Sunnyslope County Water District Water Construction Notes

- The water system to serve the development shall be installed entirely at the developer's expense in accordance with the most revised Sunnyslope Count Water District Water (SSCWD) System Specifications and Standards.
- Any wells discovered within the development shall be sealed/destroyed at the developer's expense and according to State and County Standards.
- 3. All buried water main pipes shall be P.V.C. AWWA Standard C900-07, DR-18. A continuous, insulated, stranded, gauge 10 tracer wire shall be attached to all buried pipe and loop up in all valve boxes. Splice connections shall be made between tracer wires at all Tee, Cross, and service lateral connection according to Sunnyslope Standards.
- 4. Only SSCWD shall operate existing water valves. Contractor shall make arrangements at least 3 working days in advance with the District Engineer for operation of water valves. Contractor shall notify affected SSCWD customers at least 48 hours before water shutdown with Temporary Water Shutoff Notice door hangers provided by SSCWD. Main tie-ins may not take place on Fridays or the day before a recognized holiday.
- 5. All water service installations shall include a meter box set to final grade and the location shall be marked with a "W" impressed in the curb face.
- 6. Meter boxes must be Christy B-16 or Christy B-36 with a meter reading lid and a 2" drilled hole for the remote reading ERT. No lateral or box shall be installed in a driveway, drainage swale, or within 10 feet of a tree.
- 7. All water mains and services shall have sand a minimum of 6 inches beneath, 6 inches on each side, and 12 inches over the pipe or lateral.
- 8. Contractor shall install 1/8th inch thick steel separation plates at all points where the existing water system meets the new development water system. An approved backflow prevention device (supplied by contractor) and a water meter (supplied by District) to register construction water must be installed to fill the new development water system. Contractor is responsible for all fees and deposits for the meter and construction water. After the new development system has passed hydrostatic pressure test and bacteriological test, the separation plates and BPD and meter are to be removed and the ownership of the new system transferred to SSCWD.
- 9. Contractor shall chlorinate all water mains according to AWWA C651-14 Standards.

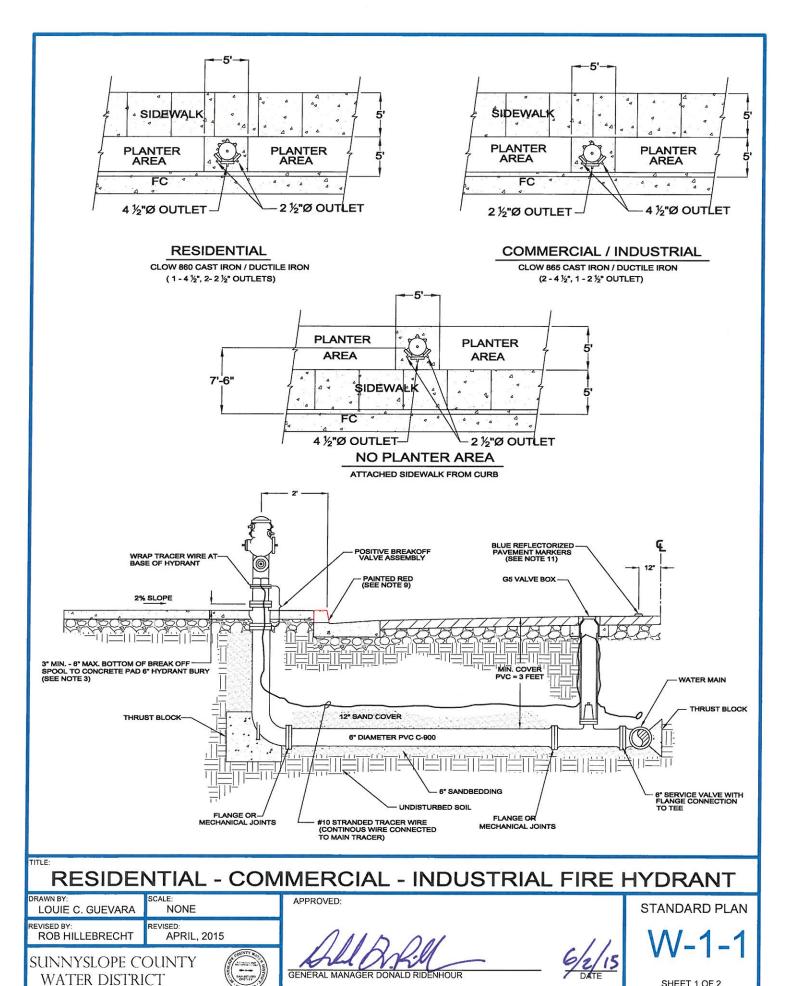
- 10. The completed water system must pass hydrostatic leakage test before bacteriological test. Contractor must wait 48 hours after flushing the chlorine out of the water distribution system before bacteria sampling is conducted by a certified laboratory. The free chlorine residual must not be higher than the water being supplied to the subdivision. SSCWD Inspector must be present for sampling.
- 11. District Inspector must inspect all water mains, fittings, tracer wires, valves, hydrants, services, thrust blocks, and other system components before sand backfilling.
- 12. All blow-offs shall be only brass pipe and fittings with a curb stop, 45 degree elbow, and cap. No galvanized or plastic pipe shall be used.
- 13. Any existing services to be moved or abandoned shall be removed to the corporation stop and a brass plug is to be inserted in the corporation stop.
- 14. Any existing water system components that become damaged during construction shall be completely replaced to the satisfaction of the SSCWD specifications and District Inspector, at the contractor's sole expense.
- 15. SSCWD is to be included in Pre-Construction meetings scheduled by the City of Hollister, County of San Benito, P.G.&E., Developer, or other applicable party.
- 16. Any relocation of water mains and appurtenances shall be conducted in accordance with any and all requirements of SSCWD specifications. This work shall be done at no expense to the District. The owner shall pay the cost of all such relocation work including fees, bonds, permits, labor, materials, etc.
- 17. Construction water used for dust control and compaction may be purchased from SSCWD. Contractor shall request a construction meter and is responsible for all applicable fees and deposits for the meter.
- 18. Contractor is responsible for arrangements to pay for all material testing required by the District Inspector and ensure that such testing is satisfactorily performed.
- 19. Any time native soil is removed from under an asbestos cement water main, the void must be replaced with a two sack sand slurry from native soil to pipe spring-line.
- 20. Contractor shall pot-hole and expose all buried existing water infrastructure to verify the location, elevation, size, and material prior to starting related construction.

Donald G. Ridenhour

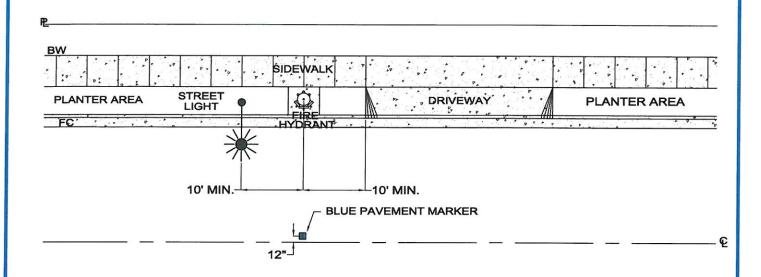
Approval

General Manager

Date 2/2/16



SHEET 1 OF 2



STANDARD LOCATION OF FIRE HYDRANT

NOTES:

- ALL FIRE HYDRANT LOCATIONS SHALL BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION. MINIMUM DISTANCE OF HYDRANT FROM DRIVEWAY IS 10 FEET. HYDRANT SPACING IS TO FOLLOW THE INTERNATIONAL FIRE CODE AND NOT TO EXCEED 500'.
- INSTALL FIRE HYDRANT CLOW 860 OUTLET REQUIREMENTS: FOR RESIDENTIAL AND CLOW 865 FOR COMMERCIAL AND INDUSTRIAL, APPROVED EQUAL.

RESIDENTIAL

CLOW VALVE CO. 860

2-2½ INCH OUTLET

1 - 4 1/2 INCH OUTLET

COMMERICAL/INDUSTRIAL

CLOW VALVE CO. 865

1-2% INCH OUTLET

2 - 4 1/2 INCH OUTLET

- POSITIVE BREAK OFF VALVE ASSEMBLY SHALL BE LONG BEACH LB 400 DUCTILE IRON OR APPROVED EQUAL.
- DUCTILE IRON FITTINGS AND COATING SHALL CONFORM WITH THE LATEST AWWA SPECIFICATIONS C153 AND SHALL BE CEMENT LINED PER AWWA STANDARD C104.
- FIRE HYDRANT VALVE SHALL BE INSTALLED PER STANDARD PLAN NO. B-2 OR AS APPROVED BY DISTRICT ENGINEER.
- THRUST BLOCKS SHALL CONFORM TO STANDARD W-10 AND BE CLASS 520 C 2500 PCC.
- THE ENTIRE FIRE HYDRANT ASSEMBLY SHALL PASS HYDROSTATIC PRESSURE TESTING, LEAKAGE TEST AND BACTERIOLOGICAL TEST PER AWWA SPECIFICATION PRIOR TO ACCEPTANCE BY DISTRICT ENGINEER.
- ALL HYDRANTS SHALL BE PAINTED WITH SAFETY YELLOW USING KELLY MOORE KEL-GUARD ENAMEL OR APPROVED EQUAL.
- PAINT CURB WITH RED PAINT 10 FT. ON BOTH SIDES OF HYDRANT.
- POUR A CONCRETE PAD AROUND THE HYDRANT AND AGAINST SIDEWALK, AT THE SAME ELEVATION OF THE EXISTING SIDEWALK.
- FIRE HYDRANT BLUE PAVEMENT MARKER SHALL BE LOCATED 12 INCHES FROM CENTERLINE TOWARDS THE FIRE HYDRANT. HYDRANTS NEAR INTERSECTIONS REQUIRES MARKERS ON EACH STREET.
- WRAP THE FIRE HYDRANT BURY WITH 10 MIL POLYETHYLENE SHEET.
- BRING THE TRACER WIRE ABOVE THE CEMENT AND WRAP IT AT THE BASE OF THE HYDRANT.

FIRE HYDRANT LOCATION AND NOTES DRAWN BY: SCALE APPROVED: NONE LOUIE C. GUEVARA

ROB HILLEBRECHT

TITLE:

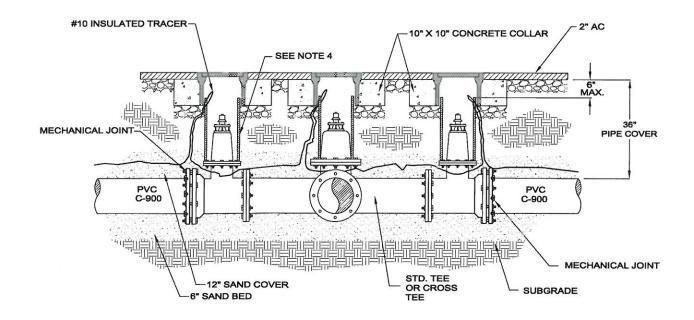
REVISED: **APRIL**, 2015

STANDARD PLAN

SHEET 2 OF 2

SUNNYSLOPE COUNTY WATER DISTRICT





PLAN VIEW

TRACER WIRE SPLICE

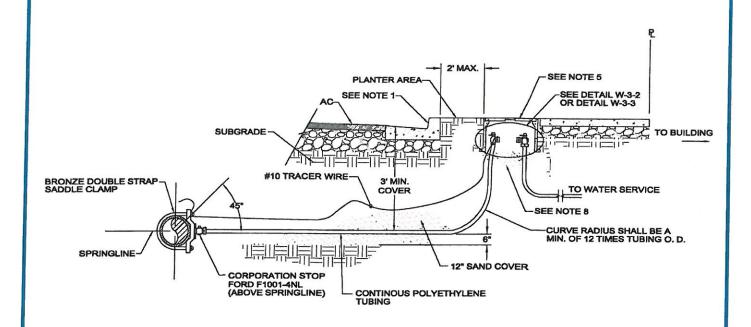


TRACER WIRE SPLICE TEE F/F TRACER WIRE GATE VALVE F/MJ GATE VALVE F/MJ

NOTES:

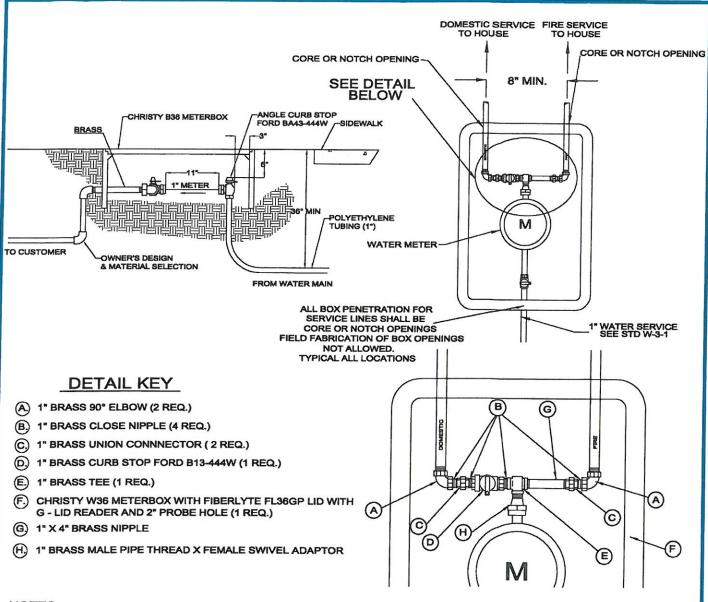
- ALL GATE VALVES SHALL BE NON RISING STEM (NRS) DOUBLE O-RING SEAL. VALVES SHALL BE PER AWWA STANDARD EQUAL SIZED TO LINE PIPING. VALVES SHALL BE EPOXY COATED RESILIENT WEDGE GATE VALVES COMPLYING WITH AWWA C-509 SPECIFICATIONS. ALL VALVES MUST OPEN COUNTERCLOCKWISE ONLY.
- 2. CONCRETE COLLAR AND THRUST BLOCK SHALL BE CLASS 520-C-2500 PCC AND IN ACCORD WITH STD W-10.
- 3. VALVE BOX SHALL BE CHRISTY G5 BOX WITH G5C TRAFFIC LID.
- 4. VALVE BOX RISER SHALL BE 8"Ø PVC SLEEVE AND NO MORE THAN 6" BELOW AC FINISH GRADE.
- 5. ALL VALVES, FITTINGS AND ANCHOR BARS SHALL BE WRAPPED WITH 10 MIL. THICK POLYETHYLENE SHEET.
- 6. ANY VALVES LARGER THAN 12" SHALL BE BUTTERFLY VALVE MANUFACTURED PER AWWA STANDARDS.

DRAWN BY: LOUIE C. GUEVARA REVISED BY: ROB HILLEBRECHT ROB TEE/CROSS & VALVES APPROVED: APPROVED: STANDARD PLAN WATER DISTRICT SCALE: NONE APPROVED: APPROVED: APPROVED: APPROVED: APPROVED: STANDARD PLAN W-2 SHEET I OF I



- ALL WATER SERVICE INSTALLATIONS INCLUDE METER BOX AND MUST BE MARKED WITH A 3" STAMPED "W" ON FACE OF CURB.
- 2. MINIMUM 1" WATER SERVICE WITH 1" CORPORATION STOP, FORD F1001-4NL WITH STANDARD IP THREADS X PACK JOINT, OPENING COUNTER CLOCKWISE, AND BRASS SHALL BE LEAD FREE.
- ALL WATER SERVICE SHALL HAVE A TAMPED SAND BEDDING 6" BENEATH THE TUBING AND SHALL HAVE 6" MINIMUM CLEARANCE ON EACH SIDE AND 12" MIN. SAND COVER.
- 4. ALL WATER SERVICE SHALL BE POLYETHYLENE CTS SDR 9 (ASTM 2666) TUBING. ALL TUBING CONNECTIONS SHALL BE COMPRESSION TYPE: FORD, "PACK JOINT" OR APPROVED EQUAL.
- 5. WATER METER BOX SHALL BE PRE CORE CHRISTY FIBERLYTE OR APPROVED EQUAL WITH TRAFFIC LID IF SUBJECT TO VEHICLE TRAFFIC AND WITH METER READING DOOR AND PREDRILLED HOLE FOR METER READING ERT IN THE LID.
- A MINIMUM SEPARATION OF 1'-0" BETWEEN WATER SERVICES REQUIRED ON COMMON TRENCH WITH MULTIPLE SERVICES TO BE INSTALLED MINIMUM 6" CLEARANCE BETWEEN TRENCH WALL & WATER SERVICE.
- 7. ALL TUBING TO FITTING CONNECTIONS SHALL INCLUDE STAINLESS STEEL INSERTS.
- 8. ALL SAND BACK FILL MATERIAL SHALL HAVE A MINIMUM SE=30 AND COMPACTED TO 90% RELATIVE COMPACTION.
- 9. THIS DETAIL ONLY APPLIES TO 1" METER SERVICES. FOR LARGER METERS SERVICE INSTALLATIONS, CONTACT THE DISTRICT ENGINEER.
- 10. INSTALL INSULATED STRANDED GAUGE #10 WIRE TO ALL WATER SERVICES AND CONNECT IT TO THE TRACER WIRE ON THE MAIN.
- 11. NO WATER SERVICE LINE MAY BE INSTALLED IN A FIRE HYDRANT TRENCH.
- 12. NO WATER METER BOX MAY BE INSTALLED ON A DRAINAGE SWALE OR IN A DRIVEWAY.
- 13. EACH METER MUST HAVE ITS OWN SERVICE CONNECTION TO THE MAIN. NO SETTING MULTIPLE METERS OFF ONE SERVICE.

WATER SERVICE											
DRAWN BY: LOUIE C. GUEVARA	SCALE: NONE	APPROVED:		STANDARD PLAN							
REVIEWED BY: ROB HILLEBRECHT	REVISED: APRIL, 2015	DARD OIL		1/1/21							
SUNNYSLOPE CO WATER DISTRI	[2] [3]	GÉNÉRAL MANAGÉR DONALD RIDENHOUR	6/2/15 DATE	V V - 3 - 1							



TITLE:

- 1. METER SIZE NO LESS THAN 1" (METER SUPPLIED BY DISTRICT)
- SEPARATE PRIVATE SERVICE LINES ARE REQUIRED FOR DOMESTIC WATER AND FIRE. THESE SERVICE LINES SHALL BE INSTALLED BY THE CUSTOMER AND SHALL BE PER UNIFORM PLUMBING CODE.
- 3. WATER METER BOX SHALL BE CHRISTY N36 WITH B36G LID. THE LID SHALL BE CORE DRILLED TO ACCEPT REMOTE METER READING SENSOR (ERT).
- CUSTOMER SHALL INSTALL SUITABLE CONTROL VALVES ON THE DOMESTIC SERVICE LINE ON THE RISER TO EACH BUILDING.
- 5. THE MAXIMUM NUMBER OF DWELLING UNITS CONNECTED TO A COMBINATION RESIDENTIAL DOMESTIC AND FIRE SPRINKLER SERVICE SHALL NOT EXCEED ONE(1) DWELLING UNIT PER SERVICE. PROJECTS WHICH PROPOSE TO EXCEED THIS LIMITATION MUST INCLUDE A SEPARATE, DEDICATED FIRE SERVICE AND WATER SERVICE LINE FOR EACH RESIDENTIAL UNIT.
- 6. ALL CONNECTIONS TO 1" POLYETHYLENE TUBING SHALL USE FORD "PACK JOINT" COMPRESSION FITTINGS
- THE DISTRICT ENGINEER HAS THE AUTHORITY TO MODIFY THE REQUIREMENTS OF THIS STANDARD DETAIL AS NECESSARY TO ACCOMODATE NON-TYPICAL SITUATIONS.

COMBINATION DOMESTIC & FIRE SERVICE

AUTOCAD BY:
LOUIE C. GUEVARA

REVISED BY:
ROB HILLEBRECHT

REVISED:
APRIL, 2015

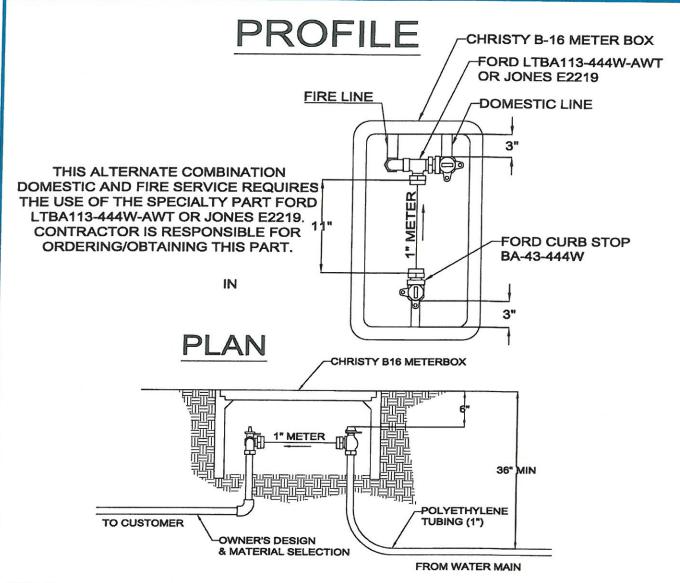
SUNNYSLOPE COUNTY
WATER DISTRICT

APRIL 2015

APRIL 2015

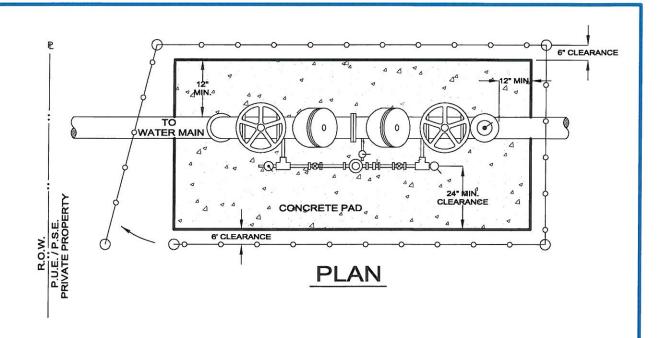
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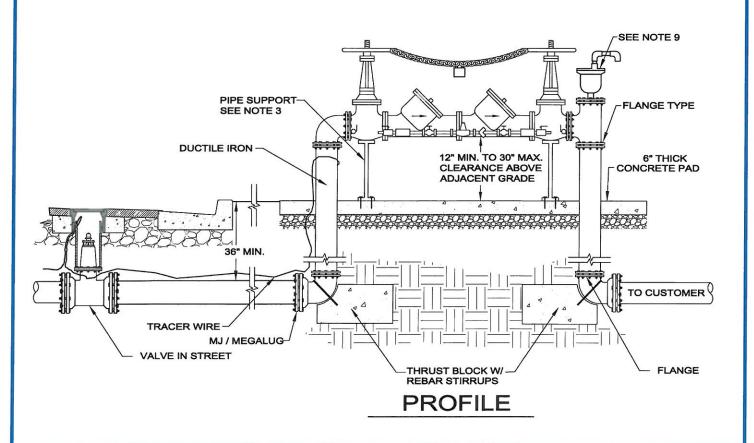
SHEET 2 0F 3



- 1. METER SIZE NO LESS THAN 1" (METER SUPPLIED BY DISTRICT)
- SEPARATE PRIVATE SERVICE LINES ARE REQUIRED FOR DOMESTIC WATER AND FIRE. THESE SERVICE LINES SHALL BE INSTALLED BY THE CUSTOMER AND SHALL BE PER UNIFORM PLUMBING CODE.
- WATER METER BOX SHALL BE CHRISTY B16 AND B16G LID WITH READING WINDOW. THE LID SHALL BE CORE DRILLED TO ACCEPT REMOTE METER READING SENSOR (ERT).
- 4. CUSTOMER SHALL INSTALL SUITABLE CONTROL VALVES ON THE DOMESTIC SERVICE LINE ON THE RISER TO EACH BUILDING.
- 5. THE MAXIMUM NUMBER OF DWELLING UNITS CONNECTED TO A COMBINATION RESIDENTIAL DOMESTIC AND FIRE SPRINKLER SERVICE SHALL NOT EXCEED ONE(1) DWELLING UNIT PER SERVICE. PROJECTS WHICH PROPOSE TO EXCEED THIS LIMITATION MUST INCLUDE A SEPARATE, DEDICATED FIRE SERVICE AND WATER SERVICE LINE FOR EACH RESIDENTIAL UNIT.
- 6. ALL CONNECTIONS SHALL BE TO 1" POLYETHYLENE TUBING USING BRASS COMPRESSION FITTINGS.
- THE DISTRICT ENGINEER HAS THE AUTHORITY TO MODIFY THE REQUIREMENTS OF THIS STANDARD DETAIL AS NECESSARY TO ACCOMODATE NON-TYPICAL SITUATIONS.

ALTERNATE DOMESTIC & FIRE SERVICE AUTOCAD BY: LOUIE C. GUEVARA REVISED BY: ROB HILLEBRECHT ROB HILLEBRECHT WATER DISTRICT APPROVED: STANDARD PLAN STANDARD PLAN STANDARD PLAN W-3-3 SHEET 3 OF 3





3" AND LARGER FIRE FLOW BACKFLOW PREVENTION DEVICE

DRAWN BY:
LOUIE C, GUEVARA

SCALE:
NONE

REVISED BY:
ROB HILLEBRECHT

SUNNYSLOPE COUNTY
WATER DISTRICT

APPROVED:

APPROVED:

STANDARD PLAN

W4-4-1

GENERAL MANAGER DONALD RIDENHOUR

STANDARD PLAN

W4-4-1

- 1. BACKFLOW PREVENTION DEVICES (BPD'S) SHALL BE LEAD FREE REDUCED PRESSURE PRINCIPLE (RPP) OR DOUBLE CHECK VALVE (DC) DEPENDING ON THE DEGREE OF HAZARD. ALL BPD'S SHALL BE APPROVED BY THE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO) AND BE ON THE MOST CURRENT LIST OF BPD'S AT THE TIME OF INSTALLATION. THE ENTIRE ASSEMBLY (GATE VALVES, TEST COCKS, AND BYPASS METER) SHALL BE PROVIDED AS A COMPLETE UNIT BY CONTRACTOR.
- 2. TEST COCKS FOR BPD SHALL BE PROVIDED WITH %" MALE FLARE AND CAP
- BPD SHALL BE SUPPORTED BY 2" DIAMETER GALVANIZED STEEL PIPE SADDLE SUPPORTS WITH FLANGE ADAPTORS THAT ARE BOLTED TO THE CONCRETE PAD.
- 4. NO TEES OR OTHER CONNECTIONS SHALL BE PERMITTED BETWEEN THE DISTRICT WATER SUPPLY LINE AND THE APPROVED BPD. ALL BPD'S SHALL BE INSTALLED AS CLOSE TO THE WATER MAIN AS POSSIBLE AND PRACTICAL.
- 5. O.S.&Y. VALVES ARE REQUIRED ON FIRE SERVICES (U.L. LISTED) RATED AT 175 PSI WORKING AND 350 PSI HYDROSTATIC TEST PRESSURE. THE HAND WHEELS SHALL BE CHAINED AND LOCKED USING %" GALVANIZED CHAIN. SUNNYSLOPE MAY ADD AN ADDITIONAL LOCK ON THE CHAIN IF DESIRED.
- 6. THRUST BLOCKS SHALL BE 520-C-2500 PCC AND IN ACCORD WITH STANDARD W-10.
- ASSEMBLY SHALL BE PROTECTED WITH 4" DIAMETER BALLARDS WHEN LOCATED NEAR TRAFFIC AT ENGINEER'S DISCRETION.
- 8. DEVICE MUST ALWAYS REMAIN EASILY ACCESSIBLE FOR TESTING AND MAINTENANCE.
- AIR AND VACUUM RELEASE VALVE SHALL GENERALLY BY ¾" APCO NO. 50, TO BE VERIFIED WITH DISTRICT ENGINEER.
- 10. A CERTIFIED BACKFLOW PREVENTION ASSEMBLY GENERAL TESTER ACCREDITED BY CALIFORNIA-NEVADA AWWA SHALL INSPECT, TEST, AND APPROVE BPD PRIOR TO THE DISTRICT PROVIDING POTABLE WATER BEYOND THE DEVICE.
- 11. THE BPD MUST BE TESTED ANNUALLY BY A CERTIFIED TESTER AND THE TEST REPORT FORWARDED TO SUNNYSLOPE WD.
- 12. ALL BPD ASSEMBLIES SHALL BE PROTECTED BY AN APPROVED ENCLOSURE. SEE STANDARD W-4-3.
- ALL ABOVE GROUND PIPING SHALL BE DUCTILE IRON PIPE (DIP) AND ALL ABOVE GROUND FITTINGS SHALL BE FLANGES.
- 14. ALL BELOW GROUND FITTINGS SHALL BE WRAPPED WITH 10 MIL MINIMUM POLYETHYLENE SHEET.
- 15. A STRANDED #10 GAUGE TRACER WIRE SHALL EXTEND FROM THE MAIN, INTO THE STREET VALVE BOX, AND THEN WRAP AROUND THE BOTTOM OF THE BPD.
- 16. PAINT THE ENTIRE ASSEMBLY WITH TWO (2) COATS OF RUSTOLEUM MEDIUM GREEN PAINT.
- 17. ALL ABOVE GROUND PIPING AND ASSEMBLY MUST BE INSULATED FOR COLD WEATHER PROTECTION TO ENGINEER'S DISCRETION.

TITLE:

3" AND LARGER BACKFLOW PREVENTION DEVICE

DRAWN BY:
LOUIE C. GUEVARA
NONE

REVISED BY:
ROB HILLEBRECHT
ROBLES APRIL, 2015

SUNNYSLOPE COUNTY

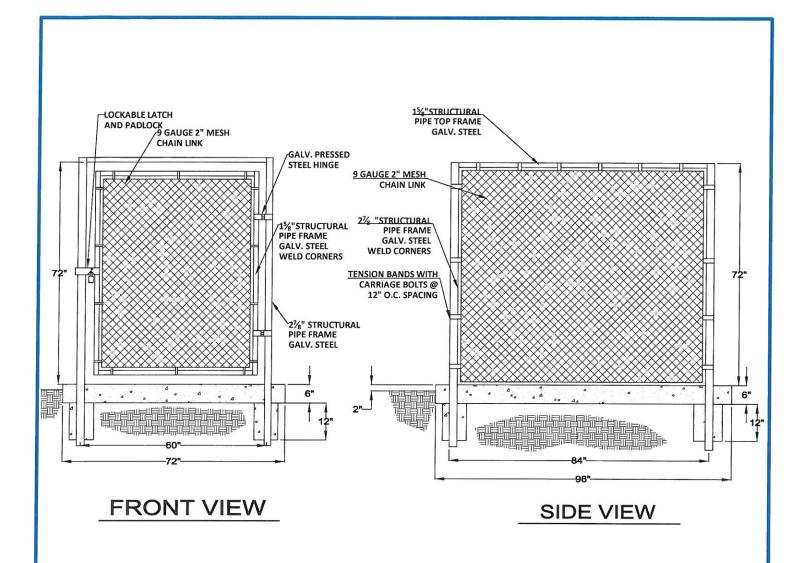
APPROVED:

STANDARD PLAN

B-4-2

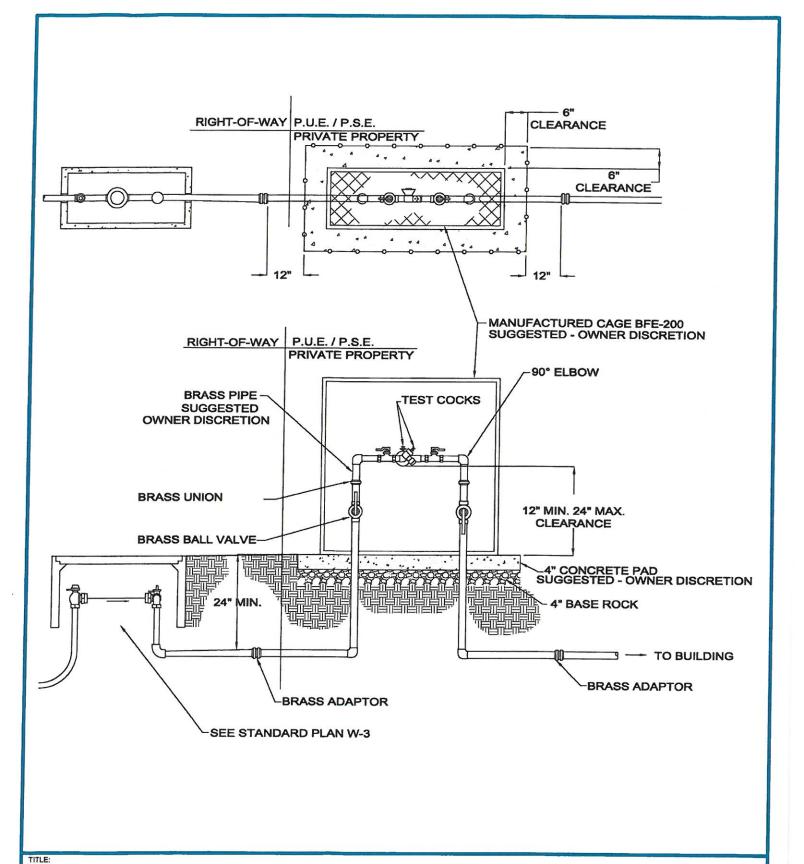
SHEET 2 OF 3

WATER DISTRICT



- 1. GATE TO BE AT END OF ENCLOSURE WITH LOCKABLE LATCH AND PADLOCK.
- 2. WHERE TWO BACKFLOW PREVENTION DEVICE (BPD'S) ARE INSTALLED PARALLEL, ENCLOSURE SHALL PROVIDE FOR MIN. CLEARANCES SHOWN ON B-4-1, PROVIDE DOUBLE GATE WITH DOUBLE DROP ROD FOR LATCHING.
- 3. ALL ENCLOSURES SHALL BE GALV. STEEL PIPE FRAME AND 9 GAUGE CHAIN LINK, AND SHALL BE SECURED IN SUCH A MANNER AS TO PREVENT TAMPERING OR UNAUTHORIZED ENTRY.
- 4. CONCRETE PAD TO BE 520-C-2500 PCC, TOP OF PAD, SHALL SLOPE TO EDGE AND SET 2" MINIMUM ABOVE EXISTING SOIL LEVEL.
- 5. MEDIUM BROOM FINISH ON CONCRETE PAD.
- 6. ALTERNATIVE ENCLOSURE MAY BE INSTALLED WITH APPROVAL BY THE DISTRICT ENGINEER.
- 7. ENCLOSURE TO BE PAINTED WITH TWO (2) COATS OF RUSTOLEUM MED. GREEN PAINT.
- 8. ALL ENCLOSURES MUST HAVE CHAIN LINK TOPS.

3" AND LARGER BACKFLOW PREVENTION DEVICE ENCLOSURE DRAWN BY: LOUIE C. GUEVARA REVISED BY: ROB HILLEBRECHT ROB HILLEBRECHT WATER DISTRICT APRIL, 2015 APPROVED: APPROVED: APPROVED: STANDARD PLAN B-4-3 SHEET 3 OF 3



2" AND SMALLER BACKFLOW PREVENTER

APPROVED:

DRAWN BY:
LOUIE C. GUEVARA

REVISED BY:
ROB HILLEBRECHT

SUNNYSLOPE COUNTY

WATER DISTRICT

GENERAL MANAGER DONALD RIDENHOUR

STANDARD PLAN

B-5-1

SHEET 1 OF 2

- BACKFLOW PREVENTION DEVICE (BPD) SHALL BE LEAD FREE, REDUCED PRESSURE PRINCIPLE OR DOUBLE CHECK VALVE DEPENDING ON THE LEVEL OF HAZARD. THE ENTIRE ASSEMBLY (INCLUDING BALL VALVES, TEST COCKS, AND CAPS) SHALL BE PROVIDED AS A COMPLETE UNIT BY THE CONTRACTOR.
- NO CONNECTIONS OR TEES WILL BE ALLOWED BETWEEN THE WATER METER AND BPD. THE BPD SHALL BE AS CLOSE TO THE METER AS POSSIBLE AND REASONABLE.
- 3. ALL BPD'S SHALL CONFORM TO THE LATEST REVISION OF AWWA AND BE ON THE CDDW LIST OF APPROVED BPD'S.
- 4. THE DEVICE MUST ALWAYS REMAIN EASILY ACCESSIBLE FOR MAINTENANCE AND TESTING.
- THE BPD SHALL BE TESTED PRIOR TO INITIAL ACCEPTANCE AND ANNUALLY THEREAFTER BY A CERTIFIED INDIVIDUAL APPROVED BY SUNNYSLOPE COUNTY WATER DISTRICT. THE TEST REPORT SHALL BE FORWARDED TO SUNNYSLOPE WD.
- 6. IT IS SUGGESTED THAT A CONCRETE PAD BE POURED AROUND THE BPD USING 520-C-2500 PCC. THE TOP OF THE PAD SHOULD BE SET 2" MINIMUM ABOVE THE EXISTING SOIL AND HAVE A BROOM FINISH.
- 7. IT IS SUGGESTED THAT A SUITABLE ENCLOSURE BE USED TO PROTECT THE BPD AND TO PREVENT VANDALISM.
- 8. IT IS SUGGESTED THAT THE DEVICE BE PAINTED WITH TWO (2) COATS OF RUSTOLEUM MED. GREEN PAINT.
- 9. IT IS SUGGESTED THAT ALL ABOVE GROUND PIPING AND FITTINGS BE BRASS WITH SUITABLE COLD WEATHER PROTECTION. GALVANIZED OR PLASTIC PIPE MAY BE USED AT THE OWNER'S DISCRETION.
- 10. TESTING, MAINTENANCE, REPAIR, AND REPLACEMENT OF THE BPD ARE SOLELY THE RESPONSIBILITY OF THE OWNER AND SUNNYSLOPE HAS NO RESPONSBILITY NOR LIABILITY FOR ANY BREAKS, LEAKS, OR MALFUNCTIONS OF THE BPD.
- 11. UNDER NO CIRCUMSTANCES WHATSOEVER IS THE BPD TO BE BYPASSED OR REMOVED SO AS TO PROVIDE WATER WITHOUT ITS USE UNLESS WRITTEN AUTHORIZATION IS GIVEN FROM THE DISTRICT GENERAL MANAGER.

2" AND SMALLER BACKFLOW PREVENTER NOTES

DRAWN BY: LOUIE C. GUEVARA

ROB HILLEBRECHT

TITLE:

REVISED BY:

SCALE: NONE

REVISED: APRIL, 2015

SUNNYSLOPE COUNTY WATER DISTRICT



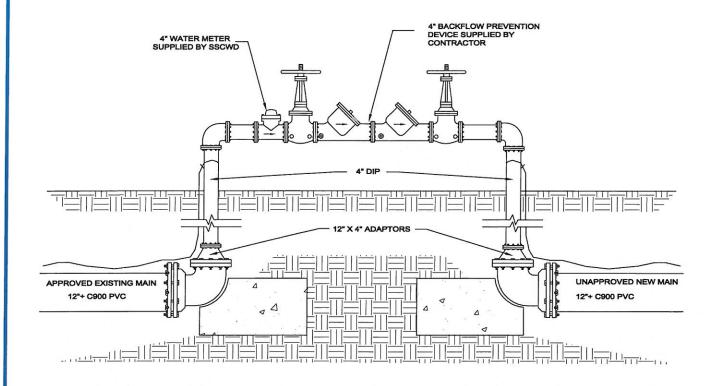
GENERAL MANAGER DONALD RIDENHOUR

APPROVED:

6/2/15 DATE STANDARD PLAN

W-5-2

SHEET 2 OF 2



- SSCWD SHALL OPERATE ALL EXISTING WATER VALVES. CONTRACTOR WILL MAKE ARRANGEMENTS FORTY EIGHT (48) HOURS IN ADVANCE WITH DISTRICT INSPECTOR FOR VALVE OPERATION. VALVES SHALL NOT BE OPERATED BY CONTRACTOR WITHOUT PRIOR WRITTEN CONSENT FROM DISTRICT.
- TEMPORARY METER AND BACKFLOW ASSEMBLY OR SEPARATION PLATE SHALL BE INSTALLED AT ALL POINTS WHERE EXISTING WATER SYSTEM MEETS A NEW UNAPPROVED WATER SYSTEM.
- 3. THE ASSEMBLY MAY NOT BE REMOVED UNTIL AFTER NEW SYSTEM PASSES PRESSURE TEST AND BACTERIA TEST. BASE ROCK MUST BE IN BEFORE PRESSURE TEST IS CONDUCTED AND PRESSURE TEST MUST PASS BEFORE BACTERIA TEST IS CONDUCTED.
- 4. AFTER SYSTEM APPROVAL, CONTRACTOR SHALL REMOVE ENTIRE ASSEMBLY AND THRUST BLOCKS TO INSTALL A NEW SECTION OF C-900 PIPE WITH TWO BARREL COUPLING CONNECTIONS. TRACER WIRES TO BE CONNECTED OVER NEW PIPE. MUST BE INSPECTED BY DISTRICT PRIOR TO BACKFILL.
- 5. BACKFLOW PREVENTION DEVICE ASSEMBLY SHALL CONFORM TO LATEST REVISION OF CDDW SERVICES LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES. ENTIRE ASSEMBLY SHALL BE PROVIDED AS A UNIT AND BE TESTED BY A CERTIFIED INDIVIDUAL PRIOR TO USE.
- 6. SSCWD SHALL PROVIDE A 4" WATER METER FOR CONSTRUCTION WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES OR DEPOSITS ASSOCIATED WITH THE METER.
- 7. ALL 4" PIPE AND FITTINGS ARE TO BE DUCTILE IRON WITH FLANGE CONNECTIONS.

12"+ TIE-IN CONSTRUCTION METER & BACKFLOW PREVENTER

DRAWN BY:
ROB HILLEBRECHT
NONE

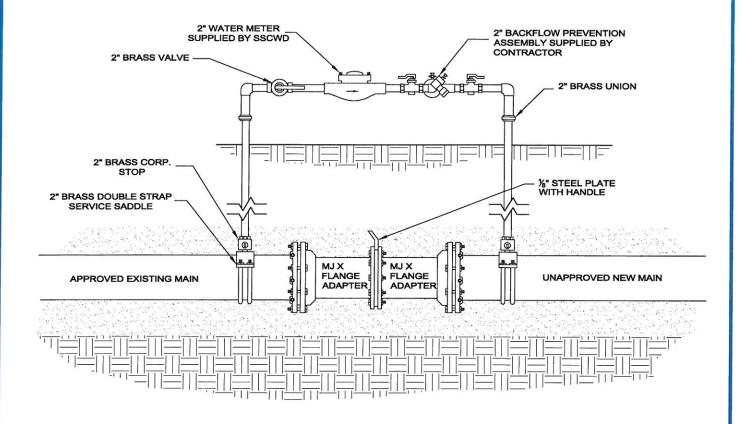
REVISED BY:
ROB HILLEBRECHT
SUNNYSLOPE COUNTY
WATER DISTRICT

APPROVED:

STANDARD PLAN

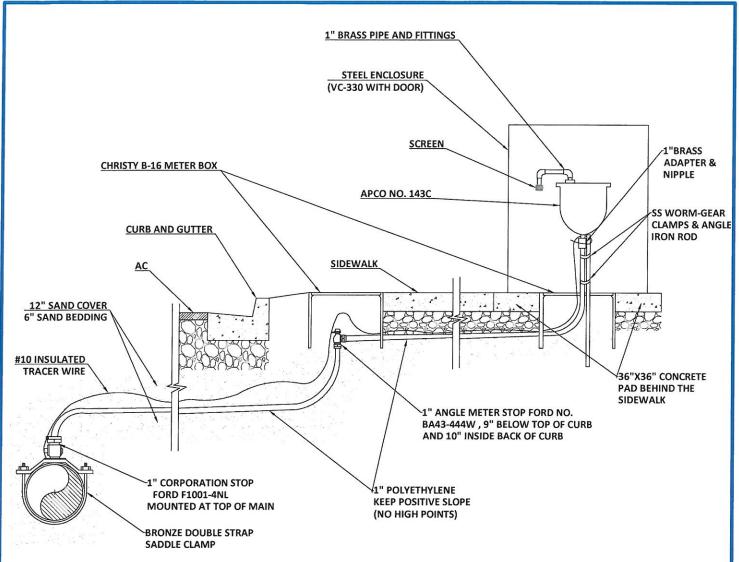
W-6-1

SHEET 1 OF 2



- SSCWD SHALL OPERATE ALL EXISTING WATER VALVES. CONTRACTOR WILL MAKE ARRANGEMENTS
 FORTY EIGHT (48) HOURS IN ADVANCE WITH DISTRICT INSPECTOR FOR VALVE OPERATION. VALVES
 SHALL NOT BE OPERATED BY CONTRACTOR WITHOUT PRIOR WRITTEN CONSENT FROM DISTRICT.
 BACKFLOW MUST BE TESTED AND APPROVED BY CERTIFIED BACKFLOW TESTER BEFORE VALVES
 OPENED TO DELIVER WATER.
- 2. TEMPORARY METER AND BACKFLOW ASSEMBLY OR SEPARATION PLATE SHALL BE INSTALLED AT ALL POINTS WHERE EXISTING WATER SYSTEM MEETS A NEW UNAPPROVED WATER SYSTEM.
- THE ASSEMBLY MAY NOT BE REMOVED UNTIL AFTER NEW SYSTEM PASSES PRESSURE TEST AND BACTERIA TEST. BASE ROCK MUST BE IN BEFORE PRESSURE TEST IS CONDUCTED AND PRESSURE TEST MUST PASS BEFORE BACTERIA TEST IS CONDUCTED.
- 4. AFTER PRESSURE AND BACTERIA TEST, CONTRACTOR SHALL REMOVE THE STEEL PLATE FROM BETWEEN THE MJ X FLANGE ADAPTERS AND THE 2" BYPASS ASSEMBLY. BRASS PLUGS MUST BE INSTALLED IN THE CORPORATION STOPS. THIS MUST BE INSPECTED BY DISTRICT PRIOR TO SAND BACKFILL.
- 5. BACKFLOW PREVENTION ASSEMBLY SHALL CONFORM TO LATEST REVISION OF CDDW SERVICES LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES. ENTIRE ASSEMBLY SHALL BE PROVIDED AS A UNIT AND BE TESTED BY A CERTIFIED INDIVIDUAL PRIOR TO USE.
- 6. SSCWD SHALL PROVIDE A 2" WATER METER FOR CONSTRUCTION WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES OR DEPOSITS ASSOCIATED WITH THE METER.
- 7. ALL PIPING AND FITTINGS OFF OF THE SADDLES AND ASSEMBLY SHALL BE 2" BRASS.

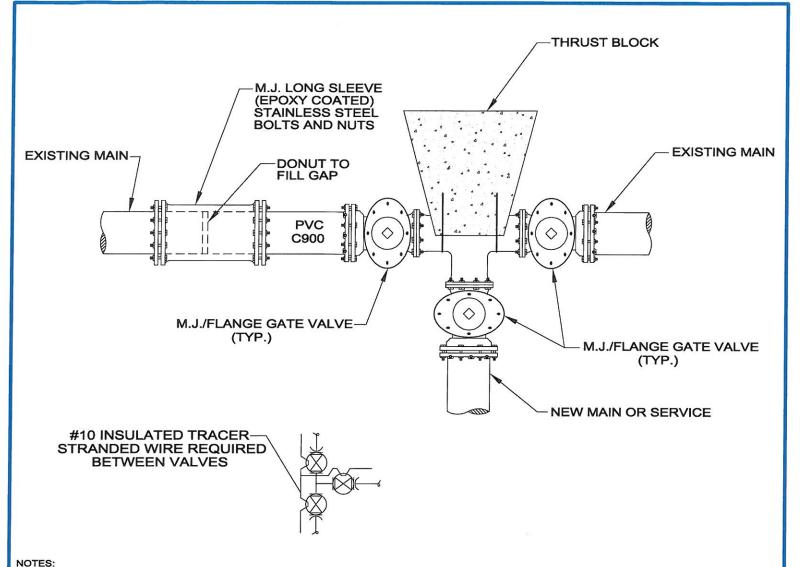
TITLE: 8" TIE-IN CONSTRUCTION METER & BACKFLOW DRAWN BY: SCALE: APPROVED: STANDARD PLAN LOUIE C. GUEVARA NONE REVISED BY REVISED: ROB HILLEBRECHT **APRIL 2015** SUNNYSLOPE COUNTY GENERAL MANAGER DONALD RIDENHOUR WATER DISTRICT SHEET 2 OF 2



TITLE:

- 1. STEEL ENCLOSURE TO BE PIPELINE PRODUCTS VC-330 #10 GAUGE STEEL, 30" DIA. X 36" TALL ENCLOSURE, BOLTED TO 36"X36" CONCRETE PAD
- 2. USE 6" TAMPED SAND BEDDING UNDER THE LATERAL AND 12" TAMPED SAND COVER OVER THE LATERAL.
- 3. PAINT CASE AND DOOR, BOTH INSIDE AND OUTSIDE, WITH TWO (2) COATS OF RUSTOLEUM MEDIUM GREEN OR EQUAL GREEN ENAMEL OR GREEN POWDER COATED.
- 4. INSTALL INSULATED STRANDED #10 GAGE TRACER WIRE ON TOP OF POLYETHYLENE TUBING, CONNECTED TO THE TRACER WIRE ON THE WATER MAIN AND WRAPPED AROUND THE AIR-VAC BASE.
- 5. AIR VAC TO BE LOCATED AT THE HIGHEST POINT IN THE LINE AND WHERE FEASIBLE AT THE PROPERTY LINE OR LOCATIONS APPROVED BY SUNNYSLOPE COUNTY WATER DISTRICT ENGINEER.
- 6. AIR & VACUUM RELEASE VALVE SHALL GENERALLY BE APCO NO. 143C OR APPROVED EQUAL FOR 8"-16" SERVICE MAINS. VERIFY PROPER AIR & VACUUM RELEASE VALVE SIZE WITH DISTRICT ENGINEER PRIOR TO ORDER OR INSTALL.

AIR AND VACUUM COMBINATION RELEASE VALVE ASSEMBLY DRAWN BY: LOUIE C. GUEVARA REVISED BY: ROB HILLEBRECHT REVISED: APRIL, 2015 SUNNYSLOPE COUNTY WATER DISTRICT APPROVED: STANDARD PLAN W-7 SHEET 1 OF 1



- NOTIFY DISTRICT ENGINEER AT LEAST 72 HOURS PRIOR TO ANY WATER TIE-IN OR SHUTDOWN TO ALL EXISTING WATER MAINS. NO SHUTDOWNS SHALL BE ALLOWED ON FRIDAYS OR TWO DAYS PRIOR TO A DISTRICT-RECOGNIZED HOLIDAY. 1.
- ALL EXISTING VALVES TO BE OPERATED BY SUNNYSLOPE WATER DISTRICT ONLY, AND SCHEDULED THROUGH DISTRICT ENGINEER.
- ALL FITTINGS SHALL BE DUCTILE IRON.
- PLACE THRUST BLOCKS AS PER STANDARD PLAN B-10. 4.
- ALL NEW PIPES AND FITTINGS SHALL BE SWABBED WITH SODIUM HYPOCHLORITE SOLUTION PER AWWA STANDARDS.
- ALL FITTINGS MUST BE ON SITE AND ALL FITTINGS EXCEPT M.J. LONG SLEEVE ARE TO BE ASSEMBLED PRIOR TO WATER SYSTEM SHUT-DOWN.
- VALVES 6" THRU 12" SHALL BE GATE TYPE, RESILIENT WEDGE, EPOXY COATED AND COMPLY WITH AWWA, C-509, SPECIFICATIONS. 7.
- PERFORM CHLORINE RESIDUAL TEST, AND COLIFORM TEST (PRESENT / ABSENT). RESIDUAL SHALL BE MINIMUM 0.2 PPM FREE CHLORINE. THE DEVELOPER/OWNER SHALL CONDUCT CHLORINE RESIDUAL AND COLIFORM TESTS (PRESENT/ABSENT) WHENEVER A TIE-IN TO THE 8. WATER MAIN HAS OCCURRED AS PART OF THE FLUSHING PROCESS & CERTIFIED BY A CALIFORNIA LABORATORY.
- CONTRACTOR TO HAVE AT LEAST ONE DEWATERING PUMP PLUS ONE STANDBY PUMP DURING WATER TIE-IN AND BE ABLE TO DEWATER THE BELL HOLE IN A REASONABLE TIME.
- WATER TIE-IN HOLE SHALL BE EXCAVATED ONE DAY BEFORE WATER TIE-IN AND COVERED WITH A STEEL PLATE. CONTRACTOR TO HAVE 6" DEPTH DRAIN ROCK IN THE TRENCH BOTTOM BEFORE TIE-IN WORK BEGINS. 10.
- 11. CONTRACTOR SHALL PROVIDE TWO (2) RUNNING CUT-OFF SAWS AND ALL OTHER NEEDED EQUIPMENT ON SITE PRIOR TO TIE-IN.
- 12. MECHANICAL JOINT RESTRAINT IS ALLOWED WITH THE APPROVAL OF THE DISTRICT ENGINEER.
- 13. CONTRACTOR SHALL COMPLY WITH STORM WATER BEST MANAGEMENT PRACTICE WHEN DEWATERING.
- ALL FITTINGS SHALL BE WRAPPED WITH 10MIL. MINIMUM POLYETHLYENE SHEET. 14.
- 15. INSULATED #10 GAUGE STRANDED TRACER WIRE ON NEW MAIN TO CONNECT WITH EXISTING TRACER WIRE AND LOOP UP IN EACH VALVE BOX

TITLE:

WATER MAIN TIE-IN DETAIL

DRAWN BY: APPROVED LOUIE C. GUEVARA NONE REVISED BY REVISED: ROB HILLEBRECHT **APRIL. 2015**

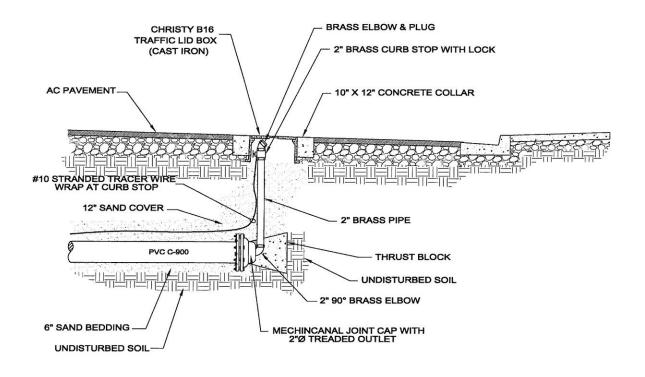
SHEET I OF I

STANDARD PLAN

SUNNYSLOPE COUNTY WATER DISTRICT



GENERAL MANAGER DONALD



- 1. WRAP THE M.J. CAP AND 2" BRASS ELBOW IN 10 MIL. MINIMUM POLYETHYLENE SHEET
- 2. THRUST BLOCK SHALL BE CLASS 520-C-2500 PCC IN ACCORDANCE WITH STD. PLAN B-10.
- 3. ALL FITTINGS AND PIPE AFTER THE M.J. CAP SHALL BE ONLY BRASS.
- 4. RUN A #10 GAUGE STRANDED TRACER WIRE FROM THE PIPE AND WRAP AROUND CURB STOP.
- 5. INSTALL CHRISTY B16 BOX WITH CAST IRON TRAFFIC LID AND 10"X12" CONCRETE COLLAR.
- BACKFILL WITH SAND FOR 6" BEDDING UNDER PIPE, 12" COVER OVER PIPE, AND 12" AROUND TH 2" BRASS PIPE UP TO BOX.

8" AND SMALLER BLOW OFF ASSEMBLY

DRAWN BY:
LOUIE C. GUEVARA

REVISED BY:
ROB HILLEBRECHT

SUNNYSLOPE COUNTY
WATER DISTRICT

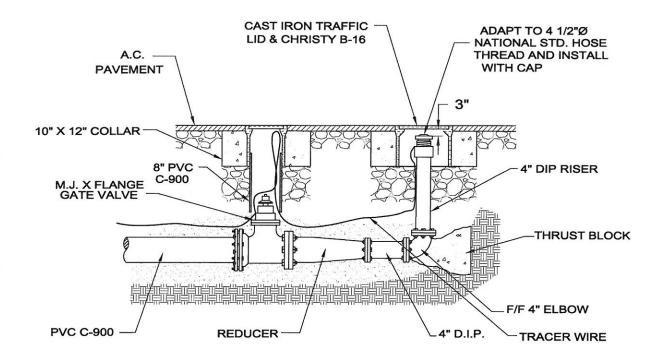
APPROVED:

APPROVED:

STANDARD PLAN

W-9-1

SHEET 1 OF 2

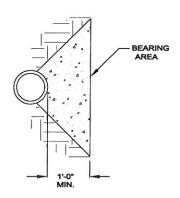


- 1. WRAP ALL FITTINGS AND D.I.P. IN 10 MIL. MINIMUM POLYETHYLENE SHEET.
- 2. THRUST BLOCK SHALL BE CLASS 520-C-2500 PCC IN ACCORDANCE WITH STD. PLAN B-10.
- GATE VALVE TO BE EQUAL SIZED TO MAIN PIPELINE. USE GATE VALVES FOR 12" AND BUTTERFLY VALVES FOR LARGER THAN 12".
- 4. RUN A #10 GAUGE STRANDED TRACER WIRE FROM THE PIPE, LOOP IN THE VALVE BOX, TO THE BLOW-OFF AND WRAP AROUND BLOW-OFF CAP.
- INSTALL CHRISTY G5 FOR VALVE LID AND B-16 BOX WITH CAST IRON LID FOR BLOW-OFF WITH 10"X12" CONCRETE COLLAR AROUND EACH.
- 6. BACKFILL WITH SAND FOR 6" BEDDING UNDER PIPE, 12" COVER OVER PIPE.

12" AND LARGER BLOW OFF ASSEMBLY DRAWN BY: LOUIE C. GUEVARA SCALE: NONE REVISED BY: ROB HILLEBRECHT REVISED: APPRIL, 2015 SUNNYSLOPE COUNTY WATTER DISTRICT APPROVED: STANDARD PLAN W-9-2 SHEET 2 OF 2

THRUST BLOCK BEARING AREA REQUIRED - SQUARE FEET

TYPE OF FITTING		90° BEND	45° BEND	22.5° BEND	11.25° BEND	TEE	TEE W/ PLUG	CROSS W/ PLUG	CROSS W/ PLUGS	
TYPICAL	INSTALLATION									
PIPE	6"	6	4	2	1	6	6	6	6	
ᆔ	8"	10	6	3	2	10	10	10	10	
SIZE	12"	21	11	6	3	22	21	22	21	

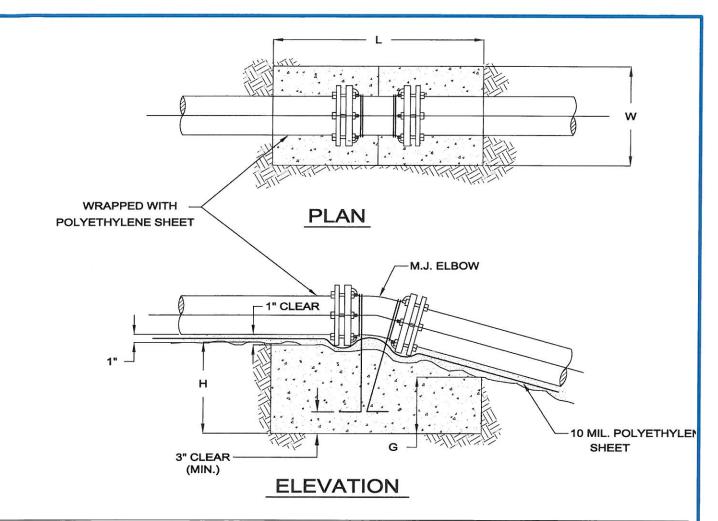


SECTION

NOTES

- 1. JOINTS, FITTINGS AND FACES OF PLUGS TO BE KEPT CLEAR OF CONCRETE USING 10 MIL. POLYETHYLENE SHEET.
- 2. BLOCKS MUST BE PLACED AGAINST UNDISTURBED SOIL.
- 3. THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS 520-C-2500 PCC.
- 4. STIRRUPS TO BE #4 REBAR EMBEDDED IN THRUST BLOCK TO A DEPTH EQUAL TO 3/4 OF PIPE OUTSIDE DIAMETER. STIRRUP HOOKS TO BE SHAPED 90° BEND WITH LENGTH EQUIVALENT TO 1/2 PIPE O.D.
- 5. THRUST BLOCK AREA IS BASED ON TEST PRESSURE OF 150 PSI AND A HORIZONTAL SOIL BEARING STRENGTH OF 1500 PSF.
- 6. EXPOSED STIRRUPS SHALL BE WRAPPED IN PVC TAPE 10 MIL.
- 7. MECHANICAL JOINT RESTRAINTS ARE ALLOWED WITH THE APPROVAL OF THE DISTRICT ENGINEER.

THRUST BLOCK SCHEDULE										
AUTOCAD BY: LOUIE C. GUEVARA	SCALE: NONE	APPROVED:	STANDARD PLAN							
REVISED BY: ROB HILLEBRECHT APRIL, 2015		011 5 011	\\\/_10_1							
sunnyslope co Water distri	[\(\frac{1}{2} \)	GENERAL MANAGER DONALD RIDENHOUR G/2/15 DATE	SHEET 1 OF 2							



		THE	RUS	T BL	OCK	DIN	/ENS	1018	1 - N	PWA	RD	THR	UST	•	
PIPE	PIPE 11 1/4° BEND					22 1/2° BEND				45° BEND					
SIZE	L	W	Н	G	BAR	L	W	Н	G	BAR	L	W	Н	G	BAR
6"	3.0	2.0	2.0	1.0	5	4.0	2.0	3.0	1.0	5	5.0	3.0	3.0	1.0	5
8"	3.5	2.5	2.0	1.0	5	4.5	3.0	3.0	1.0	5	6.0	3.0	4.0	1.5	5
12"	4.0	3.5	3.0	1.5	5	5.0	4.0	3.5	2.0	5	7.0	4.0	5.0	2.5	5

- 1. DIMENSIONS L, W, H, AND G ARE IN FEET.
- 2. THRUST BLOCK DIMENSIONS BASED ON 150 PSI TEST PRESSURE AND CONCRETE OF 150 PCF.
- 3. EXPOSED STIRRUPS SHALL BE WRAPPED WITH 10 MIL POLYETHYLENE SHEET.
- 4. THRUST BLOCKS SHALL BE CLASS 520-C-2500 PCC.
- 5. FLANGES, NUTS & BOLTS SHALL BE CLEAR OF CONCRETE.
- MECHANICAL JOINT RESTRAINTS ARE ALLOWED WITH THE APPROVAL OF THE DISTRICT ENGINEER.
- 7. STIRRUPS TO BE AS SHOWN IN TABLE ABOVE.

TITLE: UPWARD THRUST BLOCK SCHEDULES DRAWN BY: APPROVED: NONE

REVISED: APRIL, 2015 ROB HILLEBRECHT SUNNYSLOPE COUNTY WATER DISTRICT

LOUIE C. GUEVARA

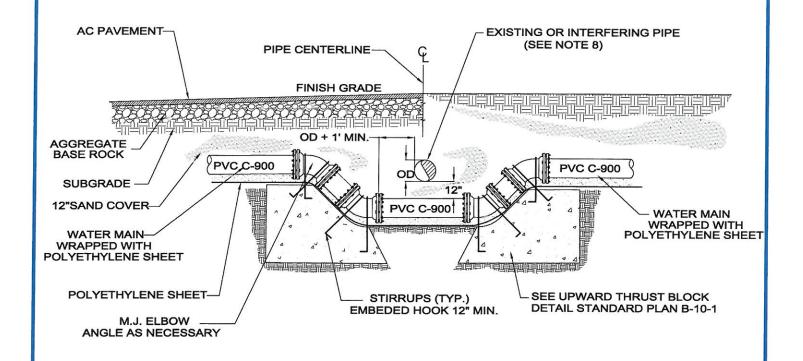
REVISED BY:



GENERAL MANAGER DONALD RIDENHOUR

STANDARD PLAN

SHEET 2 OF 2



- 1. MECHANICAL JOINT FITTINGS, NUTS & BOLTS TO BE CLEAR OF CONCRETE.
- 2. ALL ELBOWS SHALL BE MEGA-LUG MECHANICAL JOINT FITTINGS.
- 3. ALL FITTINGS SHALL BE WRAPPED WITH POLYWRAP 10 MIL. POLYETHYLENE SHEETING.
- STIRRUPS TO BE # 4 REBAR AND ALL EXPOSED STIRRUPS SHALL BE WRAPPED IN PVC TAPE 10 MIL.
- 5. THRUST BLOCKS SHALL BE CLASS 520-C-2500 PCC AND ABIDE BY STD. PLAN B-10.
- 6. CONCRETE SHALL NOT COME IN CONTACT WITH FITTINGS OR PIPE.
- ANY ALTERNATIVES MECHANICAL JOINT OR FLANGE FITTINGS REQUIRE REVIEW AND APPROVAL BY DISTRICT ENGINEER PRIOR TO INSTALLATION.
- 8. SANITARY OR STORM DRAIN SEPARATION AND JOINT LOCATION SHALL COMPLY WITH CITY AND COUNTY SPECIFICATIONS
- 9. ELBOW ANGLES AND PIPE LENGTHS TO BE DETERMINED AS NECESSARY AND APPROVED BY DISTRICT ENGINEER.
- 10. ALL JOINTS AND FITTINGS ARE TO BE MEGA-LUG MECHANICAL JOINTS AND ALL PIPING TO BE C-900 PVC.

