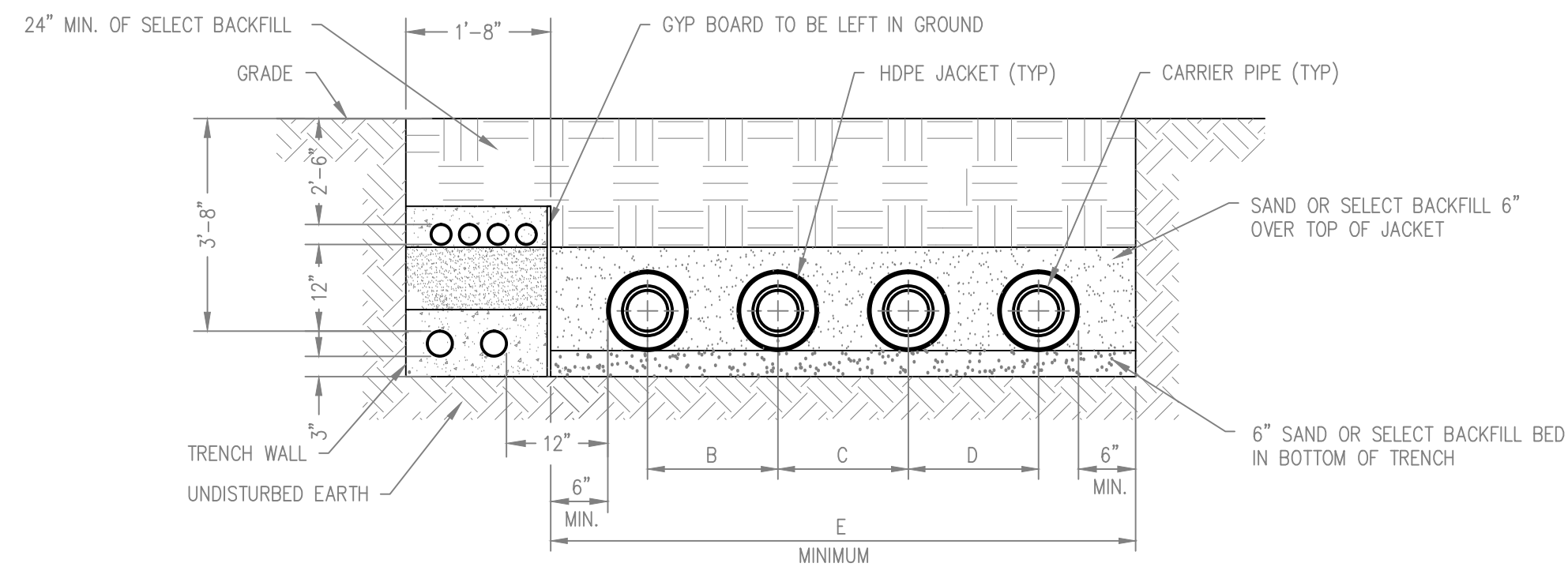
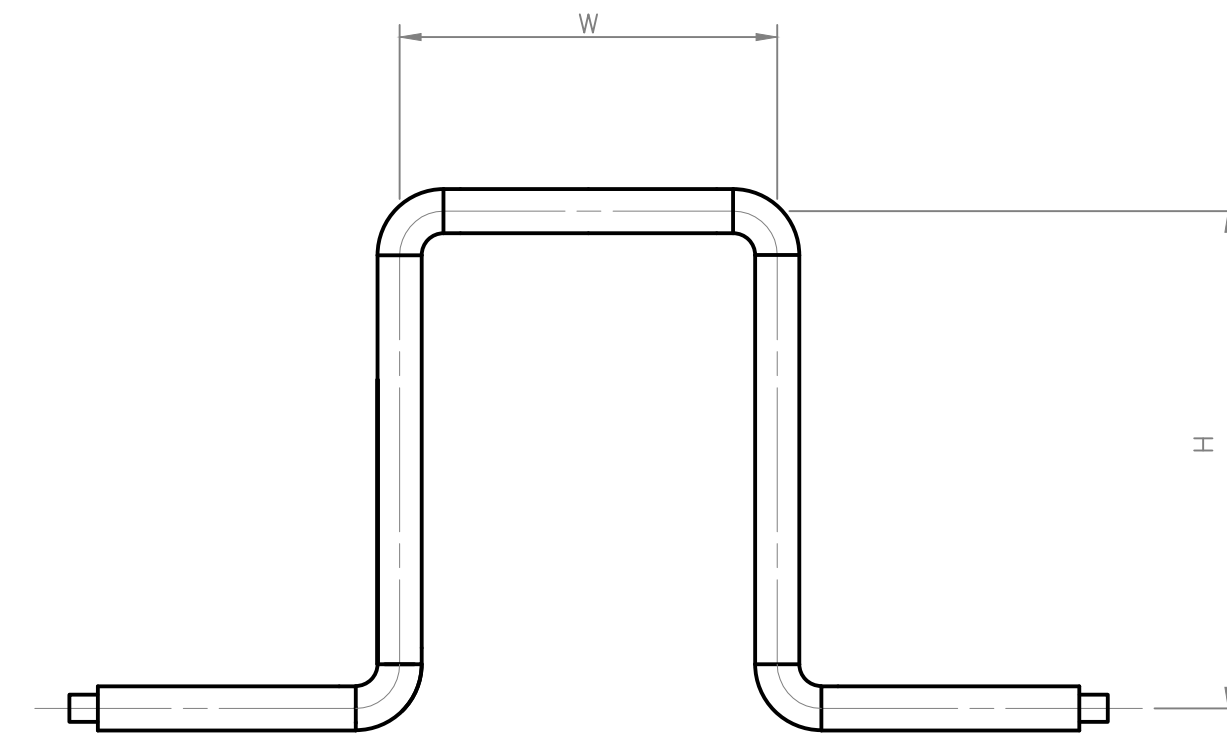


PIPING RISER DETAIL  
NOT TO SCALE: 7



TRENCH PIPING SCHEDULE					
TRENCH SECTION	A DIMENSION (IN.)	B DIMENSION (IN.)	C DIMENSION (IN.)	D DIMENSION (IN.)	E DIMENSION (IN.)
A-A	50	9.5	9.5	9.5	47
-	-	-	-	-	-

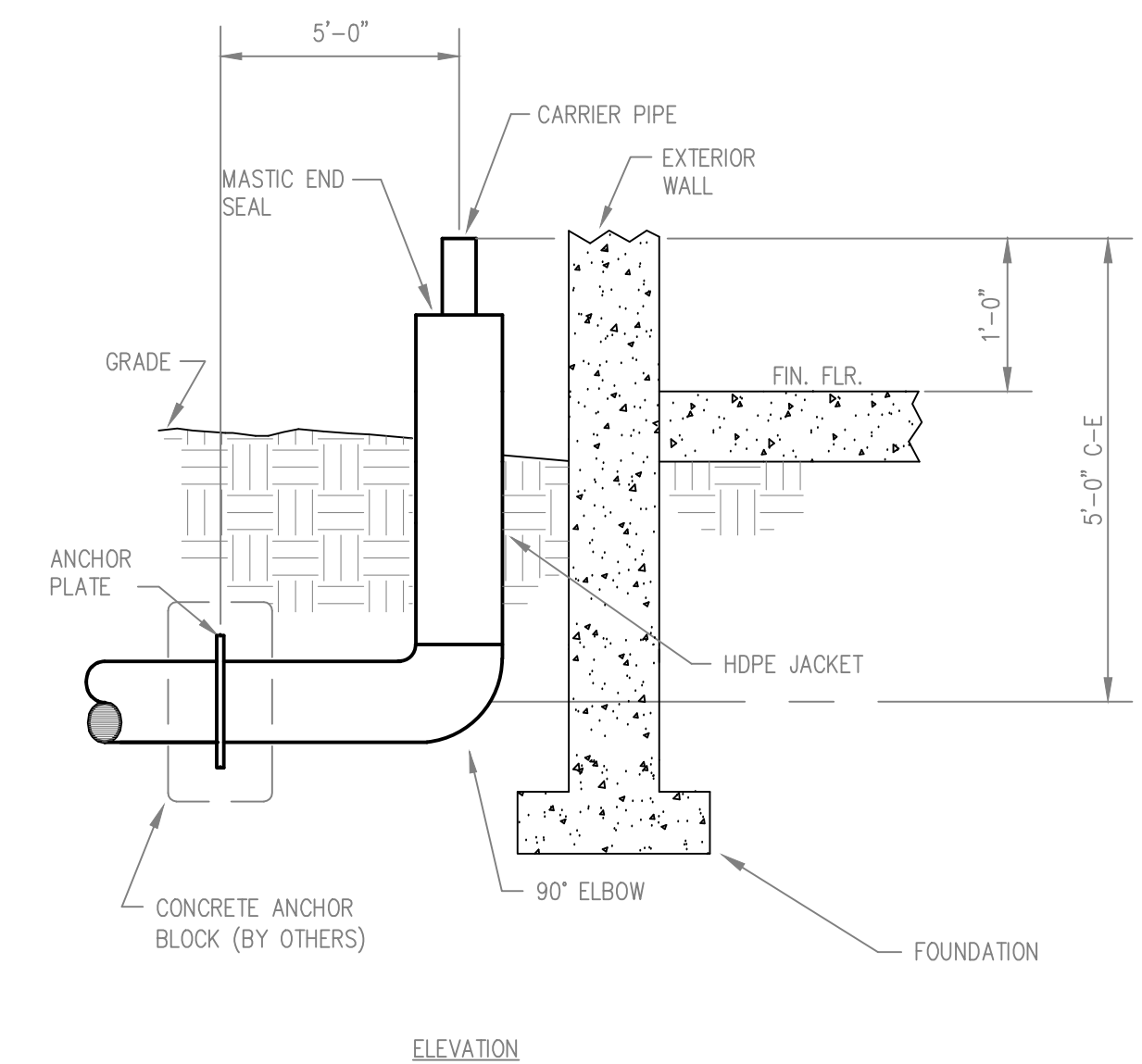
PIPE TRENCH SECTION  
NOT TO SCALE: 4



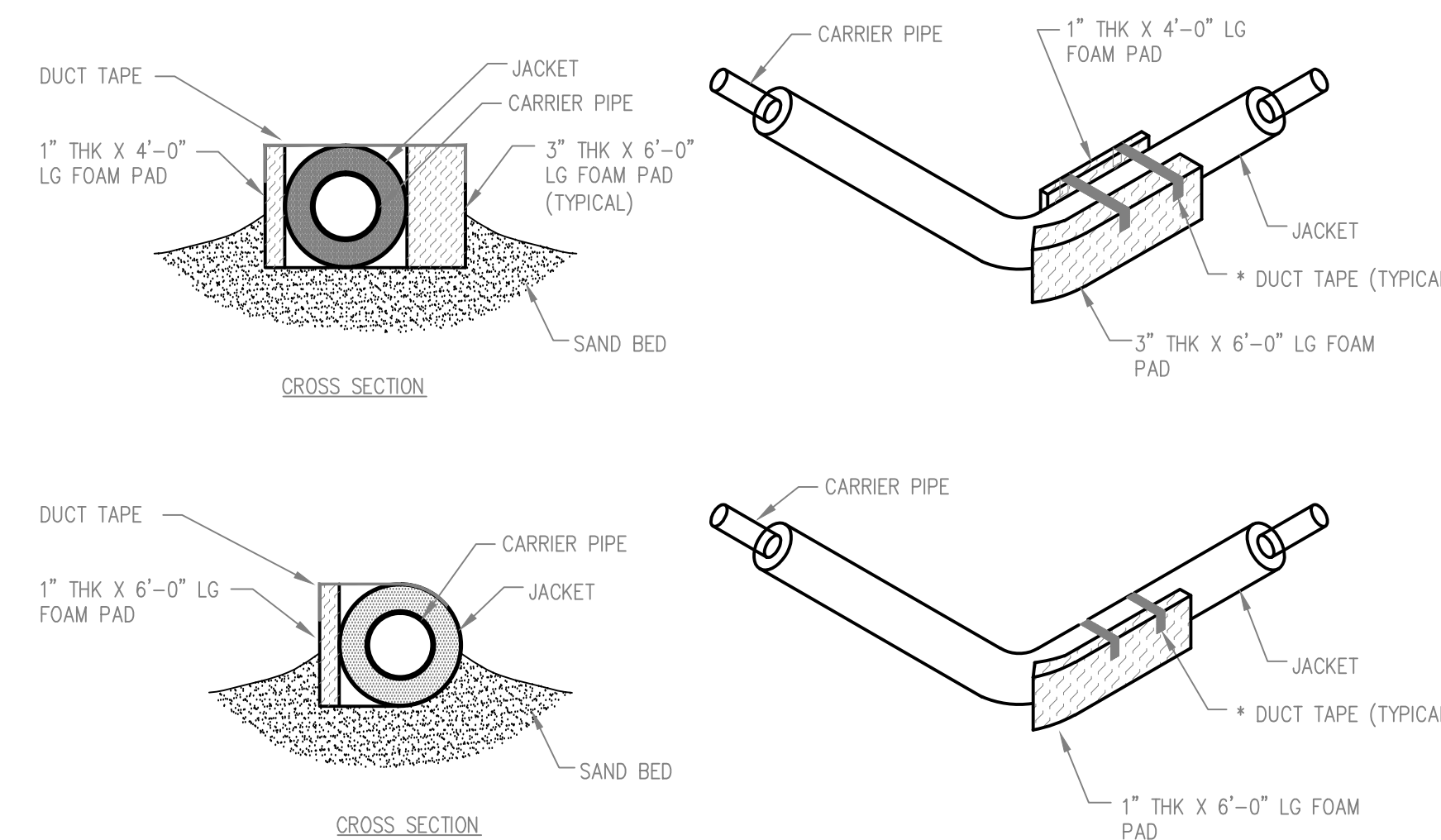
EXPANSION LOOP SCHEDULE						
LOOP NO.	SERVICE	JACKET SIZE	TOTAL EXP.	DIMENSIONS		BOLSTER PAD
				H	W	
1	LGHWS&R, HGHWS&R	TYPE 1 CLASS 1 PVC		11 FT.	4.50 FT	

DESIGN PARAMETERS: HOT WATER 250° F  
INSTALLATION TEMPERATURE 60° F  
EXPANSION RATE 0.91 IN/100 FT @ 120° F DELTA T

EXPANSION LOOP DETAIL  
NOT TO SCALE: 1



BUILDING RISER DETAIL  
NOT TO SCALE: 8



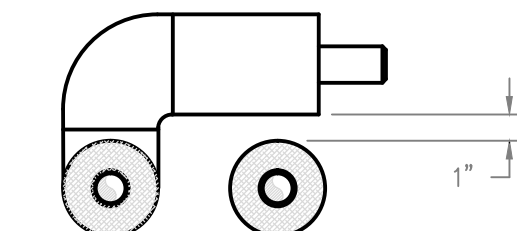
INSTALLATION INSTRUCTIONS:  
EXPANSION BOLSTERS PROCEDURE

- EXPANSION BOLSTER MATERIAL IS SUPPLIED IN PADS: 6'-0" LONG x 3" THICK x HEIGHT SPECIFIED ON CHART. 4'-0" LONG x 1" THICK x HEIGHT SPECIFIED ON CHART.
- PLACE BOLSTER PADS AGAINST JACKET AND CURVE AROUND ELBOW AS SHOWN. HOLD IN PLACE BY ATTACHING PADS TO JACKET WITH DUCT TAPE OR EQUIVALENT ON TOP AND BEDDING SAND ON THE BOTTOM. BE CERTAIN THAT THE BOLSTER PADS FITS SNUG TO JACKET.
- BOLSTER PAD CONFIGURATION IS DEPENDENT ON LAYOUT & WILL BE SHOWN ON THE INSTALLATION DRAWING.

PVC JACKET OD (INCHES)	HDPE JACKET OD (INCHES)	PAD HEIGHT (INCHES)
3	-	7
4	5.40	7
6	6.68	7
8	8.68	7
10	10.85	13
12	12.85	13
14	14.1	13
16	16.1	17
-	18.2	17
-	20.28	17
-	22.2	25
-	24.38	25
-	28.25	25

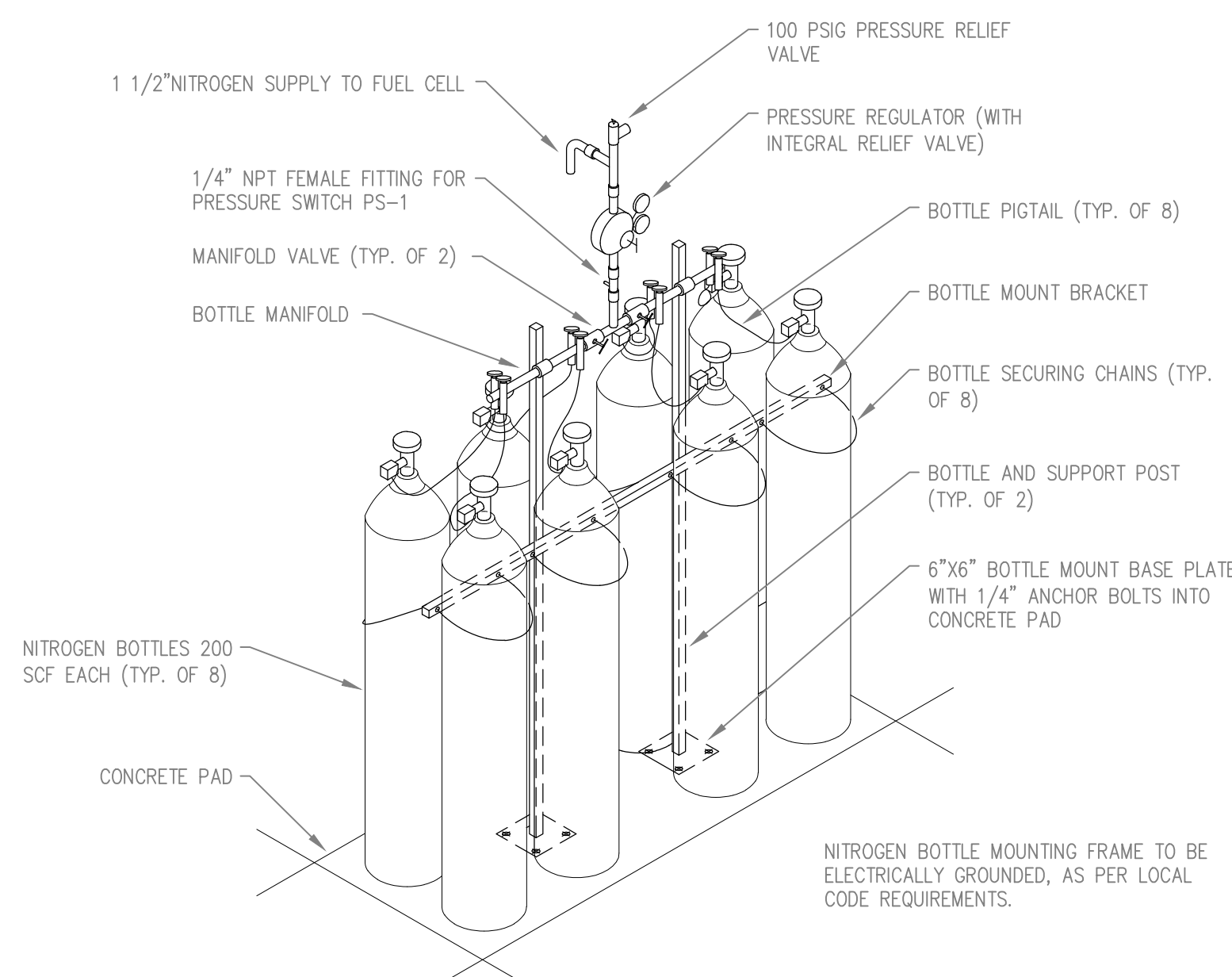
NOTE:  
\* DUCT TAPE TO BE 1'-0" ON CENTERS.

EXPANSION BOLSTER DETAIL  
NOT TO SCALE: 5

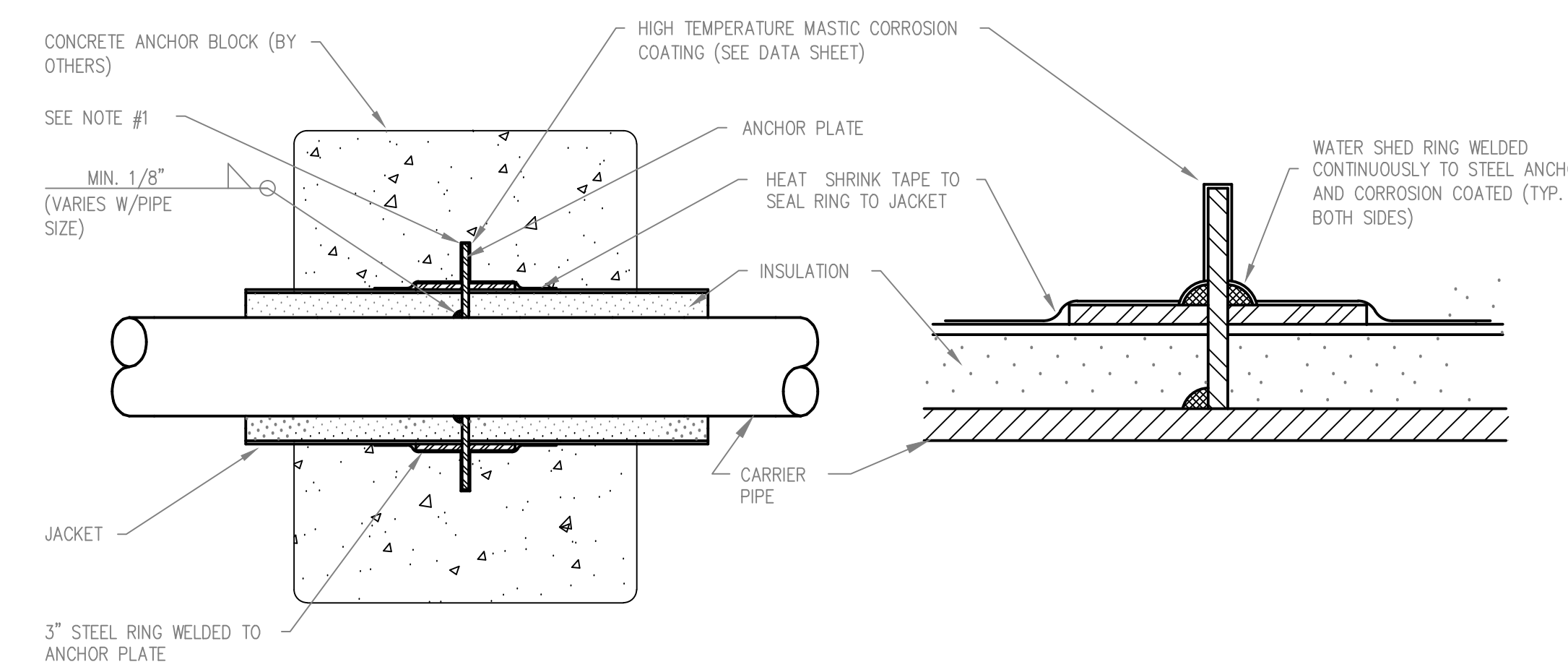


NOTE:  
CROSSOVER PIPING TO HAVE APPROX. 1" CLEARANCE BETWEEN JACKETS.

CROSSOVER DETAIL  
NOT TO SCALE: 2



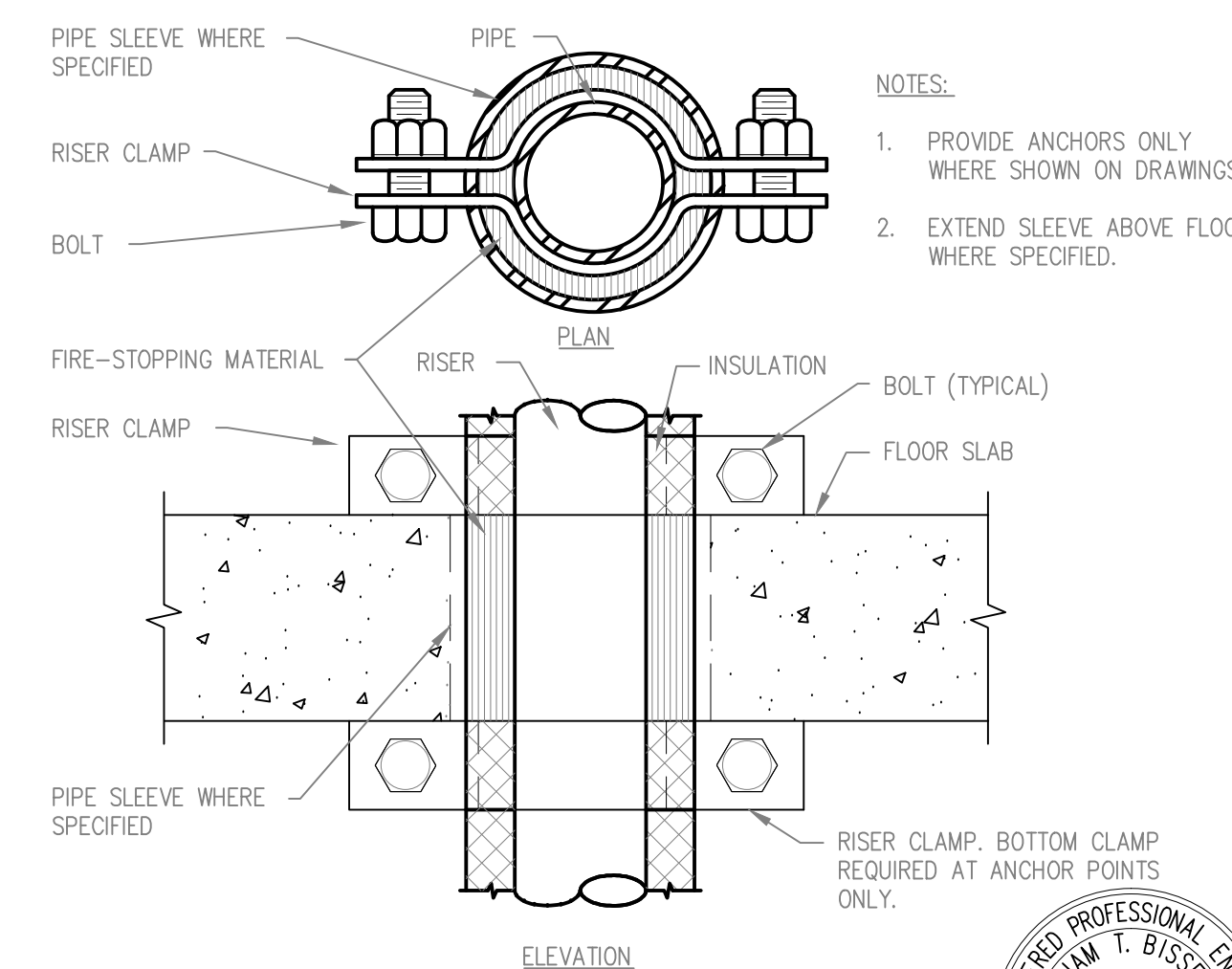
NITROGEN BOTTLE MOUNTING DETAIL  
NOT TO SCALE: 9



STEEL PIPE ANCHOR SPECIFICATIONS

- STEEL ANCHOR PLATE AND WELDED RINGS FURNISHED BY THERMACOR. ANCHOR PLATE SHALL MEET ASTM A36 AND ON ALL SIZES SHALL BE 1/2" THICK. ANCHOR PLATE SHALL EXTEND 2-1/2" BEYOND THE CASING DIAMETER ON ALL SIDES. ANCHOR PLATE SHALL BE CORROSION COATED WITH A HIGH TEMPERATURE MASTIC MATERIAL AFTER WATERSHED RINGS HAVE BEEN SEALED TO CASING BY HEAT SHRINK TAPE.
- ANCHOR ASSEMBLY SHALL BE POURED IN A CONCRETE BLOCK BY THE CONTRACTOR IN THE FIELD. GENERALLY, THE ANCHOR BLOCK EXTENDS 12" IN ALL DIRECTIONS FROM THE ANCHOR AND RESTS ON UNDISTURBED EARTH. THE JOB SITE CONDITIONS SHALL BE THE FINAL DETERMINING FACTOR FOR ANCHOR BLOCK SIZING.

PIPING ANCHOR DETAIL  
NOT TO SCALE: 6



NOTES:  
1. PROVIDE ANCHORS ONLY WHERE SHOWN ON DRAWINGS.  
2. EXTEND SLEEVE ABOVE FLOOR WHERE SPECIFIED.

SUPPORT/ANCHOR FOR PIPE RISERS DETAIL  
NOT TO SCALE: 3



CBS TELEVISION CITY  
FUEL CELL INSTALLATION PROJECT

7800 BEVERLY BLVD.  
LOS ANGELES, CALIFORNIA 90036

MECHANICAL DETAILS

ID	DATE	REMARKS
1	7/02/12	PRELIMINARY DESIGN REVIEW
2	8/20/12	PLAN CHECK
3	9/14/12	100% COMMENTS
4	9/19/12	100% COMMENTS
5	9/25/12	100% COMMENTS

ENGR:	WTB
DRWN BY:	WTB
CHK'D BY:	WTB
DATE:	9/19/12
JOB NO.:	12-010
SCALE:	AS NOTED



SHEET  
M4.3