

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

CAMPBELL COUNTY

I-275 WESTBOUND OVER THREE MILE ROAD STA. 1209 + 55.93

ESTIMATE OF QUANTITIES																										
BID ITEM CODE	08100	08104	08150	08151	08001	08020	02231	02998	08671	08046	08033	08094	03299	21532ED	02599	02555	08534	08551	08549	08504	02403					
BID ITEM	Concrete Class "A"	Concrete Class "AA"	Steel Reinforcement	Steel Reinforcement, Epoxy Coated	Structure Excavation, Common	Crushed Aggregate Slope Protection	Structure Granular Backfill	Masonry Coating	B33 X 48 Box Beam	Piles - Steel HP 12 x 53	Test Piles	12" Pile Points	Armored Edge for Concrete	Railing System Type 3	Type IV Geotextile Fabric	Concrete Class "B"	Concrete Overlay Latex	Machine Preparation	Blast Cleaning	Epoxy Sand Slurry	Remove Concrete Masonry					
UNIT	C.Y.	C.Y.	LBS.	LBS.	C.Y.	Tons	C.Y.	S.Y.	L.F.	L.F.	L.F.	Each	L.F.	L.F.	S.Y.	C.Y.	C.Y.	S.Y.	S.Y.	S.Y.	C.Y.					
END BENT 1	21.0	12.4	184	2899	60	50	16		275	55	6				45											
PIER 1	46.8		8491	24	120			75	325	25	14					1.8										
PIER 2	51.2		9215	24	110			80	225	15	16					3.6										
END BENT 2	25.2	12.3	184	3380		75	55	16	315	45	8				60									4.2		
Substructure Totals	144.2	24.7	18074	6327	230	135	105	187	1140	140	44				105	5.4									8.0	
Superstructure		101.1		31207				313	315.8					37	160.5		12.0	345	430	85	32.8					
BRIDGE TOTALS	144.2	125.8	18074	37534	230	135	105	500	315.8	1140	140	44	37	160.5	105	5.4	12.0	345	430	85	40.8					

INDEX OF SHEETS

Sheet No.	Description
S1	TITLE SHEET
S2	GENERAL NOTES
S3	LAYOUT
S4	TYPICAL SECTION
S5	SOUNDINGS
S6	PILE LAYOUT
S7, S8&S15	END BENT 1
S9-S12	PIERS
S13-S15	END BENT 2
S16	FRAMING PLAN
S17-S20	33X48 BOX BEAMS
S21-S28	SUPERSTRUCTURE
S29&S30	CONSTRUCTION ELEVATIONS

SPECIAL NOTES

6J Non-Epoxy Adhesives

SPECIAL PROVISIONS

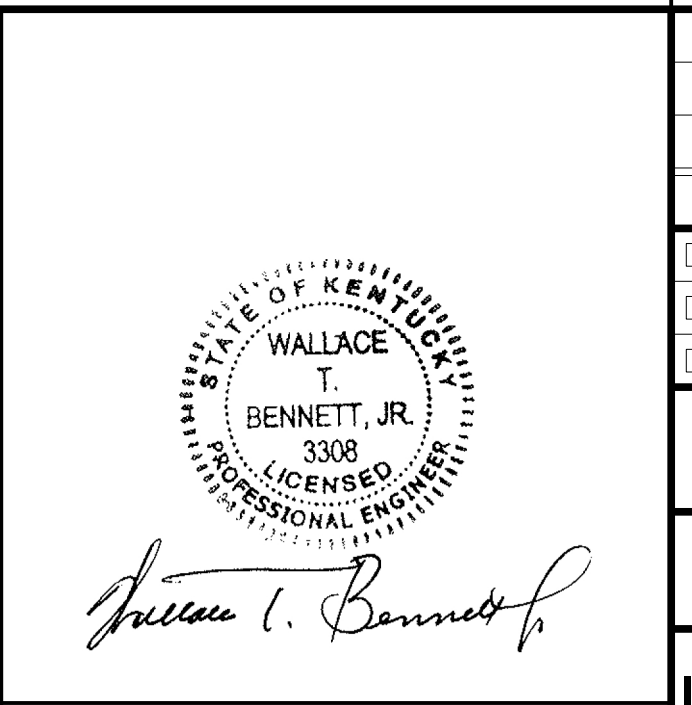
69 Embankment at Bridge End Bent Structures

STANDARD DRAWINGS

BBP-001-11	Elastomeric Bearing Pads for Prestressed Beams
BBP-002-04	Bearing Details
BBP-003-01	Elastomeric Bearing Pads for Box Beams
BGX-006-08	Stencils for Structures
BGX-011-04	Barrier Transition End Drainage
BGX-012-02	Geotechnical Legend
BHS-008	Railing System Type 3
BJE-001-11	Neoprene Expansion Dams and Armored Edges
BPS-003-08	HP12x53 Steel Pile
RGX-100-05	Treatment of Embankments at End Bents
RGX-105-06	Treatment of Embankments at End Bents

SPECIFICATIONS

2008 Standard Specifications for Road and Bridge Construction.
2010 AASHTO LRFD Bridge Design Specifications with Current Interims.



REVISION	DATE

DATE: 08-2011
DESIGNED BY: []
DETAILED BY: CH WTB

**Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS**
COUNTY
CAMPBELL
ROUTE: I-275 WB CROSSING: THREE MILE ROAD
TITLE SHEET

ITEM NUMBER
6-2021.00

PREPARED BY
WMB INC., ENGINEERS

SHEET NO. S1
DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\I-275\THREE MILE ROAD\FINAL\S26788_001.DGN
 LETTING DATE: []
 CONSTRUCTION PROJECT NO.: []
 USER: choll
 DATE PLOTTED: January 1, 2001
 E-SHEET NAME:
 MicroStation v8.11.7.443

GENERAL NOTES

SPECIFICATIONS

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO CURRENT EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

DESIGN LOAD AND METHOD

THIS BRIDGE IS DESIGNED FOR HL-93 LIVE LOAD, TRUCK OR TANDEM PLUS LANE LOAD, ALL INCREASED BY 25%. ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS AND ARE DESIGNED FOR A 15 PSF FUTURE SURFACE.

WIND LOAD

THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 100 MPH.

MATERIALS DESIGN SPECIFICATIONS

FOR CLASS "A" REINFORCED CONCRETE
F'C = 3,500 PSI
FOR CLASS "AA" REINFORCED CONCRETE
F'C = 4,000 PSI
FOR STRUCTURAL STEEL
FY = 36,000 PSI FOR A36 STEEL
FY = 50,000 PSI FOR PILING
FOR STEEL REINFORCEMENT
FY = 60,000 PSI
FOR PRESTRESSED BEAM CONCRETE
F'C = 8,000 PSI
F'S = 270,000 PSI

FOUNDATION DATA

SEE FOUNDATION LAYOUT SHEET. PILES ARE DESIGNED FOR LOADS AS SHOWN IN THE PILE RECORD.

CONCRETE

CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE. CLASS "A" CONCRETE IS TO BE USED IN THE PEDESTALS AND IN THE SUBSTRUCTURE BELOW THE TOP OF THE CAPS. PRESTRESSED BEAM CONCRETE SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS. CLEAR DISTANCE TO FACE OF CONCRETE IS 2", UNLESS OTHERWISE NOTED. ANY REINFORCING BARS DESIGNATED BY SUFFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 811.10 OF THE STANDARD SPECIFICATIONS. ANY REINFORCING BARS DESIGNATED BY SUFFIX (S) IN A BILL OF REINFORCEMENT SHALL BE CONSIDERED A STIRRUP FOR PURPOSES OF BEND DIAMETERS.

PILE DATA

PILES SHALL BE DRIVEN TO REFUSAL. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED. ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

ANY COMMONLY UTILIZED HAMMER ALLOWED BY THE DIVISION OF CONSTRUCTION WILL BE ADEQUATE TO DRIVE THE PILES TO REFUSAL AFTER PRE-DRILLED PILE INSTALLATION. THE CONTRACTOR SHALL SUBMIT THE PROPOSED PILE DRIVING SYSTEM TO THE DEPARTMENT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FIRST PILE. APPROVAL OF THE PILE DRIVING SYSTEM BY THE ENGINEER WILL BE SUBJECT TO SATISFACTORY FIELD PERFORMANCE OF THE PILE DRIVING PROCEDURES.

PILE POINTS

PILE POINTS ARE REQUIRED ON ALL PILES. THE PILE POINTS SHALL BE THE TYPE FOR KEYING INTO A SLOPING ROCK SURFACE. PILE POINTS SHALL BE IN ACCORDANCE WITH SUBSECTION 604.03.04(c) OF THE STANDARD SPECIFICATIONS.

TEMPORARY SUPPORTS

TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE BEAMS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF BEAM" ELEVATIONS.

SLOPE PROTECTION

USE 12" CRUSHED AGGREGATE SLOPE PROTECTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

DIMENSIONS

DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS.

SHOP DRAWINGS

SUBMIT SHOP DRAWINGS THAT ARE REQUIRED BY THE PLANS AND SPECIFICATIONS DIRECTLY TO THE CONSULTANT. IF CHANGES IN THE DESIGN PLANS ARE PROPOSED BY A FABRICATOR OR SUPPLIER, SUBMIT THOSE CHANGES TO THE CONSULTANT. SUBMIT ALL FINAL, APPROVED SHOP DRAWINGS TO THE DIVISION OF STRUCTURAL DESIGN.

MATERIALS

ASTM OR AASHTO SPECIFICATIONS AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED.

MATERIAL	A. S. T. M.	AASHTO
STRUCTURAL STEEL		M-183
SHEET LEAD AND PIG LEAD	B29-79	
STEEL REINFORCEMENT, GRADE 60	A-615	
STEEL PIPE	A-500	

SLAB POURING SEQUENCE

THE SLAB POURING SEQUENCE SHALL NOT BE CHANGED WITHOUT THE WRITTEN PERMISSION OF THE DESIGNER.

BEVELED EDGES

BEVEL ALL EXPOSED EDGES $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

ON-SITE INSPECTION

EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS SO THAT WORK CAN BE EXPEDITIOUSLY PERFORMED AFTER A CONTRACT IS AWARDED. SUBMISSION OF A BID WILL BE CONSIDERED EVIDENCE OF THIS INSPECTION HAVING BEEN MADE. ANY CLAIMS RESULTING FROM SITE CONDITIONS WILL NOT BE HONORED BY THE DEPARTMENT OF HIGHWAYS.

COMPLETION OF STRUCTURE

THE CONTRACTOR IS REQUIRED TO COMPLETE THE STRUCTURE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. MATERIAL, LABOR OR CONSTRUCTION OPERATIONS, NOT OTHERWISE SPECIFIED, ARE TO BE INCLUDED IN THE BID ITEM MOST APPROPRIATE TO THE WORK INVOLVED. THIS MAY INCLUDE COFFERDAMS, SHORING, EXCAVATIONS, BACKFILLING, REMOVAL OF ALL OR PARTS OF EXISTING STRUCTURES, PHASE CONSTRUCTION, INCIDENTAL MATERIALS, LABOR, OR ANYTHING ELSE REQUIRED TO COMPLETE THE STRUCTURE.

CONSTRUCTION IDENTIFICATION

THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

COFFERDAMS

COFFERDAMS MAY BE NECESSARY FOR CONSTRUCTION OF PIERS. THE COST OF ANY COFFERDAM SHALL BE INCIDENTAL TO COST OF STRUCTURE EXCAVATION, COMMON.

ARMORED EDGE

STEEL MATERIAL SHOULD BE NEW, COMMERCIAL GRADE STEEL SUITABLE FOR WELDING. ACCEPTANCE WILL BE BASED ON VISUAL INSPECTION BY THE ENGINEER. STUD SHEAR CONNECTORS SHALL CONFORM TO ASTM A108, GRADE 1015. TECHNIQUES AND WELDING PROCEDURE SHALL COMPLY WITH CURRENT JOINT SPECIFICATION ANSI/ AASHTO/ AWS D1.5 BRIDGE WELDING CODE. CONTRARY TO THE SPECIFICATIONS, ALL METAL SURFACES SHALL HAVE ONE SHOP COAT OF ORGANIC ZINC PRIMER APPLIED PRIOR TO SHIPPING THE STEEL FROM THE PLANT. NO FIELD COATING IS REQUIRED.

SPIRAL COLUMN TIES

SPLICES FOR SPIRALS WHERE DESIRED BY THE CONTRACTOR SHALL BE MADE WITH A MINIMUM OF ONE AND ONE-HALF TURNS OF SPIRAL. NO ADDITIONAL PAYMENT WILL BE MADE FOR THESE SPLICES, AND THE COST WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE DEVELOPED-LENGTH OF SPIRAL SHOWN ON THE PLANS. SPIRAL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF SUBSECTION 811.02.01 OF THE SPECIFICATIONS.

ENSURE SPIRAL REINFORCEMENT IS GRADE 60 DEFORMED OR PLAIN REINFORCEMENT. USE A MINIMUM OF ONE AND ONE-HALF TURNS OF THE SPIRAL FOR SPLICES. THE LENGTH SHOWN IN THE BILL OF REINFORCEMENT IS THE LENGTH FROM THE TOP OF FOOTING TO THE BOTTOM LAYER OF CAP REINFORCEMENT. PROVIDE ONE AND ONE-HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT. PROVIDE, FOR EACH COIL, FOUR CHANNEL, TEE, OR ANGLE SPACERS, WEIGHING APPROXIMATELY 0.8 POUNDS PER LINEAR FOOT. SPACING THEM EQUALLY ALONG THE INSIDE PERIPHERY OF THE COIL. INCLUDE THE COST OF SPLICES AND SPACERS IN THE BID FOR STEEL REINFORCEMENT.

ELASTOMERIC BEARING PADS

ELASTOMERIC BEARING PADS SHALL CONFORM TO THE DIMENSIONS SHOWN IN THESE PLANS AND SHALL CONFORM TO THE REQUIREMENTS OF DIVISION II, SECTION 18 OF THE AASHTO SPECIFICATIONS. THE ELASTOMER COMPOUND SHALL BE LOW TEMPERATURE GRADE 3 WITH A DUROMETER HARDNESS OF 50. BEARING PADS ARE DESIGNED ACCORDING TO DIVISION I, ARTICLE 14.6 OF THE AASHTO SPECIFICATIONS. TESTING IN ACCORDANCE WITH DIVISION II, ARTICLE 18.7 REQUIRED. SHOP DRAWINGS ARE REQUIRED FOR ALL BEARING PADS. PAYMENT FOR BEARING PADS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PC BOX BEAMS.

CONTRARY TO AASHTO SPECIFICATIONS DIVISION II SECTION 18.4.5. THE LOW ELASTOMER MATERIAL SHALL BE VIRGIN NEOPRENE (POLYCHLOROPRENE) NATURAL RUBBER (POLYISOPRENE) WILL NOT BE ALLOWED.

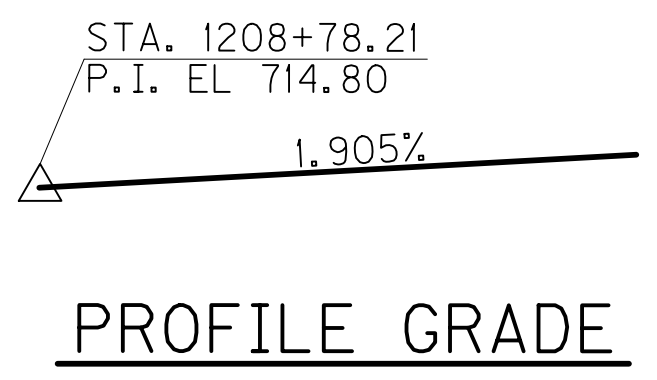
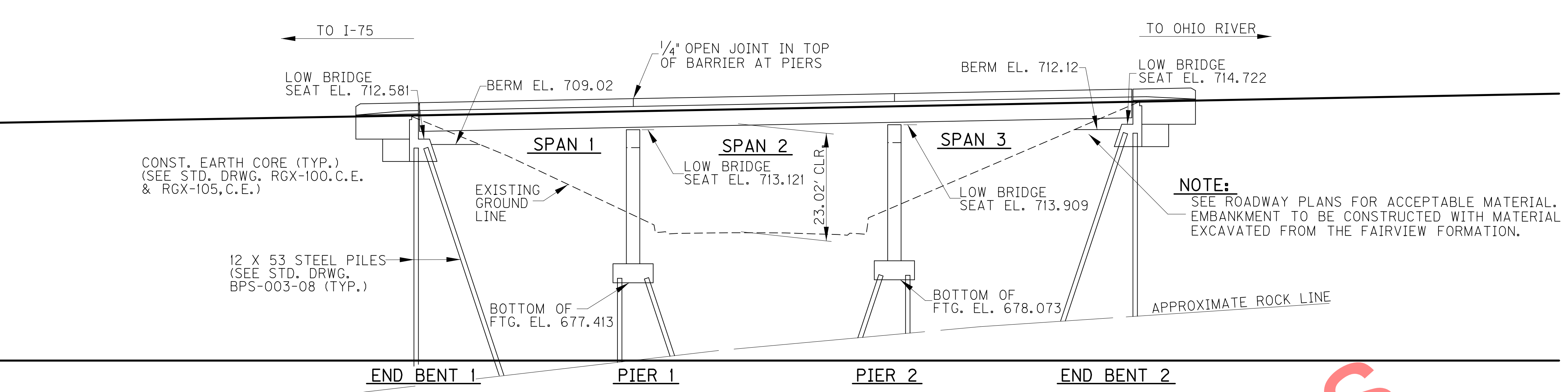
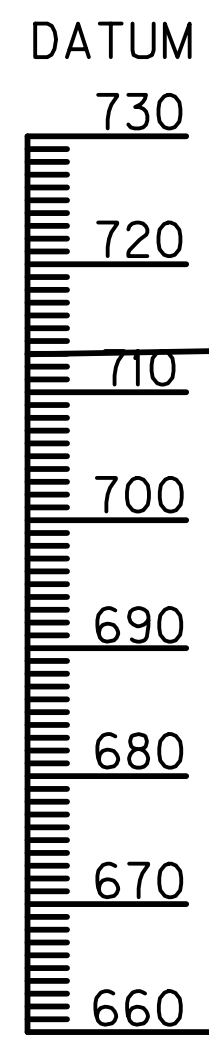
FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_002.DGN

USER: ch01
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

MicroStation v8.11.7.443

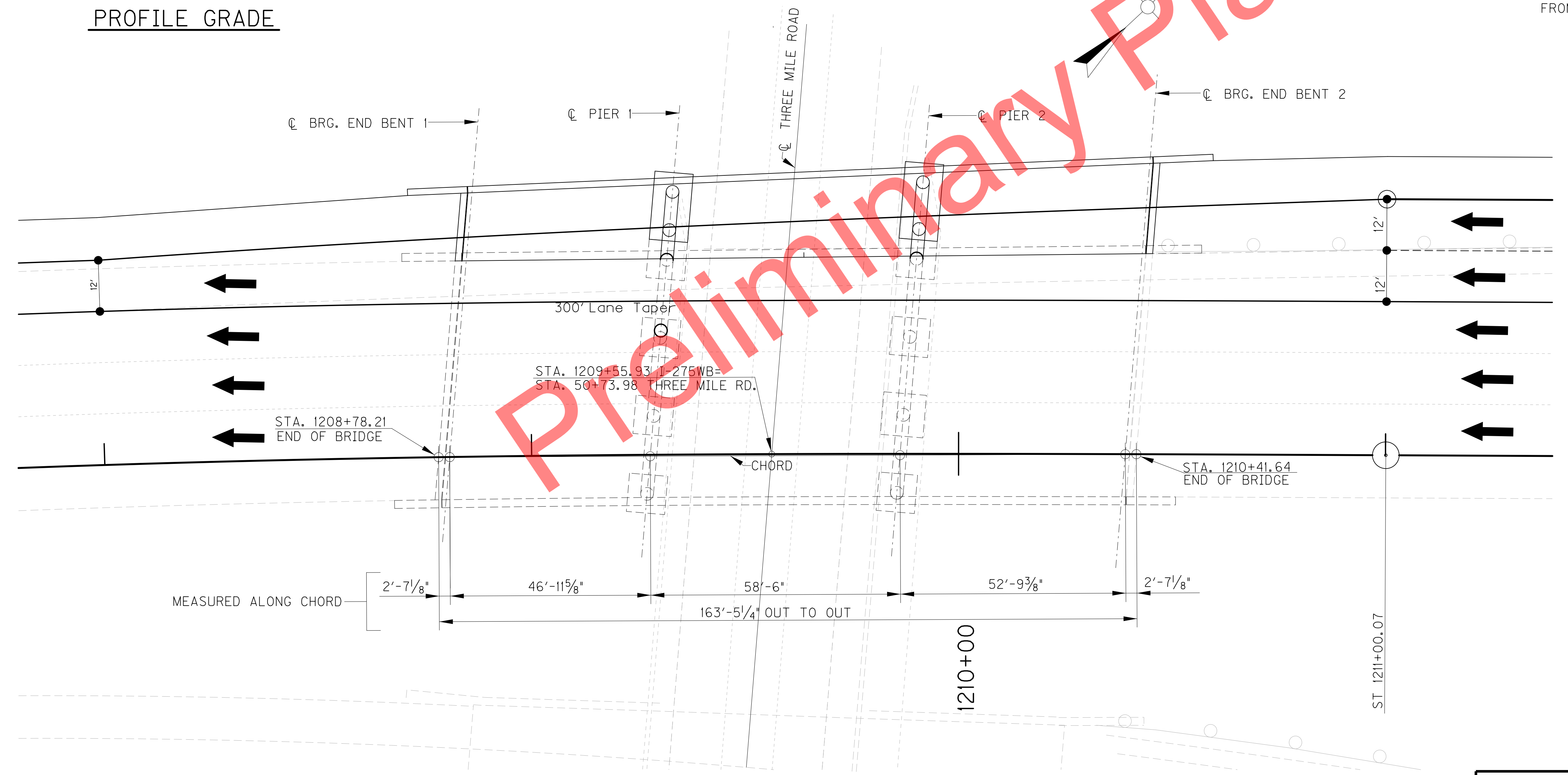
REVISION		DATE	
DATE: 08-2011			CHECKED BY
DESIGNED BY: CH			WTB
DETAILED BY: CH			WTB
Commonwealth of Kentucky			
DEPARTMENT OF HIGHWAYS			
COUNTY			
CAMPBELL			
ROUTE	CROSSING		
I-275 WB	THREE MILE ROAD		
GENERAL NOTES			
ITEM NUMBER		PREPARED BY	SHEET NO.
6-2021.00		WMB INC., ENGINEERS	S2
DRAWING NO.			26788



ELEVATION
 CONST. 33 X 48 BOX BEAM SPANS
 HL93 LOADING, 5°00'00" SKEW RT.

NOTE:
 SEE ROADWAY PLANS FOR ACCEPTABLE MATERIAL.
 EMBANKMENT TO BE CONSTRUCTED WITH MATERIAL
 EXCAVATED FROM THE FAIRVIEW FORMATION.

NOTE
 EXISTING ROADWAY CURBS AND PAVEMENT ARE TO BE PROTECTED
 FROM ANY DAMAGE DURING CONSTRUCTION OF THIS PROJECT.



PLAN

Preliminary Plans

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_003.DGN
 USER: choll
 DATE PLOTTED: January 1, 2001
 E-SHEET NAME: S002GN
 MicroStation v8.11.7.443

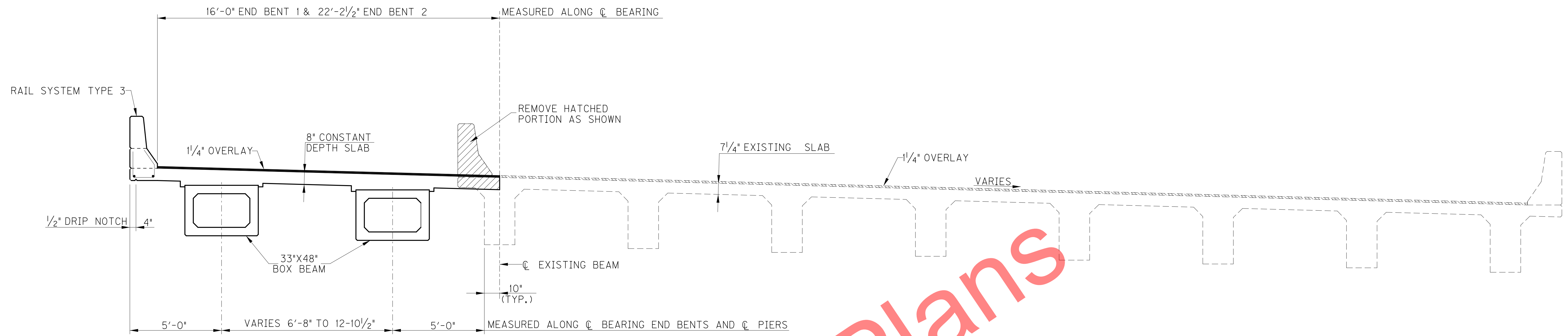
REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: CH	WTB	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
LAYOUT		
PREPARED BY		
WMB INC., ENGINEERS		
ITEM NUMBER	SHEET NO.	DRAWING NO.
6-2021.00	S3	26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_004.DGN

USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



TYPICAL SECTION

Preliminary Plans

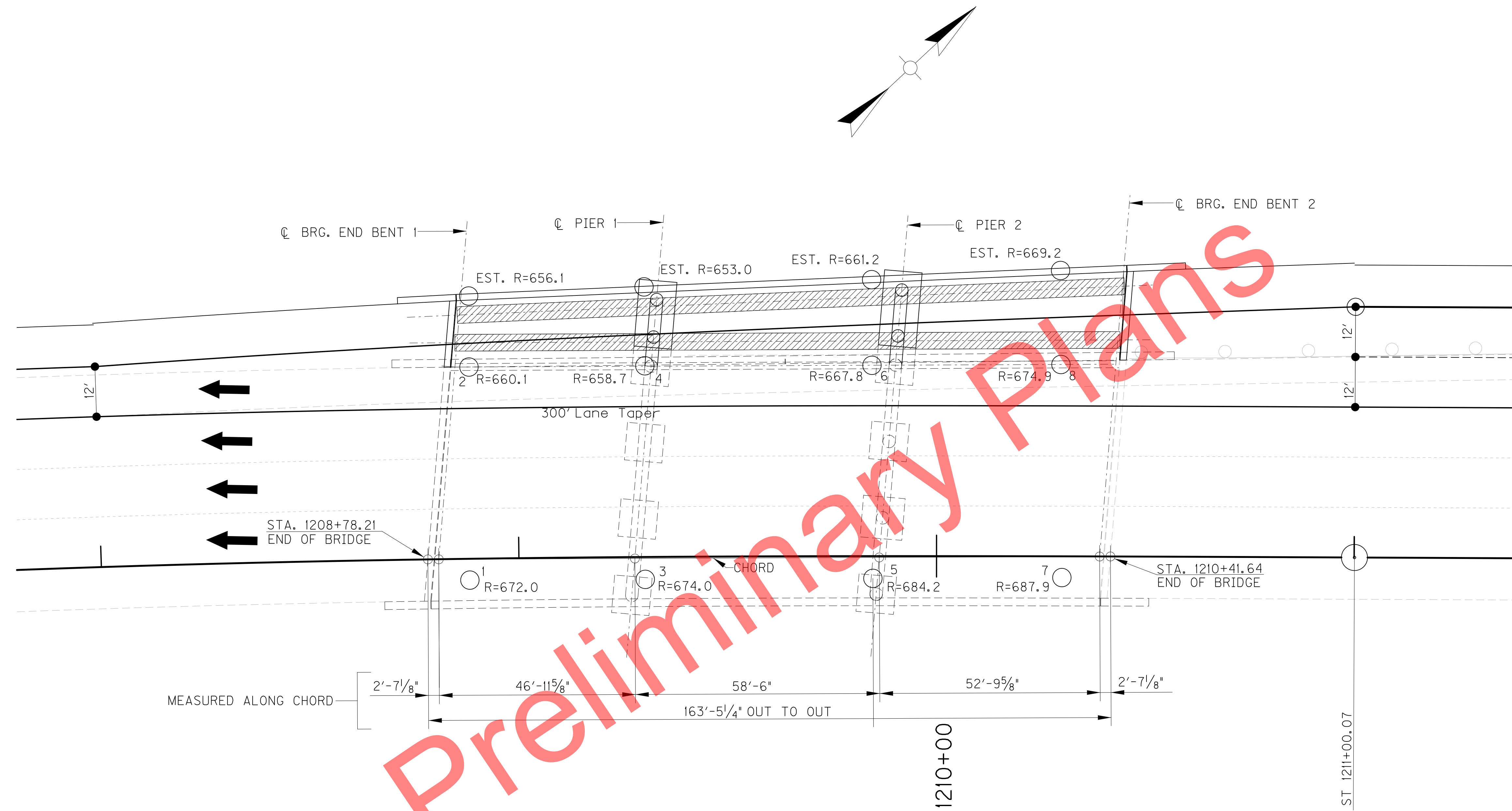
REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: CH	WTB	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
ITEM NUMBER	PREPARED BY	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S4
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_005.DGN

USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

MicroStation v8.11.7.443

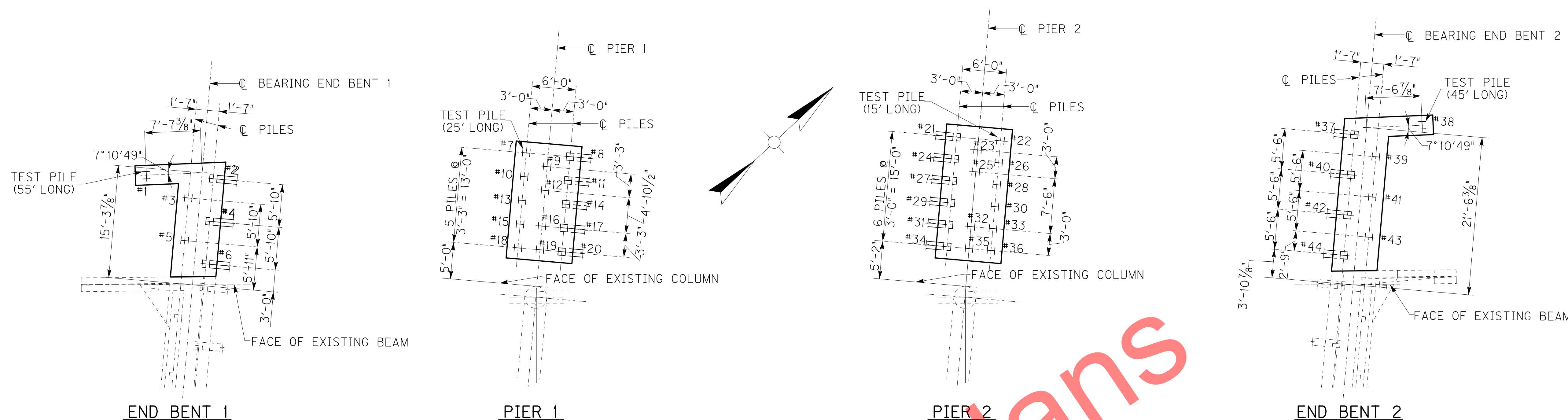


Preliminary Plans

PLAN

REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: CH	WTB	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275	CROSSING THREE MILE ROAD	
SOUNDINGS		
ITEM NUMBER	PREPARED BY	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S5
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURTJ-471\THREE MILE ROAD\FINAL\S26788_006.DGN
 USER: choll
 DATE PLOTTED: January 1, 2001
 E-SHEET NAME: S002GN
 MicroStation v8.11.7.443



LEGEND

- H — INDICATES VERTICAL PILE
- B — INDICATES BATTERED PILE 4:12 AT END BENTS
- B — INDICATES BATTERED PILE 3:12 AT PIERS

PLAN

NOTE

PILE LAYOUT DIMENSIONS ARE MEASURED AT THE BOTTOM OF FOOTINGS FOR PILE RECORD SEE THIS SHEET.

PILE RECORD FOR POINT BEARING PILES

PILE NO.	PILE CUT-OFF ELEVATION (FT.)	PILE LENGTH IN PLACE (LIN. FT)	POINT OF PILE ELEVATION AS DRIVEN (FT.)	DESIGN AXIAL LOAD (KIPS)	REQUIRED FIELD BEARING (KIPS)	CALCULATED FIELD BEARING (KIPS)	PILE NO.	PILE CUT-OFF ELEVATION (FT.)	PILE LENGTH IN PLACE (LIN. FT)	POINT OF PILE ELEVATION AS DRIVEN (FT.)	DESIGN AXIAL LOAD (KIPS)	REQUIRED FIELD BEARING (KIPS)	CALCULATED FIELD BEARING (KIPS)
1	708.213			135	300		31	677.563			125	300	
2	708.213			135	300		32	677.563			125	300	
3	708.213			135	300		33	677.563			125	300	
4	708.213			135	300		34	677.563			125	300	
5	708.213			135	300		35	677.563			125	300	
6	708.213			135	300		36	677.563			125	300	
7	676.403			125	300		37	711.313			135	300	
8	676.403			125	300		38	711.313			135	300	
9	676.403			125	300		39	711.313			135	300	
10	676.403			125	300		40	711.313			135	300	
11	676.403			125	300		41	711.313			135	300	
12	676.403			125	300		42	711.313			135	300	
13	676.403			125	300		43	711.313			135	300	
14	676.403			125	300		44	711.313			135	300	
15	676.403			125	300								
16	676.403			125	300								
17	676.403			125	300								
18	676.403			125	300								
19	676.403			125	300								
20	676.403			125	300								
21	677.563			125	300								
22	677.563			125	300								
23	677.563			125	300								
24	677.563			125	300								
25	677.563			125	300								
26	677.563			125	300								
27	677.563			125	300								
28	677.563			125	300								
29	677.563			125	300								
30	677.563			125	300								

DEFINITIONS OF TERMS

PILE CUT-OFF ELEVATION: ELEVATION AT THE TOP OF PILE IN THE FINISHED STRUCTURE.
PILE LENGTH IN PLACE: ACTUAL PILE LENGTH BELOW THE PILE CUT-OFF ELEVATION IN THE FINISHED STRUCTURE.
POINT OF PILE ELEVATION AS DRIVEN: ACTUAL POINT OF THE PILE ELEVATION IN THE FINISHED STRUCTURE.
DESIGN AXIAL LOAD: SERVICE LOAD CARRIED BY EACH PILE AS ESTIMATED FROM STRUCTURAL DESIGN CALCULATIONS.
REQUIRED FIELD BEARING: PILE BEARING VALUE REQUIRED TO ACHIEVE "REFUSAL" FOR THE SIZE OF PILE USED. ACCORDING TO THE DIVISION OF CONSTRUCTION GUIDANCE MANUAL, THIS VALUE IS TAKEN AS 300 KIPS FOR 12 IN. STEEL H PILES AND 360 KIPS FOR 14 IN. STEEL H PILES.
CALCULATED FIELD BEARING: PILE BEARING VALUE IN PLACE CALCULATED USING THE APPROPRIATE PILE DRIVING FORMULA IN SECTION 604.07(8) OF THE STANDARD SPECIFICATIONS.

DRIVING CRITERIA

DRIVING CRITERIA: DRIVE POINT BEARING PILES TO REFUSAL AND VERIFY THAT THE CALCULATED FIELD BEARING EQUALS OR EXCEEDS THE REQUIRED FIELD BEARING.

FIELD DATA

FOR EACH PILE, THE PROJECT ENGINEER SHALL RECORD THE FOLLOWING ON THIS SHEET: PILE LENGTH IN PLACE, POINT OF PILE ELEVATION AS DRIVEN, AND THE CALCULATED BEARING. SUBMIT THIS RECORD TO:

DIRECTOR, DIVISION OF STRUCTURAL DESIGN
 TRANSPORTATION CABINET OFFICE BUILDING
 3RD FLOOR
 200 MERO STREET
 FRANKFORT, KY. 40622-0001

THIS PILE RECORD DOES NOT REPLACE OTHER PILE RECORDS THE PROJECT ENGINEER IS REQUIRED TO KEEP AND SUBMIT.

USE HP 12 X 53 IN ACCORDANCE WITH BPS-003, C.E.

CONTRARY TO THE STANDARD DRAWINGS, PILES SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF AASHTO M270 GRADE 50.

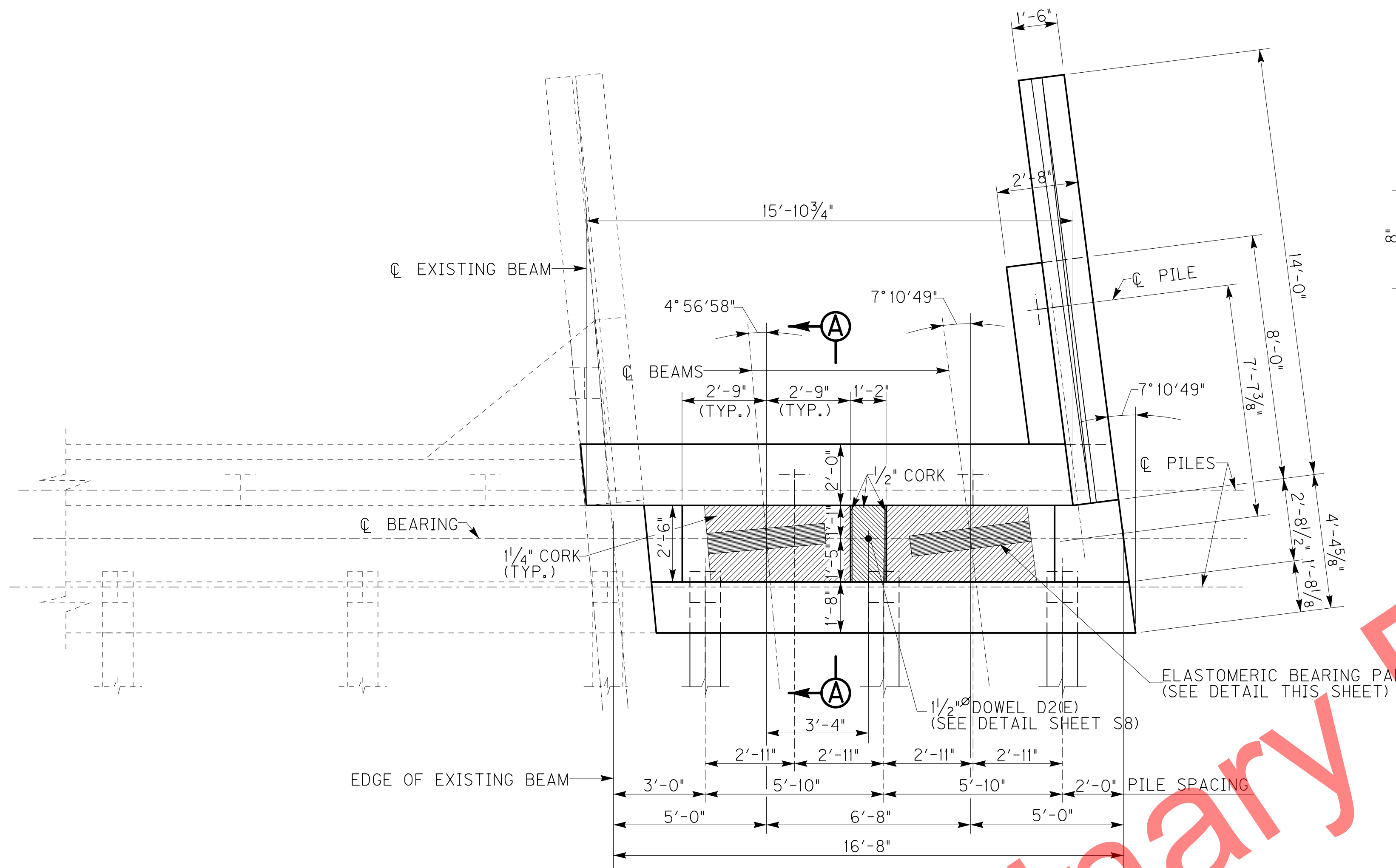
REVISION		DATE
DATE: 09-2011	CHECKED BY	
DESIGNED BY: CH	WTB	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
PILE LAYOUT		
ITEM NUMBER		SHEET NO.
6-2021.00		56
PREPARED BY		DRAWING NO.
WMB INC., ENGINEERS		26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_007.DGN

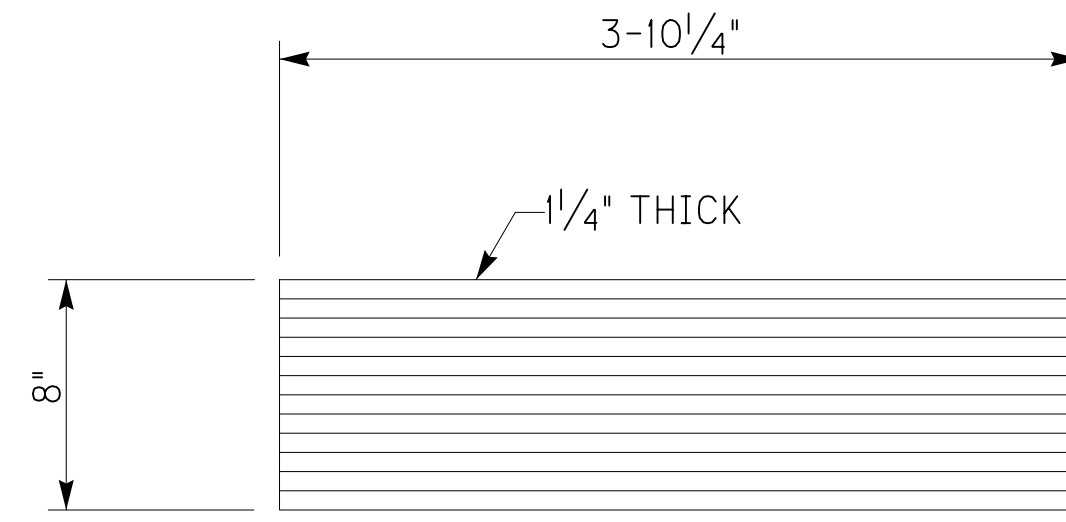
USER: choll
DATE PLOTTED: October 12, 2011

E-SHEET NAME: S002GN

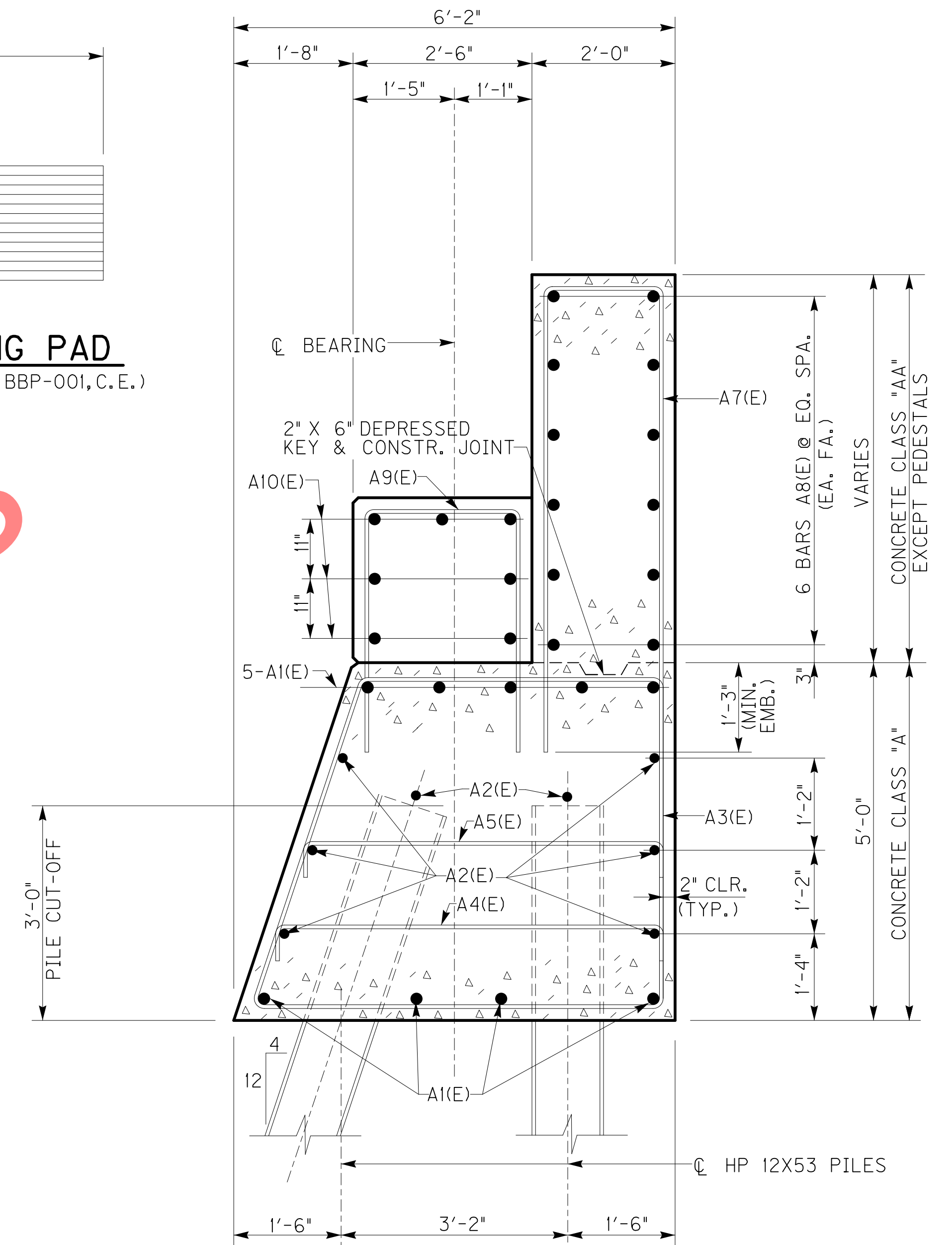
MicroStation v8.11.7.443



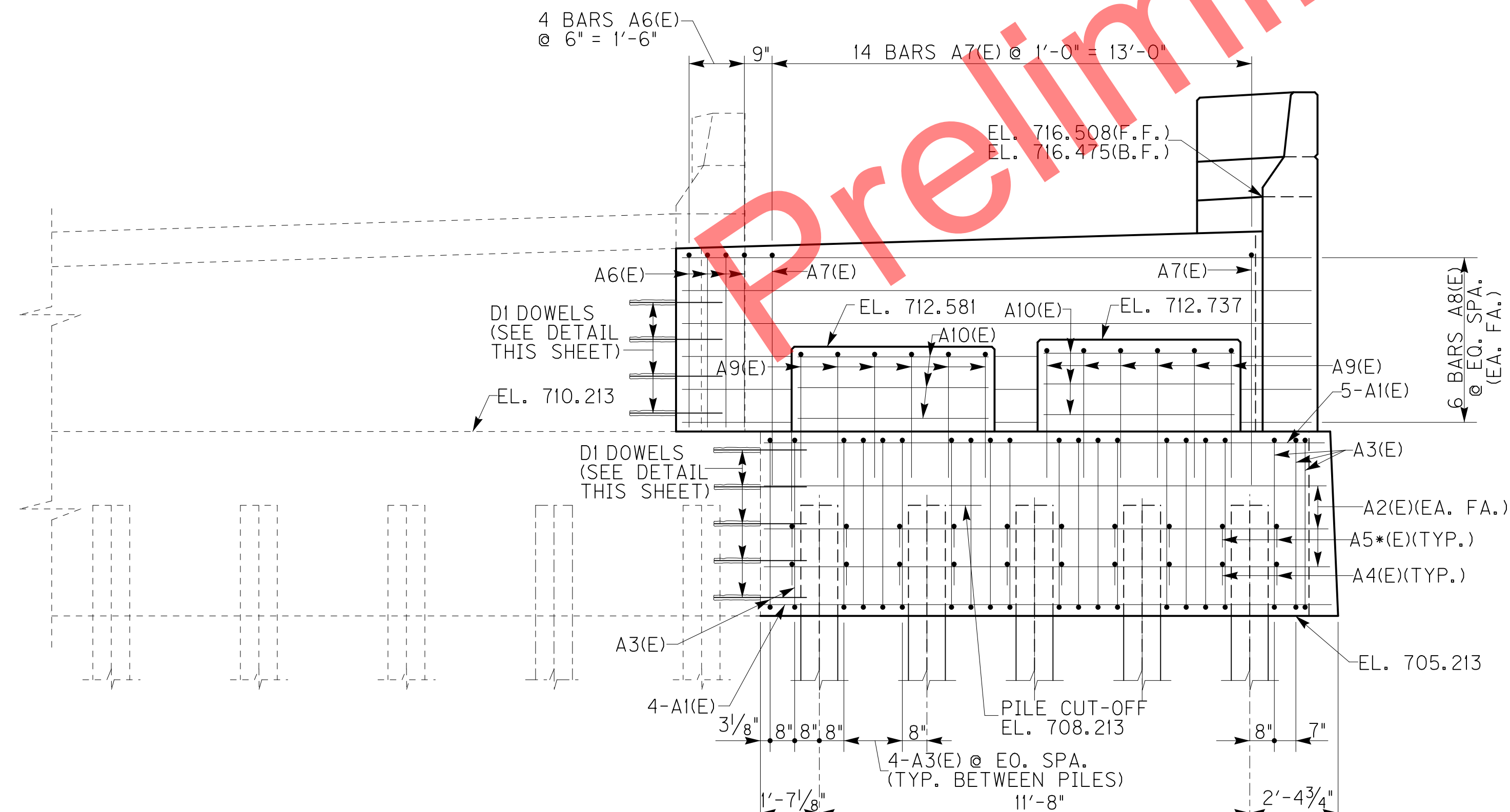
PLAN
(SHOWING DIMENSIONS)



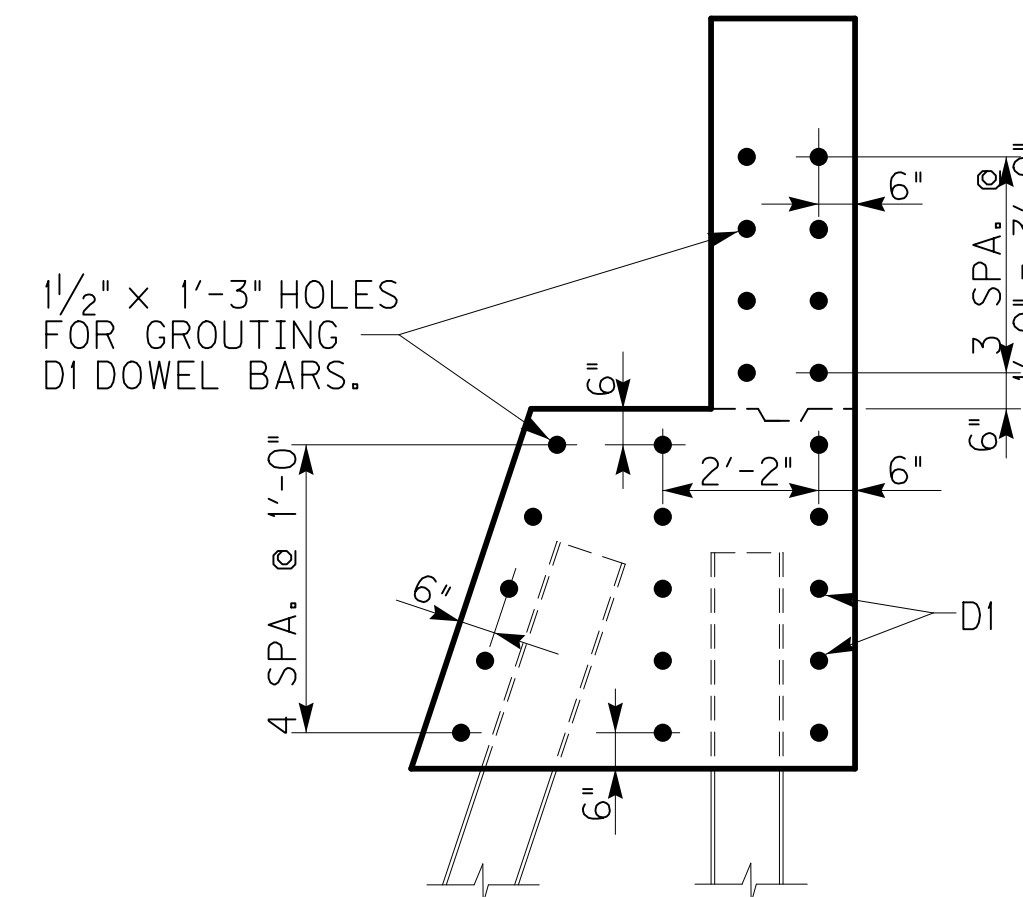
NEOPRENE BEARING PAD
(THICKNESS 1/4" SEE STD. DRWG. BBP-001,C.E.)



SECTION A-A



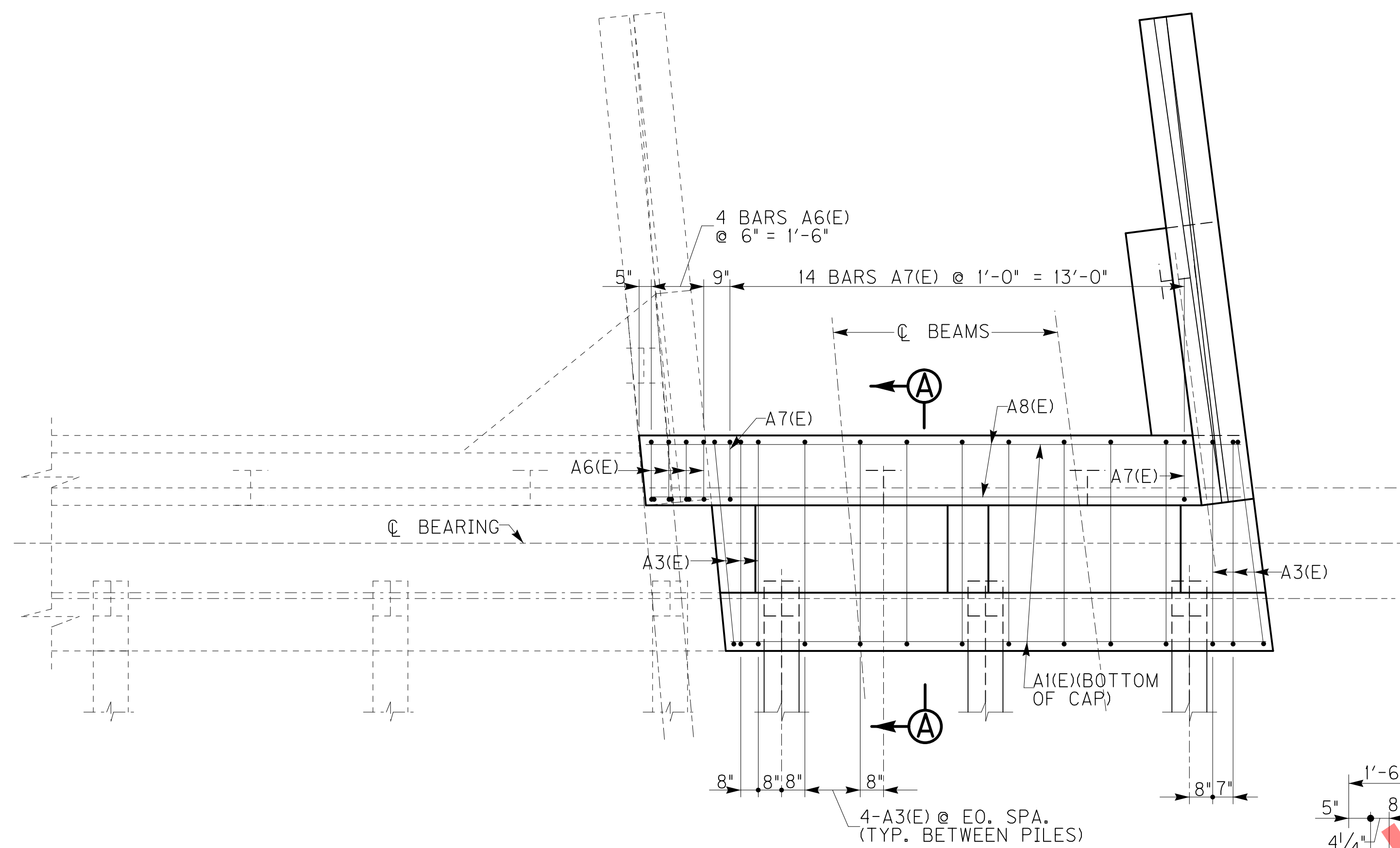
ELEVATION



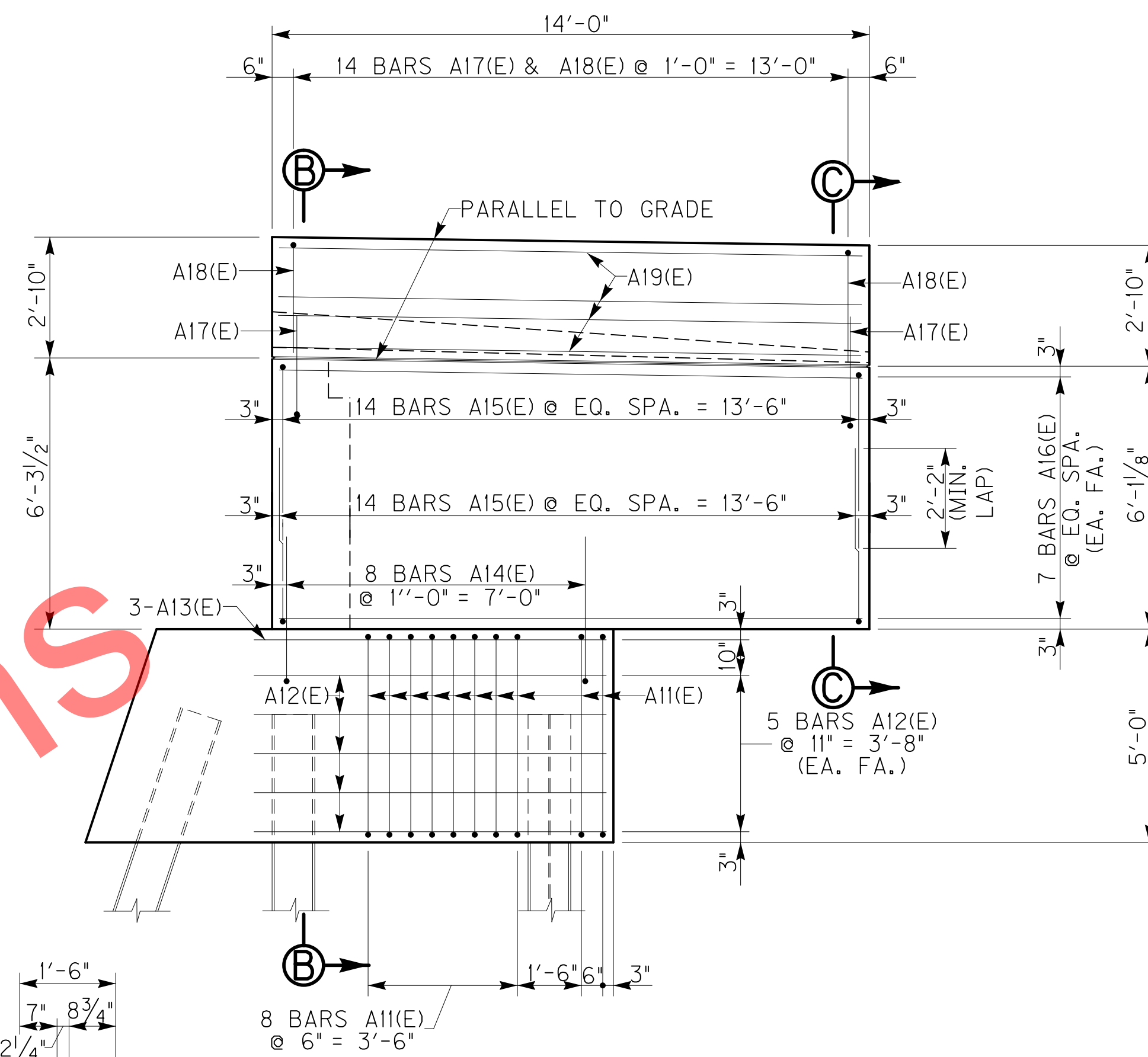
DOWEL DETAIL

ITEM NUMBER	6-2021.00
-------------	-----------

REVISION		DATE
DATE: 07-2011	DESIGNED BY: WTB	CHECKED BY: EAO
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
END BENT 1		
	PREPARED BY:	SHEET NO.
		S7
		DRAWING NO.
		26788

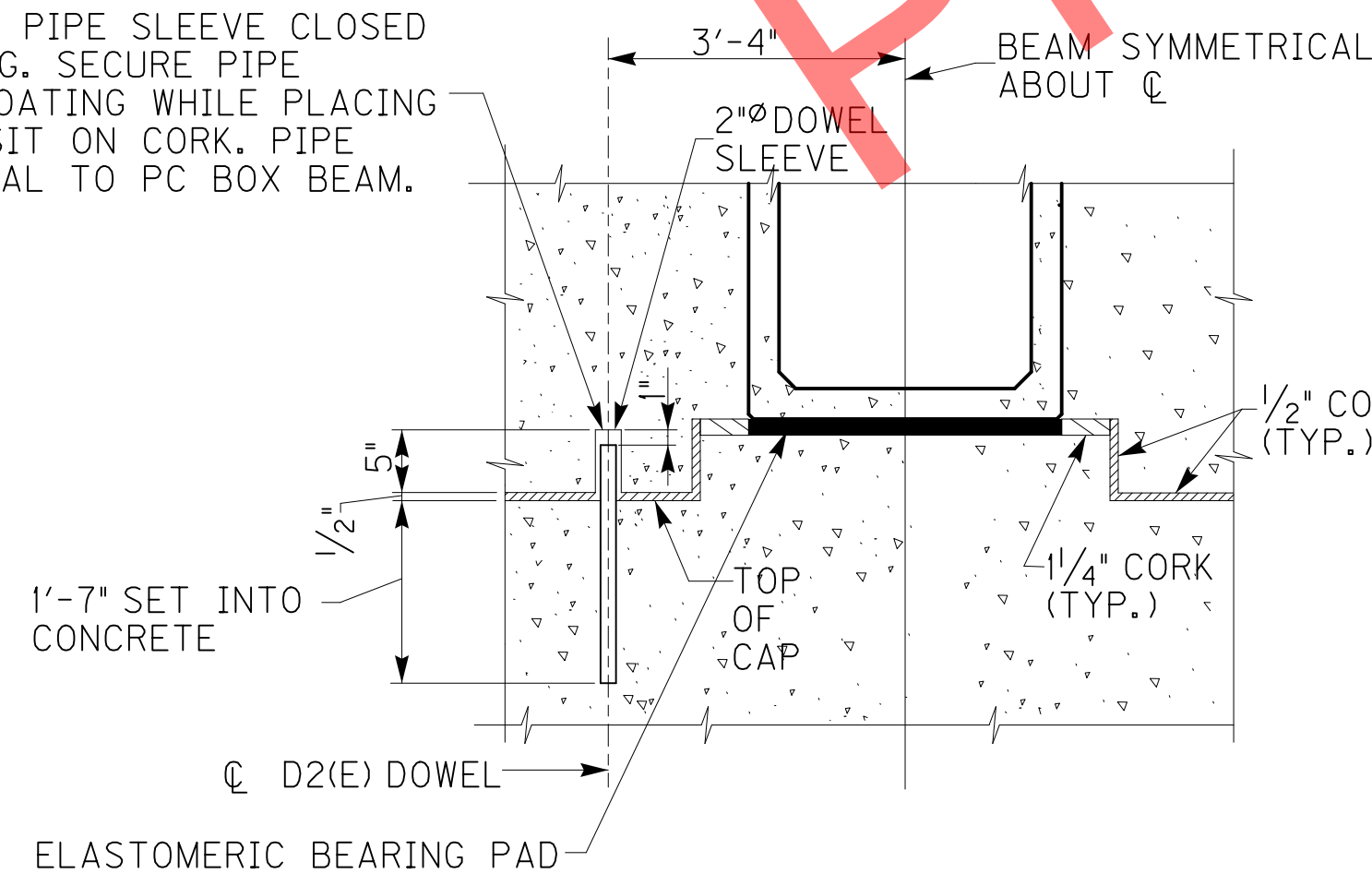


PLAN
(SHOWING REINFORCEMENT)

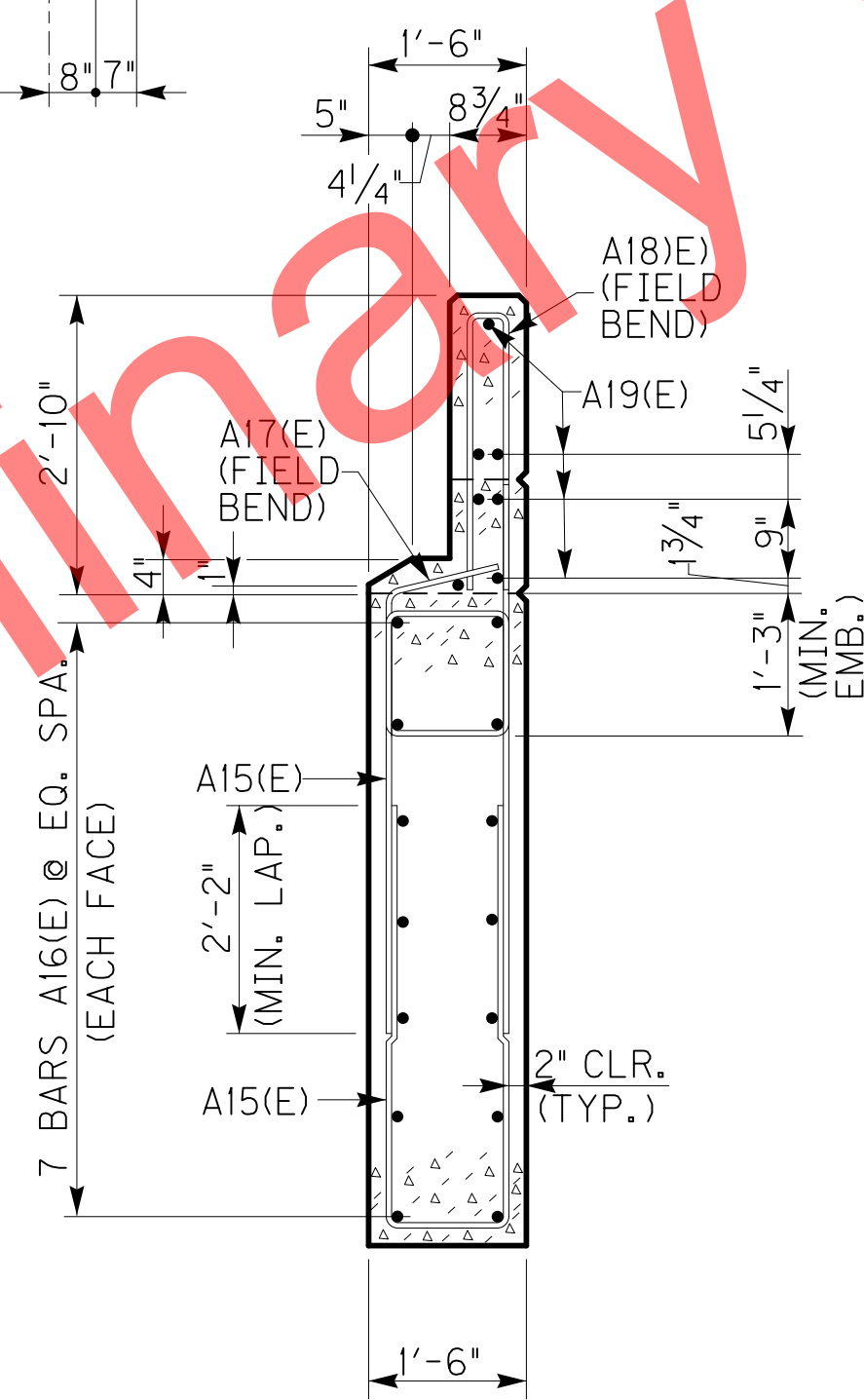


WING ELEVATION

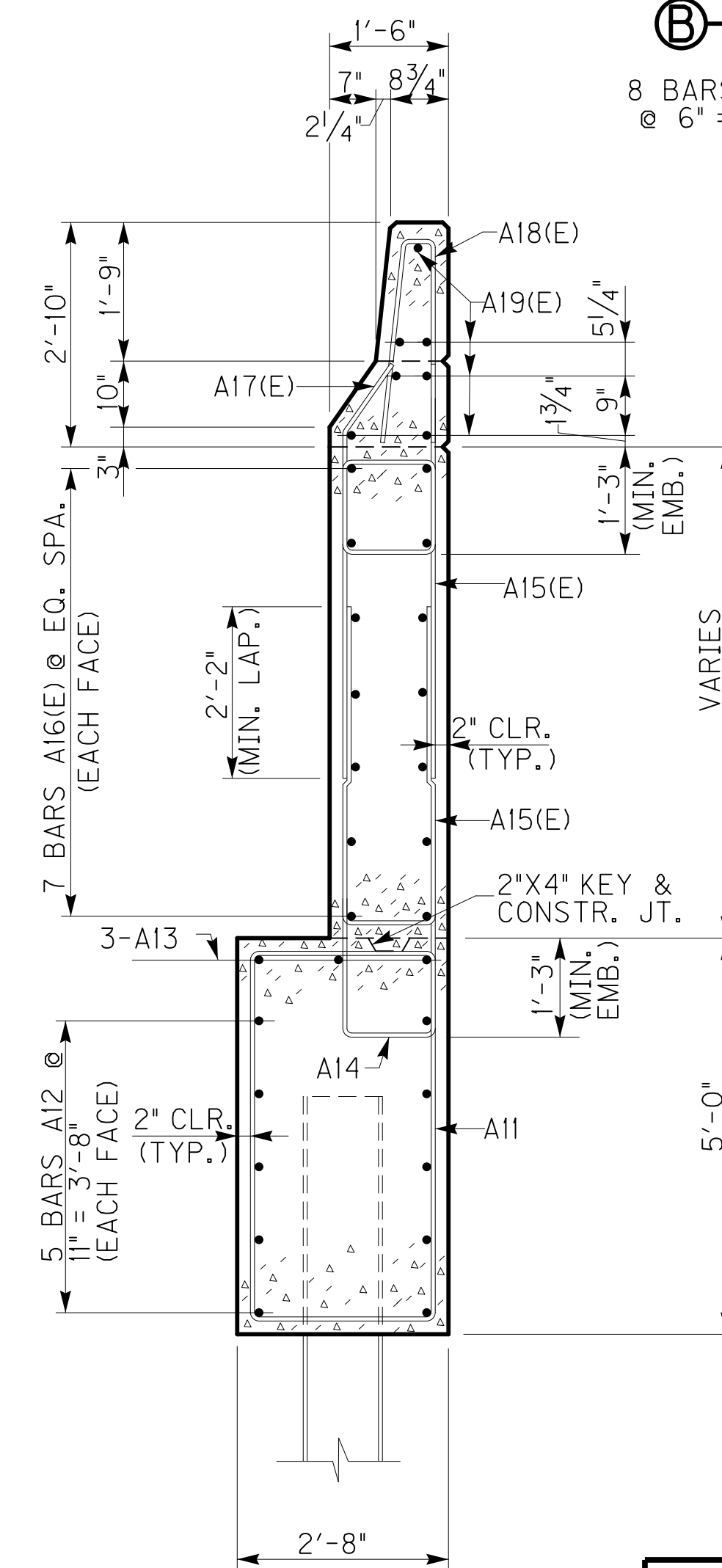
STD. WT. 2" COMMERCIAL PIPE SLEEVE CLOSED AT ONE END AND 5" LONG. SECURE PIPE SLEEVE TO PREVENT FLOATING WHILE PLACING CONCRETE. SLEEVE TO SIT ON CORK. PIPE SLEEVE TO BE INCIDENTAL TO PC BOX BEAM.



DOWEL DETAIL



SECTION C-C



SECTION B-B

ITEM NUMBER

6-2021.00

REVISION	DATE

DATE: 07-2011
DESIGNED BY: WTB
CHECKED BY: EAO
DETAILED BY: CH
WTB

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
CAMPBELL

ROUTE CROSSING
L-275 WB THREE MILE ROAD

END BENT 1

PREPARED BY

WMB INC., ENGINEERS

SHEET NO.

S8

DRAWING NO.

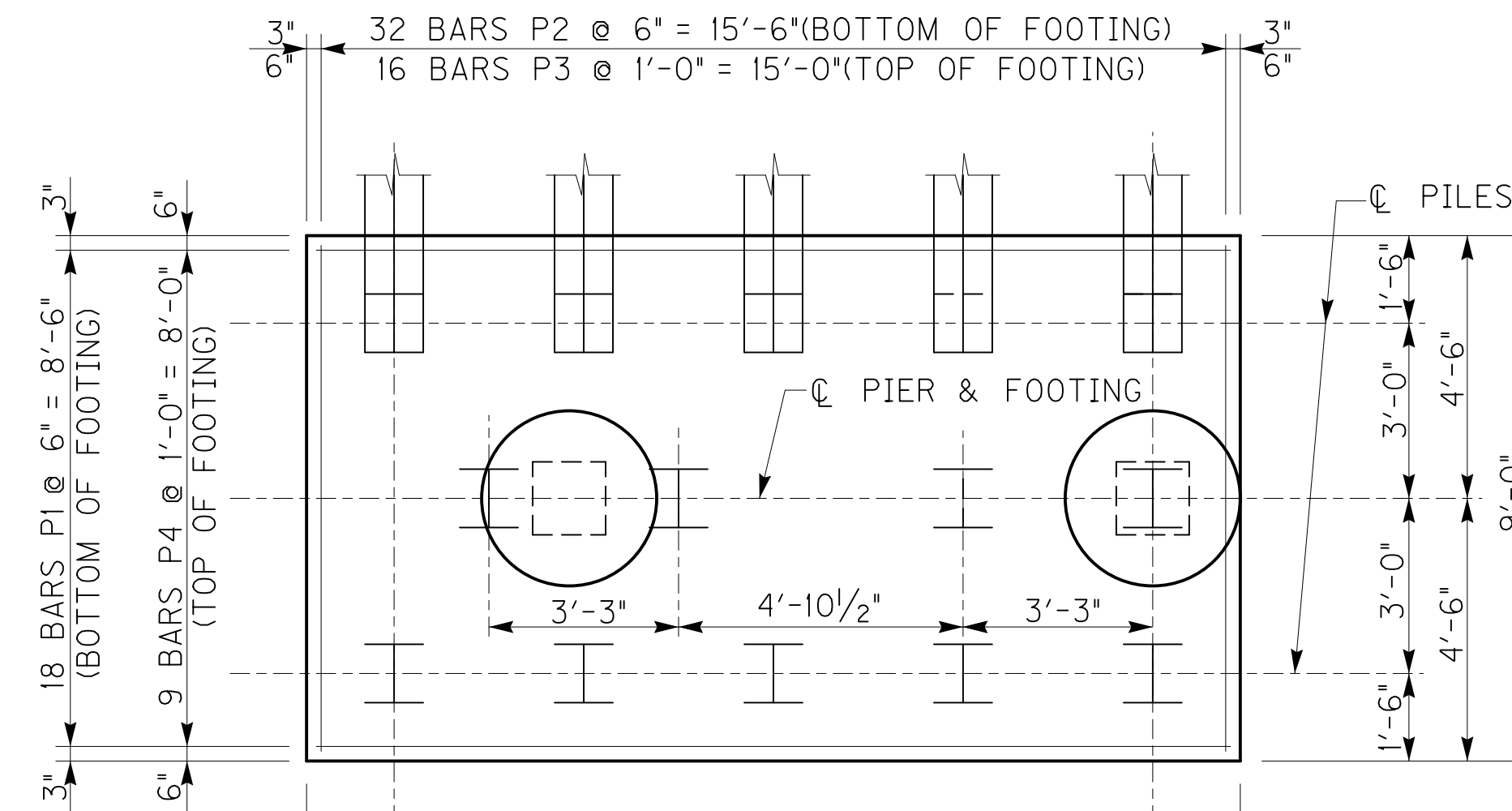
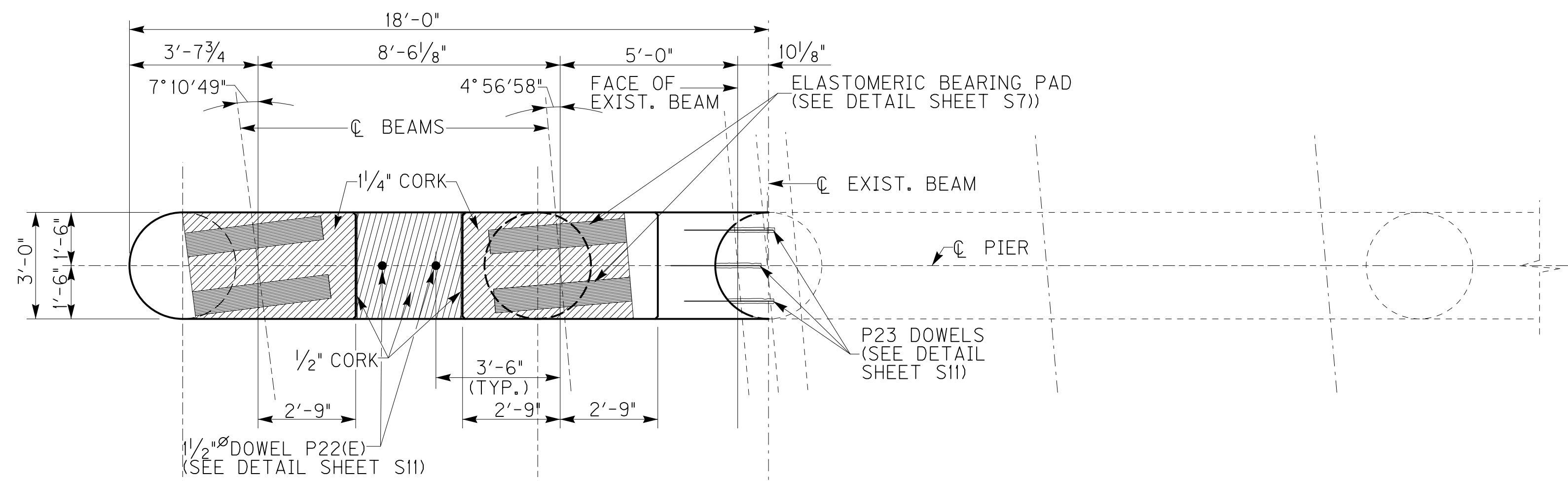
26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_009.DGN

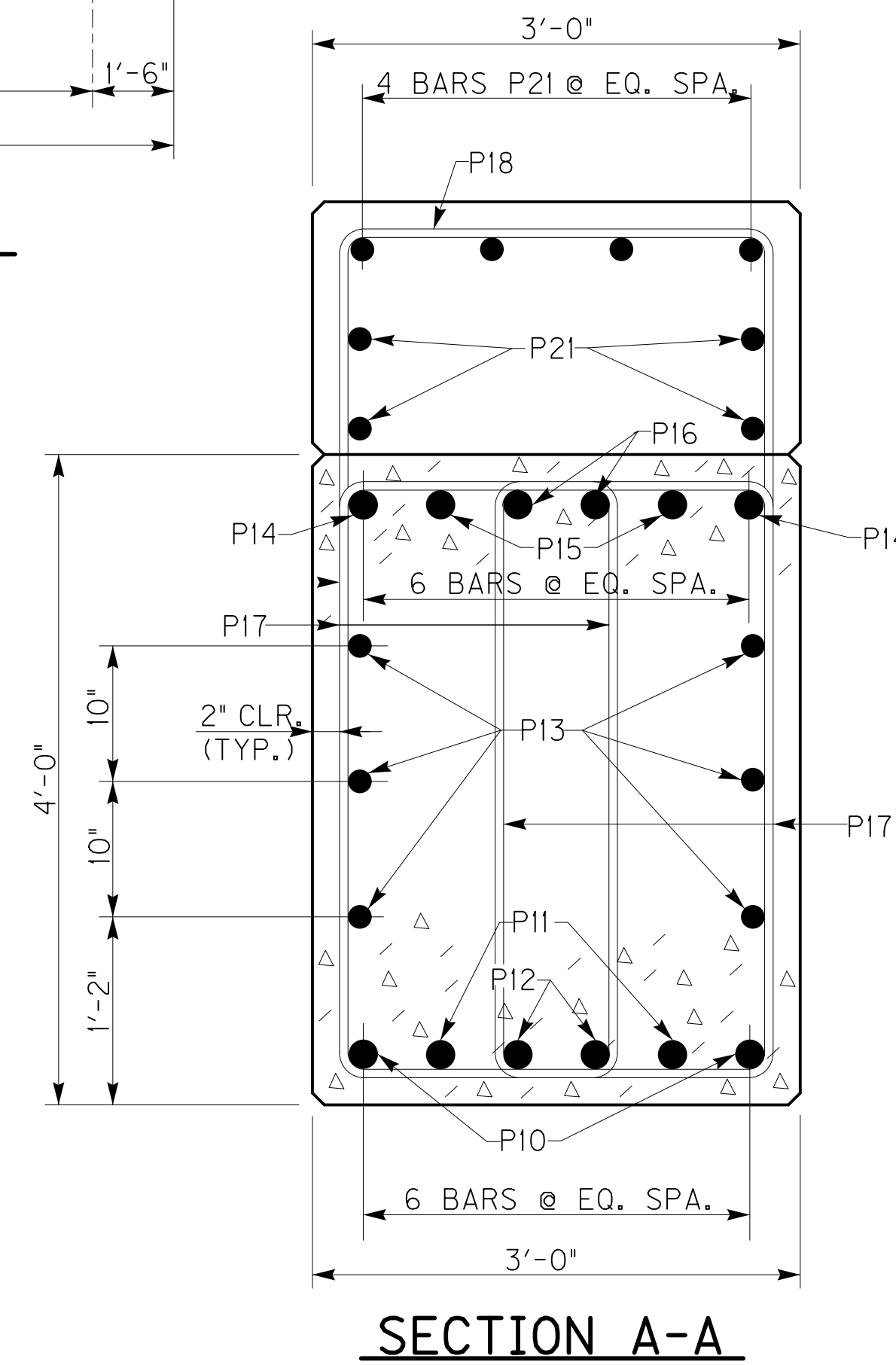
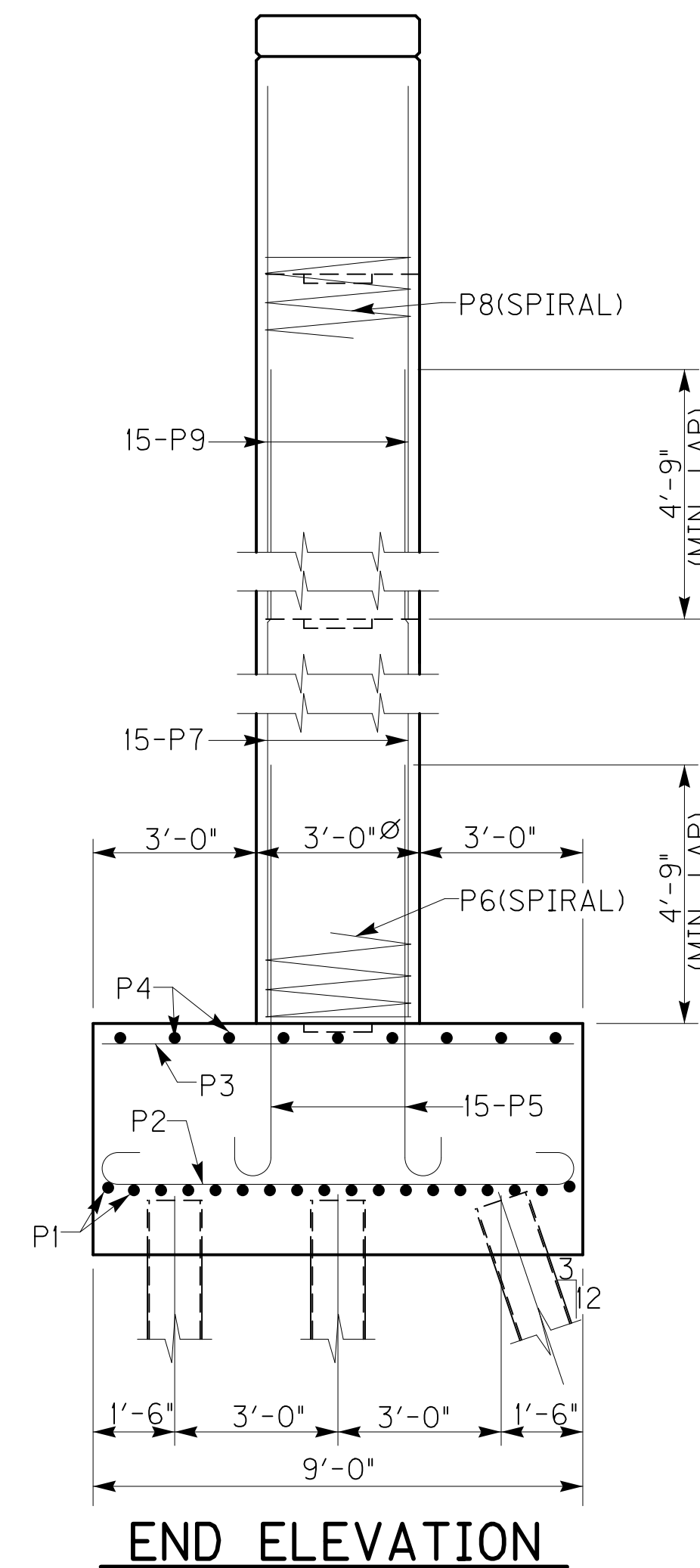
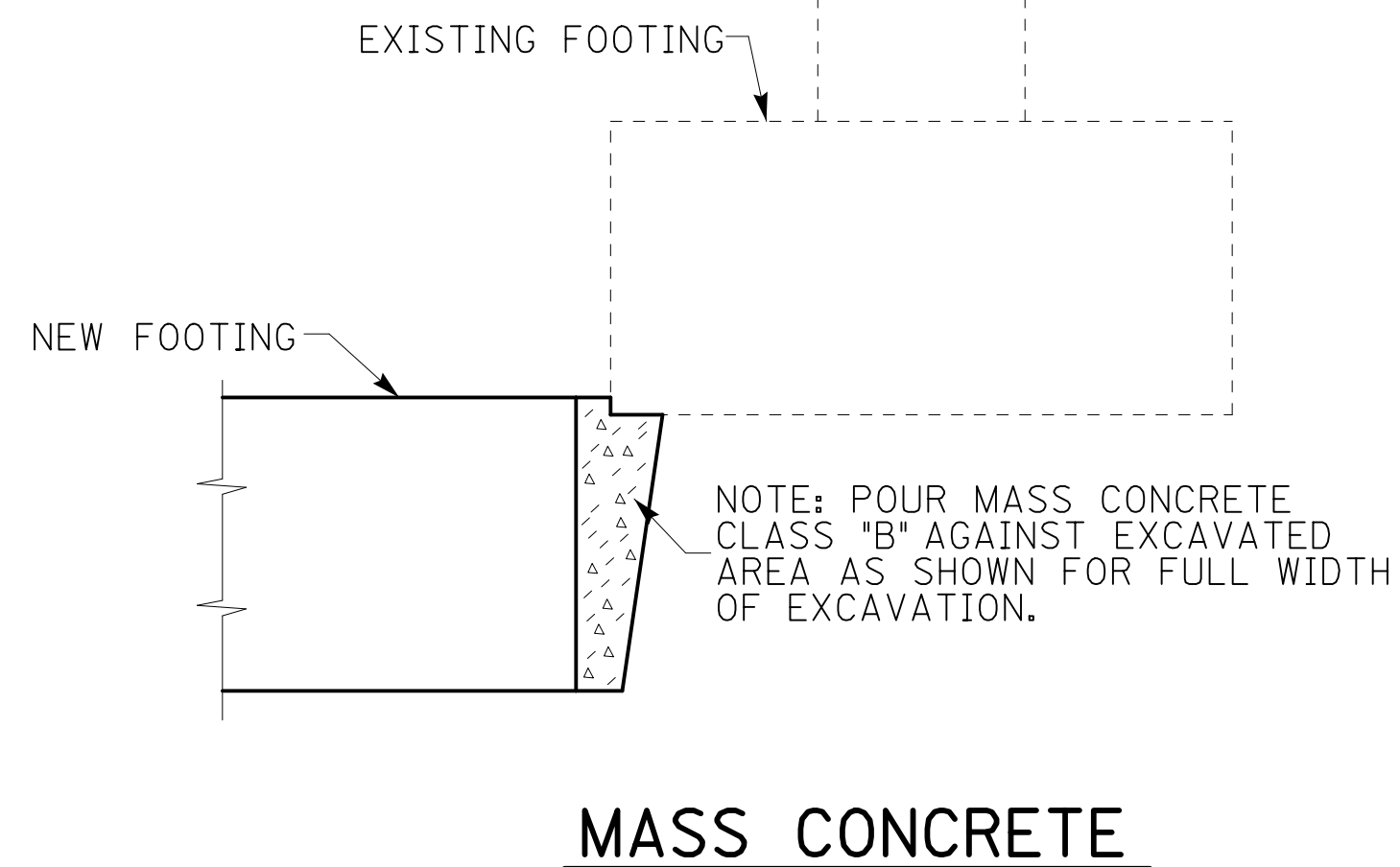
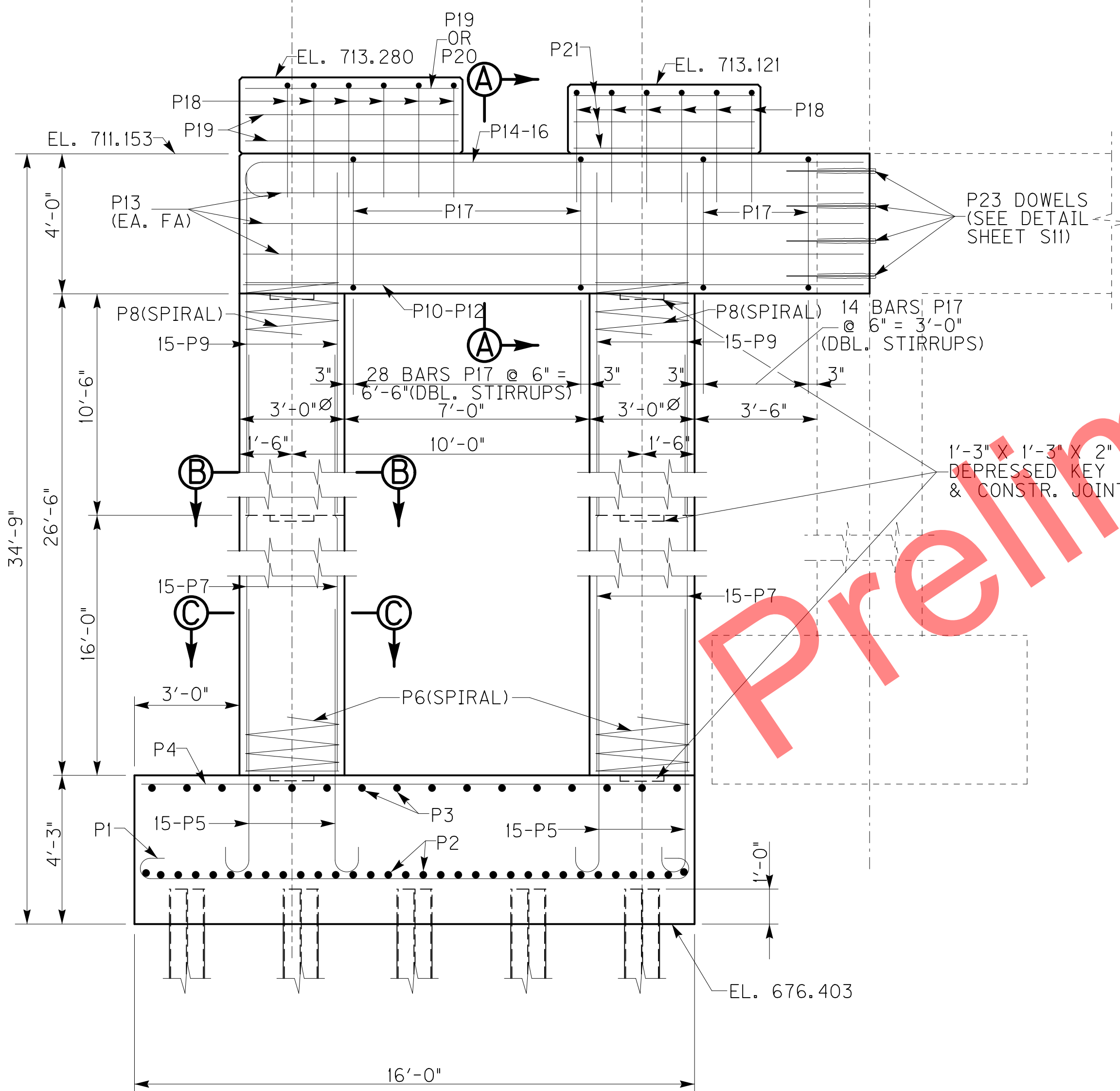
USER: choll
DATE PLOTTED: October 4, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



NOTES:
FOR SECTION B-B, C-C PEDESTAL AND DOWEL DETAILS SEE SHEET S11.
FOR BILL OF REINFORCEMENT SEE SHEET S12.



REVISION	DATE

DATE: 07-2011 CHECKED BY: EAO
DESIGNED BY: WTB
DETAILED BY: CH WTB

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
CAMPBELL

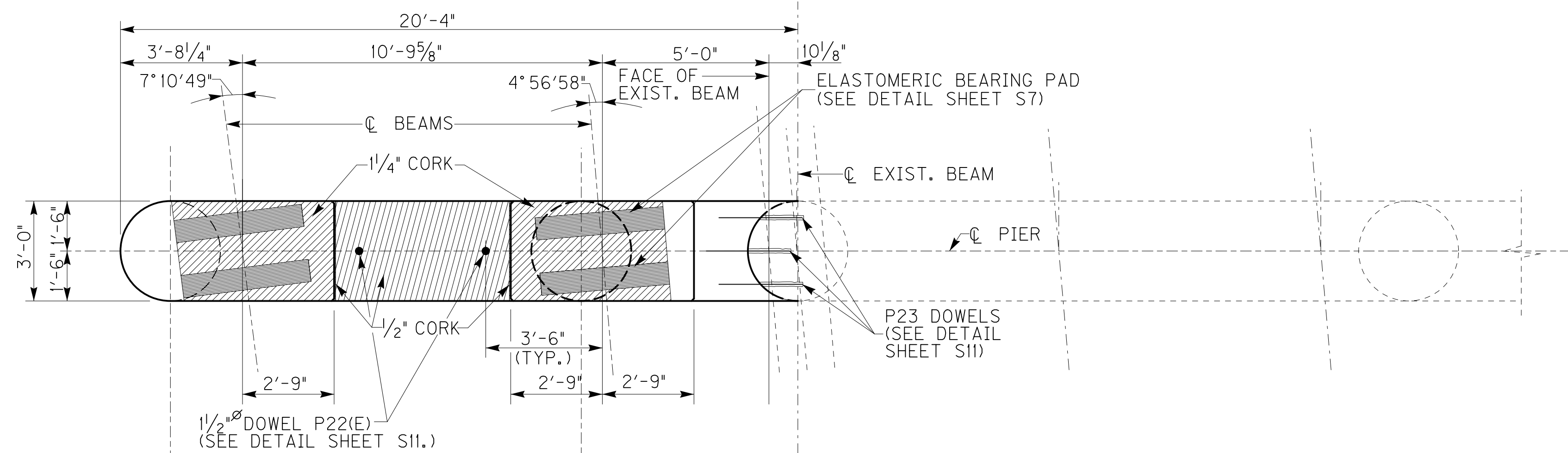
ROUTE: L-275 WB CROSSING: **THREE MILE ROAD**
PIER 1

PREPARED BY: **WMB INC., ENGINEERS**

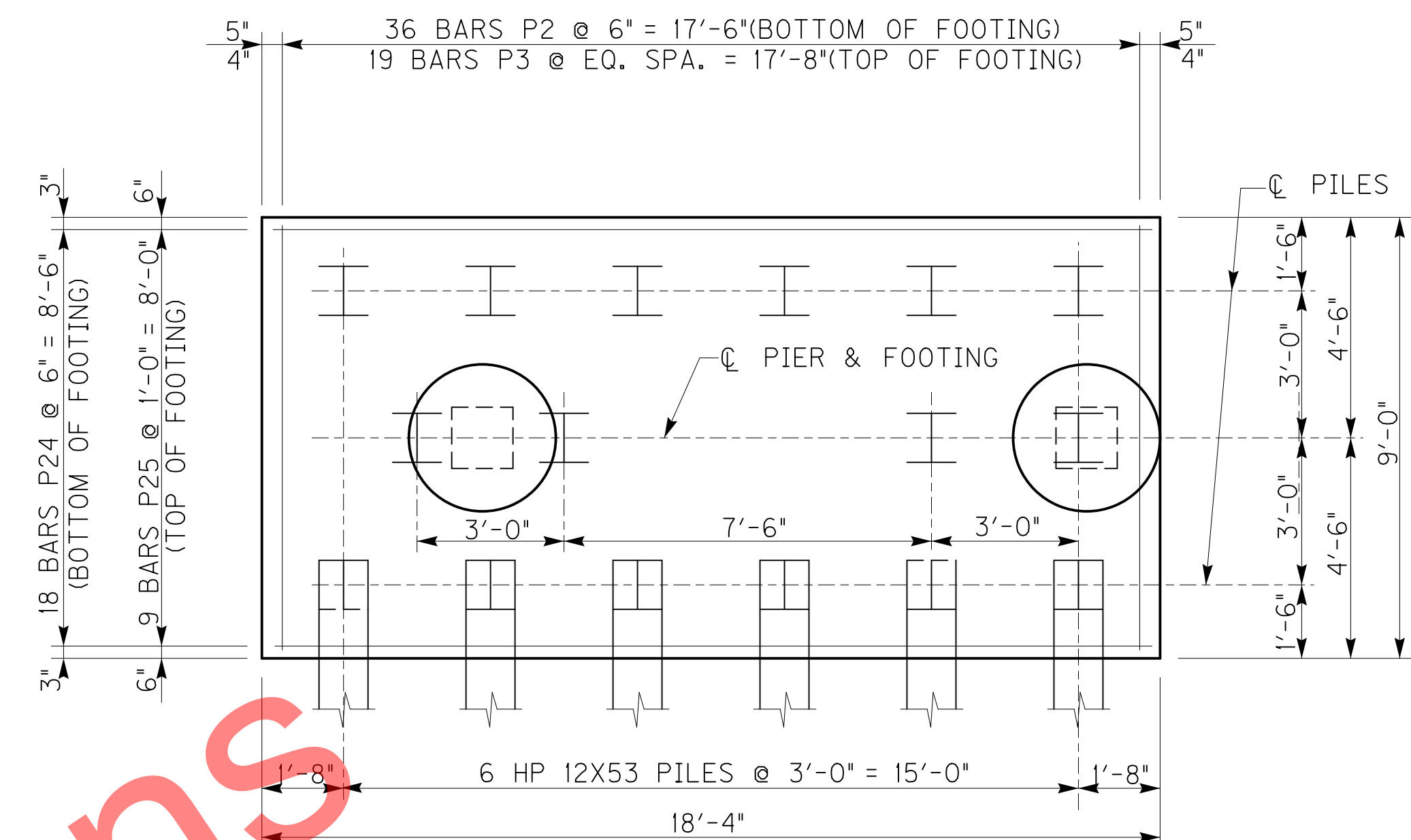
ITEM NUMBER: **6-2021.00**

SHEET NO.
26788
DRAWING NO.

FILE NAME: P:\STRUCT\CURTJ\471\THREE MILE ROAD\FINAL\S26788_010.DGN
 USER: choll
 DATE PLOTTED: October 4, 2011
 E-SHEET NAME: S002GN
 MicroStation v8.11.7.443

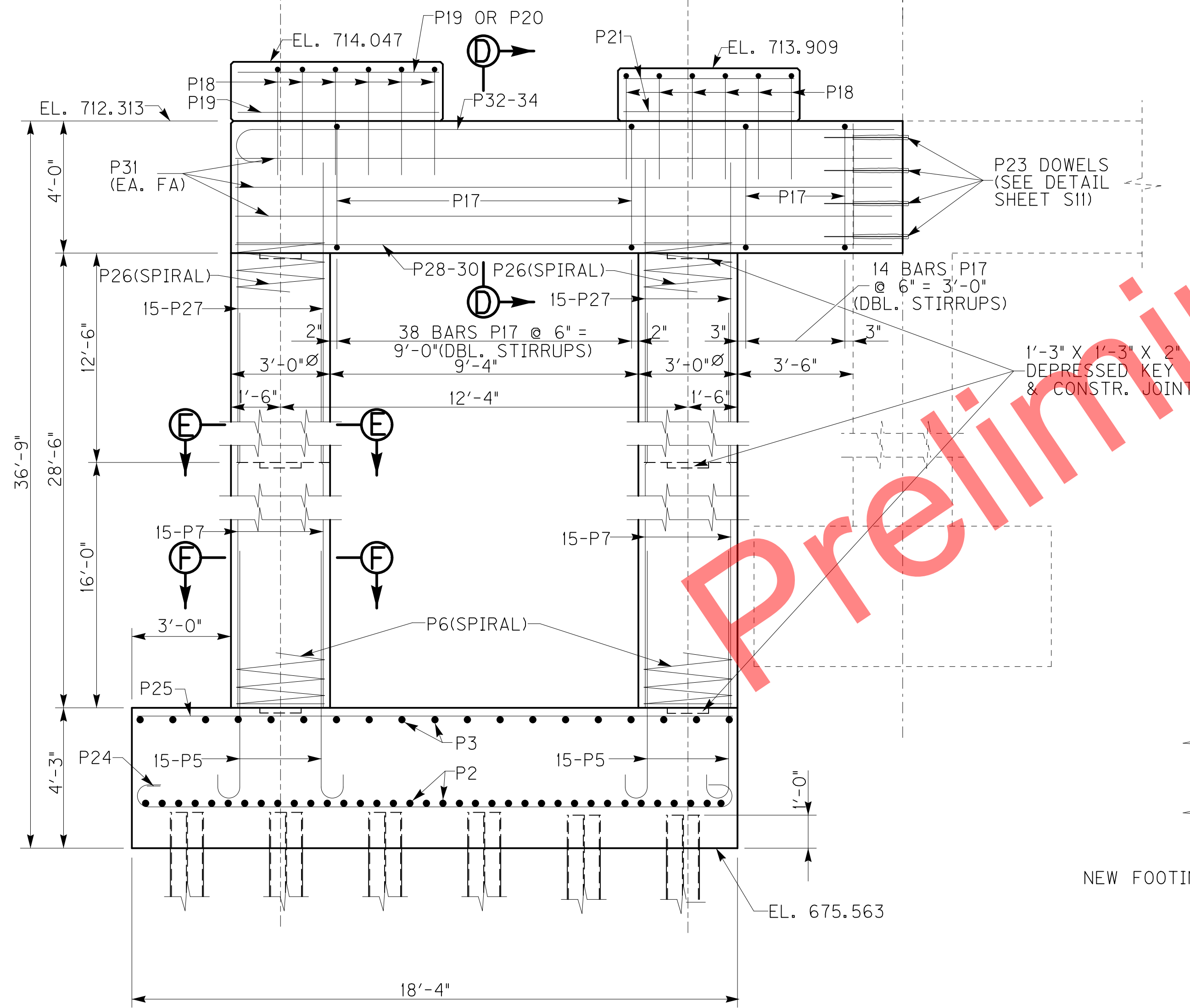


PLAN

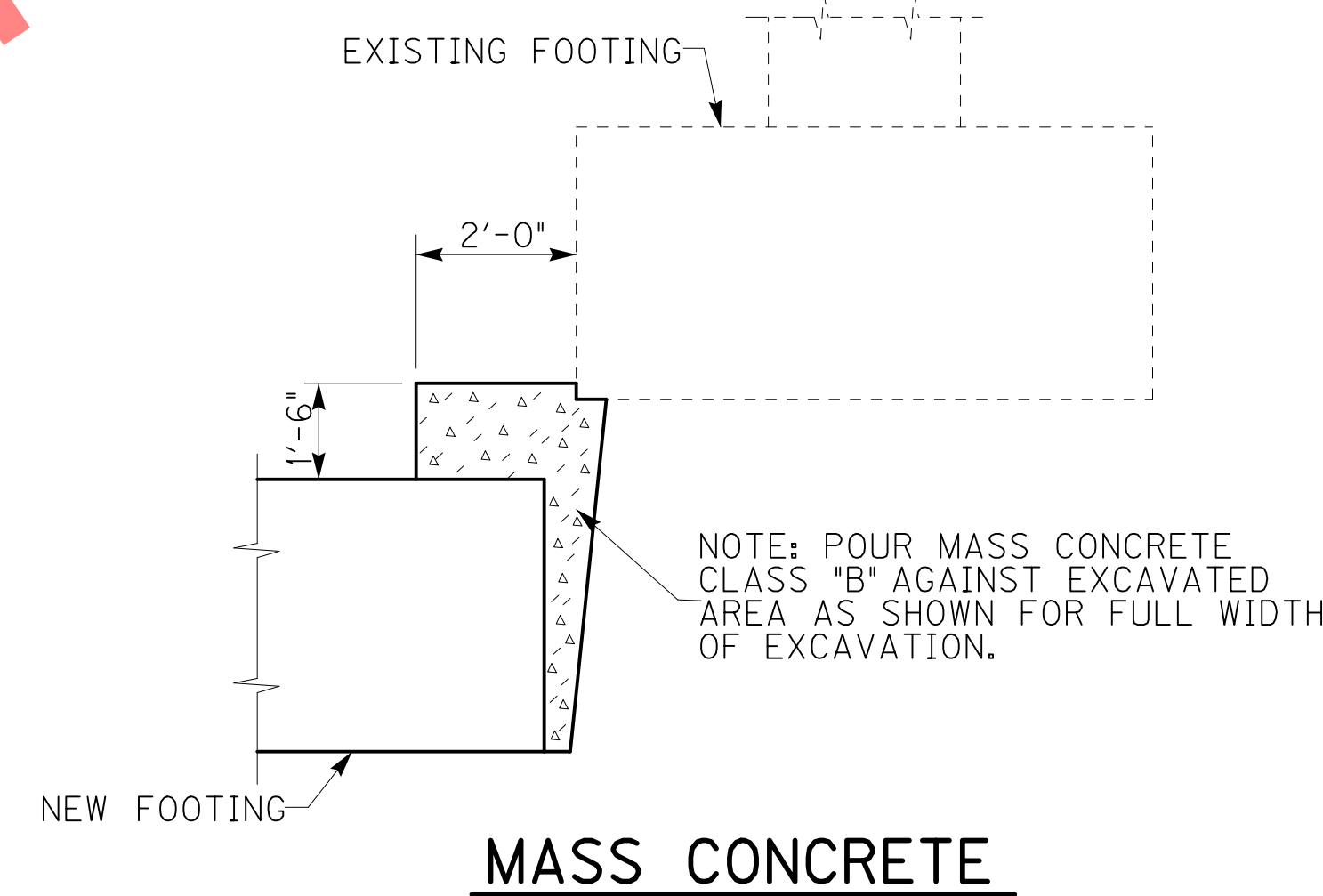


PLAN OF FOOTING

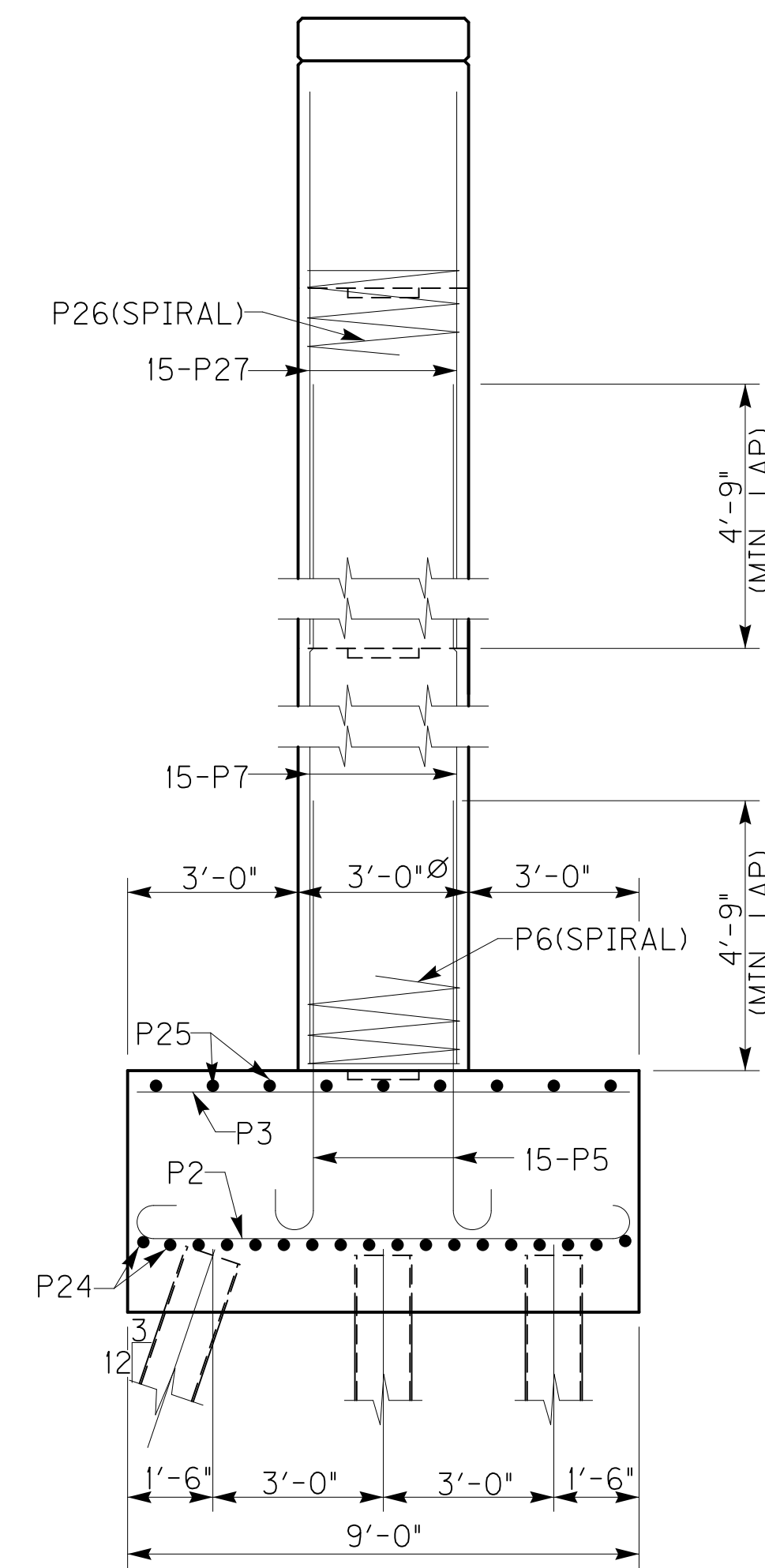
NOTES:
 FOR DOWEL DETAILS SEE SHEET S11.
 FOR SECTION E-E, F-F, PEDESTAL DETAILS
 AND BILL OF REINFORCEMENT SEE SHEET S12.



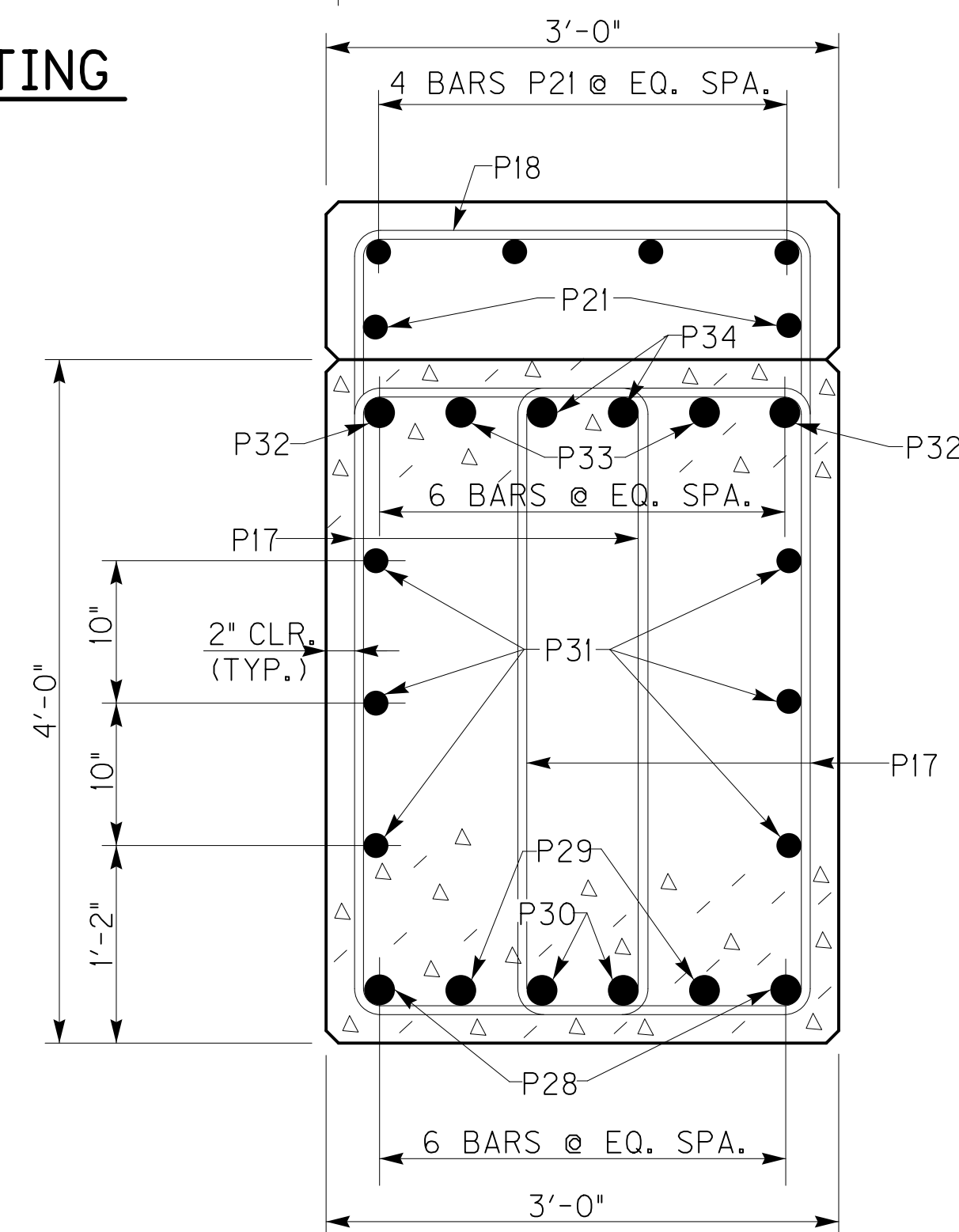
ELEVATION



MASS CONCRETE



END ELEVATION



SECTION D-D

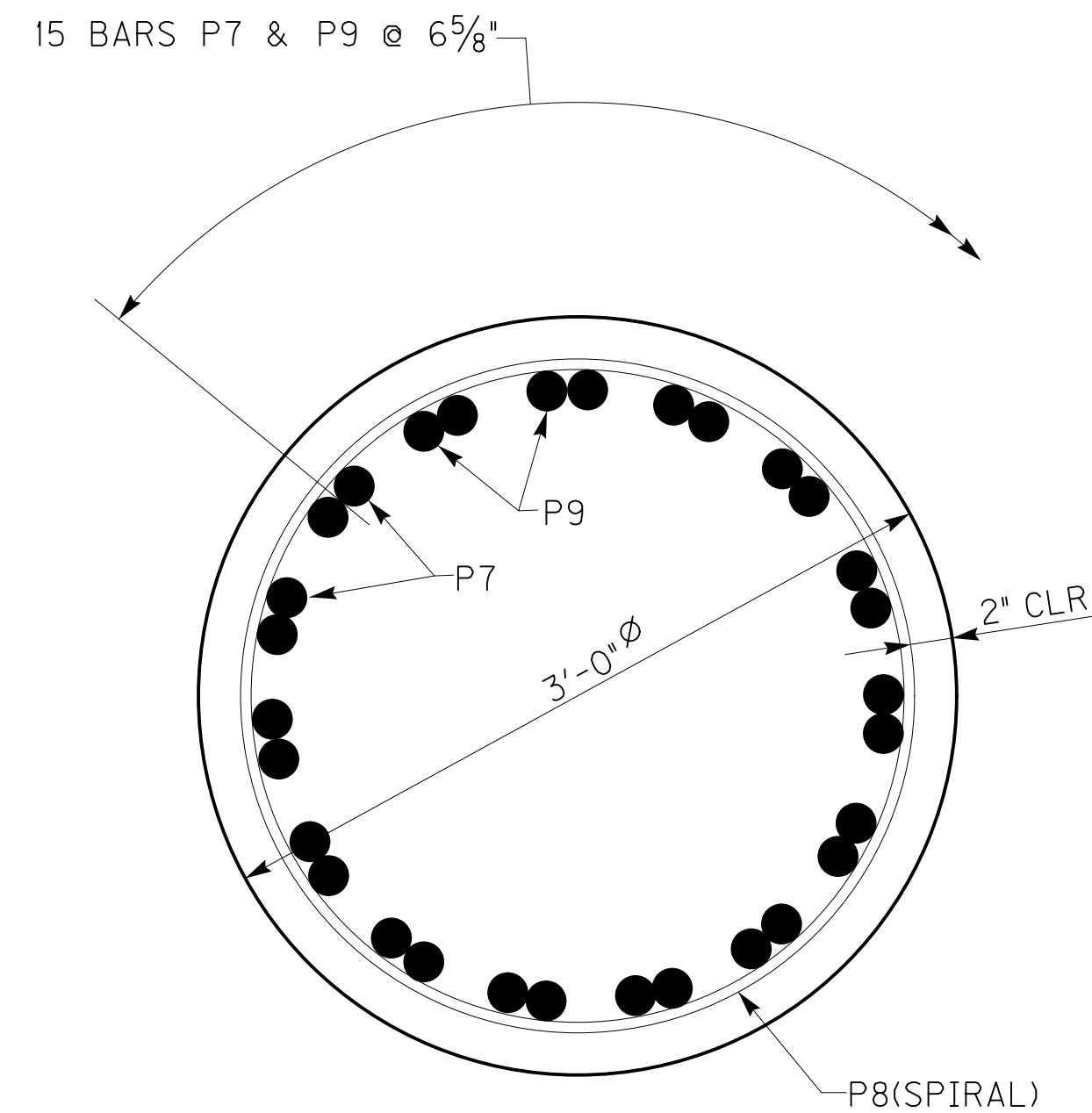
REVISION		DATE
DATE: 07-2011	DESIGNED BY: WTB	CHECKED BY: EAO
DESIGNED BY: WTB	DATE: 07-2011	DETAILD BY: CH
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
PIER 2		
ITEM NUMBER 6-2021.00	PREPARED BY WMB INC., ENGINEERS	SHEET NO. S10 DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURTJ\1-47\THREE MILE ROAD\FINAL\S26788_011.DGN

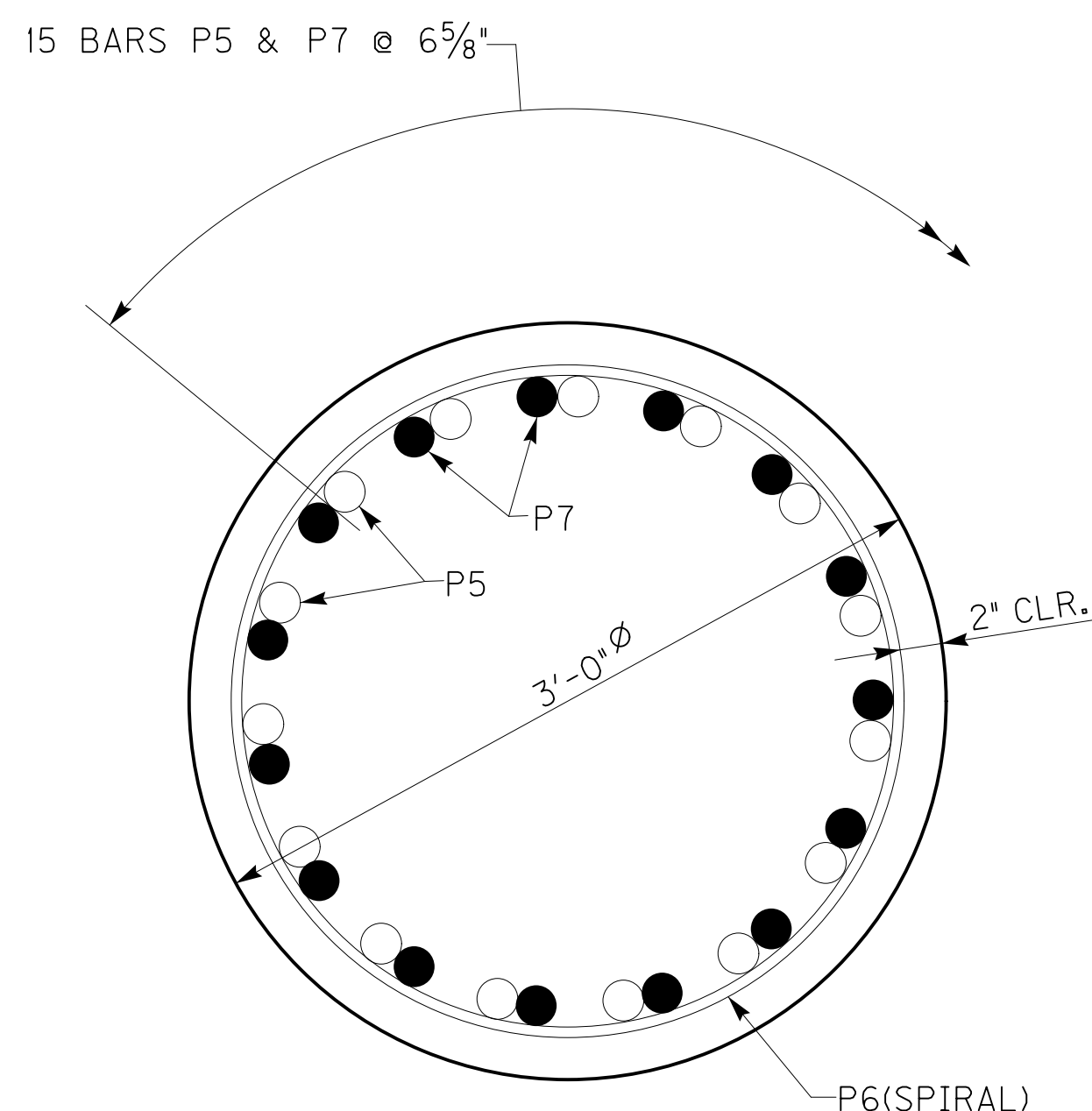
USER: ch01
DATE PLOTTED: October 8, 2011

E-SHEET NAME: S002GN

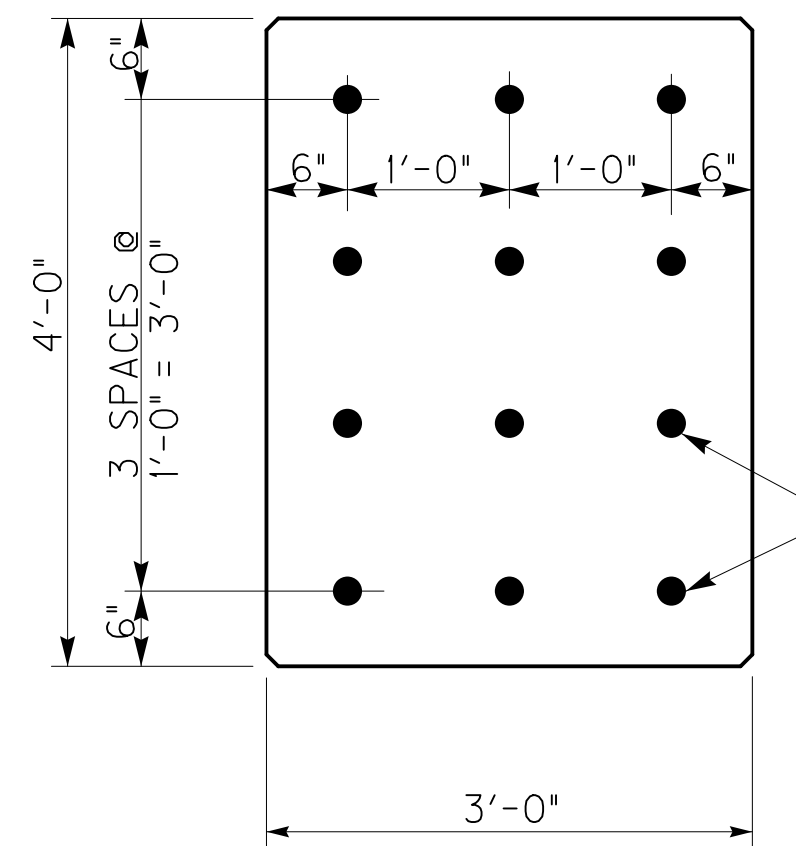
MicroStation v8.11.7.443



SECTION B-B

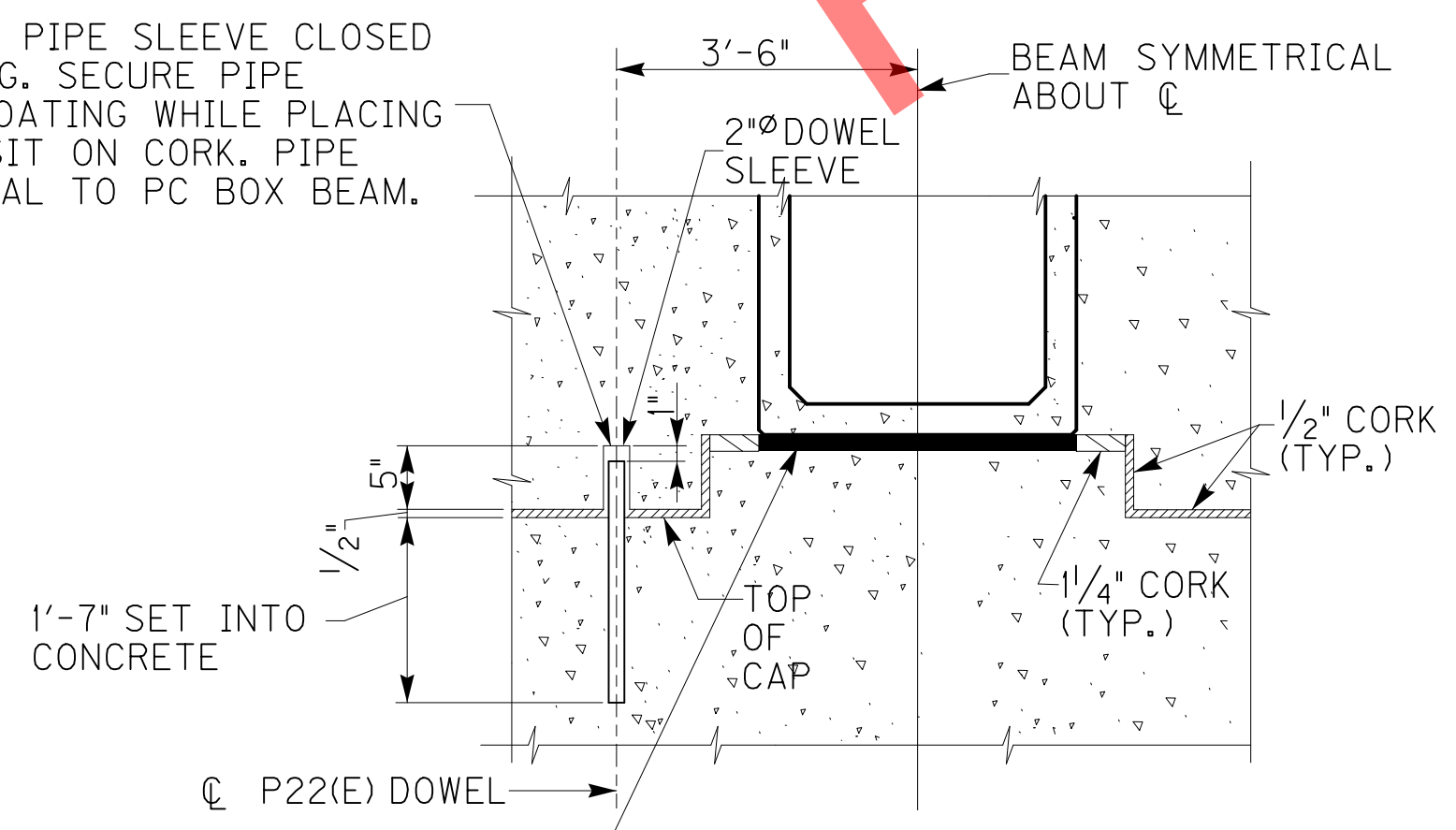


SECTION C-C

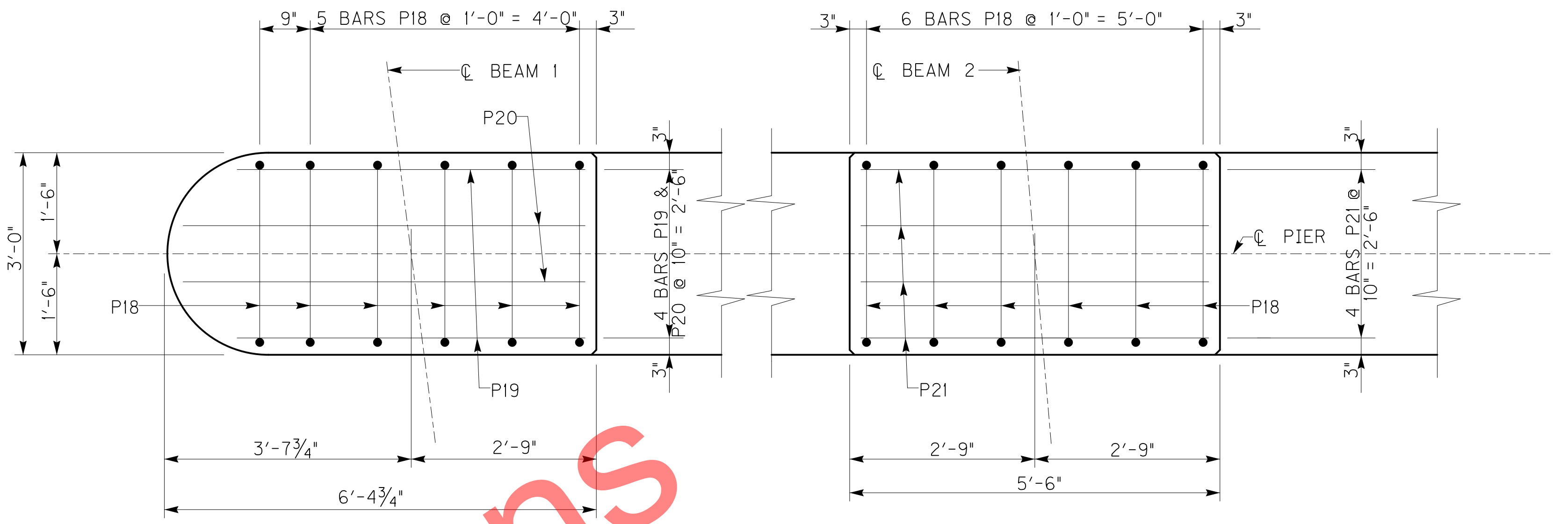


**DOWEL DETAIL
(END OF CAP)**

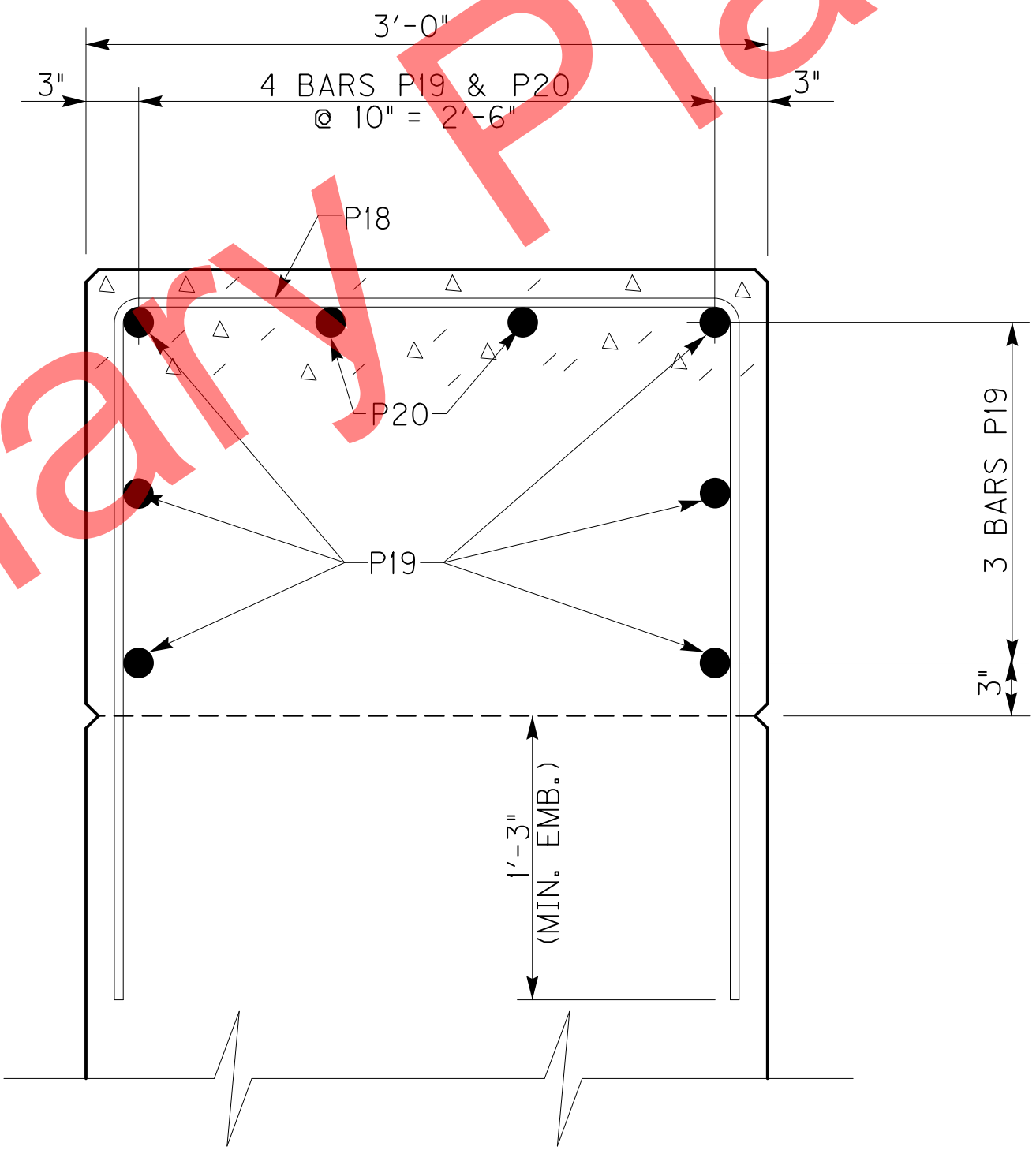
STD. WT. 2" COMMERCIAL PIPE SLEEVE CLOSED AT ONE END AND 5' LONG. SECURE PIPE SLEEVE TO PREVENT FLOATING WHILE PLACING CONCRETE. SLEEVE TO SIT ON CORK. PIPE SLEEVE TO BE INCIDENTAL TO PC BOX BEAM.



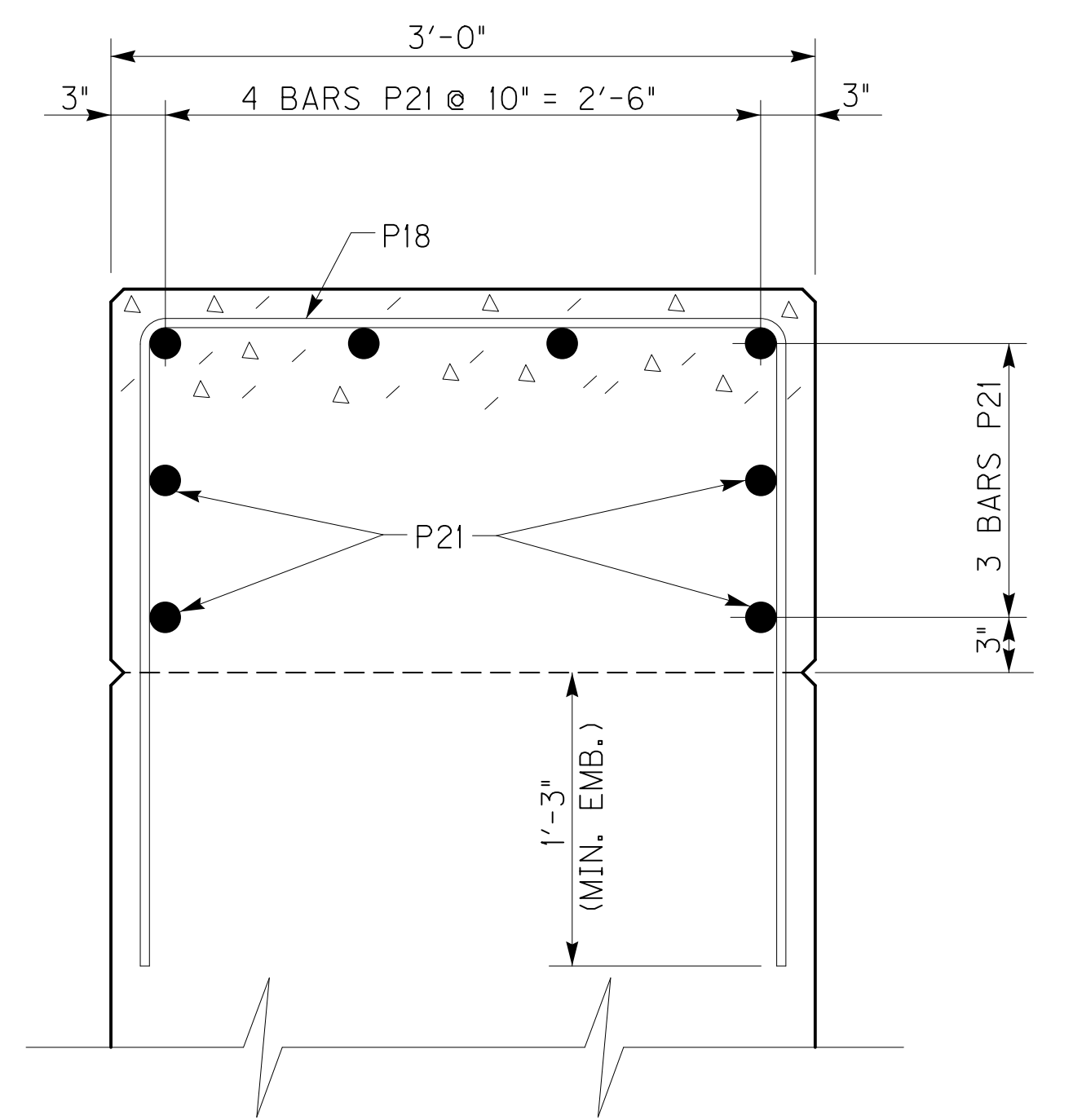
**DOWEL DETAIL
(TOP OF CAP)**



PEDESTAL PLAN PIER 1



PEDESTAL SECTION BEAM 1



PEDESTAL SECTION BEAM 2

REVISION		DATE
DATE: 07-2011	CHECKED BY: EAO	
DESIGNED BY: WTB	DETAILED BY: CH	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
CAMPBELL		
ROUTE: I-275 WB	CROSSING: THREE MILE ROAD	
PIERS		
ITEM NUMBER: 6-2021.00	PREPARED BY: WMB INC., ENGINEERS	SHEET NO. S11 DRAWING NO. 26788

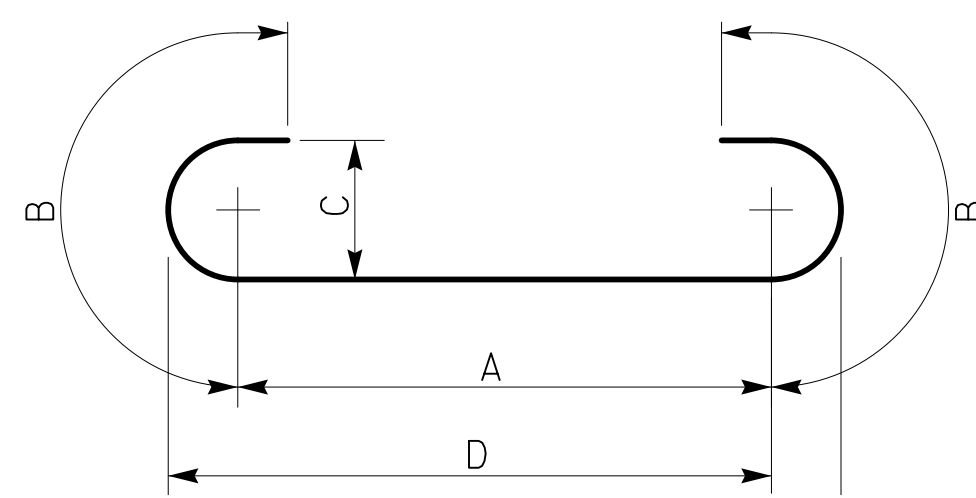
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER		SIZE	LENGTH FT. IN.	LOCATION	A		B		C		D	
		PIER 1	PIER 2				FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.		
P1	①	18		#7	17 7	BOTTOM OF FOOTING	15 1	1 3	0 7	15 8				
P2	①	32	36	7	10 7	BOTTOM OF FOOTING	8 1	1 3	0 7	8 8				
P3	STR.	16	19	6	8 8	TOP OF FOOTING								
P4	STR.	9		6	15 8	TOP OF FOOTING								
P5	④	30	30	9	9 2	COLUMN DOWEL	7 2/8	1 11	0 11 3/4	7 8				
P6	⑱	2	2	4	16 0	COLUMN SPIRAL (58 TURNS)								
P7	STR.	30	30	8	20 9	COLUMN								
P8	⑱	2		4	10 8	COLUMN SPIRAL (40 TURNS)								
P9	STR.	30		8	13 2	COLUMN								
P10	STR.	2		10	15 11	CAP								
P11	STR.	2		10	16 1	CAP								
P12	STR.	2		10	16 3	CAP								
P13	STR.	6		6	15 11	CAP								
P14	④	2		9	17 4	CAP	15 5/8	1 11	0 11 3/4	15 11				
P15	④	2		9	17 6	CAP	15 7/8	1 11	0 11 3/4	16 1				
P16	④	2		9	17 8	CAP	15 9/8	1 11	0 11 3/4	16 3				
P17	⑭	42	52	5	11 9	CAP	3 8	1 10						
P18	②	12	12	5	9 1	PEDESTALS	3 3	2 8						
P19	STR.	6	4	5	5 2	PEDESTALS								
P20	STR.	2	2	5	5 11	PEDESTALS								
P21	STR.	8	6	5	5 3	PEDESTALS								
P22(E)	STR.	2	2	✱	2 0	DOWELS								
P23	STR.	12	12	8	3 0	DOWELS								
P24	①		18	7	19 11	BOTTOM OF FOOTING	17 5	1 3	0 7	18 0				
P25	STR.		9	6	18 0	TOP OF FOOTING								
P26	⑱		2	4	12 8	COLUMN SPIRAL (47 TURNS)								
P27	STR.		30	8	15 2	COLUMN								
P28	STR.		2	10	18 2	CAP								
P29	STR.		2	10	18 4	CAP								
P30	STR.		2	10	18 6	CAP								
P31	STR.		6	6	18 2	CAP								
P32	④		2	9	19 7	CAP	17 8/8	1 11	0 11 3/4	18 2				
P33	④		2	9	19 9	CAP	17 10/8	1 11	0 11 3/4	18 4				
P34	④		2	9	19 11	CAP	18 0/8	1 11	0 11 3/4	18 6				

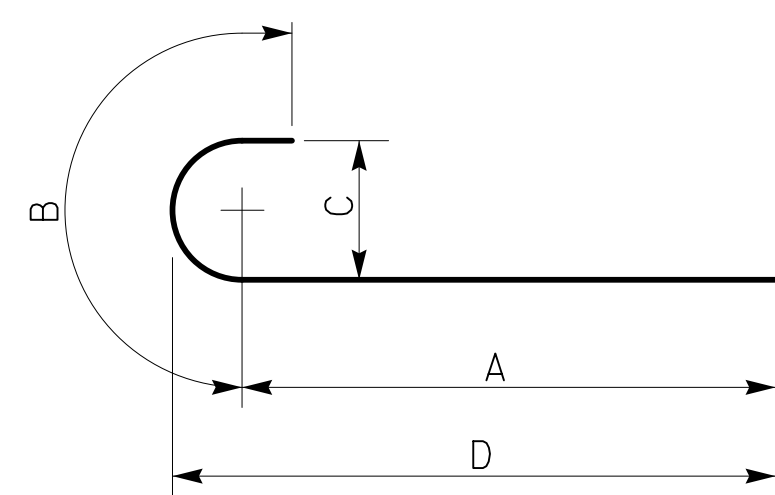
NOTE: REINFORCING BARS DESIGNATED BY THE SUFFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

REINFORCING BARS DESIGNATED BY THE SUFFIX (S) IN THE BILL OF REINFORCEMENT SHALL BE CONSIDERED STIRRUPS FOR PURPOSES OF BEND DIAMETERS.

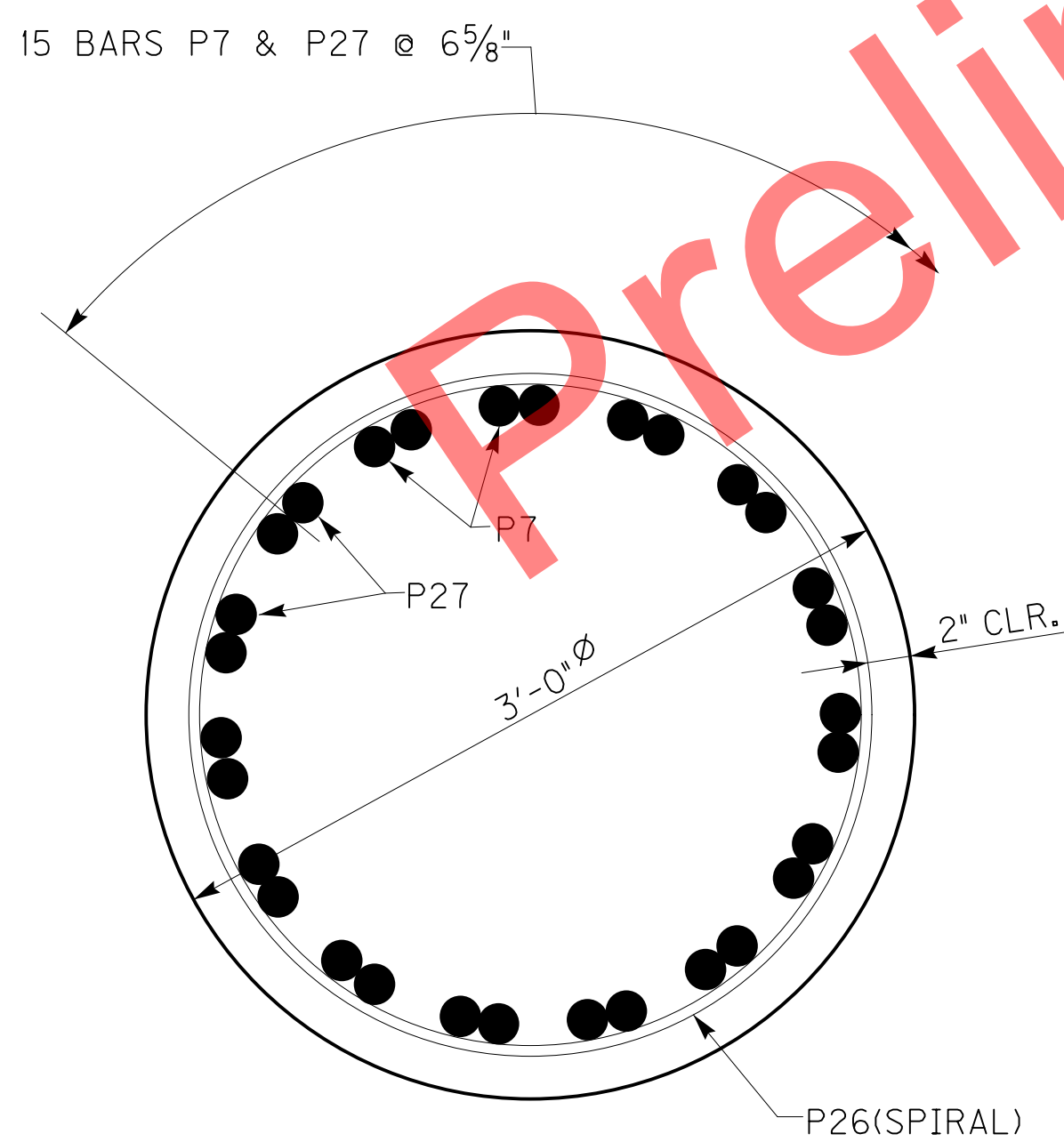
✱ 1/2" Ø SMOOTH ROUND PIN, EPOXY COATED.



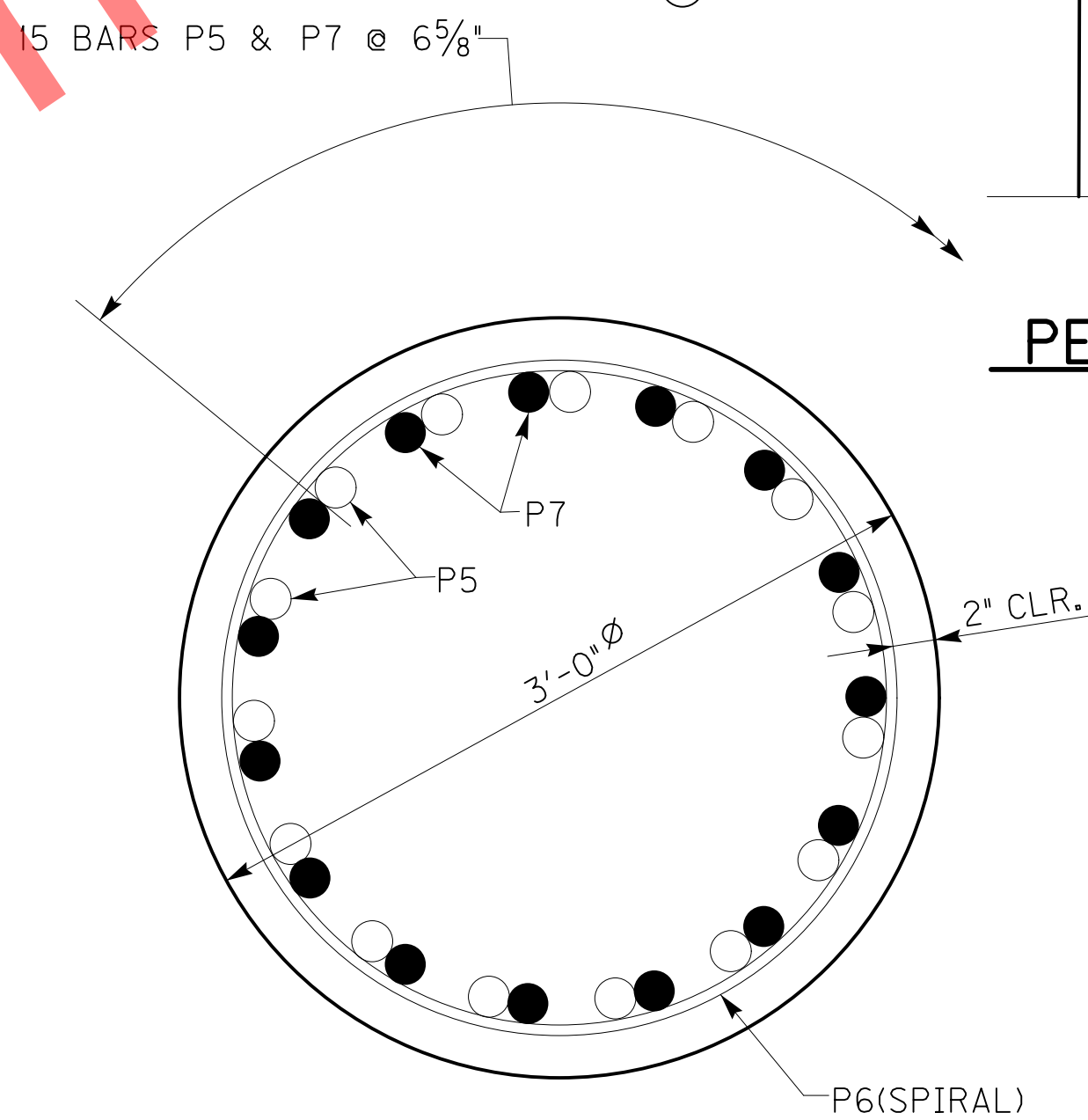
TYPE ①



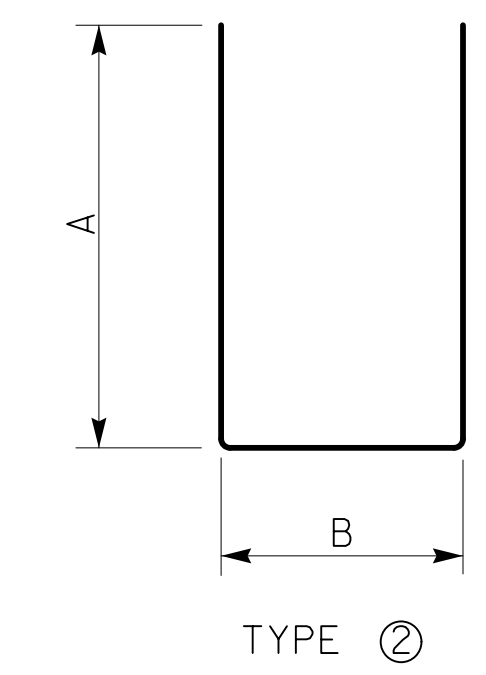
TYPE ④



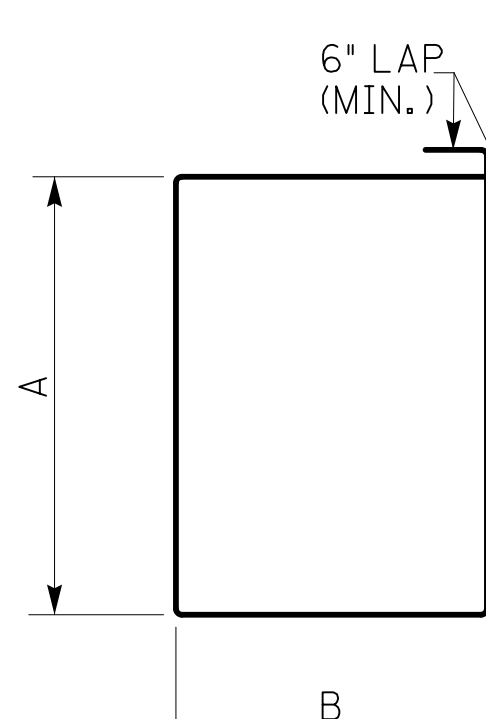
SECTION E-E



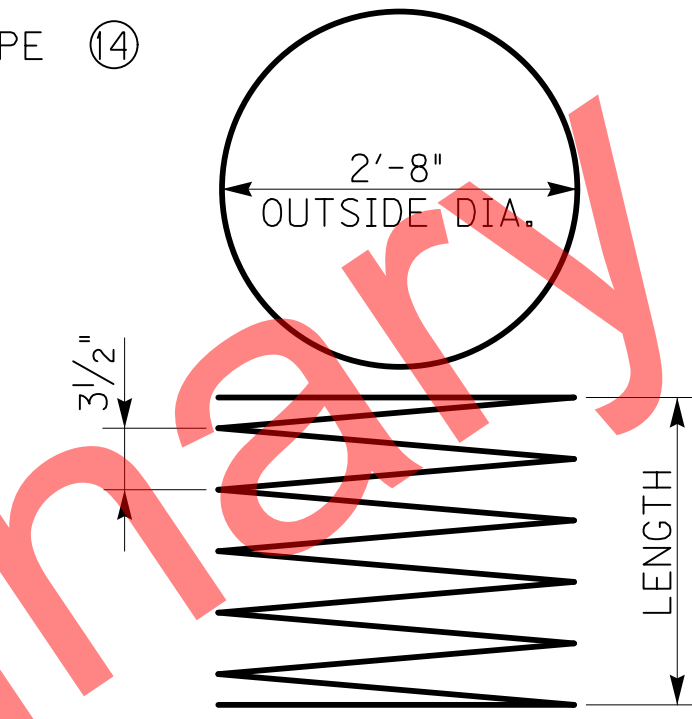
SECTION F-F



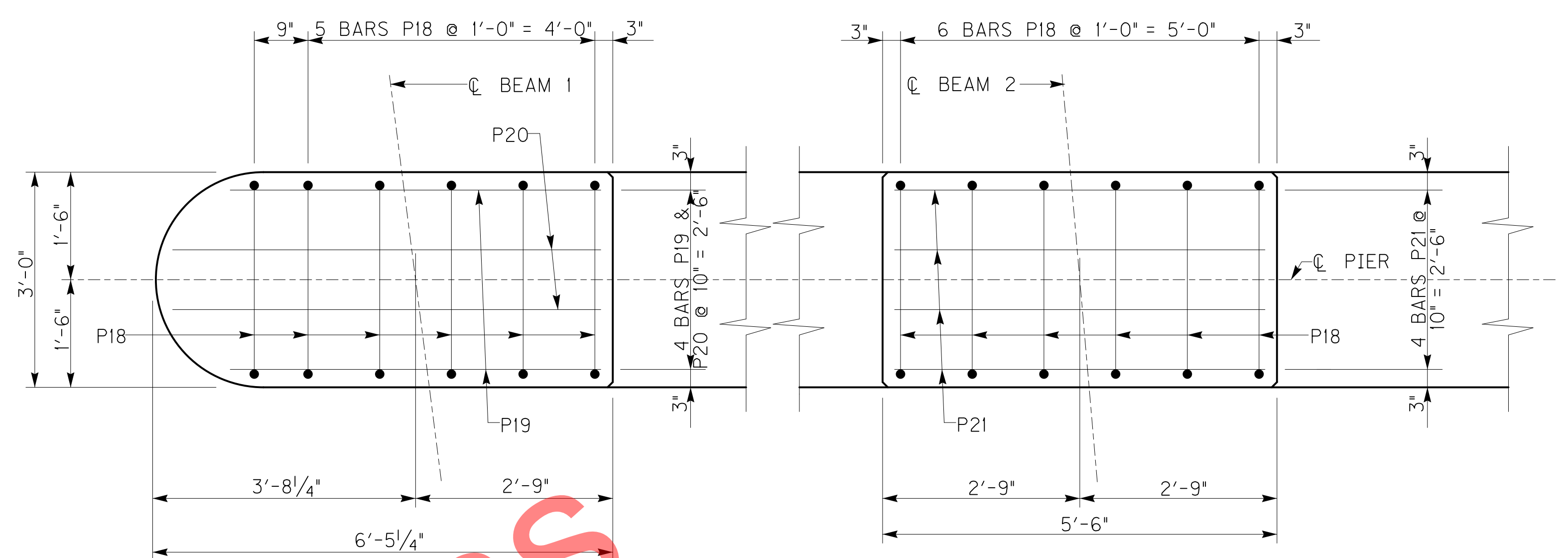
TYPE ②



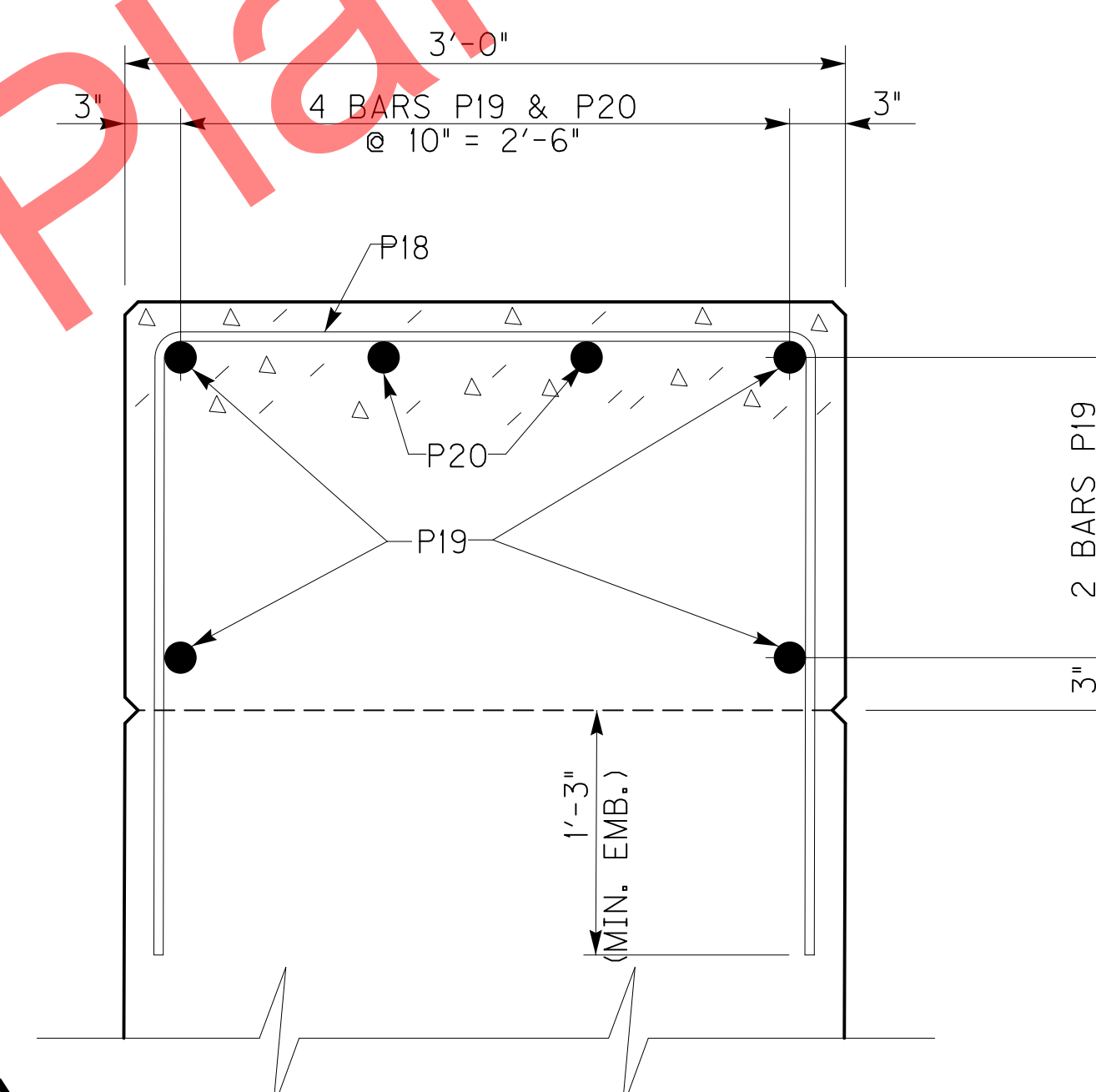
TYPE ⑭



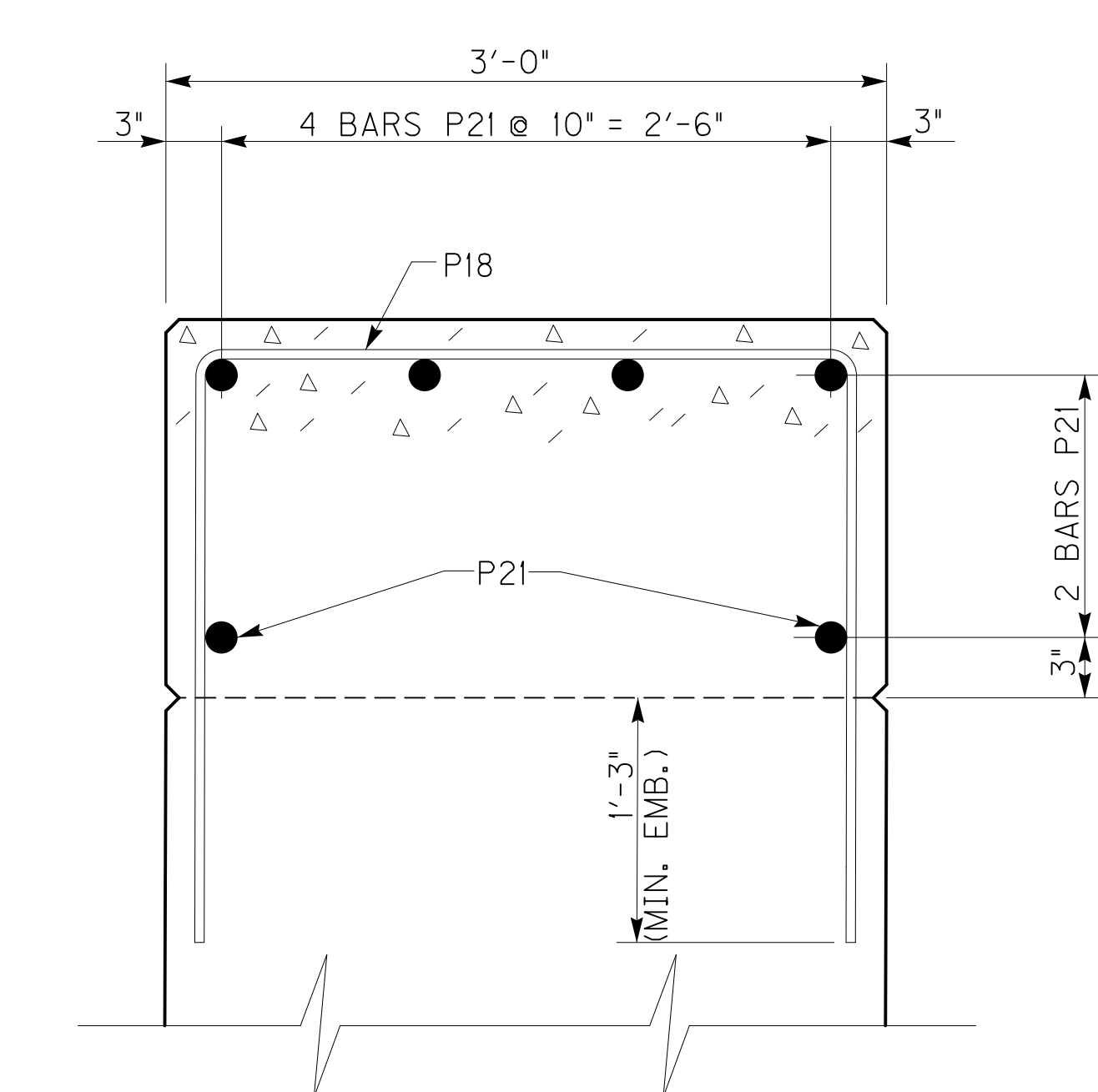
TYPE ⑱



PEDESTAL PLAN PIER 2



PEDESTAL SECTION BEAM 1



PEDESTAL SECTION BEAM 2

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_012.DGN

USER: choll
DATE PLOTTED: November 11, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443

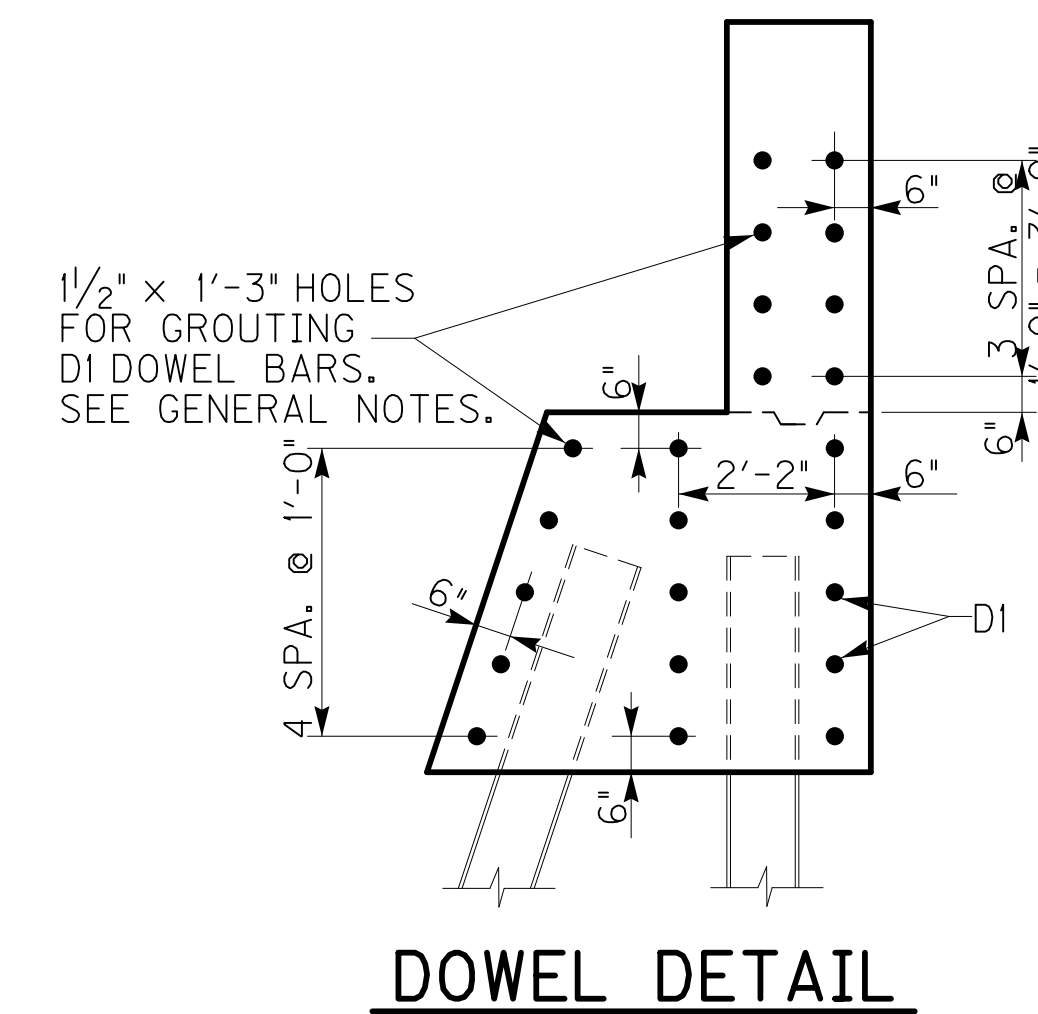
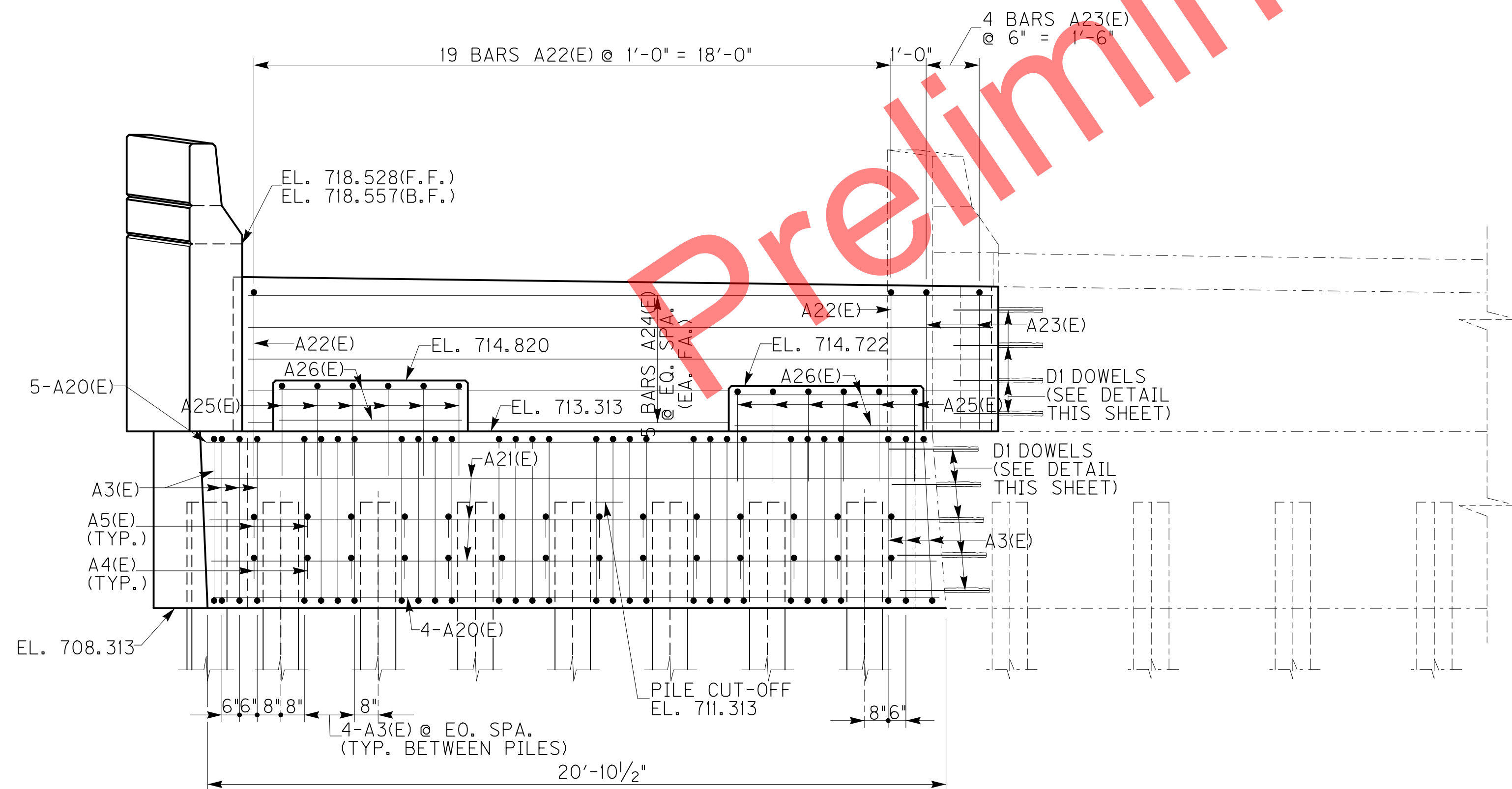
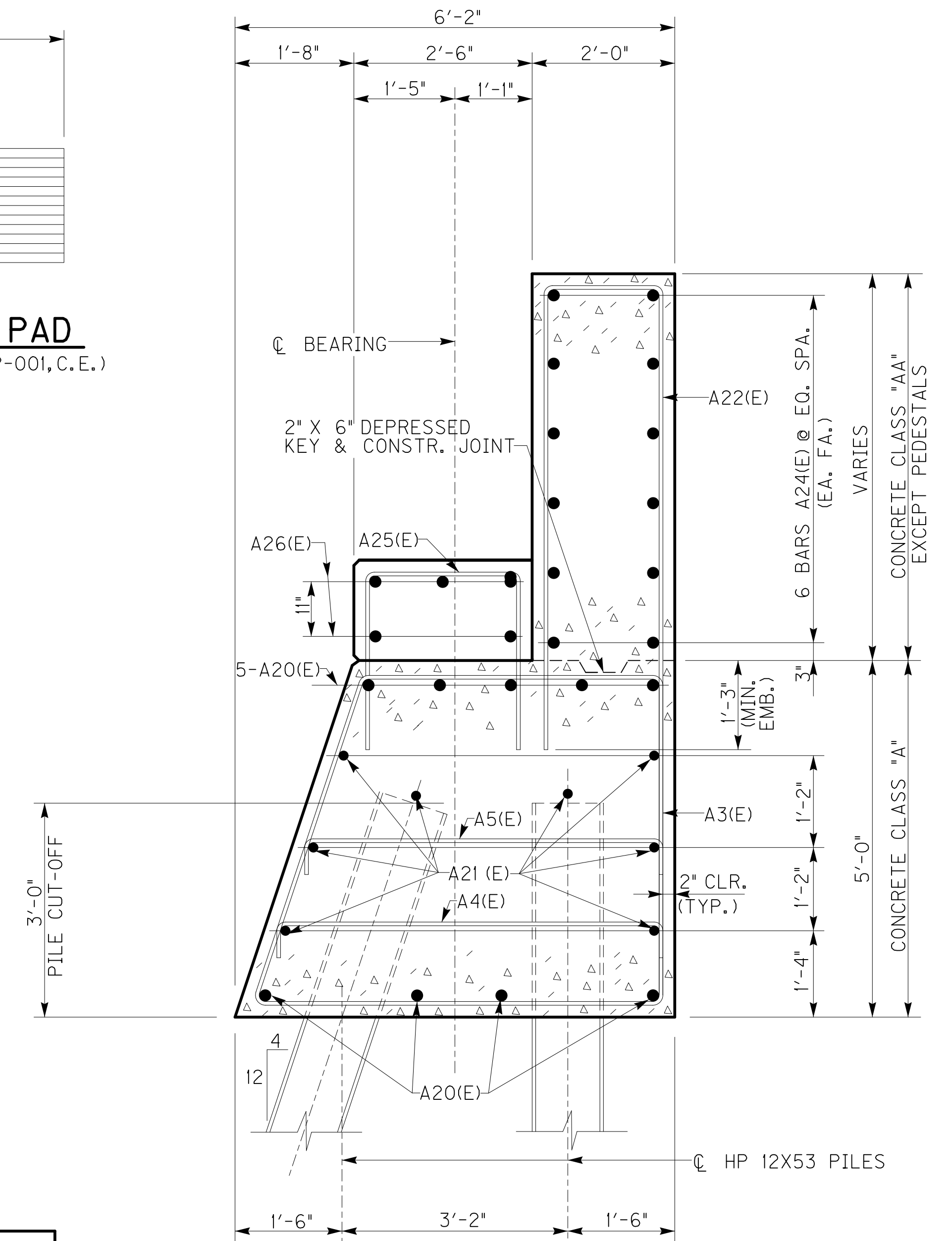
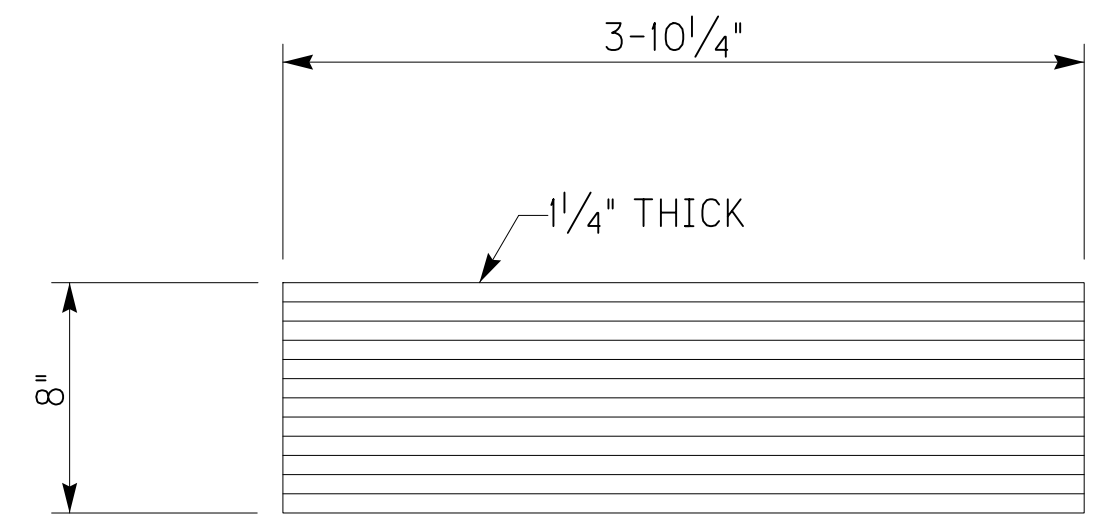
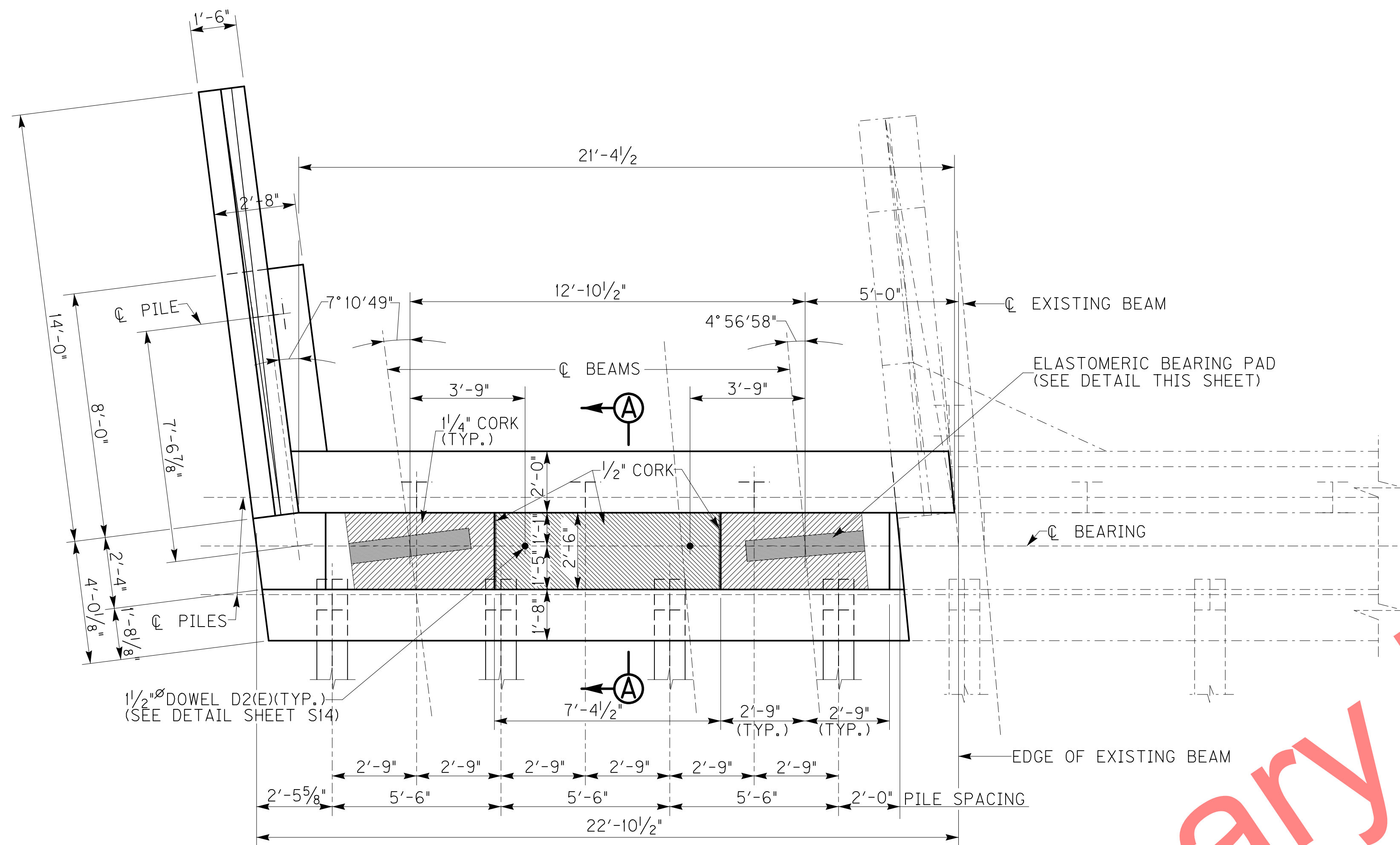
REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
PIERS		
ITEM NUMBER	PREPARED BY	
6-2021.00	WMB INC., ENGINEERS	
	SHEET NO. S12	DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURTJ-471\THREE MILE ROAD\FINAL\S26788_013.DGN

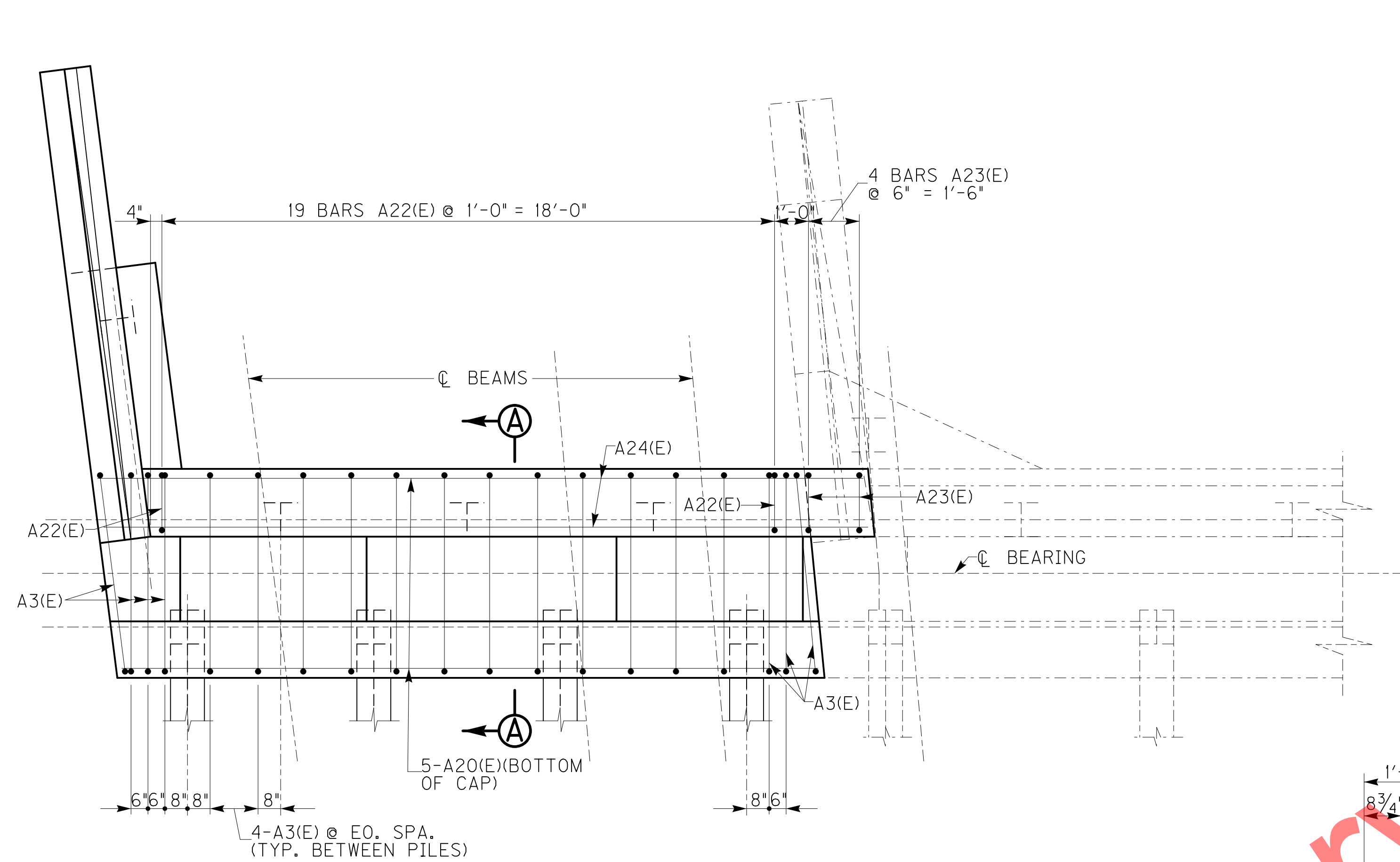
USER: choll
DATE PLOTTED: October 12, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443

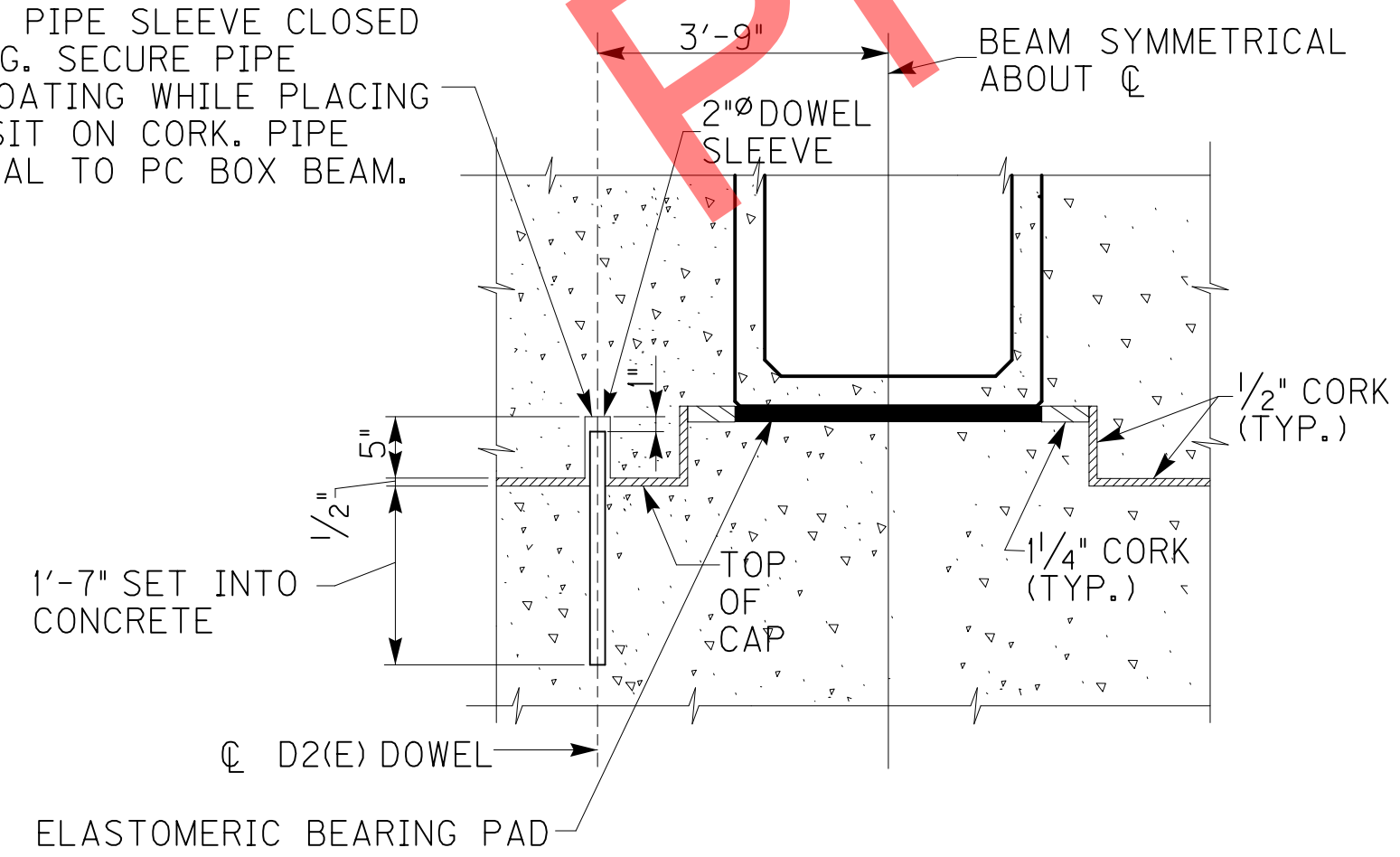


REVISION		DATE
DATE: 07-2011		CHECKED BY:
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
END BENT 2		
ITEM NUMBER 6-2021.00	PREPARED BY WMB INC., ENGINEERS	SHEET NO. S13 DRAWING NO. 26788

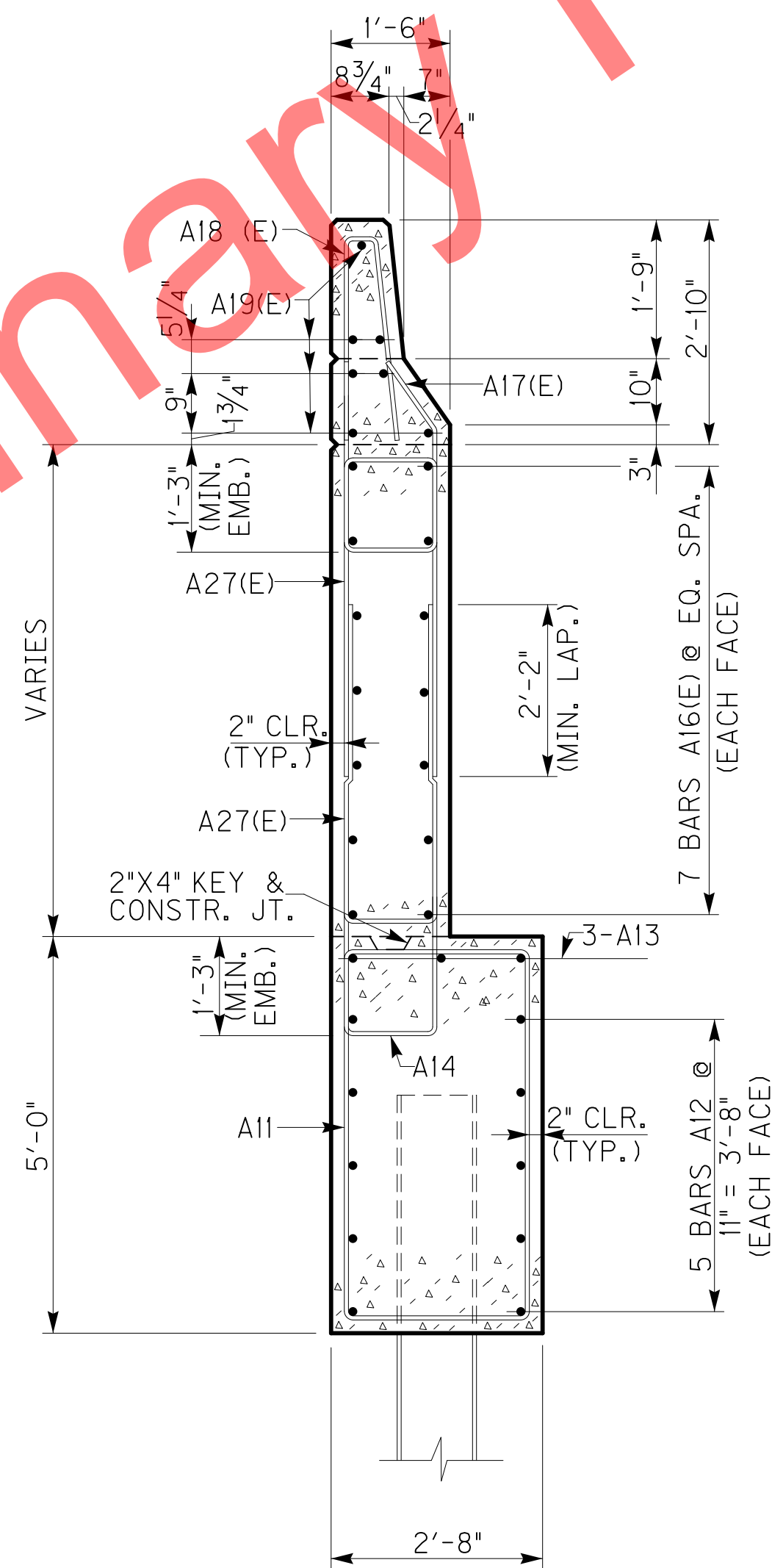


PLAN
(SHOWING DIMENSIONS)

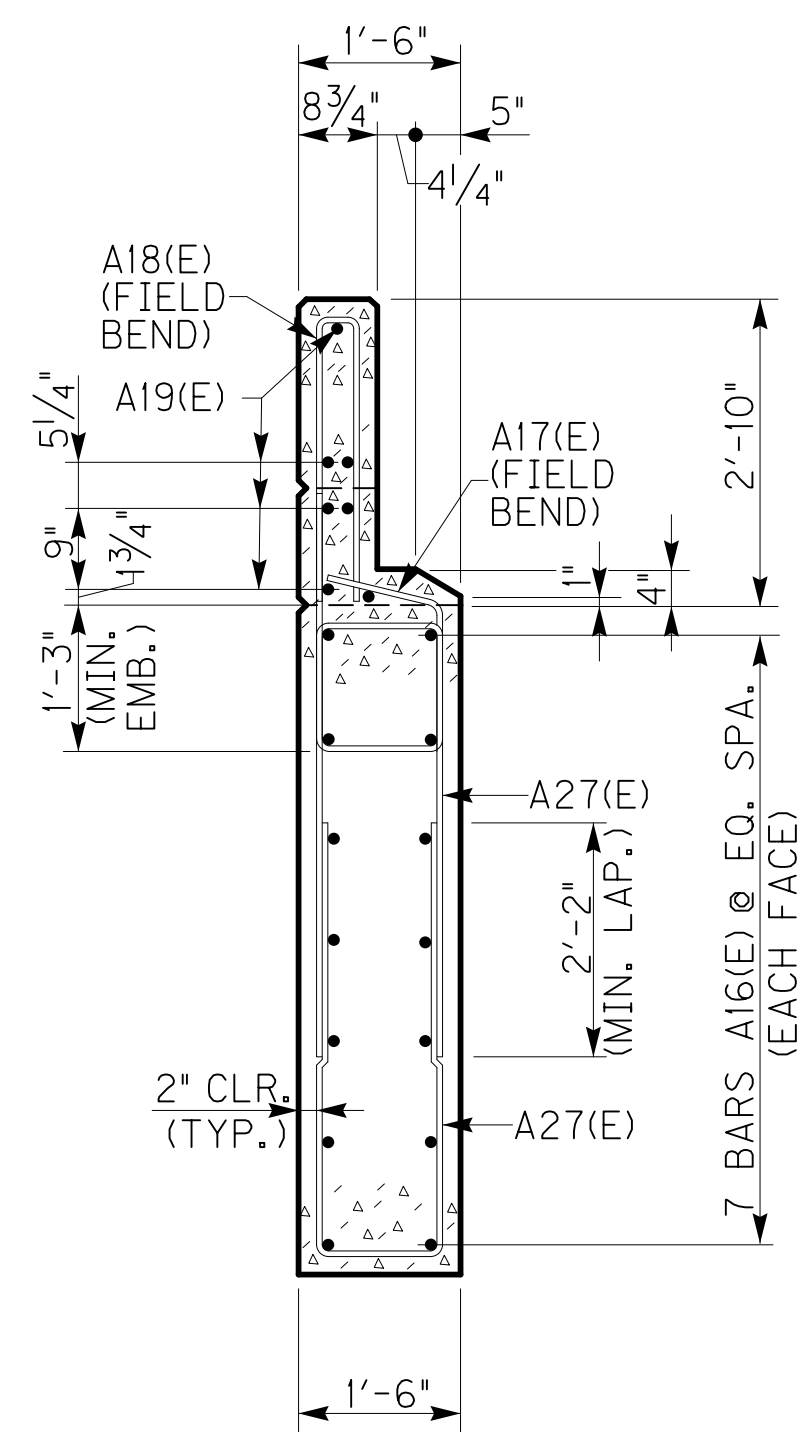
STD. WT. 2" COMMERCIAL PIPE SLEEVE CLOSED AT ONE END AND 5' LONG. SECURE PIPE SLEEVE TO PREVENT FLOATING WHILE PLACING CONCRETE. SLEEVE TO SIT ON CORK. PIPE SLEEVE TO BE INCIDENTAL TO PC BOX BEAM.



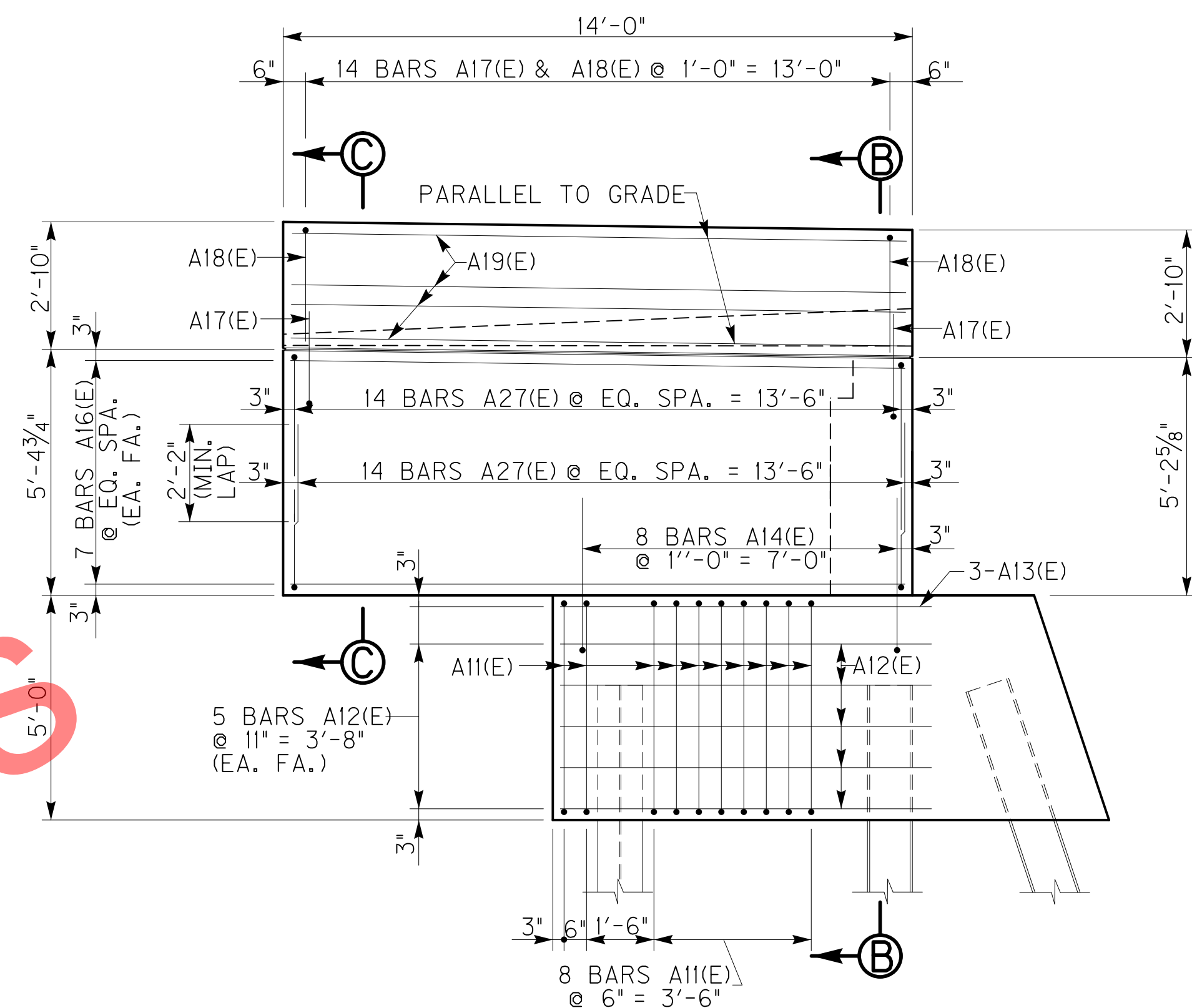
DOWEL DETAIL



SECTION B-B



SECTION C-C



WING ELEVATION

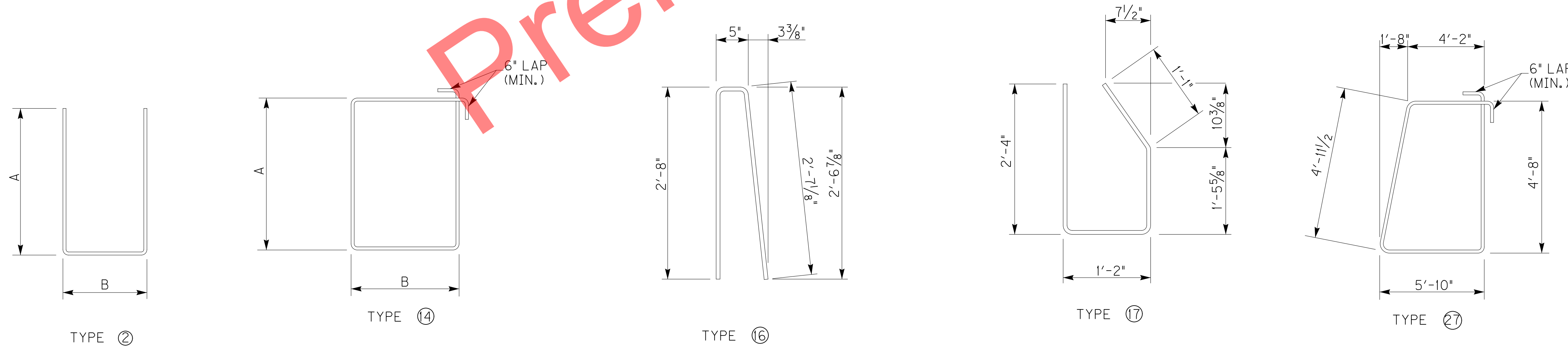
REVISION		DATE
DATE: 07-2011		CHECKED BY: EAO
DESIGNED BY: WTB		DETAILED BY: CH
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
END BENT 2		
ITEM NUMBER	PREPARED BY:	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S14
		DRAWING NO.
		26788

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER		SIZE	LENGTH		LOCATION	A		B		C		D	
		END BENT 1	END BENT 2		FT.	IN.		FT.	IN.	FT.	IN.	FT.	IN.		
A1(E)	STR.	9		#8	15	5	CAP								
A2(E)	STR.	8		6	15	5	CAP								
A3(E)	②	21	31	5	20	4	CAP								
A4(E)	②	10	14	5	6	4	CAP	0	6	5	4 1/2				
A5(E)	②	10	14	5	5	11	CAP	0	6	4	11 7/8				
A6(E)	②	4		5	11	1	BACKWALL	4	9	1	8				
A7(E)	②	14		5	14	11	BACKWALL	6	8	1	8				
A8(E)	STR.	12		5	15	6	BACKWALL								
A9(E)	②	12		5	9	1	PEDESTALS	3	6	2	2				
A10(E)	STR.	14		5	5	2	PEDESTALS								
A11(E)	⑭	10	10	5	14	9	WING FOOTING	4	8	2	4				
A12(E)	STR.	10	10	5	8	0	WING FOOTING								
A13(E)	STR.	3	3	8	8	0	WING FOOTING								
A14(E)	②	8	8	5	7	11	WING	3	5	1	2				
A15(E)	②	28		5	9	5	WING	4	2	1	2				
A16(E)	STR.	14	14	5	13	8	WING								
A17(E)	⑰	14	14	5	6	0	WING								
A18(E)	⑰	14	14	5	5	7	WING								
A19(E)	STR.	7	7	5	13	8	WING								
A20(E)	STR.		9	8	20	6	CAP								
A21(E)	STR.		8	6	20	6	CAP								
A22(E)	②		19	5	12	7	BACKWALL	5	6	1	8				
A23(E)	②		4	5	9	5	BACKWALL	3	11	1	8				
A24(E)	STR.		12	5	21	2	BACKWALL								
A25(E)	②		12	5	7	9	PEDESTALS	2	10	2	2				
A26(E)	STR.		10	5	5	2	PEDESTALS								
A27(E)	②		28	5	8	3	WING	3	7	1	2				
DI	STR.	23	23	8	3	0	DOWELS								
D2(E)	STR.	1	2	※	1	11	DOWELS								

NOTE: REINFORCING BARS DESIGNATED BY THE SUFFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

※ 1/2" Ø SMOOTH ROUND PIN, EPOXY COATED.



Preliminary Plans

FILE NAME: P:\STRUCT\CURT\J-471\THREE MILE ROAD\FINAL\S26788_015.DGN
 USER: choll
 DATE PLOTTED: November 11, 2011
 E-SHEET NAME: S002GN
 MicroStation v8.11.7.443

ITEM NUMBER
6-2021.00

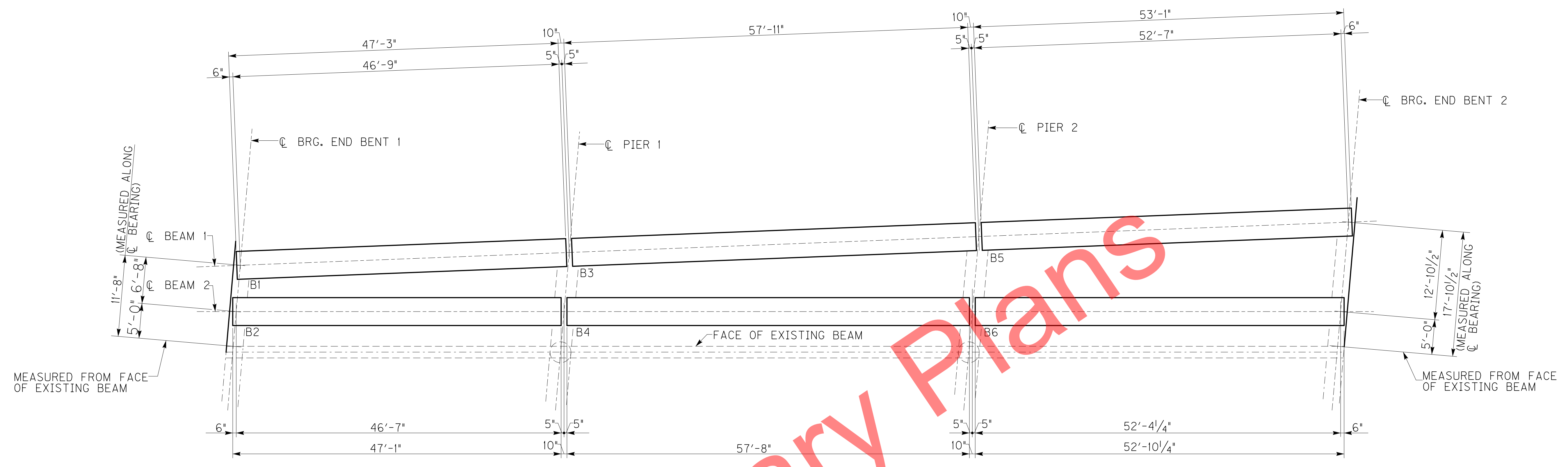
REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
END BENTS		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S15
		DRAWING NO.
		26788

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_016.DGN

USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



Preliminary Plans

PLAN

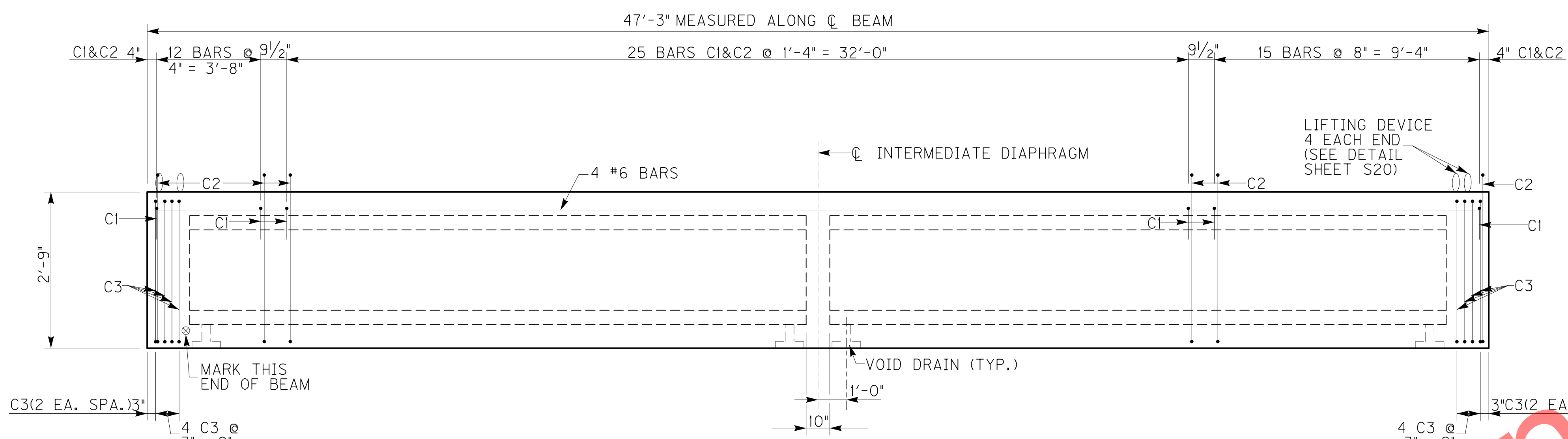
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
FRAMING PLAN		
PREPARED BY		
WMB INC., ENGINEERS		
ITEM NUMBER	SHEET NO.	DRAWING NO.
6-2021.00	S16	26788

FILE NAME: P:\STRUCT\CURTJ\471\THREE MILE ROAD\FINAL\S26788_017.DGN

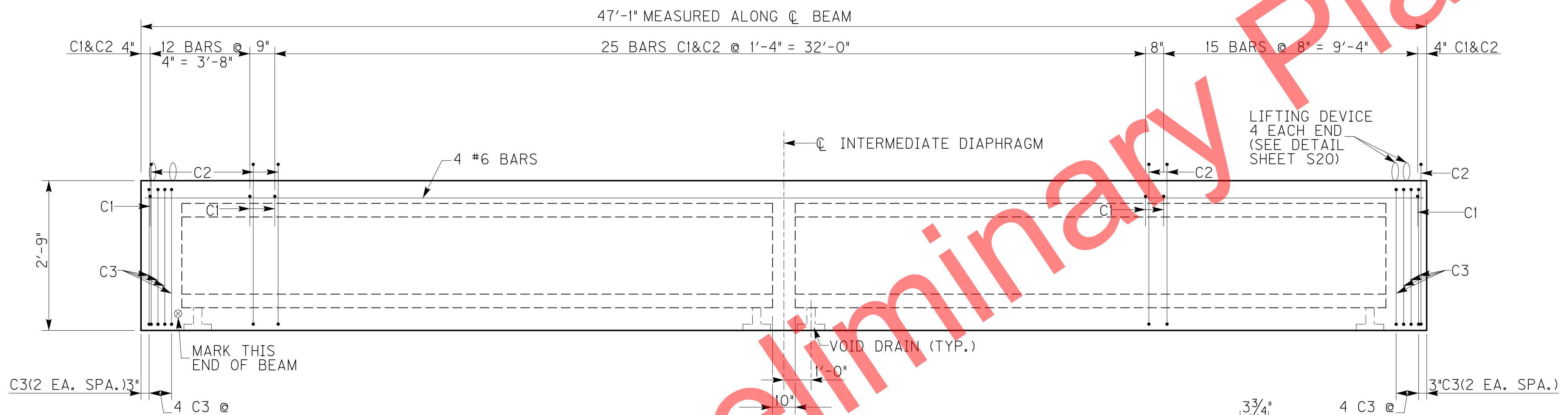
USER: choll
DATE PLOTTED: October 3, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



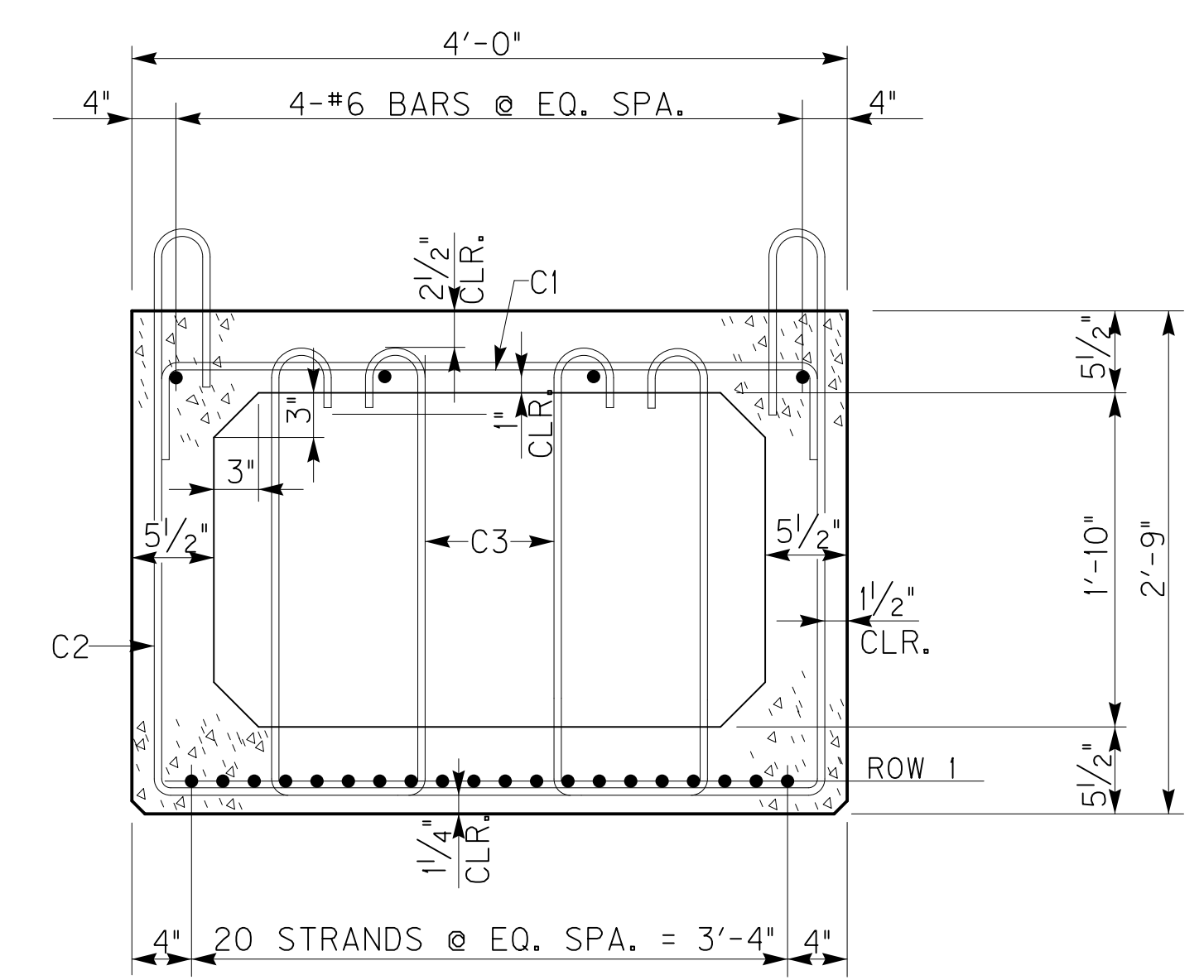
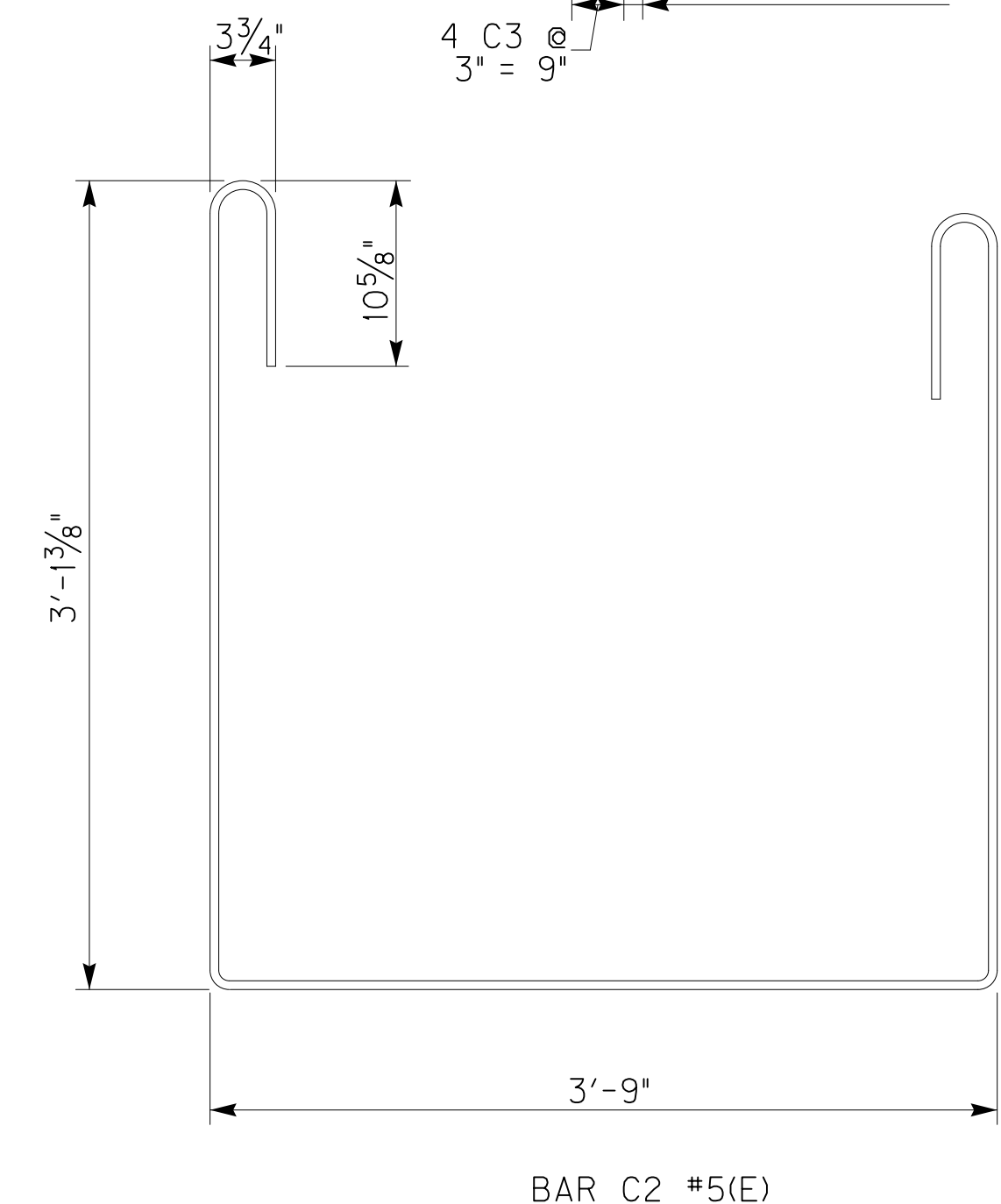
ELEVATION BEAM B1



ELEVATION BEAM B2

NOTE:
FOR GENERAL NOTES AND BEAM TABLE SEE SHEET S20.
FOR DETAILS OF LIFTING DEVICE AND CABLE CLAMPS SEE SHEET S20.

NO. OF BARS REQUIRED PER BEAM		
BAR	B1	B2
C1	52	52
C2	52	52
C3	16	16



SECTION BEAM B1 & B2

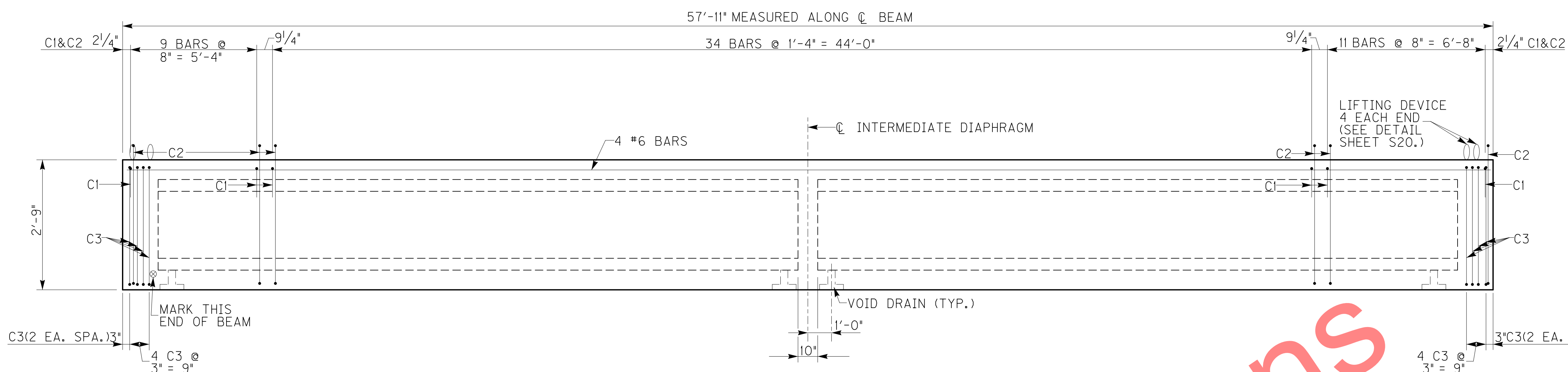
REVISION		DATE
DATE: 08-2011	DESIGNED BY: WTB	CHECKED BY: EAO
DESIGNED BY: WTB	DATE: 08-2011	CHECKED BY: EAO
DETAILED BY: CH	DATE: 08-2011	CHECKED BY: WTB
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE 1275 WB	CROSSING THREE MILE ROAD	
B33 X 48 BOX BEAMS		
ITEM NUMBER 6-2021.00	PREPARED BY WMB INC., ENGINEERS	SHEET NO. S17
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_01B.DGN

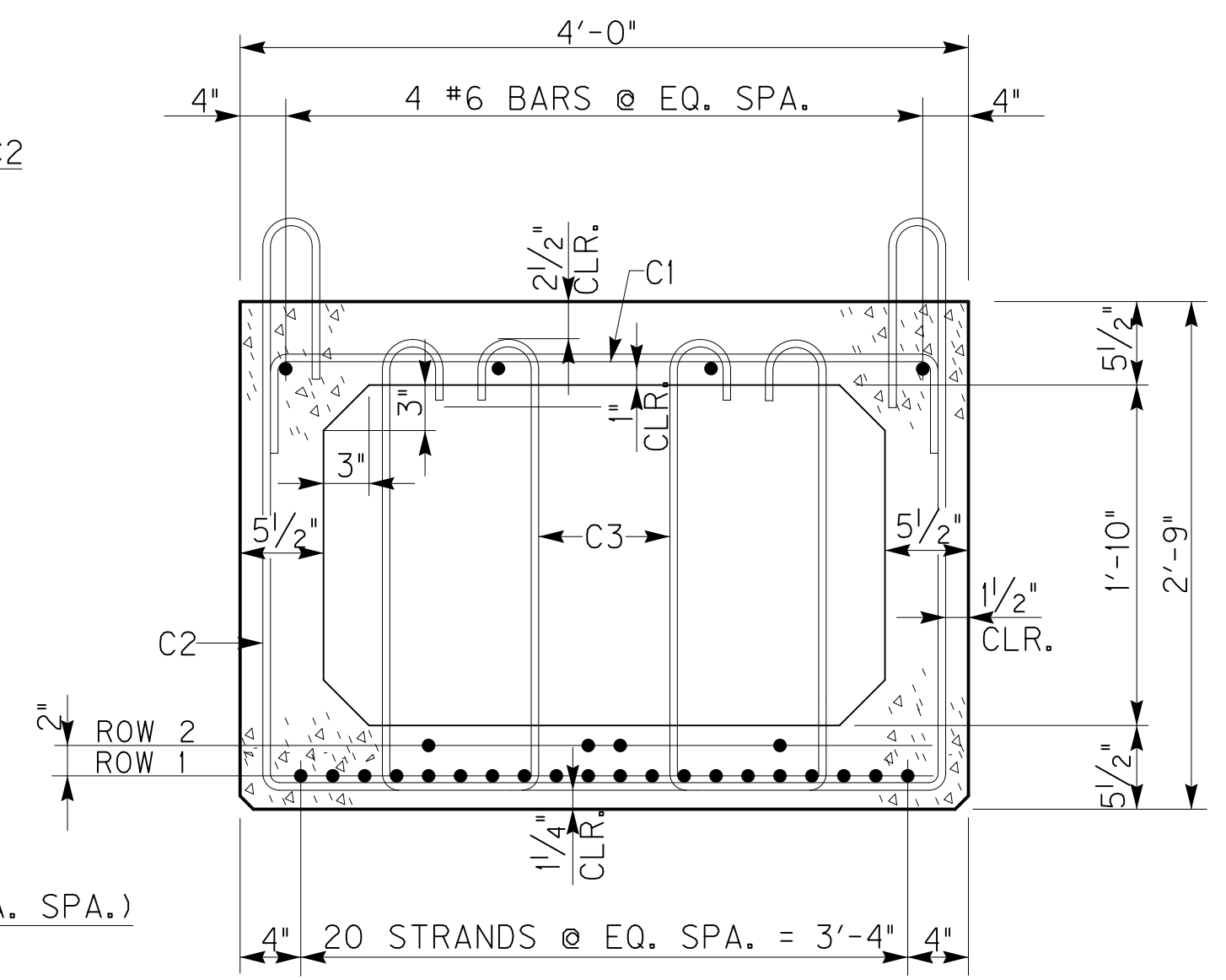
USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

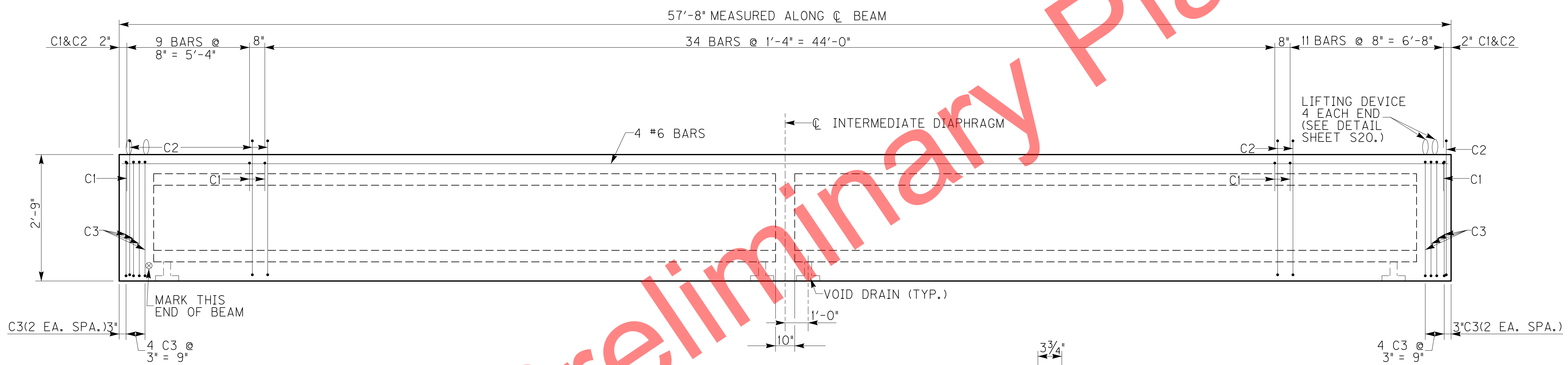
MicroStation v8.11.7.443



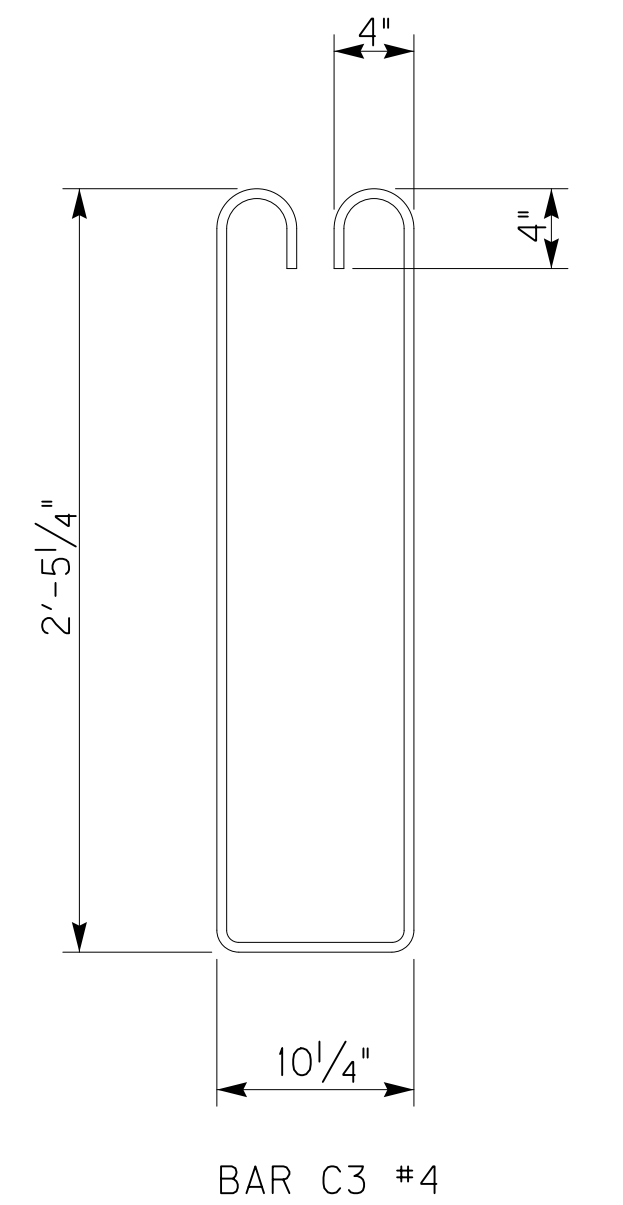
ELEVATION BEAM B3



SECTION BEAM B3 & B4



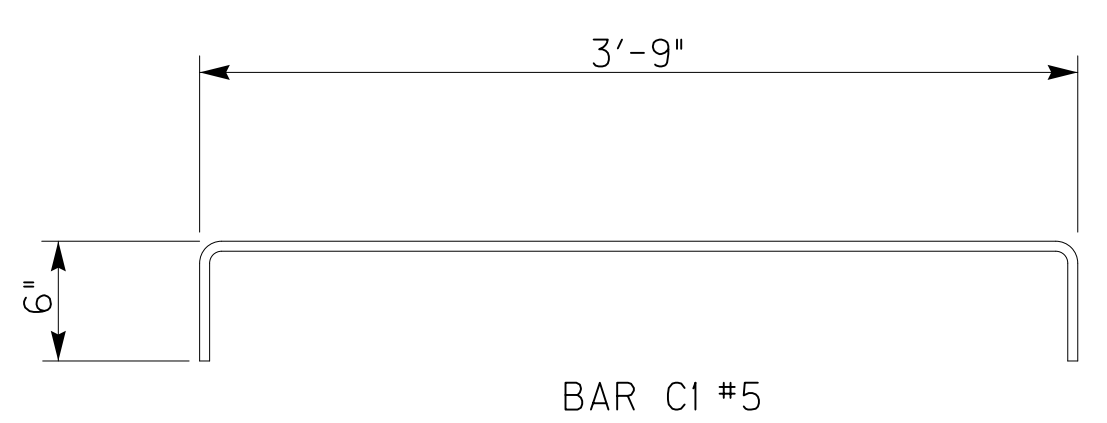
ELEVATION BEAM B4



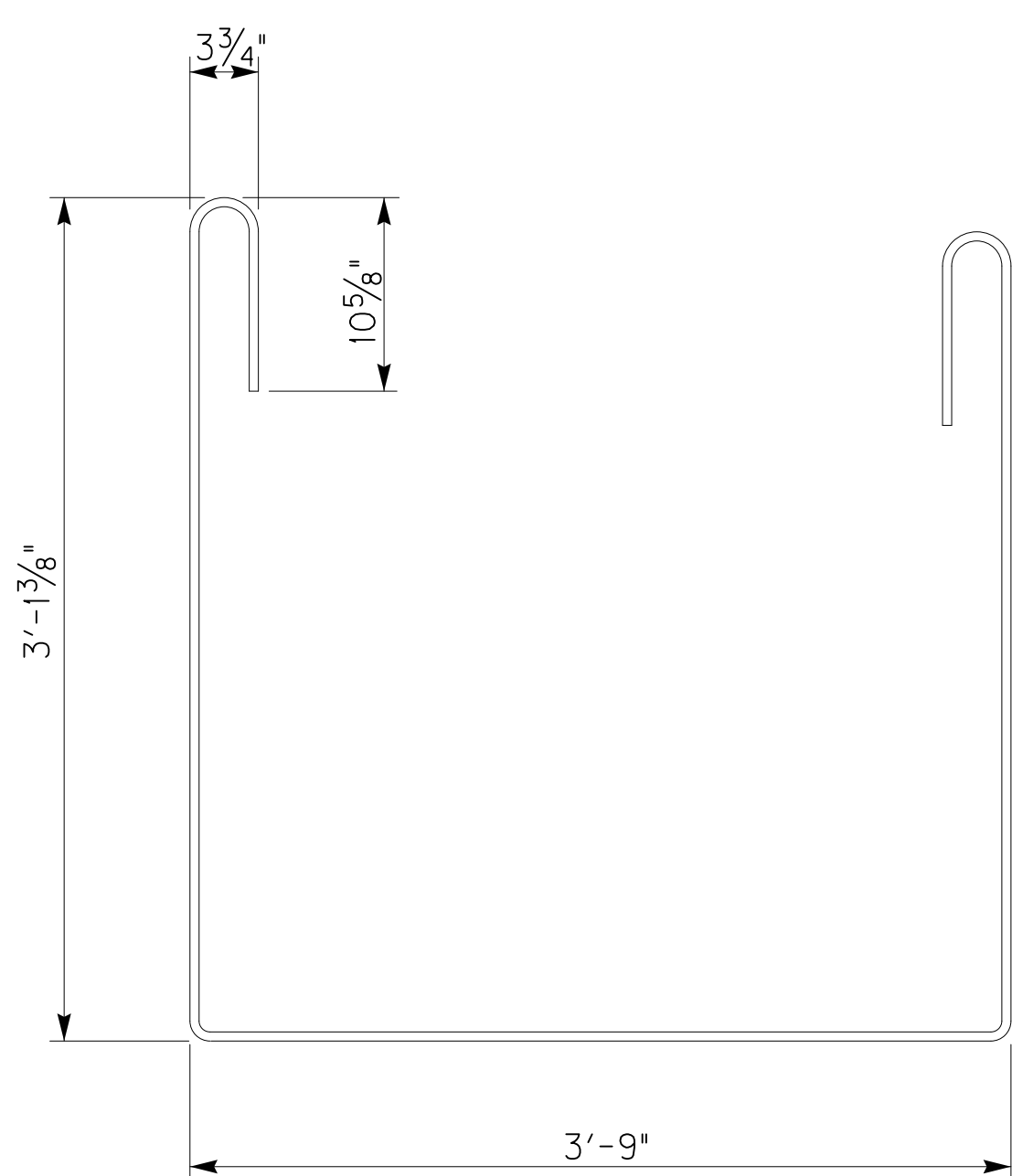
BAR C3 #4

NOTE:
FOR GENERAL NOTES AND BEAM TABLE SEE SHEET S20.
FOR DETAILS OF LIFTING DEVICE AND CABLE CLAMPS SEE SHEET S20.

NO. OF BARS REQUIRED PER BEAM			
BAR	B3	B4	
C1	54	54	
C2	54	54	
C3	16	16	



BAR C1 #5



BAR C2 #5(E)

ITEM NUMBER	6-2021.00
-------------	-----------

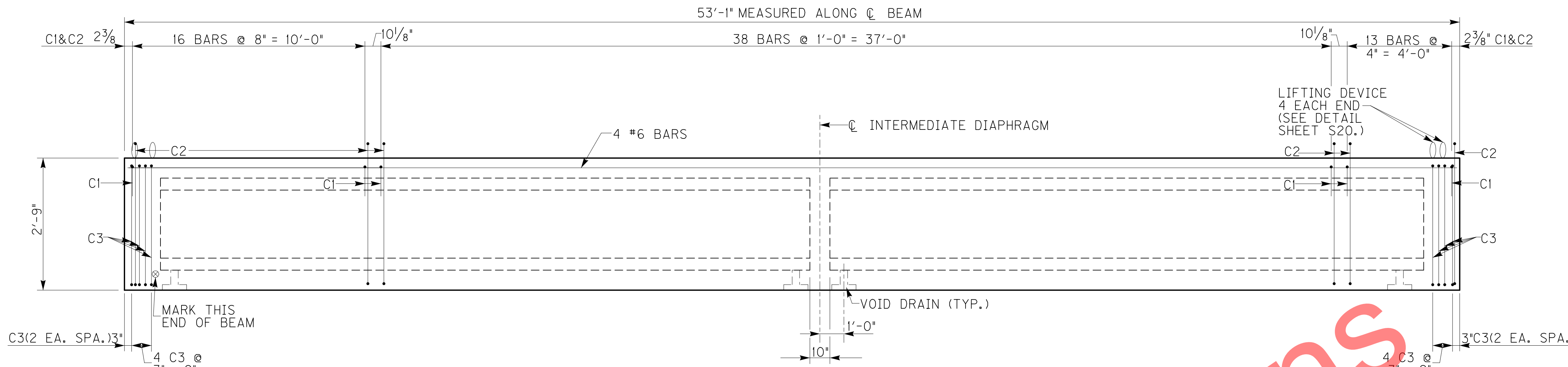
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE 1275 WB	CROSSING THREE MILE ROAD	
B33 X 48 BOX BEAMS		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S18
		DRAWING NO.
		26788

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_019.DGN

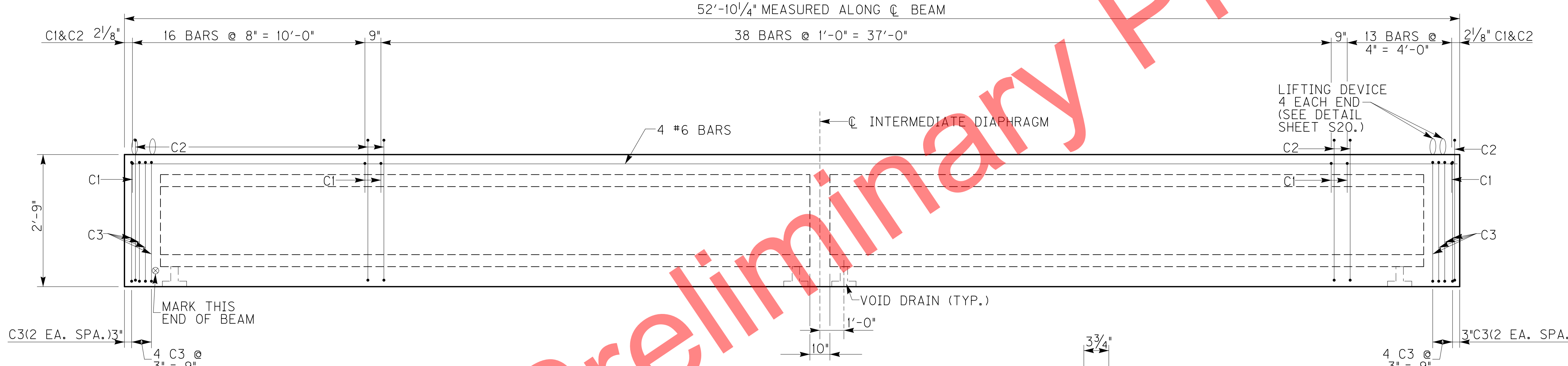
USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

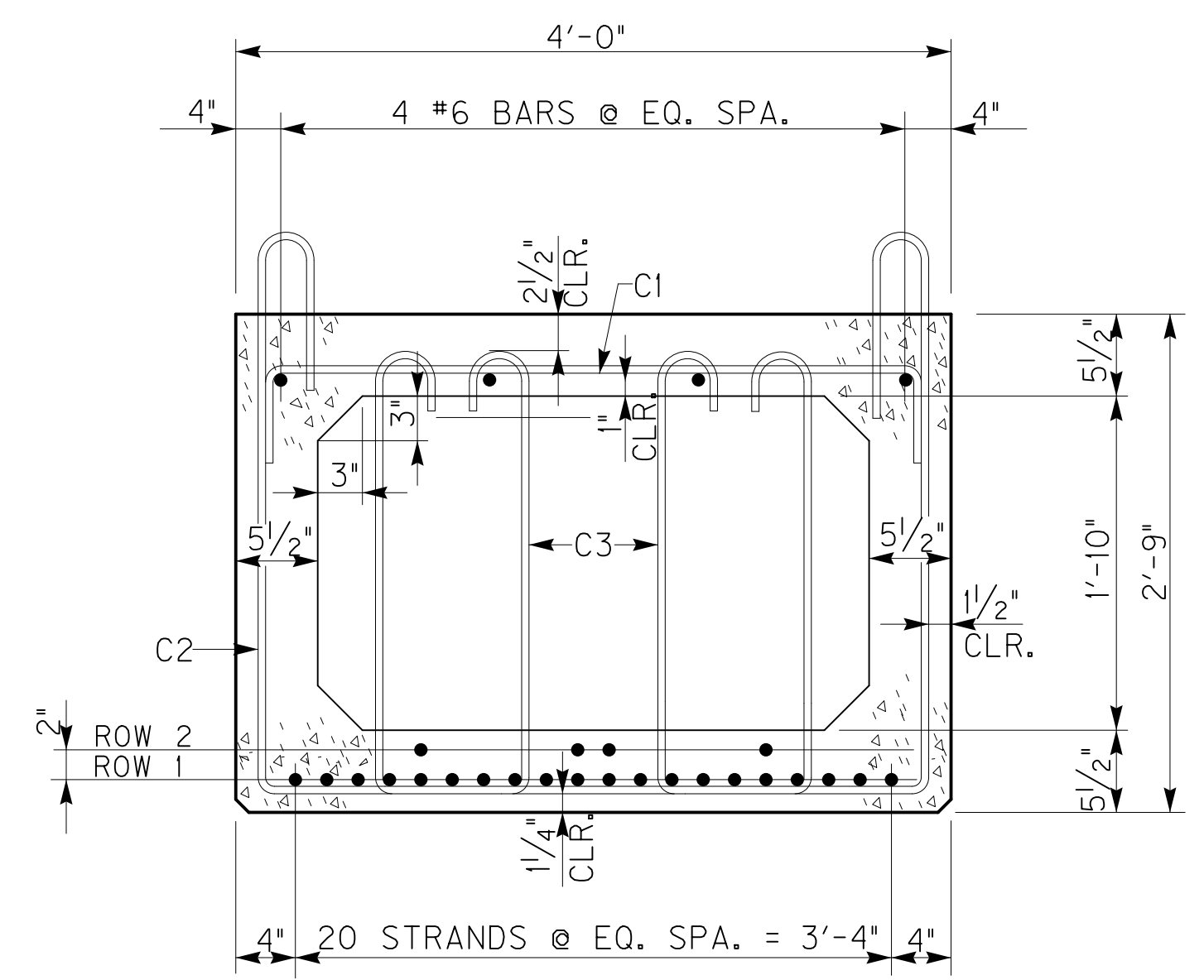
MicroStation v8.11.7.443



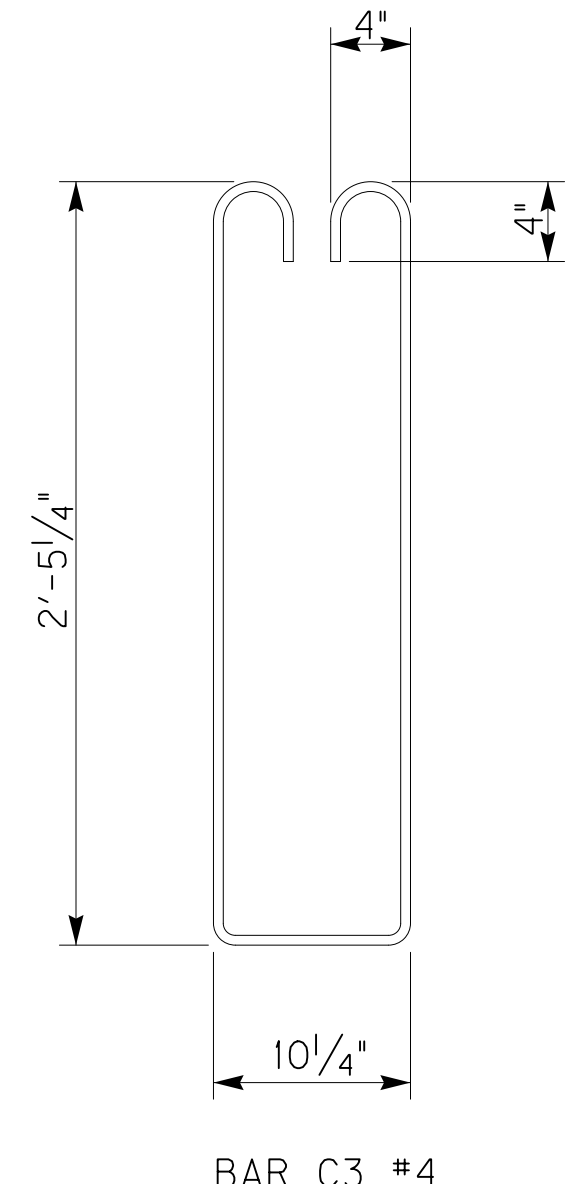
ELEVATION BEAM B5



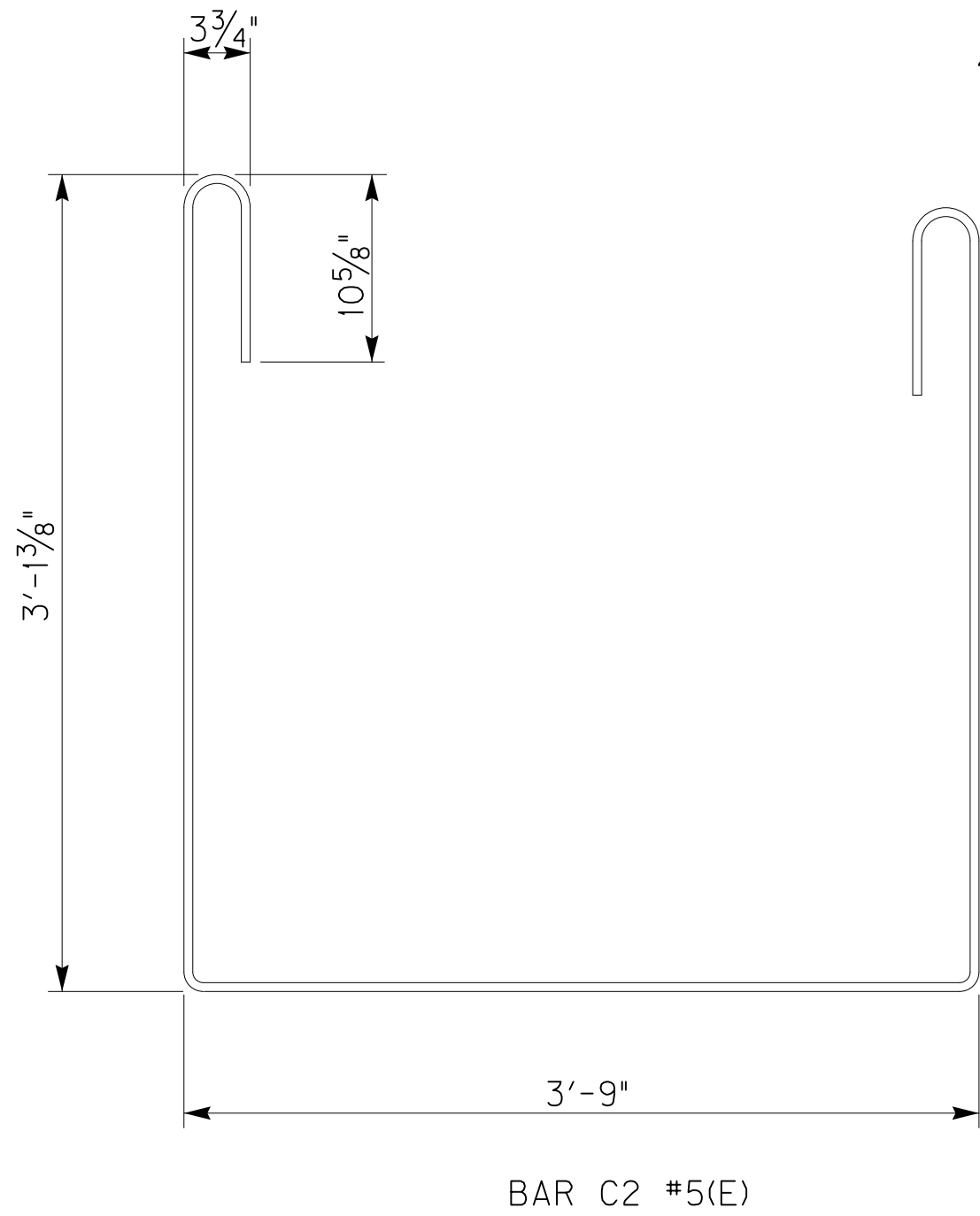
ELEVATION BEAM B6



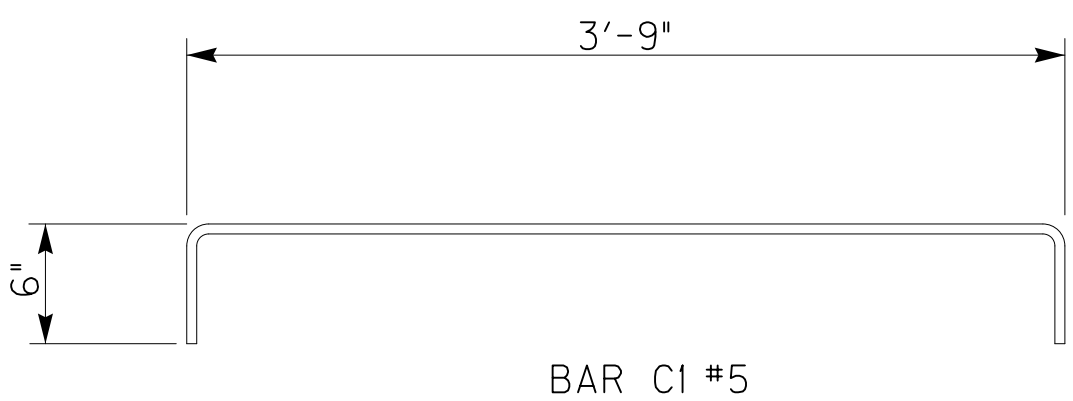
SECTION BEAM B5 & B6



BAR C3 #4



BAR C2 #5(E)



BAR C1 #5

NOTE:
FOR GENERAL NOTES AND BEAM TABLE SEE SHEET S20.
FOR DETAILS OF LIFTING DEVICE AND CABLE CLAMPS SEE SHEET S20.

NO. OF BARS REQUIRED PER BEAM			
BAR	B3	B4	
C1	67	67	
C2	67	67	
C3	16	16	

ITEM NUMBER	6-2021.00
-------------	-----------

DATE: 08-2011	DESIGNED BY: WTB	CHECKED BY: EAO
REVISION	DATE	DETAILED BY: CH
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE 1275 WB	CROSSING THREE MILE ROAD	
B33 X 48 BOX BEAMS		
PREPARED BY WMB INC., ENGINEERS		SHEET NO. S19 DRAWING NO. 26788

GENERAL NOTES

CONCRETE: PRESTRESSED GIRDER CONCRETE SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

MATERIAL DESIGN SPECIFICATIONS: FOR PRESTRESSED GIRDER.
 F_y = 60KSI F'c = 270 KSI

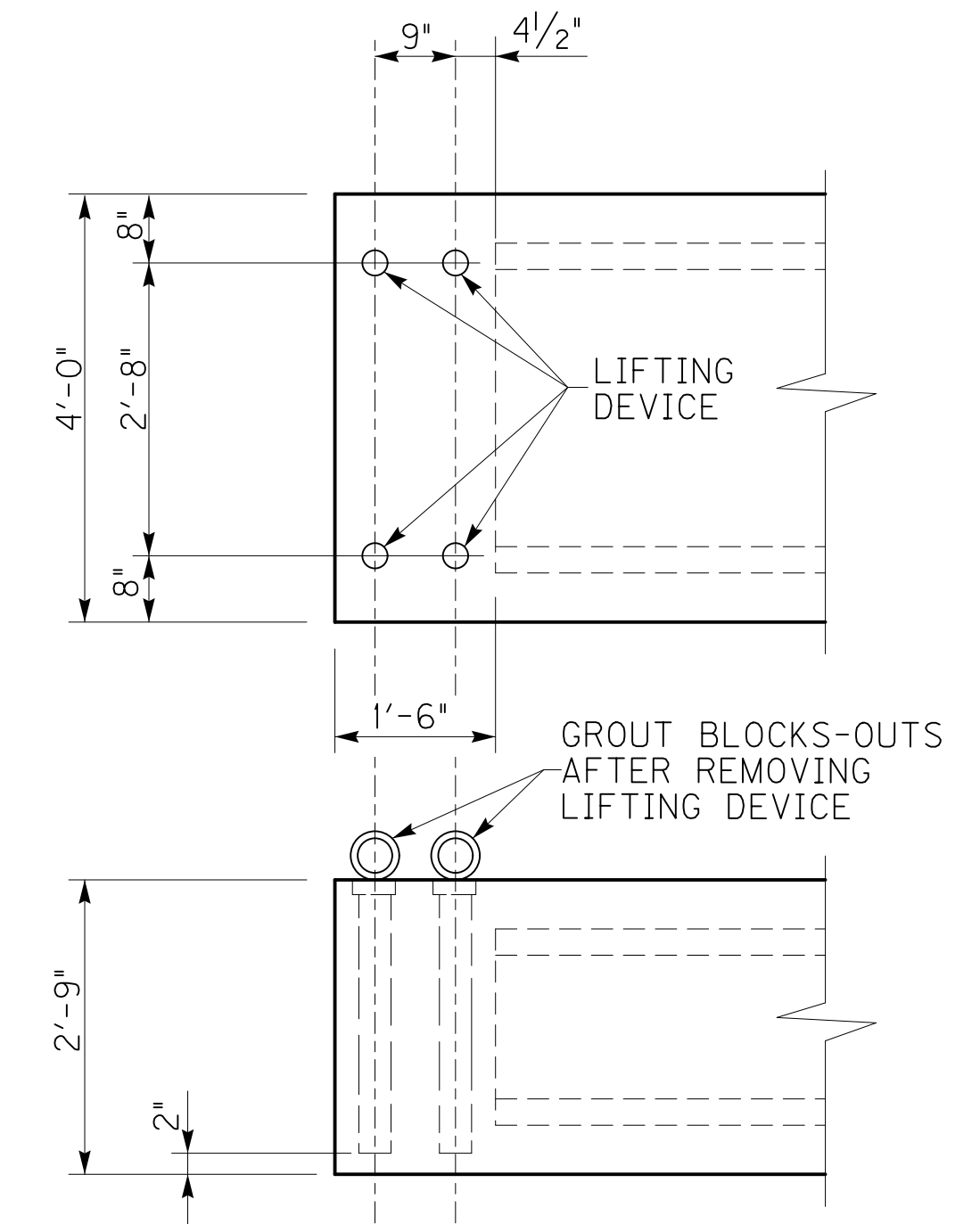
PRESTRESSING REINFORCEMENT: PRESTRESSING STRANDS SHALL BE LOW-RELAXATION STRAND CONFORMING TO AASHTO M 203. IF AN ALTERNATE STRAND ARRANGEMENT OR STRAND TYPE IS PREFERRED BY THE CONTRACTOR, THE DESIGNER THAT DEVELOPED THE ORIGINAL PLANS SHALL PROVIDE THE DESIGN AND ALSO REVISE THE ORIGINAL PLANS TO REFLECT THE CHANGES. THESE DESIGN AND PLAN MODIFICATIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

TENSIONING METHOD: BEAMS SHALL BE PRETENSIONED.

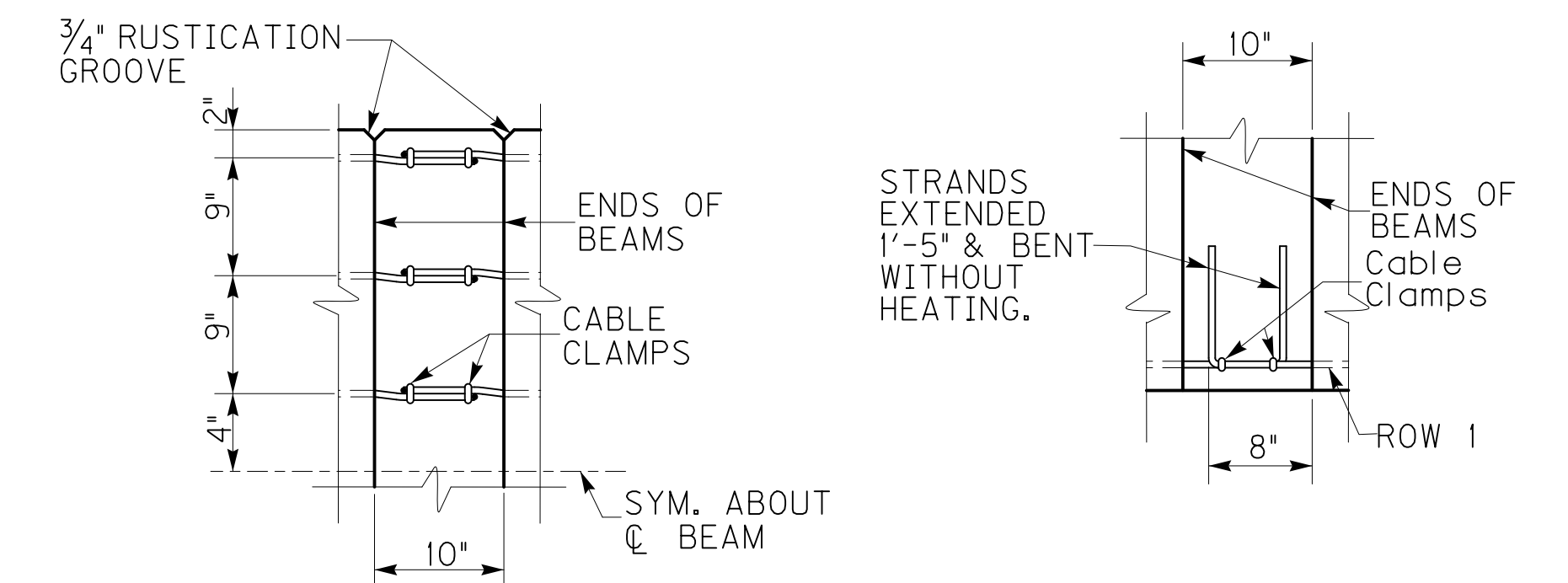
CONSTRUCTION METHOD: NO BOND STRESS SHALL BE TRANSFERRED TO THE CONCRETE, NOR SHALL END ANCHORS BE RELEASED UNTIL THE CONCRETE HAS ATTAINED f'_{ci} (SHOWN IN TABLE) AS SHOWN BY STANDARD CYLINDERS MADE AND CURED IDENTICALLY WITH THE GIRDERS; f'_c (SHOWN IN TABLE) SHALL BE ATTAINED AT OR PRIOR TO 28 DAYS. AN INITIAL PRESTRESS FORCE OF 34 KIPS PER LOW RELAXATION STRAND SHALL BE APPLIED SUCH AS TO DEVELOP A STRESS OF 202.5 KSI. BEAMS WITH HONEYCOMB OF SUCH EXTENT AS TO EFFECT THE STRENGTH OF RESISTANCE TO DETERIORATION WILL NOT BE ACCEPTED. AN ALLOWANCE OF .0005L (LENGTH) SHALL BE MADE FOR SHORTENING OF BEAMS DUE TO SHRINKAGE AND ELASTIC CHANGE. SHOP PLANS SHALL SHOW A DETENSIONING PLAN BY NUMBERING, IN SEQUENCE, THE STRAND PATTERN.

DEFORMED WIRE FABRIC: FABRIC MAY BE USED IN THE PRECAST BEAMS IN LIEU OF REINFORCING BARS, PROVIDED AN EQUIVALENT AREA OF STEEL IS FURNISHED. WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATIONS M221 (A497) AND IS TO BE MADE OF DEFORMED WIRE CONFORMING TO AASHTO SPECIFICATION M225 (A496).

LIFTING DEVICES: DIMENSIONS FOR LIFTING DEVICES SHALL BE SHOWN ON SHOP PLANS FOR APPROVAL. LIFTING SHALL BE BY EQUAL LOADS TO EACH DEVICE.



LIFTING DEVICE



PLAN OF CABLE CLAMPS
(TYPICAL AT PIERS)

PART ELEVATION
(STRAND SPLICE DETAIL)

Preliminary Plans

NUMBER OF 1/2" Ø - 7 WIRE STRANDS IN INDICATED ROWS										CONCRETE STRENGTHS		APPROX. WEIGHT OF BEAMS (LBS.)	MAXIMUM ALLOWABLE CAMBER
Mark	BEAM 1 & 2 (SECTION)				BEAM 3, 4, 5 & 6 (SECTION)				Total Number	F'CI PSI	F'C PSI		
	1	2	1	2	1	2	3	4					
B1	20								20	5,500	8,000	41,930	1 3/4"
B2	20								20	5,500	8,000	41,890	1 3/4"
B3					20	4			24	5,500	8,000	50,617	2 1/4"
B4					20	4			24	5,500	8,000	50,583	2 1/4"
B5					20	4			24	5,500	8,000	46,667	2"
B6					20	4			24	5,500	8,000	46,633	2"

ITEM NUMBER
6-2021.00

REVISION		DATE
DATE: 07-2011		CHECKED BY
DESIGNED BY: WTB		EAO
DETAILED BY: CH		WTB
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
33 X 48 BOX BEAMS		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S20
		DRAWING NO.
		26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_020.DGN

USER: choll
DATE PLOTTED: September 8, 2011

E-SHEET NAME: S002GN

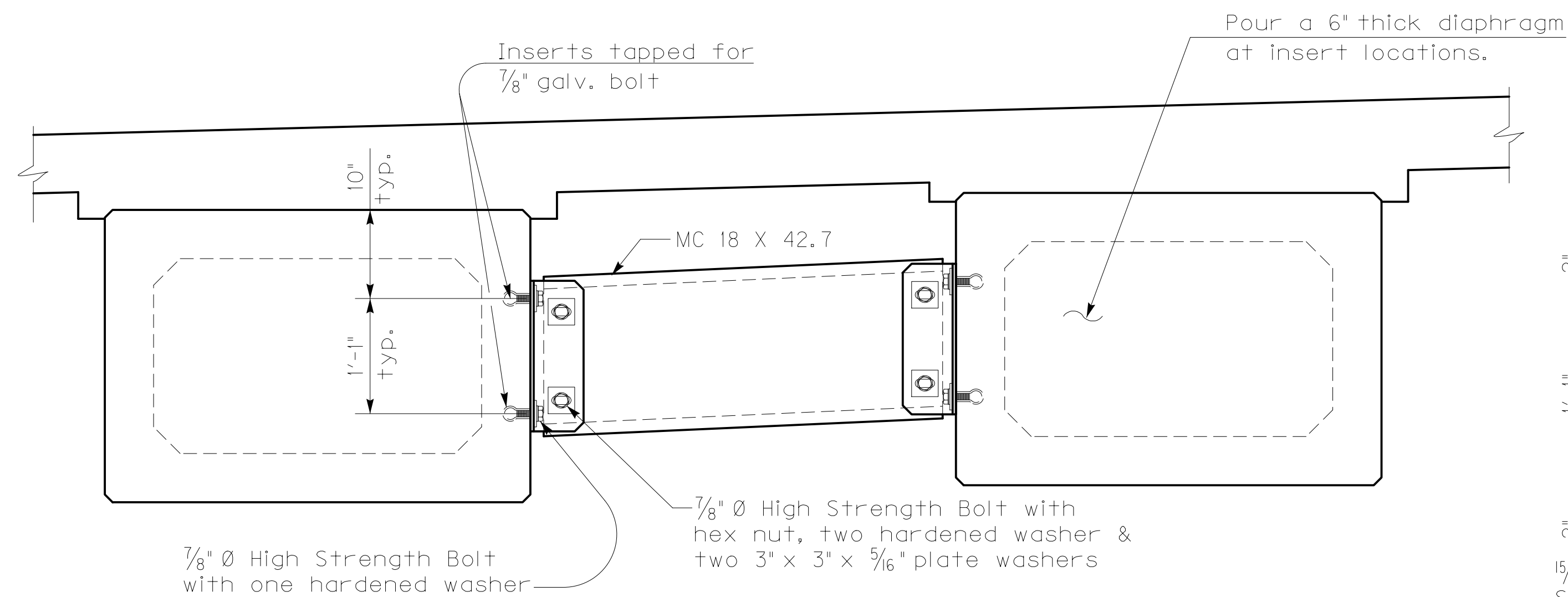
MicroStation v8.11.7.443

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_021.DGN

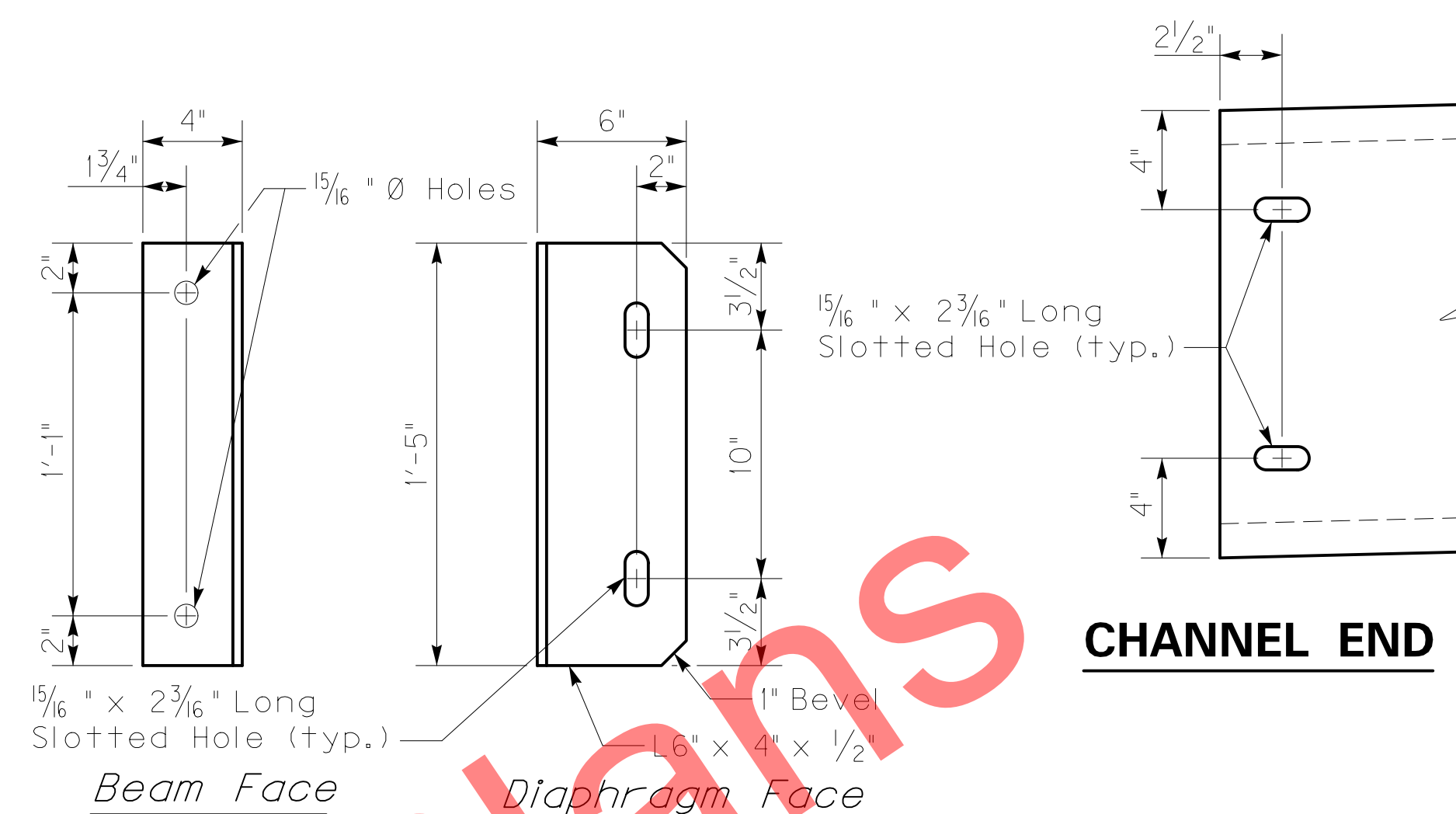
USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

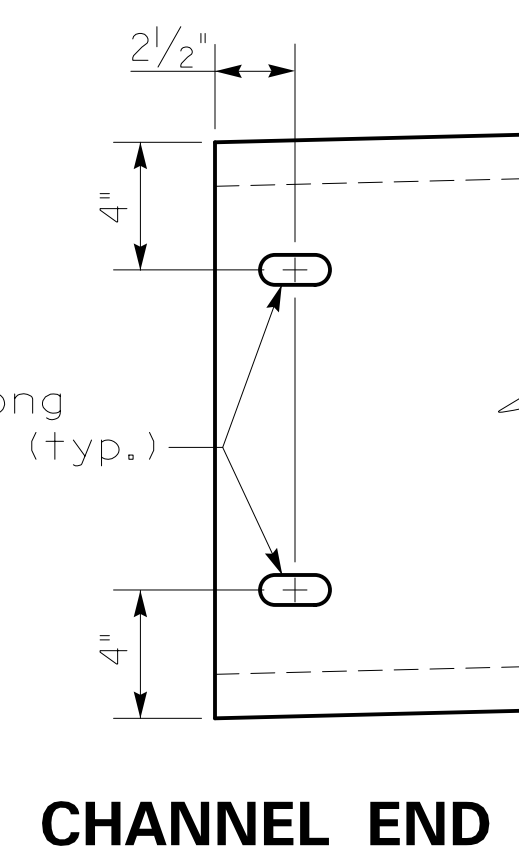
MicroStation v8.11.7.443



INTERMEDIATE DIAPHRAGM
~Typical for SB-33 Beams~



CLIP ANGLE



CHANNEL END

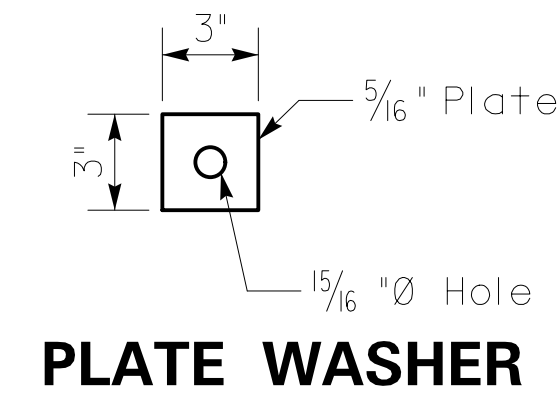
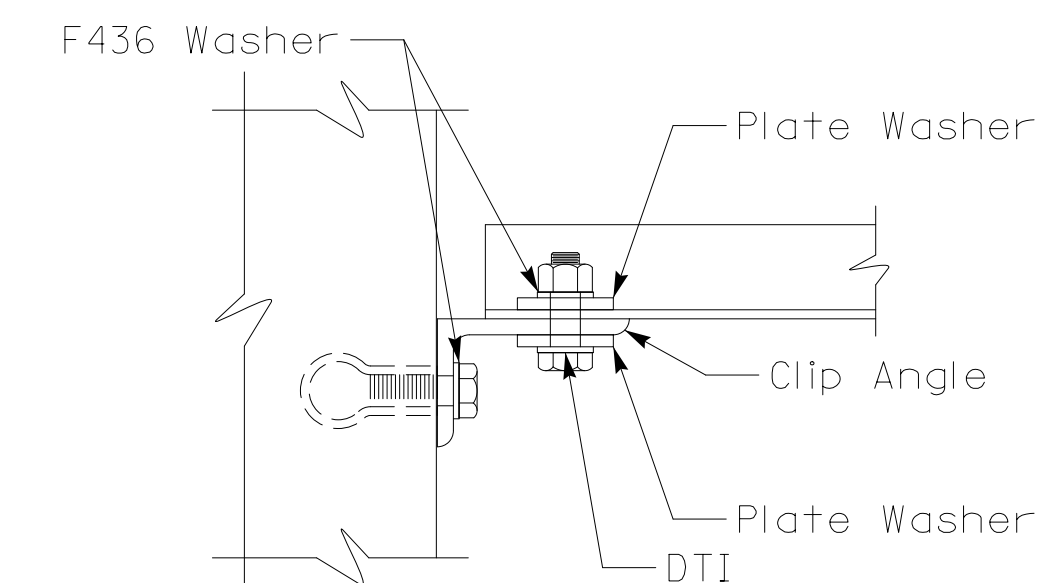


PLATE WASHER



CONNECTION DETAILS

Preliminary Plans

Diaphragm Notes

CONNECTIONS: Ensure all bolted connections are ASTM A325, 7/8 inch diameter high strength bolts, nuts, and washers, mechanically zinc coated in accordance with AASHTO M298, for Class 50. Install all high strength bolted field connections using "direct tension indicators" (DTI's) in accordance with the Standard Specifications and ASTM F959. Ensure all DTI's are mechanically zinc coated. Show installation details of the DTI's on the shop plans. Place DTI's under the bolt head.

STRUCTURAL STEEL: Ensure plates, angles, and channels conform to AASHTO M 183 and galvanized after fabrication.

SHOP DRAWINGS: Show the location of all inserts and holes on the precast beam shop drawings. Submit shop drawings for the steel diaphragms to the Division of Structural Design for approval.

DIAPHRAGMS: Erect the diaphragms the same day that the precast beams are placed on the substructure. Include the cost of all materials and labor required to fabricate and erect the diaphragms in the bid for Precast Beams.

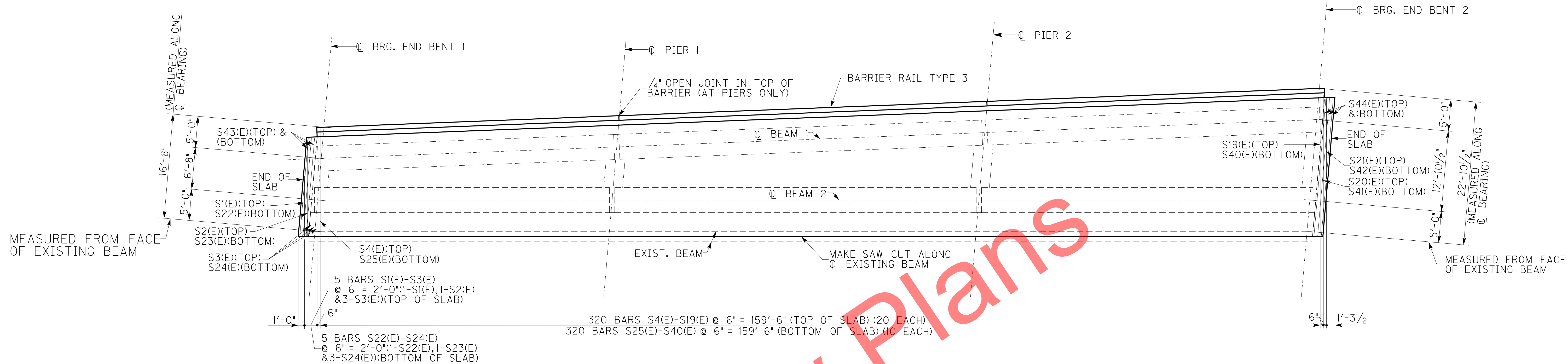
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY:		
DETAILED BY: CH	WTB	
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
SUPERSTRUCTURE		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S21
ITEM NUMBER		DRAWING NO.
6-2021.00		26788

FILE NAME: P:\STRUCT\CURT\J-471\THREE MILE ROAD\FINAL\S26788_022.DGN

USER: choll
DATE PLOTTED: October 10, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443

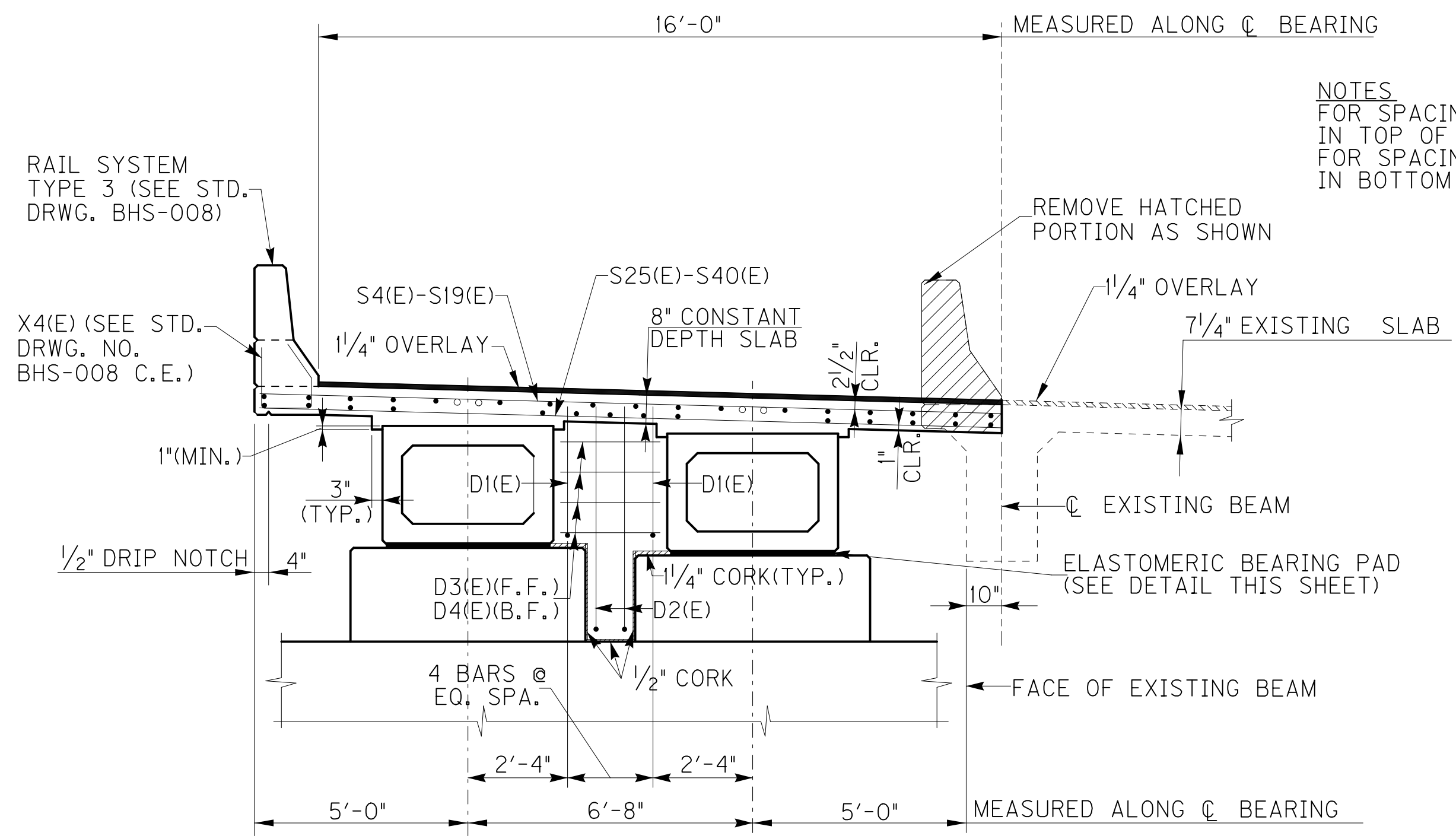


Preliminary Plans

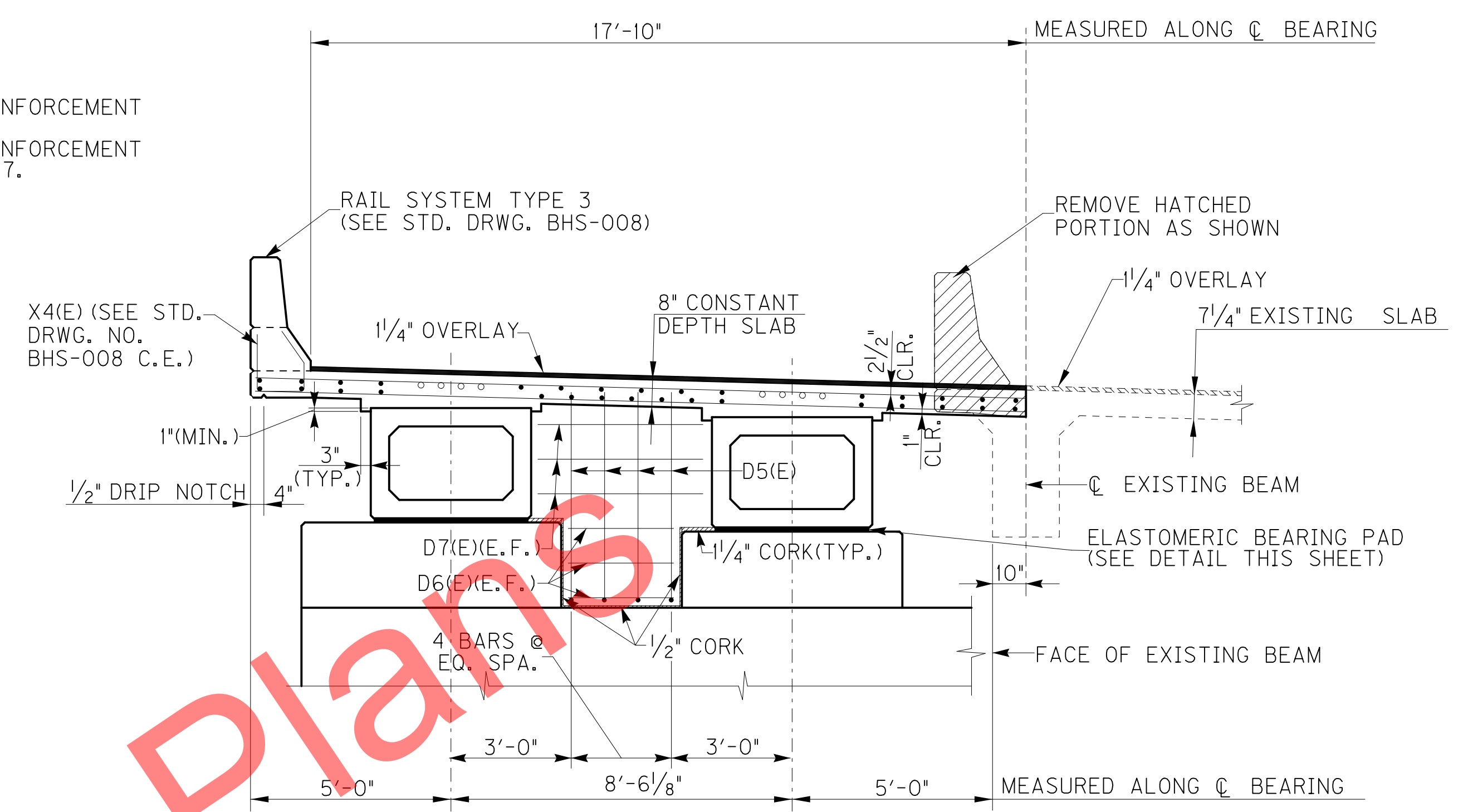
PLAN

REVISION		DATE
DATE: 07-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
ITEM NUMBER	PREPARED BY	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S22
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_023.DGN
 USER: choll
 DATE PLOTTED: January 1, 2001
 E-SHEET NAME: S002GN
 MicroStation v8.11.7.443

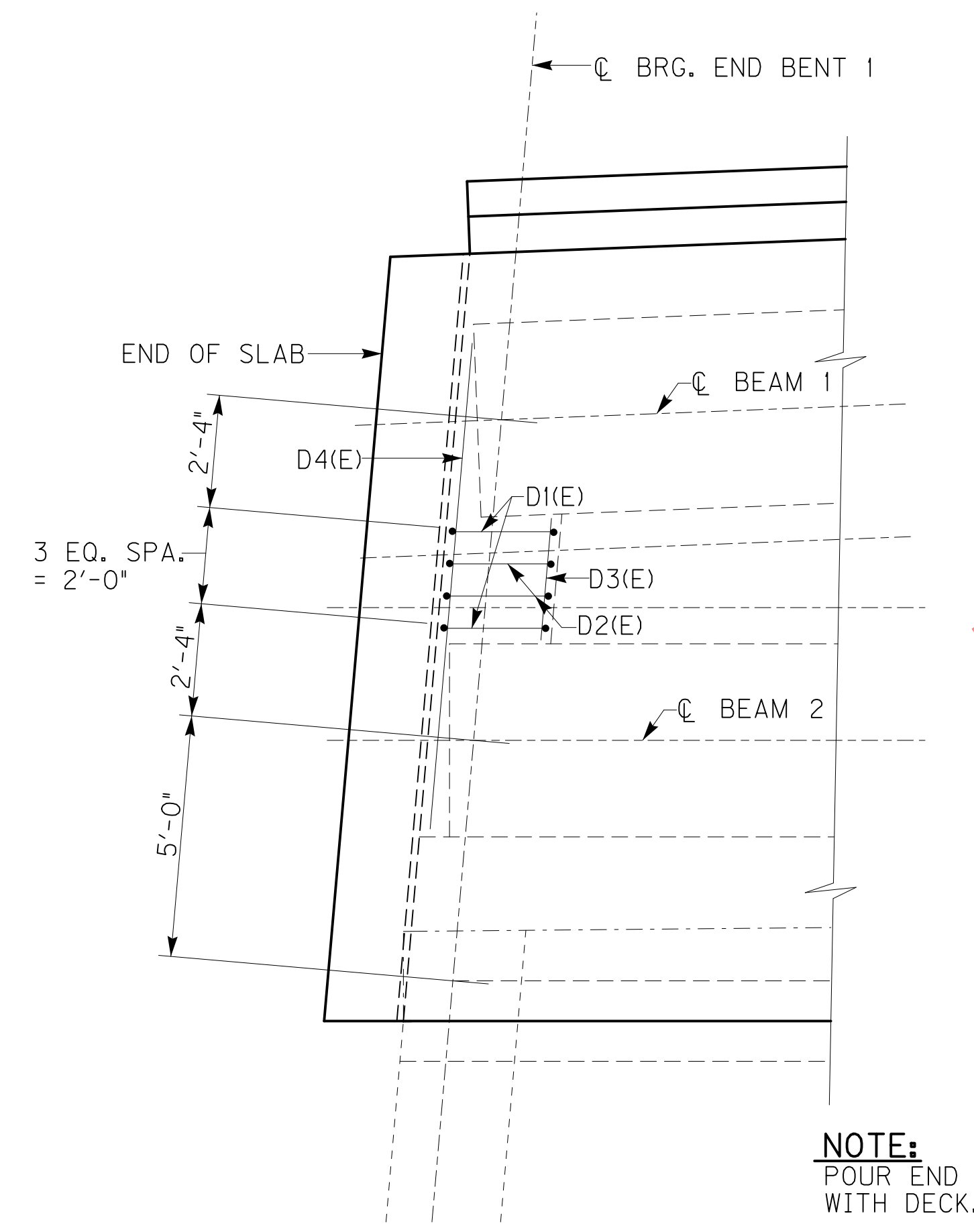


TYPICAL SECTION @ END BENT 1



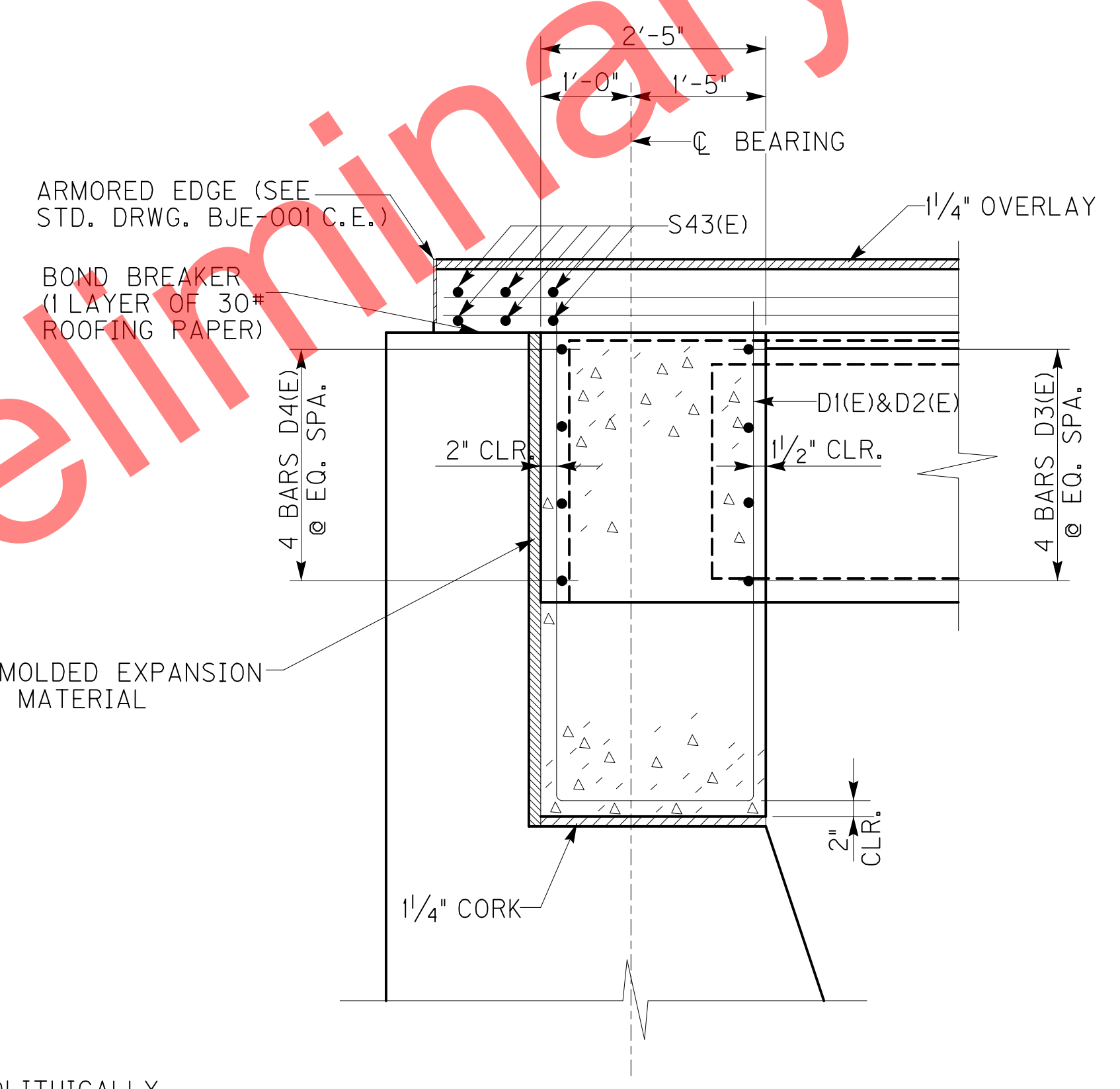
TYPICAL SECTION @ PIER 1

NOTE: FOR PIER 1 DIAPHRAGM SEE SHEET S25.

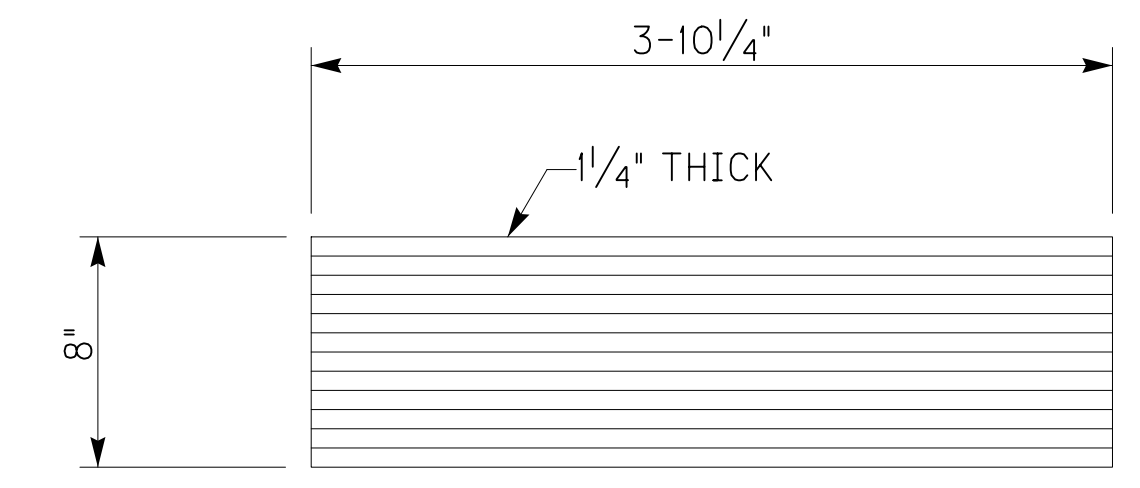


PART PLAN @ END BENT 1

NOTE:
POUR END BENT DIAPHRAGM MONOLITHICALLY WITH DECK.



SECTION @ END BENT 1



NEOPRENE BEARING PAD
(THICKNESS 1/4" SEE STD. DRWG. BBP-001, C.E.)

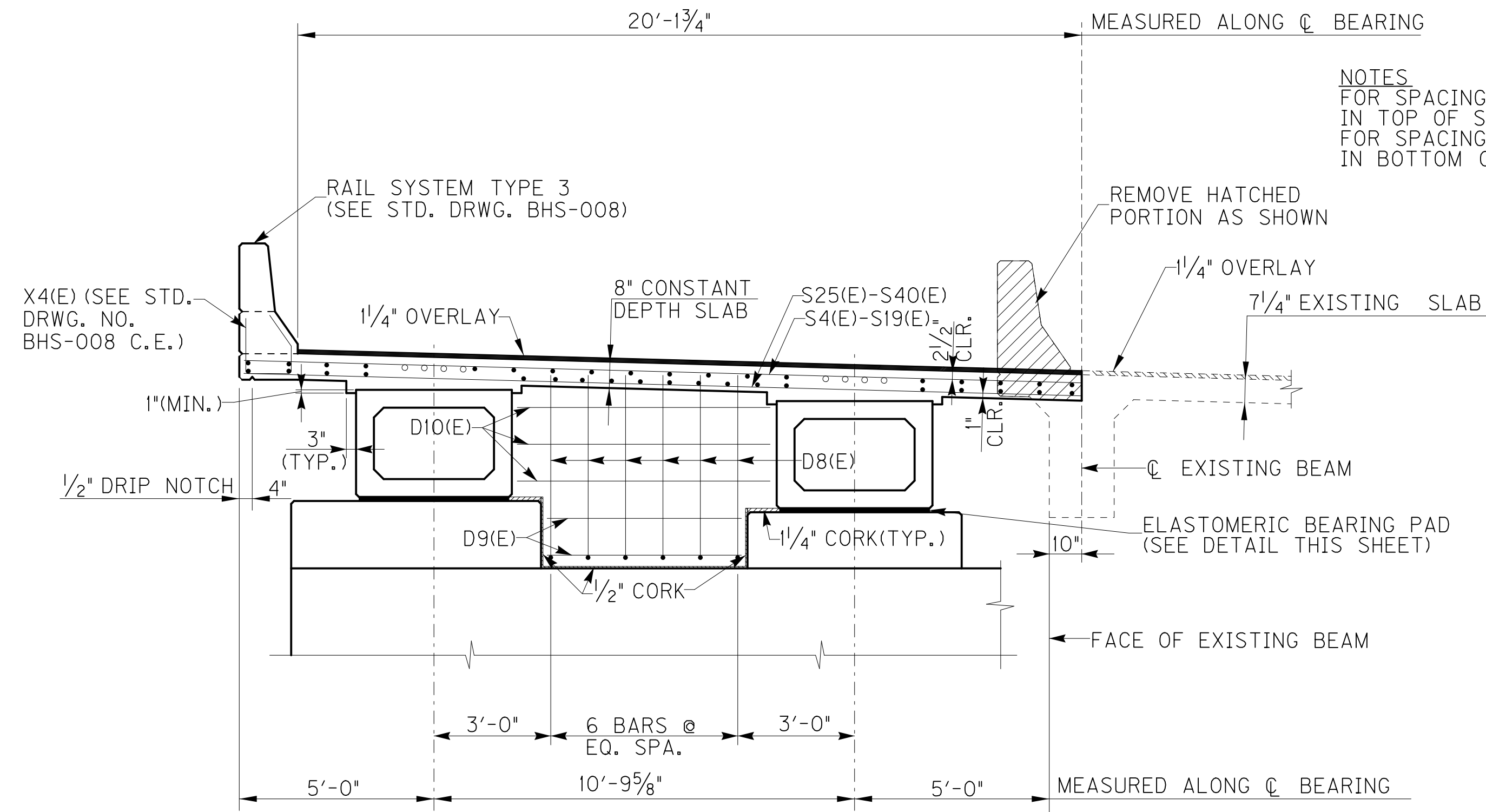
REVISION		DATE
DATE: 08-2011	CHECKED BY: EAO	
DESIGNED BY: WTB	DETAILED BY: CH	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
ITEM NUMBER 6-2021.00	PREPARED BY WMB INC., ENGINEERS	SHEET NO. S23 DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_024.DGN

USER: choll
DATE PLOTTED: November 7, 2011

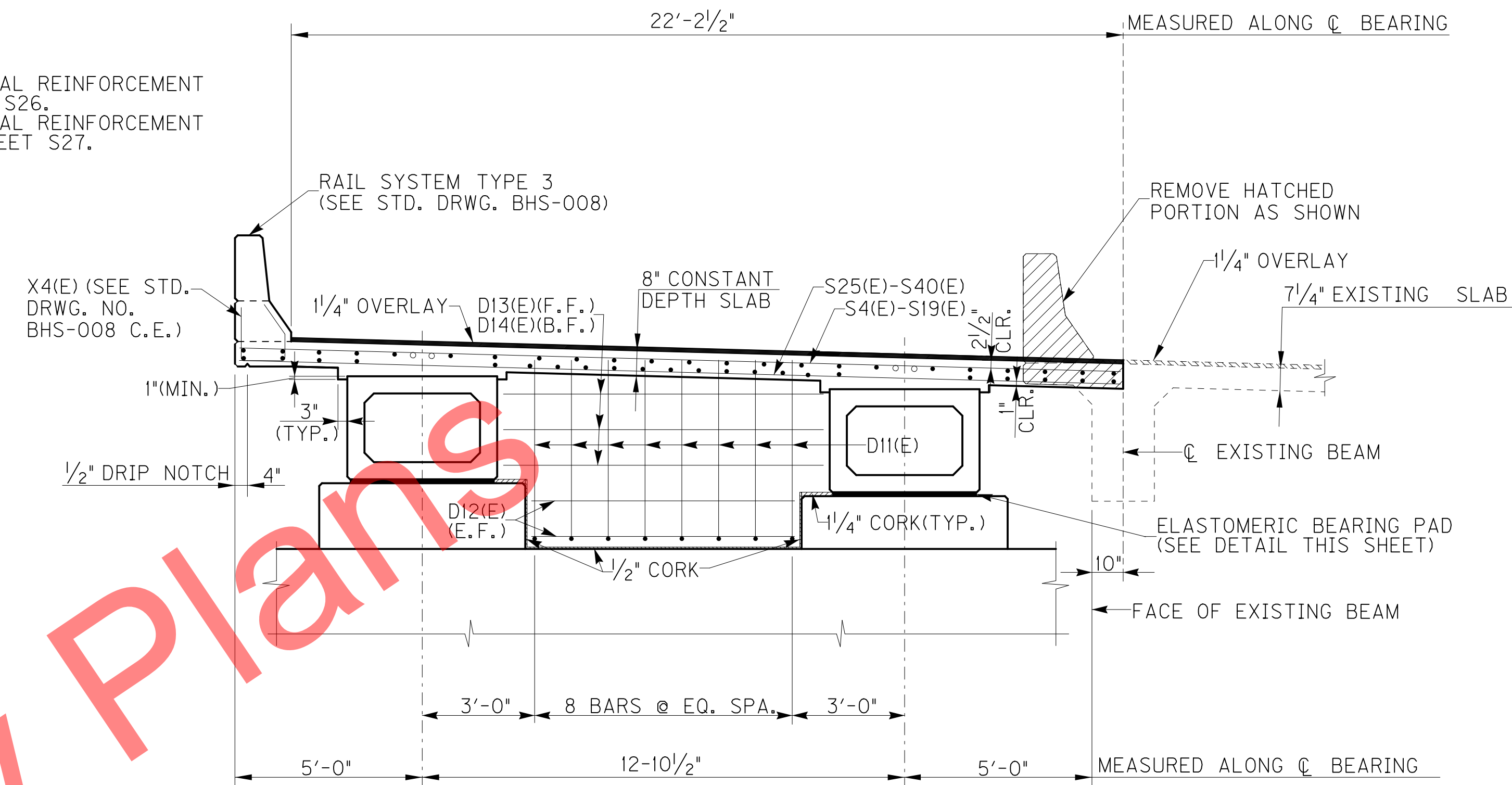
E-SHEET NAME: S002GN

MicroStation v8.11.7.443

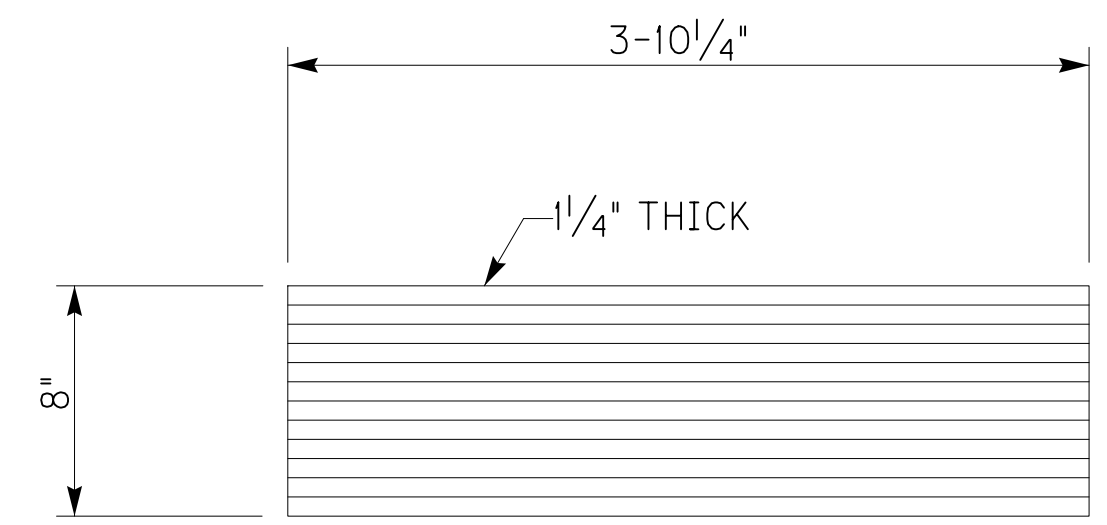


TYPICAL SECTION @ PIER 2

NOTES:
FOR SPACING OF LONGITUDINAL REINFORCEMENT IN TOP OF SLAB SEE SHEET S26.
FOR SPACING OF LONGITUDINAL REINFORCEMENT IN BOTTOM OF SLAB SEE SHEET S27.



TYPICAL SECTION @ END BENT 2



NEOPRENE BEARING PAD
(THICKNESS 1/4" SEE STD. DRWG. BBP-001, C.E.)

Preliminary Plans

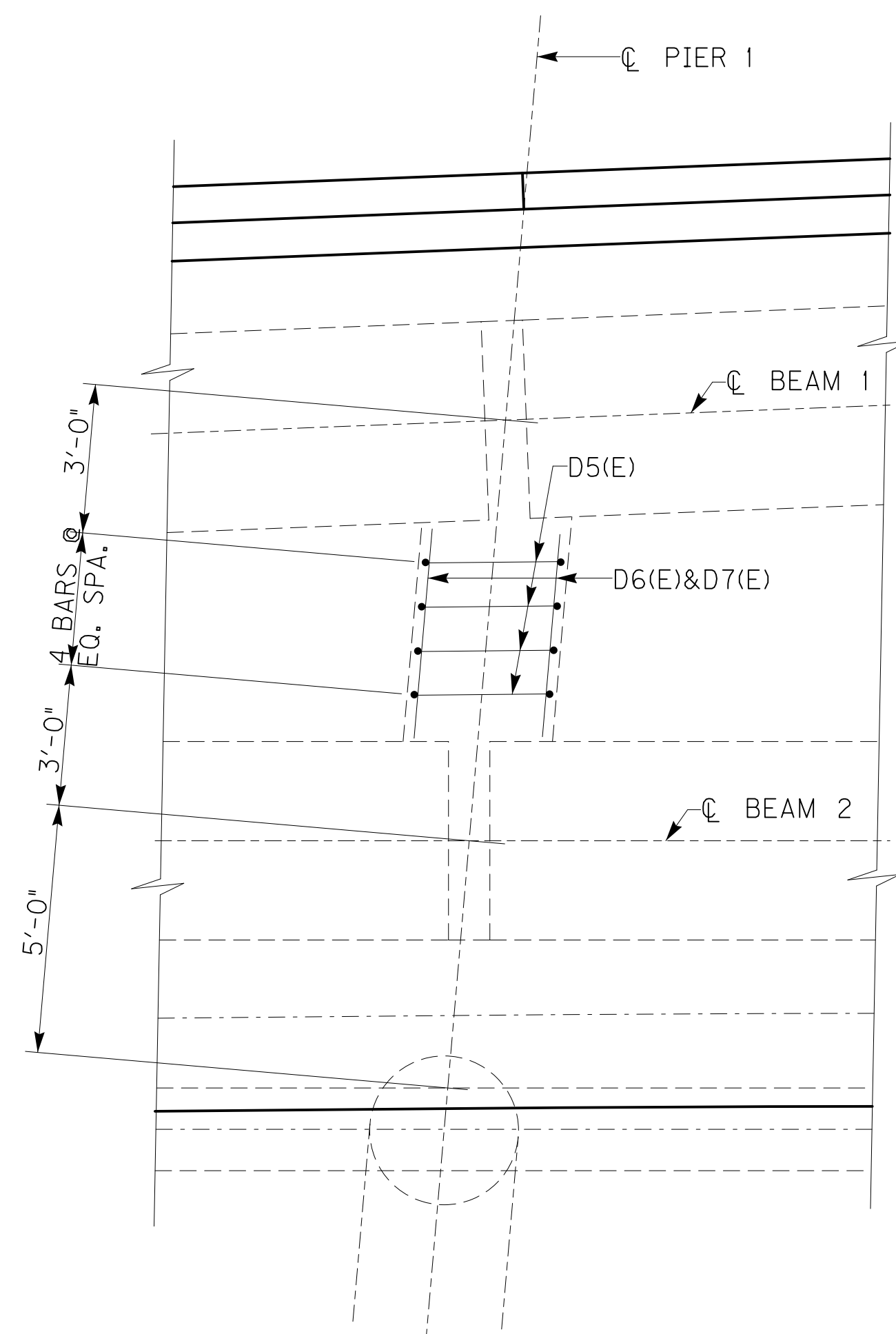
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
ITEM NUMBER	PREPARED BY	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S24
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_025.DGN

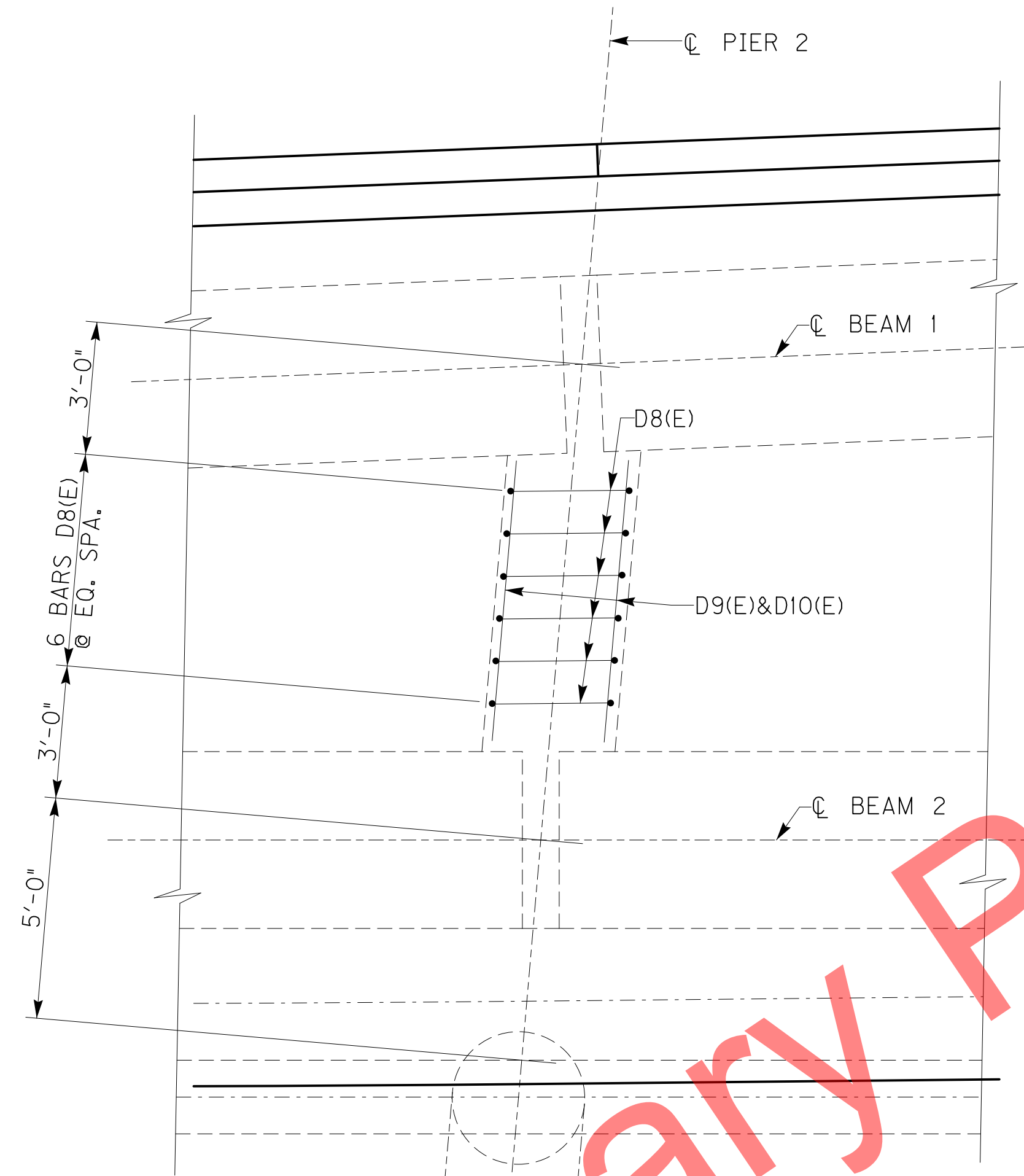
USER: chpl
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

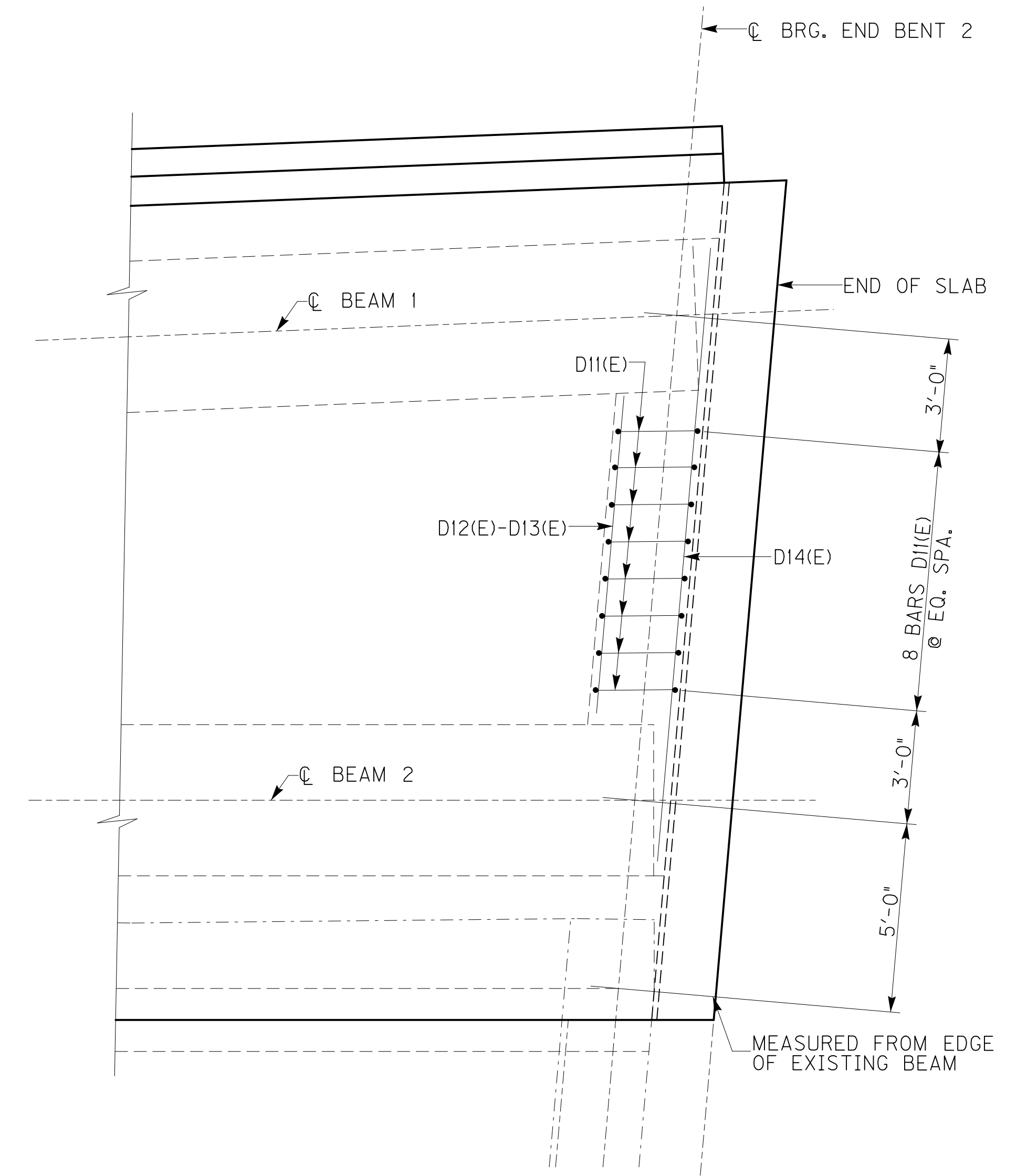
MicroStation v8.11.7.443



PART PLAN @ PIER 1

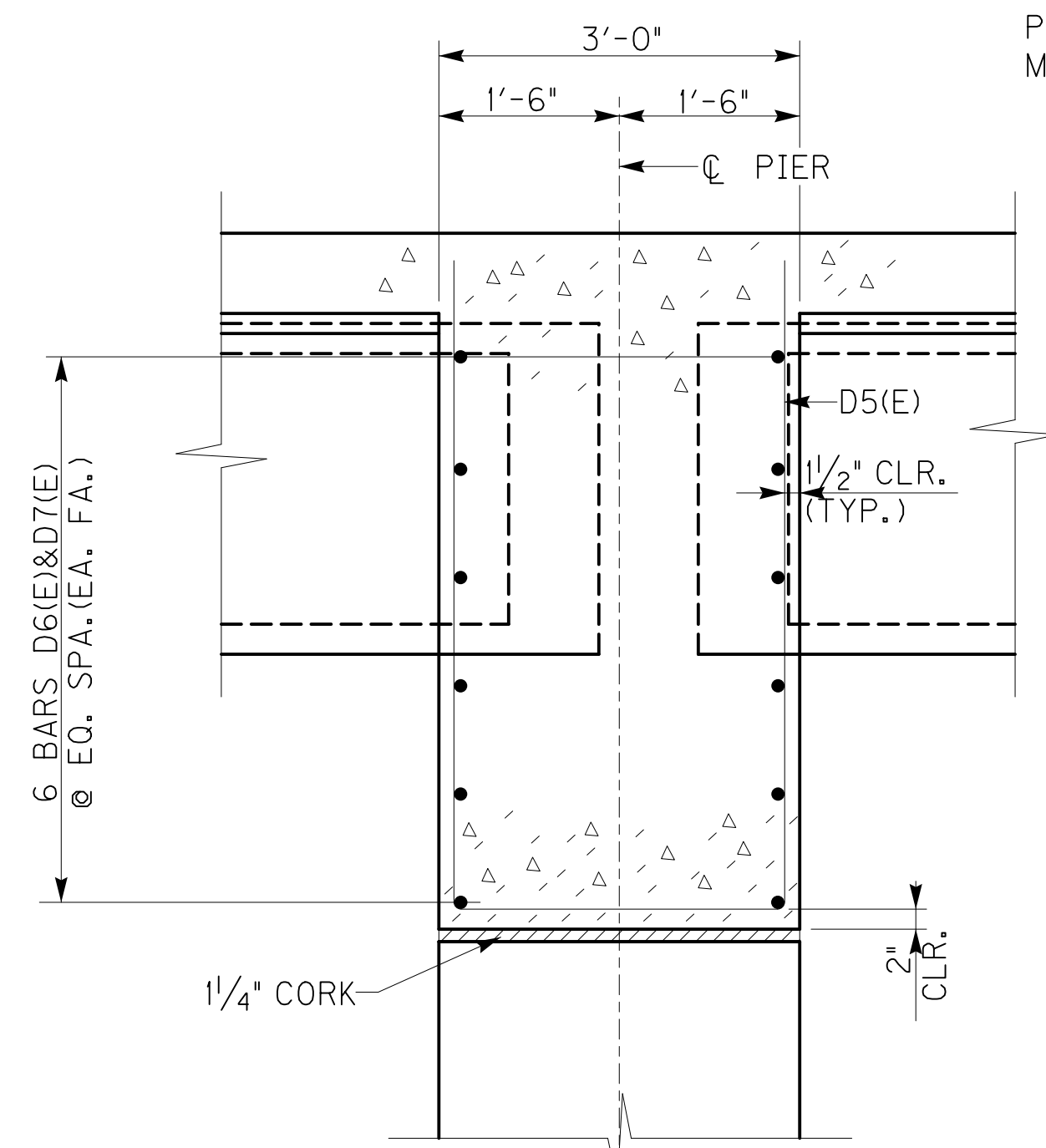


PART PLAN @ PIER 2

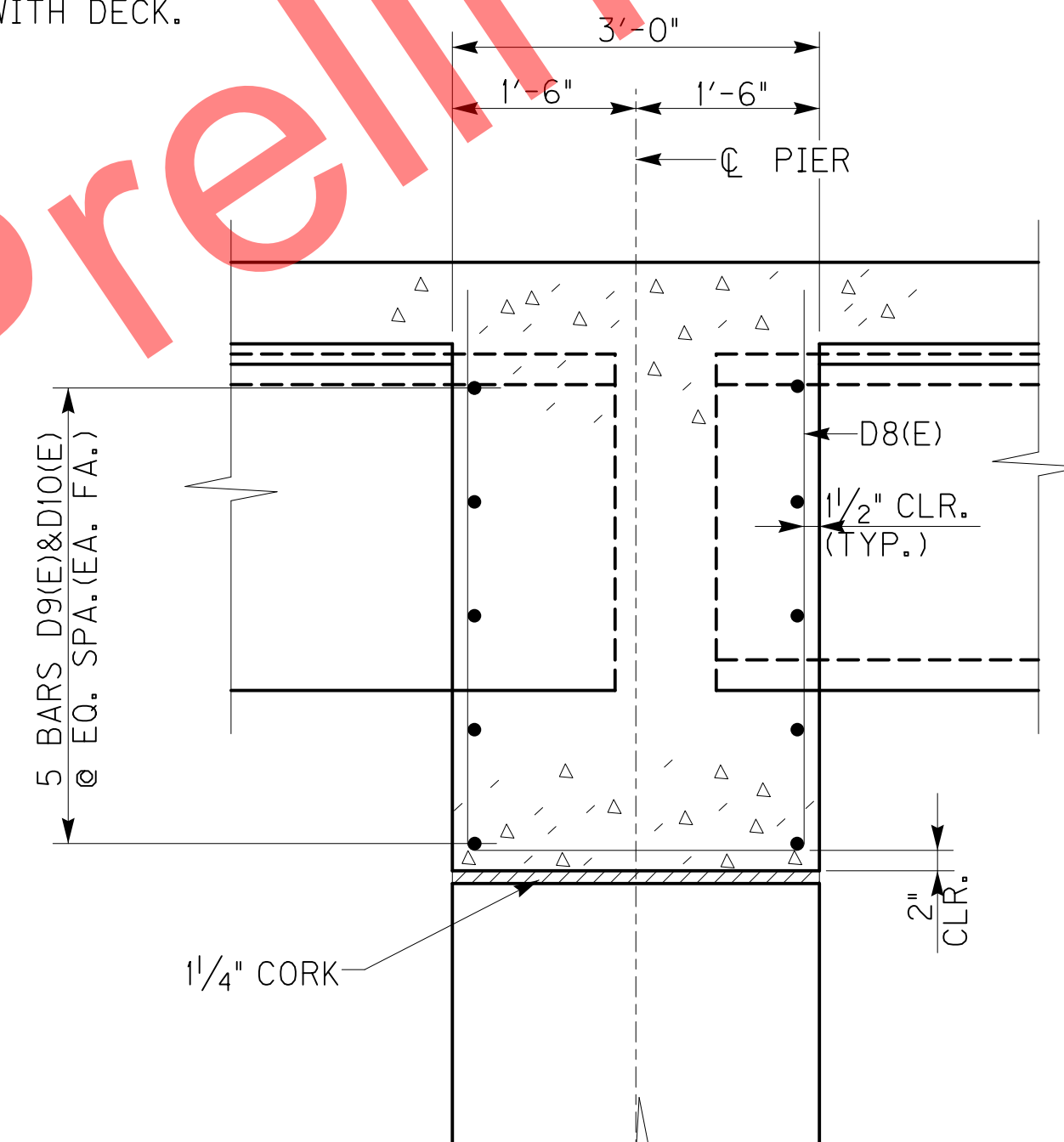


PART PLAN @ END BENT 2

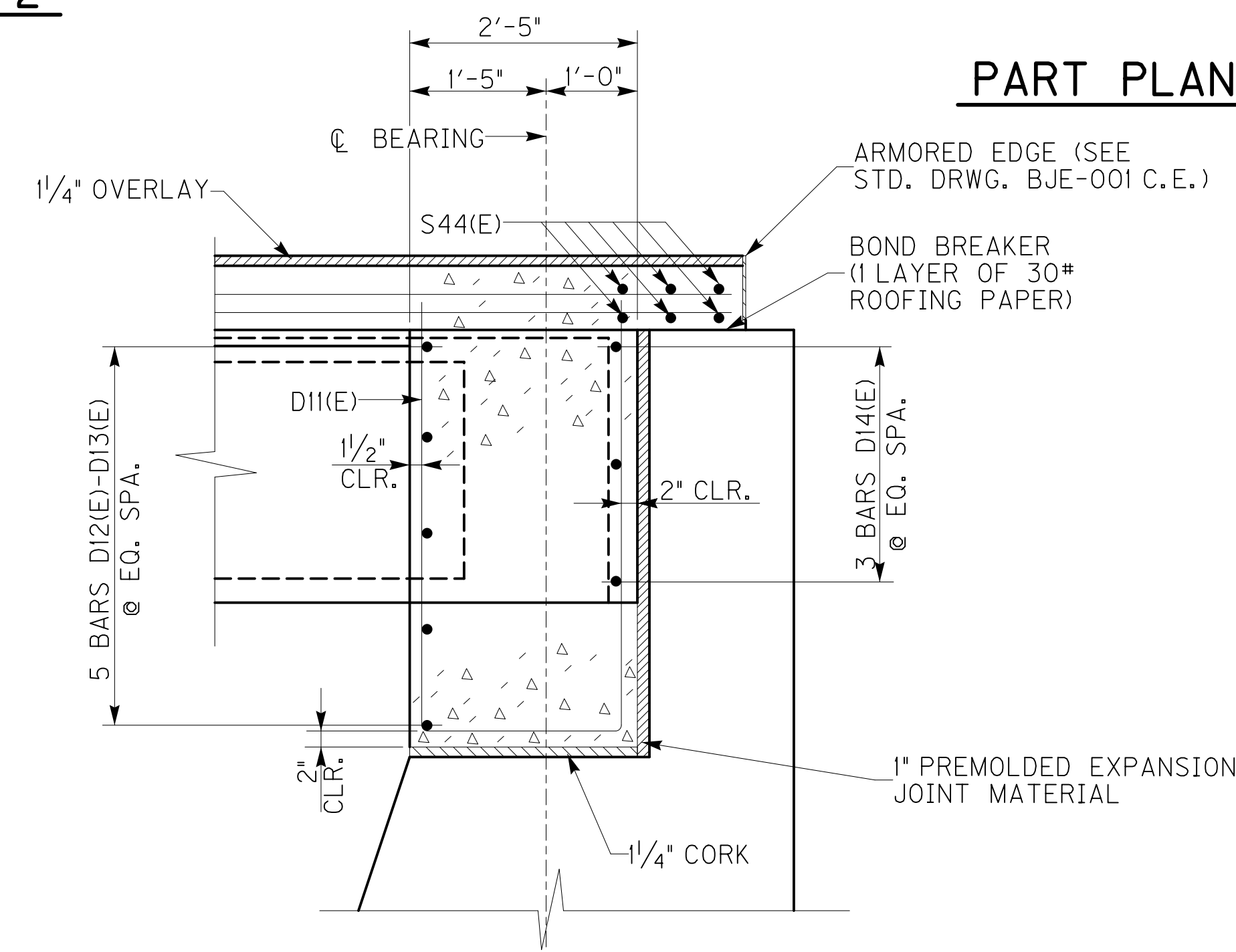
NOTE:
POUR END BENT AND PIER DIAPHRAGMS
MONOLITHICALLY WITH DECK.



SECTION @ PIER 1



SECTION @ PIER 2



SECTION @ END BENT 2

ITEM NUMBER	6-2021.00
-------------	-----------

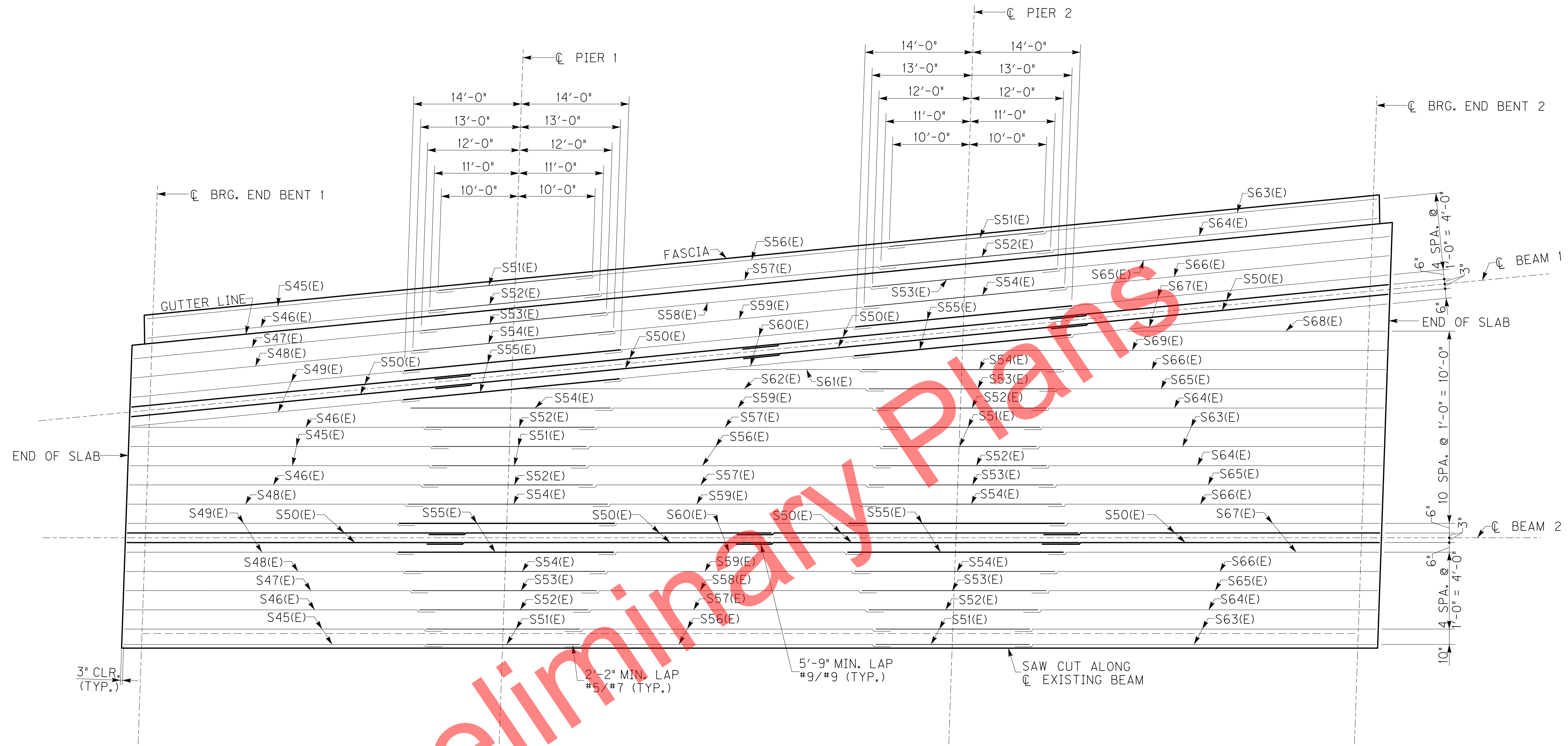
REVISION		DATE
DATE:	08-2011	CHECKED BY:
DESIGNED BY:	WTB	EAO
DETAILED BY:	CH	WTB
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE	CROSSING	
I-275 WB	THREE MILE ROAD	
SUPERSTRUCTURE		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S25
		DRAWING NO.
		26788

FILE NAME: P:\STRUCT\CURT\1-47\THREE MILE ROAD\FINAL\S26788_026.DGN

USER: choll
DATE PLOTTED: October 11, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



SCHMATIC DIAGRAM LONGITUDINAL REINFORCEMENT
(TOP OF SLAB)

Preliminary Plans

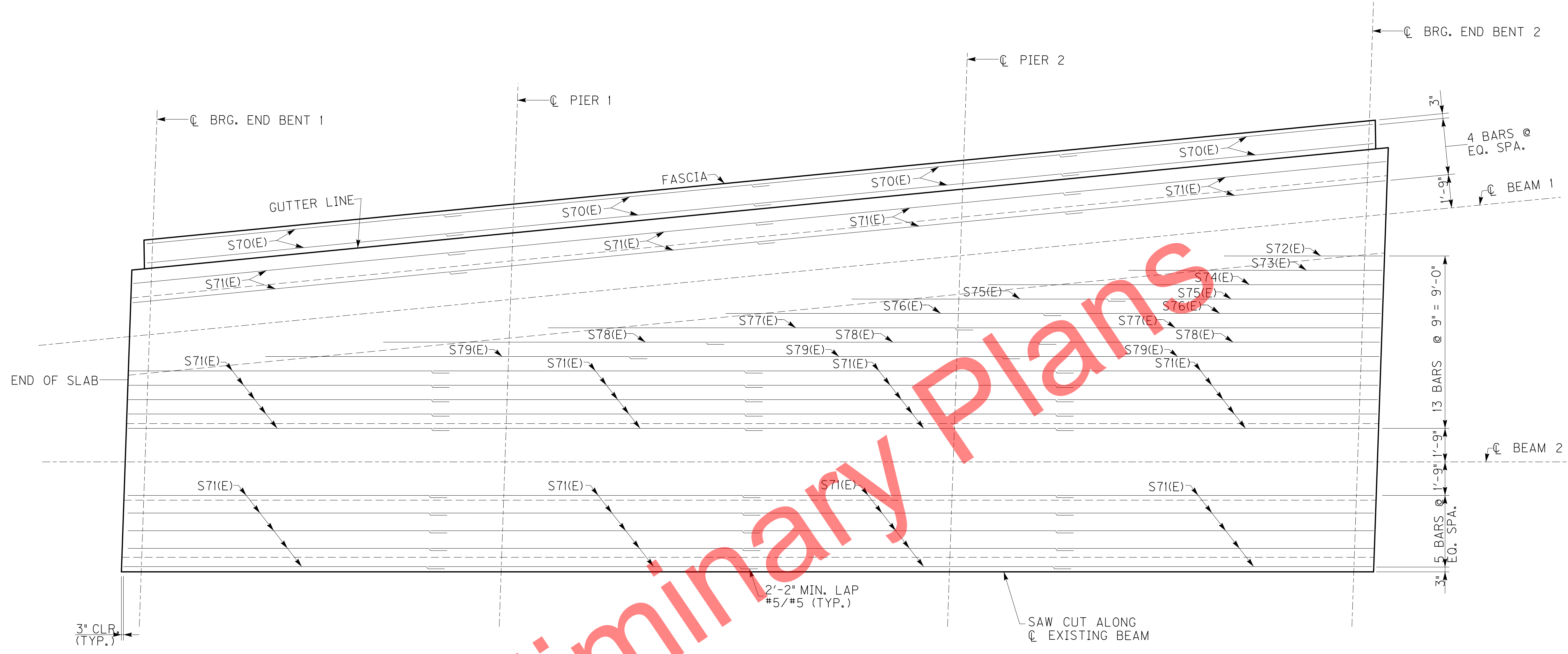
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
ITEM NUMBER	PREPARED BY	SHEET NO.
6-2021.00	WMB INC., ENGINEERS	S26
		DRAWING NO. 26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_027.DGN

USER: choll
DATE PLOTTED: January 1, 0001

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



SCHEMATIC DIAGRAM LONGITUDINAL REINFORCEMENT
(BOTTOM OF SLAB)

Preliminary Plans

ITEM NUMBER	6-2021.00
-------------	-----------

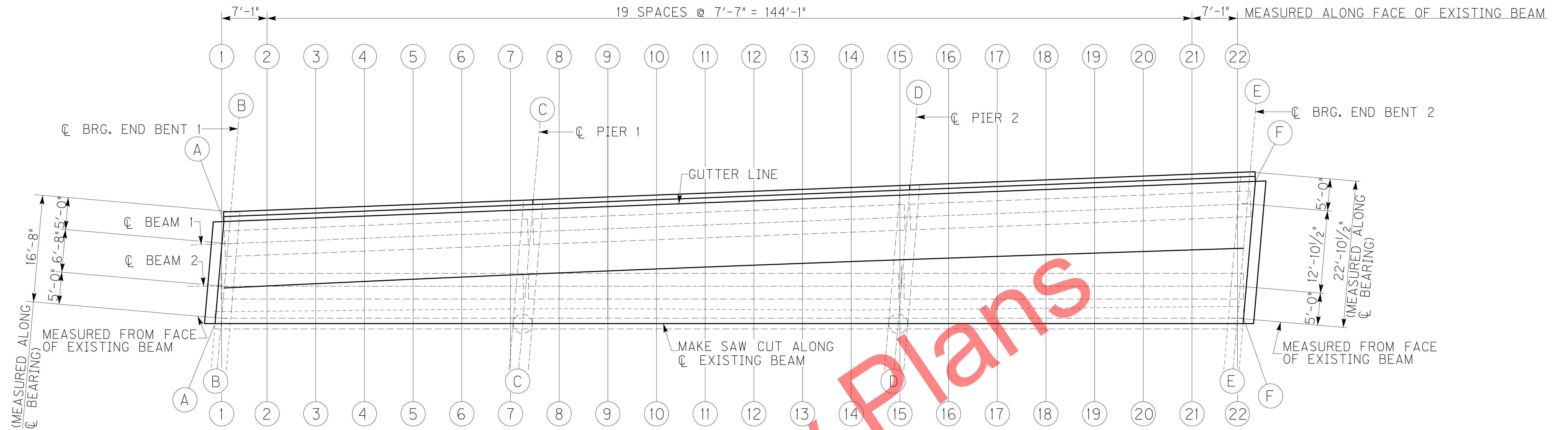
REVISION		DATE
DATE: 08-2011	CHECKED BY	
DESIGNED BY: WTB	EAO	
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
SUPERSTRUCTURE		
PREPARED BY		SHEET NO.
WMB INC., ENGINEERS		S27
		DRAWING NO.
		26788

FILE NAME: P:\STRUCT\CURT\1-471\THREE MILE ROAD\FINAL\S26788_029.DGN

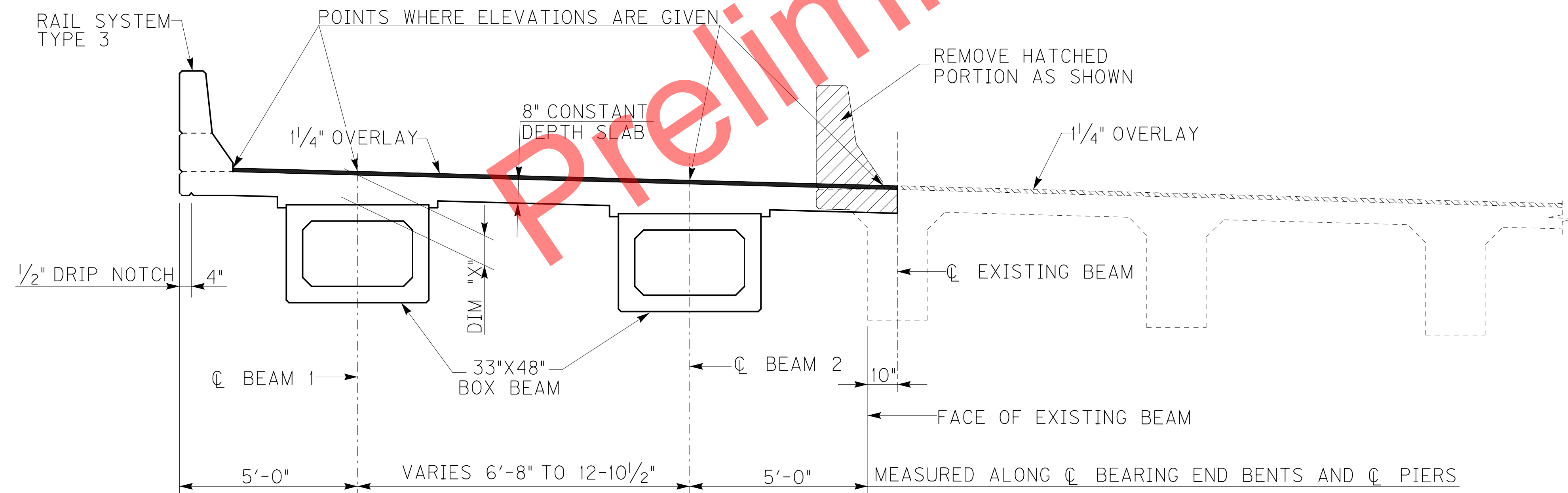
USER: choll
DATE PLOTTED: November 3, 2011

E-SHEET NAME: S002GN

MicroStation v8.11.7.443



PLAN



TYPICAL SECTION

REVISION		DATE
DATE: 08-2011	DESIGNED BY: WTB	CHECKED BY: CH
DESIGNED BY: WTB	CH	WTB
DETAILED BY: CH	WTB	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY CAMPBELL		
ROUTE I-275 WB	CROSSING THREE MILE ROAD	
CONSTRUCTION ELEVATIONS		
ITEM NUMBER 6-2021.00	PREPARED BY WMB INC., ENGINEERS	SHEET NO. S29 DRAWING NO. 26788

