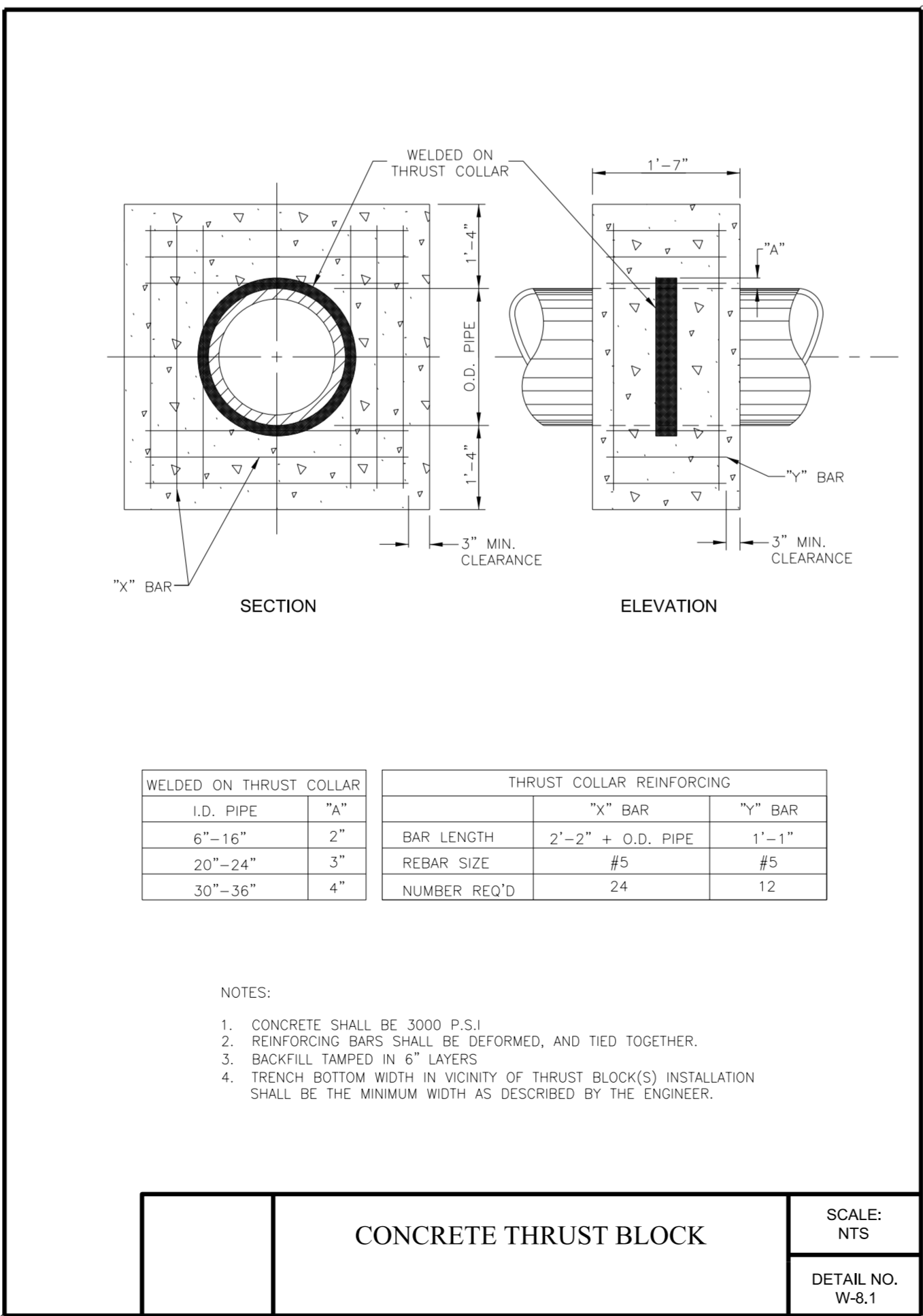
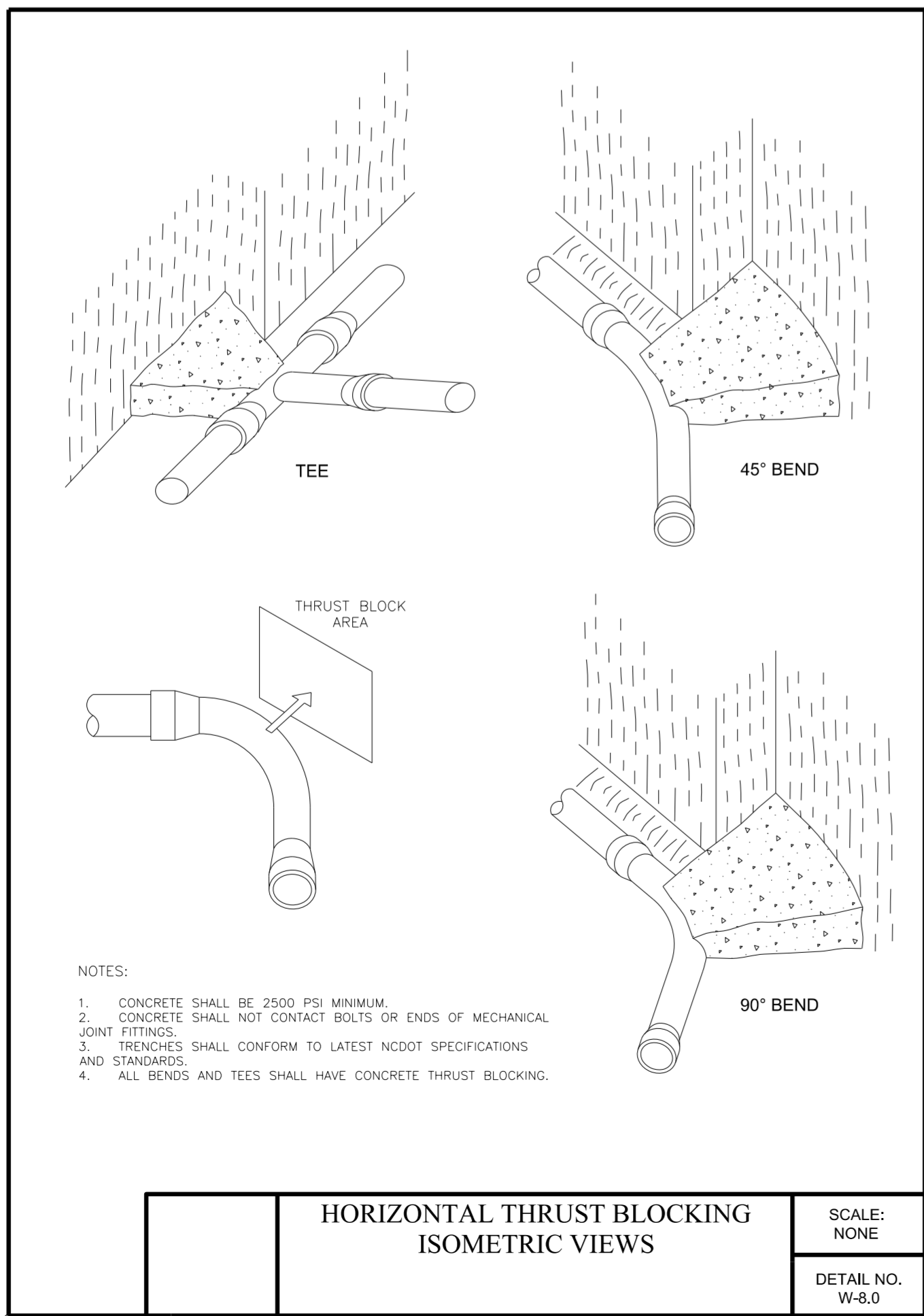
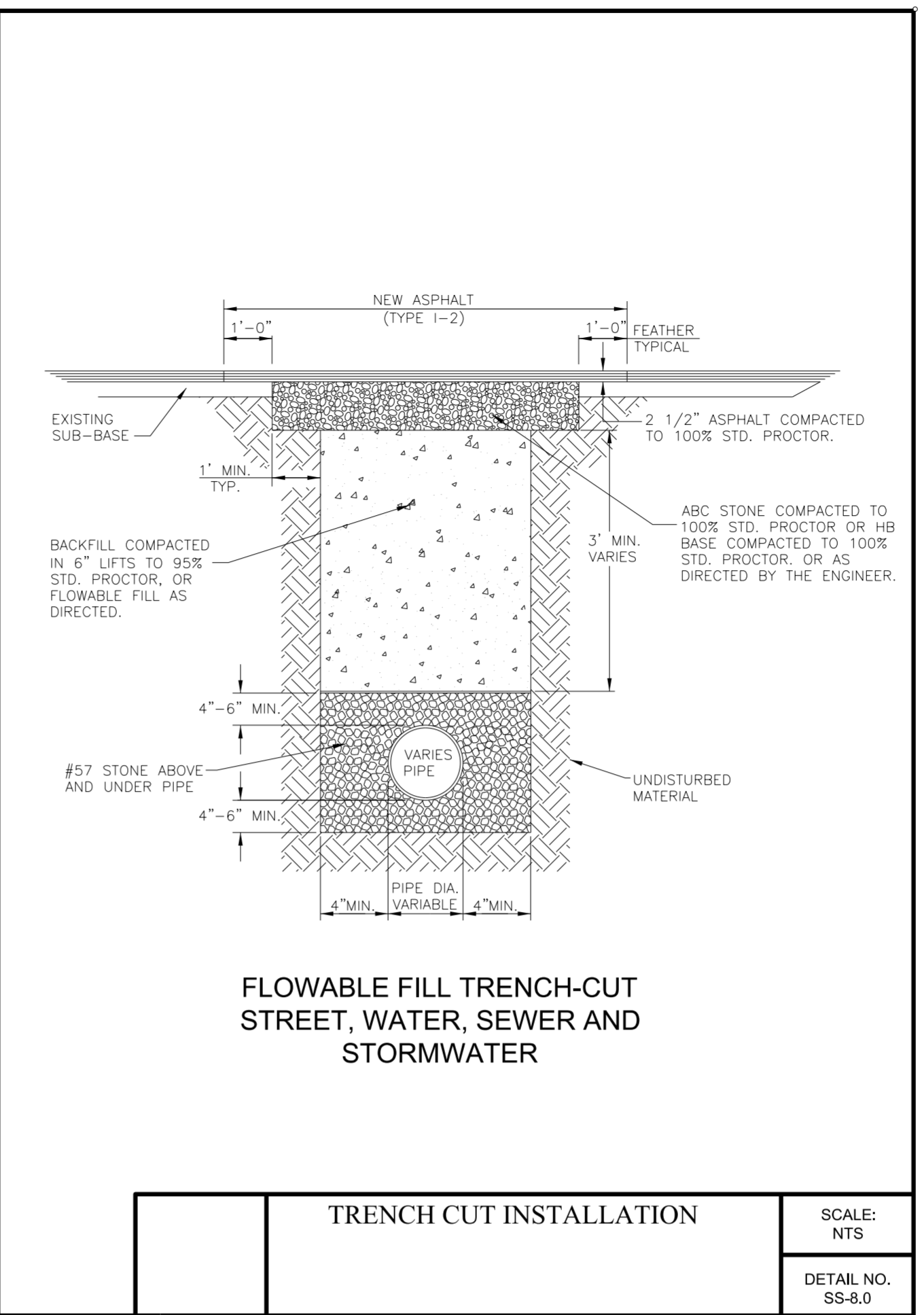
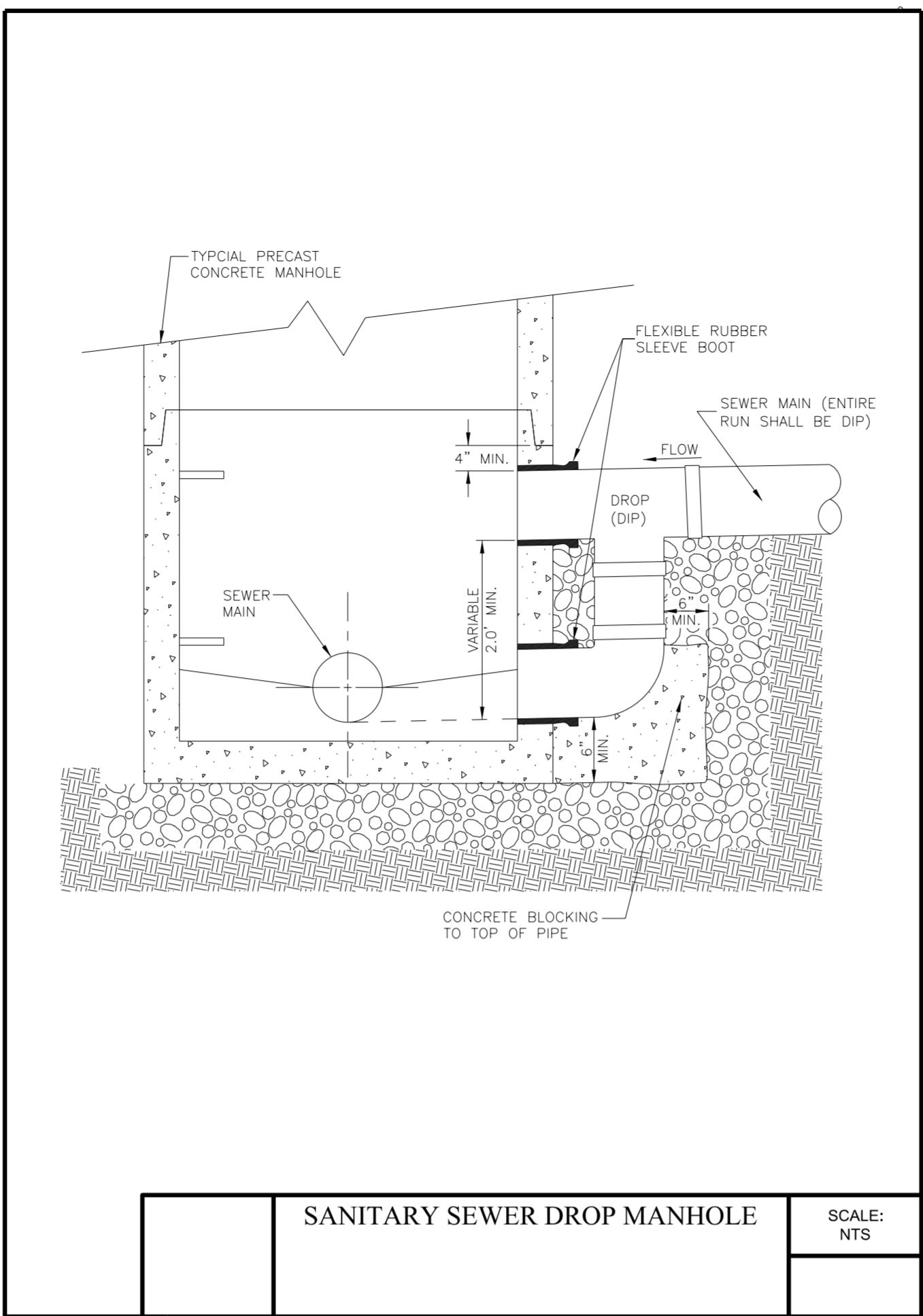
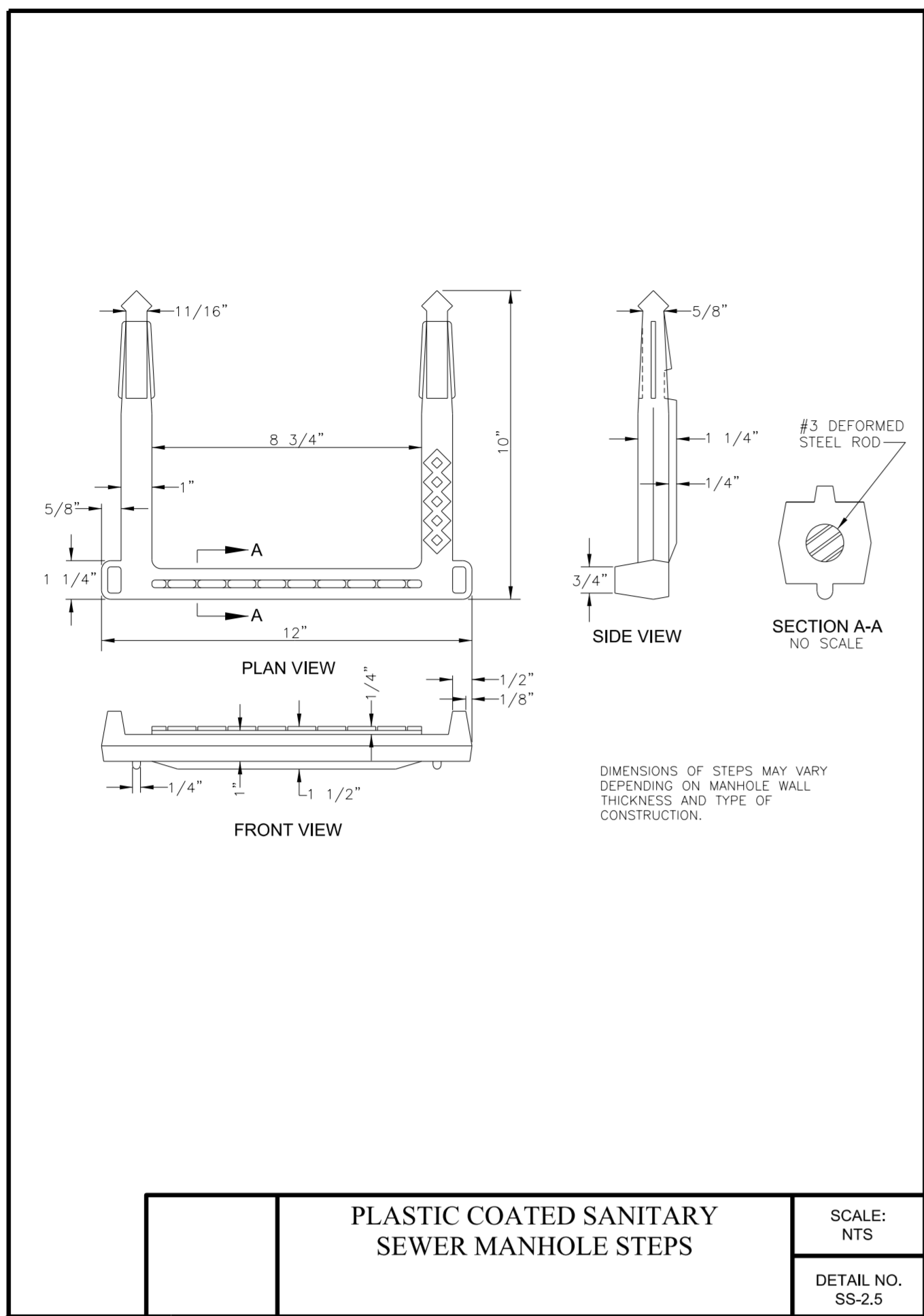


# UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



**HORIZONTAL THRUST BLOCKING SCHEDULE**

SCALE: NTS  
DETAIL NO. W-8.2

SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	4 LAYERS	4 LAYERS W/ RYD	4 LAYERS W/ RYD & COARSE SAND	4 LAYERS W/ RYD & COARSE SAND & COB	4 LAYERS W/ RYD & COARSE SAND & COB ALWAYS	4 LAYERS W/ RYD & COARSE SAND & COB ALWAYS & FIRM	4 LAYERS W/ RYD & COARSE SAND & COB ALWAYS & FIRM & ROCK	4 LAYERS W/ RYD & COARSE SAND & COB ALWAYS & FIRM & ROCK & PEBBLES	4 LAYERS W/ RYD & COARSE SAND & COB ALWAYS & FIRM & ROCK & PEBBLES & FT.
6" PIPE										
11 1/4"	1,108	1	1	1	1	1	1	2	1	
22 1/2"	2,207	1	2	2	1	1	1	3	1	
45°	4,328	2	3	3	1	1	2	5	1	
90°	7,996	2	4	5	1	1	2	8	1	
PLUG OR TEE	5,655	2	3	4	1	1	2	6	1	
8" PIPE										
11 1/4"	1,970	1	1	2	1	1	1	2	1	
22 1/2"	3,922	1	2	3	1	1	1	4	1	
45°	7,694	2	4	5	1	1	2	8	1	
90°	14,215	4	8	9	2	2	4	15	2	
PLUG OR TEE	10,053	3	5	6	2	2	3	10	1	
12" PIPE										
11 1/4"	4,433	2	3	3	1	1	2	5	1	
22 1/2"	8,826	3	5	6	2	2	3	9	1	
45°	17,312	5	9	11	3	3	5	18	2	
90°	31,983	8	16	19	4	4	8	32	4	
PLUG OR TEE	22,619	6	12	14	3	3	6	23	3	
16" PIPE										
11 1/4"	7,881	2	4	5	1	1	2	8	1	
22 1/2"	15,691	4	8	10	2	2	4	16	2	
45°	7,694	8	16	19	4	4	8	31	4	
90°	56,861	15	29	35	8	8	15	57	6	
PLUG OR TEE	40,213	10	21	25	5	5	10	41	5	
20" PIPE										
11 1/4"	12,315	3	7	8	2	2	3	13	2	
22 1/2"	24,517	7	13	15	4	4	7	25	3	
45°	48,091	12	24	29	6	6	12	48	5	
90°	88,844	23	45	53	12	12	23	89	9	
PLUG OR TEE	62,832	16	32	38	8	8	16	63	7	
24" PIPE										
11 1/4"	17,734	5	9	11	3	3	5	18	2	
22 1/2"	35,305	9	18	22	5	5	9	36	4	
45°	69,252	18	35	42	9	9	18	70	7	
90°	127,936	32	64	77	16	16	32	128	13	
PLUG OR TEE	90,478	23	46	55	12	12	23	91	10	
30" PIPE										
11 1/4"	27,709	7	14	17	4	4	7	2	3	
22 1/2"	55,163	14	28	34	7	7	14	56	6	
45°	108,206	28	55	65	14	14	28	109	11	
90°	199,900	50	100	120	25	25	50	200	20	
PLUG OR TEE	141,372	36	71	85	18	18	36	142	15	
36" PIPE										
11 1/4"	39,901	10	20	24	5	5	10	40	4	
22 1/2"	79,435	20	40	48	10	10	20	30	8	
45°	155,816	39	78	94	20	20	39	156	16	
90°	247,855	72	144	172	36	36	72	288	29	
PLUG OR TEE	203,575	51	102	122	26	26	51	204	21	

GENERAL NOTES:  
1. BASED ON TEST PRESSURE OF 200 P.S.I. ALL AREAS GIVEN IN SQUARE FEET.  
2. THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.  
3. USE 6"-90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTORS.

8/29/2024 11:11:51 AM I:\Users\Engineering\UC\Projects\B5766\ut\_notes\_UC03\_psh.dgn