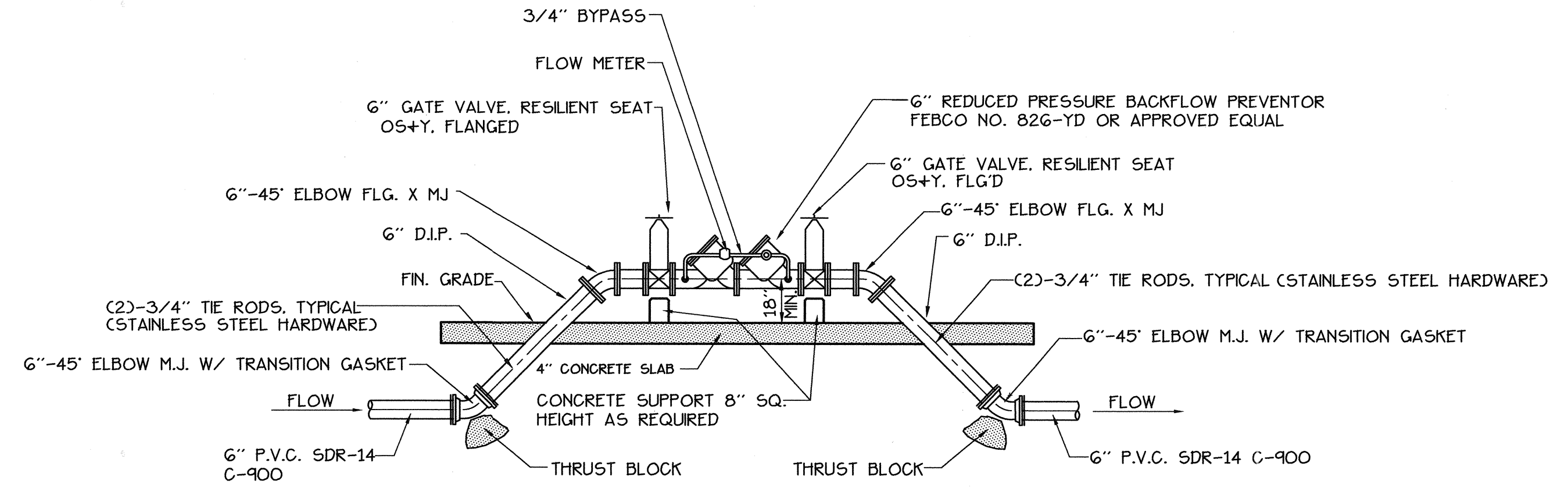
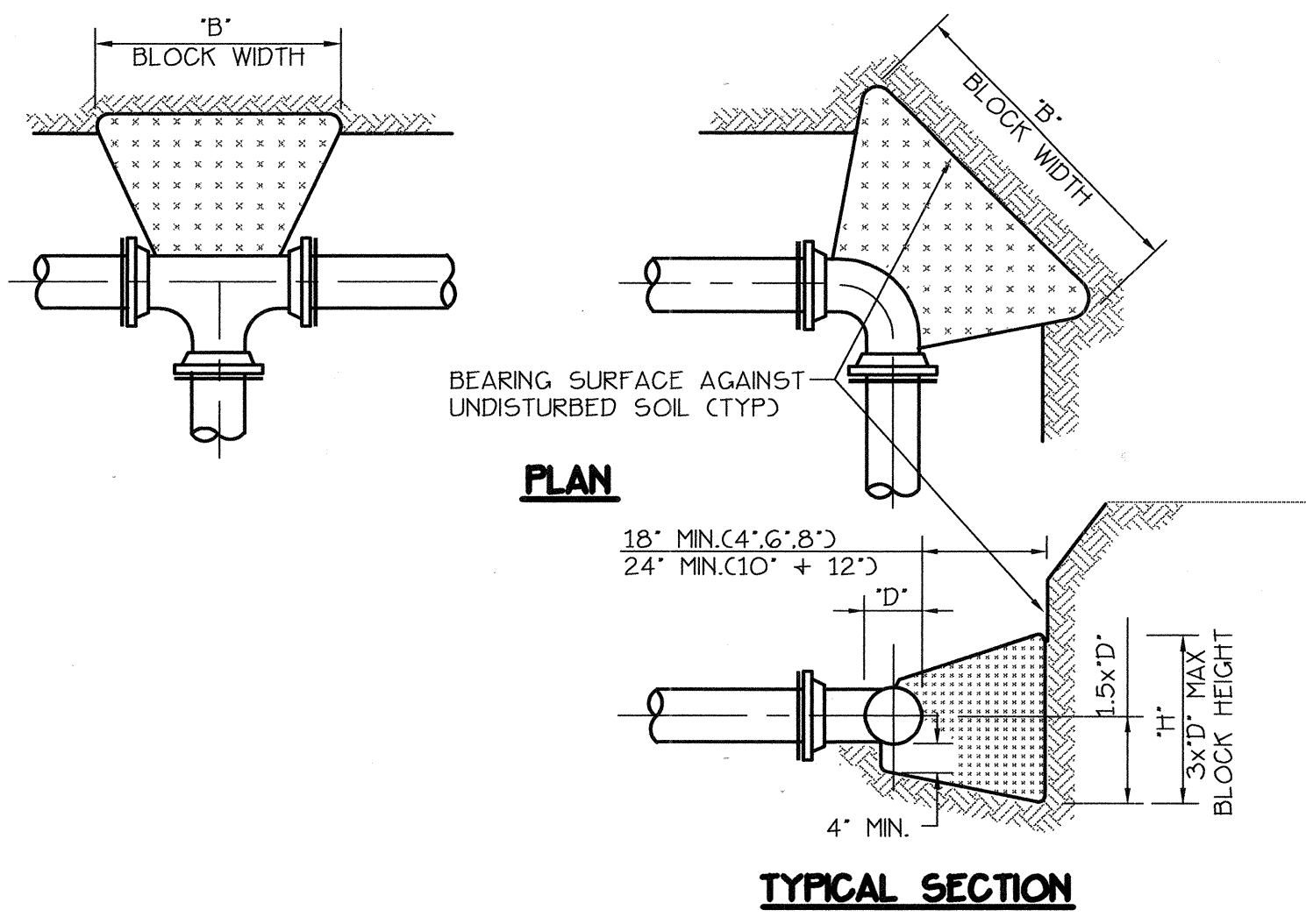


WATER METER/BACK FLOW PREVENTER DETAIL
N.T.S.

NOTE: PIPE SIZES IN ABOVE DETAIL LISTED BELOW
 CLUBHOUSE - 1 1/2" (COPPER PIPE USED)
 PHASE I BULD. - 3"
 PHASE II BULD. - 3"



FIRE LINE/BACKFLOW PREVENTER DETAIL
N.T.S.



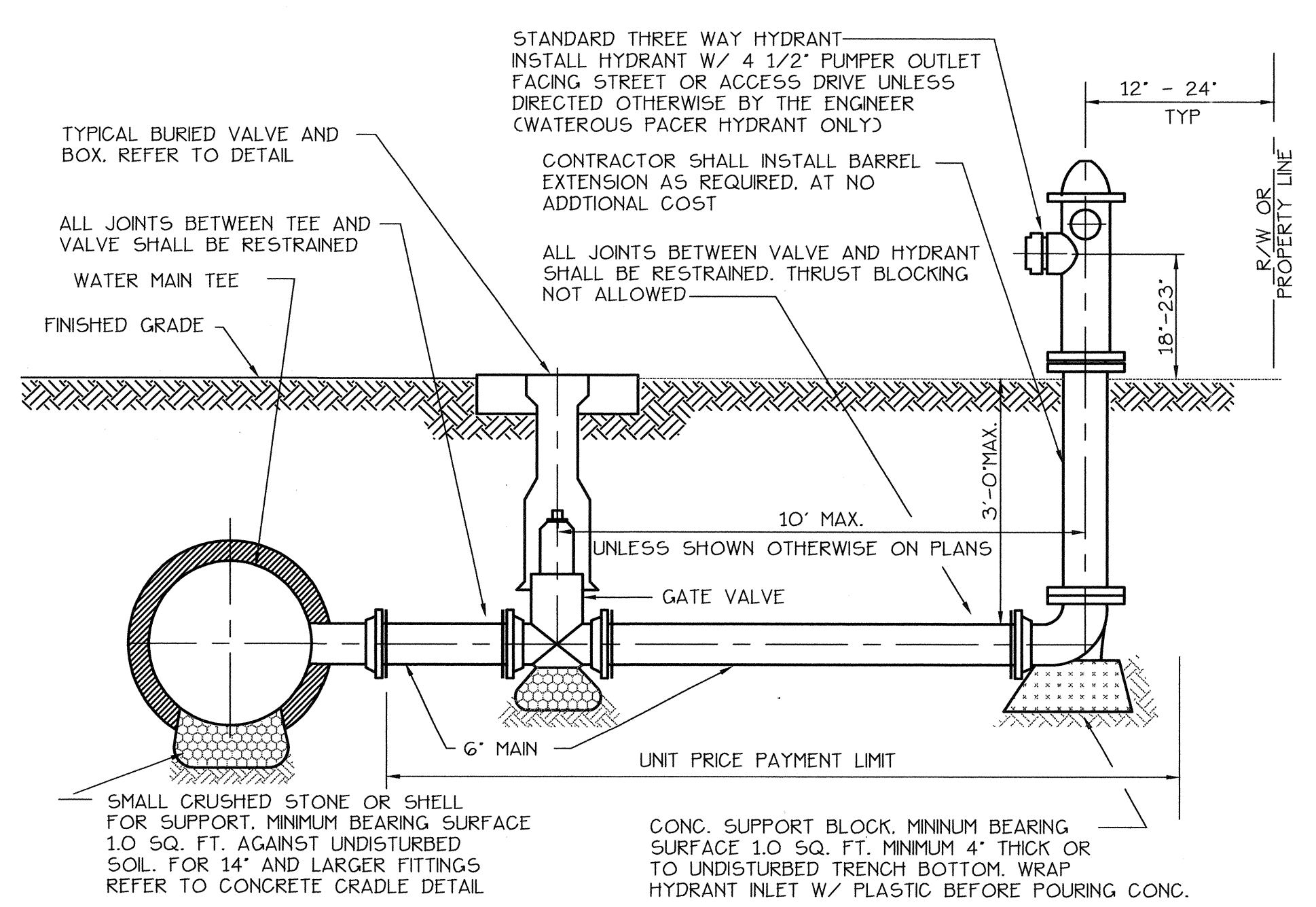
BEARING SURFACE AREA (SQ. FT.)

PIPE SIZE	90° ELB	45° ELB	22 1/2° ELB	TEE OR PLUG
4"	2.0	1.1	1.0	1.4
6"	4.5	2.4	1.2	3.2
8"	8.0	4.3	2.2	5.7
10"	12.5	6.8	3.5	8.8
12"	18.0	9.7	5.0	12.7

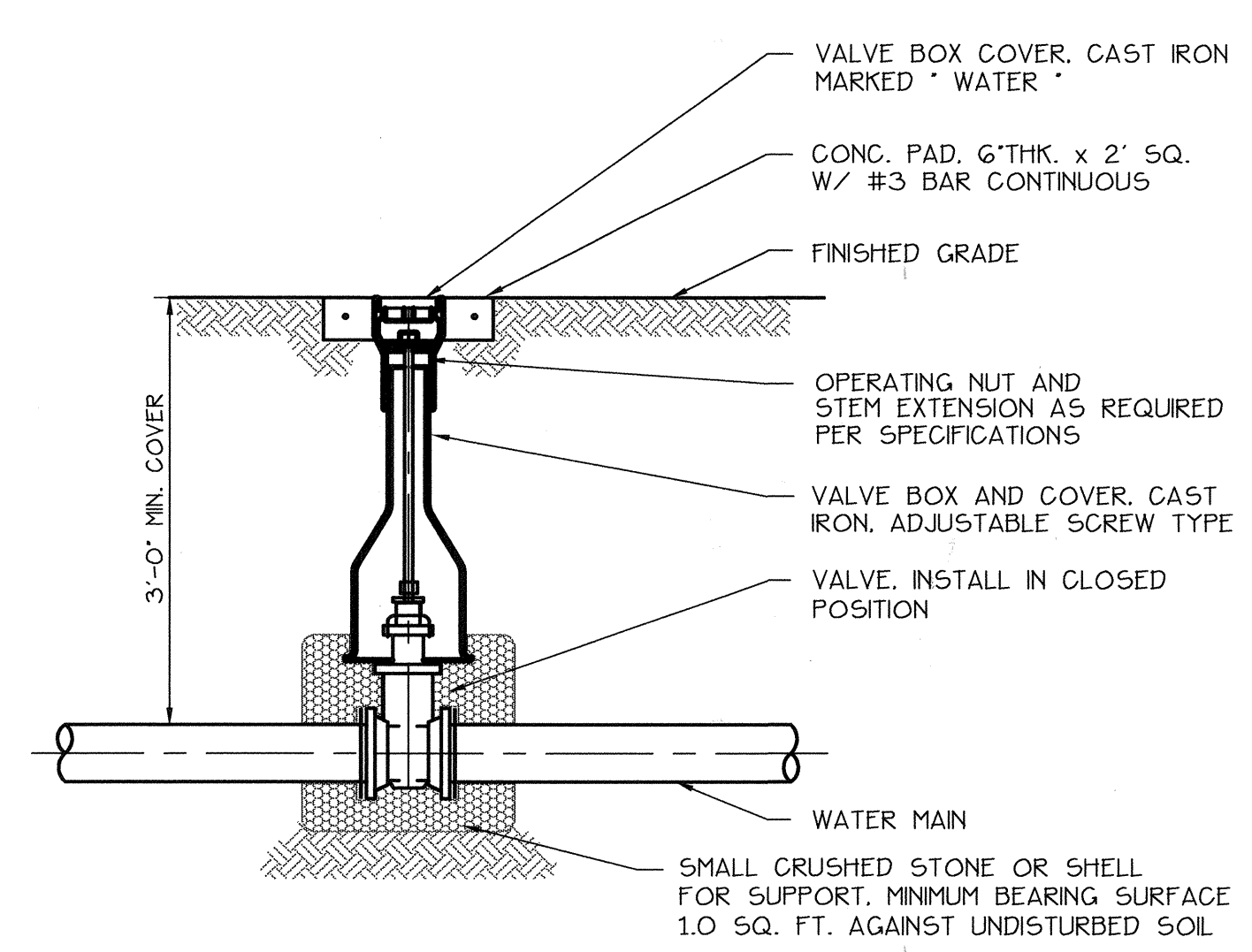
DESIGN PRESSURE = 150 PSI

- NOTES**
- THRUST BLOCK BEARING AREA BASED ON 2000 PSF SAFE SOIL BEARING. IF ACTUAL SOIL BEARING IS LESS THAN 2000 PSF, CONTRACTOR SHALL BE REQUIRED TO PLACE ADDITIONAL THRUST BEARING AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST.
 - THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
 - CONCRETE SHALL BE KEPT CLEAR OF 'T' BOLT AND PLACED BENEATH FITTINGS AS SHOWN FOR SUPPORT. WRAP ALL FITTINGS WITH PLASTIC BEFORE POURING THRUST BLOCK CONCRETE.
 - BEFORE POURING CONCRETE, PLUGS SHALL BE WRAPPED WITH PLASTIC AND A PRESSURE TREATED BOARD PLACED BETWEEN IT AND THE CONCRETE.
 - 'B' SHALL NOT EXCEED 2 x 'H'.
 - ALL IRON PIPE AND FITTINGS (WATER AND WASTEWATER) SHALL BE COMPLETELY WRAPPED IN 8 MIL. THICK BLACK PLASTIC FOR CORROSION PROTECTION.

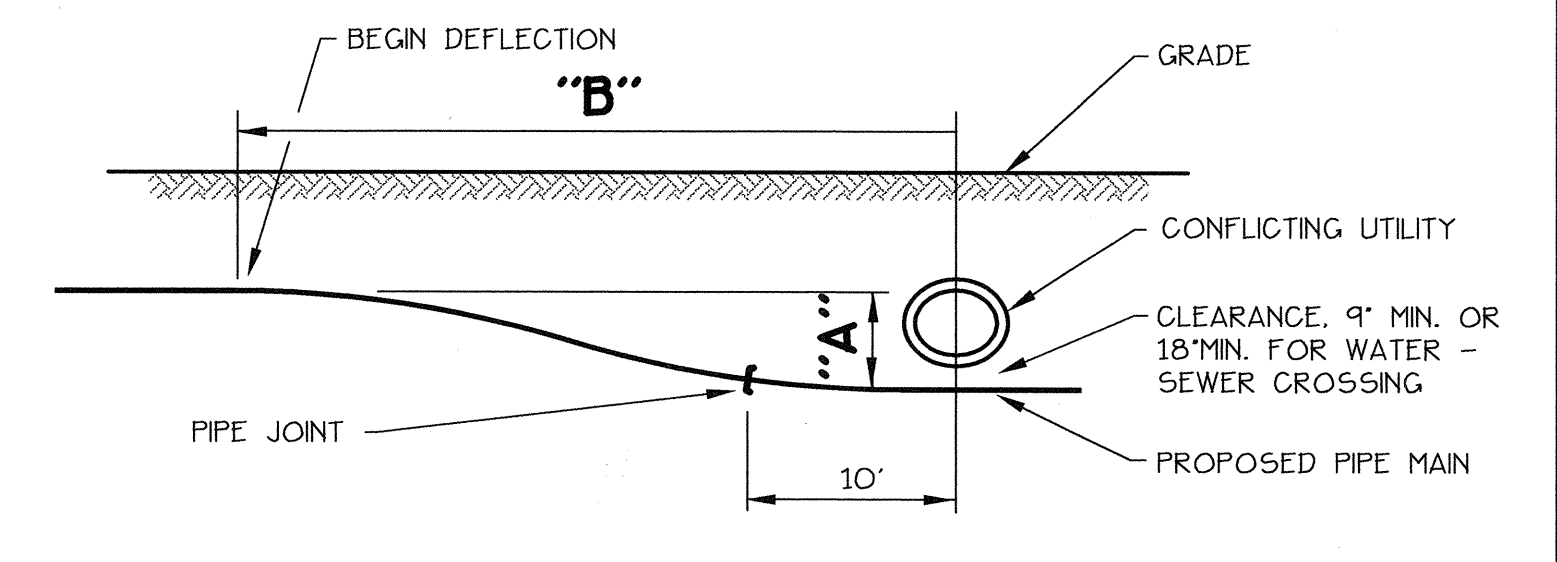
WATER MAIN THRUST BLOCK DETAIL
N.T.S.



FIRE HYDRANT ASSEMBLY
N.T.S.



BURIED VALVE DETAIL
N.T.S.



MINIMUM DISTANCE TO START DEFLECTION "B"

BENDING RADIUS OF PIPE	70	80	100	120	150	200	250	300	350	400	500	550
TOTAL DEFLECTION (FT.) "A"	0.5	2.0	2.0	2.0	2.0	2.0	2.2	2.5	2.6	2.8	3.2	3.4
	1.0	2.0	2.0	2.2	2.2	2.8	3.2	3.5	3.7	4.0	4.6	4.9
	1.5	2.0	2.2	2.4	2.7	3.0	3.5	3.9	4.2	4.6	4.9	5.6
	2.0	2.4	2.5	2.8	3.1	3.5	4.0	4.5	4.9	5.3	5.7	6.5
	3.0	3.0	3.1	3.5	3.8	4.2	4.9	5.5	6.0	6.5	6.9	8.0

ALLOWABLE BENDING RADIUS DETERMINED FOR ASTM D2241, SDR 21 AND C-900

PIPE DIAMETER	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	12"
SDR 21	70	80	100	120	150	220	240	430
C-900						200	300	400

UTILITY CROSSING DETAIL
N.T.S.

NOTE: FACILITIES COMPLETED THROUGH CERTIFICATION DATE BELOW DO NOT INCLUDE 4" THICK CONCRETE SLABS OR CONCRETE SUPPORT FOR FIRE LINE/BACKFLOW PREVENTER AND WATER METER/BACKFLOW PREVENTERS.

RECORD DRAWING
VILLA DI LANCIA
 TANGERINE DEVELOPMENT COMPANY
WATER SYSTEM DETAILS

PROJECT NO
DLC-01
 SHEET NO.
7

BISHOP & ASSOCIATES
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 AN EMPLOYEE OWNED COMPANY
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 PHONE(813)-371-6362 • FAX(813)-378-3215

REVISED	DATE	Q.C.	DATE	DESCRIPTION

BY	DATE	Q.C.	DATE	DESCRIPTION
P.L.K.	5/28/96	M.J.H.	5/28/96	WATER/FIRE AS-BUILT INFORMATION

TASK	INITIALS	DATE
DESIGN	J.J.T.	2-3-95
DRAWN	P.S.N.	2-6-95
CHECKED	J.J.F.	2-7-95
QUALITY GRK		
HORZ. SCALE	SHOWN	
VERT. SCALE		

SEE NOTE ABOVE

SEAL ENGINEER OR SURVEYOR OF RECORD DATE