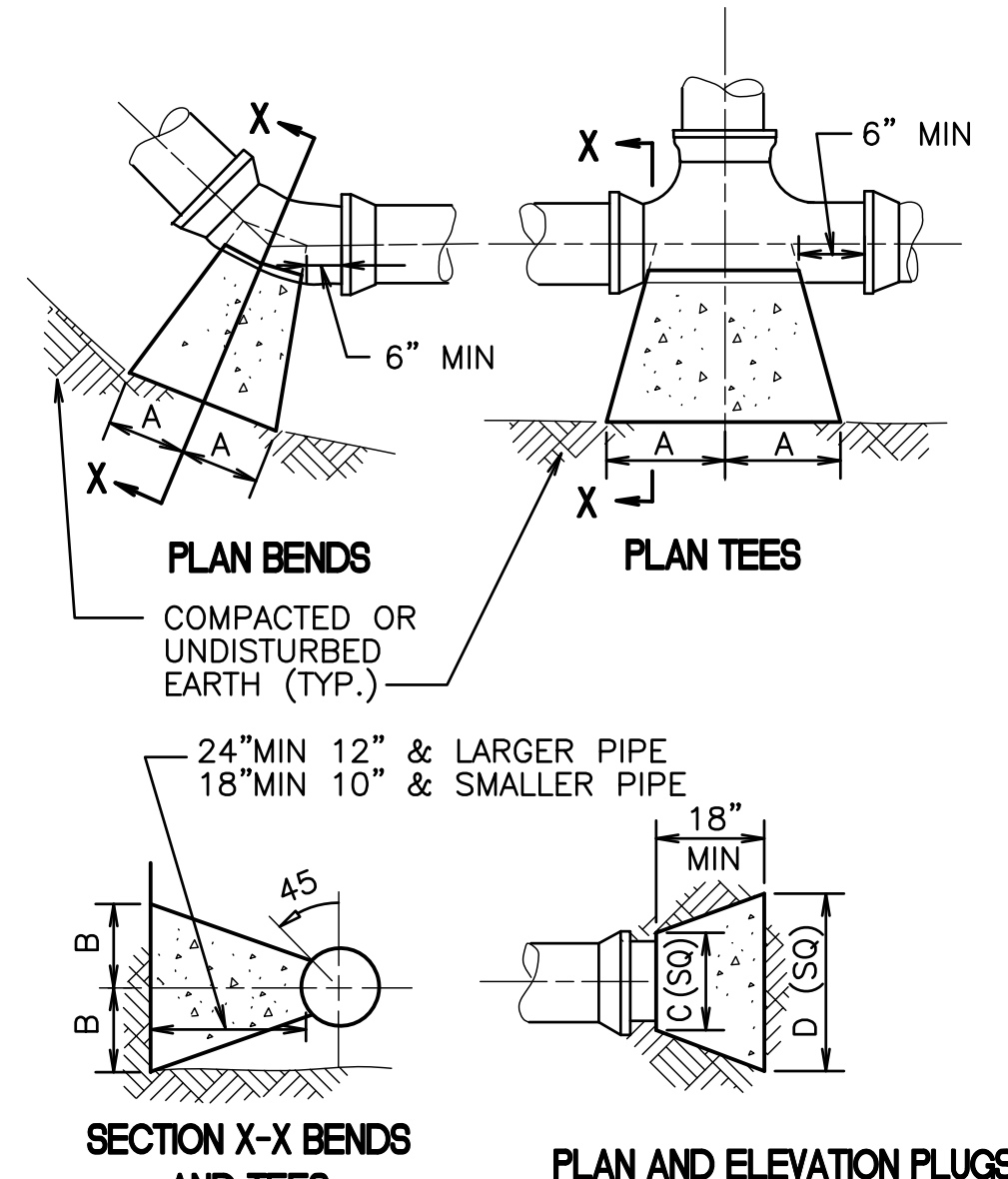
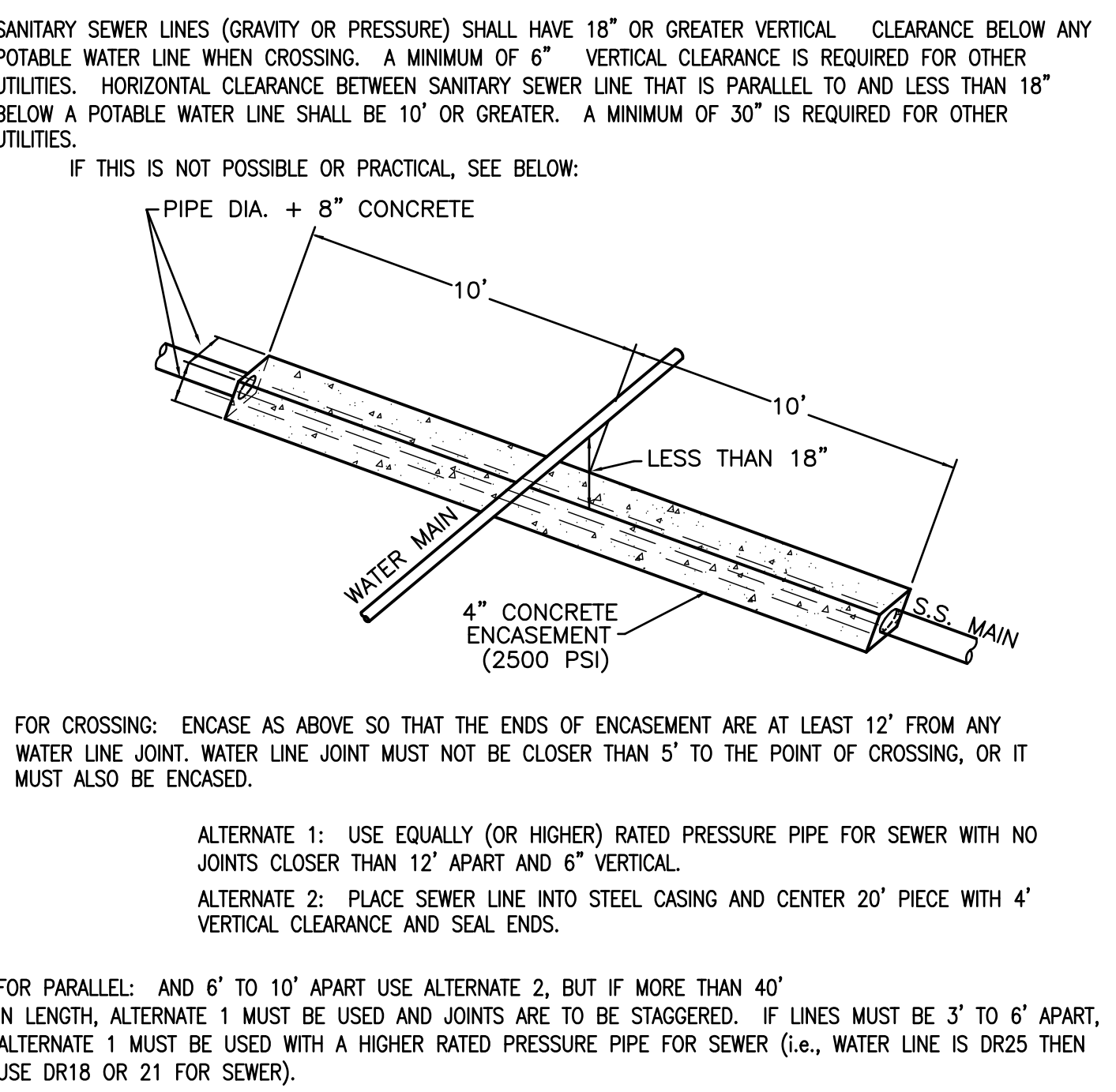
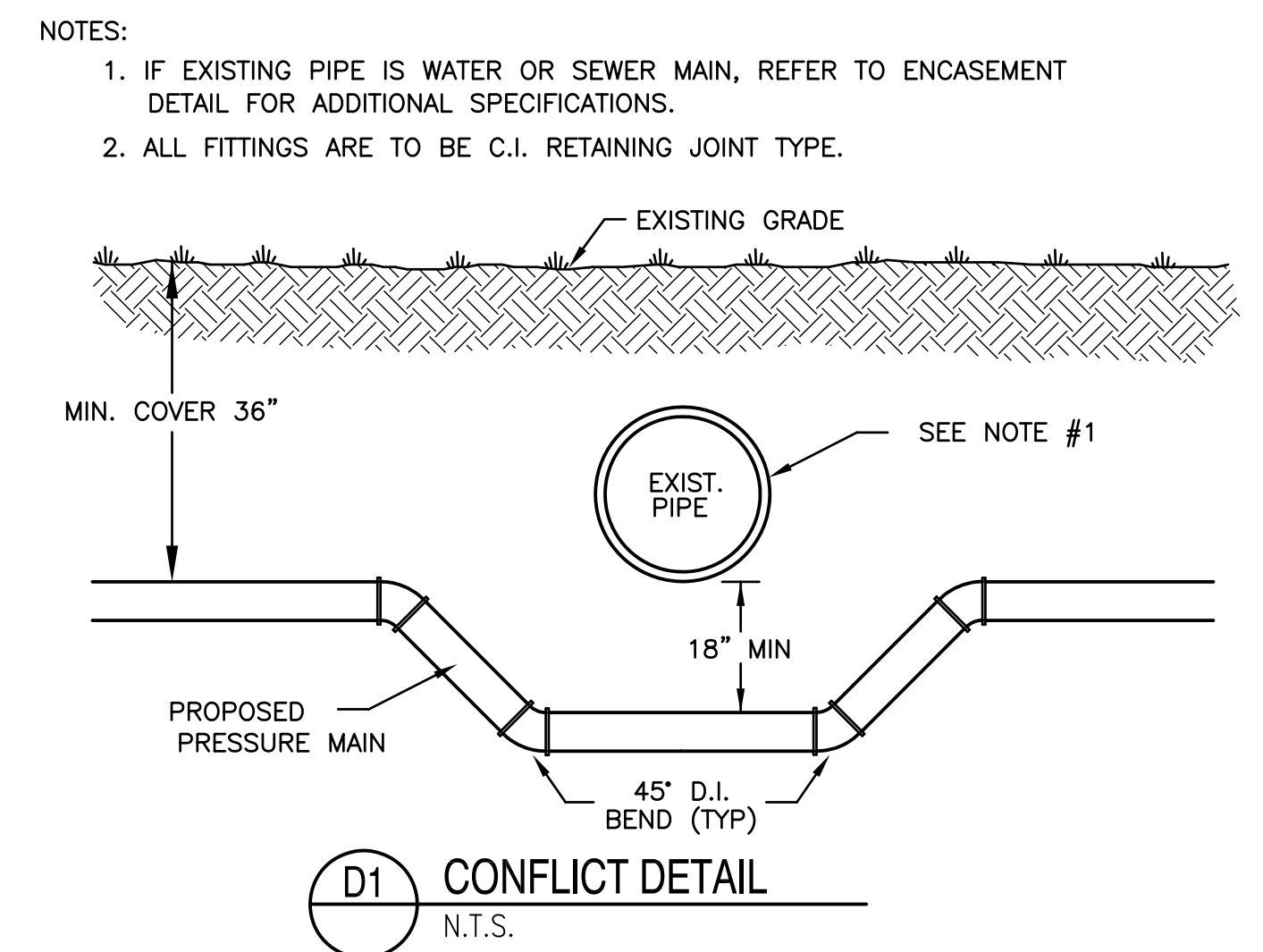


three eighths inch = one foot  
one eighth inch = one foot  
one quarter inch = one foot  
one half inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot  
four inches = one foot  
five inches = one foot  
six inches = one foot  
seven inches = one foot  
eight inches = one foot  
nine inches = one foot  
ten inches = one foot  
eleven inches = one foot  
twelve inches = one foot  
thirteen inches = one foot  
fourteen inches = one foot  
fifteen inches = one foot  
sixteen inches = one foot  
seventeen inches = one foot  
eighteen inches = one foot  
nineteen inches = one foot  
twenty inches = one foot  
twenty one inches = one foot  
twenty two inches = one foot  
twenty three inches = one foot  
twenty four inches = one foot  
twenty five inches = one foot  
twenty six inches = one foot  
twenty seven inches = one foot  
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twenty nine inches = one foot  
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eighty two inches = one foot  
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eighty five inches = one foot  
eighty six inches = one foot  
eighty seven inches = one foot  
eighty eight inches = one foot  
eighty nine inches = one foot  
ninety inches = one foot  
ninety one inches = one foot  
ninety two inches = one foot  
ninety three inches = one foot  
ninety four inches = one foot  
ninety five inches = one foot  
ninety six inches = one foot  
ninety seven inches = one foot  
ninety eight inches = one foot  
ninety nine inches = one foot  
one hundred inches = one foot

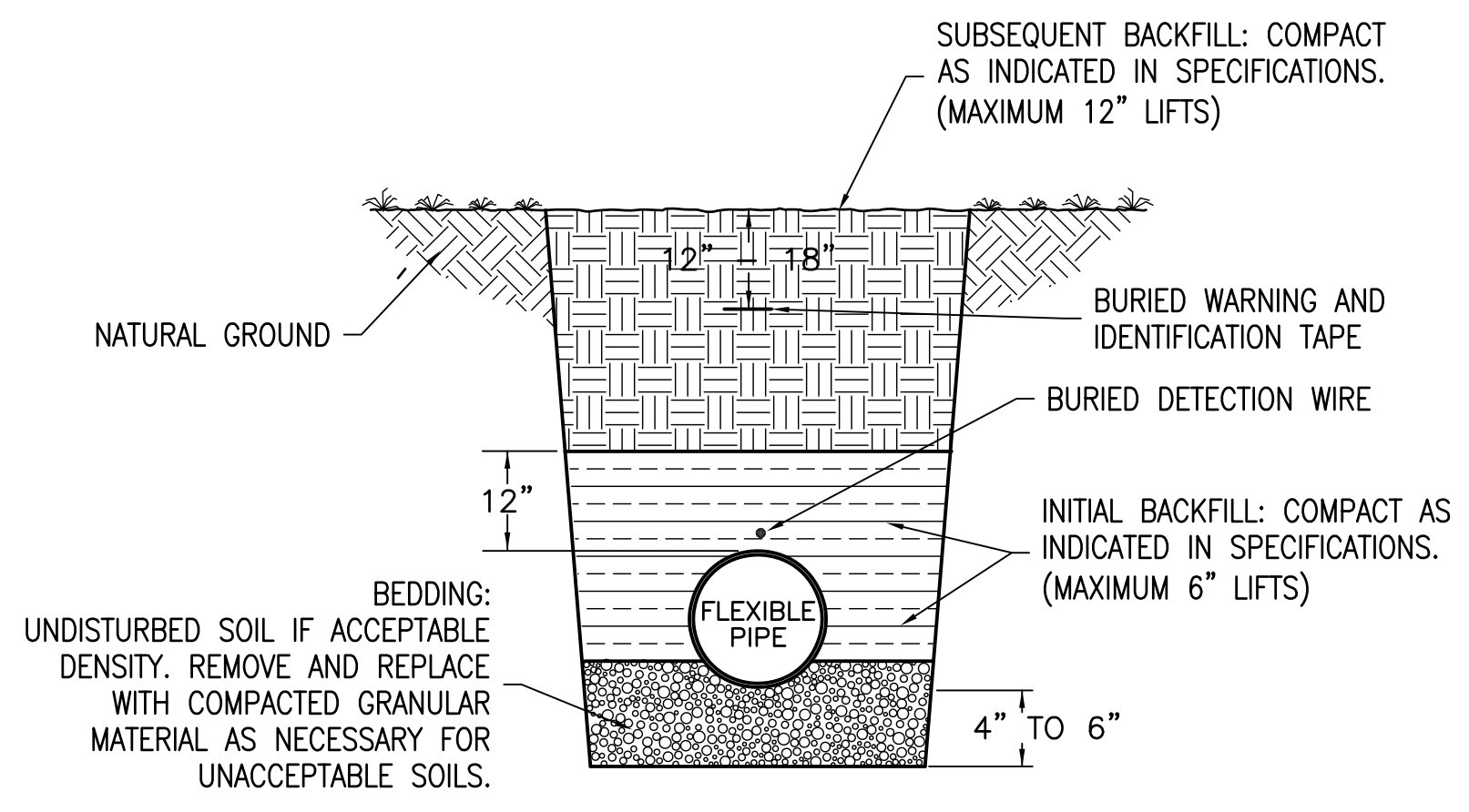


SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

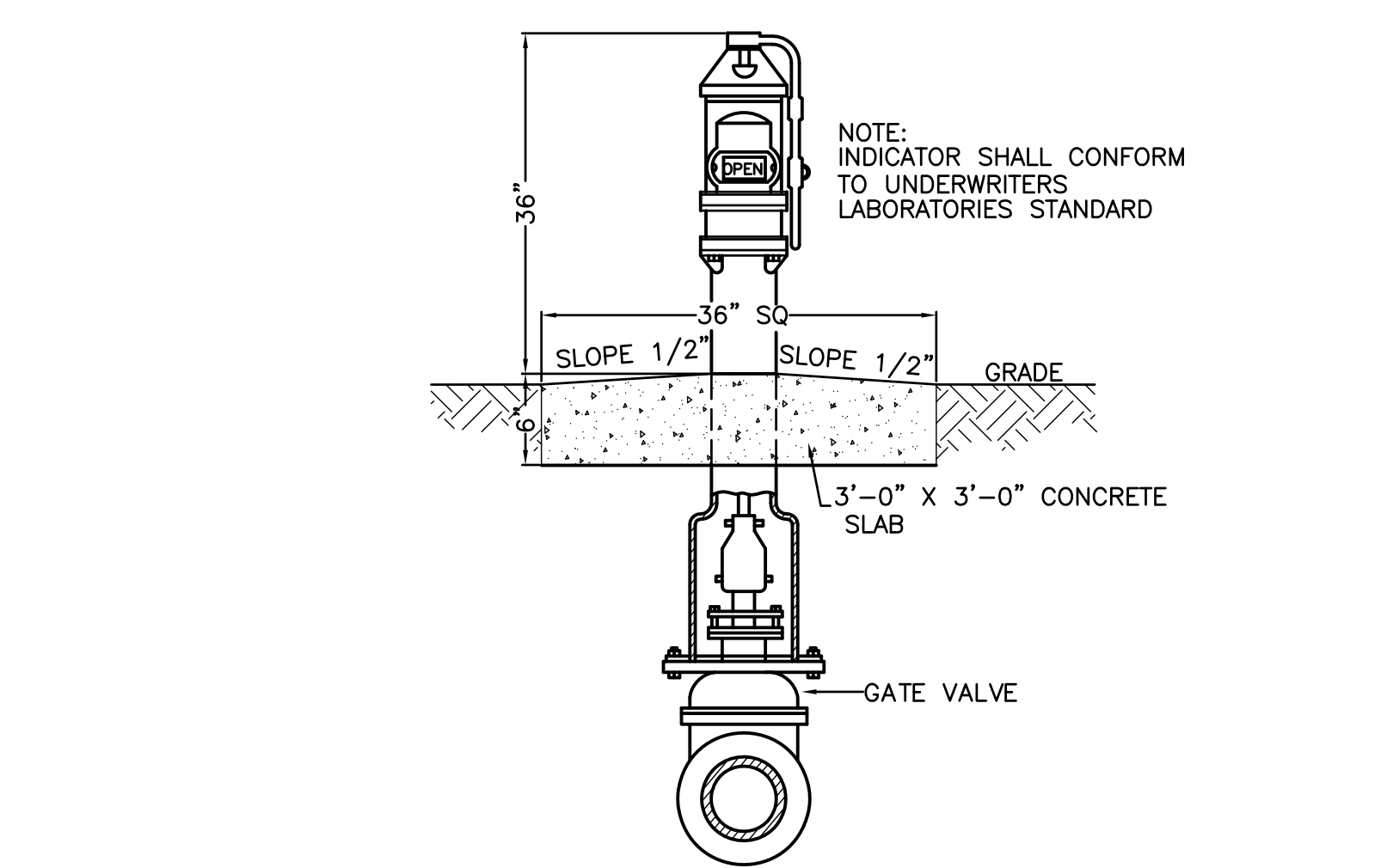
**C1 THRUST BLOCK DETAIL**  
CU101 N.T.S.



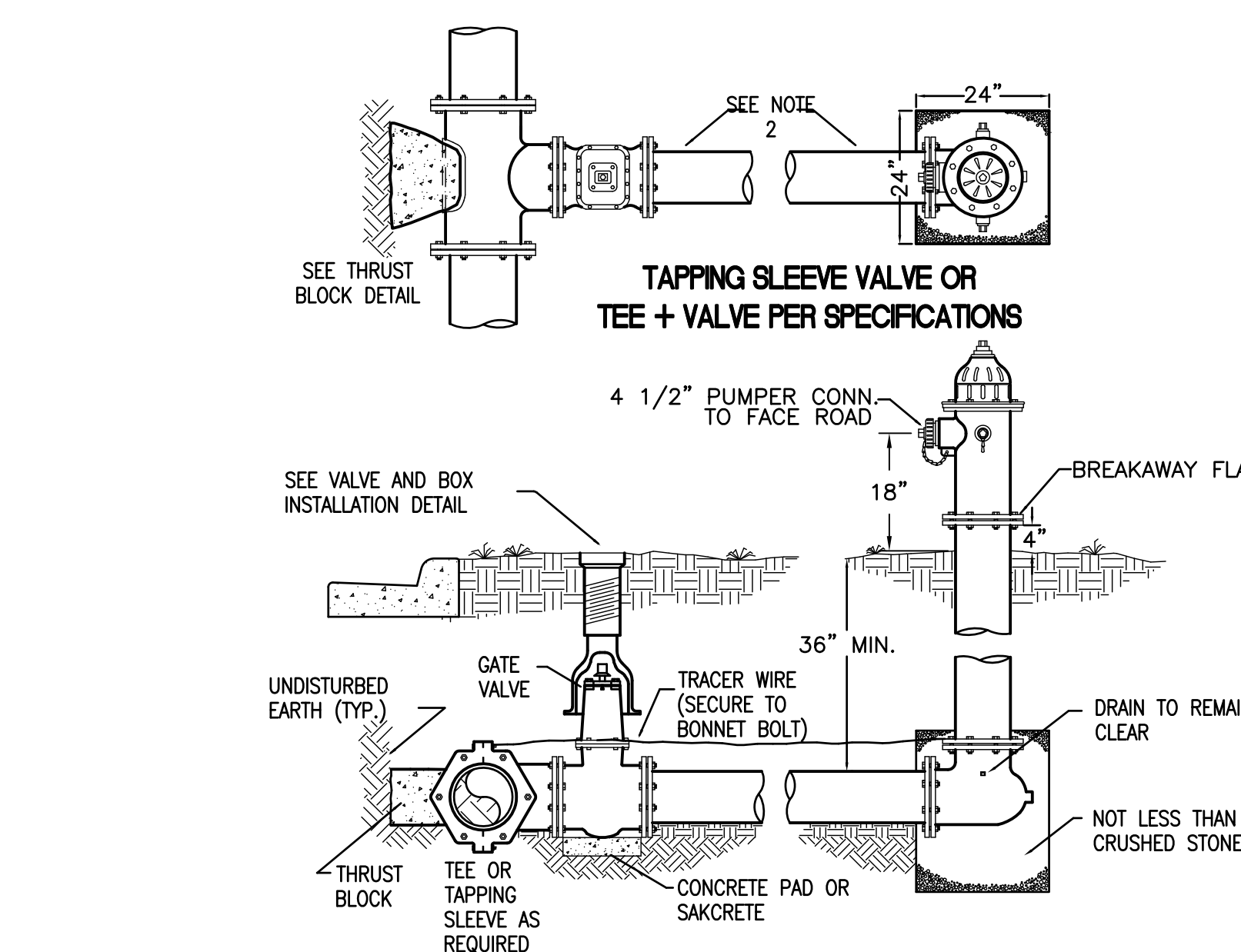
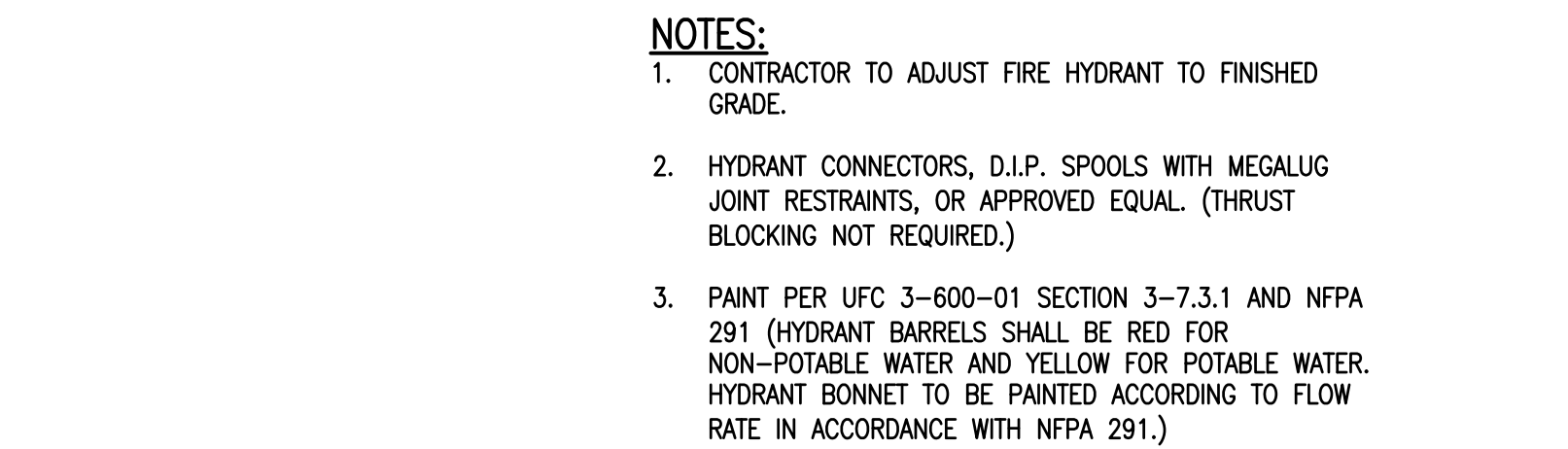
**F1 SEWER-WATER SEPARATION & CLEARANCES DETAIL**  
N.T.S.



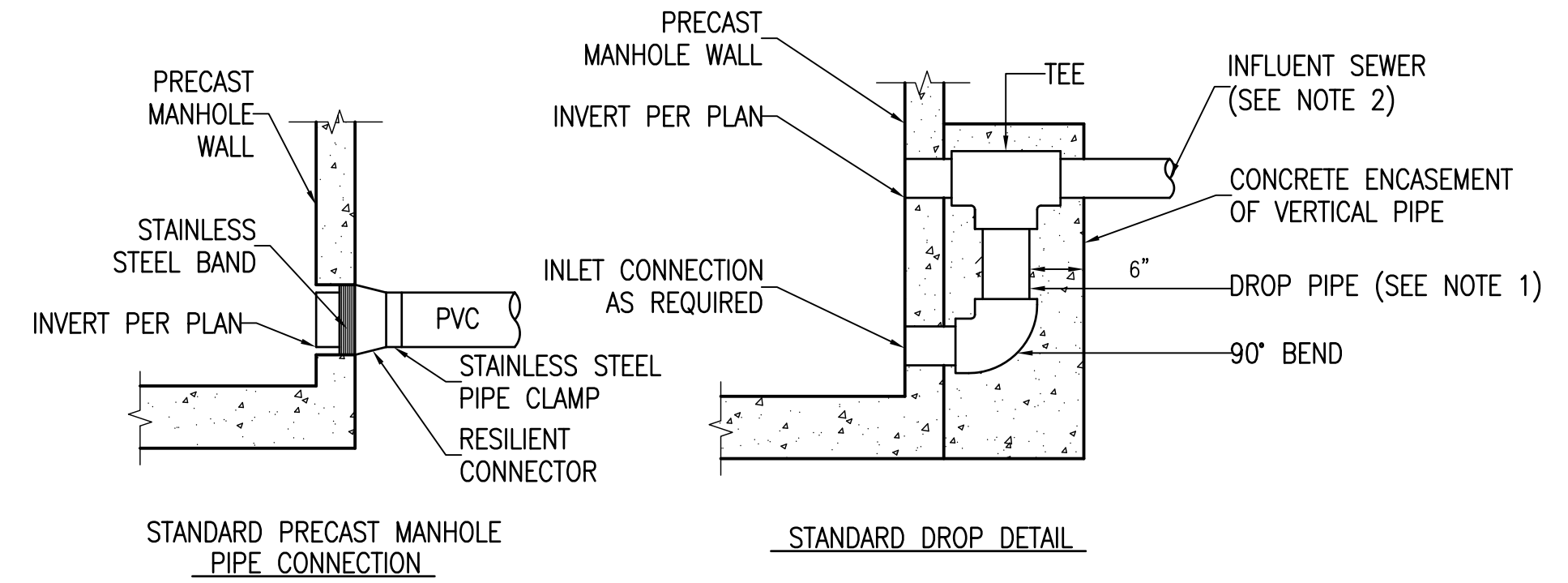
**A3 FLEXIBLE PIPE BEDDING DETAIL**  
N.T.S.



**C3 POST INDICATOR VALVE DETAIL**  
CU101 N.T.S.

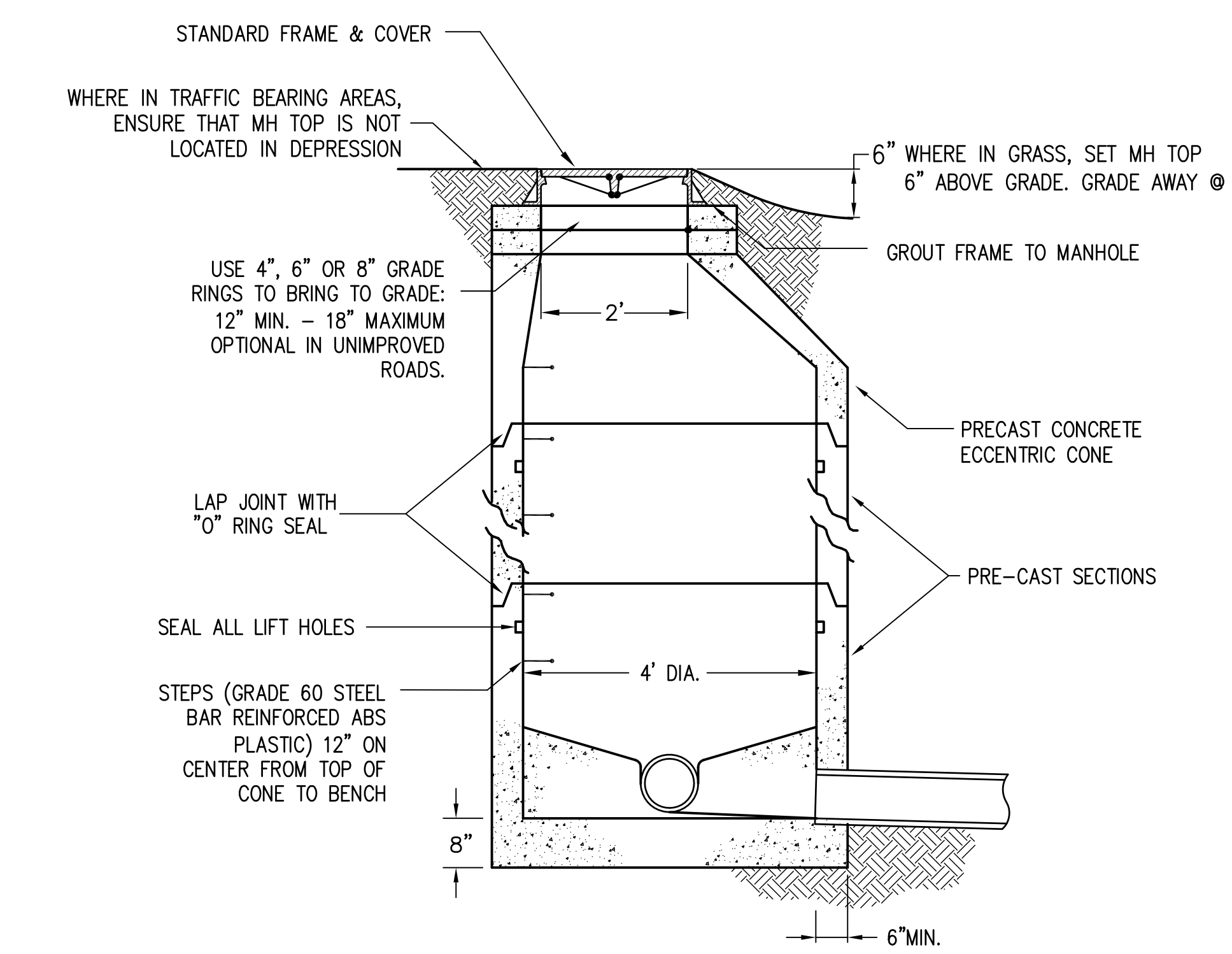


**E3 TYPICAL FIRE HYDRANT INSTALLATION DETAIL**  
CU101 N.T.S.



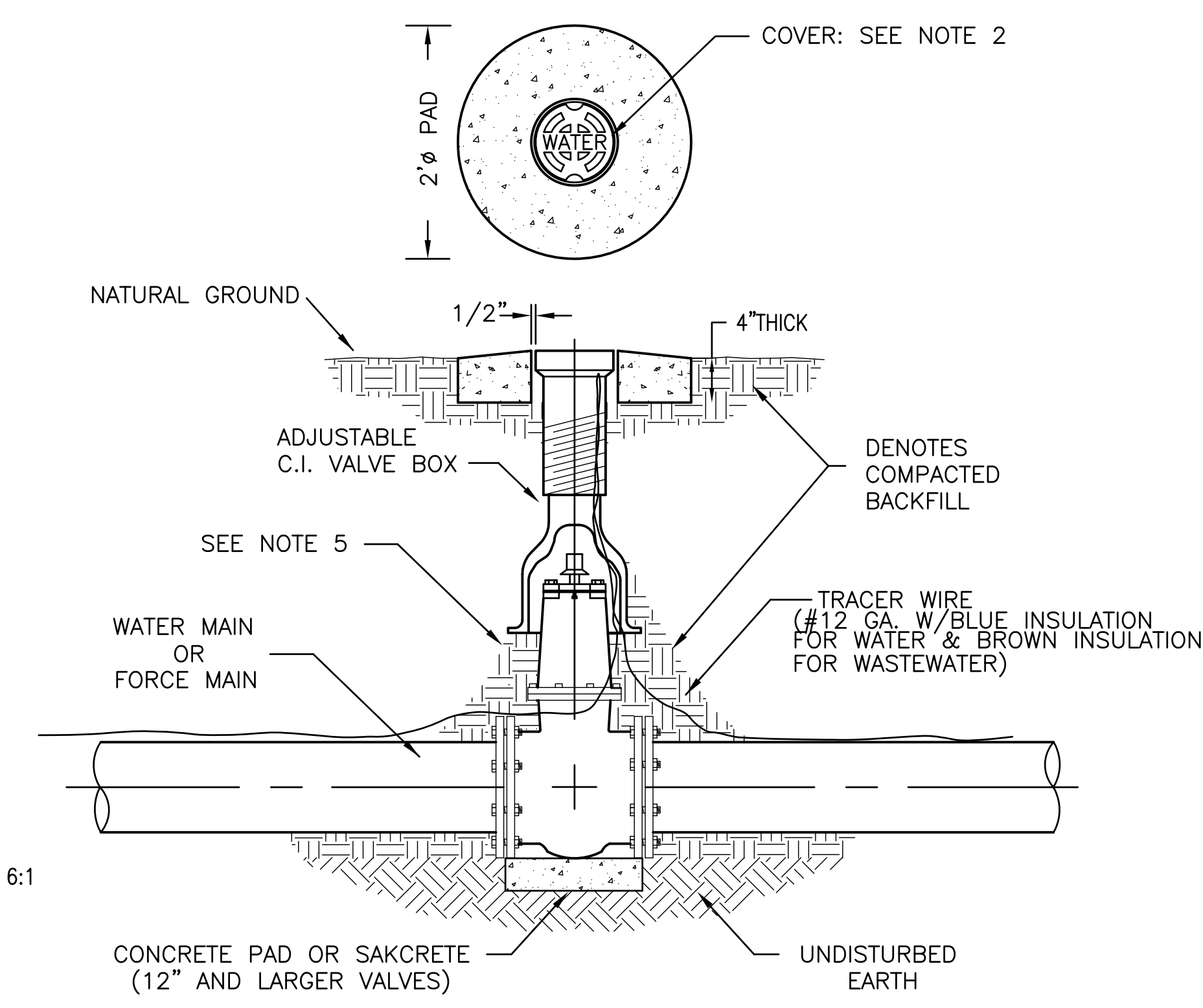
- NOTES:**
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.

**A6 SANITARY SEWER MANHOLE CONNECTIONS DETAIL**  
N.T.S.

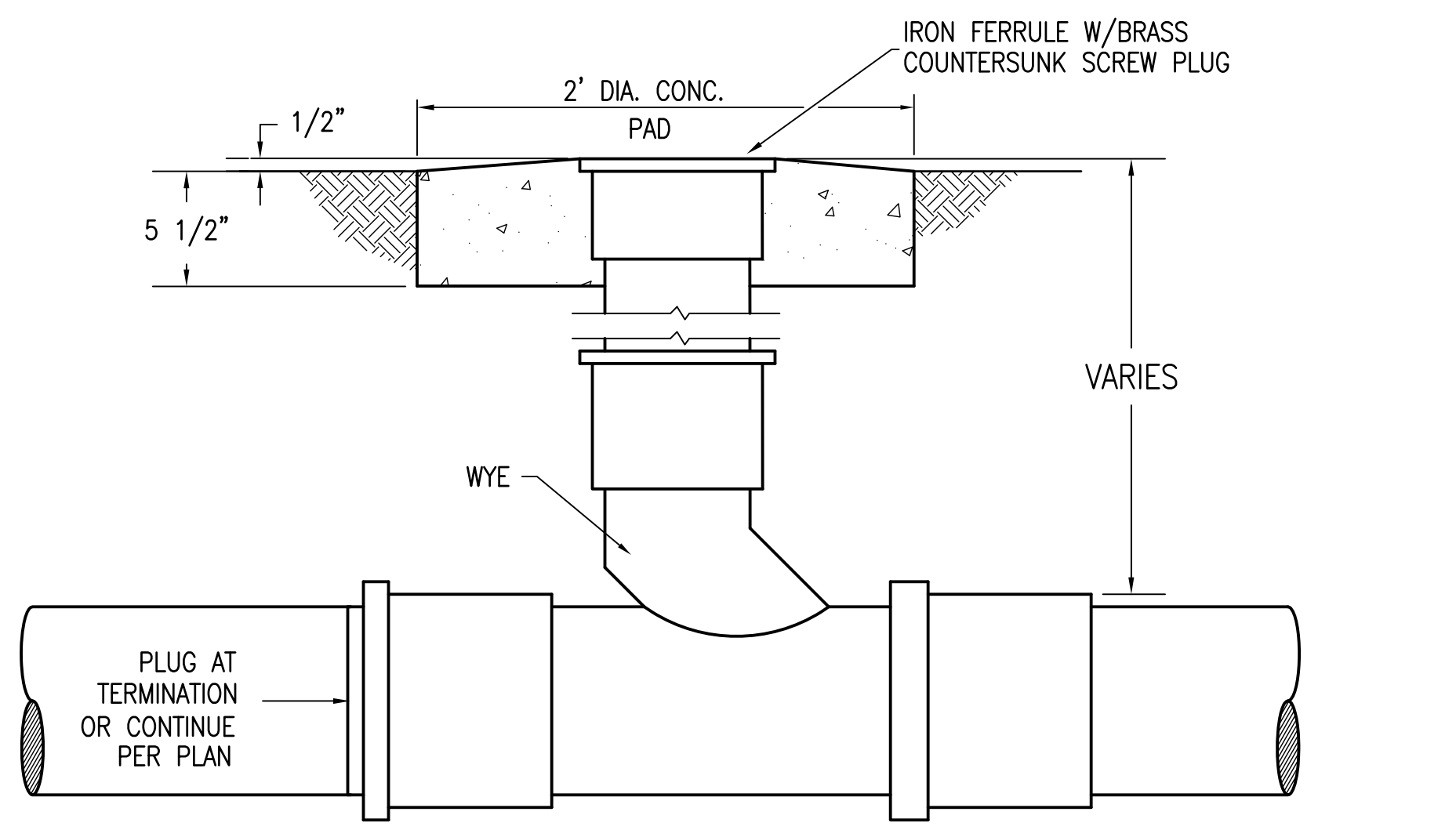


- NOTES:**
1. ALL SANITARY SEWER MANHOLES FOR THIS PROJECT SHALL BE 4' INSIDE DIAMETER.
2. MANHOLE SHALL CONFORM TO A.S.T.M. C 478 SPECIFICATIONS.
3. DIAMETER OF OPENING FOR PIPE SHALL BE 1" LARGER DIAMETER THAN BELL OF THE PIPE BEING USED.
4. JOINTING COMPOUND SHALL BE RAM NECK, TYPE 1, ROPE FORM PLASTIC GASKET OR EQUAL.
5. ALL PATCHING TO BE DONE WITH HYDRAULIC CEMENT. NO MORTAR REPAIRS PERMITTED.
6. CONCRETE TO BE 2500 P.S.I., REINFORCING STEEL TO BE A.S.T.M. A 615 GRADE 60.
7. SEAL WITH A-LOK, KORE-N-SEAL OR LOCK-JOINT PER SPECIFICATIONS.
8. CAST IN PLACE MANHOLE MAY BE ALLOWED IN PRE-APPROVED LOCATIONS.
9. ALL NEW LINE TIE-INS SHALL BE CORE-DRILLED WITH RUBBER BOOT ADDED.
10. BITUMASTIC COATING SHALL BE FACTORY APPLIED.
11. FRAME AND COVER SHALL BE VULCAN 1337-2 (ASTM SPEC. A-48, CLASS 30 CAST IRON) OR APPROVED EQUAL, REFER TO SPECIFICATIONS.
12. ALL MANHOLE TOPS SHALL BE ADJUSTED TO WITHIN 0.1' OF FINISH GRADE.

**E6 SANITARY SEWER MANHOLE DETAIL**  
CU101 N.T.S.



**C8 TYPICAL VALVE & BOX INSTALLATION (WITHIN PROPERTY) DETAIL**  
CU101 N.T.S.



**E8 CLEAN-OUT DETAIL**  
CU101 N.T.S.

FINAL SUBMISSION

<b>CONSULTANTS:</b>		<b>ARCHITECT/ENGINEERS:</b>		<b>Drawing Title</b>		<b>Project Title</b>		<b>Project Number</b>		<b>Office of Construction and Facilities Management</b> 
CIVIL: KENNETH HORNE & ASSOCIATES 7201 NORTH 9TH AVENUE, STE. 6 PENSACOLA, FLORIDA 32504 PH: (850) 471-9005 FX: (850) 471-0093		COMM/DES: SCHMIDT CONSULTING GROUP, INC. 40 S. PALAFOX PLACE, STE. 300 PENSACOLA, FLORIDA 32502 PH: (850) 438-0050 FX: (850) 432-8631		SURVEYORS: KCI TECHNOLOGIES, INC. 10401 HIGHLAND MANOR DRIVE, SUITE 120 TAMPA, FLORIDA 33610 PH: (813) 740-2300		UTILITY DETAILS		520-326		
LANDSCAPE ARCHITECT: CSA GROUP, INC. 6300 PICCADILLY SQUARE DRIVE MOBILE, ALABAMA 36609 PH: (251) 344-4023 FX: (251) 344-4052		ARCHITECTURE: BULLOCK TICE ASSOCIATES, INC. 909 EAST CERVANTES STREET PENSACOLA, FL 32501 PH: (850) 434-5444 FX: (850) 432-5208				Approved Project Director		Building Number -		
Date		Date		Date		Location: PANAMA CITY, FLORIDA		Drawing Number: CU501 Dwg 13 of 21		