

**COMMERCIAL METER VAULT DETAIL  
FOR METERS 3" AND LARGER  
GOFORTH S.U.D.**

HAYS, CALDWELL & TRAVIS COUNTIES, TEXAS

**Southwest Engineers, Inc.**

Civil - Environmental - Planning  
Gonzales Austin

www.swengineers.com  
TBPE NO. F-1909



## NOTES FOR COMMERCIAL METERS 3" AND LARGER

1. All piping from mainline tap or tee through mainline RPZ, including bypass piping, shall be ductile iron. (If bypass piping is less than 3", copper or brass shall be used.)
2. Vault, pipe and meter size shall be as determined by Owner; approval by Goforth SUD.
3. Meter vault must be behind curb and/or sidewalk and out of vehicular traffic.
4. Mainline and bypass valves shall be resilient wedge type. Valves 12" and larger shall be butterfly type. All valves within vault shall have handwheels.
5. A mechanical joint gate valve upstream of the vault (Goforth's valve) and downstream of the vault (Owner's valve) is required. (A gate valve downstream of the RPZ is recommended, but not required.)
6. Goforth's maintenance/ownership ends at the downstream end of the meter.
7. The meter is provided and installed by Goforth.
8. All fittings inside the vault shall be flanged.
9. All bypass piping shall be located inside the vault.
10. The vault shall include a double-leaf aluminum access hatch with locking device and equipped with safety grating for fall protection. Typical hatch opening shall be 36" x 48" for smaller meter applications and 48" x 72" for larger meter applications. A ladder shall be provided and is to remain in the vault for access.
11. All notches where piping goes through vault shall be filled with mortar.
12. The top of the meter vault shall be at an elevation such that the surrounding ground slopes away from the vault.
13. There shall be a minimum of 18" of 3/4" to 1" rock (ASTM C33, size 57) at the bottom of the vault and a 12" minimum clearance between the piping and rock bed. (Vault will not have a concrete bottom.)
14. A sump pump shall be installed within the vault to pump water out should a drain not be possible or the vault not drain properly. The pump (i.e. Goulds 3871 - EP0411A, or approved equal), equipped with a float and the capability of pumping at least 25 gpm, shall be installed within a 12" PVC pipe with holes drilled into it. This pipe shall be embedded in the rock bed at the bottom of the vault. A 1 1/2" PVC pipe shall leave the the pump vertically and protrude out the side of the vault just below the lid and drain away from the vault. The outlet of the PVC pipe shall be screened with fine mesh to prevent blockage. The pump shall either be hardwired into the electrical system or a solar panel can be installed. The electrical box for the pump must be waterproof if installed inside the vault (and it should be installed near the top of the wall, away from the vault piping). If a solar panel is used, a backup battery pack must be provided. The 1 1/2" discharge piping and wiring shall be fastened to the sidewall of the vault.
15. A drain can be used ONLY when the outlet can be tied into a storm sewer or drainage channel. Both ends of the drain must be screened with a fine mesh.
16. Refer to Goforth's Backflow Prevention Policy for information downstream of the meter vault.



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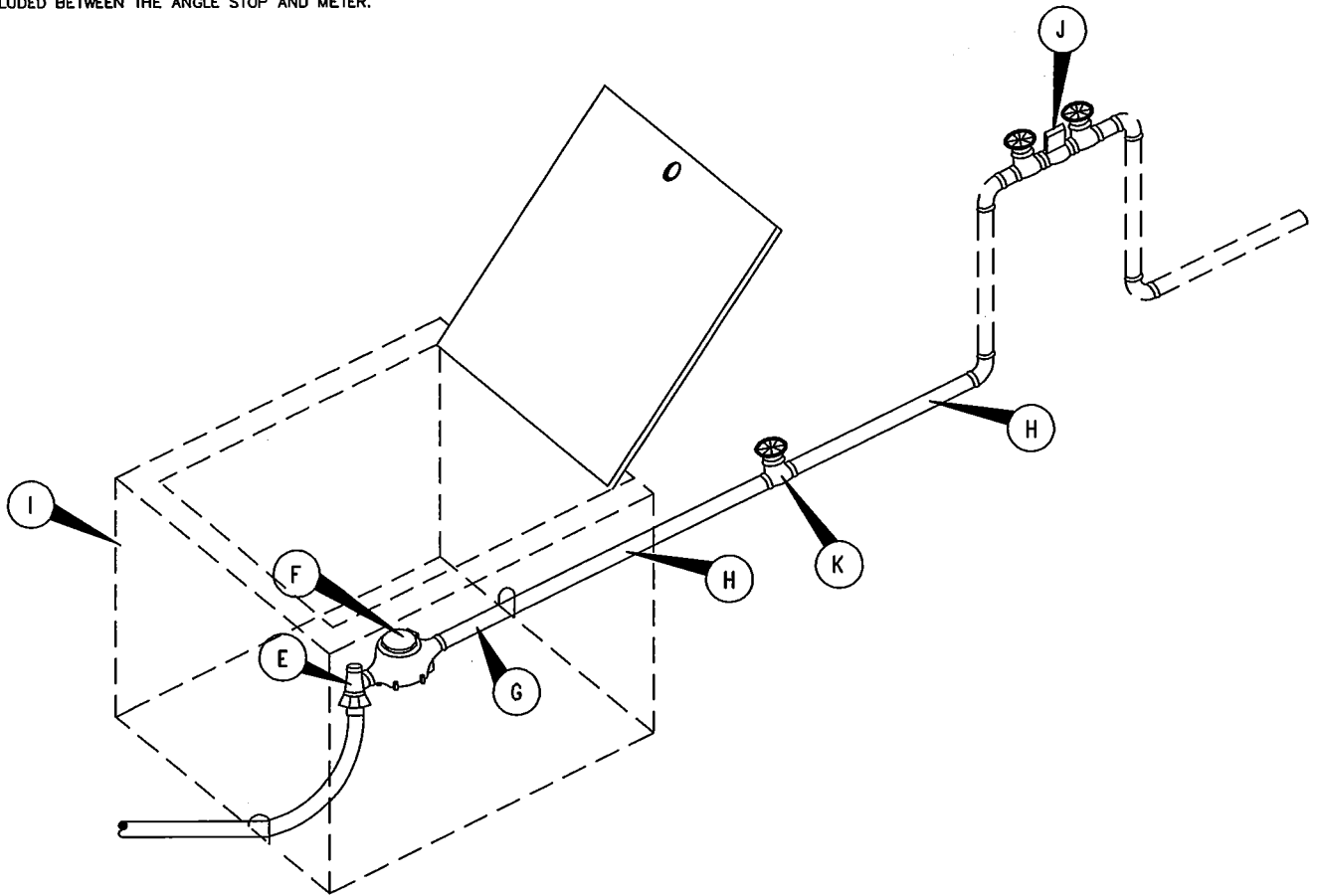
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**MASTER METER VAULT NOTES**  
**GOFORTH S.U.D.**

**HAYS, CALDWELL & TRAVIS COUNTIES, TEXAS**

**NOTES**

- 1. PER GOFORTH'S BACKFLOW PREVENTION POLICY, ALL COMMERCIAL AND IRRIGATION SERVICES WILL HAVE A RPZ BACKFLOW DEVICE INSTALLED ON THE CUSTOMERS SIDE OF THE METER AND SHALL BE TESTED ANNUALLY.
- 2. ON 2" COMPOUND METERS, A STRAINER SHALL BE INCLUDED BETWEEN THE ANGLE STOP AND METER.



**MATERIAL LIST**

- E. COMPRESSION 90 (ANGLE) STOP  
1"-FORD BA43-444W  
1-1/2"-FORD FV43-666W FLANGED  
2"-FORD FV63-777W-IDR7 FLANGED
- F. WATER METER  
(WILL BE PROVIDED BY GOFORTH)
- G. BRASS NIPPLE  
(WILL BE PROVIDED BY GOFORTH)
- H. CUSTOMER SERVICE LINE MEETING  
GOFORTH'S BACKFLOW PREVENTION  
POLICY AND PLUMBING CODE  
REQUIREMENTS  
(WILL BE PROVIDED BY CUSTOMER).
- I. COMMERCIAL PLASTIC METER BOX W/ LID  
E.J.I.W. - Old Castle Precast MS BCF-1730-XL
- J. RPZ BACKFLOW DEVICE  
(WILL BE PROVIDED BY CUSTOMER AND  
INSTALLED PER GOFORTH'S BACKFLOW  
PREVENTION POLICY AND WILL BE TESTED  
ANNUALLY)
- K. BALL VALVE (WILL BE PROVIDED BY  
CUSTOMER)

**1" - 2" COMMERCIAL  
METER SERVICE DETAIL**

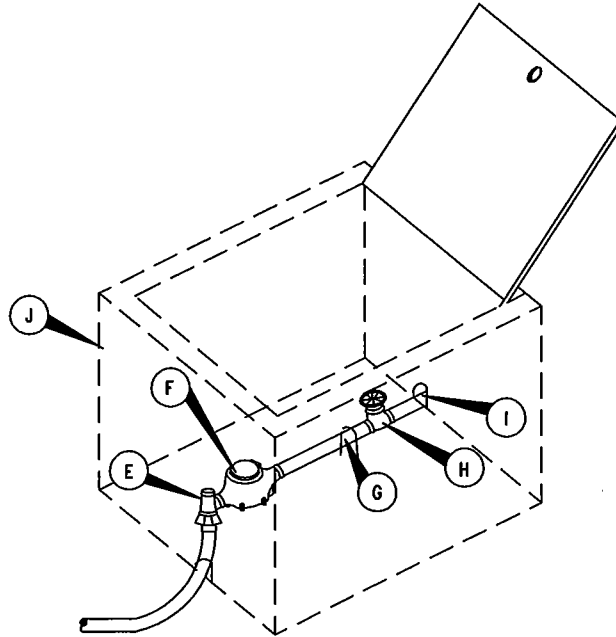
SCALE : NONE

REV. DATE : 8/10

**GOFORTH S.U.D.**  
HAYS, CALDWELL & TRAVIS COUNTIES,  
TEXAS

## MATERIAL LIST

- E. 5/8"x3/4" FORD COMPRESSION 90 (ANGLE) STOP  
KV43-332W-G FOR SINGLE
- F. 5/8"x3/4" METER (WILL BE PROVIDED BY GOFORTH).
- G. DUAL CHECK VALVE JONES J5930 WITH SWIVEL  
COUPLING NUT (WILL BE PROVIDED BY GOFORTH).
- H. 3/4" FORD BALL VALVE CURB STOP, NON-RISING STEM,  
MALE I.P.T. BY FEMALE I.P.T. B81-333-W ( WILL BE  
PROVIDED BY GOFORTH ).
- I. CUSTOMER SERVICE LINE MEETING PLUMBING CODE  
REQUIREMENTS (WILL BE PROVIDED BY CUSTOMER ).
- J. PLASTIC METER BOX W/ LID - D.F.W. - ALLIANCE 1200 SERIES.



SINGLE SERVICE

STANDARD RESIDENTIAL  
METER SERVICE DETAIL

SCALE : NONE

REV. DATE : 8/10

**GOFORTH S.U.D.**  
HAYS, CALDWELL & TRAVIS COUNTIES,  
TEXAS

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