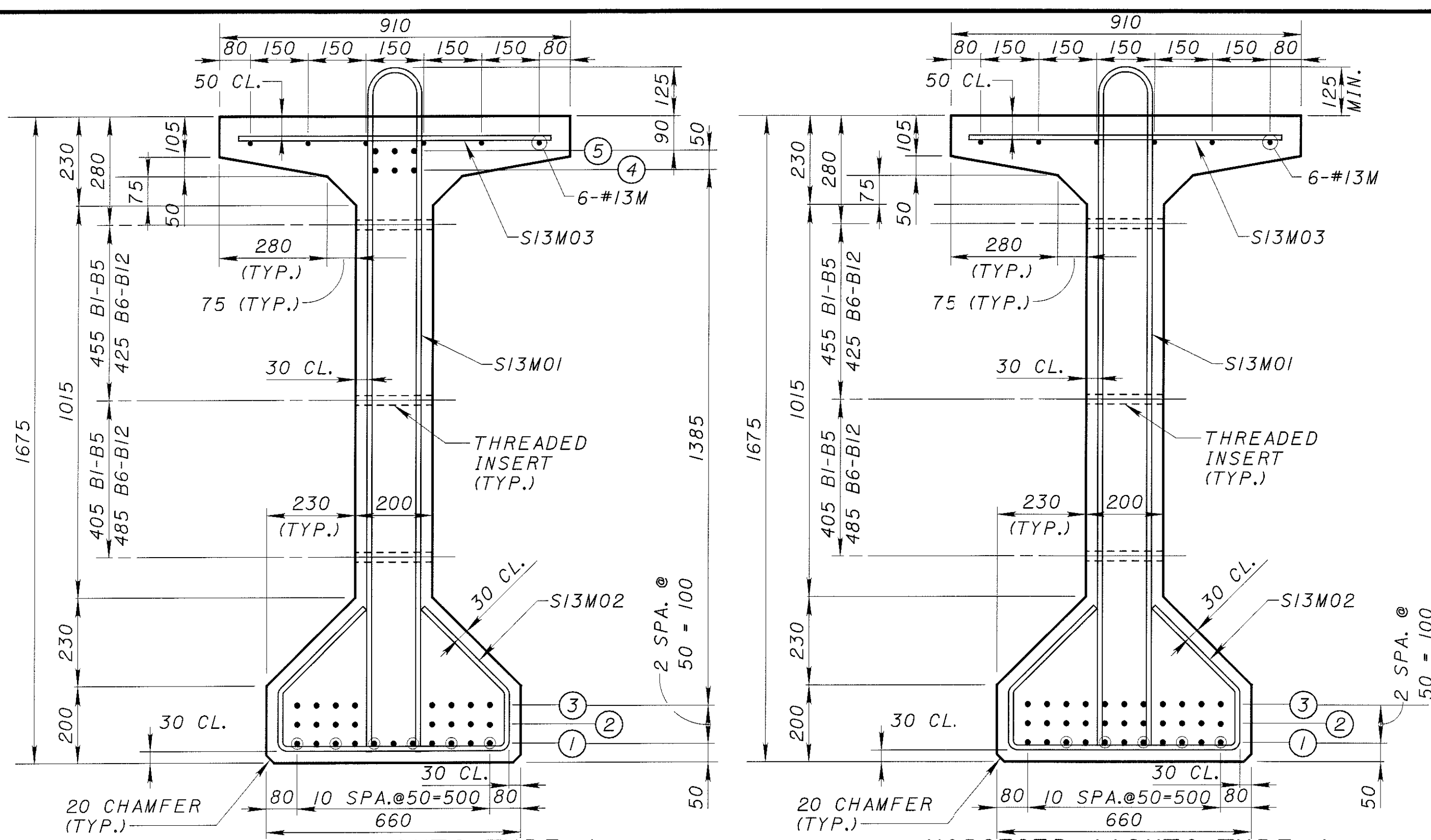
- NOTES:**
1. FOR PIER AND INTERMEDIATE DIAPHRAGM DETAILS, SEE BRIDGE STANDARD DRAWING PSID-I-99.
 2. FOR END DIAPHRAGM DETAILS, SEE STANDARD DRAWING PSID-I-99.

BEAM ANGLES						
BEAM LINE	ANGLE A	ANGLE B	ANGLE C	ANGLE D	ANGLE E	ANGLE F
B1	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B2	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B3	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B4	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B5	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B6	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B7	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B8	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B9	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B10	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B11	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B12	52°12'22"	127°47'33"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B13	51°34'43"	127°25'17"	55°23'06"	124°36'54"	55°23'06"	124°36'54"
B14	51°34'43"	127°25'17"	54°49'10"	125°10'50"	55°23'06"	124°36'54"
B15	51°34'43"	128°25'17"	54°15'41"	125°44'19"	55°23'06"	124°36'54"
B16	51°34'43"	128°25'17"	53°42'40"	126°17'20"	55°23'06"	124°36'54"
B17	51°34'43"	128°25'17"	53°10'07"	126°49'53"	55°23'06"	124°36'54"

FRAMING PLAN
* DENOTES DIMENSION MEASURED ALONG REFERENCE CHORD

LEGEND
BRG. = BEARING
CL = CENTERLINE
SPA. = SPACES

02/09/2001 01:02:20 PM
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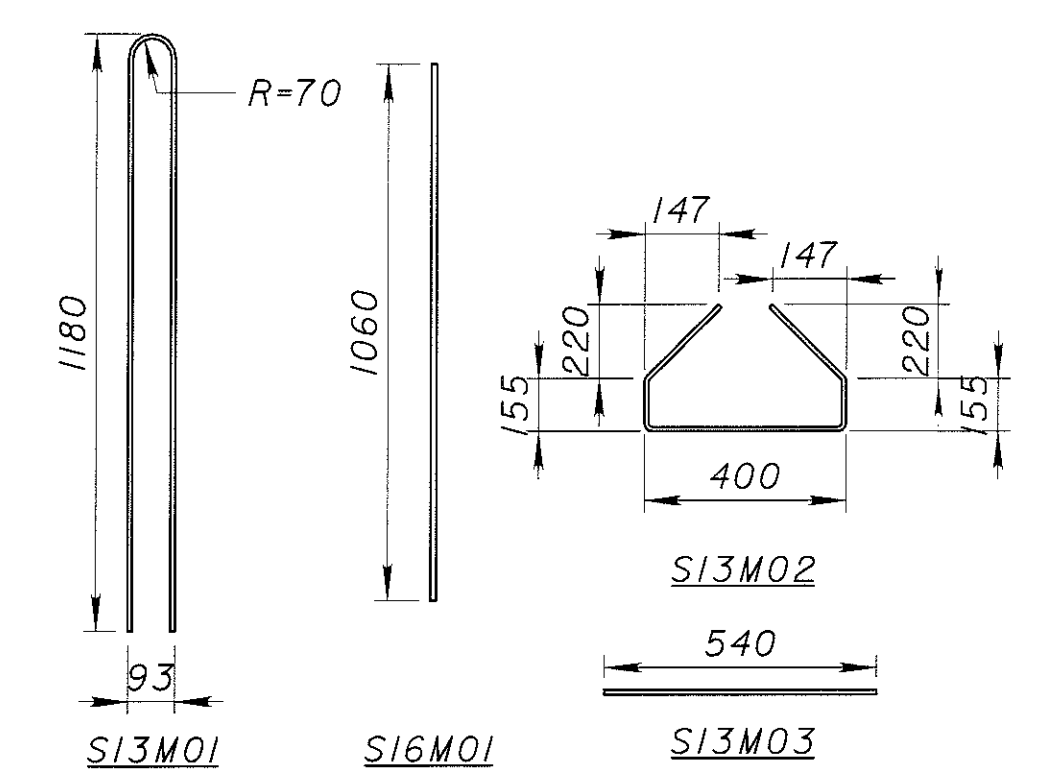


**MODIFIED AASHTO TYPE 4
BEAM END SECTION**

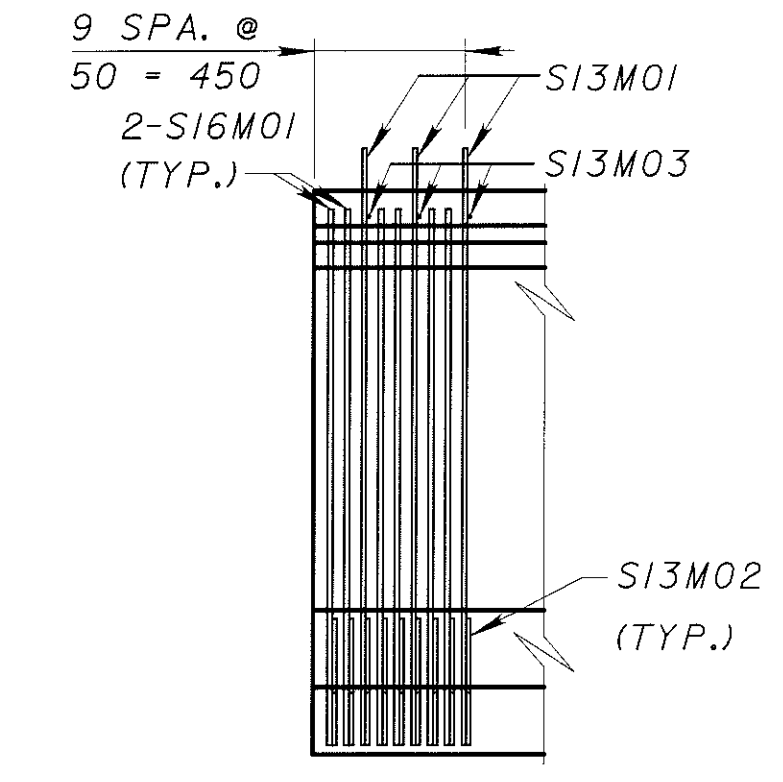
⊙ DENOTES STRANDS TO BE EXTENDED AT ALL BEAM ENDS

**MODIFIED AASHTO TYPE 4
BEAM MID-SPAN SECTION**

⊙ DENOTES STRANDS TO BE EXTENDED AT ALL BEAM ENDS



BENDING DIAGRAMS
(ALL DIMENSIONS ARE OUT-TO-OUT)

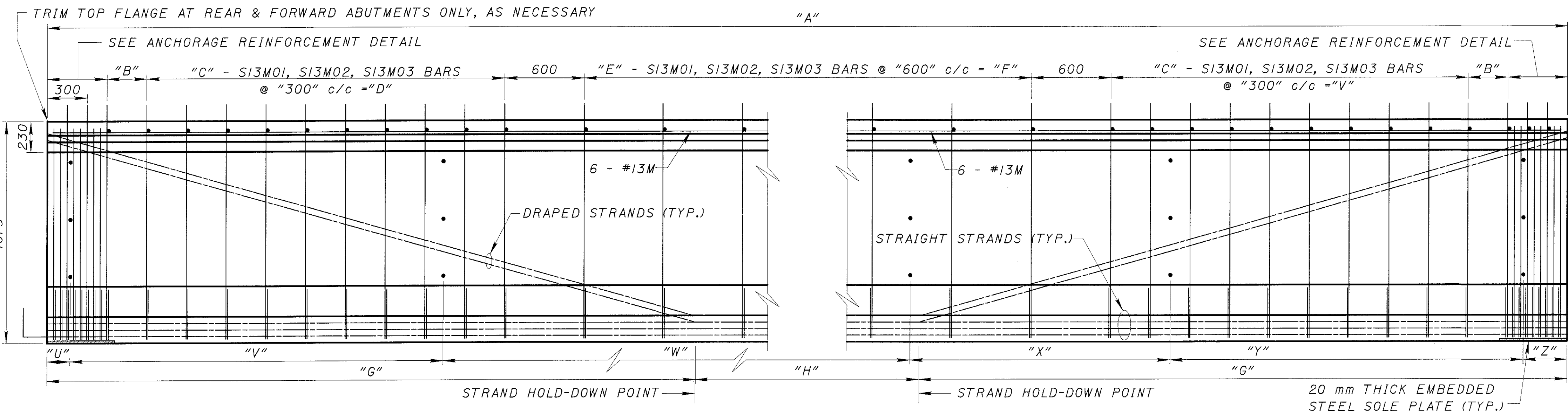


ANCHORAGE REINFORCEMENT DETAIL

BEAM DIMENSIONS

BEAM MARK	NO. REQ'D.	DIMENSIONS								SIDE	U	V	W	X	Y	Z	APPROXIMATE MASS (EACH)
		A	B	C	D	E	F	G	H								
B1	11	27260	285	29	8400	14	7800	9540	8180	NF	175	5970	6780	6780	7130	425	38100
										FF	500	7435*	6780*	6780*	5640*	125	
B2	1	27260	285	29	8400	14	7800	9540	8180	NF	175	5880	6810	6810	7160	425	38100
										FF	500	7435	6780	6780	5640	125	
B3	1	27490	95	29	8400	15	8400	9620	8250	NF	125	5945	6840	6840	7265	475	38500
										FF	475	7605	6810	6810	5665	125	
B4	3	27490	95	29	8400	15	8400	9620	8250	NF	125	5945	6840	6840	7265	475	38500
										FF	475	7650	6840	6840	5560	125	
B5	1	27490	95	29	8400	15	8400	9620	8250	NF	125	-	-	-	26890	475	38500
										FF	475	7650	6840	6840	5560	125	
B6	12	31240	170	31	9000	19	10800	14055	3130	NF	125	6800	7865	7865	8160	425	43700
										FF	425	8160*	7865*	7865*	6800*	125	
B7	1	31240	170	31	9000	19	10800	14055	3130	NF	125	6720	7890	7895	8185	425	43700
										FF	425	8160	7865	7865	6800	125	
B8	1	31450	275	31	9000	19	10800	14150	3150	NF	125	6760	7945	7945	8250	425	44000
										FF	425	8295	7890	7890	6825	125	
B9	1	31660	80	32	9300	19	10800	14245	3170	NF	125	6795	8000	8000	8315	425	44300
										FF	425	8355	7945	7950	6860	125	
B10	1	31880	190	32	9300	19	10800	14345	3190	NF	125	6835	8060	8055	8380	425	44600
										FF	425	8425	8000	8000	6905	125	
B11	1	32100	300	32	9300	19	10800	14445	3210	NF	125	-	-	-	31550	425	44900
										FF	425	8485	8060	8060	6945	125	
B12	17	31600	50	32	9300	19	10800	14220	3160	NF	125	6800**	7865**	7865**	8520**	425	44200
										FF	425	8155*	7865*	7865*	7165*	125	

SPAN	BEAM MARK	NUMBER OF STRANDS PER ROW										TOTAL STRANDS	CONCRETE STRENGTHS		SI3M01 BARS REQ'D.	SI3M02 BARS REQ'D.	SI3M03 BARS REQ'D.	SI6M01 BARS REQ'D.
		END					MIDSPAN						f'ci	f'c				
1	B1	11	8		3	11	11					22	34.5 Mpa	48.3 Mpa	78	90	78	24
1	B2	11	8		3	2	11	11	2			24	34.5 Mpa	48.3 Mpa	78	90	78	24
1	B3	11	8		3	2	11	11	2			24	34.5 Mpa	48.3 Mpa	79	91	79	24
1	B4	11	11		3	11	11	3				25	34.5 Mpa	48.3 Mpa	79	91	79	24
1	B5	11	8		3	11	11					22	34.5 Mpa	48.3 Mpa	79	91	79	24
2	B6	11	8	4	3	3	11	11	7			29	34.5 Mpa	48.3 Mpa	87	99	87	24
2	B7	11	8	6	3	3	11	11	9			31	34.5 Mpa	48.3 Mpa	87	99	87	24
2	B8	11	8	8	3	3	11	11	11			33	34.5 Mpa	48.3 Mpa	87	99	87	24
2	B9	11	8	8	3	3	11	11	11			33	34.5 Mpa	48.3 Mpa	89	101	89	24
2	B10	11	8	8	3	3	11	11	11			33	34.5 Mpa	48.3 Mpa	89	101	89	24
2	B11	11	8	6	3	3	11	11	9			31	34.5 Mpa	48.3 Mpa	89	101	89	24
3	B12	11	8	8	3	3	11	11	11			33	34.5 Mpa	48.3 Mpa	89	101	89	24



* EXCEPT BEAM 1
** EXCEPT BEAM 17

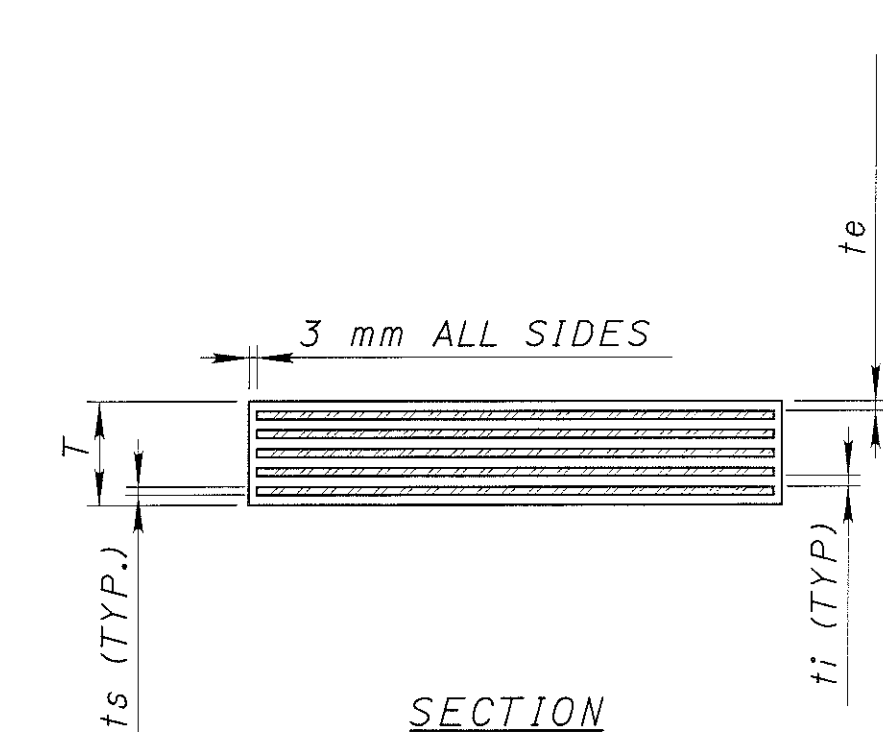
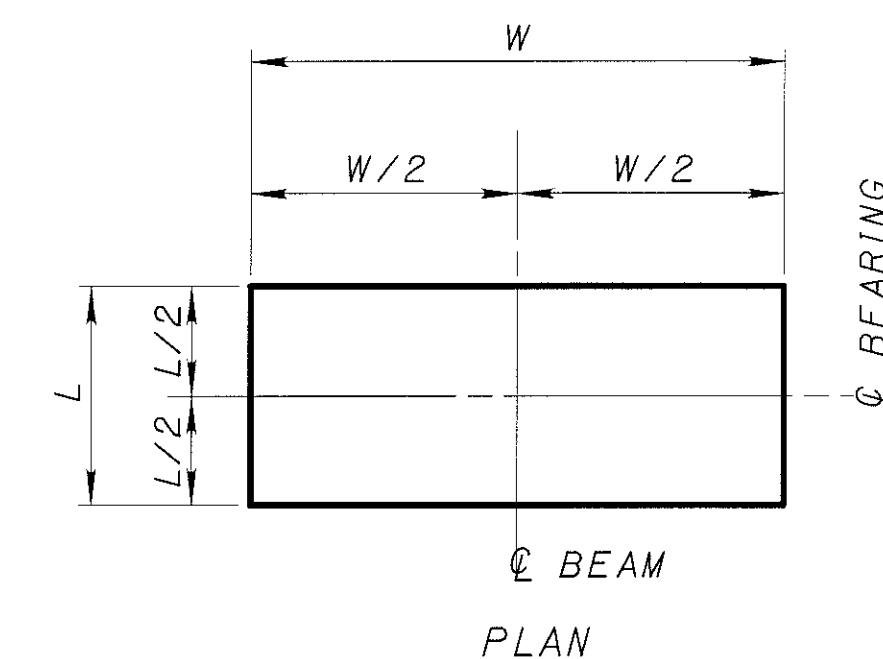
NOTES:
1. SEE BRIDGE STANDARD DRAWING PSID-1-99 SHEET 1 TO 8 FOR OTHER DETAILS AND NOTES NOT SHOWN.
2. SEE GENERAL NOTES FOR CONVERSION OF ENGLISH STANDARD BRIDGE DRAWING.

LEGEND
CL. = CLEAR
F.F. = FAR FACE
N.F. = NEAR FACE
TYP. = TYPICAL

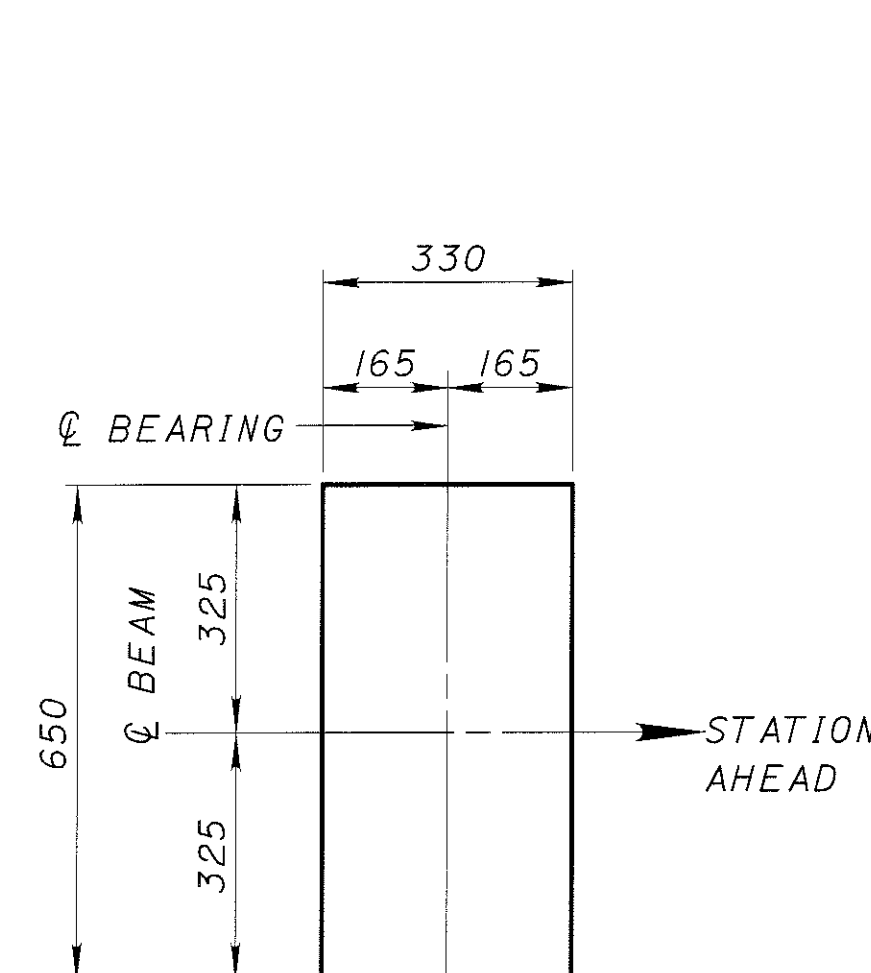
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BEARING DESIGN LOADS AND DIMENSIONS						
SPAN	1	1	2	2	3	3
LOCATION	R. ABUT.	PIER 1	PIER 1	PIER 2	PIER 2	F. ABUT.
TYPE (EXPANSION OR FIXED)	E	E	E	E	E	E
DESIGN DEAD LOAD (kN)	560	610	661	665	655	609
DESIGN LIVE LOAD (kN)	285	278	287	287	264	294
DESIGN TOTAL LOAD (kN)	845	888	948	952	919	903
WIDTH, W (mm)	600	600	600	600	600	600
LENGTH, L (mm)	330	300	300	300	300	330
THICKNESS, T (mm)	98	75	75	75	75	98
NUMBER OF EXTERNAL LAYERS, Ne	2	2	2	2	2	2
THICKNESS OF EXTERNAL LAYER, te (mm)	9.5	9	9	9	9	9.5
NUMBER OF INTERNAL LAYERS, Ni	5	4	4	4	4	5
THICKNESS OF INTERNAL LAYER, ti (mm)	13.5	12	12	12	12	13.5
NUMBER OF STEEL LAYERS, Ns	6	5	5	5	5	6
THICKNESS OF STEEL LAYERS, ts (mm)	1.9	1.9	1.9	1.9	1.9	1.9
LOAD PLATE THICKNESS, T1 (mm)	48	58	58	58	58	48
LOAD PLATE THICKNESS, T2 (mm)	38	50	50	50	50	38

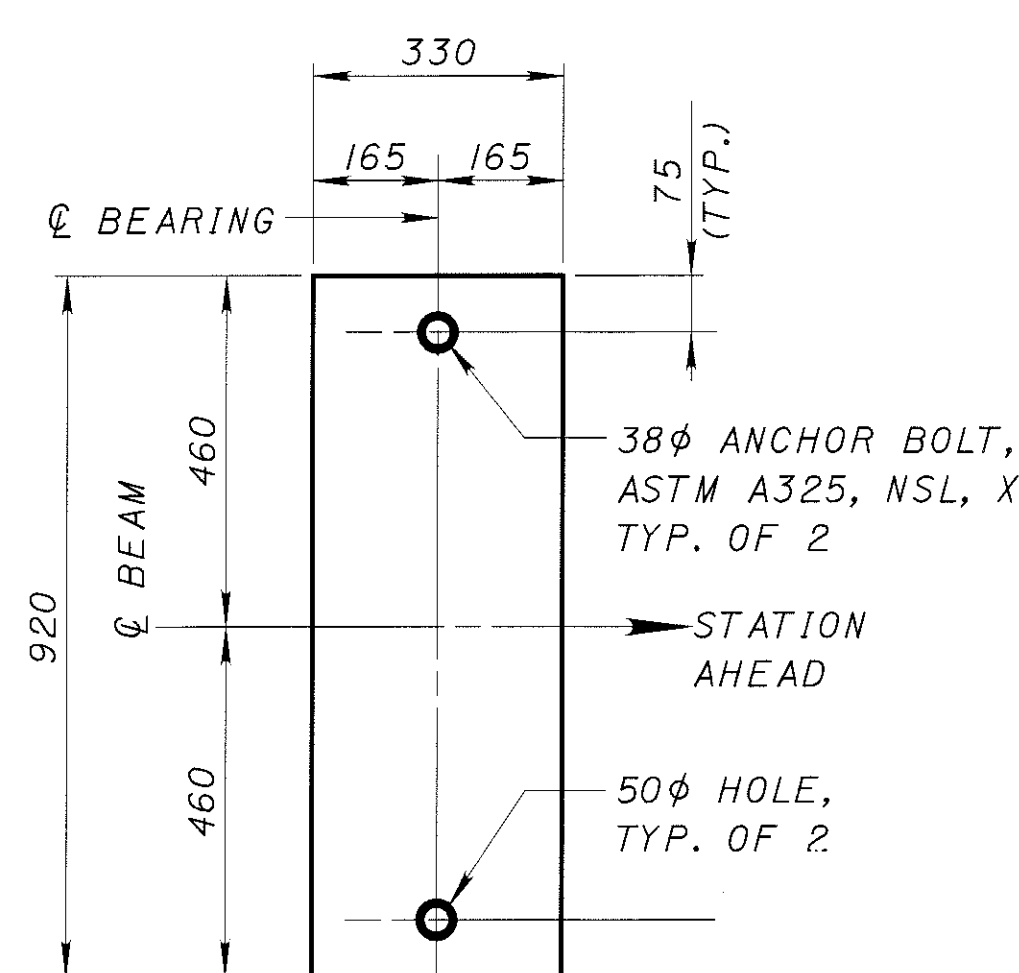
LOCATION	BEAM																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
REAR ABUTMENT	E	E	E	E	E	E	D	D	D	D	D	E	E	E	E	E	E
PIER 1	A	A	A	A	A	A	C	C	C	C	C	A	A	A	A	A	A
PIER 2	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	A
FORWARD ABUTMENT	E	E	E	E	E	E	D	D	D	D	D	E	E	E	E	E	E



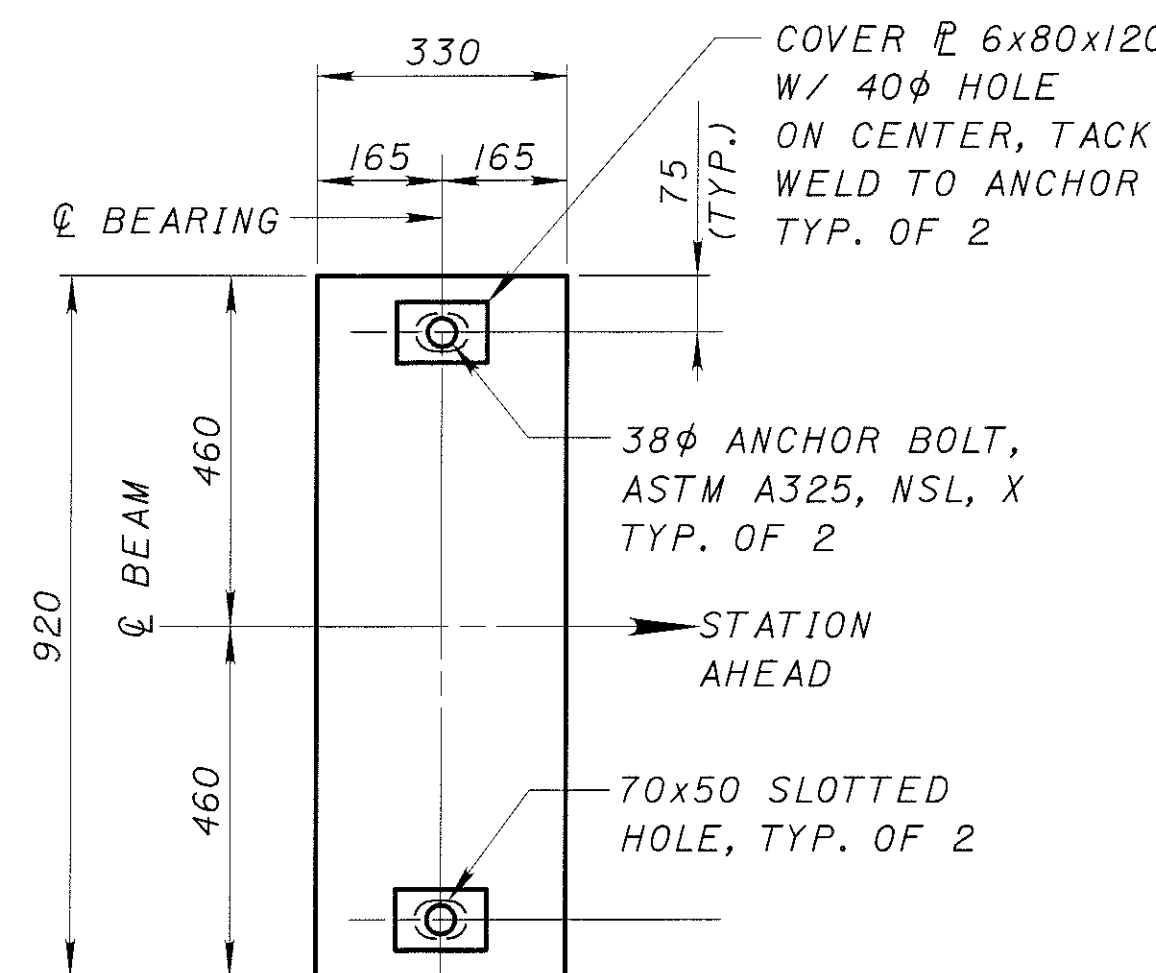
ELASTOMERIC BEARING PAD DETAILS



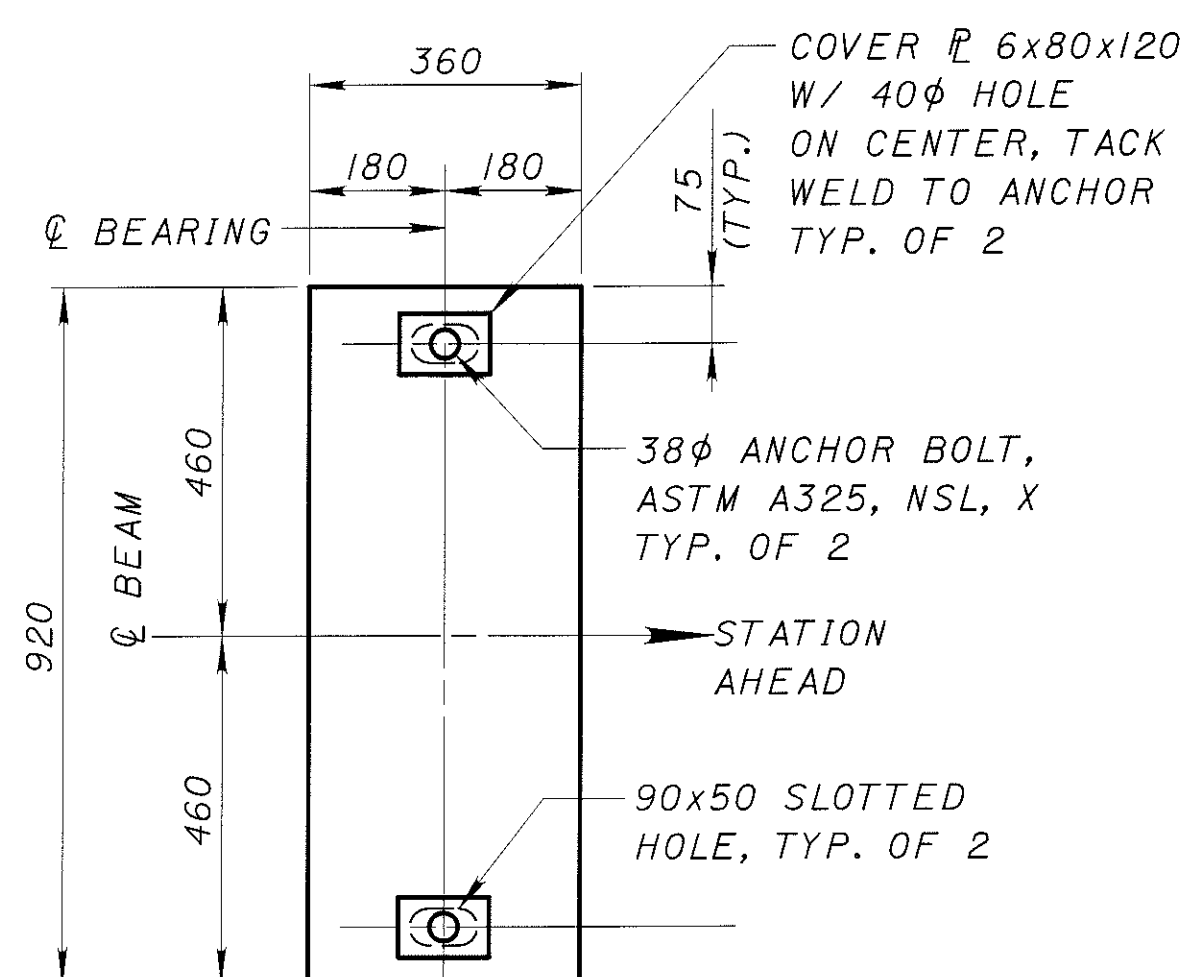
PLAN - PLATE A



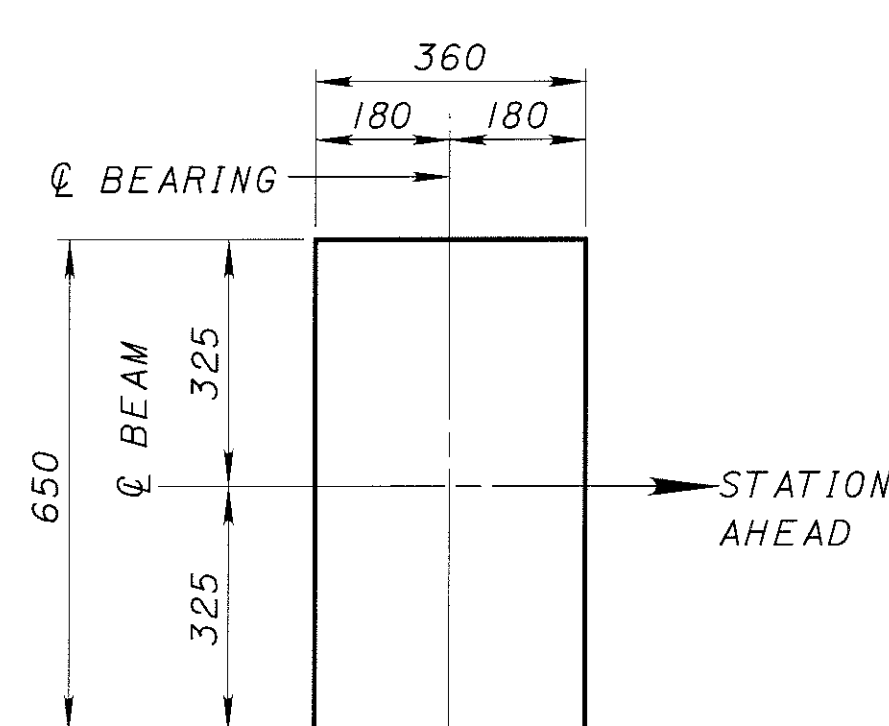
PLAN - PLATE B



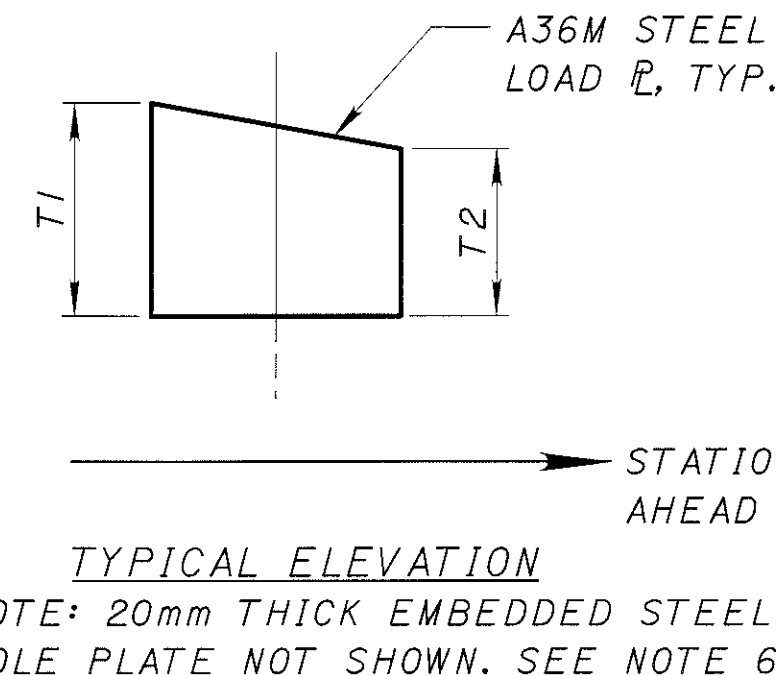
PLAN - PLATE C



PLAN - PLATE D



PLAN - PLATE E



TYPICAL ELEVATION
NOTE: 20mm THICK EMBEDDED STEEL SOLE PLATE NOT SHOWN. SEE NOTE 6.

BEVELED LOAD PLATE DETAILS

BEARING PAD NOTES:

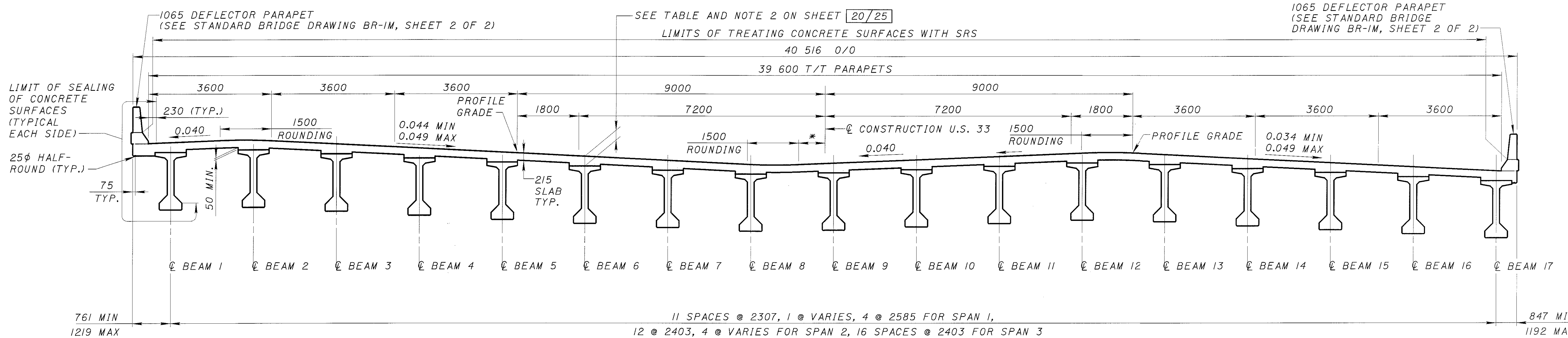
- ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED 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.
- BEARING REPOSITIONING: IF DECK CONCRETE IS PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 26°C OR LOWER THAN 4°C, AND THE BEARING SHEAR DEFLECTION EXCEEDS ONE-SIXTH OF THE BEARING HEIGHT AT 15°C+/-5°C: THE GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 15°C+/-5°C.
- BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, STEEL LOAD PLATES AND SHIMS. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AS MADE AS PER PLAN.
- WELDING OF THE LOAD PLATE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 150°C AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- STEEL LOAD PLATES TO BE A36M STEEL.
- FOR ADDITIONAL DETAILS & NOTES, SEE STANDARD DRAWING PSID-I-99, EXCEPT FIXED PIER DETAIL ON SHEET 4 OF 8.

DATE 02/02/01
REVIEWED JUN
DRAWN RTP
DESIGNED PHB
CHECKED CAX

STRUCTURE FILE NUMBER 5300584

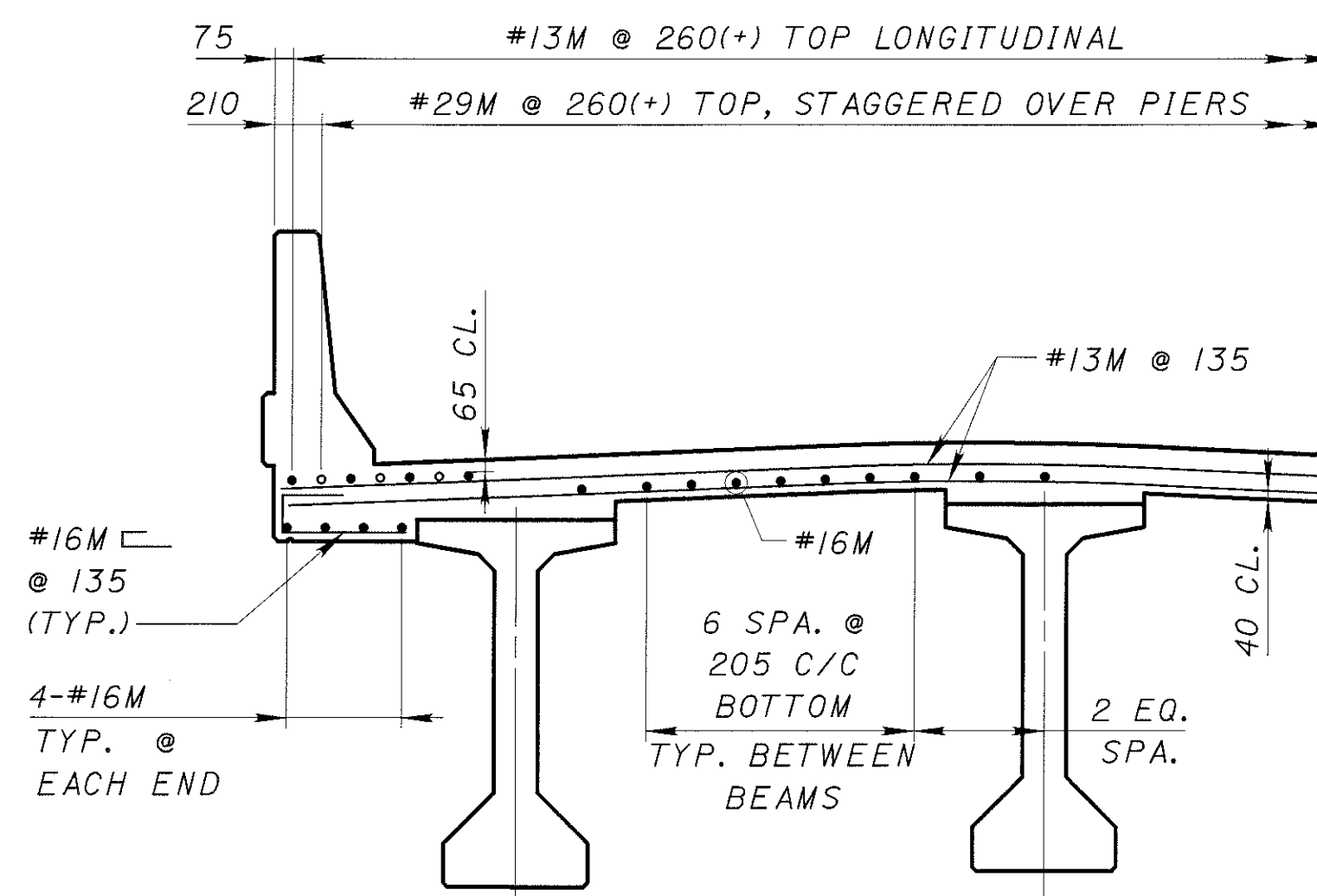
SUPERSTRUCTURE DETAILS
BRIDGE NO. MEG-33-05810
OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681

ATH-33-40.981



TYPICAL TRANSVERSE SECTION

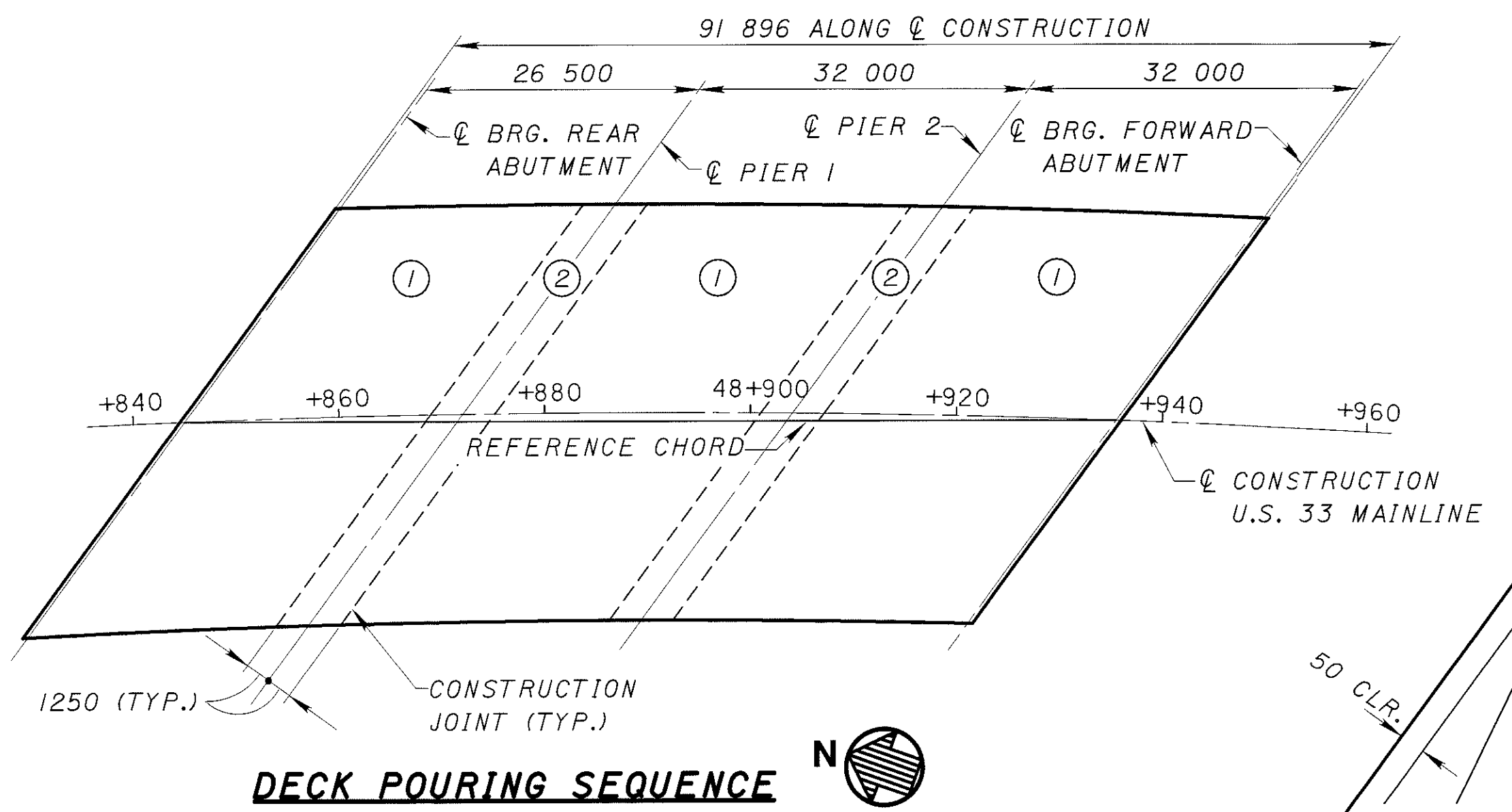
* VARIES SEE SCREED TABLE ON 22/25



TYPICAL REINFORCING PARTIAL SECTION

LEGEND

- ☉ = CENTERLINE
- C/C = CENTER TO CENTER
- CL. = CLEAR
- φ = DIAMETER
- EQ. = EQUAL
- MAX = MAXIMUM
- MIN = MINIMUM
- O/O = OUT TO OUT
- SPA. = SPACES
- T/T = TOE TO TOE
- TYP. = TYPICAL



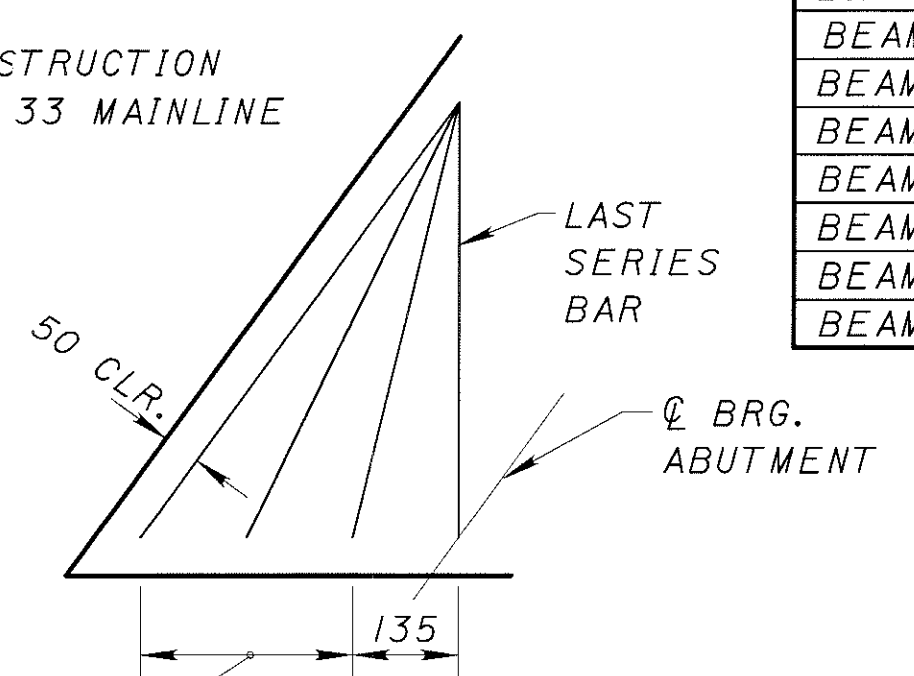
DECK POURING SEQUENCE

ANTICIPATED DECK THICKNESS (mm)

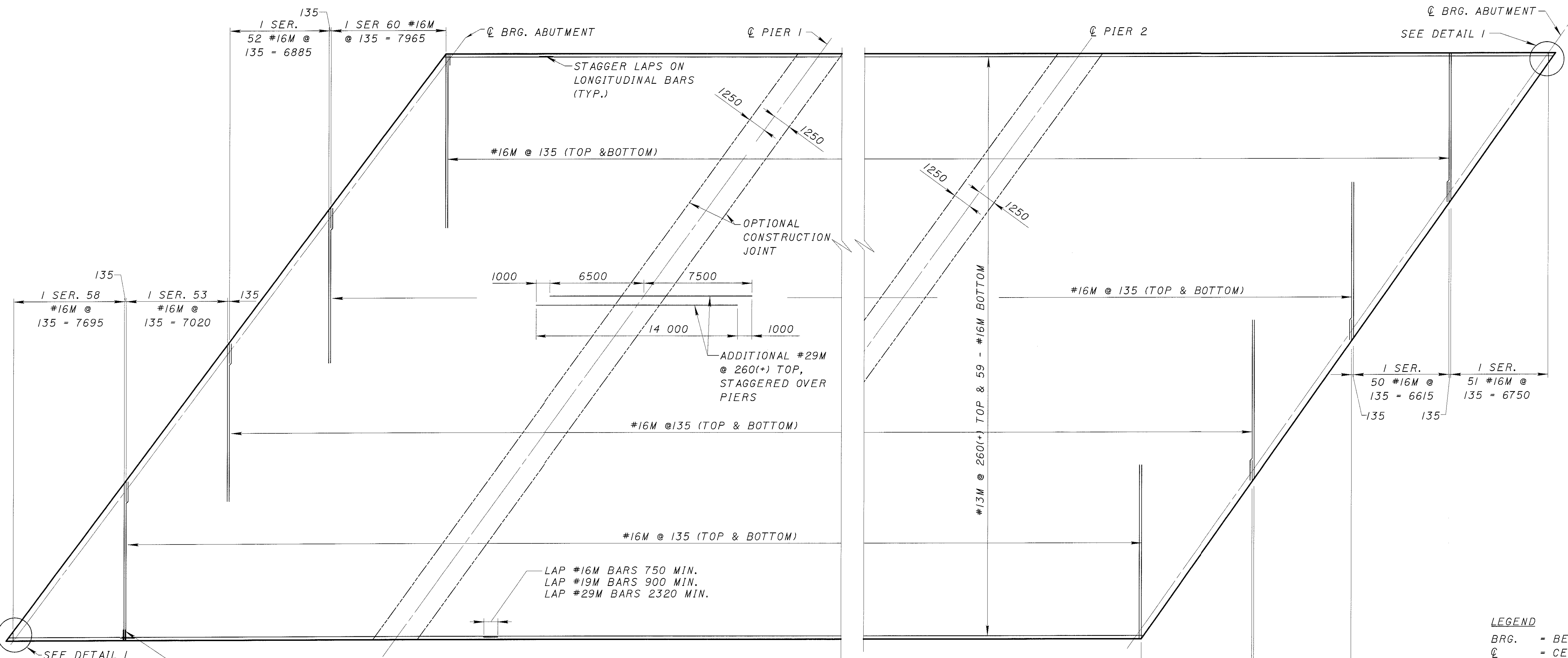
	①	③	⑤	⑦	⑨	⑪	⑬	⑮	⑰
BEAM 1	297	290	315	296	290	324	306	290	306
BEAM 2	297	290	318	300	290	329	311	290	311
BEAM 3	299	290	323	305	290	333	315	290	315
BEAM 4	299	290	324	305	290	333	315	290	315
BEAM 5	302	290	324	305	290	333	315	290	315
BEAM 6	307	290	324	305	290	333	315	290	315
BEAM 7	314	290	324	305	290	333	315	290	315
BEAM 8	323	290	324	305	290	334	315	290	315
BEAM 9	297	290	315	296	290	324	306	290	306
BEAM 10	294	290	314	296	290	324	306	290	306
BEAM 11	295	290	314	296	290	324	306	290	306
BEAM 12	297	290	314	296	290	324	306	290	306
BEAM 13	304	290	324	305	290	334	315	290	315
BEAM 14	307	290	330	311	290	334	315	290	315
BEAM 15	308	290	329	310	290	334	315	290	315
BEAM 16	307	290	322	313	290	334	315	290	315
BEAM 17	302	290	333	310	290	334	315	290	315

NOTES:

1. THE TOPPING THICKNESSES SHOWN ARE NOMINAL DIMENSIONS. THE PAY QUANTITY FOR DECK CONCRETE SHALL BE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE NOMINAL HAUNCH DEPTHS AT MID-SPAN AND AT THE BEAM BEARINGS. THE HAUNCH DEPTHS ARE THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. DEVIATION FROM THIS AVERAGE MAY OCCUR BECAUSE THE TOP OF THE BEAM MAY NOT HAVE THE CAMBER ANTICIPATED BY DESIGN DUE TO CONTRACTOR'S TIME OF ERECTION, MIX DESIGN, AND OTHER FABRICATION FACTORS. ONCE ALL BEAMS ARE SET IN THEIR FINAL POSITION, THE CONTRACTOR SHALL RECORD THE TOP OF BEAM ELEVATIONS AT EACH BEARING AND AT MID-SPAN. THE ACTUAL CAMBER FOR EACH MEMBER SHALL BE THE MEASURED ELEVATION AT MID-SPAN MINUS THE AVERAGE ELEVATION AT EACH BEARING. THE ACTUAL HAUNCH DEPTH AT MID-SPAN SHALL BE THE NOMINAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE THE ACTUAL AND ANTICIPATED CAMBER.



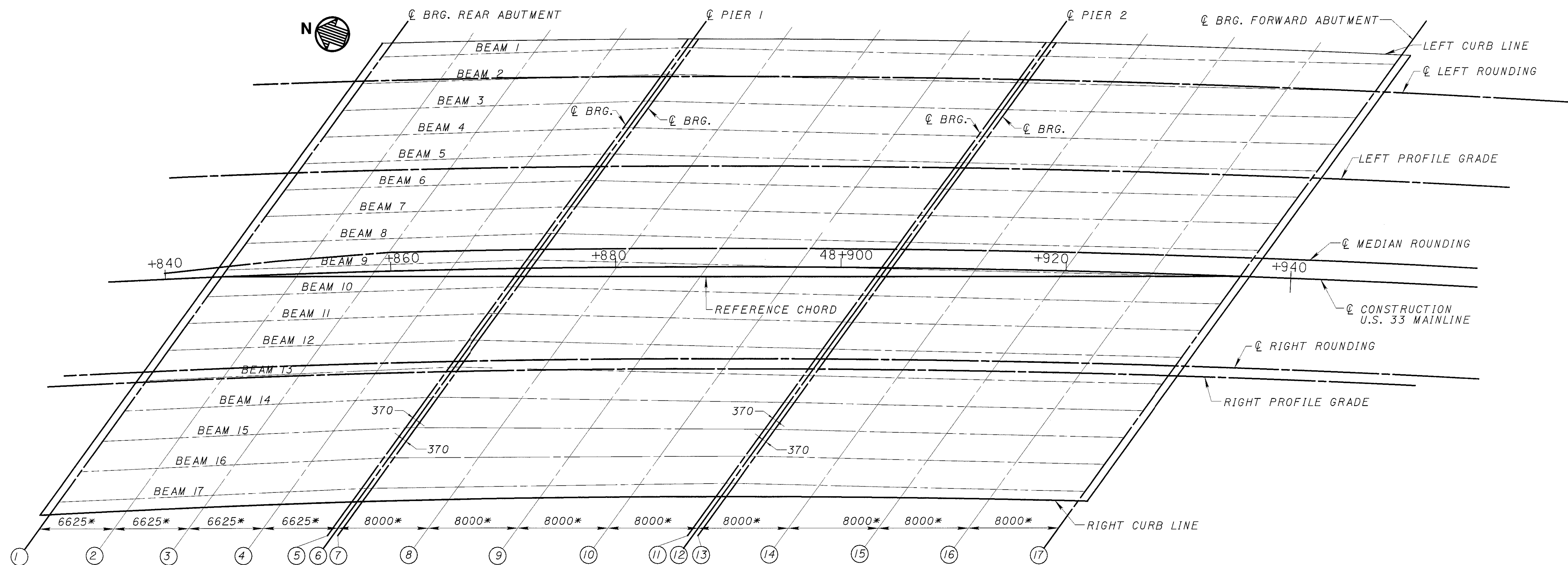
DETAIL I



PARTIAL DECK PLAN

LEGEND
BRG. = BEARING
 ϕ = CENTERLINE
MIN. = MINIMUM
SER. = SERIES
TYP. = TYPICAL

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SCREED PLAN

NOTE:

- SCREED LINES FOR THE THREE ROUNDINGS ARE LOCATED AT THE RESPECTIVE P.I. POINTS OF THE ROUNDINGS. THE SCREED ELEVATIONS HAVE BEEN ADJUSTED TO ACCOUNT FOR THE 1500mm ROUNDINGS.
- THE MEDIAN ROUNDING OFFSETS VARY AT SCREED LINE ① & ② DUE TO THE SUPERELEVATION TRANSITION.

NOTE:

1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.
2. - OFFSETS TO RIGHT OF Q CONSTRUCTION.

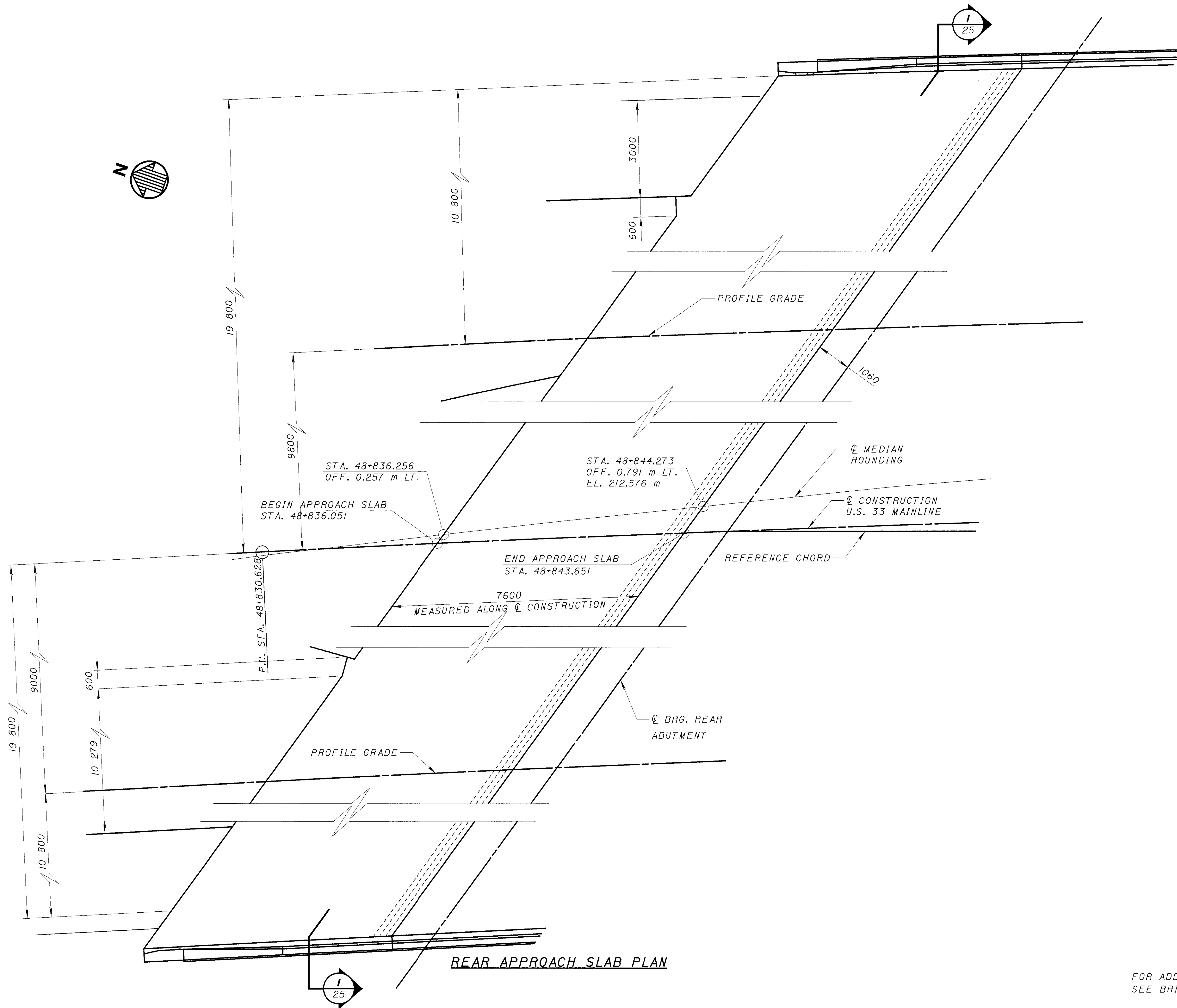


SCREED STATIONS, OFFSETS & ELEVATIONS

Table with columns: LOCATION, STA., OFFSET, ELEVATION, and stations 1 through 17. Rows include LEFT CURB LINE, BEAM 1-17, Q LEFT ROUNDING, BEAM 2-17, LEFT P.G., Q MEDIAN ROUNDING, BEAM 9, CL, BEAM 10-17, Q RIGHT ROUNDING, BEAM 13-17, RIGHT P.G., BEAM 14-17, and RIGHT CURB LINE.

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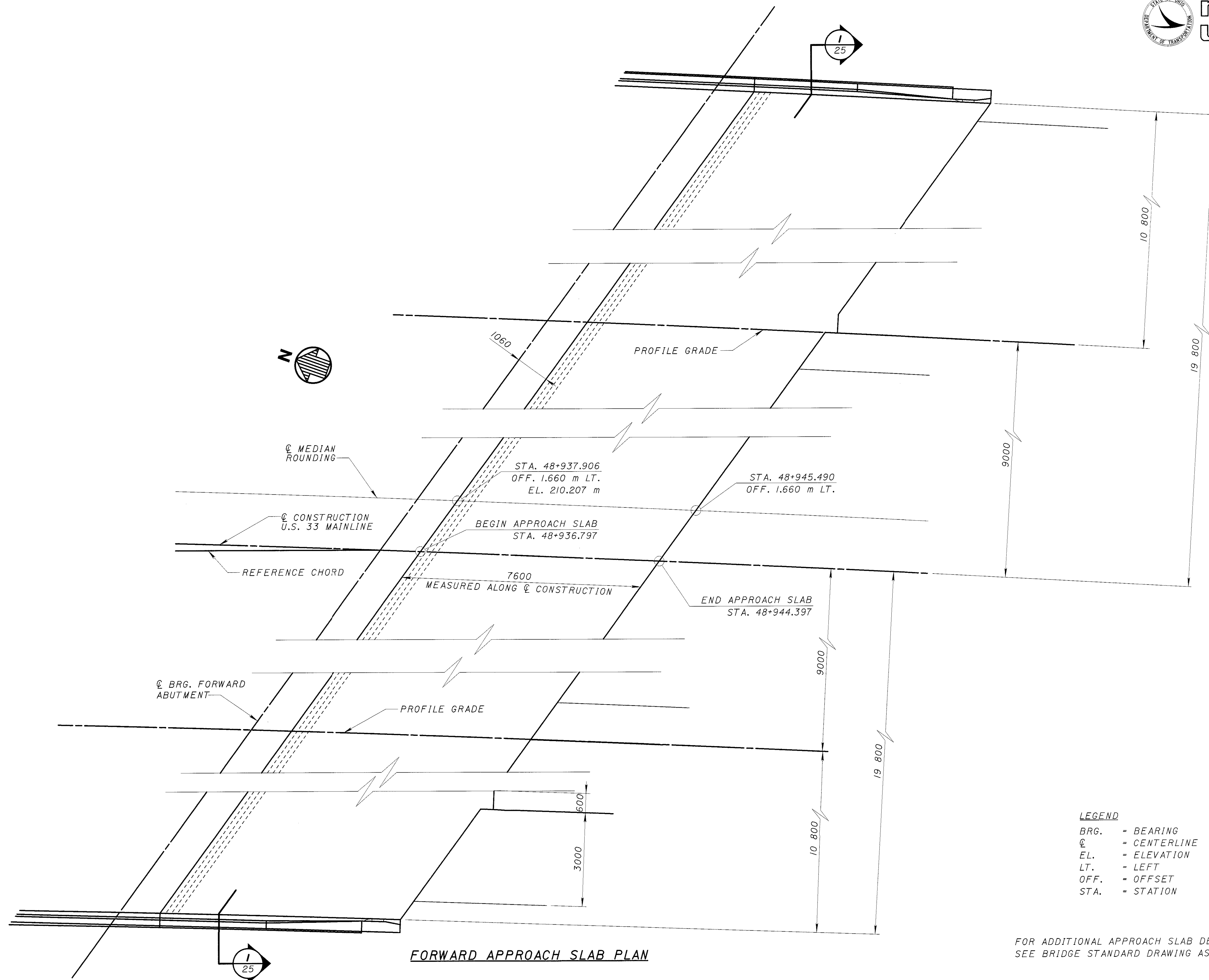
DLZ logo and project information: SUPERSTRUCTURE, SCREED ELEVATIONS, BRIDGE NO. MEG-33-05810, OVER TRIB. TO SHADE RIVER & FUTURE S.R. 681, AT H-33-40.991, 22/25, 946, 949



REAR APPROACH SLAB PLAN

- LEGEND**
- BRG. = BEARING
 - ☉ = CENTERLINE
 - EL. = ELEVATION
 - LT. = LEFT
 - OFF. = OFFSET
 - P.C. = POINT OF CURVATURE
 - STA. = STATION

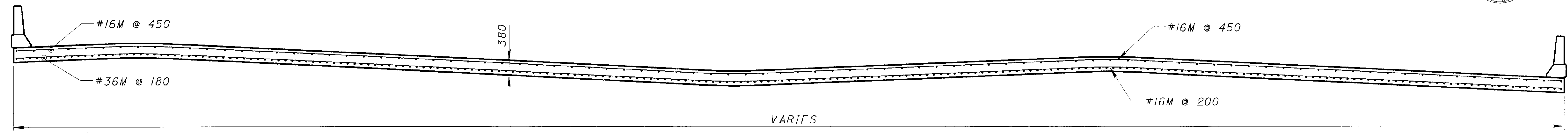
FOR ADDITIONAL APPROACH SLAB DETAILS,
SEE BRIDGE STANDARD DRAWING AS-1-81M.



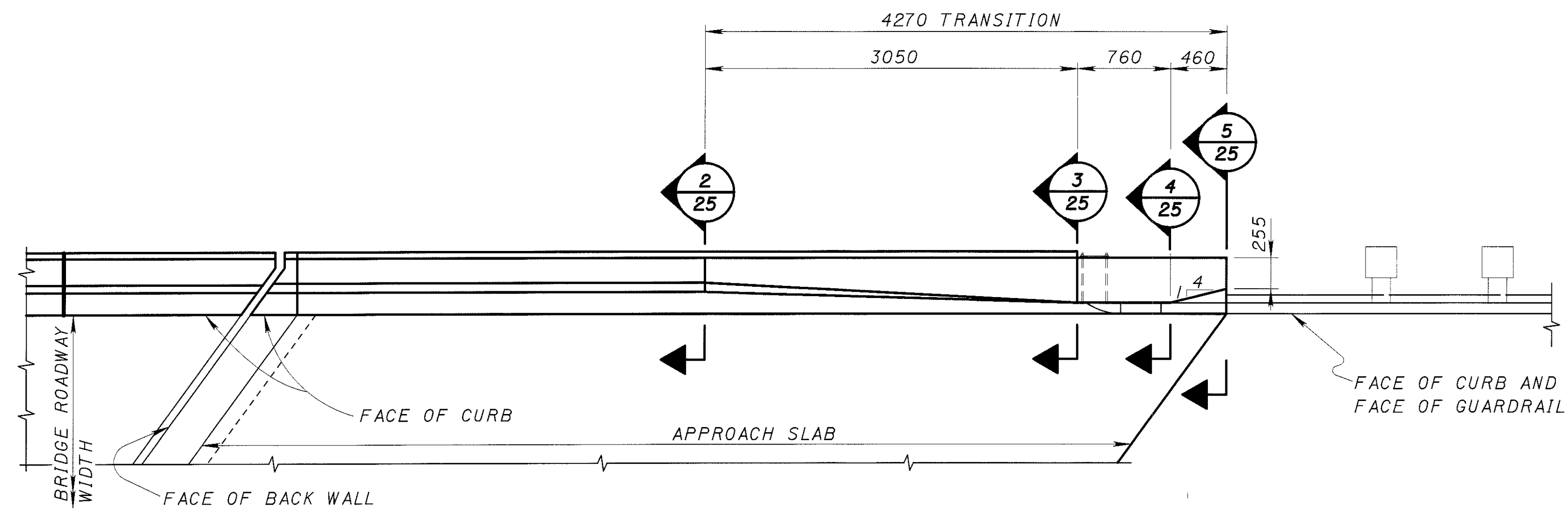
FORWARD APPROACH SLAB PLAN

LEGEND
BRG. = BEARING
Q = CENTERLINE
EL. = ELEVATION
LT. = LEFT
OFF. = OFFSET
STA. = STATION

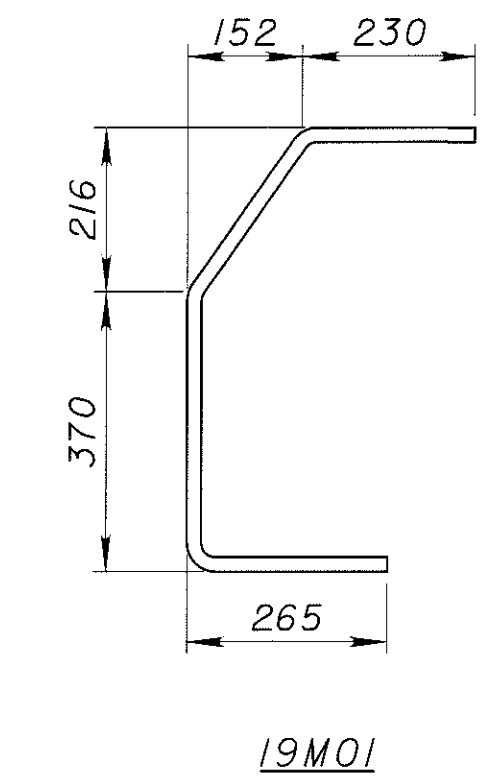
FOR ADDITIONAL APPROACH SLAB DETAILS,
SEE BRIDGE STANDARD DRAWING AS-1-81M.



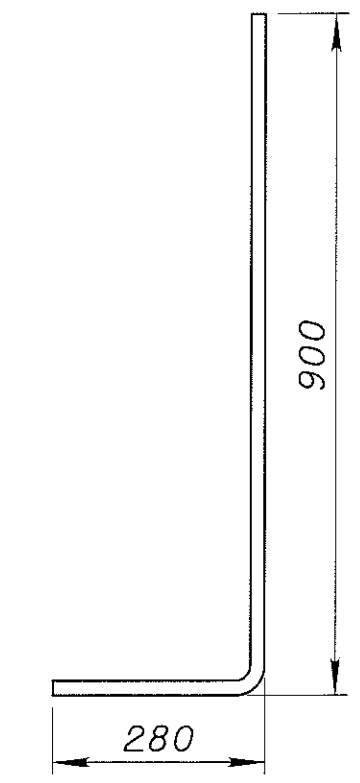
SECTION 1
25, 26



PART PLAN AT ABUTMENT



19M01

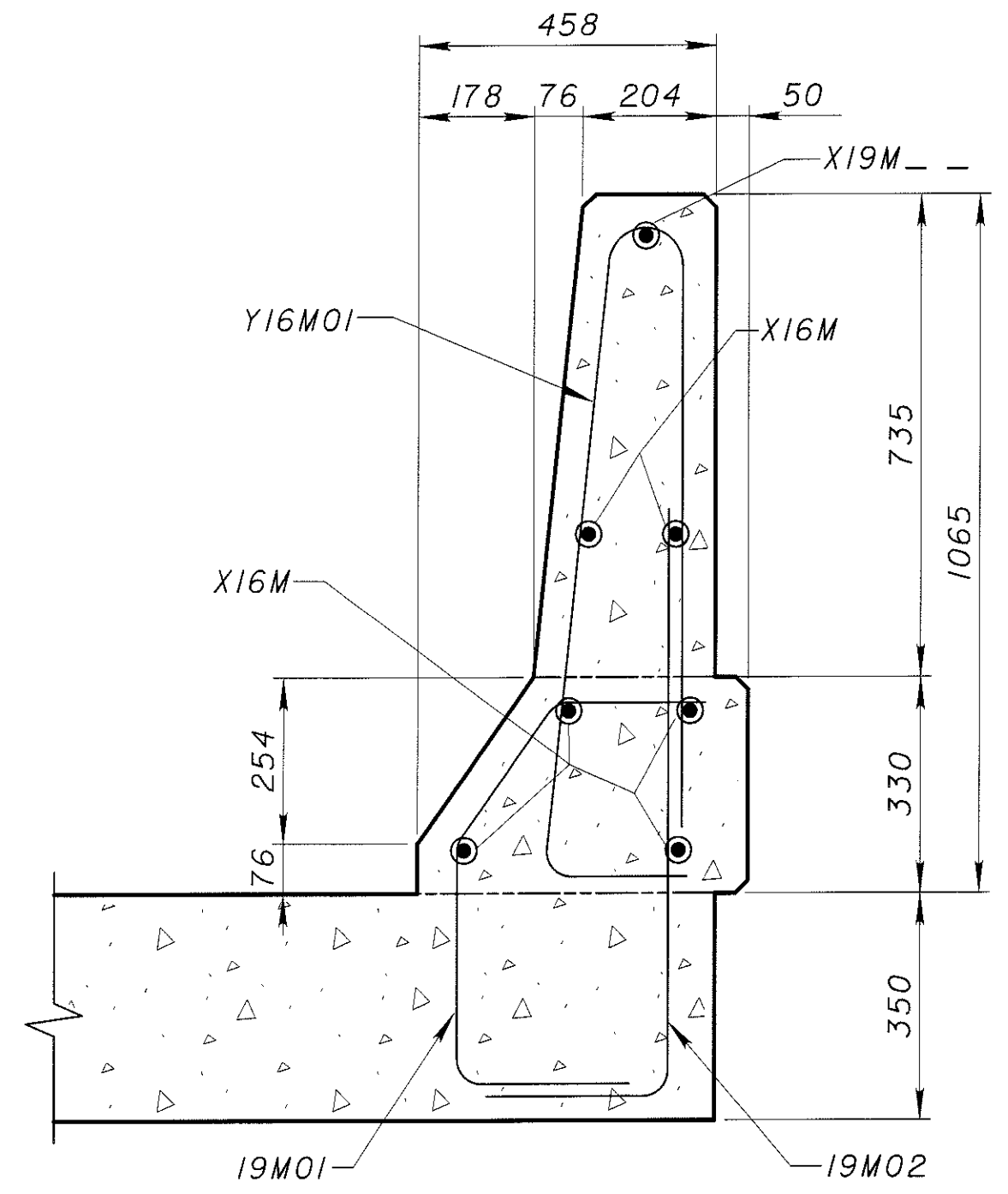


19M02

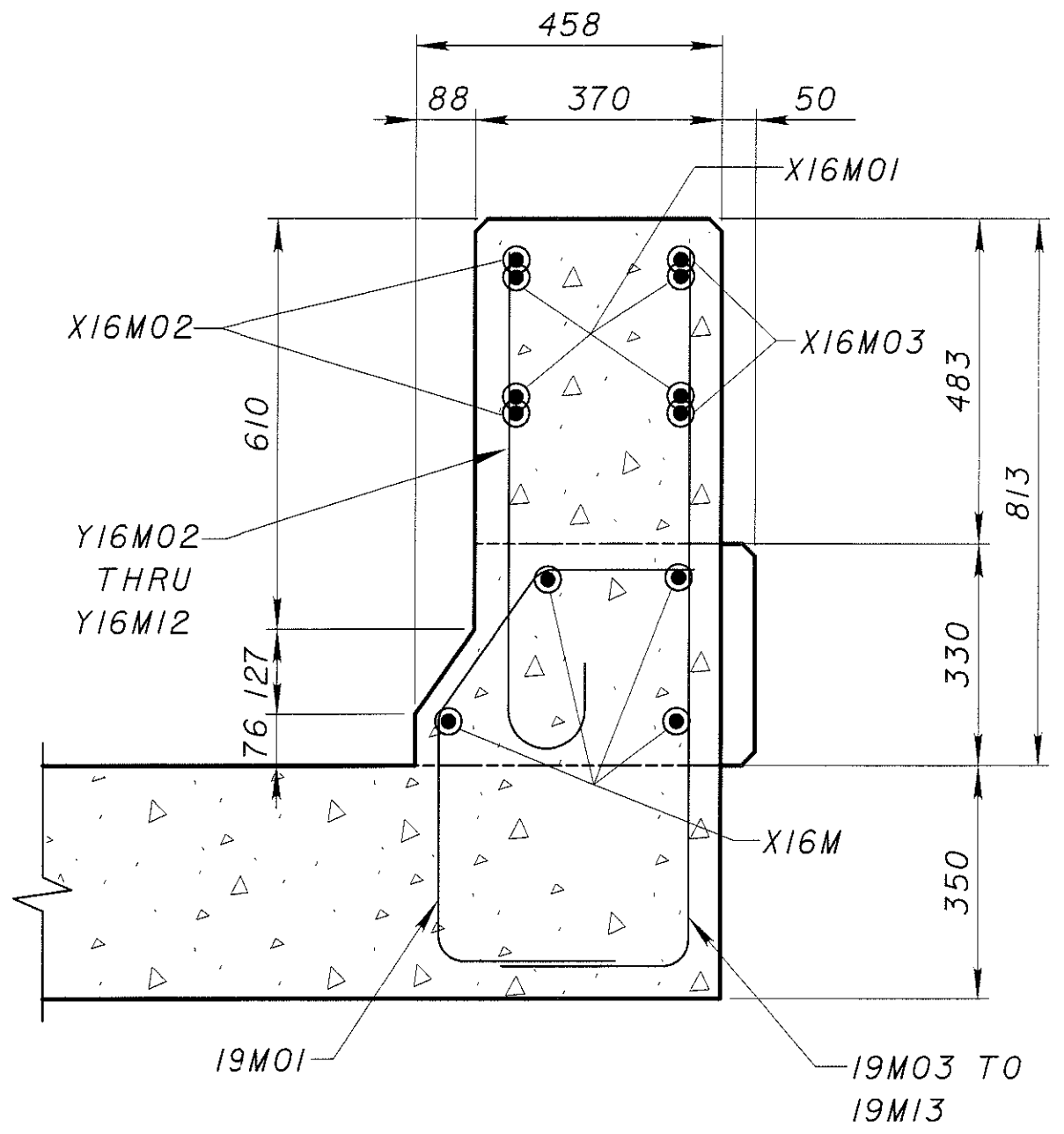


19M03 TO 19M13

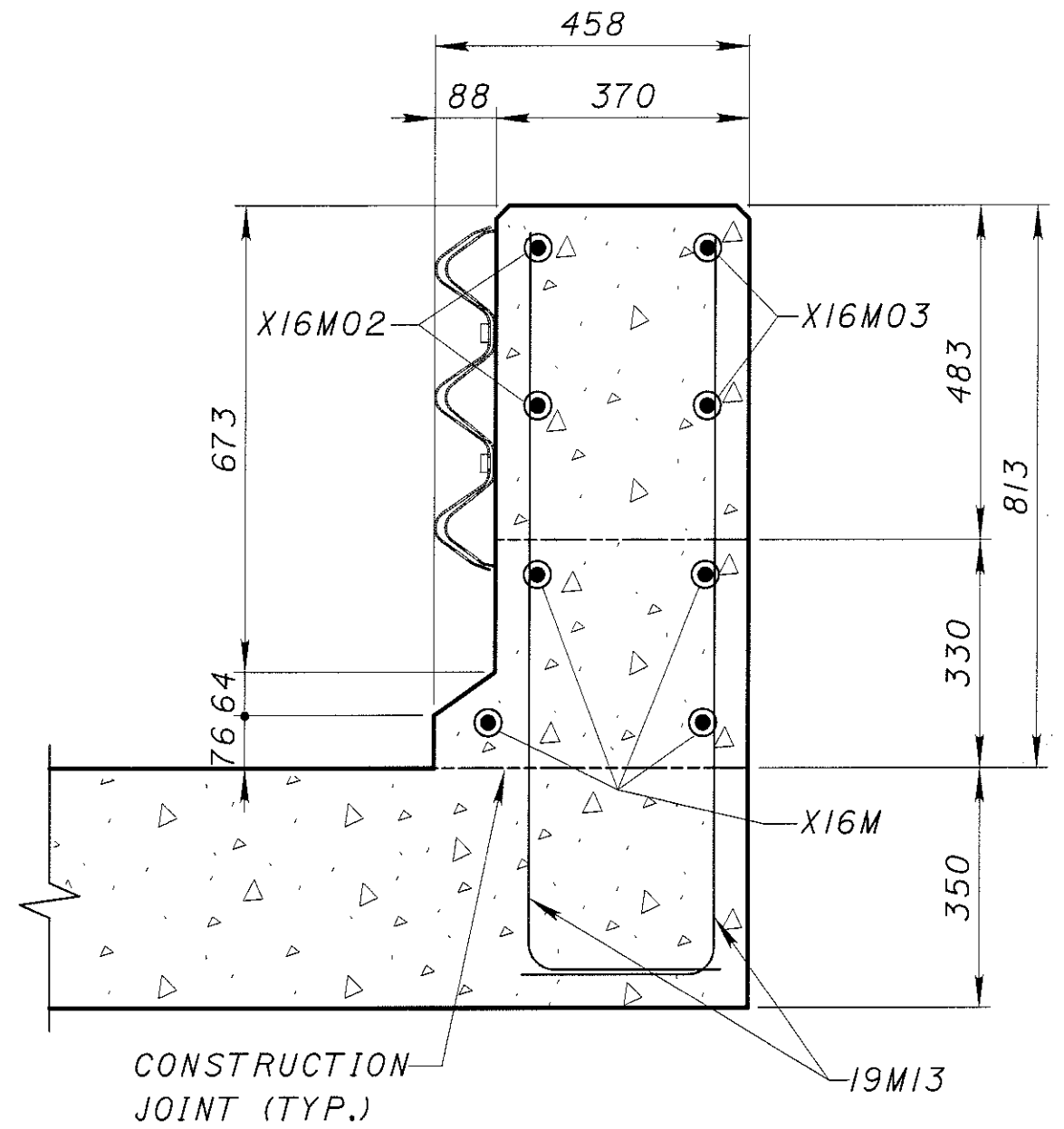
BENDING DIAGRAMS
(ALL DIMENSIONS ARE OUT-TO-OUT)



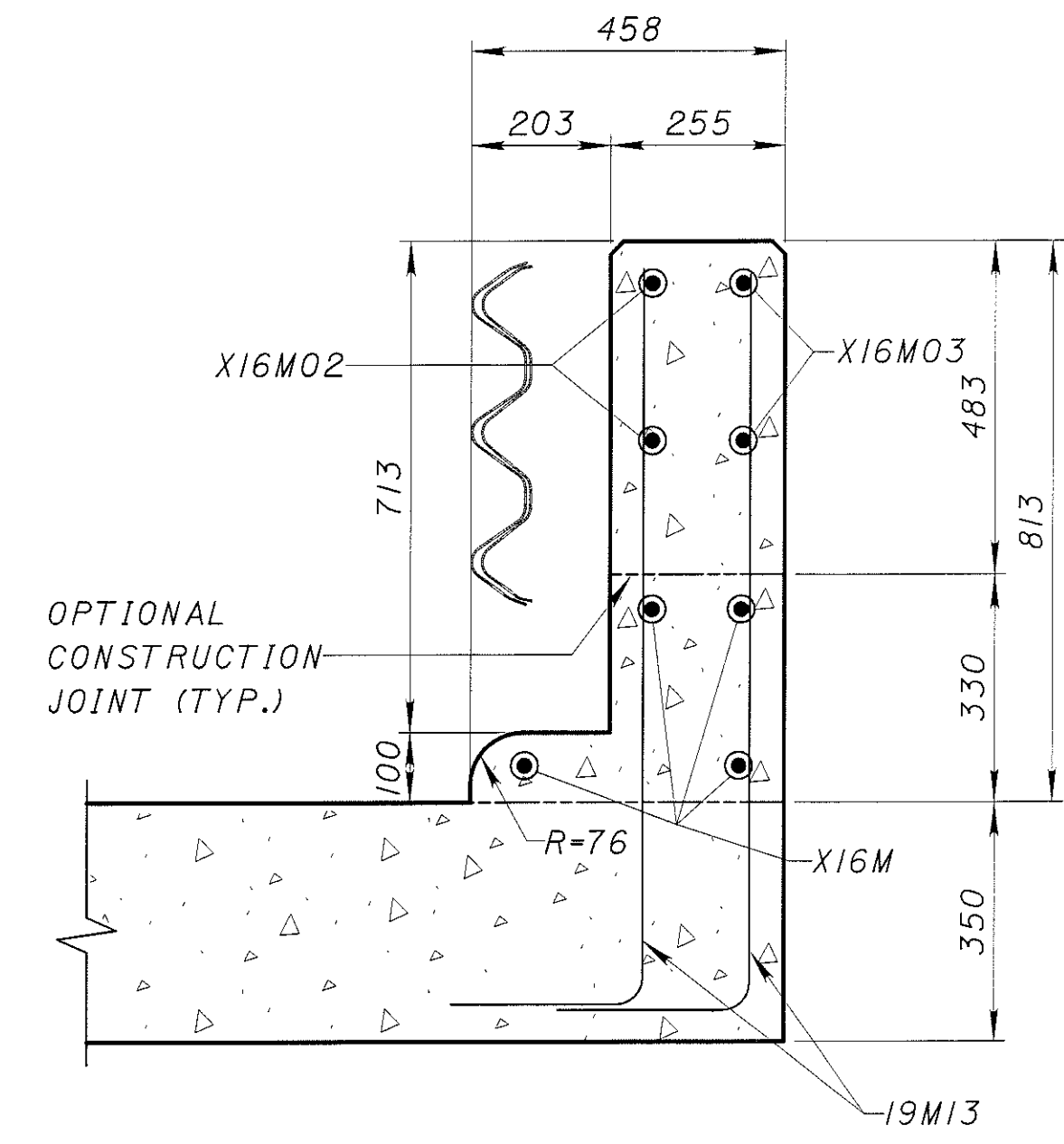
SECTION 2
25



SECTION 3
25



SECTION 4
25



SECTION 5
25

LEGEND
TYP. = TYPICAL

NOTES:
1. FOR ADDITIONAL RAILING AND RAILING TRANSITION DETAILS, SEE STANDARD DRAWING BR-1M, SHEET 2 OF 2.

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