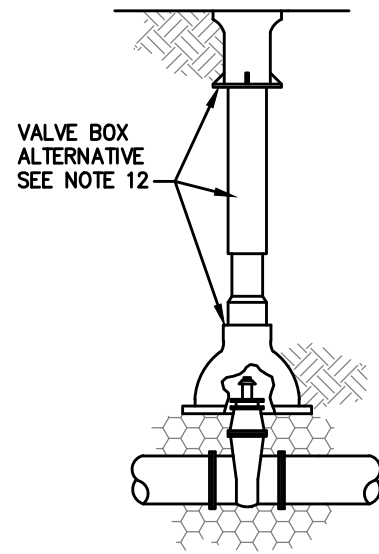


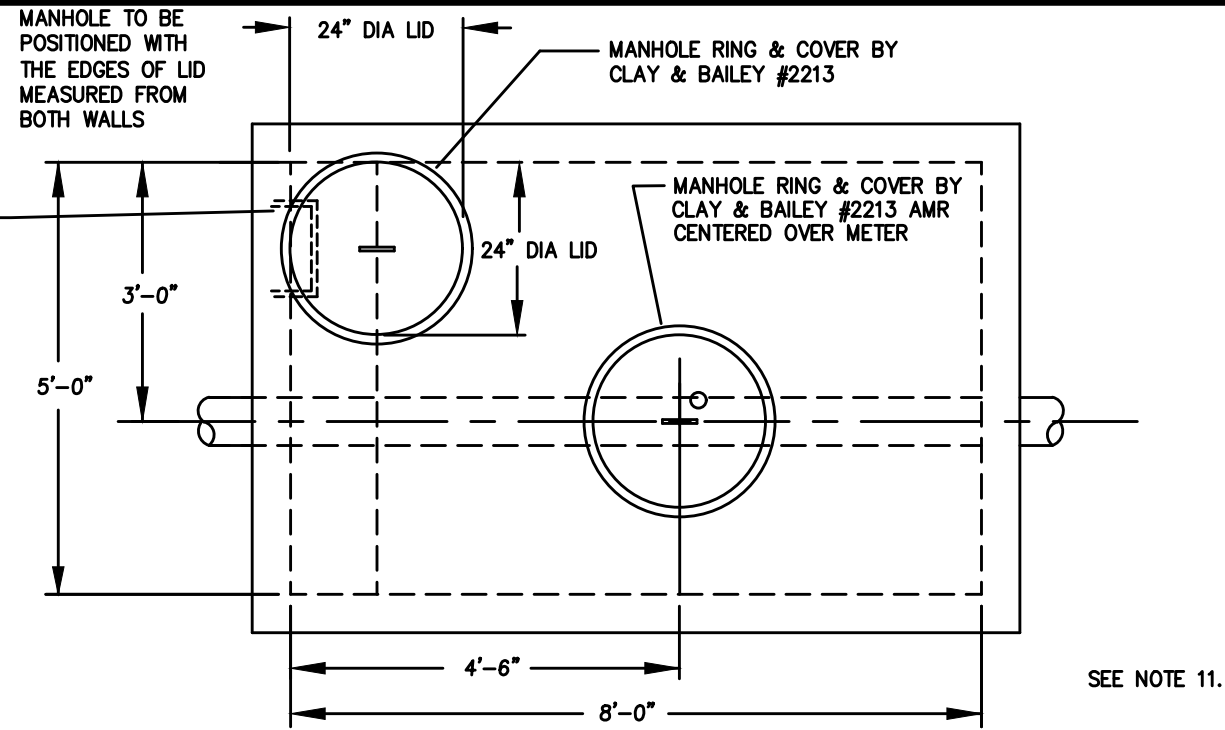
											Approx
3" METER LAYOUT DIMENSIONS	A	B	C	D	E	F	G	H	Total Laying Length	Vault	OD Pipe
Meter (and strainer) Lay Length	4x3 90	Upstream	Strainer	Meter	FxMJ SB911	15" Spool	4x3 90	Edge Vault To Risers	C/L Inlet to Outlet	Inside Length	to C/L
3" Compound Sensus	6.5	15	0	17	7.88	12	6.5	13.2	64.9	96	4.8
3" Compound Neptune	6.5	15	6	17	7.88	12	6.5	10.2	70.9	96	4.8
3" Compound Badger	6.5	15	7	17	7.88	12	6.5	9.7	71.9	96	4.8
3" Turbine Sensus	6.5	15	0	19	7.88	12	6.5	12.2	66.9	96	4.8
3" Turbine Neptune	6.5	15	6	12	7.88	12	6.5	12.7	65.9	96	4.8
3" Turbine Badger	6.5	15	7	12	7.88	12	6.5	12.2	66.9	96	4.8

											Approx
4" METER LAYOUT DIMENSIONS	A	B	C	D	E	F	G	Edge Vault	Total Laying Length	Vault	OD Pipe
Meter (and strainer) Lay Length	4" 90	Upstream	Strainer	Meter	FxMJ SB911	15" Spool	6"90	To Risers	C/L Inlet to Outlet	Inside Length	to C/L
4" Compound Sensus	6.5	20	0	20	7.88	12	6.5	9.2	72.9	96	4.8
4" Compound Neptune	6.5	20	7.5	20	7.88	12	6.5	5.4	80.4	96	4.8
4" Compound Badger	6.5	20	9	20	7.88	12	6.5	4.7	81.9	96	4.8
4" Turbine Sensus	6.5	20	0	23	7.88	12	6.5	7.7	75.9	96	4.8
4" Turbine Neptune	6.5	20	7.5	14	7.88	12	6.5	8.4	74.4	96	4.8
4" Turbine Badger	6.5	20	9	14	7.88	12	6.5	7.7	75.9	96	4.8



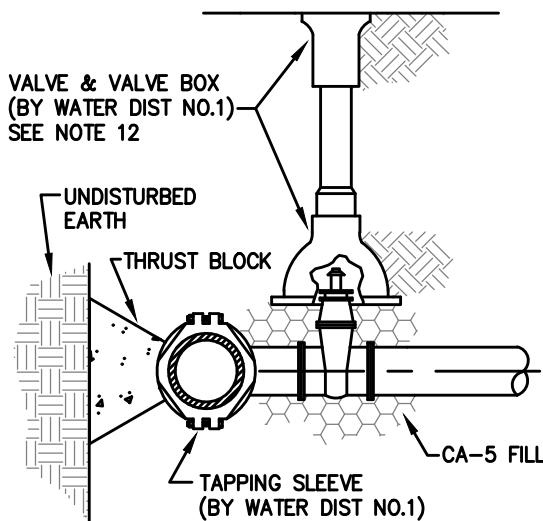
VALVE BOX GREATER THAN 60" DEPTH

CENTER STEPS UNDER MANHOLE (INLET SIDE OF VAULT)



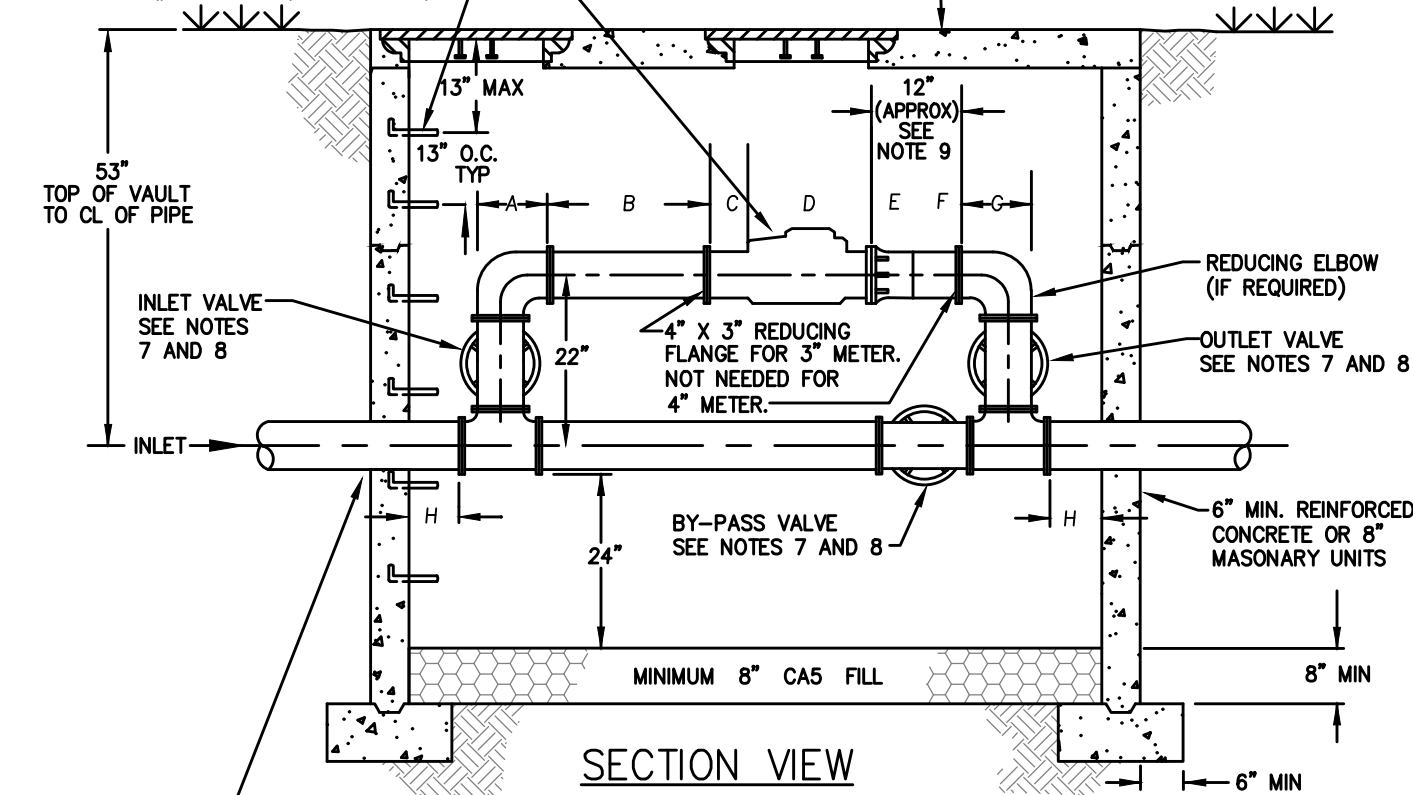
PLAN VIEW

SEE NOTE 11.



VALVE BOX

POLYPROPYLENE STEPS BY M.A. INDUSTRIES NO. M-0001 #PS-2-PF (SEE NOTE 10)



SECTION VIEW

FLEX COUPLING JOINT MATERIAL AROUND PIPE AT INLET & OUTLET POINTS IN WALL. 2 PIECES REQUIRED TO FIT AROUND PIPE. (INDIANA SEAL FLEX COUPLING #156-44C)

NOTES:

- VAULT WILL BE LOCATED IN NON-TRAFFIC, NON-PEDESTRIAN AREA. VAULT LID AT GRADE AND FULLY EXPOSED PRE APPROVAL OF THE VAULT LOCATION WILL BE OBTAINED FROM THE SITE INSPECTION BY WATER DIST. NO. 1 PERSONNEL.
- THE SERVICE LINE FROM MAIN TO PROPERTY LINE SHALL BE 6" CML DUCTILE IRON PIPE PC350 WRAPPED WITH 8 MIL POLYWRAP, OR DR18 C900 OR 4710 DR11 C906 HDPE (IF USING LARGER THAN 4" PIPE FOR A 4" METER, THEN REDUCER ELBOWS ARE REQUIRED AS SHOWN, AND PROPER SIZE OF METER VAULT TO BE USED FOR SIZE OF PIPE).
- STRUCTURAL MEMBERS OF THE VAULT SHALL BE DESIGN BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER AND PRE APPROVED BY DISTRIBUTION ENGINEERING
- PRECAST CONCRETE VAULT AND LID DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IS ACCEPTABLE. SHOP DRAWINGS OF THE VAULT SHALL BE SUBMITTED FOR APPROVAL TO WATER DIST. NO.1 DISTRIBUTION SERVICES DEPT.
- ALL MATERIAL FOR THE INSTALLATION WILL BE PROVIDED BY THE APPLICANT EXCEPT MATERIAL NOTED ON DRAWING BY (WATER DIST. NO.1), PAID FOR BY THE APPLICANT
- ALL PIPE AND FITTINGS SHALL BE CEMENT MORTAR LINED, FLANGED, DUCTILE IRON PIPE.
- VALVES INSIDE VAULT SHALL BE MUELLER 2360 SERIES, AMERICAN FLOW CONTROL 2500 SERIES, AMERICAN AVK 65 SERIES, EAST JORDAN FLOWMASTER SERIES, OR CLOW 2638 SERIES, OPEN LEFT. CANNOT USE RISING STEM VALVES.
- BY PASS VALVE, METER INLET VALVE, AND OUTLET VALVE TO BE ROTATED 90° TOWARD MANHOLE SIDE OF VAULT.
- FLANGED COUPLING ADAPTOR AT METER OUTLET FLANGE SUPPLIED BY WATER DIST. NO.1 (FLANGE IS APPROX. 5" IN LENGTH. A 12" SPOOL PIECE CUT TO SIZE AS REQUIRED TO CONNECT FROM FLANGE COUPLING ADAPTOR TO ELBOW)
- STEPS SHALL BE ON FLOW INLET END OF VAULT. (5 STEPS REQUIRED) POLYPROPYLENE STEPS SHALL BE CAST IN PLACE OR GROUTED IN PLACE IN PRE-DRILLED HOLES, NOT DRIVEN IN PLACE.
- IF METER VAULT CANNOT BE PLACED AT PROPERTY LINE, WITHIN AN EASEMENT OR AT A MAXIMUM DISTANCE OF 15' FROM THE MAIN, THEN A SECOND VALVE SHALL BE REQUIRED BETWEEN TAP AND METER VAULT.
- (THE MATERIAL ORIGINALLY SUPPLIED IS FOR A MAIN WITH A DEPTH BETWEEN 42"-60"). IF THE MAIN IS MORE THAN 60" DEEP, THEN A VALVE BOX ALTERNATIVE WILL BE NEEDED BY FOLLOWING THE STEPS LISTED BELOW:
  - RETURN LID, LONG TOP AND SHORT BOTTOM OF THE STANDARD VALVE BOX ISSUED, TO WATER DIST. MATERIAL MANAGEMENT DEPARTMENT FOR EXCHANGE.
  - MATERIAL MANAGEMENT DEPARTMENT WILL ISSUE ALTERNATIVE VALVE BOX MATERIALS (58-A VALVE BOX EXTENSION AND CLAY & BAILEY #2194 LID) USED WITH A PVC RISER PIPE. (COST DIFFERENCE MUST BE PAID AT TIME OF EXCHANGE)
  - RISER PIPE FOR VALVE BOX TO BE 6" CLASS 200 PVC PIPE CUT TO FIT FINAL GRADE. (RISER PIPE SUPPLIED BY CONTRACTOR)
- APPLICANT WILL EXCAVATE TAP HOLE ACCORDING TO OSHA REGULATION 29 C.F.R. XVII PART 1926 AS AMENDED P-EXCAVATION
- NO OTHER EQUIPMENT OF ANY DESCRIPTION SHALL BE INSTALLED OR STORED IN VAULT.
- SUBJECT TO REVISION WITHOUT NOTICE.

IMPORTANT!  
SEE DIMENSION TABLE ON PREVIOUS PAGE

MANAGER OF DISTRIBUTION ENGINEERING	
INITIALS:	DATE:
MANAGER OF DISTRIBUTION WATER QUALITY	
INITIALS:	DATE:
MANAGER OF CONSTRUCTION MAINTENANCE VALVING & SERVICE	
INITIALS:	DATE:
DIRECTOR OF DISTRIBUTION ENGINEERING	
INITIALS:	DATE:

**WaterOne**

Water District No.1 of Johnson County

**3" & 4" METER SERVICE CONNECTION  
STANDARD INSTALLATION**

DRAWN BY: WRY - updated-  
2-20-2007 - cwc  
DATE: 08-10-2003

DWG NO.  
**ES-1828 (4C, 4T)**