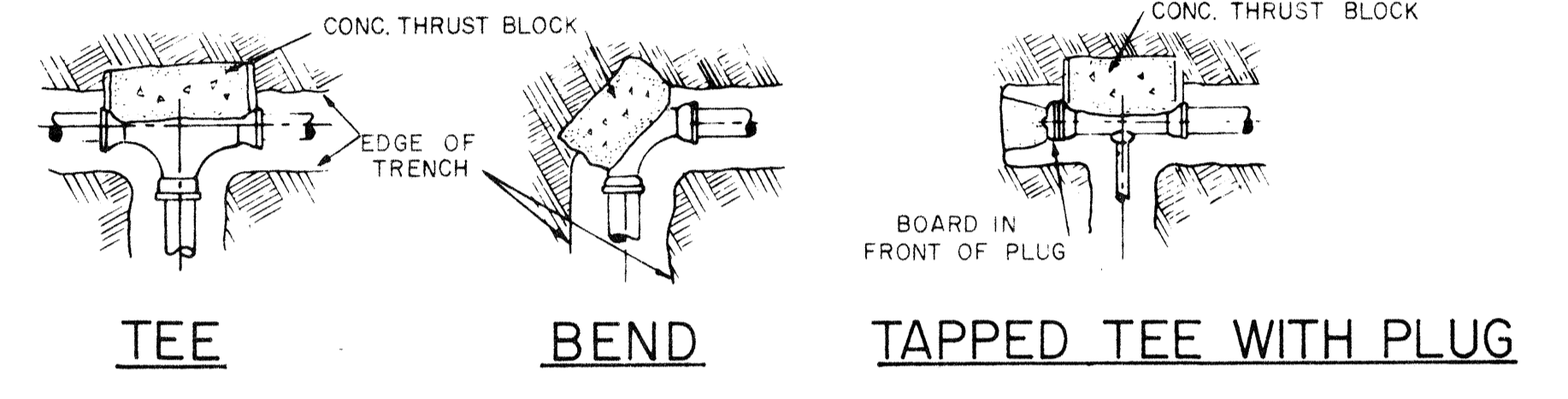


CROSS WITH PLUG TEE WITH PLUG TYPICAL SECTION



TEE BEND TAPPED TEE WITH PLUG DETAILS OF THRUST BLOCKS FOR FITTINGS

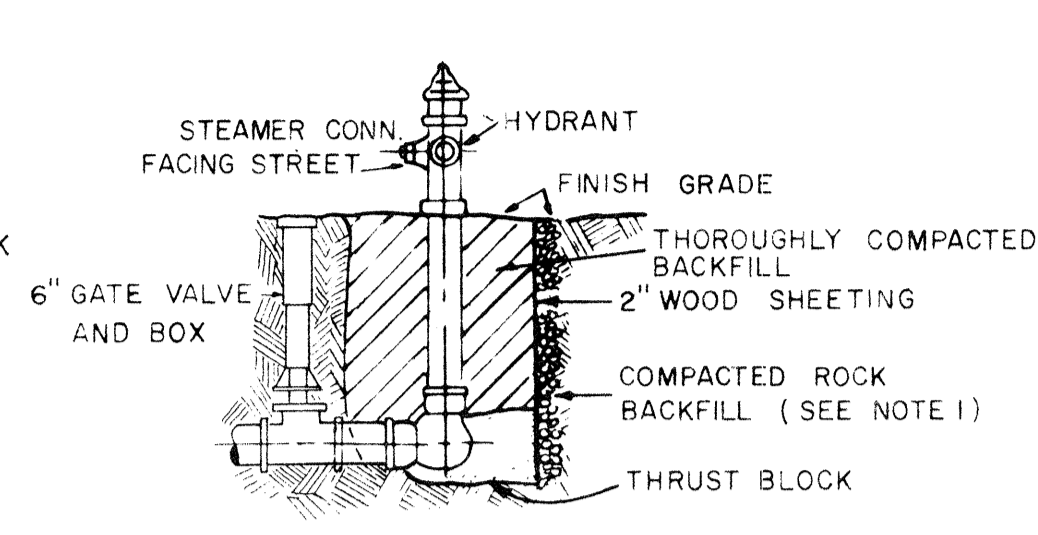
NOTES

- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. IN THE CASE OF FIRE HYDRANTS, WOOD SHEETING AND COMPACTED ROCK BACKING MAY BE OMITTED WHERE SOLID BEARING CAN BE OBTAINED.
- ON TEES AND BENDS, EXTEND THRUST BLOCK FULL LENGTH. PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE. THRUST BLOCK ON REDUCERS, APPLY SOCKET CLAMP WITH TIE ROD WHERE REQUIRED.
- BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SAND AND/OR ROCK SCREENINGS. ANY MUCK ENCOUNTERED SHALL BE REPLACED WITH ACCEPTABLE BACKFILL.
- MINIMUM COVER OVER SERVICES:
 - a. 30" WHEN CROSSING STREETS
 - c. 30" TO SAME SIDE OF STREET
 - d. 24" IN EASEMENT
 - e. 12" UNDER DITCHES AND IN MEDIANS
- 2500 P.S.I. @ 28 DAYS CONCRETE SHALL BE USED THROUGHOUT

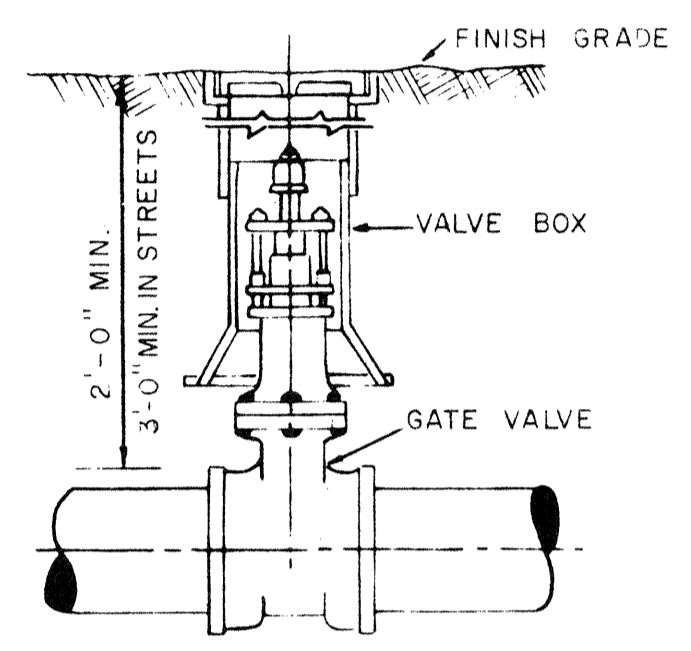
THRUST BLOCK AREAS IN SQUARE FEET					
PIPE SIZE	TEE	90°	45°	22 1/2°	11 1/4°
2"	1.0	6	4	2	1
3"	1.9	15	8	4	2
4"	2.8	27	15	8	4
6"	6.0	60	33	17	9
8"	9.8	110	58	30	15
10"	16.0	170	91	46	23
12"	23.0	240	113	66	33
14"	31.0	330	180	91	46
16"	40.0	425	230	112	60

150 PSI TEST PRESSURE MAXIMUM
THIS CHART IS BASED ON A SAFE SOIL BEARING CAPACITY OF 1,000 LBS. PER SQUARE FOOT
AREAS OF THRUST BLOCKS WILL BE ADJUSTED AS DIRECTED BY ENGINEER, ACCORDING TO ACTUAL FIELD CONDITIONS

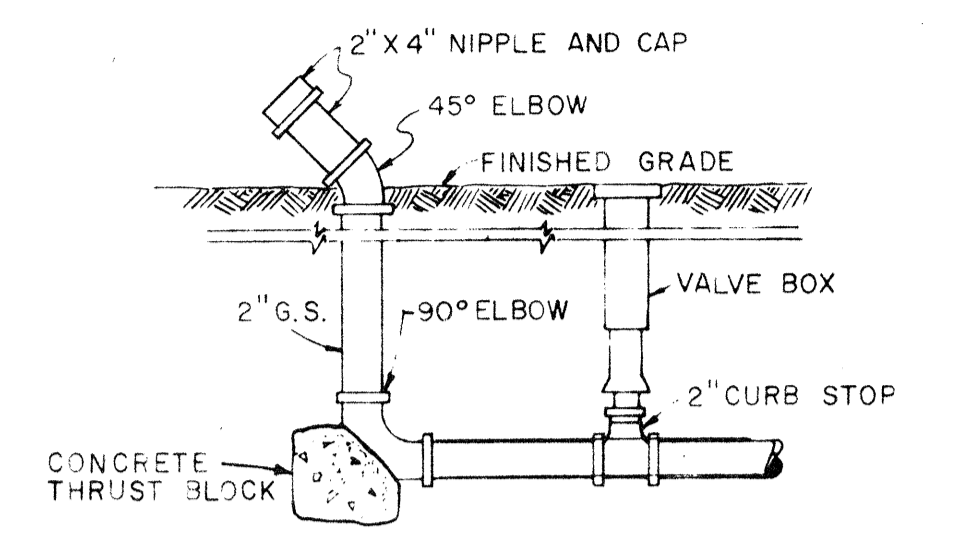
MAXIMUM SIZE OUTLET FOR USE WITH SERVICE SADDLE OR CLAMP	
PIPE SIZE	OUTLET SIZE
3"	3/4"
4"	1"
6"	1 1/2"
8"	2"
10"	2 1/2"



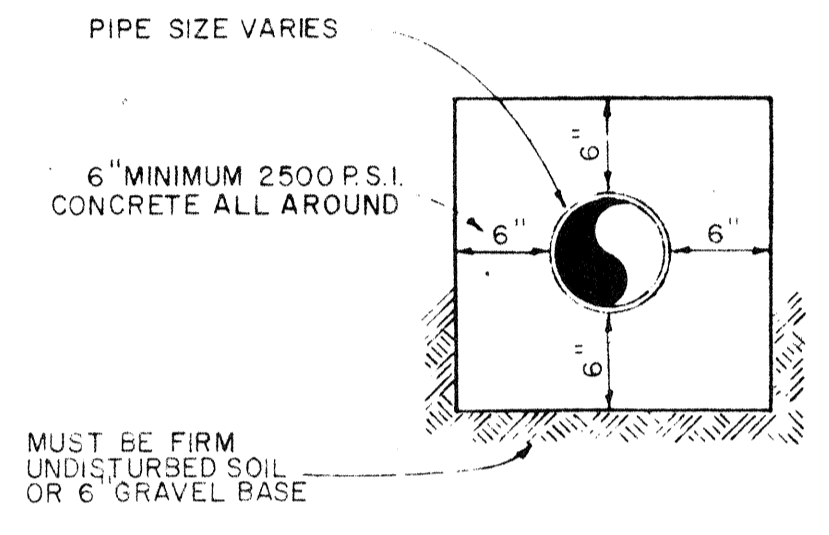
TYPICAL HYDRANT DETAIL



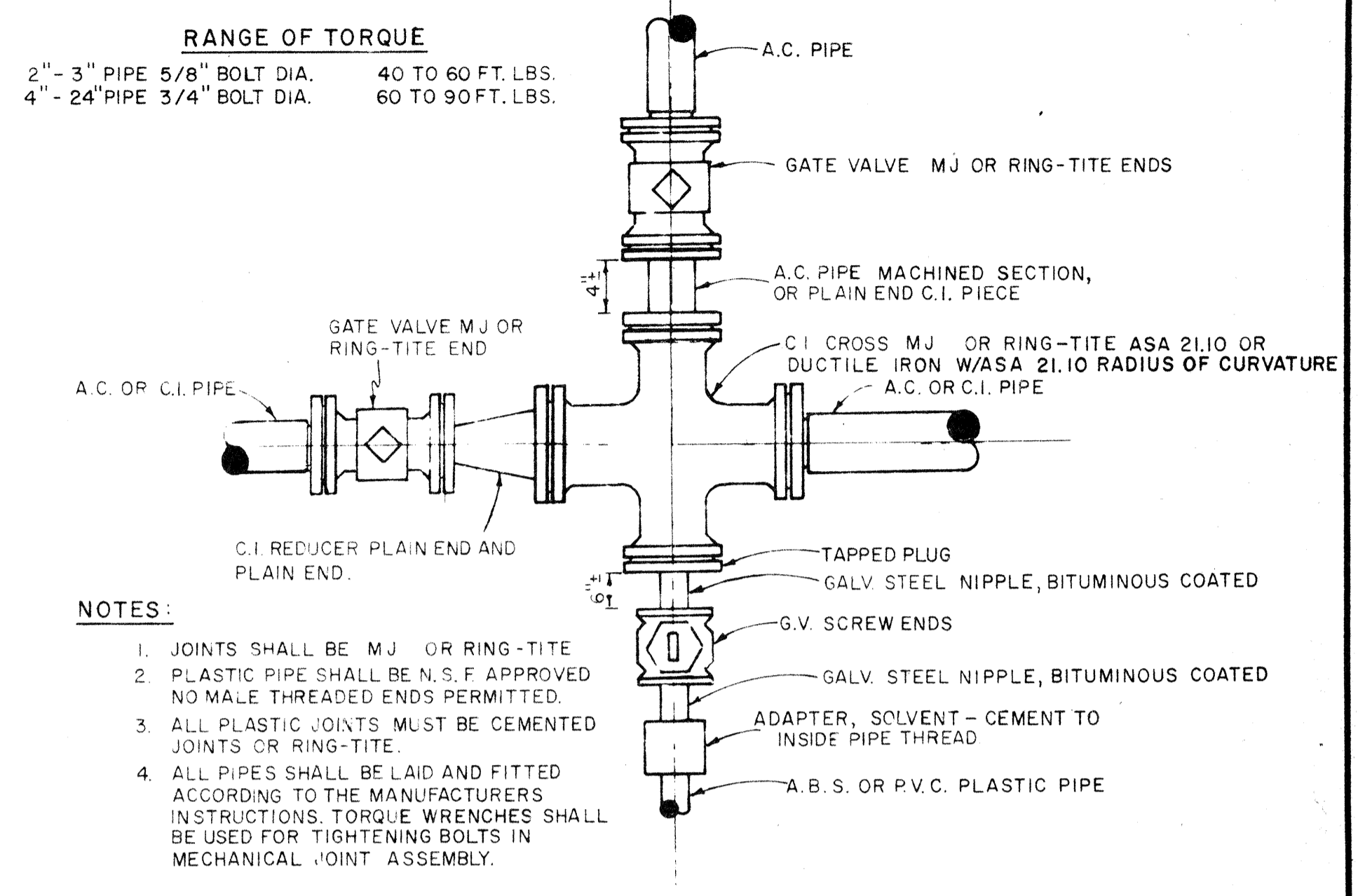
TYPICAL GATE VALVE & VALVE BOX DETAIL



TYPICAL BLOW-OFF DETAIL



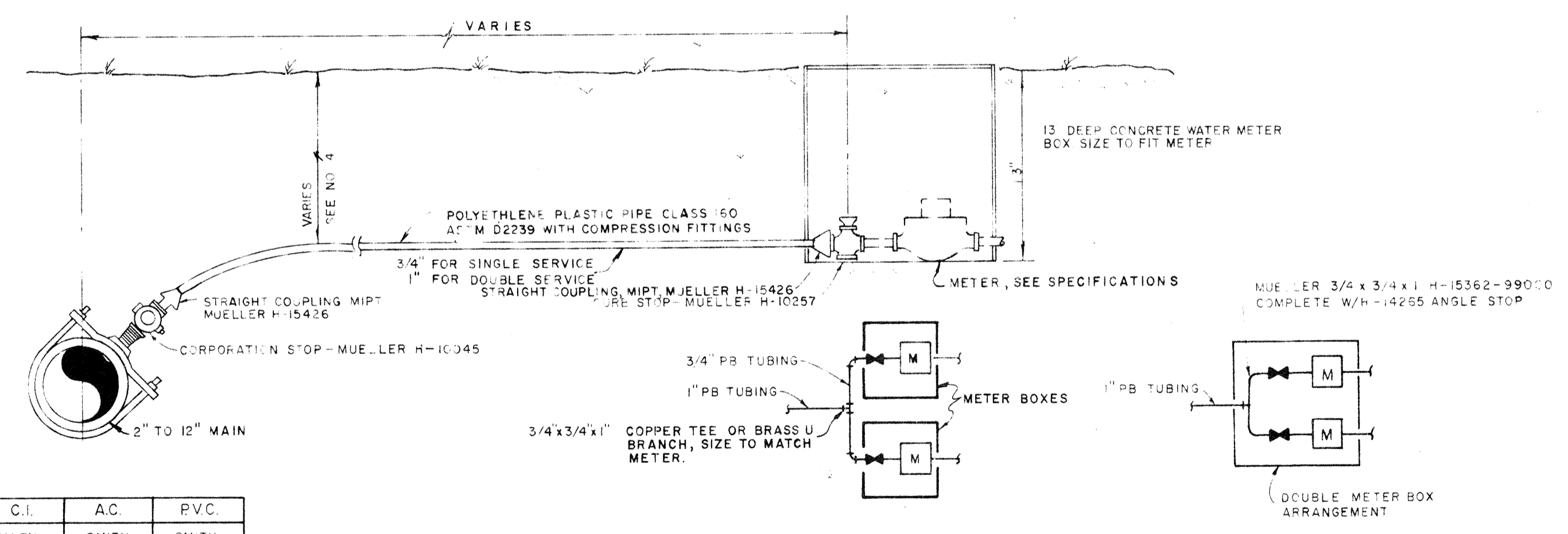
CONCRETE ENCASUREMENT



NOTES:

- JOINTS SHALL BE MJ OR RING-TITE
- PLASTIC PIPE SHALL BE N.S.F. APPROVED. NO MALE THREADED ENDS PERMITTED.
- ALL PLASTIC JOINTS MUST BE CEMENTED ACCORDING TO THE MANUFACTURERS INSTRUCTIONS. TORQUE WRENCHES SHALL BE USED FOR TIGHTENING BOLTS IN MECHANICAL JOINT ASSEMBLY.

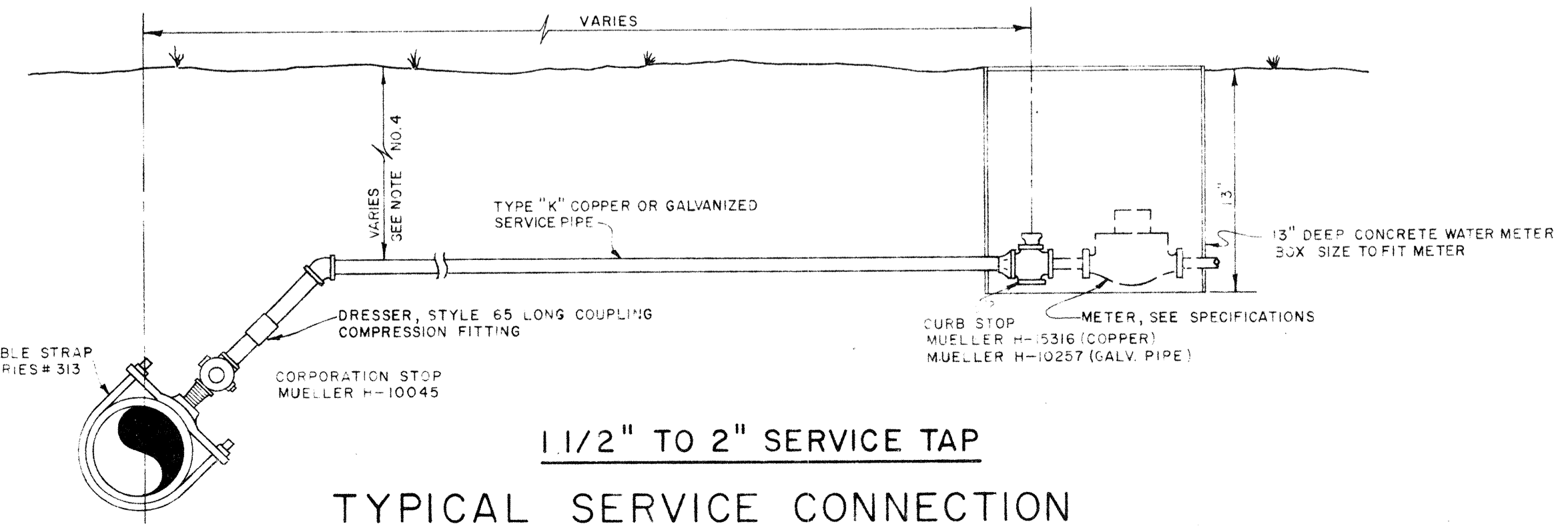
SCHMATIC PIPE FITTING DETAIL



3/4" TO 1" SERVICE TAP

TYPE OF MAIN	C.I.	A.C.	PVC.
* TYPE OF SADDLE	SMITH-BLAIR #311 OR #313	SMITH-BLAIR #313	SMITH-BLAIR #342 OR #313 (PRESENT)

* C.C. TAP



1 1/2" TO 2" SERVICE TAP
TYPICAL SERVICE CONNECTION

REVISIONS		SCALE	DATE	FOR: HERB FIELD RECLINATA A SUBDIVISION
LTR.	DESCRIPTION, DATE AND BY	NO SCALE	8-23-71	
A	Revised thrust block notes and service tap 12-21-70 L.D.L.	DESIGNED BY	L. D. L.	DRAWN BY L. D. L.
B	Reducer tie rods and fitting detail Sept '71	CHECKED BY		
C	Revised service tap 10-26-71 DSC	APPROVED BY		
		DONALD J. SMALLY, P.E. FLA. CERT. NO. 5051		PROJECT NO. 1359 DRAWING NUMBER E-1359-4 REVISION