

MATERIAL LIST (ALL MATERIALS TO BE APPROVED BY EMWD)

| ITEM | QTY | DESCRIPTION |
|------|------|---|
| ① | 1 EA | FLANGED PRESSURE REGULATOR W/(4) FOUR-PORT BONNET [△] |
| ② | 2 EA | F X VICTAULIC SPOOL (CUT TO FIT) |
| ③ | 1 EA | VICTAULIC COUPLING |
| ④ | 2 EA | F X F 90° ELBOW (MIN 4" I.D.) W/4" X 2" COMPANION FLANGE |
| ⑤ | 3 EA | F X F BUTTERFLY VALVE |
| ⑥ | 2 EA | FLANGED TEE, STEEL OR D.I. (RUN SIZE SAME AS MAIN REGULATOR NO. 1) STEEL OR D.I. COMPANION FLANGE (SIZE AS REQUIRED) |
| ⑦ | 4 EA | STAINLESS STEEL BALL VALVE W/CLOSE NIPPLE (SIZE AS REQUIRED) |
| ⑧ | 2 EA | COPPER OR BRASS PIPE (SIZE AS REQUIRED) |
| ⑨ | 4 EA | 45° COPPER OR BRASS ELBOW W/CLOSE NIPPLE (SIZE AS REQUIRED) |
| ⑩ | 1 EA | 4" THREADED GLOBE DIRECT-ACTING PRESSURE REGULATOR W/UNION |
| ⑪ | 2 EA | F X F CML&P STEEL OR D.I. PIPE (MIN 8" I.D.) [△] |
| ⑫ | 2 EA | () X 8" FLGD REDUCER, IF REQUIRED |
| ⑬ | 2 EA | 8" F X F CML&P STEEL OR D.I. PIPE SPOOL [△] |
| ⑭ | ... | #4 REBAR GR 60 12" O.C. EA. WAY |
| ⑮ | ... | PREFORMED EXPANSION PAPER PER ASTM 1751 |
| ⑯ | 1 EA | CONCRETE SLAB (LENGTH= 12" LARGER AND WIDTH= 12" LARGER THAN ENCLOSURE) [△] |
| ⑰ | 1 EA | 2" THREADED GLOBE DIRECT-ACTING PRESSURE REGULATOR W/UNION |
| ⑱ | 2 EA | THREADED X F CML&P STEEL OR D.I. PIPE SPOOL (SIZED AS REQUIRED NO. 10) |
| ⑲ | 2 EA | 4" X 4" FLGD SPOOL (SIZE AS REQUIRED) [△] |
| ⑳ | 2 EA | TWO PIECE SPLIT STEEL ENCLOSURE [△] |
| ㉑ | 2 EA | STEEL OR D.I. COMPANION FLANGE (SIZE AS REQUIRED) [△] |

REGULATOR TABLE

| MAIN REGULATOR NO. 1 (SIZE) | BYPASS REGULATOR NO. 10 (SIZE) |
|--------------------------------|--------------------------------|
| 8" | 4" Direct-Acting Reg. |
| BYPASS REGULATOR NO. 17 (SIZE) | 2" Direct-Acting Reg. |

PRESSURE REGULATOR

| SIZE | RECOMMENDED FLOW (HEAD LOSS VARIES) |
|------|-------------------------------------|
| 2" | 15 GPM - 210 GPM |
| 4" | 50 GPM - 800 GPM |
| 6" | 115 GPM - 1800 GPM |
| 8" | 200 GPM - 3100 GPM |

| REVISIONS | | | | APPROVALS | | |
|-----------|---------|---------|--|-----------|---------|---------|
| NO. | DATE | INITIAL | DESCRIPTION | APP'D | DATE | DATE |
| ② | 3/10/22 | GS | UPDATED TITLE BLOCK, NOTES CAGE DETAIL, REGULATOR CONFIG. ADDED SECOND SHEET FOR PLACEMENT DETAILS AND NOTES | AGA | 3/10/22 | 7/14/05 |
| ① | 8/5/20 | GS | UPDATED TITLE BLOCK, FONT AND LOGO | AGA | 8/5/20 | 7/15/05 |

| DESIGN | INITIAL | DATE |
|--------------|---------|---------|
| DESIGN | CM | 7/14/05 |
| CONSTRUCTION | | |
| INSPECTION | CD | 7/14/05 |
| OPERATIONS | KG | 7/15/05 |
| SUBMITTED | VJB | 7/18/05 |

| | |
|---|--------------|
| REFERENCES: | SCALE: NONE |
| FILE I.D.: \kawaii\eng\std dwgs\B-933.dgn | DRAWN BY: CM |



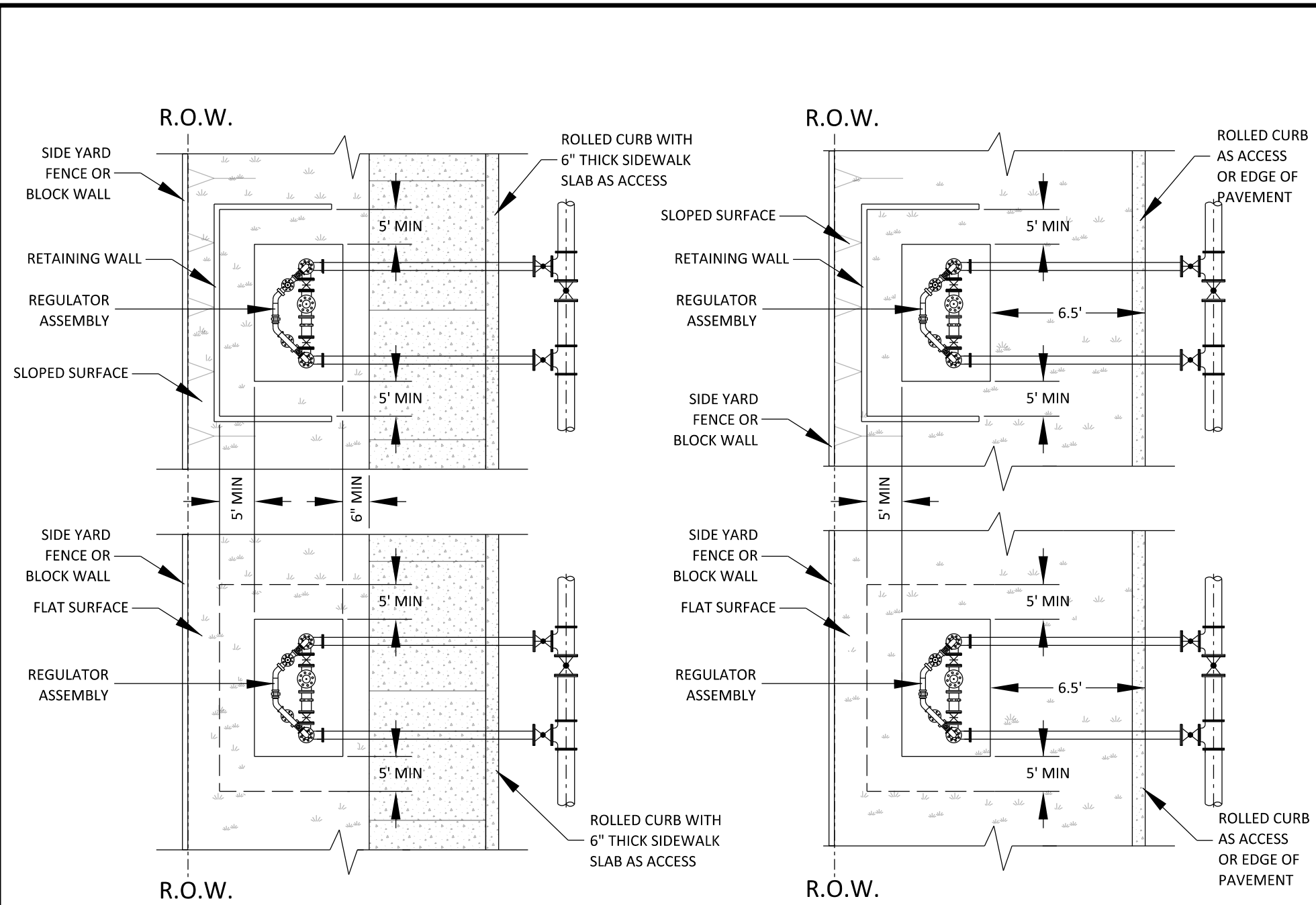
**EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING**

**8" PRESSURE REGULATOR
ABOVE GROUND INSTALLATION**

SHEET
1 of 2

APPROVED Charlie Bachmann 7/18/05
ASSISTANT GENERAL MANAGER DATE

B-933

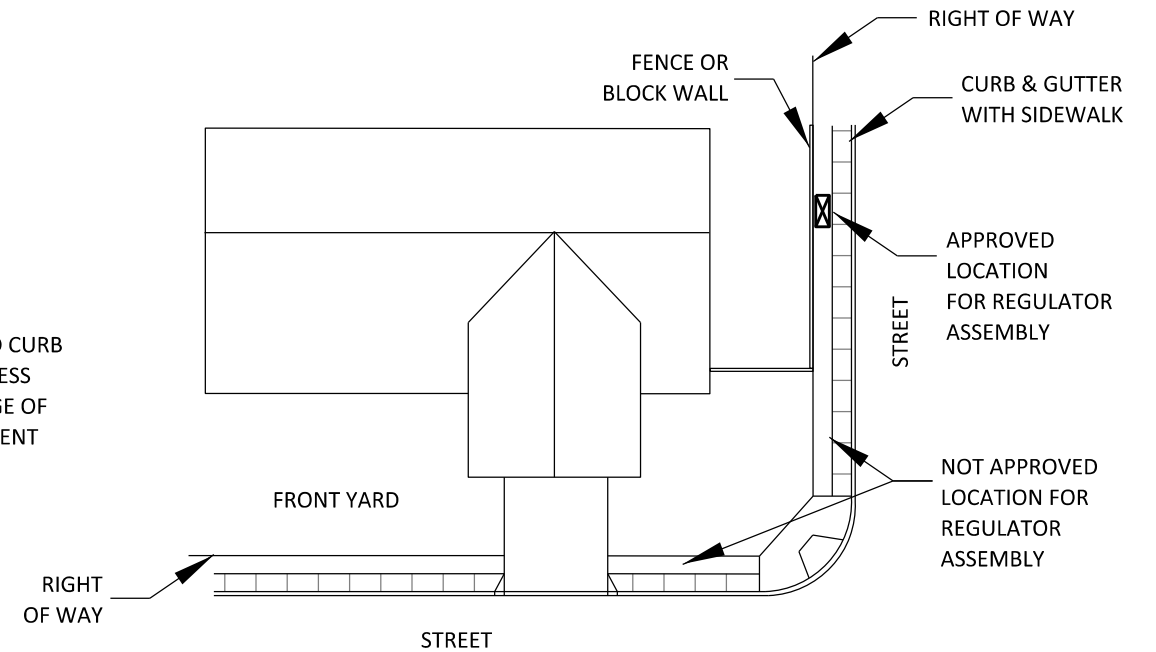


REGULATOR ASSEMBLY INSTALLATION DETAIL

NOT TO SCALE

NOTES:

1. PRESSURE REGULATOR SHALL BE MIN. 12" ABOVE CONCRETE PAD.
2. BELOW GROUND INSTALLATION OF PRESS. REG. TO BE ALLOWED ONLY WHEN ABOVE GROUND ASSEMBLY IS NOT PERMITTED BY THE GOVERNING AGENCY.
3. IN AREAS PRONE TO FREEZING, BYPASS PIPING SHALL BE WRAPPED WITH INSULATING TAPE.
4. ALL CML&C PIPE TO MEET EMWD SPECIFICATION 15061.
5. TEES OR CONNECTIONS SHALL NOT BE ALLOWED BETWEEN EMWD RSGV AND PRESSURE REGULATOR.
6. ENCLOSURE MANUFACTURERS, OR APPROVED EQUAL:
 - A. BACKFLOW PREVENTION DEVICE ENCLOSURE, PHOENIX, AZ.
 - B. LE MEUR WELDING & MANUFACTURING, WILMINGTON, CA.
7. EMWD O&M MAY REQUIRE A VERTICAL FLOW METER ON INLET PIPING. INSTALL AN EQUAL LENGTH SPOOL ON OUTLET PIPING.
8. PRESSURE REGULATOR ASSEMBLY SHALL NOT EXCEED 5' IN HEIGHT.
9. INSTALLATION LOCATION MAY REQUIRE BOLLARDS. BOLLARDS TO BE INSTALLED AT THE DIRECTION OF THE EMWD ENGINEER AND/OR EMWD INSPECTOR PER B-665.
10. MINIMUM 8" CLEARANCE FROM THE TOP OF REGULATOR TO TOP OF ENCLOSURE.
11. PRESSURE REGULATOR ASSEMBLY INSTALLATION NOT PERMITTED TO BE INSTALLED IN FRONT YARDS OR SIDE YARDS WHERE NO FENCE OR BLOCK WALLS EXIST.



| REVISIONS | | | | | | APPROVALS | | |
|-----------|---------|---------|---|-------|---------|--------------|---------|---------|
| NO. | DATE | INITIAL | DESCRIPTION | APP'D | DATE | | INITIAL | DATE |
| | | | | | | DESIGN | CM | 7/14/05 |
| | | | | | | CONSTRUCTION | | |
| | | | | | | INSPECTION | CD | 7/14/05 |
| △ | 3/10/22 | GS | UPDATED TITLE BLOCK, NOTES CAGE DETAIL, REGULATOR CONFIG. ADDED SECOND SHEET FOR PLACEMENT DETAILS AND NOTES | AGA | 3/10/22 | OPERATIONS | KG | 7/15/05 |
| | | | | | | SUBMITTED | VJB | 7/18/05 |

EASTERN MUNICIPAL WATER DISTRICT

RECOMMENDED _____

DIRECTOR OF ENGINEERING

DATE _____

EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING

**4" & 6" PRESSURE REGULATOR
ABOVE GROUND INSTALLATION**

SHEET
2 of 2

REFERENCES: SUPERCEDES B-368
FILE I.D.: \kauai\eng\std dwgs\B-932.dgn

SCALE: NONE
DRAWN BY: CM

APPROVED Charlie Bachmann 10/11/05
ASSISTANT GENERAL MANAGER DATE

B-933

