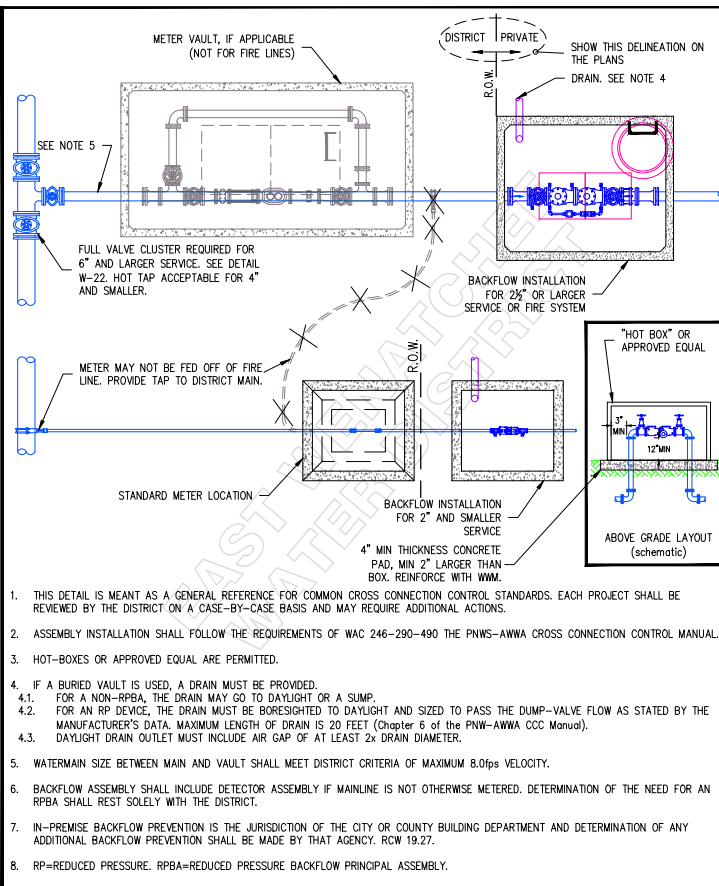


VALVE SIZE	MAX FLOW	VAULT MIN. INSIDE LENGTH	VAULT MIN. INSIDE WIDTH	CLEARANCES SHOWN MUST BE MAINTAINED. VAULT DIMENSIONS ARE MINIMUMS AND LIKELY A LARGER VAULT WILL BE REQUIRED. DESIGN ENGINEER TO CONFIRM SIZING.
2 1/2"	225 gpm	5'6"	6'6"	
3"	320 gpm	6'8"	6'8"	
4"	500 gpm	6'8"	6'8"	
6"	1000 gpm	6'12"	6'12"	
8"	1600 gpm	6'12"	6'12"	
10"	2300 gpm	6'12"	6'12"	
12"	3000 gpm	6'12"	6'12"	

1. ASSEMBLY TO BE MAINTAINED BY OWNER AND ANNUAL CERTIFICATION REQUIRED.
2. WATER MAIN SHALL NOT BE PLACED IN SERVICE UNTIL AFTER DOUBLE CHECK IS APPROVED BY A DISTRICT INSPECTOR.
3. ALL JOINTS SHALL BE RESTRAINED BETWEEN THE WATERMAIN AND THE VALVE ASSEMBLY. ALL JOINTS ON THE DOWNSTREAM (CUSTOMER) SIDE OF THE VALVE SHALL BE RESTRAINED PER DEAD-END LENGTH CALLOUTS ON STANDARD DETAIL W-16, OR AS APPROVED BY THE DISTRICT.
4. DISTRICT OWNERSHIP TERMINATES AT R.O.W. OR VAULT WALL, WHICHEVER IS REACHED FIRST.
5. THIS PLAN IS SHOWN FOR GENERAL LAYOUT ONLY. ENGINEER MUST PROVIDE DETAILED AND DIMENSIONED PLAN FOR EACH INSTALLATION INCLUDING HATCH AND LADDER LOCATIONS.
6. ENGINEER TO VERIFY SIZE OF CDDA REQUIRED PER MANUFACTURER AND FIRE DISTRICT CRITERIA. SUBMIT SIZING INFORMATION TO DISTRICT FOR REVIEW.
7. SEE STANDARD DETAIL W-25 FOR MORE INFO.
8. RP=REDUCED PRESSURE PRINCIPAL.
9. NOTHING ON THESE DETAILS SHALL BE INTERPRETED AS MAKING STATE CROSS CONNECTION CONTROL REQUIREMENTS.
10. SEE W-26 FOR ADDITIONAL VAULT INSTALLATION DETAILS. "HOT-BOX" MAY ALSO BE ACCEPTABLE.

**DOUBLE CHECK DETECTOR ASSEMBLY**

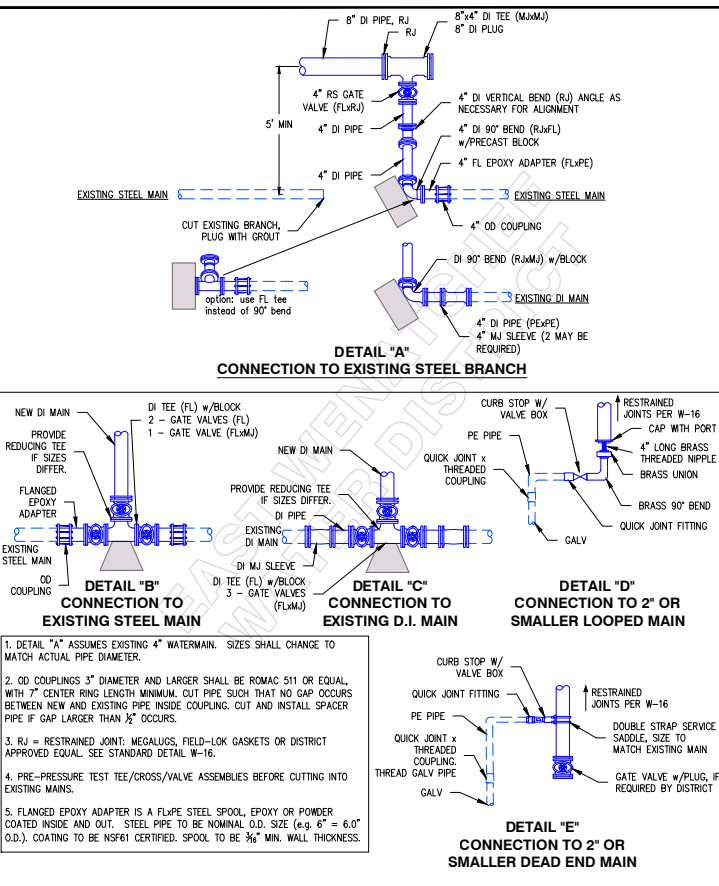
<p><b>TRACER WIRE TERMINATION</b></p>	<p><b>SPLICE DETAIL</b></p>								
		<p><b>TRACER WIRE INSTALLATION</b></p>							
<p>1. INSTALL TRACER WIRE ON ALL WATERMANS, SERVICE PIPES, AIR VALVE PIPES, AND BLOW OFF PIPES. DO NOT WRAP WIRE AROUND PIPE.</p> <p>2. TRACER WIRE TO BE SOLID COPPER CORE, UF, BLUE COLOR, 12 AWG FOR LENGTHS 2,000 FEET AND LESS, OR 10 AWG FOR LENGTH OVER 2,000 FEET.</p> <p>3. SEE STANDARD DETAILS W-14, W-18 AND W-21 FOR TRACER WIRE LAYOUT AT WATER SERVICES, W-08 AT BLOW-OFFS, AND W-10 AT AIR VALVES.</p> <p>4. IF SPACING IS GREATER THAN 1,000 FEET BETWEEN ACCESS POINTS (VALVE BOX, SERVICE, ETC), PROVIDE A VALVE BOX FOR TERMINATION.</p> <p>5. FOR SPLICES, USE A WATERPROOF DBY SPLICE KIT AND SECURE WITH ZIP TIES.</p>									
<table border="1"> <tr> <td><b>East Wenatchee Water District</b></td> <td>WATER SYSTEM STANDARD DETAIL</td> </tr> <tr> <td><b>BACKFLOW PREVENTION ASSEMBLY</b></td> <td></td> </tr> <tr> <td>File:EMDTW4</td> <td>Revised: MAR 1, 2019 Printed: MAR 1, 2019</td> </tr> <tr> <td>DRAWING NO. W-13</td> <td>SHEET NO. 25</td> </tr> </table>		<b>East Wenatchee Water District</b>	WATER SYSTEM STANDARD DETAIL	<b>BACKFLOW PREVENTION ASSEMBLY</b>		File:EMDTW4	Revised: MAR 1, 2019 Printed: MAR 1, 2019	DRAWING NO. W-13	SHEET NO. 25
<b>East Wenatchee Water District</b>	WATER SYSTEM STANDARD DETAIL								
<b>BACKFLOW PREVENTION ASSEMBLY</b>									
File:EMDTW4	Revised: MAR 1, 2019 Printed: MAR 1, 2019								
DRAWING NO. W-13	SHEET NO. 25								



1. THIS DETAIL IS MEANT AS A GENERAL REFERENCE FOR COMMON CROSS CONNECTION CONTROL STANDARDS. EACH PROJECT SHALL BE REVIEWED BY THE DISTRICT ON A CASE-BY-CASE BASIS AND MAY REQUIRE ADDITIONAL ACTIONS.
2. ASSEMBLY INSTALLATION SHALL FOLLOW THE REQUIREMENTS OF WAC 246-290-490 THE PNWS-AWWA CROSS CONNECTION CONTROL MANUAL.
3. HOT-BOXES OR APPROVED EQUAL ARE PERMITTED.
4. IF A BURIED VAULT IS USED, A DRAIN MUST BE PROVIDED.
4.1. FOR A NON-RPBA, THE DRAIN MAY GO TO DAYLIGHT OR TO A SUMP.
4.2. FOR AN RP DEVICE, THE DRAIN MUST BE REDESIGNED TO DAYLIGHT AND SIZED TO PASS THE DUMP-VALVE FLOW AS STATED BY THE MANUFACTURER'S DATA. MAXIMUM LENGTH OF DRAIN IS 20 FEET (Chapter 6 of the PNW-AWWA CCC Manual).
4.3. DAYLIGHT DRAIN OUTLET MUST INCLUDE AIR GAP OF AT LEAST 2x DRAIN DIAMETER.
5. WATERMAIN SIZE BETWEEN MAIN AND VAULT SHALL MEET DISTRICT CRITERIA OF MAXIMUM 8.0fps VELOCITY.
6. BACKFLOW ASSEMBLY SHALL INCLUDE DETECTOR ASSEMBLY IF MAINLINE IS NOT OTHERWISE METERED. DETERMINATION OF THE NEED FOR AN RPBA REST SOLELY WITH THE DISTRICT.
7. IN-PREMISE BACKFLOW PREVENTION IS THE JURISDICTION OF THE CITY OR COUNTY BUILDING DEPARTMENT AND DETERMINATION OF ANY ADDITIONAL BACKFLOW PREVENTION SHALL BE MADE BY THAT AGENCY. RCW 19.27.
8. RP=REDUCED PRESSURE. RPBA=REDUCED PRESSURE BACKFLOW PRINCIPAL ASSEMBLY.

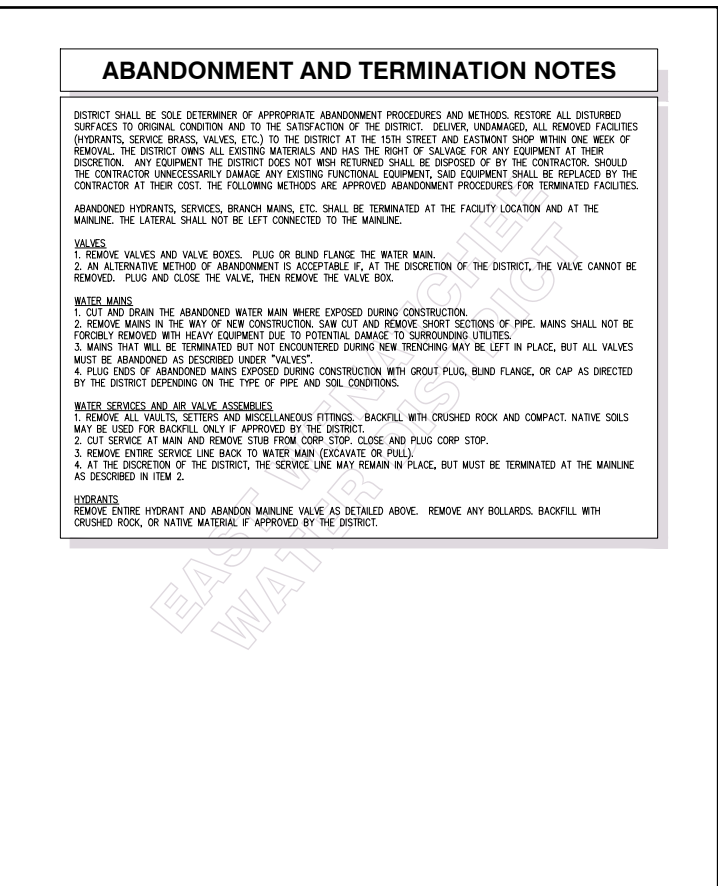
<b>East Wenatchee Water District</b>	WATER SYSTEM STANDARD DETAIL
<b>BACKFLOW ASSEMBLY INSTALLATION</b>	
File:EMDTW0	Revised: MAR 1, 2019 Printed: MAR 1, 2019
DRAWING NO. W-25	SHEET NO. 26

<p><b>REVISION HISTORY</b></p> <p><b>JULY 2014</b></p> <ul style="list-style-type: none"> <li>W-07 DEFINED MATERIAL FOR ALL TIE/SHACKLE RODS. UPDATED DETAILS (W02, W05, W17, W20, W24) TO REFERENCE BACK TO W-07 FOR ROD MATERIAL.</li> <li>W-10 ADDED TRACER WIRE TO SUPPLY LINE. ADDED #24 MESH SCREEN TO VENT.</li> <li>W-12 ADDED DETAIL FOR CURB STOP RISER PIPE.</li> <li>W-13 UPDATED BYPASS METER REGISTER MODEL.</li> <li>W-14 ADDED CONCRETE BLOCKING AND PT WOOD SHIM CALLOUT.</li> <li>W-17 CHANGED 3/4" AIR RELEASE VALVE TO 1" COMBINATION AIR VALVE, UPDATED PIPING. ADDED AIR VALVE TO BOTH SIDES OF PRV.</li> <li>ADDED NOTE TO ADDRESS THE LOCATION OF GAUGE &amp; AIR VALVE.</li> <li>W-18 UPDATED FORD METER SETTER MODEL NUMBERS. ADDED A 3" LONG BRASS NIPPLE BETWEEN CURB STOP AND SETTER.</li> <li>W-19 UPDATED LINE WORK FOR AIR VALVE PER CHANGE TO W-17.</li> <li>W-20 REMOVED BASKET STRAINER.</li> <li>W-21 UPDATED FORD METER SETTER MODEL NUMBERS. ADDED 6" BRASS NIPPLE BETWEEN CURB STOP AND SETTER.</li> <li>W-22 CHANGED VALVE ON 2" AND SMALLER DETAIL TO CURB STOP, ADDED MINIMUM WALL THICKNESS TO FLANGED EPOXY ADAPTER. ADDED DETAIL FOR CONNECTION TO EXISTING 2" AND SMALLER DEAD END MAIN.</li> <li>W-24 REMOVED BASKET STRAINER.</li> <li>W-26 CREATED NEW DETAIL FOR COMMON LARGE VAULT INFORMATION.</li> <li>ADDED NOTE THAT ALL EXTERIOR THRUST BLOCKS ON LARGE VAULTS SHALL BE INSTALLED PRIOR TO THE PIPE INSTALLED THROUGH THE VAULT BEING CUT OUT.</li> <li>ADDED A NOTE THAT REINFORCED THRUST BLOCKS SHALL BE FORMED USING WOOD FORMS NOT POURED DIRECTLY AGAINST SOIL.</li> <li>ADDED NOTE THAT REINFORCED THRUST BLOCKS SHALL BE CONSOLIDATED USING VIBRATION.</li> <li>W-29 ADDED NOTE THAT CUSTOMER SIDE CASINGS ARE ALWAYS REQUIRED.</li> <li>W-30 ADDED NOTE TO DELIVER SALVAGED VALVES WITHIN ONE WEEK AND UNDAMAGED.</li> <li>W-30 ADDED NOTE THAT RESTRAINTS AND AFFECTED PIPE MAY NOT BE REUSED ONCE ASSEMBLED.</li> </ul> <p><b>NOVEMBER 2014</b></p> <ul style="list-style-type: none"> <li>W-20 REVISED METER LAY LENGTH AND MODEL FROM NEPTUNE TO SENSUS.</li> <li>W-24 REVISED METER LAY LENGTH AND MODEL FROM NEPTUNE TO SENSUS.</li> <li>W-30 ADDED NOTE FOR FLANGE GASKET AND BOLT MATERIALS.</li> </ul> <p><b>JUNE 2015</b></p> <ul style="list-style-type: none"> <li>W-07 REMOVED ASTM A36 STEEL FROM TABLE HEADING.</li> <li>W-08 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 CHANGED VAULT LOCATION TO BE IN SIDEWALK.</li> <li>W-13 REVISED VAULT DRAINS TO CONFORM TO DETAIL W-26.</li> <li>W-15 REVISED FIRST PARAGRAPH.</li> <li>W-26 REVISED NOTE REGARDING PIPE LENGTHS TO ACCOMMODATE LONG VAULTS.</li> <li>W-26 ADDED REQUIREMENT OF 2 SUPPORTS FOR LADDER-UP EXTENSIONS.</li> <li>W-21 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-21 ADDED LENGTHS FOR BRASS NIPPLE BASED ON SINGLE OR DOUBLE SERVICE.</li> <li>W-23 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-29 CHANGED DETAIL TITLE TO "WATER SERVICE, AIR VALVE, BLOW OFF VAULT INSTALLATION PLACEMENT".</li> <li>W-29 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CASING RUNNERS</li> </ul> <p><b>January 2017</b></p> <ul style="list-style-type: none"> <li>W-01 REVISED WATER MAIN COVERAGE DEPTH NOTE</li> <li>W-01 REVISED THE THRUST RESTRAINT NOTE</li> <li>W-01 INCLUDED SETTERS AND TAILPIPE IN PRESSURE TEST NOTE</li> <li>W-01 INCLUDED OPEN END OF VALVES IN PIPE PLUG NOTE</li> <li>W-06 REMOVED DEADMAN THRUST BLOCK DETAIL</li> <li>W-07 REVISED ATTACHMENT DETAIL TO INCLUDE A WASHER AND DOUBLE NUT OR NYLOCK NUT</li> <li>W-10 CLARIFIED CMU BLOCK SIZE REQUIRED AND ELIMINATED CMU BLOCK UNDER CURB STOP</li> <li>W-10 CLARIFIED MATERIAL ALLOWED FOR CORP STOP BLOCKING.</li> <li>W-12 ADDED NOTE 8 AND ADDED PLAN VIEW OF BOX LID</li> <li>W-13 UPDATED NOTE 3 TO CLARIFY RESTRAINED PIPE REQUIREMENTS</li> <li>W-13 REMOVED THRUST BLOCKS AND SHACKLES</li> <li>W-13 CHANGED THE FCA TO A FLRJ ADAPTER</li> <li>W-13 ADDED DISMANTLING JOINT</li> <li>W-13 UPDATED VAULT MIN INTERIOR DIMENSION REQUIREMENTS TO MATCH NEW PIPE LAYOUT</li> <li>W-13 INCLUDED IPERL IN TYPE OF METER ALLOWED</li> <li>W-15 INCLUDED AIR VALVE ASSEMBLIES IN WATER SERVICE SECTION TITLE</li> <li>W-19 REMOVED WALL COLLARS FROM DETAIL</li> <li>W-20 REMOVED EXTERIOR BLOCKS AND SHACKLES, ADDED NOTE 8, UPDATED FITTING NO. 2 FROM MJ TO RJ</li> <li>W-21 REMOVED NOTE 4 REGARDING MASTIC BETWEEN CHAMBER TOP AND BASE</li> <li>W-21 ADDED NOTE REGARDING PRESSURE TESTING SERVICE</li> <li>W-21 ADDED NOTE IN ELEVATION REGARDING REQUIRED ADAPTER IN 1" SETTERS</li> <li>W-24 REMOVED EXTERIOR BLOCKS AND SHACKLES, ADDED NOTE 8, UPDATED FITTING NO. 2 FROM MJ TO RJ WITH NO FCA OPTION</li> <li>W-26 REMOVED ALL WALL COLLARS</li> <li>W-26 UPDATED NOTE 2 TO HAVE THE DISTRICT DECIDE IF EXTERNAL BLOCKS ARE REQUIRED.</li> <li>W-26 CLARIFIED IN NOTE 3 TO NEATLY ROUTE DRAIN PIPING IN VAULT</li> <li>W-26 CREATED A NEW NOTE 7 ALLOWING THE DISTRICT TO REQUIRE INTERIOR PAINT</li> <li>W-26 UPDATED NOTE 8 (WAS PREVIOUSLY 7) TO REQUIRE EXTERIOR COAT ON GROUT PATCHES</li> <li>W-30 RELOCATED CASING NOTE TO CASING DETAIL, W-32</li> <li>W-30 UPDATED CONTRACTOR SHUTDOWN REQUIREMENT NOTE</li> <li>W-30 INCLUDED ASTM A307 GRADE B FOR FLANGE BOLTS</li> <li>W-31 NEW DETAIL CREATED FOR TRACER WIRE INSTALLATION</li> <li>W-32 NEW DETAIL CREATED FOR CASING PIPES</li> </ul> <p><b>September 2017</b></p> <ul style="list-style-type: none"> <li>W-01 RELOCATED DOMESTIC-MADE REQUIREMENT NOTE FROM NOTE 15 TO NOTE 1.</li> <li>W-01, W-30 SPLIT NOTE 15 INTO SEPARATE NOTES 1, 2, AND 17. RENUMBERED OTHER NOTES ACCORDINGLY.</li> </ul> <p><b>JUNE 2018</b></p> <ul style="list-style-type: none"> <li>W-01 CLARIFIED CUSTOMER SIDE TAILPIPE IN PRESSURE TESTING NOTE.</li> <li>W-01 REVISED DOMESTIC MADE REQUIREMENT NOTE TO EXCLUDE CASING PIPES</li> <li>W-02 UPDATED THE APPROVED M&amp;H MODEL NUMBERS</li> <li>W-02 ADDED TRACER WIRE TO ELEVATION VIEW</li> <li>W-03 ADDED NOTE TO TRENCH DETAIL ABOUT TRACER WIRE INSTALLATION.</li> <li>W-04 ADDED A ROW FOR SILT IN TABLE 2.</li> <li>W-07 ADDED ATTACHMENT DETAIL FOR SHACKLE PLATES</li> <li>W-07 ADDED A BULLET LIST OF APPROVED MATERIALS FOR THE TIE RODS IN THE GENERAL NOTES.</li> </ul> <p><b>JUNE 2018 (CONTINUED)</b></p> <ul style="list-style-type: none"> <li>W-08 REVISED THE TRACER WIRE TO NOT WRAP AROUND THE PIPE.</li> <li>W-10 REVISED TRACER WIRE ROUTING.</li> <li>W-10 CREATED AN ISOMETRIC OF THE BLOW-OFF TEE.</li> <li>W-10 UPDATED THE MODEL NUMBERS FOR THE APCO AIR RELEASE/VACUUM VALVE.</li> <li>W-10 CALLED OUT THE LENGTH OF THE NIPPLE UNDERNEATH THE AIR RELEASE/VACUUM VALVE.</li> <li>W-12 ADDED TRACER WIRE TO ISOLATION VALVE DETAIL</li> <li>W-12 UPDATED VALVE NOTE TO INCLUDE VALVES ON TEES.</li> <li>W-12 REVISED ISOLATION VALVE NOTE TO 4" AND LARGER.</li> <li>W-12 CLARIFIED PRE-PRESSURE TEST NOTE TO SAY CLOSED SEAT.</li> <li>W-12 ADDED TO MARKER POST NOTE TO INCLUDE WHEN VALVE IS IN GRAVEL AREA.</li> <li>W-13 ADDED 12" VALVE SIZE DATA TO THE VAULT MIN. INSIDE TABLE</li> <li>W-14 ADDED 1" MIN SIZE TO PE SERVICE PIPE</li> <li>W-14 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-14 INCLUDED "WHEN TAPPING EXISTING MAIN" TO NOTE ABOUT TRACER WIRE CONNECTION.</li> <li>W-16 ADDED A FUSION BONDED POLYESTER COATING REQUIREMENT TO THE MECHANICAL JOINT RESTRAINTS</li> <li>W-16 UPDATED THE REQUIRED RESTRAINED LENGTHS FOR ALL FITTINGS</li> <li>W-17 ADDED A BELL REDUCER ON THE GAUGE &amp; AIR VALVE DETAIL</li> <li>W-17 ADDED A MAX TAP SIZE TABLE</li> <li>W-18 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-18 ADDED DETAIL TO SHOW SERVICE LINE GOING UNDER CROSSING UTILITY</li> <li>W-18 ADDED 3" CASING TO ELEVATION DETAIL FOR SERVICE PIPE</li> <li>W-19 ADDED FLRJ ADAPTERS TO EACH END OF THE MAIN PIPE IN THE VAULT</li> <li>W-19 ADDED A SPOOL OF PIPE TO SEPARATE THE PRV'S AND MOVE THE LADDER</li> <li>W-19 REVISED ITEM NO. 4, REDUCING TEE, TO COME WITH A TAPPED BOSS</li> <li>W-20 ADDED A VALVE AND DRAIN ON THE BYPASS</li> <li>W-21 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-21 UPDATED THE MUELLER MODEL NUMBER</li> <li>W-22 REMOVED NOTES AND PIPING THAT WAS REDUNDANT TO DETAIL W-15</li> <li>W-22 UPDATED GENERAL NOTE 1 TO READ WATERMAIN INSTEAD OF BRANCH</li> <li>W-22 UPDATED COUPLING NOTE TO INCLUDE ROMAC 511 COUPLING OR EQUAL WITH A 7" CENTER RING LENGTH MINIMUM.</li> <li>W-24 ADDED A VALVE AND DRAIN ON THE BYPASS</li> <li>W-26 CLARIFIED NOTE ABOUT DRILLING 2" HOLE IN DOOR. ONLY IF VAULT HAS METER</li> <li>W-26 ADDED NOTE ABOUT A SPRAY UNDERCOAT TO THE GROUT PACK</li> <li>W-26 REVISED LADDER-UP TO BE SPRING LOADED AND INCLUDED APPROVED MATERIALS FOR THE LADDER</li> <li>W-29 ADDED REFERENCE TO RETAINING WALL DETAIL TO GENERAL NOTE 4</li> <li>W-30 ADDED THE DIMENSIONS FOR THE RECESSED HOLE FOR THE RADIO.</li> <li>W-30 ADDED NOTE STATING THE TYPE OF VALVES TO BE USED WHEN SMALLER THAN 4"</li> <li>W-31 UPDATED TRACER WIRE TO COME IN BETWEEN TWO PARTS OF VALVE BOX</li> <li>W-31 UPDATED DETAIL TO SHOW TRACER WIRE TERMINATING ON SLEEVE OR COUPLING</li> <li>W-31 REVISED THE WATERPROOF NUT TO A WATERPROOF DBY CONNECTOR</li> <li>W-31 REMOVED TRACER WIRE WRAPPING DETAIL</li> <li>W-31 ADDED GENERAL NOTE 6</li> <li>W-32 ADDED DETAIL FOR CASINGS LONGER THAN 20'</li> <li>W-32 INCLUDED A CROSS SECTION OF THE CROSS UTILITY FOR EACH CASING DETAIL.</li> <li>W-32 ADDED NOTE ABOUT CASING RUNNER SELECTION SIZE.</li> <li>W-32 ADDED NOTE REGARDING CASING SIZE NEEDED FOR VARIOUS PUSH-ON JOINT DI CARRIER PIPE SIZES.</li> <li>W-14, W-18, W-21, W-29 CHANGED SERVICE LINE DEPTH CALLOUT TO 48" COVER.</li> </ul>	
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<b>East Wenatchee Water District</b>	WATER SYSTEM STANDARD DETAIL
<b>CONNECTIONS TO EXISTING MAINS</b>	
File:EMDTW8	Revised: MAY 2, 2018 Printed: MAY 2, 2018
DRAWING NO. W-22	SHEET NO. 27

<p><b>REVISION HISTORY</b></p> <p><b>JULY 2014</b></p> <ul style="list-style-type: none"> <li>W-07 DEFINED MATERIAL FOR ALL TIE/SHACKLE RODS. UPDATED DETAILS (W02, W05, W17, W20, W24) TO REFERENCE BACK TO W-07 FOR ROD MATERIAL.</li> <li>W-10 ADDED TRACER WIRE TO SUPPLY LINE. ADDED #24 MESH SCREEN TO VENT.</li> <li>W-12 ADDED DETAIL FOR CURB STOP RISER PIPE.</li> <li>W-13 UPDATED BYPASS METER REGISTER MODEL.</li> <li>W-14 ADDED CONCRETE BLOCKING AND PT WOOD SHIM CALLOUT.</li> <li>W-17 CHANGED 3/4" AIR RELEASE VALVE TO 1" COMBINATION AIR VALVE, UPDATED PIPING. ADDED AIR VALVE TO BOTH SIDES OF PRV.</li> <li>ADDED NOTE TO ADDRESS THE LOCATION OF GAUGE &amp; AIR VALVE.</li> <li>W-18 UPDATED FORD METER SETTER MODEL NUMBERS. ADDED A 3" LONG BRASS NIPPLE BETWEEN CURB STOP AND SETTER.</li> <li>W-19 UPDATED LINE WORK FOR AIR VALVE PER CHANGE TO W-17.</li> <li>W-20 REMOVED BASKET STRAINER.</li> <li>W-21 UPDATED FORD METER SETTER MODEL NUMBERS. 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SENSUS.</li> <li>W-30 ADDED NOTE FOR FLANGE GASKET AND BOLT MATERIALS.</li> </ul> <p><b>JUNE 2015</b></p> <ul style="list-style-type: none"> <li>W-07 REMOVED ASTM A36 STEEL FROM TABLE HEADING.</li> <li>W-08 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 CHANGED VAULT LOCATION TO BE IN SIDEWALK.</li> <li>W-13 REVISED VAULT DRAINS TO CONFORM TO DETAIL W-26.</li> <li>W-15 REVISED FIRST PARAGRAPH.</li> <li>W-26 REVISED NOTE REGARDING PIPE LENGTHS TO ACCOMMODATE LONG VAULTS.</li> <li>W-26 ADDED REQUIREMENT OF 2 SUPPORTS FOR LADDER-UP EXTENSIONS.</li> <li>W-21 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-21 ADDED LENGTHS FOR BRASS NIPPLE BASED ON SINGLE OR DOUBLE SERVICE.</li> <li>W-23 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-29 CHANGED DETAIL TITLE TO "WATER SERVICE, AIR VALVE, BLOW OFF VAULT INSTALLATION PLACEMENT".</li> <li>W-29 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-29 CHANGED NOTE ON THE LIDS INSTALLATION WITHIN SIDEWALK DETAIL TO REQUIRING A FULL PANEL OF SIDEWALK AROUND VAULT WHEN SIDEWALK IMPROVEMENTS ARE DEFERRED.</li> <li>W-29 DETAIL NOTE CHANGES: <ul style="list-style-type: none"> <li>ADDED TO NOTE TO SET LID 2" ABOVE FINISHED GRADE IN LANDSCAPE AREAS.</li> <li>ADDED NEW NOTE TO INSTALL MASTIC BETWEEN VAULT SECTIONS</li> <li>ADDED NEW NOTE REQUIRING A HMA APRON AROUND THE LID IN UNPAVED TRAVEL AREAS.</li> </ul> </li> <li>W-30 RE-ADDED VAULT LID NOTE ACCIDENTALLY DELETED DURING 2014 REVISIONS.</li> <li>W-30 MOVED NOTE REGARDING SALVAGED EQUIPMENT TO DETAIL W-15.</li> </ul> <p><b>JUNE 2016</b></p> <ul style="list-style-type: none"> <li>W-13 REVISED MINIMUM VAULT SIZE REQUIREMENTS</li> <li>W-14 REVISED SADDLE FIT RANGE</li> <li>W-18 ADDED MUELLER PRODUCT INFORMATION TO TABLE</li> <li>W-21 ADDED MUELLER PRODUCT INFORMATION TO TABLE</li> <li>W-30 ADDITIONAL SPACING REQUIREMENTS FOR CASING RUNNERS</li> </ul> <p><b>January 2017</b></p> <ul style="list-style-type: none"> <li>W-01 REVISED WATER MAIN COVERAGE DEPTH NOTE</li> <li>W-01 REVISED THE THRUST RESTRAINT NOTE</li> <li>W-01 INCLUDED SETTERS AND TAILPIPE IN PRESSURE TEST NOTE</li> <li>W-01 INCLUDED OPEN END OF VALVES IN PIPE PLUG NOTE</li> <li>W-06 REMOVED DEADMAN THRUST BLOCK DETAIL</li> <li>W-07 REVISED ATTACHMENT DETAIL TO INCLUDE A WASHER AND DOUBLE NUT OR NYLOCK NUT</li> <li>W-10 CLARIFIED CMU BLOCK SIZE REQUIRED AND ELIMINATED CMU BLOCK UNDER CURB STOP</li> <li>W-10 CLARIFIED MATERIAL ALLOWED FOR CORP STOP BLOCKING.</li> <li>W-12 ADDED NOTE 8 AND ADDED PLAN VIEW OF BOX LID</li> <li>W-13 UPDATED NOTE 3 TO CLARIFY RESTRAINED PIPE REQUIREMENTS</li> <li>W-13 REMOVED THRUST BLOCKS AND SHACKLES</li> <li>W-13 CHANGED THE FCA TO A FLRJ ADAPTER</li> <li>W-13 ADDED DISMANTLING JOINT</li> <li>W-13 UPDATED VAULT MIN INTERIOR DIMENSION REQUIREMENTS TO MATCH NEW PIPE LAYOUT</li> <li>W-13 INCLUDED IPERL IN TYPE OF METER ALLOWED</li> <li>W-15 INCLUDED AIR VALVE ASSEMBLIES IN WATER SERVICE SECTION TITLE</li> <li>W-19 REMOVED WALL COLLARS FROM DETAIL</li> <li>W-20 REMOVED EXTERIOR BLOCKS AND SHACKLES, ADDED NOTE 8, UPDATED FITTING NO. 2 FROM MJ TO RJ</li> <li>W-21 REMOVED NOTE 4 REGARDING MASTIC BETWEEN CHAMBER TOP AND BASE</li> <li>W-21 ADDED NOTE REGARDING PRESSURE TESTING SERVICE</li> <li>W-21 ADDED NOTE IN ELEVATION REGARDING REQUIRED ADAPTER IN 1" SETTERS</li> <li>W-24 REMOVED EXTERIOR BLOCKS AND SHACKLES, ADDED NOTE 8, UPDATED FITTING NO. 2 FROM MJ TO RJ WITH NO FCA OPTION</li> <li>W-26 REMOVED ALL WALL COLLARS</li> <li>W-26 UPDATED NOTE 2 TO HAVE THE DISTRICT DECIDE IF EXTERNAL BLOCKS ARE REQUIRED.</li> <li>W-26 CLARIFIED IN NOTE 3 TO NEATLY ROUTE DRAIN PIPING IN VAULT</li> <li>W-26 CREATED A NEW NOTE 7 ALLOWING THE DISTRICT TO REQUIRE INTERIOR PAINT</li> <li>W-26 UPDATED NOTE 8 (WAS PREVIOUSLY 7) TO REQUIRE EXTERIOR COAT ON GROUT PATCHES</li> <li>W-30 RELOCATED CASING NOTE TO CASING DETAIL, W-32</li> <li>W-30 UPDATED CONTRACTOR SHUTDOWN REQUIREMENT NOTE</li> <li>W-30 INCLUDED ASTM A307 GRADE B FOR FLANGE BOLTS</li> <li>W-31 NEW DETAIL CREATED FOR TRACER WIRE INSTALLATION</li> <li>W-32 NEW DETAIL CREATED FOR CASING PIPES</li> </ul> <p><b>September 2017</b></p> <ul style="list-style-type: none"> <li>W-01 RELOCATED DOMESTIC-MADE REQUIREMENT NOTE FROM NOTE 15 TO NOTE 1.</li> <li>W-01, W-30 SPLIT NOTE 15 INTO SEPARATE NOTES 1, 2, AND 17. RENUMBERED OTHER NOTES ACCORDINGLY.</li> </ul> <p><b>JUNE 2018</b></p> <ul style="list-style-type: none"> <li>W-01 CLARIFIED CUSTOMER SIDE TAILPIPE IN PRESSURE TESTING NOTE.</li> <li>W-01 REVISED DOMESTIC MADE REQUIREMENT NOTE TO EXCLUDE CASING PIPES</li> <li>W-02 UPDATED THE APPROVED M&amp;H MODEL NUMBERS</li> <li>W-02 ADDED TRACER WIRE TO ELEVATION VIEW</li> <li>W-03 ADDED NOTE TO TRENCH DETAIL ABOUT TRACER WIRE INSTALLATION.</li> <li>W-04 ADDED A ROW FOR SILT IN TABLE 2.</li> <li>W-07 ADDED ATTACHMENT DETAIL FOR SHACKLE PLATES</li> <li>W-07 ADDED A BULLET LIST OF APPROVED MATERIALS FOR THE TIE RODS IN THE GENERAL NOTES.</li> </ul> <p><b>JUNE 2018 (CONTINUED)</b></p> <ul style="list-style-type: none"> <li>W-08 REVISED THE TRACER WIRE TO NOT WRAP AROUND THE PIPE.</li> <li>W-10 REVISED TRACER WIRE ROUTING.</li> <li>W-10 CREATED AN ISOMETRIC OF THE BLOW-OFF TEE.</li> <li>W-10 UPDATED THE MODEL NUMBERS FOR THE APCO AIR RELEASE/VACUUM VALVE.</li> <li>W-10 CALLED OUT THE LENGTH OF THE NIPPLE UNDERNEATH THE AIR RELEASE/VACUUM VALVE.</li> <li>W-12 ADDED TRACER WIRE TO ISOLATION VALVE DETAIL</li> <li>W-12 UPDATED VALVE NOTE TO INCLUDE VALVES ON TEES.</li> <li>W-12 REVISED ISOLATION VALVE NOTE TO 4" AND LARGER.</li> <li>W-12 CLARIFIED PRE-PRESSURE TEST NOTE TO SAY CLOSED SEAT.</li> <li>W-12 ADDED TO MARKER POST NOTE TO INCLUDE WHEN VALVE IS IN GRAVEL AREA.</li> <li>W-13 ADDED 12" VALVE SIZE DATA TO THE VAULT MIN. INSIDE TABLE</li> <li>W-14 ADDED 1" MIN SIZE TO PE SERVICE PIPE</li> <li>W-14 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-14 INCLUDED "WHEN TAPPING EXISTING MAIN" TO NOTE ABOUT TRACER WIRE CONNECTION.</li> <li>W-16 ADDED A FUSION BONDED POLYESTER COATING REQUIREMENT TO THE MECHANICAL JOINT RESTRAINTS</li> <li>W-16 UPDATED THE REQUIRED RESTRAINED LENGTHS FOR ALL FITTINGS</li> <li>W-17 ADDED A BELL REDUCER ON THE GAUGE &amp; AIR VALVE DETAIL</li> <li>W-17 ADDED A MAX TAP SIZE TABLE</li> <li>W-18 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-18 ADDED DETAIL TO SHOW SERVICE LINE GOING UNDER CROSSING UTILITY</li> <li>W-18 ADDED 3" CASING TO ELEVATION DETAIL FOR SERVICE PIPE</li> <li>W-19 ADDED FLRJ ADAPTERS TO EACH END OF THE MAIN PIPE IN THE VAULT</li> <li>W-19 ADDED A SPOOL OF PIPE TO SEPARATE THE PRV'S AND MOVE THE LADDER</li> <li>W-19 REVISED ITEM NO. 4, REDUCING TEE, TO COME WITH A TAPPED BOSS</li> <li>W-20 ADDED A VALVE AND DRAIN ON THE BYPASS</li> <li>W-21 REVISED TRACER WIRE TO NOT WRAP AROUND PIPE</li> <li>W-21 UPDATED THE MUELLER MODEL NUMBER</li> <li>W-22 REMOVED NOTES AND PIPING THAT WAS REDUNDANT TO DETAIL W-15</li> <li>W-22 UPDATED GENERAL NOTE 1 TO READ WATERMAIN INSTEAD OF BRANCH</li> <li>W-22 UPDATED COUPLING NOTE TO INCLUDE ROMAC 511 COUPLING OR EQUAL WITH A 7" CENTER RING LENGTH MINIMUM.</li> <li>W-24 ADDED A VALVE AND DRAIN ON THE BYPASS</li> <li>W-26 CLARIFIED NOTE ABOUT DRILLING 2" HOLE IN DOOR. ONLY IF VAULT HAS METER</li> <li>W-26 ADDED NOTE ABOUT A SPRAY UNDERCOAT TO THE GROUT PACK</li> <li>W-26 REVISED LADDER-UP TO BE SPRING LOADED AND INCLUDED APPROVED MATERIALS FOR THE LADDER</li> <li>W-29 ADDED REFERENCE TO RETAINING WALL DETAIL TO GENERAL NOTE 4</li> <li>W-30 ADDED THE DIMENSIONS FOR THE RECESSED HOLE FOR THE RADIO.</li> <li>W-30 ADDED NOTE STATING THE TYPE OF VALVES TO BE USED WHEN SMALLER THAN 4"</li> <li>W-31 UPDATED TRACER WIRE TO COME IN BETWEEN TWO PARTS OF VALVE BOX</li> <li>W-31 UPDATED DETAIL TO SHOW TRACER WIRE TERMINATING ON SLEEVE OR COUPLING</li> <li>W-31 REVISED THE WATERPROOF NUT TO A WATERPROOF DBY CONNECTOR</li> <li>W-31 REMOVED TRACER WIRE WRAPPING DETAIL</li> <li>W-31 ADDED GENERAL NOTE 6</li> <li>W-32 ADDED DETAIL FOR CASINGS LONGER THAN 20'</li> <li>W-32 INCLUDED A CROSS SECTION OF THE CROSS UTILITY FOR EACH CASING DETAIL.</li> <li>W-32 ADDED NOTE ABOUT CASING RUNNER SELECTION SIZE.</li> <li>W-32 ADDED NOTE REGARDING CASING SIZE NEEDED FOR VARIOUS PUSH-ON JOINT DI CARRIER PIPE SIZES.</li> <li>W-14, W-18, W-21, W-29 CHANGED SERVICE LINE DEPTH CALLOUT TO 48" COVER.</li> </ul>	
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<b>East Wenatchee Water District</b>	WATER SYSTEM STANDARD DETAIL
<b>ABANDONMENT OF TERMINATED FACILITIES</b>	
File:EMDTW9	Revised: JAN 25, 2017 Printed: JAN 25, 2017
DRAWING NO. W-15	SHEET NO. 28

<p><b>REVISION HISTORY</b></p> <p><b>JULY 2014</b></p> <ul style="list-style-type: none"> <li>W-07 DEFINED MATERIAL FOR ALL TIE/SHACKLE RODS. UPDATED DETAILS (W02, W05, W17, W20, W24) TO REFERENCE BACK TO W-07 FOR ROD MATERIAL.</li> <li>W-10 ADDED TRACER WIRE TO SUPPLY LINE. ADDED #24 MESH SCREEN TO VENT.</li> <li>W-12 ADDED DETAIL FOR CURB STOP RISER PIPE.</li> <li>W-13 UPDATED BYPASS METER REGISTER MODEL.</li> <li>W-14 ADDED CONCRETE BLOCKING AND PT WOOD SHIM CALLOUT.</li> <li>W-17 CHANGED 3/4" AIR RELEASE VALVE TO 1" COMBINATION AIR VALVE, UPDATED PIPING. ADDED AIR VALVE TO BOTH SIDES OF PRV.</li> <li>ADDED NOTE TO ADDRESS THE LOCATION OF GAUGE &amp; AIR VALVE.</li> <li>W-18 UPDATED FORD METER SETTER MODEL NUMBERS. ADDED A 3" LONG BRASS NIPPLE BETWEEN CURB STOP AND SETTER.</li> <li>W-19 UPDATED LINE WORK FOR AIR VALVE PER CHANGE TO W-17.</li> <li>W-20 REMOVED BASKET STRAINER.</li> <li>W-21 UPDATED FORD METER SETTER MODEL NUMBERS. ADDED 6" BRASS NIPPLE BETWEEN CURB STOP AND SETTER.</li> <li>W-22 CHANGED VALVE ON 2" AND SMALLER DETAIL TO CURB STOP, ADDED MINIMUM WALL THICKNESS TO FLANGED EPOXY ADAPTER. ADDED DETAIL FOR CONNECTION TO EXISTING 2" AND SMALLER DEAD END MAIN.</li> <li>W-24 REMOVED BASKET STRAINER.</li> <li>W-26 CREATED NEW DETAIL FOR COMMON LARGE VAULT INFORMATION.</li> <li>ADDED NOTE THAT ALL EXTERIOR THRUST BLOCKS ON LARGE VAULTS SHALL BE INSTALLED PRIOR TO THE PIPE INSTALLED THROUGH THE VAULT BEING CUT OUT.</li> <li>ADDED A NOTE THAT REINFORCED THRUST BLOCKS SHALL BE FORMED USING WOOD FORMS NOT POURED DIRECTLY AGAINST SOIL.</li> <li>ADDED NOTE THAT REINFORCED THRUST BLOCKS SHALL BE CONSOLIDATED USING VIBRATION.</li> <li>W-29 ADDED NOTE THAT CUSTOMER SIDE CASINGS ARE ALWAYS REQUIRED.</li> <li>W-30 ADDED NOTE TO DELIVER SALVAGED VALVES WITHIN ONE WEEK AND UNDAMAGED.</li> <li>W-30 ADDED NOTE THAT RESTRAINTS AND AFFECTED PIPE MAY NOT BE REUSED ONCE ASSEMBLED.</li> </ul> <p><b>NOVEMBER 2014</b></p> <ul style="list-style-type: none"> <li>W-20 REVISED METER LAY LENGTH AND MODEL FROM NEPTUNE TO SENSUS.</li> <li>W-24 REVISED METER LAY LENGTH AND MODEL FROM NEPTUNE TO SENSUS.</li> <li>W-30 ADDED NOTE FOR FLANGE GASKET AND BOLT MATERIALS.</li> </ul> <p><b>JUNE 2015</b></p> <ul style="list-style-type: none"> <li>W-07 REMOVED ASTM A36 STEEL FROM TABLE HEADING.</li> <li>W-08 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 REVISED NOTE TO SEE DETAIL W29 FOR VAULT INSTALLATION REQUIREMENTS.</li> <li>W-10 CHANGED VAULT LOCATION TO BE IN SIDEWALK.</li> <li>W-13 REVISED VAULT DRAINS TO CONFORM TO DETAIL W-26.</li> <li>W-15 REVISED FIRST PARAGRAPH.</li> <li>W-26 REVISED NOTE REGARDING PIPE LENGTHS TO ACCOMMODATE LONG VAULTS.</li> <li>W-26 ADDED REQUIREMENT OF 2 SUPPORTS FOR LADDER-UP EXTENSIONS.</li> <li>W-21 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-21 ADDED LENGTHS FOR BRASS NIPPLE BASED ON SINGLE OR DOUBLE SERVICE.</li> <li>W-23 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> <li>W-29 CHANGED DETAIL TITLE TO "WATER SERVICE, AIR VALVE, BLOW OFF VAULT INSTALLATION PLACEMENT".</li> <li>W-29 ADDED PRESSURE TESTING TO PE PIPE SERVICE CONNECTION.</li> </ul>	
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