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<th>STD. NO.</th>
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<td>4&quot; PVC Blow-Off installation</td>
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<td>6&quot; Fire Hydrant Installation</td>
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<td>Reduced Pressure Backflow Prevention Device (3/4&quot; Thru 2&quot;)</td>
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<td>Reduced Pressure Backflow Prevention Device (4&quot; &amp; Larger)</td>
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<td>Standard Guard Post installation</td>
<td>W-16</td>
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</tbody>
</table>
NOTES:
1. ALL GALV. AND BRASS BURIED PIPE OR FITTINGS SHALL BE COATED WITH APPROVED WAX TAPE BEFORE BACKFILLING.
2. LOCATIONS OF AIR VAC AND AIR RELEASE ASSEMBLY SHALL BE PLACED PER STD. DWG. W-9.
3. ACCESS DOOR TO BE PAD LOCKED WITH DISTRICT KEYED, S.S. LOCK.
4. X=1" FOR 1" AIR VALVE, 2" FOR 2" AIR VALVE.

CITY OF COACHELLA

1" AND 2" AIR VAC & AIR RELEASE ASSEMBLY

STANDARD DRAWING NO. W-1

JUNE 2007
NOTES
1. REFER TO W-9 "APPURtenANCE LOCATIONS & NOTES" FOR LOCATION.
2. BLOW-OFFS SHALL BE EPOXY COATED CHROME YELLOW.
3. ALL JOINTS SHALL BE RESTRAINED.
4. ALL UNDERGROUND IRON & STEEL SHALL BE POLYETHYLENE ENCASED PER ANSI/AWWA C105.

CITY OF COACHELLA
4" OR 6" PVC OR GALVANIZED MALLEABLE IRON BLOW OFF ASSEMBLY INSTALLATION

STANDARD DRAWING NO. W-3
6" WET BARREL FIRE HYDRANT PER APPROVED MATERIAL LIST

6" BREAK-OFF SPOOL, 6 HOLE X 8 HOLE WITH MACHINED GROOVES

SIDEWALK

6" BREAK-OFF CHECK VALVE PER APPROVED MATERIAL LIST

HYDRANT RISER, 6" FLANGED DUCTILE IRON PIPE

CONCRETE THRUST BLOCK PER STD. DWG. W-11

6" FLG x MJ RWGV

DI FLG x MJ 90° BASE BEND WITH ANCHOR

6" PVC C-900 PIPE

SLOPE UP @ 1/4"/.1'

MJ x MJ x FLG DUCTILE IRON TEE (LINE SIZE X 6" BRANCH)

CONCRETE THRUST BLOCK PER STD. DWG. W13.1

BURIED VALVE PER STD. DWG. W-125

WATER MAIN

CITY OF COACHELLA

6" FIRE HYDRANT INSTALLATION

JUNE 2007

STANDARD DRAWING NO. W-4

APPROVED:

REVISION APPROVED DATE

RCE 24870 EXP. 12/31/07
MINIMUM TRENCH WIDTH = (PIPE O.D. W/O BELLS) + 16"

TEMPORARY TRENCH BOX OR SHORING WHERE REQUIRED BY SOIL CONDITIONS

MAX. SLOPE PER GEOTECHNICAL REPORT

METALLIC WARNING TAPE "WATER"

MAX. DEPTH OF TEMPORARY TRENCH BOX PER ASTM D2321 @ TOP OF PIPE AND OSHA REGULATIONS

IMPORTED GRANULAR MATERIAL SE 30 OR GREATER OR APPROVED NATIVE MATERIAL

OVER EXCAVATION OR UNSUITABLE PIPE BEDDING SHALL REQUIRE REPLACEMENT TO SUBGRADE WITH IMPORTED GRANULAR MATERIAL (SE30) OR APPROVED NATIVE MATERIAL

NOTE

1. EXCAVATE BELL HOLES AT EACH PIPE JOINT TO PERMIT PROPER ASSEMBLY AND INSPECTION OF THE ENTIRE JOINT.

CITY OF COACHELLA

PIECE BEDDING AND TRENCH BACKFILL FOR POTABLE WATER MAINS

STANDARD DRAWING NO.

W-5

JUNE 2007
NOTES
1. ALL INSTALLATIONS SHALL BE ABOVE GROUND.
2. ALL BACKFLOW PREVENTION DEVICES SHALL BE AS CLOSE TO THE WATER METER AS POSSIBLE. MAXIMUM DISTANCE TO BE 5 FEET.
3. THE BACKFLOW PREVENTION DEVICE SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.
4. NO CONNECTIONS SHALL BE MADE BETWEEN THE WATER METER AND THE BACKFLOW DEVICE.
5. APPROPRIATE TEST COCKS SHALL BE IN PLACE AT ALL TIMES.
6. CITY SHALL HAVE ACCESS TO BACKFLOW PREVENTION DEVICE AT ALL TIMES.
7. PIPING MATERIAL SHALL BE RED BRASS OR "L" HARD COPPER. PIPING INSTALLATION SHALL BE PER CURRENT UNIFORM PLUMBING CODE, WITH WAX TAPE WRAPPED JOINTS.
8. ALL EXPOSED PIPE, FITTINGS, AND VALVES TO BE EPOXY COATED.

CITY OF COACHELLA

REDUCED PRESSURE BACKFLOW PREVENTION DEVICE (3/4" THRU 2"

APPROVED:  JUNE 2007

STANDARD DRAWING NO. W-6
CITY OF COACHELLA

REDUCED PRESSURE BACKFLOW PREVENTION DEVICE (4" & LARGER)

NOTES:
1. ALL INSTALLATIONS SHALL BE ABOVE GROUND.
2. ALL BACKFLOW PREVENTION DEVICES SHALL SET AS CLOSE TO THE WATER METER AS POSSIBLE.
3. THE BACKFLOW PREVENTION DEVICE SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST.
4. NO CONNECTIONS SHALL BE MADE BETWEEN THE WATER METER AND THE BACKFLOW DEVICE.
5. APPROPRIATE TEST COCKS SHALL BE IN PLACE AT ALL TIMES.
6. CITY SHALL HAVE ACCESS TO BACKFLOW PREVENTION DEVICE AT ALL TIMES.
7. ALL EXPOSED PIPE, FITTINGS, SUPPORT STANDS, AND VALVES TO BE EPOXY COATED.
8. ALL PIPES AND FITTINGS SHALL BE RESTRAINED.
BLACK FEET.
In sidewalk, wrap box with 1/4" 3/4" meter box to be installed.

RELOCATED IN A DRIVEWAY.
2 meters may not be located or
than 4-0 from property line.
METER SHALL NOT BE LOCATED ON MORE.
WHERE NO SIDEWALK EXISTS.

NOTES

PER STD USG 6-6
TO REDUCE PRESSURE
BACKFLOW PREVENTION DEVICE

COVER TO FINISHED STREET GRADE AT
MIN. 36" MIN AT GAS MAIN CROSSING

1/16" DEEP FACE OF CURB NOT LESS THAN 2" LETTER "W" STAMPED ON CHISELED IN

WATER MAIN
SERVICE CLAMP
STOP BRONZE
2" WIDE DOUBLE

PEA GRAVEL
90 COPPER ELBOW
BRONZE ELBOW

WATER METER
CITY APPROVED

WATER SERVICE ANGLE
CITY APPROVED

GATE VALVE
BRONZE

SIDEWALK
CURB

CUSTOMER RESPONSIBILITY

END OF CITY RESPONSIBILITY

PER APPOVED MATERIALS LIST
NOTES
1. WHERE NO SIDEWALK EXISTS, THE METER SHALL BE LOCATED NO MORE
   THAN 4'-0" FROM PROPERTY LINE.
2. METERS MAY NOT BE LOCATED OR RELOCATED IN A DRIVEWAY.
3. IF METER BOX IS TO BE INSTALLED IN SIDEWALK, WRAP BOX WITH 1/4"
   BLACK FELT.

CITY OF COACHELLA

COMPACT SERVICE
METER BOX
4" AND LARGER

STANDARD DRAWING NO. W-9
JUNE 2007
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>SIZE AND DESCRIPTION</th>
<th>MATERIAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4&quot;, 6&quot; OR 8&quot; DETECTOR CHECK WITH 5/8&quot; BY-PASS METER</td>
<td>MUELLER A-2130-6 OR APPROVED EQUAL</td>
</tr>
<tr>
<td>2</td>
<td>4&quot;, 6&quot; OR 8&quot; RESILIANT SEAT GATE VALVE, FLANGED X MECHANICAL JOINT</td>
<td>MUELLER A-2370-16 OR APPROVED EQUAL</td>
</tr>
<tr>
<td>3</td>
<td>2'-6&quot; X 4'-0&quot; (4&quot; OR 6&quot;) OR 3'-0&quot; X 5'-0&quot; (8&quot;) UTILITY BOX TOP SECTION</td>
<td>BROOKS W-200 T. OR W-400 T.</td>
</tr>
<tr>
<td>4</td>
<td>2'-6&quot; X 4'-0&quot; (4&quot; OR 6&quot;) UTILITY BOX WITH 4&quot; WALLS OR 3'-0&quot; X 5'-0&quot; (8&quot;) WITH 5/8&quot; WALLS</td>
<td>BROOKS W-200 OR W-400 SERIES</td>
</tr>
<tr>
<td>5</td>
<td>2'-6&quot; X 4'-0&quot; (4&quot; OR 6&quot;) OR 3'-0&quot; X 5'-0&quot; (8&quot;) UTILITY BOX COVER</td>
<td>BROOKS W-200-20</td>
</tr>
<tr>
<td>6</td>
<td>4&quot;, 6&quot; OR 8&quot; X REQUIRED LENGTH OF PIPE, FLANGED AND/OR MECHANICAL JOINT EACH END</td>
<td>PVC, CML/CMC, DUCTILE IRON PIPE</td>
</tr>
<tr>
<td>7</td>
<td>4&quot;, 6&quot; OR 8&quot; RESILIANT SEATED GATE VALVE, FLANGED X MECHANICAL JOINT</td>
<td>MUELLER A-2370-16 OR APPROVED EQUAL</td>
</tr>
<tr>
<td>8</td>
<td>MAIN SIZE X 4&quot;, 6&quot; OR 8&quot; TEE</td>
<td>DUCTILE IRON OR APPROVED EQUAL</td>
</tr>
</tbody>
</table>

**CITY OF COACHELLA**

**FIRE DETECTOR CHECK ASSEMBLY (4", 6" OR 8" D.C.)**

**STANDARD DRAWING NO.**

**W-10**

**JUNE 2007**
INTERSECTIONS

NO SIDEWALK

CURB & SIDEWALK
ADJACENT

CURB & SIDEWALK
SEPARATED

NOTES
1. ALL APPURtenances WILL BE Staked FOR LOCATION AND ELEVATION.
2. GUARD POSTS ARE NOT REQUIRED WHERE FIRE HYDRANTS ARE ADJACENT TO SIDEWALKS OR CURB AND GUTTER.
3. APPURtenances SHALL MEAN THE FOLLOWING, BUT ARE NOT LIMITED TO, AIR VAC/RELEASE ASSEMBLIES, BLOW OFF ASSEMBLIES, AND TEST STATIONS.
CITY OF COACHELLA

WATER VALVE BOX INSTALLATION

NOTES:
BACKFILL BELOW CONCRETE AND AROUND VALVE BOX 95% RELATIVE COMPACTION

CONCRETE TO RECEIVE A LIGHT "BROOM" FINISH

CAST IRON LID
LABELED "WATER"
PAIN BLUE

6 5/8"Ø
VALVE BOX,
RICH SLIP TYPE (10 GAUGE STEEL)

SAWCUT AC PAVEMENT

CONCRETE COLLAR TYPE II
PORTLAND CEMENT (CLASS 520-C-2500)

95% COMPACTION

SAWCUT AC PAVEMENT

6"Ø VALVE BOX EXTENSION, SLIP TYPE (10 GAUGE STEEL)

FINISHED PAVEMENT

SECTION

PLAN

W-12

JUNE 2007
NOTES:
1. SEE STD. DWG. W-14 FOR BEARING AREAS.
2. SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL.
3. ARROWS (——) INDICATE THRUST DIRECTION.
4. FIGURE (100%) AT THRUST BLOCK INDICATES PER CENT OF TOTAL THRUST TO BE APPLIED FOR BEARING AREA.
5. CONCRETE FOR THRUST BLOCKS TO BE 450-C-2000.
6. CONCRETE THRUST BLOCK TO BE Poured AGAINST UNDISTURBED EARTH.

CITY OF COACHELLA

CONCRETE THRUST BLOCKS

STANDARD DRAWING NO.
W-13.1
JUNE 2007
NOTES:
1. VALUES FROM CURVES ARE FOR TEES AND DEAD ENDS:
   FOR 90° BEND: 1.40 VALUE FROM CURVE
   FOR 45° BEND: 0.80 VALUE FROM CURVE
   FOR 22.5° BEND: 0.40 VALUE FROM CURVE
2. FOR LOCATION OF THRUST BLOCK SEE STD. DWG. W-11.
3. BASED ON 225 PSI TEST PRESSURE AND BEARING VALUES OF DRY SOILS.

CITY OF COACHELLA
THRU  BLOCK
BEARING AREAS

APPROVED:                                 STANDARD DRAWING NO.
RCE 24690  EXP. 12/31/07  W-13.2
REVISION APPROVED DATE
JUNE 2007
THRUPT BLOCK DATA

CAST IRON CAP
RUBBER RING
A.C. PIPE NIPPLE
15 LB BLDG FELT
WALL OF TRENCH

CONCRETE THRUST BLOCK
(SEE CHART ABOVE FOR AREA)

DETAIL OF PLUG ASSEMBLY

RESILIENT WEDGE GATE VALVE

WATER MAIN TEE OR CROSS

BELL AND FLANGE ADAPTER
REDWOOD WEDGES

CAST IRON CAP, SAME AS DETAIL ABOVE BURIED VALVE
PER STD. DWG. W-10

6" TO 3'

6" X 6" REDWOOD BLOCK
TEMPORARY PLUG ASSEMBLY

NOTE:
AT TEMPORARY PLUG INSTALLATIONS, IN PLACE OF CONCRETE THRUST BLOCK, USE ORILLAGE MADE OF 2" X 6" REDWOOD BLOCKS, DIMENSIONS AS FOLLOWS:

WIDTH = WIDTH OF TRENCH PLUS 16"
THICKNESS = 6"
HEIGHT =
   6" PIPE = 1'-3"
   8" PIPE = 2'-0"
   10" PIPE = 3'-0"

CITY OF COACHELLA

WATER MAIN PLUG ASSEMBLY

STANDARD DRAWING NO. W-14

JUNE 2007
WATER TEST STATION: CENTERED IN 3' x 3' x 6" CONCRETE PAD. LEG SUPPORT FOR TEST STATION COVER TO BE EMBEDDED 1 1/2" IN CONCRETE PAD. TEST STATION AND CONCRETE PAD TO BE LOCATED PER STD. DWG. W-9. COVER PER APPROVED MATERIALS LIST.

METER BOX TO BE LOCATED AT 90° ROTATION TO STANDARD METER BOX DETAIL.

CONCRETE CURB AND GUTTER/A.C. BERM/EDGE OF EASEMENT BERM

NOTES:
1. TEST STATION TO BE LOCATED BEHIND SIDEWALK WHERE APPLICABLE. IF WITHIN SIDEWALK, PLACE AS PER STD. DWG S-25.

2. METER BOX AND CONCRETE PAD WILL BE SET TO FINISHED GRADE OR FLUSH WITH CONCRETE CURB OR SIDEWALK.

CITY OF COACHELLA

REVISED: DATE

APPROVED: JUNE 2007

TEST STATION

W-15

STANDARD DRAWING NO.
1. LOCATION SHALL BE AS SHOWN ON PLAN VIEW, OR AS DIRECTED IN THE FIELD BY CITY ENGINEER.

2. FOR AREAS OF 25 MPH OR LESS 4" DIA. POSTS SHALL BE USED, FOR SPEED GREATER THAN 30 MPH 6" DIA. POSTS SHALL BE USED.

CITY OF COACHELLA

STANDARD GUARD POST INSTALLATION

W-16

JUNE 2007