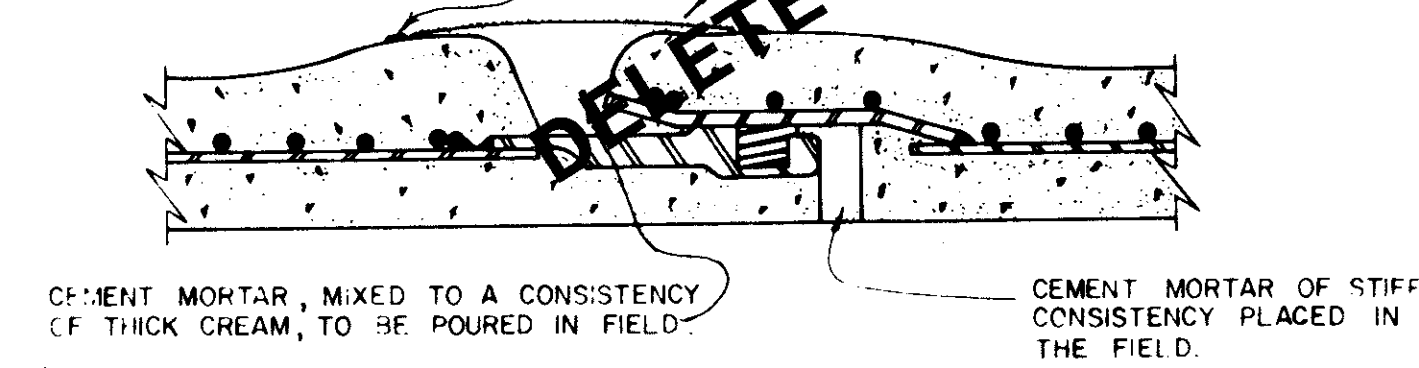


NOTE:

PROVIDE 1" MINIMUM THICKNESS CONCRETE OR CEMENT MORTAR COATING IN THE FIELD FOR THE PROTECTION OF ALL EXPOSED STEEL SUCH AS FLANGES, CAULKED JOINTS, THREADED OUTLETS, CLOSURES, ETC. THE CEMENT MORTAR USED SHALL CONSIST OF ONE PART PORTLAND CEMENT TO TWO AND ONE-HALF PARTS OF FINE, SHARP (PLASTER) SAND. WHERE SHOWN, COATING IS TO BE REINFORCED WITH WIRE MESH.

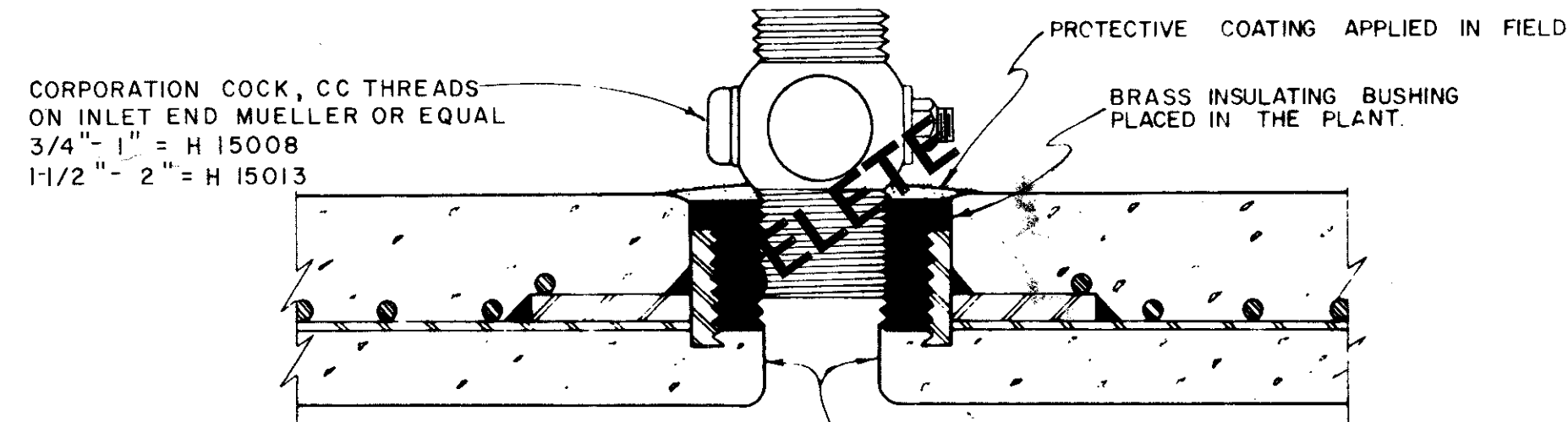
BURLAP WRAPPER AS MANUFACTURED BY MAR-MAC CORP. OR EQUAL. WIDTH OF WRAPPER TO BE 9" FOR 36" PIPE AND LARGER, 7" FOR 33" AND SMALLER.

STEEL STRAP THREADED THROUGH HEM OF BURLAP WRAPPER, DRAWN TIGHT AND FASTENED.



STANDARD RUBBER GASKET JOINT

NOTE: ALL CLOSURE SECTIONS SHALL BE FABRICATED WITH HAND HOLES TO ALLOW WIPING INSIDE OF JOINTS AFTER CLOSURE IS IN PLACE.

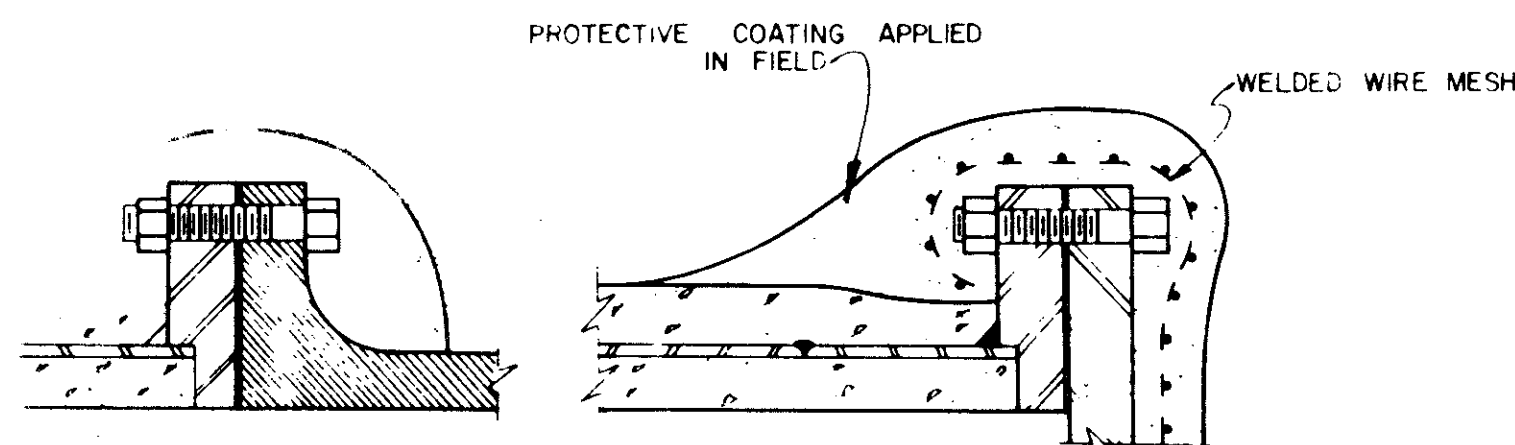


THREADED CONNECTION

NOTE:

IF CORPORATION COCK IS NOT PROVIDED IN FIELD, THEN STEEL FLUG SHALL BE COVERED WITH CEMENT MORTAR.

LINE IN PLANT TO COVER ALL EXPOSED STEEL.

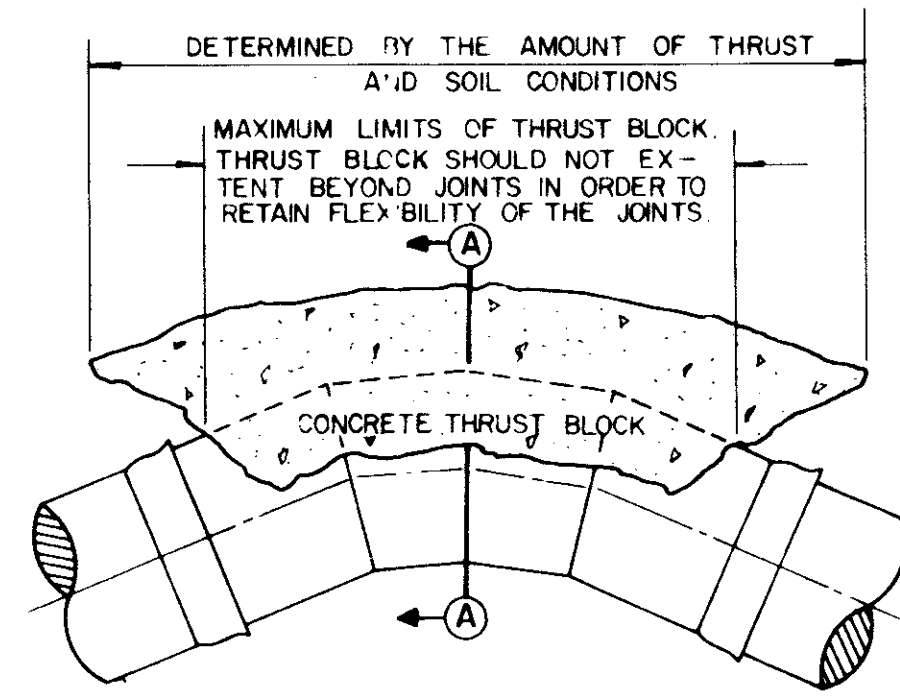


FLANGED CONNECTIONS

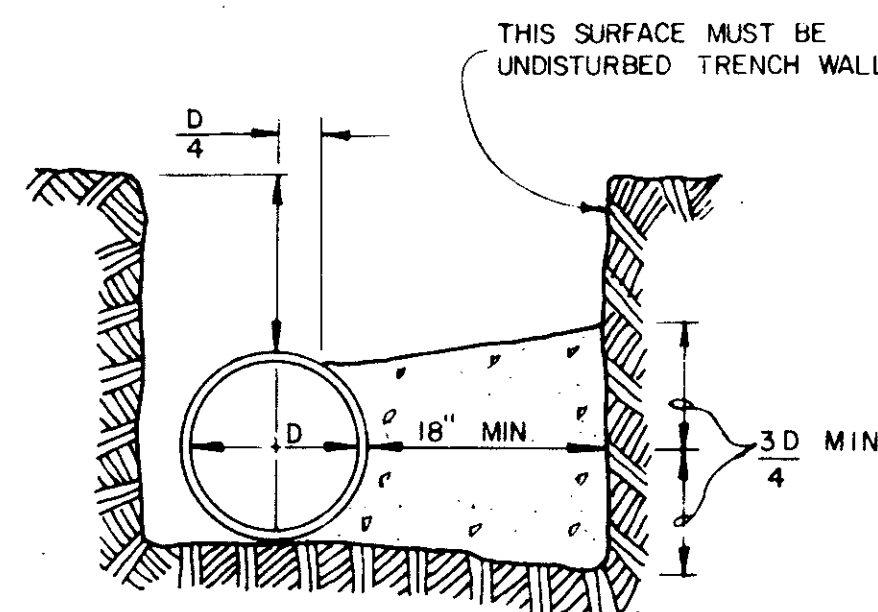
REINFORCED CONCRETE CYLINDER PIPE DETAILS

NOTE:

ANY SURFACE RECEIVING A CEMENT MORTAR COATING SHALL BE THOROUGHLY CLEAN AND WETTED WITH WATER JUST PRIOR TO PLACING THE CEMENT MORTAR COATING. AFTER PLACEMENT, CARE SHALL BE TAKEN TO PREVENT CEMENT MORTAR COATING FROM DRYING OUT TOO RAPIDLY BY COVERING WITH DAMP EARTH OR BURLAP. CEMENT MORTAR COATING SHALL NOT BE APPLIED DURING FREEZING WEATHER.

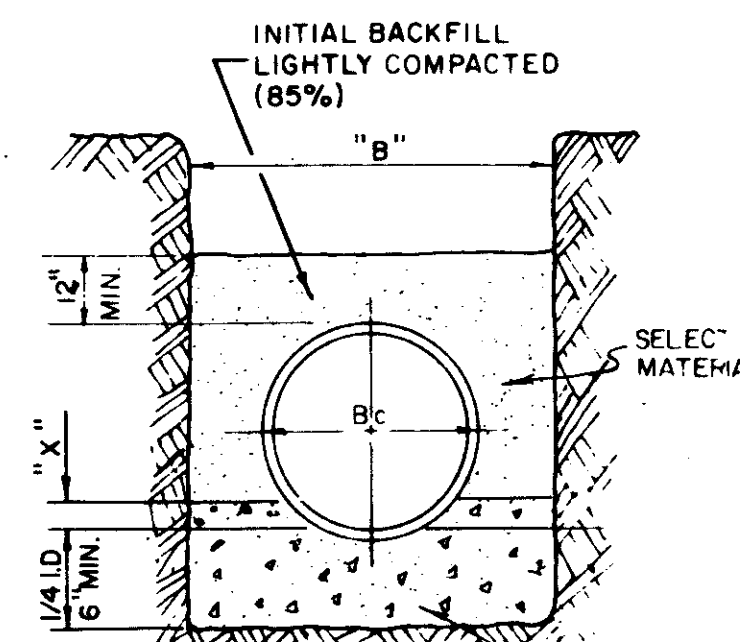


PLAN VIEW

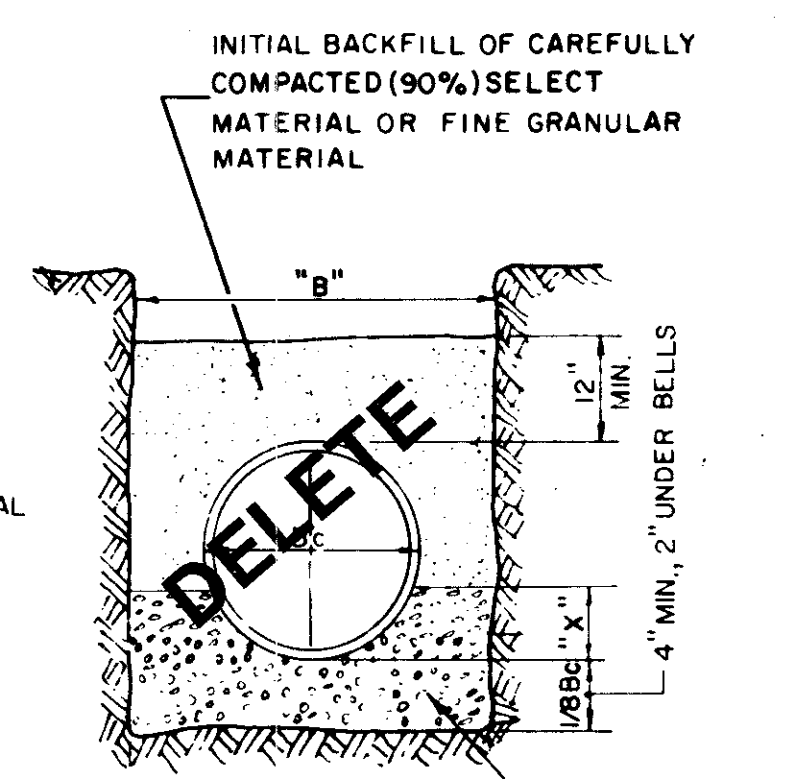


PROVIDE ADEQUATE BLOCKING AT TEES, WYES, BENDS, DEAD ENDS, ETC. TO COUNTERACT THE RESULTANT FORCE DUE TO INTERNAL PRESSURES

THRUST BLOCK DETAIL

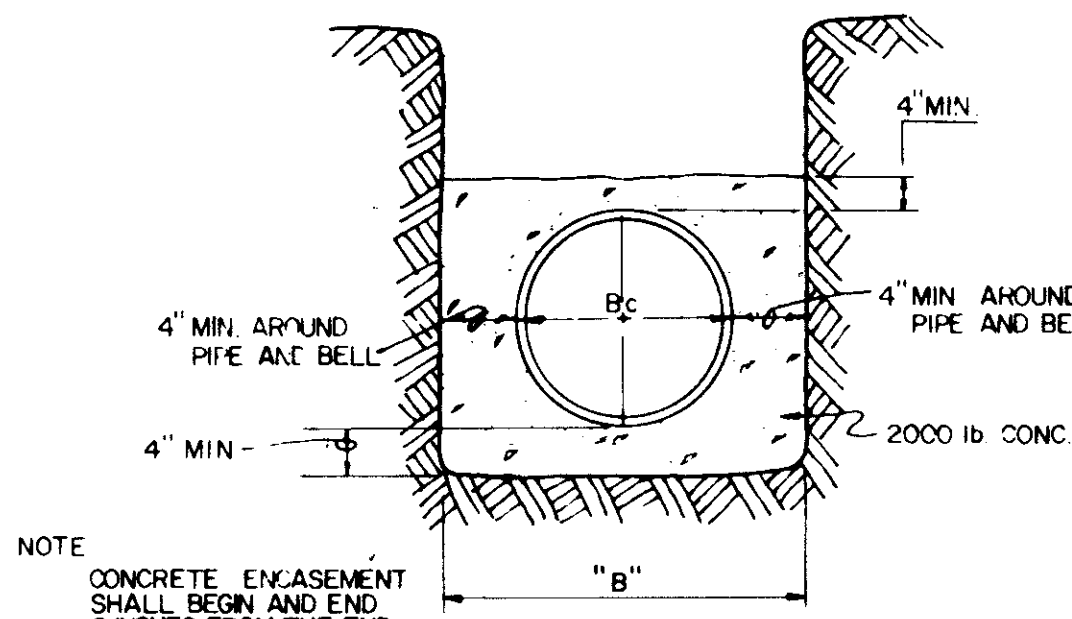


CONCRETE CRADLE



CLASS "1" EMB.

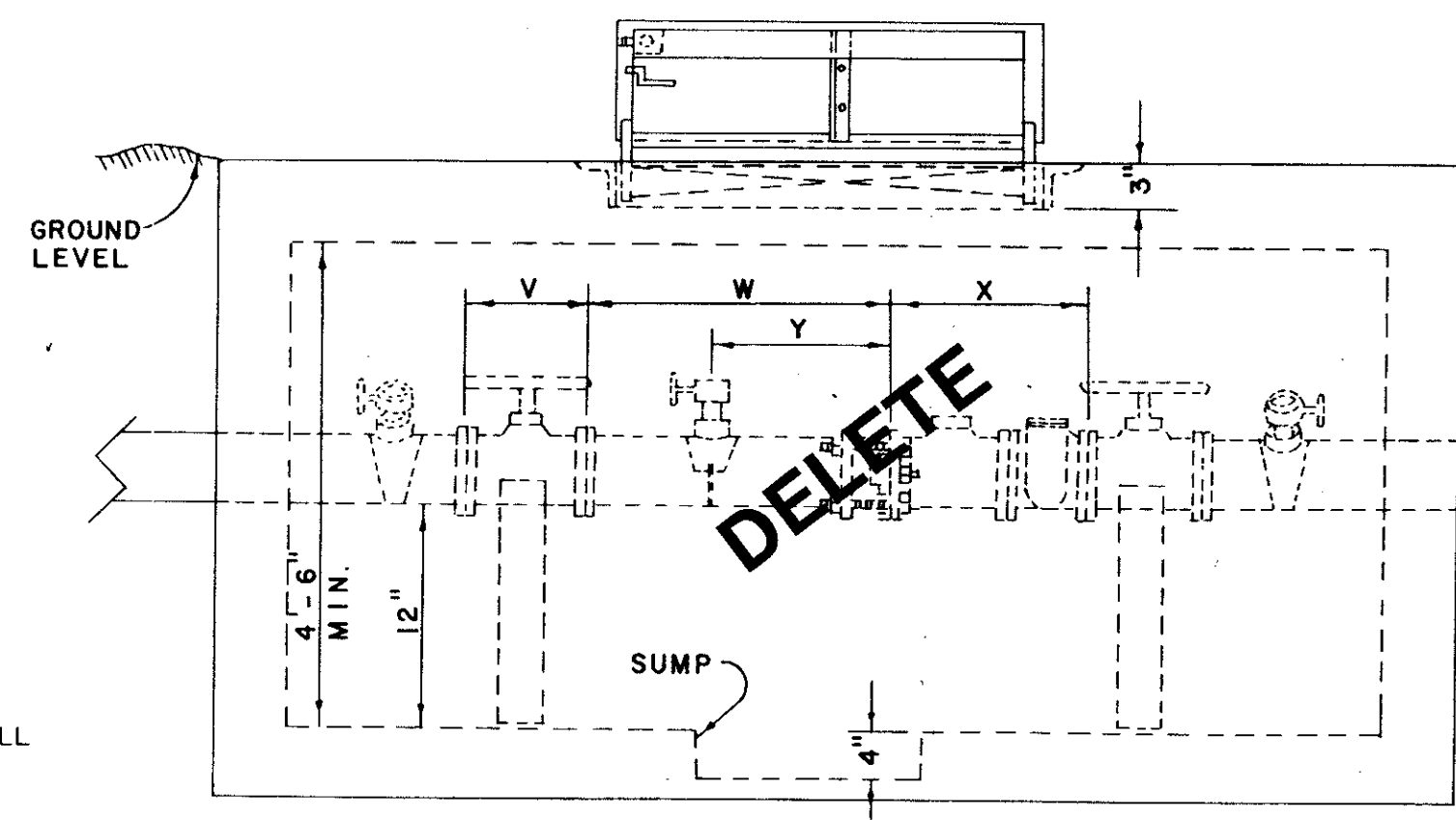
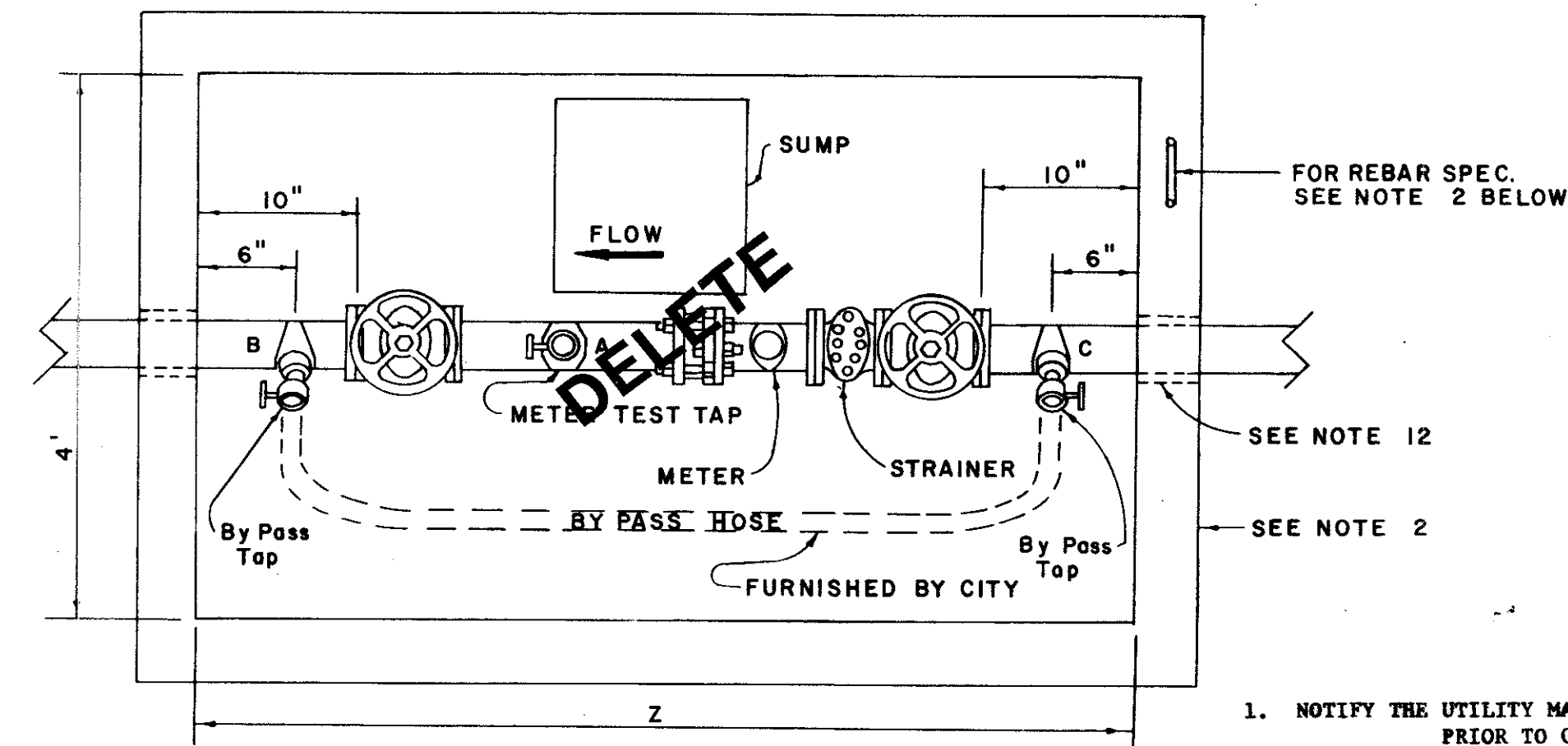
EMBEDMENT DETAILS



NOTE:

CONCRETE ENCASEMENT SHALL BEGIN AND END 6 INCHES FROM THE END OF A JOINT.

CONCRETE ENCASEMENT

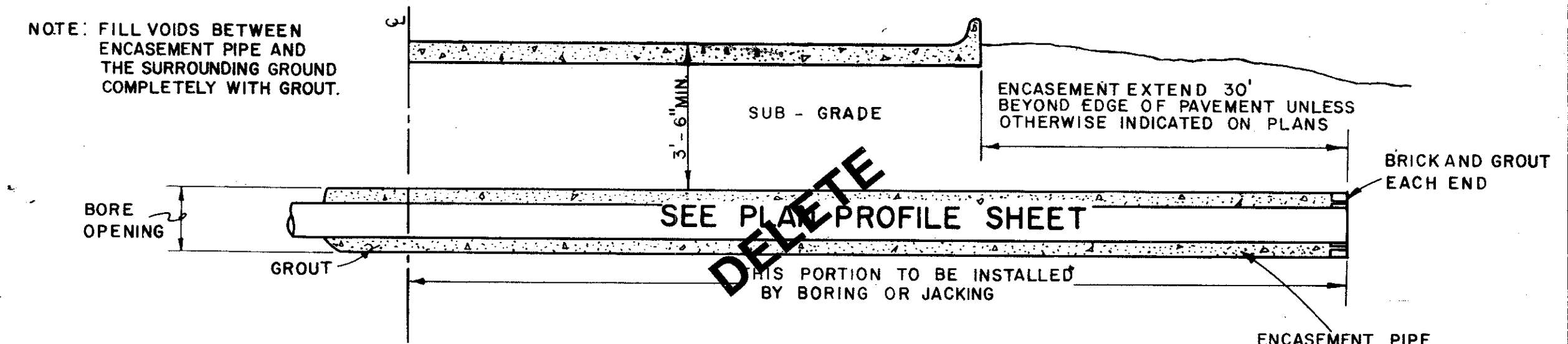


DIMENSION FOR 3", 4", & 6" M.V.

DIMENSION	3"	4"	6"
V	8"	10.5"	10.5"
W	20"	18"	18"
X	0"	23"	27"
Y	9"	9"	12"
Z	6'-1"	7'	7'-5"

METER VAULT & BY-PASS SPECIFICATIONS

- NOTIFY THE UTILITY MAINTENANCE DEPARTMENT PRIOR TO CONSTRUCTION OF VAULT OR BY-PASS ASSEMBLY.
- THE METER VAULT CAN BE EITHER POURED IN PLACE OR PREFABRICATED. CONCRETE SHALL BE 6" THICK AND BE 3000 PSI REINFORCED WITH #4 STEEL BARS ON 12" CENTERS EACH WAY IF THE VAULT IS POURED IN PLACE. PREFABRICATED VAULTS SHALL BE 4" THICK AND BE 4500 PSI CONCRETE #4 STEEL BARS ON 8" CENTERS. THESE ARE MINIMUM SPECIFICATIONS.
- THE VAULT WILL NOT BE PUT IN ANY DRIVE OR PARKING AREAS AND MUST BE LOCATED IN A UTILITY EASEMENT.
- A DRAWING WITH THE EXACT MEASUREMENTS FOR METER VAULT AND BY-PASS WILL BE GIVEN TO THE CONTRACTOR FOR A 3", 4" and 6" METER.
- THE VAULT LID SHALL BE A BILCO LID, TYPE Q-4 SINGLE LEAF DESIGN. ANGLE FRAME IS 1/4" STEEL WITH STRAP ANCHORS BOLTED TO THE EXTERIOR. THE LEAF IS 1/4" STEEL DIAMOND PATTERN PLATE, PIVOTING ON TONSTON BARS FOR EASY OPERATION. THE MINIMUM LIVE LOAD CAPACITY IS 150 LBS. PER SQUARE FOOT. THE SIZE OF THE LID IS 3'x3'.
- THE LID SHALL BE PAINTED WITH 43-38 INEPEC DIFFUSED ALUMINUM PAINT OR APPROVED EQUAL.
- CONTRACTOR SHALL MAKE 3 TAPS INSIDE THE VAULTS. TAP A MUST BE AT LEAST TWO PIPE DIAMETERS DOWNSTREAM OF METER AND MUST BE 2". TAPS B & C MUST BE MADE AT APPROXIMATELY 45° ANGLE ON EACH END OF THE PIPING BEFORE IT INTERSECTS THE WALL. CONTRACTOR SHALL FURNISH MUELLER NO. N-10499 FOR 3"x2", MUELLER NO. N-10504 FOR 4"x2", AND MUELLER NO. N-10505 FOR 6"x2", OR APPROVED EQUAL SERVICE SADDLES, BRASS NIPPLES AND NO. 7500 OHIO BRASS OR APPROVED EQUAL GATE VALVES.
- THE STRAINER, METER, AND FLEXIBLE COUPLING WILL BE PROVIDED AND INSTALLED BY THE TOWN OF ADDISON AT THE CONTRACTORS EXPENSE.
- THE STRAINER, METER AND FLEXIBLE COUPLING WILL NOT BE SET UNTIL THE METER VAULT AND TAPS ARE ACCEPTED BY THE TOWN OF ADDISON, UTILITY MAINTENANCE DEPARTMENT.
- THE GATE VALVES ARE REQUIRED TO BE MUELLER A-2370-6 FLANGED RESILIENT SEAT GATE VALVES.
- THE BOTTOM OF THE METER VAULT MUST BE 6" THICK CONCRETE WITH #4 REBAR ON 12" CENTERS AND HAVE A 4" FILL SAND COURSE UNDERNEATH. A SUMP 4" DEEP AND 12" IN DIAMETER SHALL BE INSTALLED TO ONE SIDE OF THE CENTER OF THE BOTTOM SLAB. IF PRECAST VAULT IS USED WHERE THE SIDES JOIN THE BOTTOM, A LATER RAN-NER SHALL BE USED TO SEAL THE JOINT.
- CONTRACTOR SHALL HAVE A CHOICE OF EITHER HAVING A LINK SEAL WALL SLAVE MODEL WS-8-12-8-6 FOR A 4" PIPE, WS-1036-8-6 OR WS-12-37-8-6 FOR 6" PIPE CAST IN THE VAULT OR HAVE THE VAULT WALL CORED BEFORE INSTALLATION OF VAULT AND PIPING. IN EITHER CASE, A LINK SEAL MODEL NO. LS-400-C MUST BE USED TO SEAL THE ANNULAR SPACE BETWEEN THE PIPE AND WALL OF VAULT. BREAKING OF THE WALL WITH A JACKHAMMER IS NOT PERMITTED.
- UNDER EACH VALVE WILL BE A CONCRETE SUPPORT.
- DEPTH OF VAULT SHALL BE A MINIMUM OF 4 1/2 FEET.



HALF-SECTION TYPICAL HIGHWAY CROSSING NO SCALE

NOTE: ENCASEMENT PIPE MAY BE ELIMINATED FOR CITY STREETS.

TABLE OF QUANTITIES OF MATERIALS IN CUBIC YARDS PER 100 LINEAR FEET						
INSIDE DIAMETER OF PIPE	APPROX. OUTSIDE DIAMETER OF PIPE	"X" IS A MINIMUM DEPTH	"B" TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR "CL" EMBEDMENT
				FOR EMBEDMENT	FOR ENCASEMENT	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53'	34"	6.91	16.07	5.16
16"	19.38"	2.84'	36"	7.50	17.76	5.64
18"	21.78"	3.19'	38"	8.11	19.52	6.16
24"	27.75"	4.06'	44"	9.97	24.90	9.28

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
WATER PIPE DETAILS			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984			SHEET SD-17