

5/14/22

PROJECT TYPICAL DETAILS

PROJECT REFERENCE NO.	SHEET NO.
I-5878	UC-3A
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

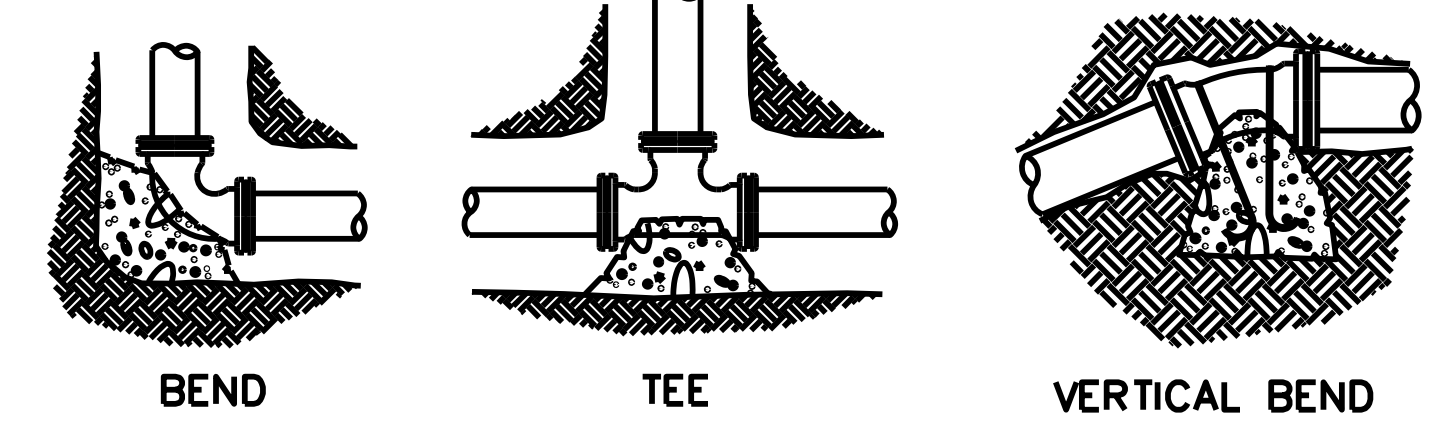
UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

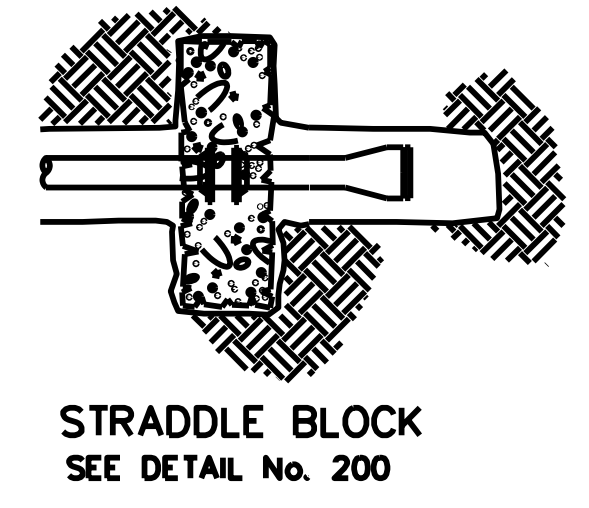
(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQ. FT. VOLUME OF THRUST BLOCK IN CU. YDS. (VERTICAL)

FITTING SIZE	TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	BEND ANGLE			
						45°	22.5°	11.25°	
4	1.3	1.8	1.0	1.0	1.0	4	1.1	0.4	0.2
6	2.8	4.0	2.2	1.1	1.0	6	2.7	1.0	0.4
8	5.0	7.1	3.8	2.0	1.0	8	4.0	1.5	0.6
12	11.3	16.0	8.7	4.4	2.2	12	8.5	3.2	1.3
16	20.1	28.4	15.4	7.8	3.9	16	14.8	5.6	2.3
20	31.1	44.4	24.0	12.3	6.2				
24	45.2	64.0	34.6	17.7	8.9				

VALUES BASED ON 200 PS WATER PRESSURE AND 2000 PSF SOL. BEARING CAPACITY.



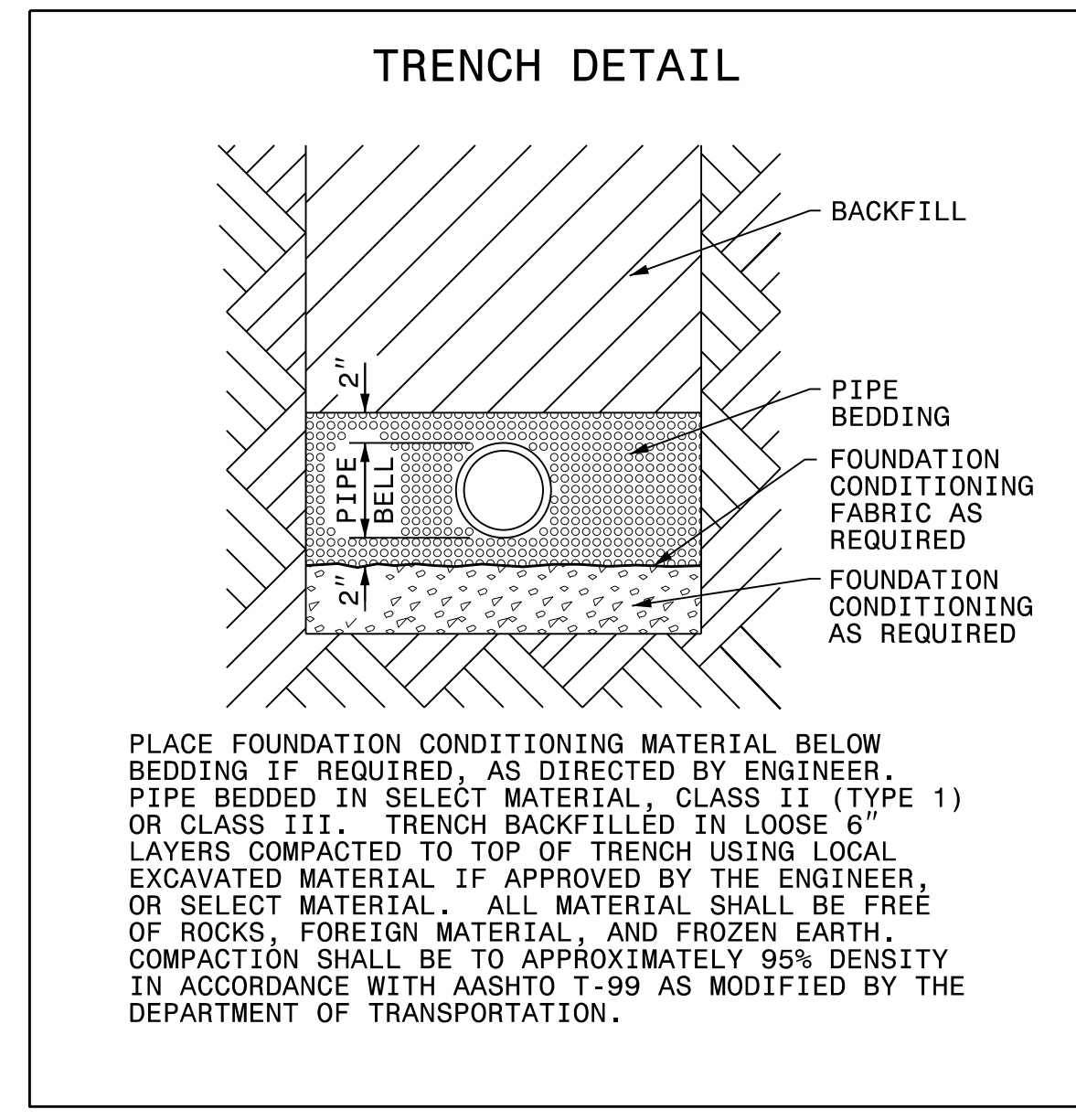
FITTING SIZE	ROD SIZE	EMBEDMENT
4"-12"	#6	30"
14"-16"	#8	36"



- NOTES:
- 1) CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH
 - 2) ALL CONCRETE TO BE CLASS 3000
 - 3) INSTALL 12 MIL TOTAL THICKNESS POLYETHENE SHEET AROUND FITTING. SECURE SHEET ENDS TO PREVENT INFILTRATION OF DIRT BETWEEN SHEET AND PIPE FITTING PRIOR TO POURING THRUST BLOCKING
 - 4) PROTECT MECHANICAL JOINT FOLLOWERS AND BOLTS FROM CONCRETE WITH TEMPORARY FORMS AND POLYETHENE SHEETING SEE NOTE No. 3

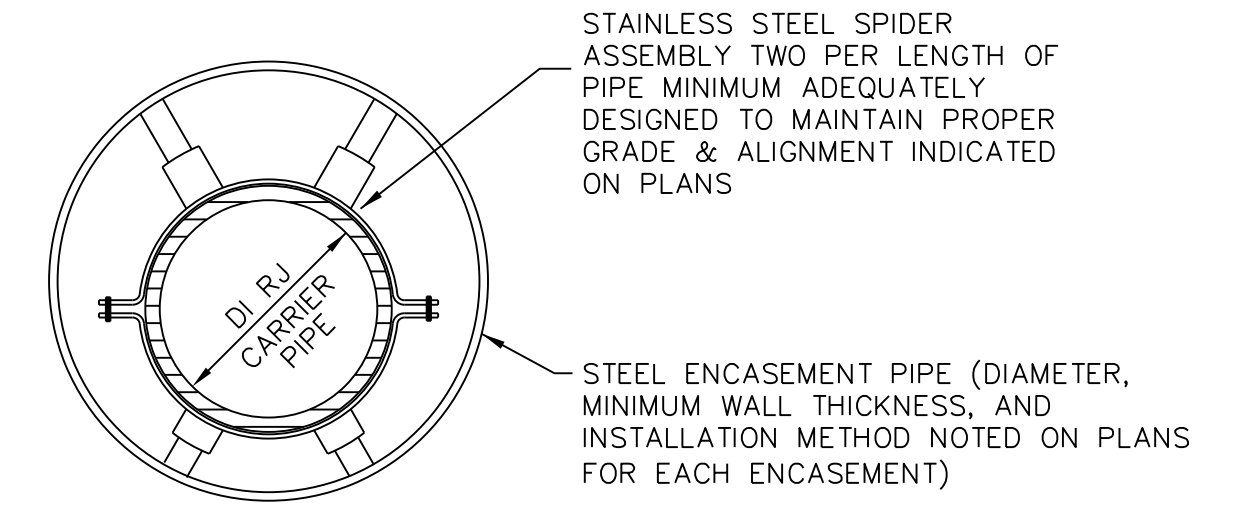
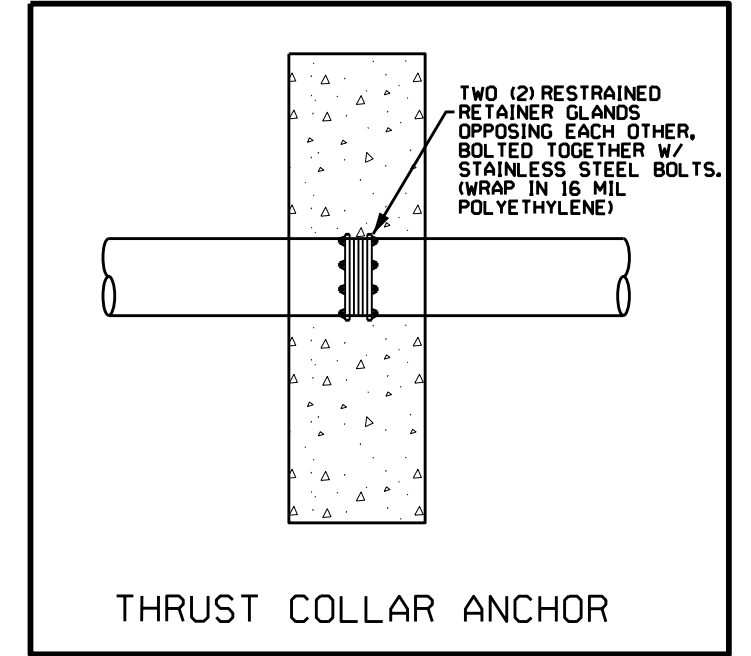
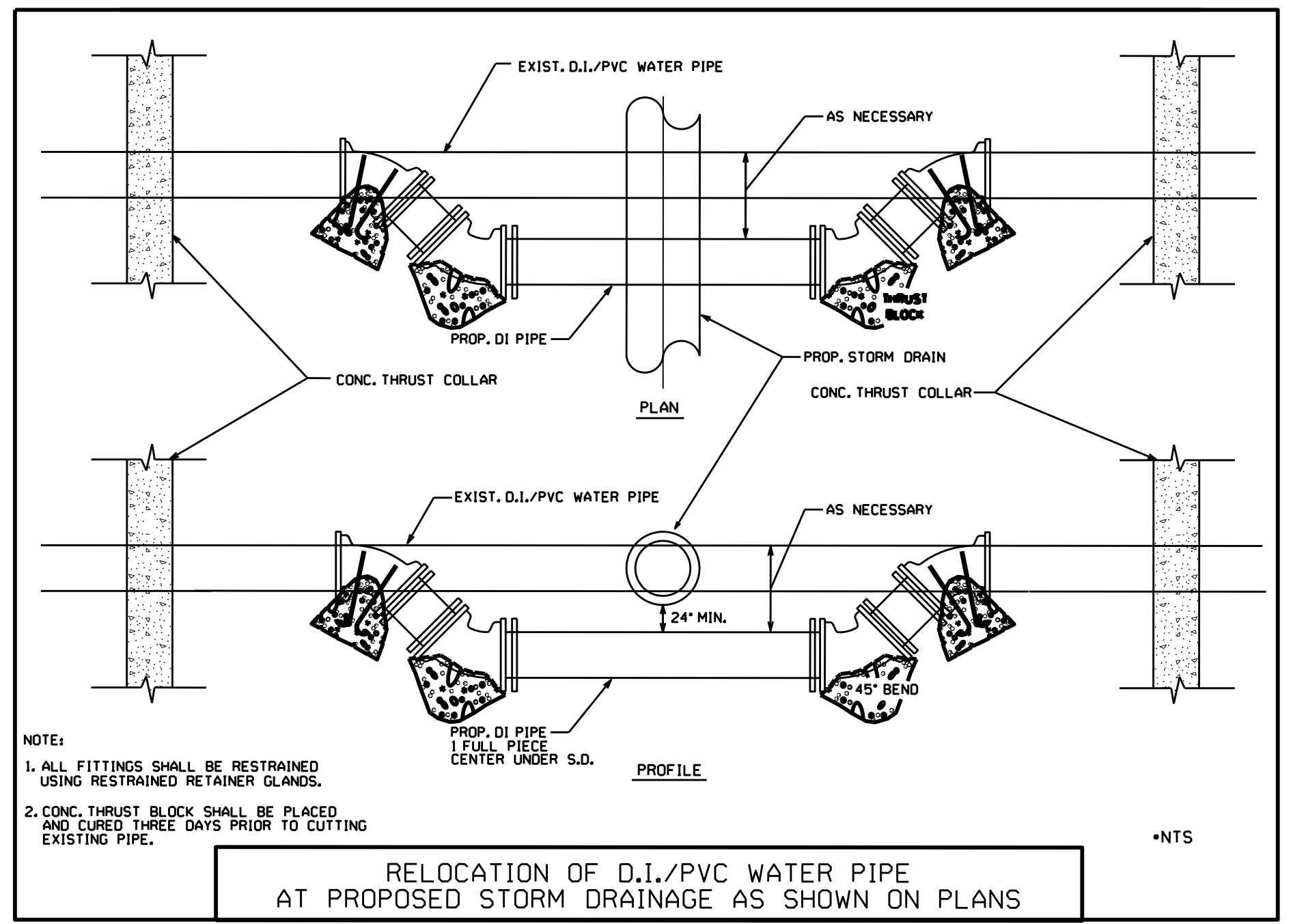
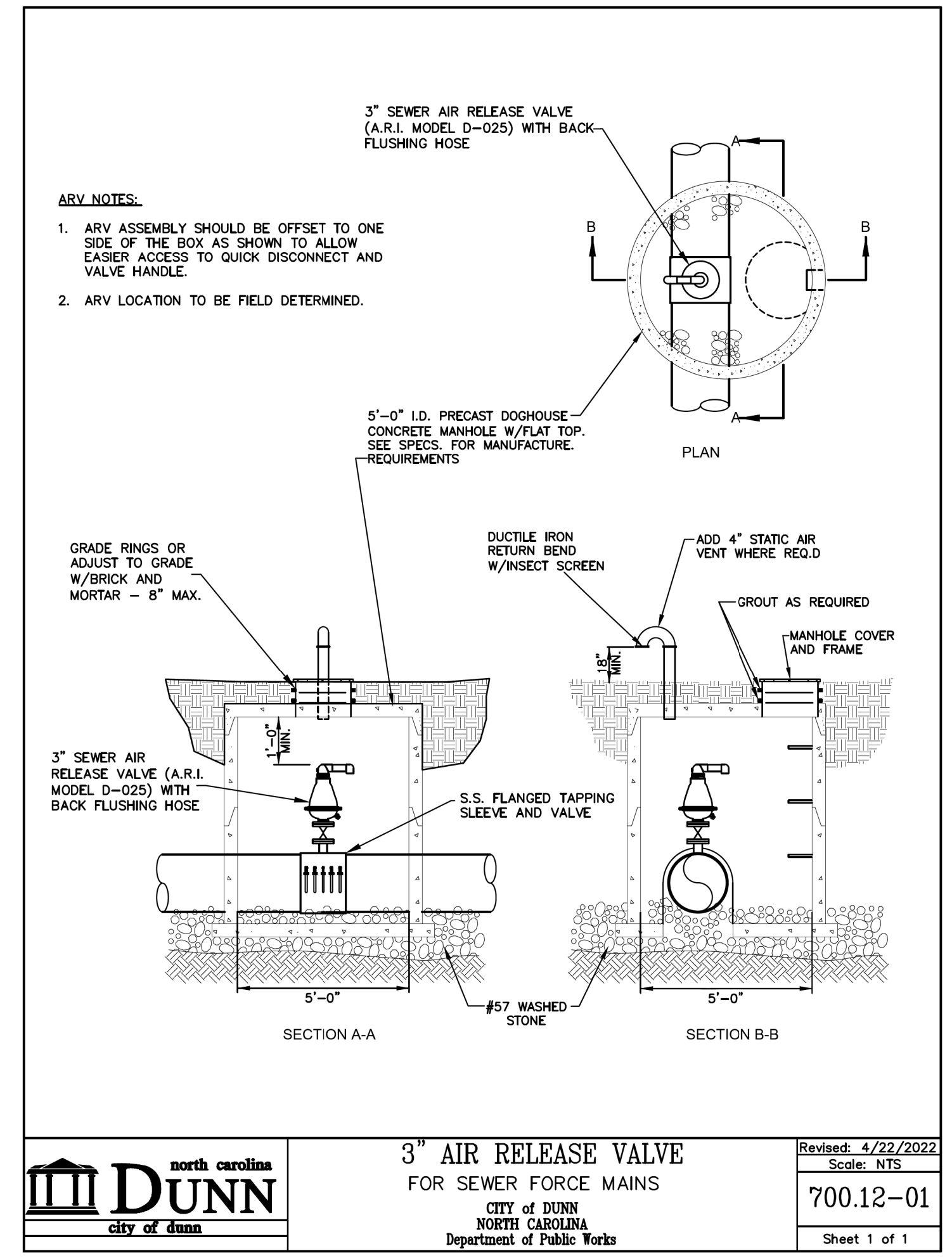
THRUST BLOCKING DETAILS

NTS



MAXIMUM TRENCH WIDTH AT TOP OF PIPE

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		



- NOTES:
1. ENCLOSE ENDS WITH BRICK MASONRY.
 2. PROVIDE 1" WEEP HOLE AT LOW END OF ENCASEMENT.
 3. DO NOT FILL ENCASEMENTS SMALLER THAN 24". FOR ENCASEMENTS 24" AND LARGER, FILL ONLY WITH CLASS III, IV, OR V SELECT MATERIALS.

TYPICAL ENCASEMENT PIPE SECTION

N.T.S.

REVISIONS
1. 4/22/2022 - ADDED DETAIL FOR CITY OF DUNN STD. DWS. 700.12-01 FOR SEWER ARV IN MH.