



PUBLISH DATE
2021-09-10

ISSUED FOR
PERMIT SET

REVISIONS



WATER SYSTEM DETAILS I
RHODODENDRON ARBOR
PLANNED UNIT DEVELOPMENT
APIC FLORENCE HOLDINGS, LLC
FLORENCE, OR



3J CONSULTING

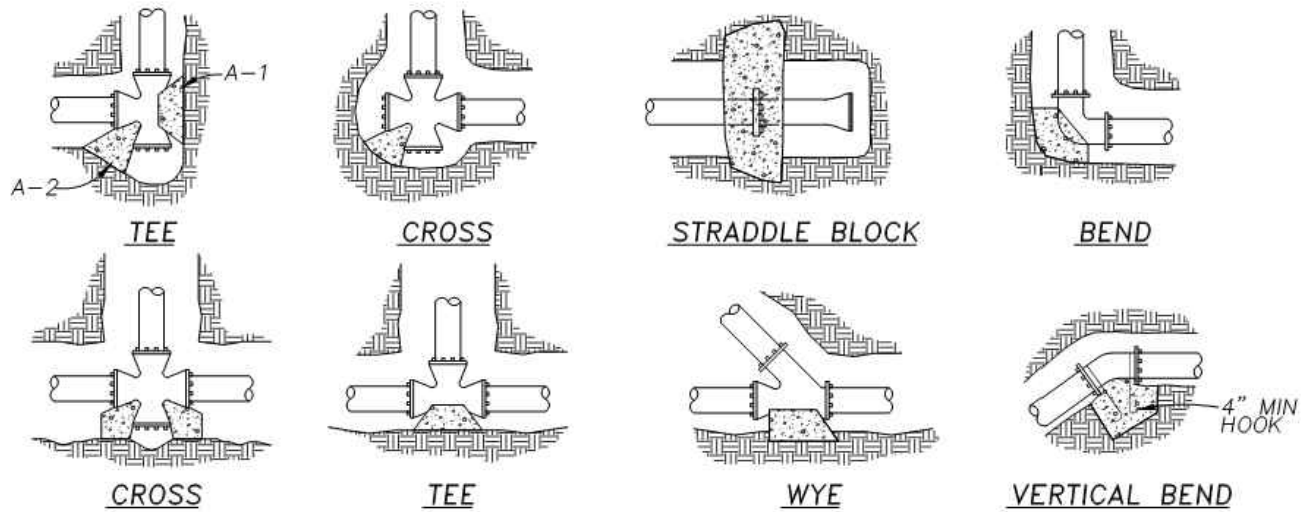
PROJECT INFORMATION
PROJECT # | 19555
LAND USE # | PC 20 07 PUD 01 & PC 20 08 SUB 01
TAX LOT(S) | 700, 1900, 3800
DESIGNED BY | JTE, TEG, ZMS, JKG
CHECKED BY | AJM

SHEET NUMBER
C951

(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET								(VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS				
FITTING SIZE	TEE, WYE, DEAD END & HYDRANT	STRADDLE BLOCK	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22-1/2" BEND	11-1/4" BEND	90° BEND	45° BEND	22-1/2" BEND	11-1/4" BEND
				A-1	A-2							
4	1.0	1.6	1.4	1.9	1.4	1.0	---	---	---	---	---	---
6	2.1	3.7	3.0	4.3	3.0	1.6	1.0	---	1.3	---	---	---
8	3.8	6.5	5.3	7.6	5.4	2.9	1.5	1.0	2.3	1.1	---	---
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4	1.2	3.7	1.8	---	---
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4	1.7	5.5	2.8	1.2	---
14	11.5	---	16.3	23.0	16.3	8.9	4.6	2.3	7.6	3.9	1.7	---
16	15.0	26.1	21.3	30.0	21.3	11.6	6.0	3.0	9.9	5.1	2.3	0.9
18	19.0	---	27.0	38.0	27.0	14.6	7.6	3.8	---	---	---	---
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4	4.7	---	---	---	---
24	34.0	58.8	48.0	68.0	48.0	26.2	13.6	6.8	---	---	---	---

NOTES:
1. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:
$$\text{BEARING AREA} = (\text{TEST PRESSURE} / 150) \times (2000 / \text{SOIL BEARING STRESS}) \times (\text{TABLE VALUE})$$

2. ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI AND THE WEIGHT OF CONCRETE = 4050 POUNDS PER CUBIC YARD. TO COMPUTE FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION:
$$\text{VOLUME} = (\text{TEST PRESSURE} / 150) \times (\text{TABLE VALUE})$$



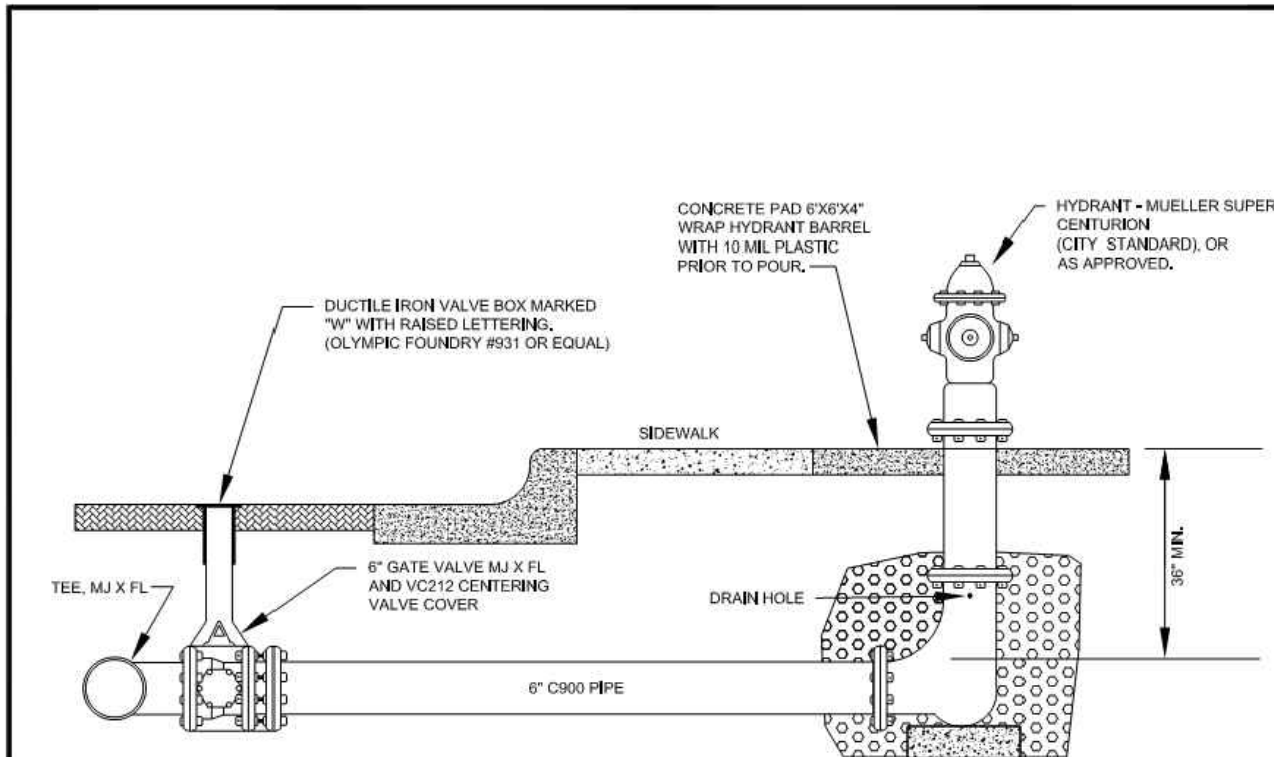
RODS FOR VERTICAL BENDS		
FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"
14"-16"	#8	36"

NOTES:
1. CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. ALL CONCRETE TO BE CLASS 2400 MINIMUM.
3. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
4. CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
5. TIE RODS SHALL BE DEFORMED, GALVANIZED, STEEL, 60,000 PSI TENSILE STRENGTH.

**CITY OF FLORENCE
STANDARD DRAWING**

THRUST BLOCKING

DATE: SEPTEMBER 2011
DRAWING NO: F-401

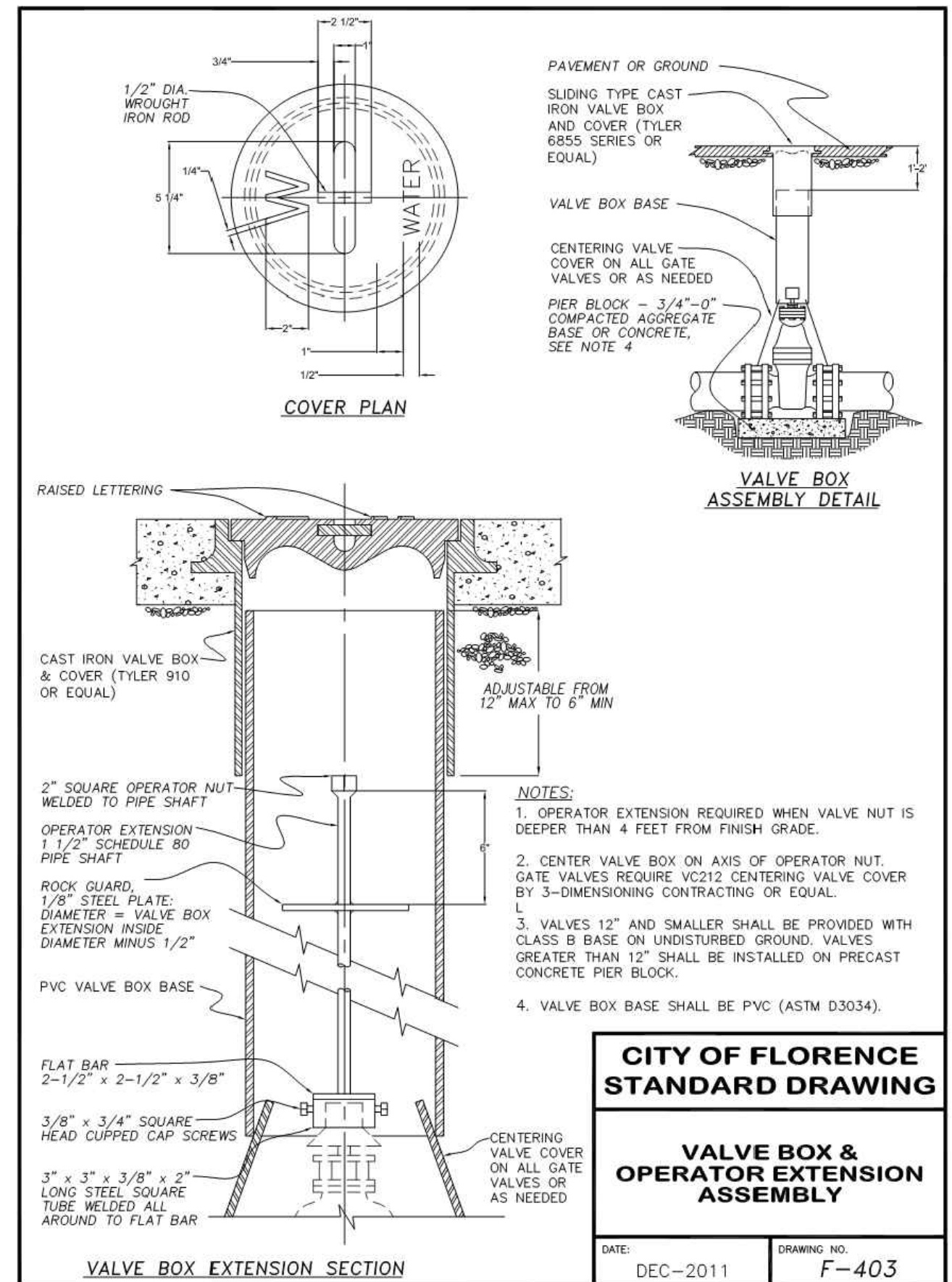


- NOTES:
- ALL JOINTS TO BE RESTRAINED WITHOUT THE USE OF THRUST BLOCKS.
 - JOINT RESTRAINT SYSTEM SHALL BE SERIES 2000 PVC BY EDEBA BION, OR APPROVED EQUAL.
 - CONTRACTOR TO SELECT HYDRANT BARREL LENGTH APPROPRIATE FOR DEPTH OF BURY.
 - EXTENSIONS WILL BE ALLOWED ONLY WHERE DEPTH OF BURY EXCEEDS MANUFACTURERS LONGEST HYDRANT BARREL.
 - SUPPORT HYDRANT ON 8" x 8" x 16" CONCRETE BLOCK.
 - BACKFILL WITH WASHED ROCK OR PEA GRAVEL WRAPPED IN GEOTEXTILE FABRIC TO 6" ABOVE DRAIN HOLE.
 - MAINTAIN 36-INCH MINIMUM CLEARANCE AROUND HYDRANT.
 - WHEN PLACED ADJACENT TO CURB, HYDRANT PORT SHALL BE 24" FROM FACE OF CURB.
 - NO JOINTS ALLOWED IF HYDRANT LINE IS LESS THAN 18 FEET IN LENGTH.
 - CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO INSURE BREAKAWAY.
 - FLANGE AND SAFETY COLLAR ARE IN CORRECT POSITIONS.
 - MAINTAIN A MINIMUM OF 5 FEET CLEARANCE FROM DRIVEWAYS, MAINTAIN 5 FEET BEHIND FACE OF CURB IN PARKING LOTS OR ZONES AND PROVIDE BOLLARDS FACING TRAFFIC IN PARKING LOTS WITH CURBS.
 - HYDRANT PUMPER PORT SHALL FACE DIRECTION OF ACCESS.
 - FIRE HYDRANT SPACING SHALL COMPLY WITH THE FIRE CODE REQUIREMENT OR 500 FEET MINIMUM ON DISTRIBUTION MAINS.
 - PLACE 24"x24"x4" CONCRETE PAD AROUND ALL VALVE BOXES OUTSIDE OF PAVED AREAS.
 - VALVE BOX EXTENSION TO BE PVC ASTM D 3034 OR EQUAL.
 - PAINT HYDRANT WITH DEVOE BAR-OK ENAMEL PAINT GLOSS SAFETY YELLOW OR APPROVED EQUAL PER MANUFACTURERS RECOMMENDATION.
 - CENTERING VALVE COVER TO BE VC212 BY 3 DIMENSIONAL CONTRACTING OR EQUAL.

**CITY OF FLORENCE
STANDARD DRAWING**

**HYDRANT
INSTALLATION**

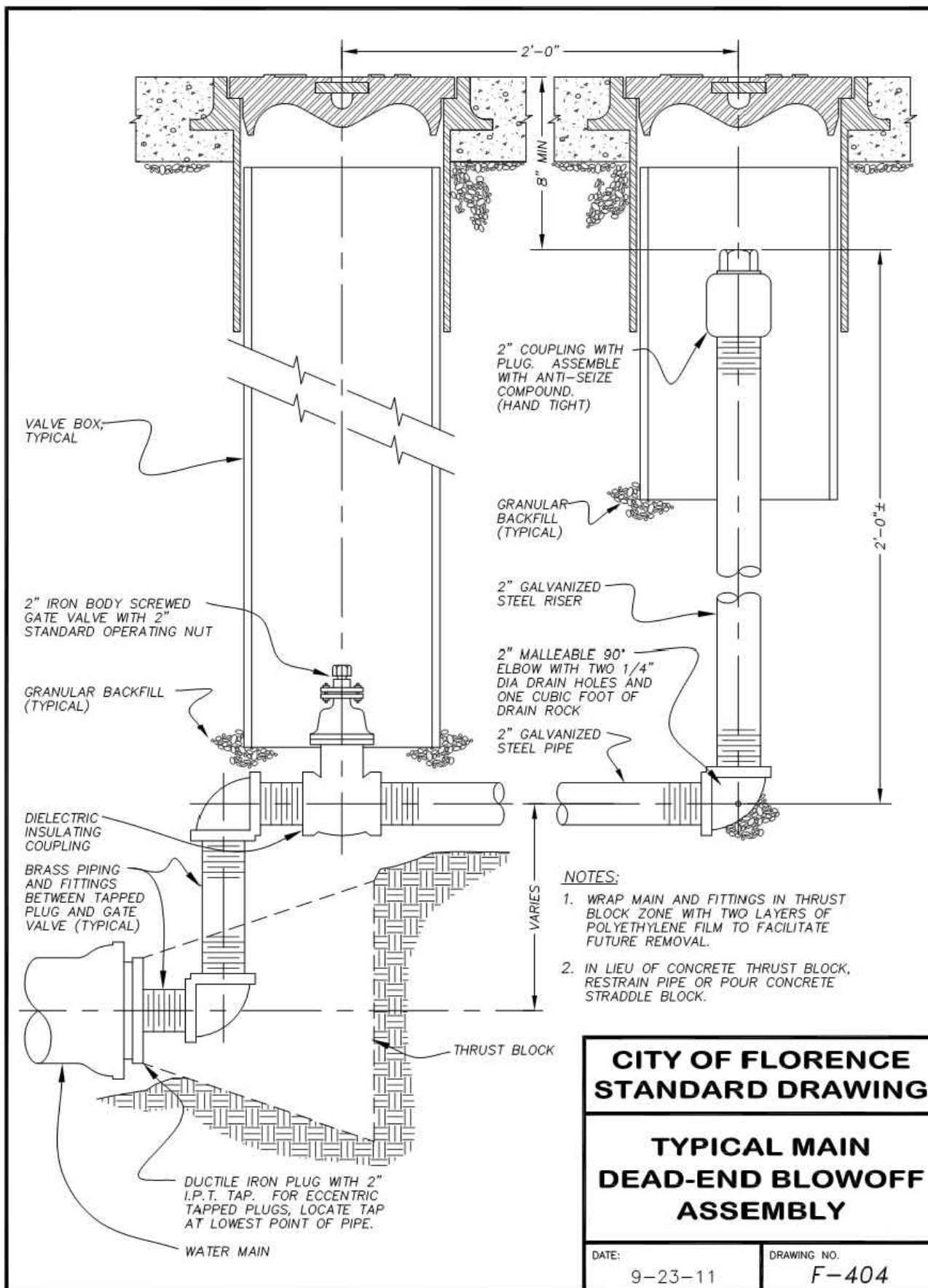
DATE: MAY-2011
DRAWING NO: F-402



**CITY OF FLORENCE
STANDARD DRAWING**

**VALVE BOX &
OPERATOR EXTENSION
ASSEMBLY**

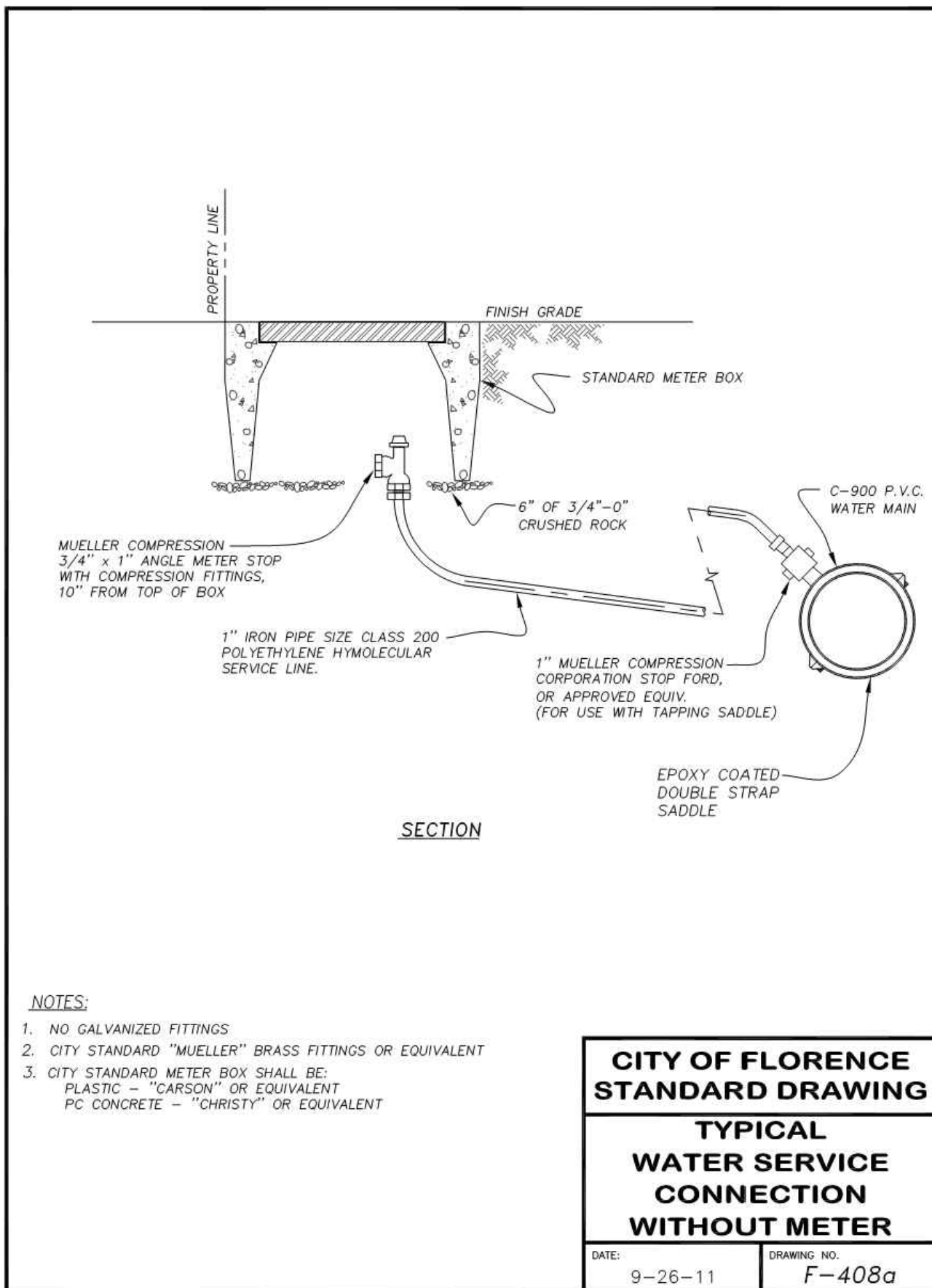
DATE: DEC-2011
DRAWING NO: F-403



**CITY OF FLORENCE
STANDARD DRAWING**

**TYPICAL MAIN
DEAD-END BLOWOFF
ASSEMBLY**

DATE: 9-23-11
DRAWING NO: F-404



**CITY OF FLORENCE
STANDARD DRAWING**

**TYPICAL
WATER SERVICE
CONNECTION
WITHOUT METER**

DATE: 9-26-11
DRAWING NO: F-408a