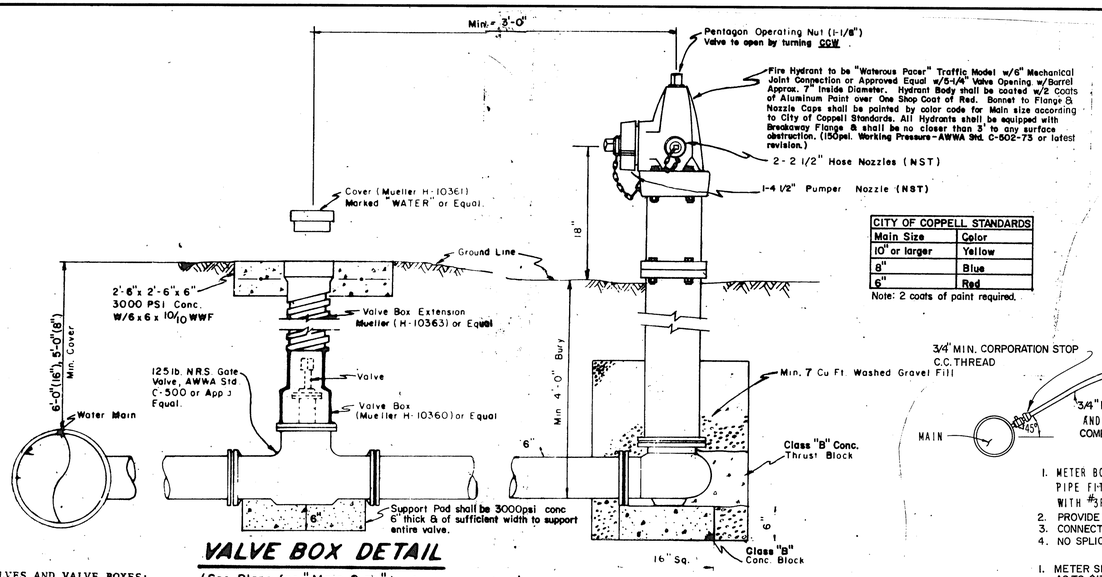


CITY OF COPPELL STANDARDS	
Main Size	Color
10" or larger	Yellow
8"	Blue
6"	Red

Note: 2 coats of paint required.

VALVE BOX DETAIL

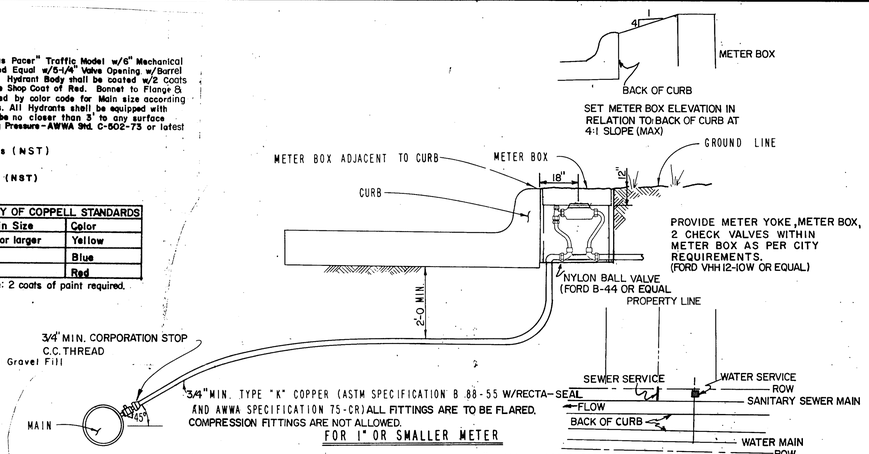
FIRE HYDRANT INSTALLATION

(Includes 6" Valve)

No Scale

GATE VALVES AND VALVE BOXES: (See Plans for "Main Size")

1. Gate valves shall be iron body, bronze or brass mounted, non-rising stem, parallel seat type. Valves shall be of equal or greater pressure class than the piping in which they are to be installed.
2. Valve boxes shall be cast iron and shall be of sufficient length and diameter to operate all valves buried in the ground. Covers shall be marked "Water." The boxes shall rest on the valve and be adjusted so that the cover may be set flush with the finished grade.

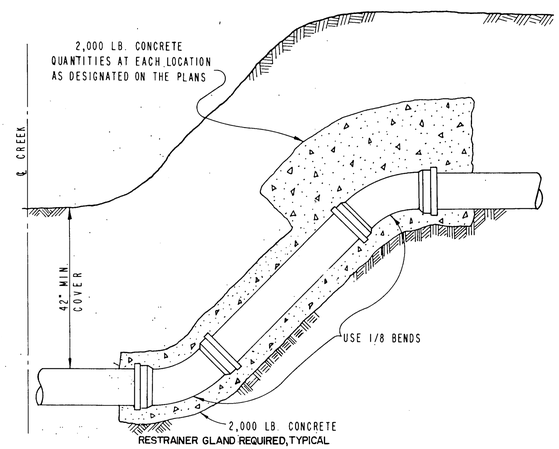


FOR 1" OR SMALLER METER

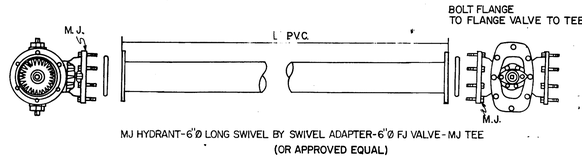
1. METER BOX SHALL BE CORRUGATED METAL, 18" DIAMETER, 18" DEEP, SLOTTED FOR SERVICE PIPE FITTED WITH CAST IRON TOP AND LID. LID SHALL BE C.I. BASS & HAYS DOMESTIC MFG. LID WITH #3P HAIRPIN LOCK.
2. PROVIDE BRONZE TAPPING SADDLES - ALL WATER SERVICES - DBL. STRAP / SINGLE WIDE - UPPER BODY
3. CONNECTION TO WATER YOKE w/BRONZE NIPPLES w/ RECTRA SEAL
4. NO SPLICES UNDER ROADWAY

FOR 2" OR LARGER

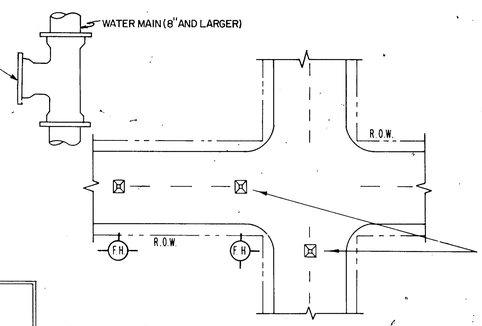
1. METER SETTERS FOLLOWED BY DBL. CHECK VALVES. - (BACK FLOW PREVENTER) AS TO CITY OF COPPELL STDS.
2. HOUSED IN SEPARATE BOX.



HALF-SECTION TYPICAL CREEK CROSSING



MJ HYDRANT-6"Ø LONG SWIVEL BY SWIVEL ADAPTER-6"Ø FJ VALVE-MJ TEE (OR APPROVED EQUAL)

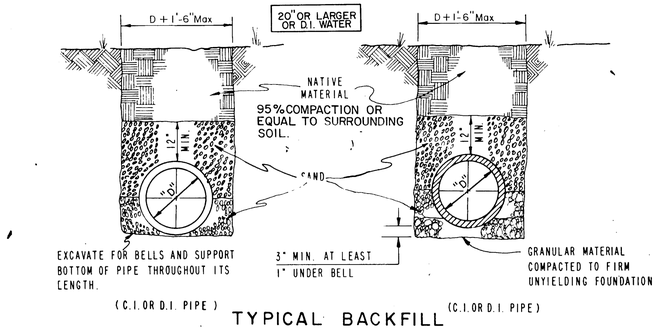


A BLUE STIMSONITE FIRE-LITE REFLECTOR (OR APPROVED EQUAL) TO BE PLACED IN THE CENTER OF STREET OPPOSITE FIRE HYDRANTS. THE INSTALLATION OF THIS REFLECTOR SHALL BE AS PRESCRIBED BY THE MANUFACTURER.

TYPICAL FIRE HYDRANT INSTALLATION

(NO SCALE)

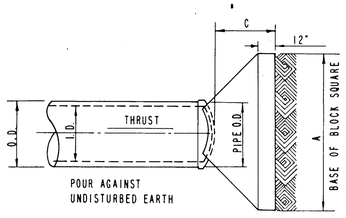
TYPICAL FIRE HYDRANT INSTALLATION



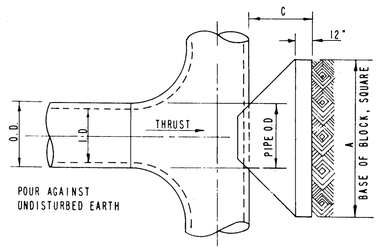
TYPICAL BACKFILL WATER MAIN

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

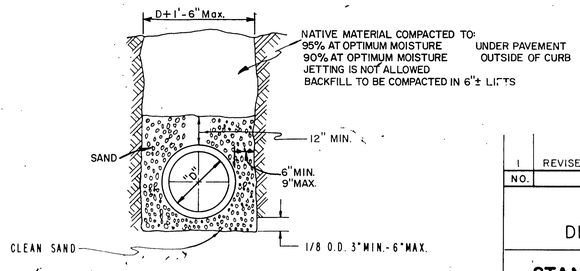


PLAN OF TEE THRUST BLOCK

TYPICAL PLUG & TEE THRUST BLOCKS

GENERAL NOTES:

1. ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.
2. 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.
3. CONCRETE FOR BLOCKING SHALL BE 2,000 CONCRETE.
4. 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.
5. FOR WATER MAINS 10" AND LARGER SDR 18 PVC PIPE IS ALLOWED, FOR 8" WATER MAINS SDR 14 PVC IS REQUIRED. ALL WATER PIPE (PVC) IS TO BE FORMED WITH INTEGRAL BELLS AND BLUE IN COLOR.
6. ALL DEGREE BENDS IN WATER MAINS SHALL HAVE RESTRAINER GLANDS AND THRUST BLOCKS.
7. ALL COMPOUND DUCTILE IRON FITTINGS SHALL BE BY TYLER, TRINITY VALLEY, NAPLO, OR APPROVED EQUAL. NO CAST IRON FITTINGS.
8. BRASS FITTINGS SHALL BE BY MUELLER, FORD, JONES, OR APPROVED EQUAL.



CLASS 4 EMBEDMENT

P.V.C. WATER PIPE

16" & SMALLER P.V.C. (BLUE PIPE)

STATE OF TEXAS
RANDALL C. HILL
48234
REGISTERED PROFESSIONAL ENGINEER
Randall C. Hill 4-14-87

NO.	REVISION	BY	DATE
1	REVISED	S.D.H	10-8-85

TOWN OF ADDISON

DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS WATER

FIRE HYDRANT - SERVICE CONNECTION

APPROVED H. WAYNE GINN, P.E.

DATE: MARCH, 1984

SHEET SD-16