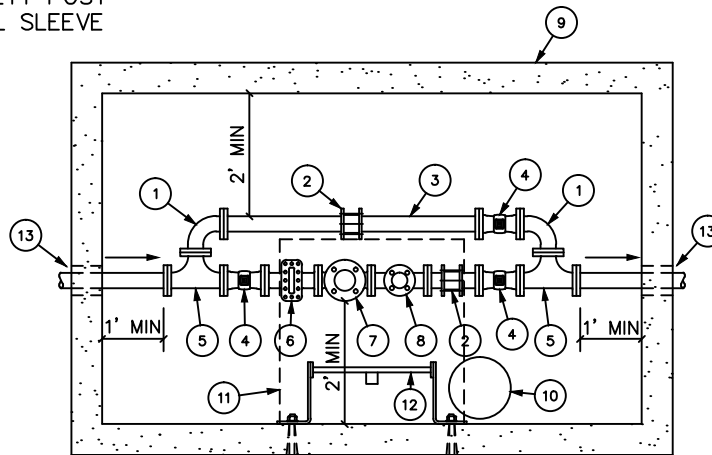


**MATERIALS LIST:**

- 1 - D.I. 90° BEND FLG. x FLG.
- 2 - RESTRAINED COUPLING OR EXPANSION JOINT
- 3 - BYPASS LINE
- 4 - GATE VALVE - RESILIENT WEDGE FLG. X FLG.
- 5 - D.I. TEE FLG. X FLG.
- 6 - STRAINER
- 7 - METER
- 8 - TESTING TEE FLG. X FLG. WITH 2" GATE VALVE
- 9 - PRECAST METEER VAULT
- 10 - SUMP
- 11 - ACCESS DOOR
- 12 - GALVANIZED STEEL LADDER WITH BILCO LADDERUP SAFETY POST
- 13 - WALL SLEEVE

**MINIMUM VAULT SIZE**

METER SIZE	VAULT SIZE
2" COMP	6'X6'
3" COMP	6'X8'
3" HPT	6'X8'
4" COMP	6'X8'
4" HPT	6'X8'
6" COMP	8'X10'
6" HPT	8'X10'
8" COMP	8'X12'
8" HPT	8'X12'



**NOTES:**

1. ALL VAULTS MUST BE PRE-FABRICATED AND ALL WALLS SHALL BE A MONOLITHIC POUR WITH NO SEAMS OR EXTENSIONS. ALL SIDE WALLS SHALL BE 4" THICK WITH 4,500 PSI CONCRETE REINFORCED WITH #4 RE-BAR ON 8" CENTERS BOTH WAYS. VAULTS SHALL BE BROOKS, AMERICAN, OR APPROVED EQUAL.
2. THE BOTTOM OF THE VAULT SHALL BE 6" WITH 4,500 PSI CONCRETE WITH #4 RE-BAR ON 12" CENTERS BOTH WAYS. A 4" DEEP X 12" DIAMETER SUMP SHALL BE INSTALLED IN ONE CORNER ON EITHER SIDE OF THE BOTTOM SLAB. A 4" CUSHION ON SAND SHALL BE INSTALLED UNDER THE SLAB.
3. THE VAULT SHALL NOT BE INSTALLED IN ANY DRIVE OR PARKING AREA AND MUST BE LOCATED IN A UTILITY EASEMENT DEDICATED TO THE TOWN. ALL PIPING INSIDE THE VAULT AND THE VAULT ITSELF MUST BE INSPECTED BY THE METER SERVICES DIVISION BEFORE INSTALLATION.
4. THE LID SHALL BE A J-44L BILCO DOOR (3'X3') FOR 2"-4" METER VAULTS AND JD-2AL BILCO (4'X4') DOOR FOR 6"-8" METER VAULTS. THE DESIGN LOADS FOR THE LID SHALL CONSIST OF DEAD, LIVE, IMPACT LOADS, AND IN ADDITION LOADS DUE TO WATER TABLE AND ANY OTHER LOADS WHICH MAY BE IMPOSED UPON THE STRUCTURE. LIVE LOADS SHALL BE FOR H-20 PER AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. DESIGN WHEEL LOAD SHALL BE 16 KIPS. THE LIVE LOAD SHALL BE THAT WHICH PRODUCES THE MAXIMUM SHEAR AND BENDING MOMENTS IN THE STRUCTURE. THE LIDS SHALL BE EQUIPPED WITH A HOLD-OPEN MECHANISM AND FLUSH LOCKING DEVICES. THE ACCESS DOOR MUST HAVE (2) 2" HOLES DRILLED 6" APART IN THE CENTER OF THE LID FOR AMR READING DEVICES. THE ALUMINUM MUST BE PROTECTED FROM THE CONCRETE DURING CASTING.
5. ALL PIPING INSIDE THE VAULT MUST BE DUCTILE IRON PIPE WITH FLANGED FITTINGS. TOWN STANDARDS-AMERICAN NATIONAL STANDARD FOR DUCTILE IRON AWWA STANDARD C151 (ANSI A21.51).
6. THE CONTRACTOR SHALL MAKE THE BY-PASS AND METER TEST TAP INSIDE OF THE VAULT. THE BY-PASS LINE MUST BE THE SAME PIPE SIZE AS THE MAIN LINE. IF THE SERVICE IS STRICTLY TO BE USED AS IRRIGATION A BY-PASS WILL NOT BE NECESSARY. THE TEST TAP MUST BE INSTALLED AT LEAST 2 PIPE DIAMETERS DOWN-STREAM FROM THE METER AND ALL TEST TAPS SHALL BE 2" AND THE CONTRACTOR SHALL INSTALL AN APPROVED SERVICE SADDLE WITH WITH BRASS NIPPLE WITH A MUELLER OR APPROVED EQUAL BRASS GATE VALVE. THE TEST TAP GATE VALVE MUST HAVE A THREADED END DISCHARGE PIPE.
7. THE MAIN LINE AND BY-PASS GATE VALVES SHALL BE RESILIENT WEDGE. ALL MAIN LINE AND BY-PASS VALVES SHALL BE FLANGED ON BOTH ENDS AND HAVE HAND WHEELS. ALL GATE VALVES MUST BE MUELLER OR APPROVED EQUAL.
8. THE CONTRACTOR SHALL HAVE A CHOICE OF HAVING LINK SEAL OR WALL SLEEVES (MODEL WS-6-28-5-6 FOR 3" PIPE; MODEL WS-8-32-5-6 FOR 4" PIPE; MODEL WS-10-38-5-6 FOR 6" PIPE; MODEL WS-12-37-5-6 FOR 8" PIPE). THE ABOVE MENTIONED WALL SLEEVES SHALL USE THE FOLLOWING LINK SEAL: FOR A 3" PIPE- 5 #LS325-C; FOR 4" PIPE-5 #LS400-C; FOR 6" PIPE-7 #LS400-C; FOR 8" PIPE-9 #LS400-C. BREAKING THE WALL WITH A JACKHAMMER OR USING A PRE-CAST KNOCKOUT PANELS IS NOT PERMITTED.
9. PIPE AND FITTINGS SHALL BE CONSTRUCTED A MINIMUM OF 1" ABOVE THE VAULT FLOOR AND THERE SHALL BE A MINIMUM OF 2' FROM THE SIDE WALLS. THE BY-PASS TEES SHALL BE A MINIMUM OF 1' FROM THE SIDE WALL. THERE WILL BE A CONCRETE SUPPORT UNDER EACH VALVE.
10. MINIMUM DEPTH OF ANY VAULT SHALL BE 4'-6"
11. THE TOWN WILL PROVIDE THE METER AT THE CONTRACTOR'S EXPENSE. ALL OTHER PARTS WILL BE SUPPLIED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.



WATER SYSTEM CONSTRUCTION DETAILS  
2" COMPOUND AND LARGER METERS

DATE: OCT 2009

SHEET 1 OF 1

SHEET: W-12