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| REVISIONS | | |
|---|---------|---|
| K. LOOK | 5/23/07 | 0 |
| NEW ISSUE | | |
| P.L.S. | 5/23/07 | |
| G. LUDWIG | 3/31/11 | 1 |
| ADDED AAT-57 175# TO TABLE 2. REVISED ITEM 4 DESCRIPTION. | | |
| D.R.J. | 3/30/11 | |
| G. LUDWIG | 5/22/12 | 2 |
| ADDED NOTE 20 | | |
| H. D. | 4-23-12 | |

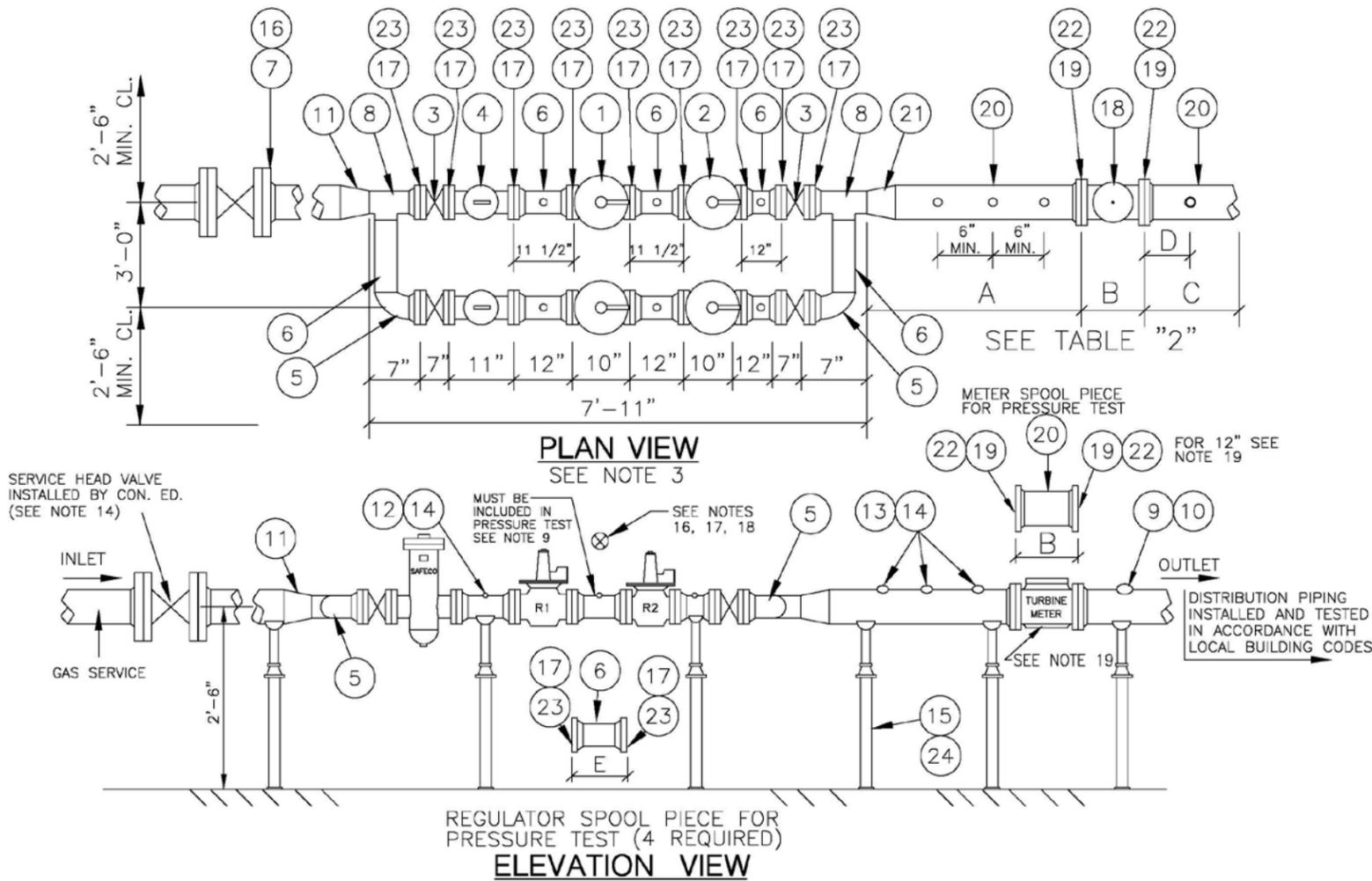


TABLE 1 - DIMENSION "V", "M", "B" (SEE NOTES 6 & 7)

| | | |
|--------------------------------|---|--|
| SIZE OF HEAD OF SERVICE VALVE | V | |
| SIZE OF METER FLANGE/PIPING | M | |
| SIZE OF METER FLANGE TO FLANGE | B | |

TABLE 2 - DIMENSION "A", "B", "C", "D", "M"

| METER | AAT-18 175# 4GTS 175# | AAT-35 175# AAT-57 175# 6GTS 175# | AAT-60 175# 8GTS 175# |
|-------|--------------------------|---|--------------------------|
| M | 4" | 6" | 8" |
| A | 40" | 60" | 80" |
| B | 14" | 16" | 21" |
| C | 20" | 30" | 40" |
| D | 6" | 12" | 18" |

TABLE 3 - REGULATOR CONFIGURATIONS

| SPECIFIED REGULATORS | APPLICABLE PRESSURE SYSTEM | R1 | R2 |
|----------------------|----------------------------|-------------|-------------|
| 2"-133HP | MEDIUM/HIGH | 2"-133HP | 2"-133HP |
| 2"-99 / 2"-133HP | MEDIUM/HIGH | 2"-133HP | 2"-99 |
| 2"-133L | MEDIUM | 2"-133L | 2"-133L |
| 2" MOONEY FLOWGRID | HIGH | 2" FLOWGRID | 2" FLOWGRID |

BILL OF MATERIALS

| ITEM | DESCRIPTION | SPEC. OR STD. | QUANTITY |
|------|--|-----------------------|-----------|
| 1 | 2" REGULATOR (R1), 150 LB. SUPPLIED BY CON ED (TABLE 3) | | 4 |
| 2 | 2" REGULATOR (R2), 150 LB. SUPPLIED BY CON ED (TABLE 3) | | 4 |
| 3 | 2" 150 LB. BALL VALVE (BALL-O-MAX, BALON-NO PLUG VALVES) | | 4 |
| 4 | 2" GAS FILTER, SUPPLIED BY CON ED | | 2 |
| 5 | 2" SHORT RADIUS 90° ELBOW, SCH. 40 | ANSI B16.28 | 2 |
| 6 | 2" STEEL PIPE, SCH. 40 | ASTM - A106 GRADE "B" | AS REQ'D. |
| 7 | V" STEEL FLANGE, 150 LB., FLAT OR RAISED FACE (TO MATCH VALVE FLANGE) (SEE NOTE 6) | ANSI B16.5 | 1 |
| 8 | 2" x 2" x 2" STEEL TEE, SCH. 40 | ANSI B16.9 | 2 |
| 9 | M" x 1" THREDOLET (SEE NOTE 5) | ANSI B16.9 | 1 |
| 10 | 1" STEEL SQUARE HEAD PLUG | ANSI B16.14 | 1 |
| 11 | V" x 2" CONCENTRIC STD. STEEL REDUCER, IF REQUIRED | ANSI B16.9 | 1 |
| 12 | 2" x 1/2" THREDOLET | | 6 |
| 13 | M" x 1/2" THREDOLET | | 3 |
| 14 | 1/2" STEEL SQUARE HEAD PLUG | ANSI B16.14 | 9 |
| 15 | PIPE SUPPORT | EO-7043 | AS REQ'D. |
| 16 | FLANGE INSULATING KIT (TO MATCH VALVE FLANGE) | | 1 |
| 17 | 2" STEEL FLANGE, RAISED FACE, 150 LB. | | 24 |
| 18 | M" TURBINE METER 4", 6", OR 8" SUPPLIED BY CON ED (TABLE 2) | | 1 |
| 19 | M" STEEL FLANGE, FLAT FACE 150 LB. | ANSI B16.5 | 4 |
| 20 | M" STEEL PIPE, SCH. 40 | ASTM - A106 GRADE "B" | AS REQ'D. |
| 21 | M" x 2" STEEL REDUCER | ANSI B16.9 | 1 |
| 22 | M" x 1/16" 150 LB. FULL FACE GASKET (SEE NOTE 4) | | 2 |
| 23 | 2" x 1/16" 150 LB. RING GASKET (SEE NOTE 4) | | 26 |
| 24 | BAKELITE, NEOPRENE, OR EQUIV. INSULATING MAT'L (SEE NOTE 8) | | AS REQ'D. |

NOTES:

- 1 - ALL MATERIAL SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER EXCEPT FOR THE FILTERS AND REGULATORS WHICH ARE FURNISHED BY THE COMPANY AND INSTALLED BY THE CUSTOMER, AND THE METER WHICH IS FURNISHED AND INSTALLED BY THE COMPANY.
- 2 - DO NOT INCLUDE REGULATORS OR METER IN PRESSURE TEST. USE SPOOL PIECES SHOWN ON DRAWING.
- 3 - IF THE INSTALLATION CANNOT BE MADE AS SHOWN, CONTACT GAS MEASUREMENT.
- 4 - ALL GASKET MATERIAL SHALL BE GARLOCK 3000 (1/16" THICK).
- 5 - ALL THREDOLETS MUST BE FULL BORE, FILLET WELDED AND PLUGGED. DO NOT WELD WITH METERS INSTALLED.
- 6 - THE LETTER V REPRESENTS THE SERVICE HEAD VALVE FLANGE SIZE, THE LETTER M REPRESENTS THE METER TO FLANGE SIZE, AND THE LETTER B REPRESENTS THE METER FLANGE TO FLANGE DIMENSION. SEE TABLE 1 FOR EXACT SIZES. IF TABLE 1 IS NOT COMPLETED, CONTACT THE ASSIGNED ENERGY SERVICE REPRESENTATIVE.
- 7 - TABLE 1 MUST BE COMPLETED BY ASSIGNED ENERGY SERVICE REPRESENTATIVE BEFORE PROVIDING TO CONTRACTOR.
- 8 - INSULATING MATERIAL MUST BE INSTALLED BETWEEN THE PIPE SUPPORTS AND THE PIPE, SO THAT THE PIPE NEVER MAKES CONTACT WITH THE PIPE SUPPORT.
- 9 - A PRESSURE TEST MUST BE CONDUCTED AT 200 PSIG.
- 10 - ALL WELDED PIPING MUST BE BUTT WELDED. ALL BUTT WELDS SHALL BE RADIOGRAPHED.
- 11 - PIPE SUPPORT OR ANY BRACING SHALL NOT BE WELDED TO METER/DISTRIBUTION PIPING.
- 12 - IF A DOMESTIC REGULATOR METER SET IS REQUIRED, IT SHALL BE INSTALLED IMMEDIATELY AFTER SERVICE HEAD VALVE WITH AN ISOLATION VALVE.
- 13 - REFER TO "REQUIREMENTS FOR GAS SERVICE INSTALLATION" BOOK FOR FURTHER INFORMATION.
- 14 - FOR WESTCHESTER, CUSTOMER'S CONTRACTOR SHALL INSTALL SERVICE HEAD VALVE WHERE APPLICABLE.
- 15 - ALL OUTDOOR PIPING SHALL BE PAINTED WITH SUITABLE NON-LEAD OUTDOOR PAINT FOR USE ON METAL SURFACES.
- 16 - REFER TO EO-17118 - "REGULATOR VENT INSTALLATION" FOR VENT PIPE INSTALLATION, CAPS AND TERMINUS LOCATION REQUIREMENTS. SINCE THESE REGULATORS DO NOT UTILIZE FULL CAPACITY RELIEF, VENT PIPING SHALL BE 2" IN DIAMETER.
- 17 - EACH REGULATOR SHALL BE SEPARATELY VENTED.
- 18 - FOR INSIDE REGULATOR INSTALLATIONS, THE CUSTOMER SHALL INSTALL 2" VENT PIPE FROM OUTDOOR VENT CAP ALONG INSIDE WALL TO A POINT WITHIN 2' OF EACH REGULATOR RUN. COMPANY TO MAKE FINAL CONNECTION TO VENT LINE.
- 19 - FOR ANY DOWNSTREAM PIPING BELOW GRADE REFER TO SPEC G-8205.
- 20 - OUTDOOR METER SETS SHALL BE PROTECTED BY A 6 FOOT HIGH LOCKABLE FENCE, CHAIN-LINK OR EQUIVALENT. THE FENCE SHALL BE EQUIPPED WITH A DOUBLE HASP LOCK TO ALLOW ACCESS BY CON-EDISON AND THE CUSTOMER.

INSTALLATION OF PARALLEL 2" REGULATORS WITH TURBINE METER INDOORS AND OUTDOORS 10,000 CFH TO 60,000 CFH

CONSOLIDATED EDISON COMPANY OF N.Y., INC.
GAS ENGINEERING DEPT.

DATE 5/16/07
LAST REV. 5/22/12

DWG. NO. **361693**

REV. **2**