

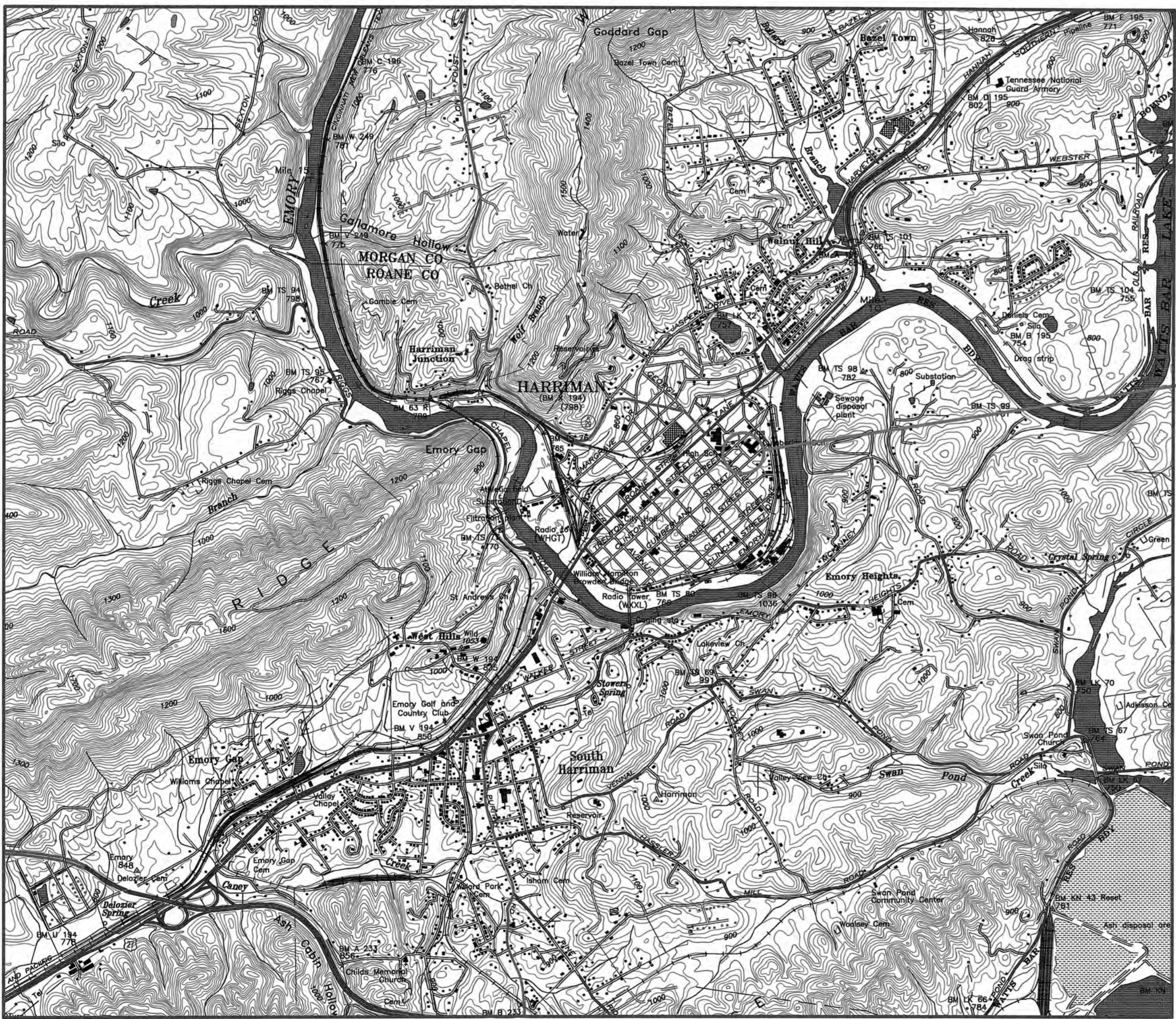
HARRIMAN UTILITY BOARD

Roane County, Tennessee

Cumberland Middle School Water Supply

LOCATION MAP

SCALE: 1" = 2000'



PROJECT LOCATION

CUMBERLAND MIDDLE SCHOOL

General Notes

Project Engineer:
James Burnham, P.E.

Drawing By:
James Reed, Engr. Assistant

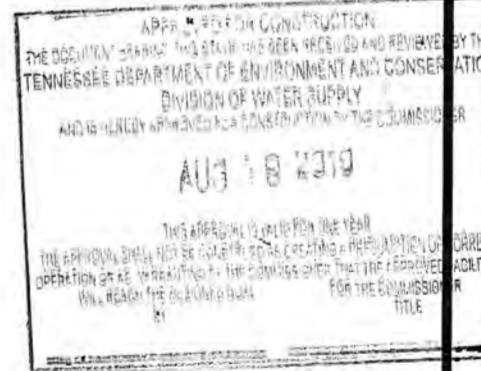


No.	Revision/Issue	Date

Firm Name and Address
Harriman Utility Board
300 N. Roane St.
Harriman, TN 37748

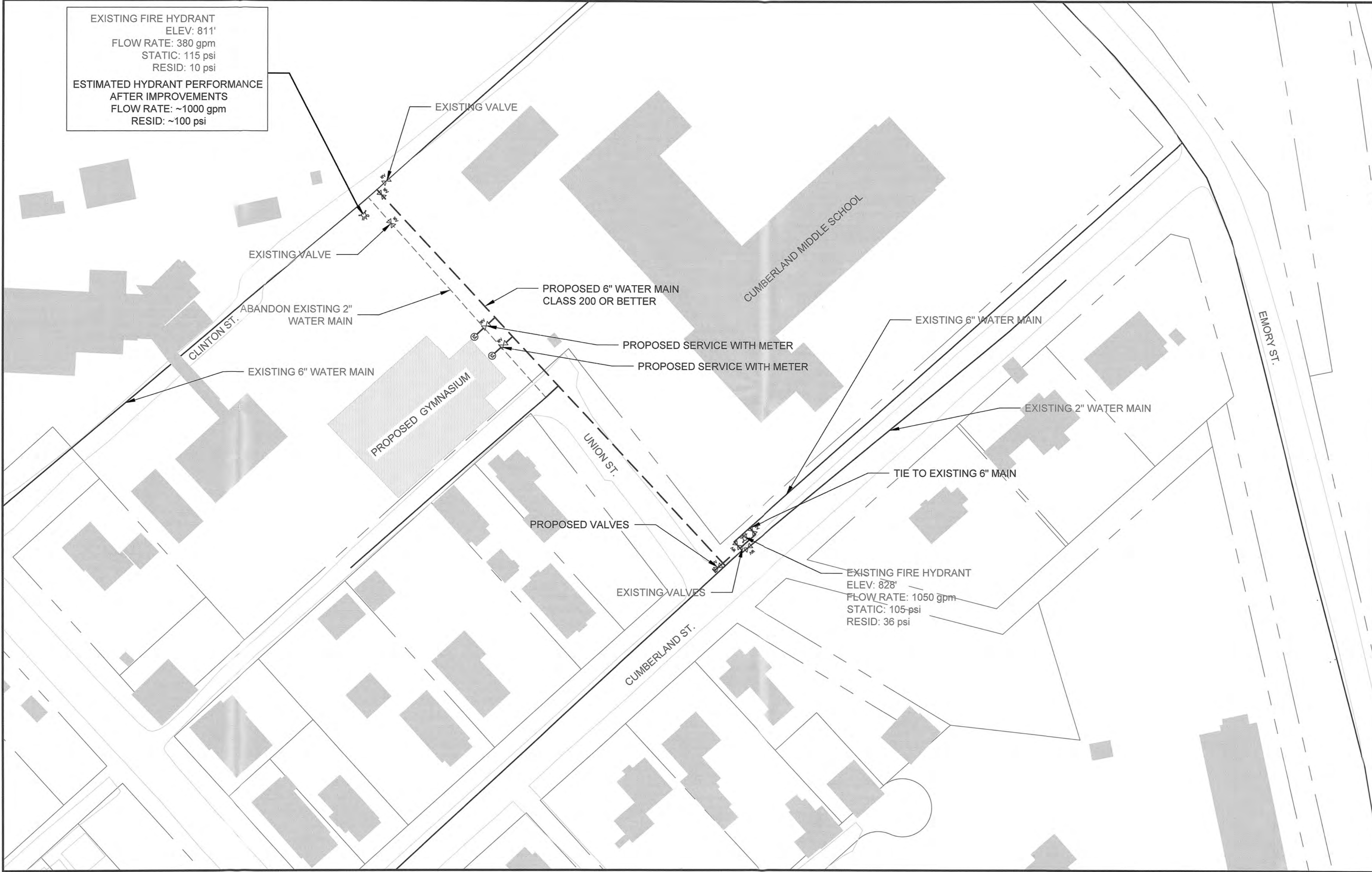
Project Name and Address
CUMBERLAND MIDDLE SCHOOL
WATER SUPPLY
Union St.
Harriman, TN 37748

Project	Sheet
WATER SERVICE LINE	1 OF 3
Date	8/2/2010
Scale	As Noted



APPROVAL EXPIRES
AUG 19 2011
TENNIS DEPT. OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER SUPPLY

WS 10 0774



EXISTING FIRE HYDRANT
ELEV: 811'
FLOW RATE: 380 gpm
STATIC: 115 psi
RESID: 10 psi
ESTIMATED HYDRANT PERFORMANCE
AFTER IMPROVEMENTS
FLOW RATE: ~1000 gpm
RESID: ~100 psi

PLAN VIEW

SCALE: 1" = 50'

General Notes

SYMBOL KEY	
	Water Meter
	Fire Hydrant
	Water Valve
	Water Service
	Abandoned Water Service
	Proposed Water Service
	Parcels
	EDGE OF PAVEMENT

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Project WATER SERVICE LINE	Sheet
Date 8/2/2010	2 OF 3
Scale As Noted	

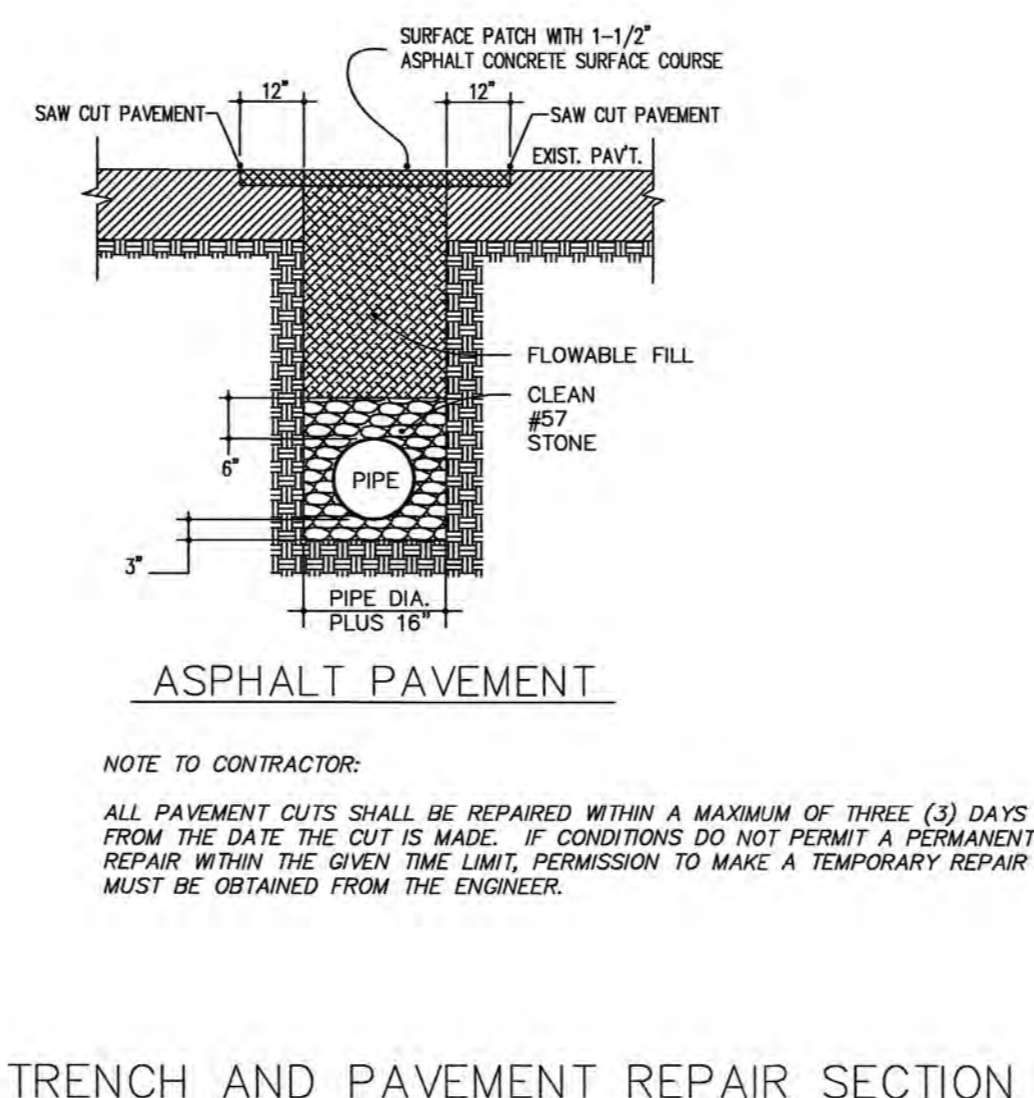
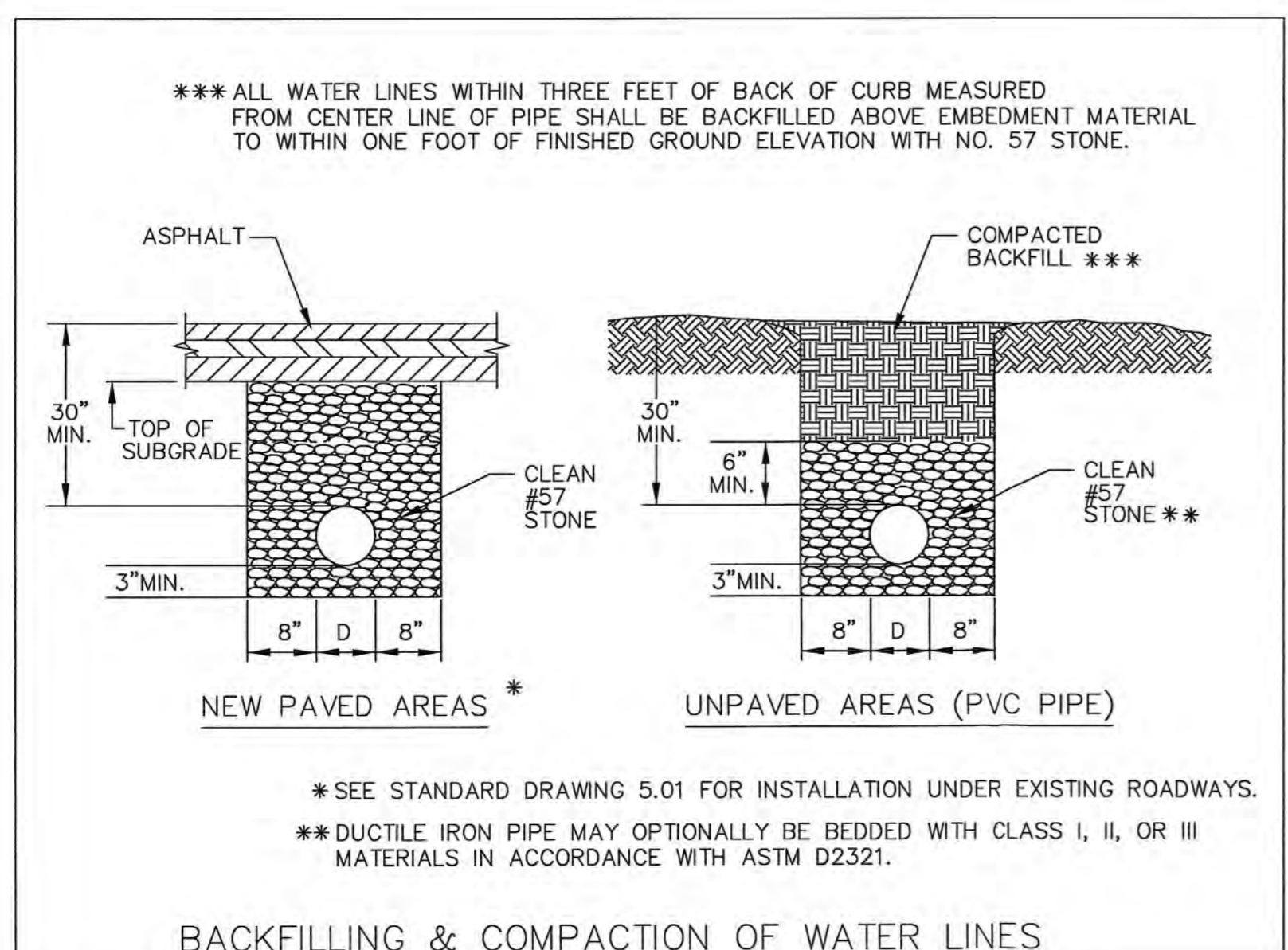
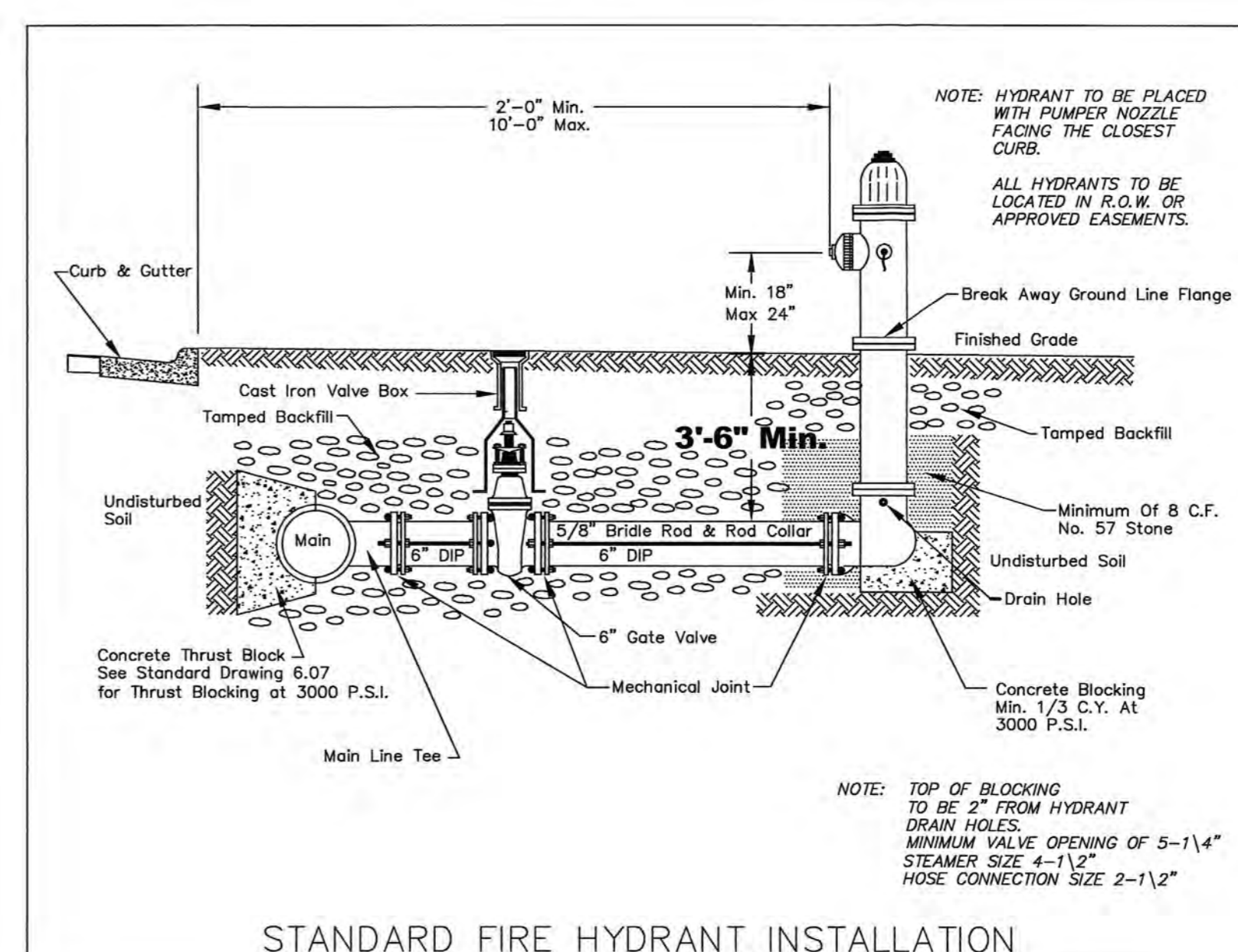
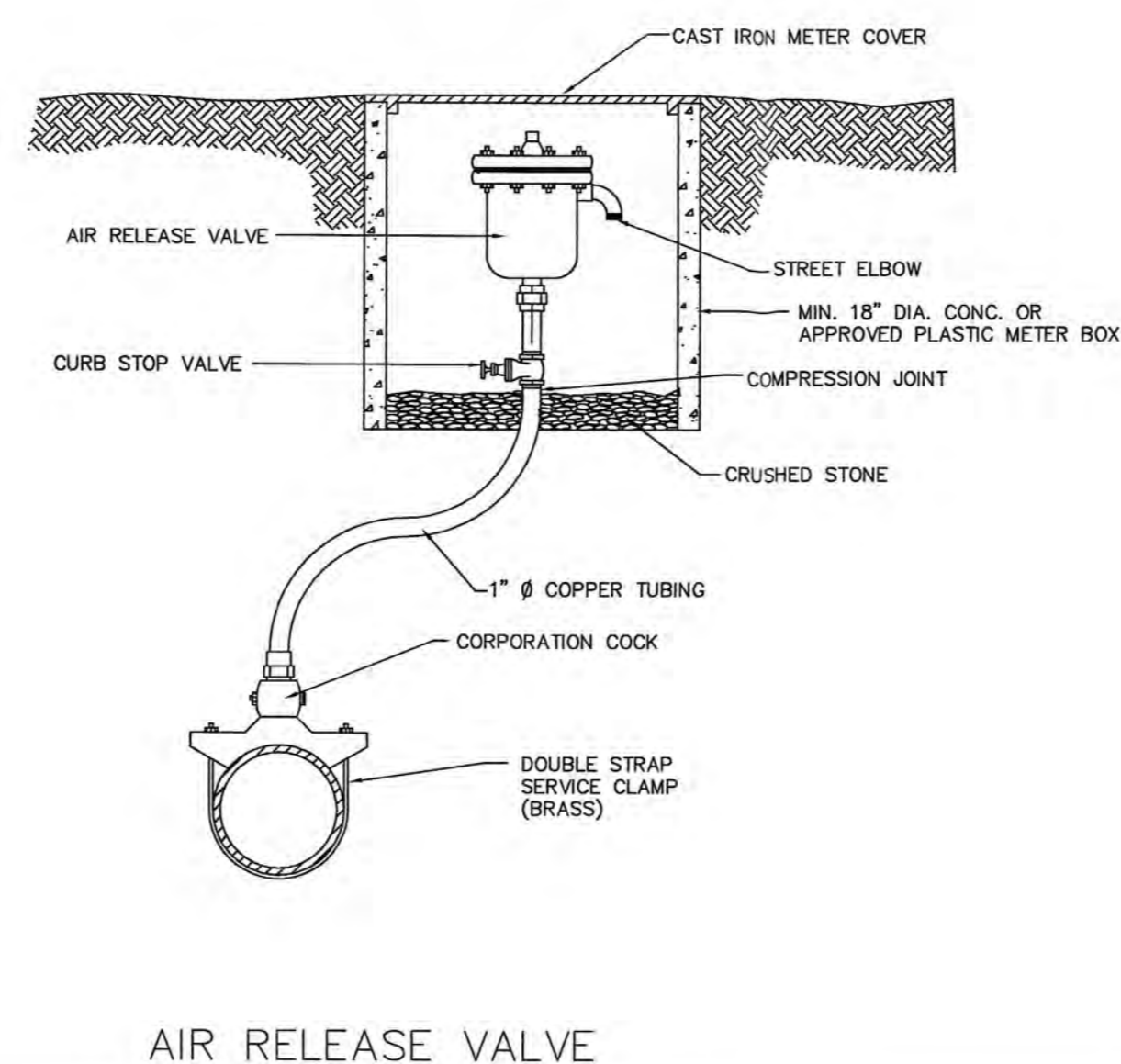
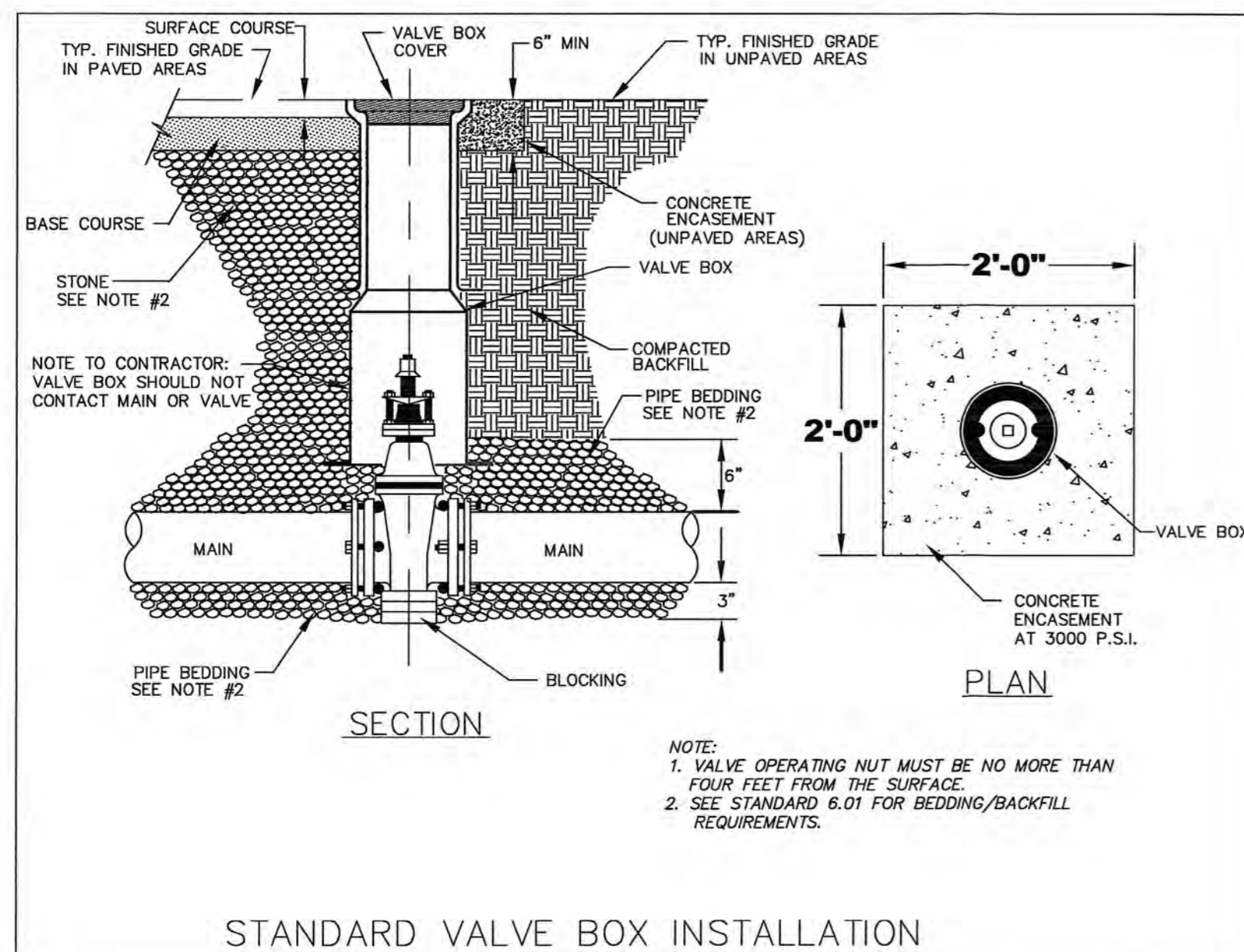
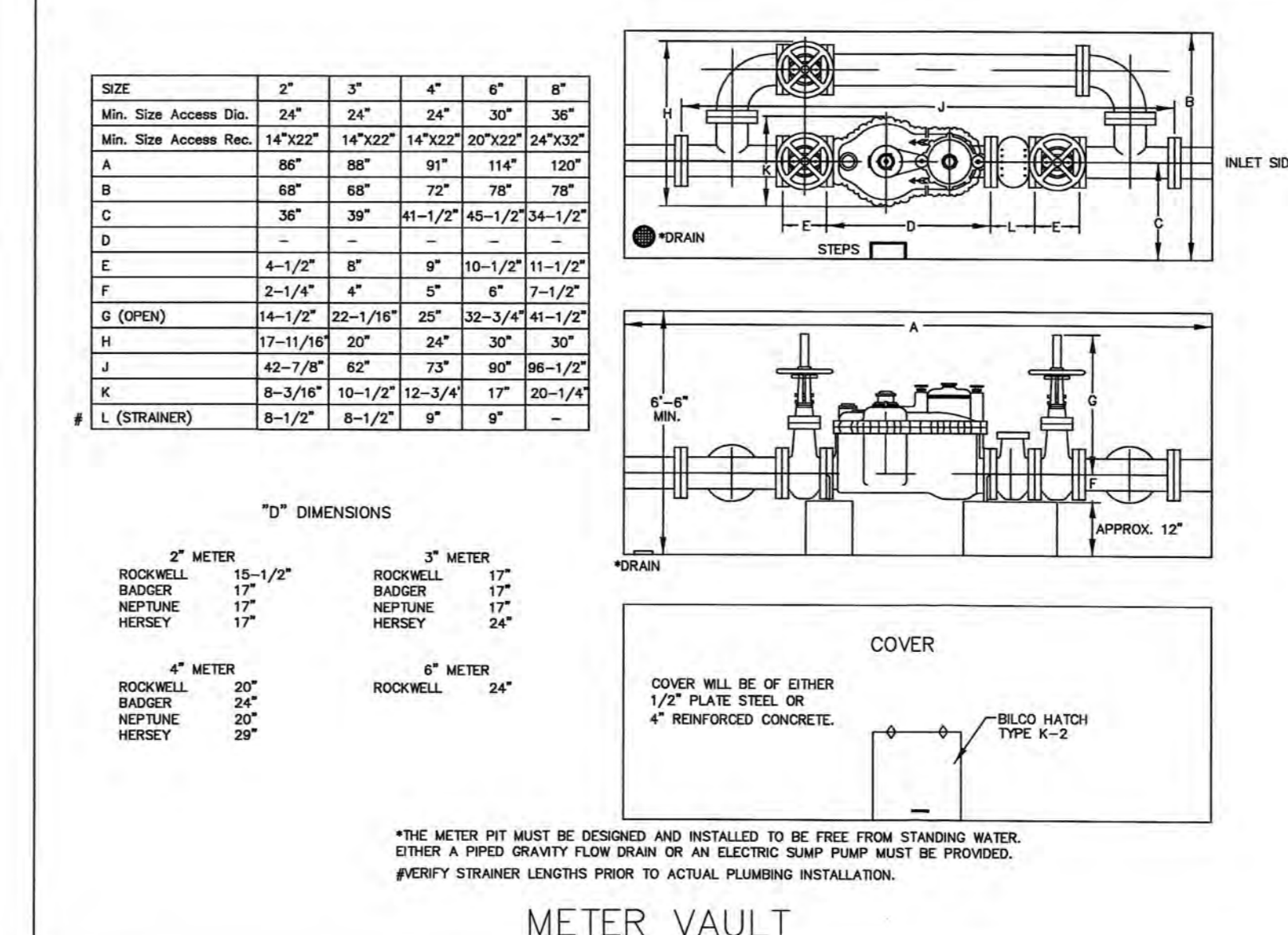
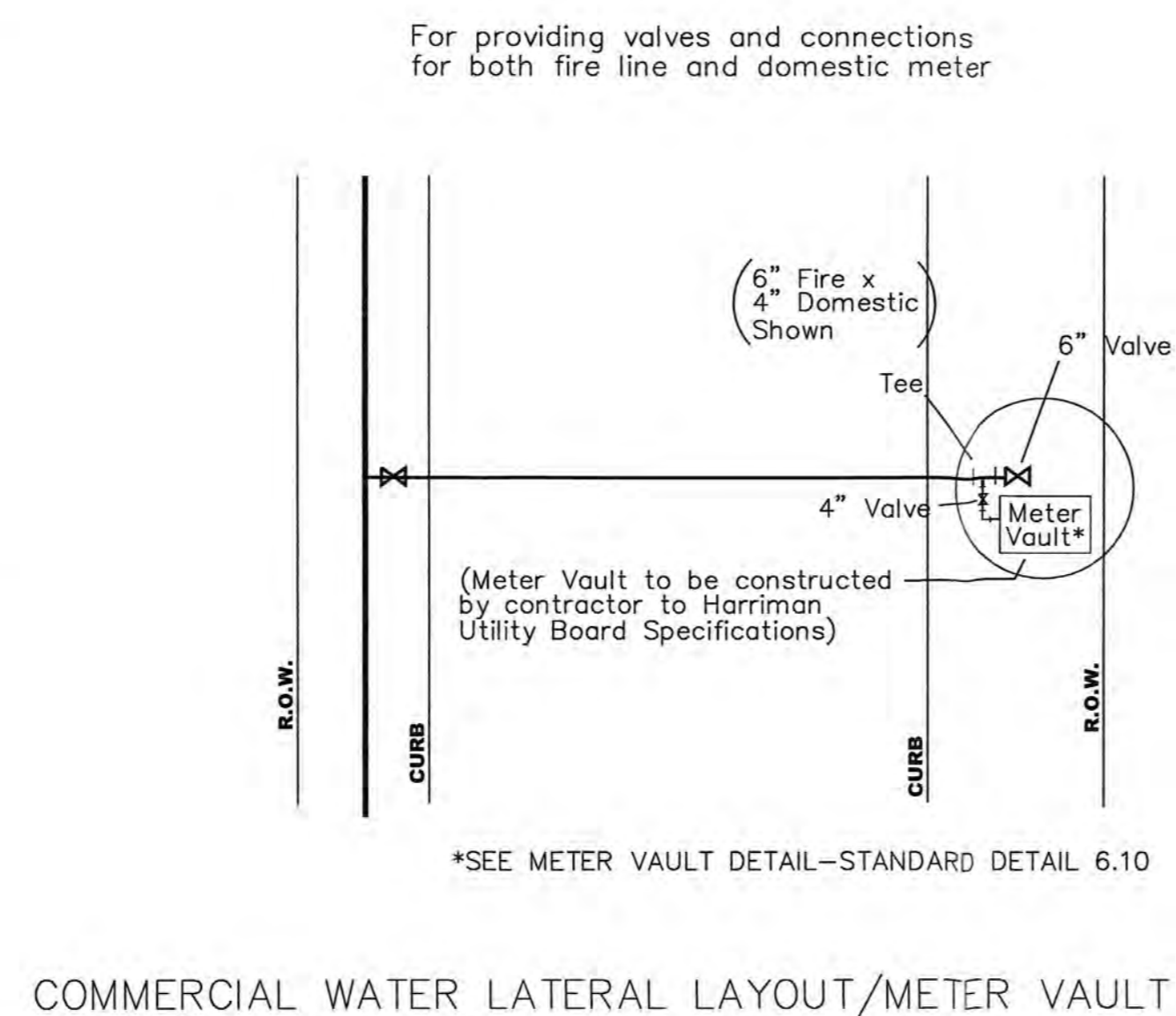
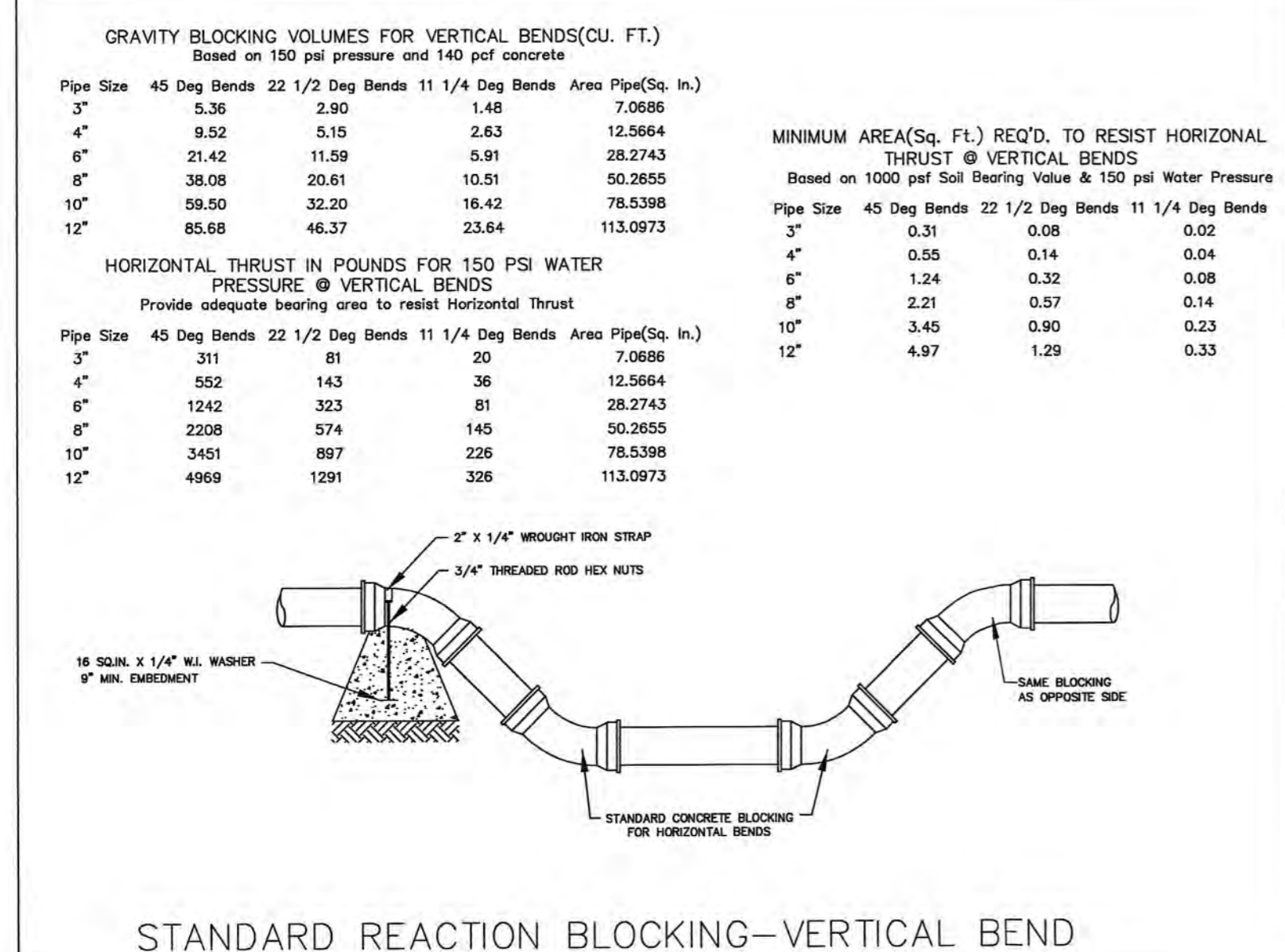


TABLE OF DIMENSIONS FOR CONCRETE BLOCKING-HORIZONTAL BENDS																									
PIPE SIZE	90 DEGREE				45 DEGREE				22 1/2 DEGREE				11 1/4 DEGREE				TEES AND PLUGS								
	H1*	H2*	V	D	H1*	H2*	V	D	H1*	H2*	V	D	H1*	H2*	V	D	H1*	H2*	V	D	C.U.F.T.				
3"	18"	10"	12"	8"	0.71	14"	5.5"	9"	8"	0.40	10"	5.5"	7"	8"	0.27	7"	5.5"	5"	8"	0.19	16"	10"	8"	0.58	
4"	24"	12"	16"	8"	1.16	18"	7"	12"	8"	0.66	13"	7"	9"	8"	0.43	9"	7"	6"	8"	0.28	21"	12"	14"	8"	0.95
6"	36"	15"	24"	11"	3.31	27"	9"	16"	9"	1.54	19"	9"	13"	8"	0.81	14"	9"	8"	0.53	31"	15"	21"	8"	1.92	
8"	48"	18"	32"	16"	8.13	36"	10"	24"	13"	3.76	26"	10"	17"	8"	1.33	18"	10"	12"	8"	0.81	41"	17"	27"	12"	4.66
10"	60"	20"	40"	20"	15.72	45"	12"	30"	16"	7.12	32"	12"	21"	10"	2.48	23"	12"	15"	8"	1.22	51"	20"	41"	16"	11.14
12"	72"	22"	48"	25"	27.83	53"	13"	36"	20"	12.36	38"	13"	26"	13"	4.56	27"	13"	18"	8"	1.63	61"	22"	41"	20"	16.73

BASED ON 1000 PSF SOIL BEARING VALUE AND 150 PSI WATER PRESSURE IN PIPE W/NO SF
 * DIMENSIONS FOR STANDARD FITTINGS SHOWN. MODIFY COMPACT FITTINGS
 ALL CONCRETE TO BE 3000# (28 DAY STRENGTH). NO CONCRETE SHALL COVER BOLTS OR GLANDS.

6" 60 SQ. STEEL PLATE-1/4" THICK
 NOTE: DIMENSIONS ARE CONTROLLED BY DIAMETER OF BRANCH MAIN.

STANDARD REACTION BLOCKING-HORIZONTAL BEND



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Project
WATER SERVICE LINE
Date
8/2/10
Sheet
3 of 3
NOT TO SCALE