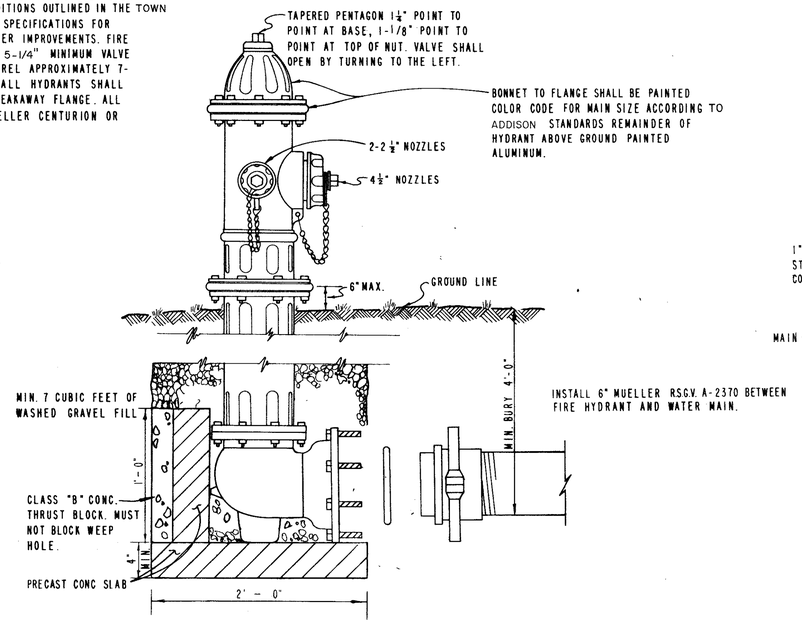
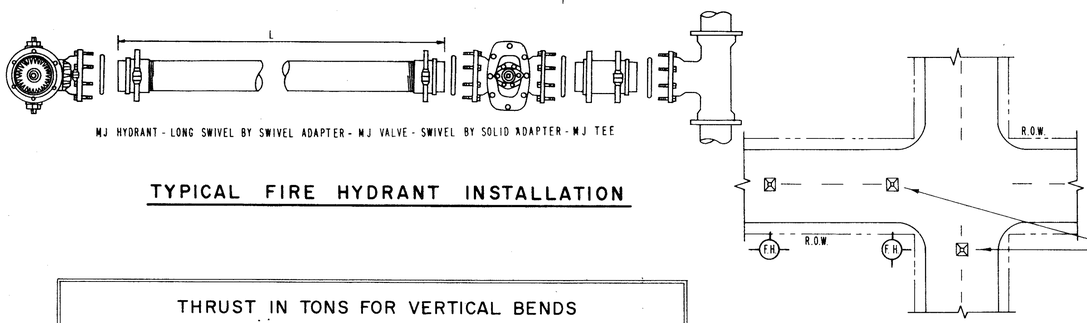
NOTE:

IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE. C-502-73. EXCEPT FOR CHANGES OR ADDITIONS OUTLINED IN THE TOWN OF ADDISON STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS SHALL HAVE A 5-1/4" MINIMUM VALVE OPENING AND WITH A BARREL APPROXIMATELY 7-INCH INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE MUELLER CENTURION OR APPROVED EQUAL.



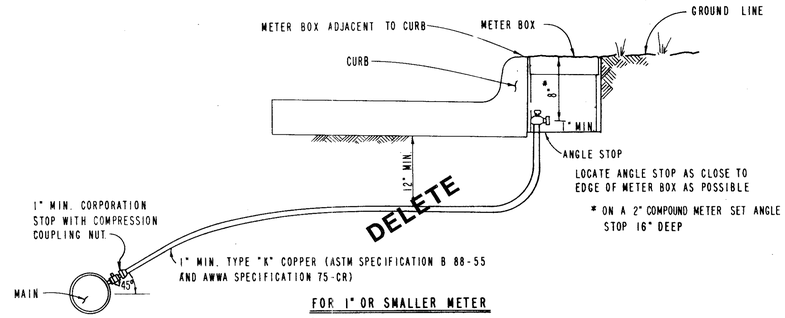
TYPICAL FIRE HYDRANT INSTALLATION



MJ HYDRANT - LONG SWIVEL BY SWIVEL ADAPTER - MJ VALVE - SWIVEL BY SOLID ADAPTER - MJ TEE

A BLUE STIMSONITE FIRE-LITE REFLECTOR (OR APPROVED EQUAL) TO BE PLACED IN THE CENTER OF STREET OPPOSITE FIRE HYDRANTS. THE INSTALLATION OF THIS REFLECTOR SHALL BE AS PRESCRIBED BY THE MANUFACTURER.

TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION
(NO SCALE)

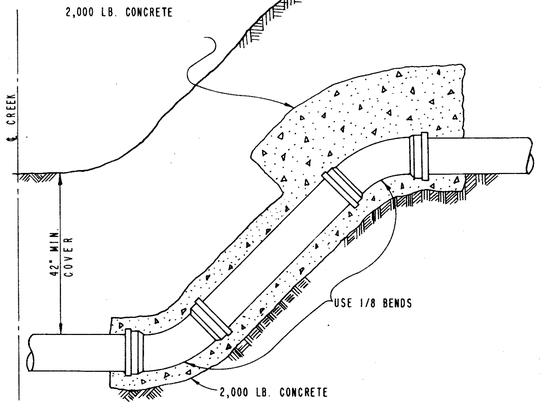


FOR 1" OR SMALLER METER

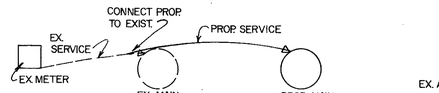
METER BOX SHALL BE CORRUGATED METAL, 18" DIAMETER, 14" DEEP, SLOTTED FOR SERVICE PIPE FITTED WITH CAST IRON TOP AND LID. LID SHALL BE C.I. BASS & HAYS DOMESTIC MFG. LID WITH ⅜P HAIRPIN LOCK. WATER METER SHALL BE PLACED IN CENTER OF LOT WITH SANITARY SEWER HOUSE CONNECTION LOCATED 10 FEET DOWN STREAM.
ALL TAPS SHALL BE MADE AT 45° ANGLE TO ℄ OF PIPE.

TYPICAL SERVICE CONNECTION WITH METER BOX

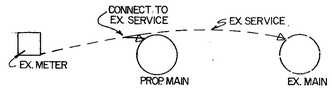
MUELLER TYPE K COPPER SERVICE PIPE SOFT ANNEALED	DOUBLE STRAP BRONZE SERVICE SADDLE WITH C.C. THREADS	MUELLER CORPORATION STOP	MUELLER ANGLE STOP	BASS & HAYS SLOTTED METER BOX
1 INCH	-	H-15008	H-14258	34AS
1½ INCH	1½ INCH	H-15013	H-14286	55A
2 INCH	2 INCH	H-15013	H-14286	55A
			W/H 15428 COUPLING	



HALF-SECTION TYPICAL CREEK CROSSING



EXIST MAIN BTWN PROP. & METER



PROP. MAIN BTWN. EXIST. & METER

SERVICE CONNECTION
NTS

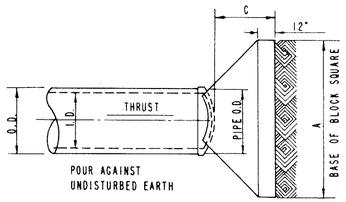
TYPICAL BACKFILL WATER MAIN

THRUST IN TONS FOR VERTICAL BENDS

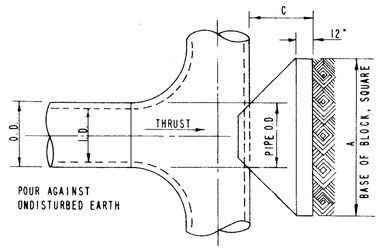
I.D. IN INCHES	△ 11.25°	15°	22.50°	30°	45°	60°	75°	90°
12								
14								
16	2.94	3.90	5.78	7.54	10.66	13.06	14.56	15.08
18	3.72	4.94	7.30	9.54	13.50	16.52	18.42	19.08
20	4.60	6.10	9.02	11.78	16.66	20.40	22.76	23.56
24	6.62	8.78	12.98	16.96	23.98	29.38	32.76	33.92
30	10.34	13.72	20.28	26.52	37.50	45.92	51.22	53.02

TEES & PLUGS

I.D. UNIT	A FT.	C FT.	THRUST TONS
12"			
14"			
16"	3.87	1.57	15.08
18"	4.37	1.77	19.09
20"	4.86	1.97	23.56
24"	5.82	2.36	33.93
30"	7.28	2.95	53.01



PLAN OF PLUG THRUST BLOCK



PLAN OF TEE THRUST BLOCK

TYPICAL PLUG & TEE THRUST BLOCKS

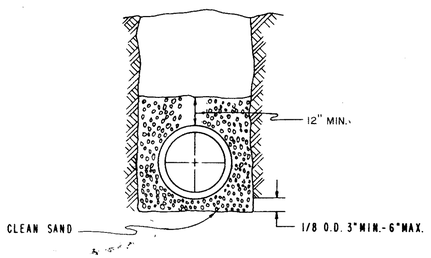
GENERAL NOTES:

ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.

ALLOWABLE SOIL BEARING PRESSURES MUST BE AT LEAST ONE TON PER SQUARE FOOT FOR THE THRUST BLOCKS SHOWN. IN SOILS OF LESSER CAPACITY, INCREASE SIZE AND BEARING AREA PROPORTIONATELY. VOLUMES OF VERTICAL BEND THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000#/C.Y.) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR BLOCKING SHALL BE 2,000 CONCRETE.

DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN HERE.



CLASS 4 EMBEDMENT
P.V.C. WATER PIPE

STATE OF TEXAS
RANDALL C. HILL
83826
REGISTERED PROFESSIONAL ENGINEER
5/27/88

RECORD DRAWING

NO.	REVISION	BY	DATE

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
WATER

FIRE HYDRANT - SERVICE CONNECTION

APPROVED _____ H. WAYNE GINN, P.E.

DATE: MARCH, 1984 | SHEET SD-16