

## APPROVED MATERIALS LIST

ITEM	DESCRIPTION	MANUFACTURER
<b>Acoustic Pump Enclosure</b>	A fabricated metal enclosure with sound insulation, internal ventilation fans and doors around the well pump for access and maintenance.	RPS Industries Precision Sheet Metal (info@rpsusa.com)
<b>Air Conditioning Unit (Exterior Wall Mounted)</b>	An exterior wall mounted AC unit usually used to cool electrical and telemetry rooms.	Bard W18AB-A0ZXP5XXJ
<b>Air Release And Vacuum Relief Valve</b>	1" and 2" air release and vacuum relief valve per AWWA C512; body and cover materials: reinforced nylon, DI or stainless steel; stainless steel or polypropylene float and plug.	APCO Cla-Val Valmatic A.R.I.
<b>Air and Vacuum Valve, Enclosure</b>	For 1" and 2" Air Vacuum Valves, use: 20" x 36" 12-gauge steel enclosure with clam shell hinged construction. Powder Polyester Coated Colored: Sandstone  or Low Density Polyethylene Enclosure with UV inhibitors; 20" dia. X 36" high; Colored: Sandstone	Pipeline Products: VCDD, VCAS-2436-SM Armorcast: P6002002-SND
	COLD WEATHER CLIMATE: 1/2" thick diamond floor plate to fit flush with meter box top and 3/16" thick steel vent tube with dimensions: 10" x 8" x 32" high. Powder Polyester Coated Colored: Safety Yellow	Placer Waterworks Inc.: PW/3618(F36) Cover, PW/AV32-M Vent Tube
<b>Air and Vacuum Valve, Insulation Jacket (for areas subject to freezing weather)</b>	Expanded polyurethane foam jacket in two halves that fit around air valve, held in place with zip ties. Provide extension at the drain elbow at the top of the valve to allow drainage away from insulating jacket.	A.R.I.: D-040 1" Freeze Jacket A.R.I.: D-040 2" Freeze Jacket
<b>Backflow Preventer (Reduced Pressure Principle Type)</b>	Moderate to high hazard backflow preventer as approved by the USC Foundation for Cross-Connection Control & Hydraulic Research.	Any manufacturer device on the USC list of Approved Backflow Prevention Assemblies.

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<b>Backflow Preventer</b> (Double check and/or double check detector assembly type)	Fire detector check or low hazard backflow preventer as approved by the USC Foundation for Cross-Connection Control & Hydraulic Research.	Any manufacturer device on the USC list of Approved Backflow Prevention Assemblies.
<b>Casing End Seal</b>	1/8" thick styrene butadiene rubber sheet end seal with one 1" or two 1/2" wide stainless steel bands.	Advances Products and Systems Calpico CCI Pipeline Systems Ion Cathodic Products & Technologies
<b>Casing Spacer with Restrained Joints</b>	Polyethylene casing spacer, center restrained, position type with PVC liner, non-metallic, and anti-friction runners.	Advance Products & Systems Cascade Water Works Calpico CCI Pipeline Systems Ion Cathodic Products & Technologies
<b>Coating, Cold Applied Wax Tape</b>	Petrolatum wax primer, cold applied petrolatum wax tape, and outerwrap applied to the exterior surface of buried steel pipe. Primer and tape shall be from the same manufacturer. Primer thickness = 3mil Tape thickness = 40mil Outer wrap = 1mil plastic	Trenton: #1 Wax-Tape Tapecoat TC Envirotape Wax Tape Denso
<b>Coating, Fusion Bonded Epoxy</b>	Baked on epoxy coating.	3M Scotchkote: 206N, 134W, 323(patch)
<b>Coating, Liquid Epoxy</b>	Liquid applied epoxy may be used with GSWC approval, when baked on epoxy coating is not practical.	Tnemec: Pota-Pox Plus L140 3M Scotchkote: 323
<b>Coating, Mastic (for buried metal)</b>	Cold applied coal tar or epoxy based single or double component, self-priming, heavy duty protective exterior coating.	Carboline: Bitumastic 50 Devoe: Devtar 5A Tnemec: 46-465, HB Tnemecol Tnemec: 46H-413, HB Tneme Tar Piccomastic: PC50
<b>Coating, Waterproof (for concrete)</b>	Epoxy resin based cement, trowel grade, protective waterproofing.	SikaTop: Seal 107 Sto CR 241
<b>Coatings, Welded Steel Reservoir (interior)</b> <b>(All interior coatings shall be listed in NSF Standard 61 or UL Standard 61)</b>	Interior prime coat (AWWA D102, Inside Coating System No. 2). Shop primers shall be red. Field prime and/or top coats shall be white.	Tnemec: N140F, Pota-Pox Plus Sherwin Williams Company: Macropoxy 646 PW
	Joint sealant similar or equal to Federal Specification TT-S-230.	Sikaflex: 1-A

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<b>Coatings, Welded Steel Reservoir (exterior)</b>	Exterior prime coat and exterior finish coat (AWWA D102, Outside Coating System No. 5).	Tnemec: N140F, Pota-Pox Plus Sherwin Williams Company: Macropoxy 646 PW
	Exterior Prime Coat	Tnemec: Series 91 Hydro-Zinc, Series 69, L140F Devoe: Bar-Rust 233H Buff
	Exterior joint sealant shall be flexible polyurethane or polysulfide product equal to Federal Specification TT-S-00230C, Type II, Class A (non-sag).	Flexible polyurethane or polysulfide product between bottom of shell and concrete ring wall.
<b>Corporation Stop, CC X Compression No-Lead</b>	Bronze CC X Compression connection ball valve corp. for 1" and 2".	Ford: FB1000-4, FB1000-7Q Jones: E-1937SG Mueller Co.: B-25008N AY McDonald: 74701 BQ
<b>Corporation Stop, MIP X MIP No-Lead</b>	Male Iron Pipe X Male Iron Pipe ball valve corp. for 1" and 2".	Ford: FB500-4-NL, FB500-7-NL Jones: J-1943 AY McDonald: 73131 B
<b>Coupling, Compression X Compression No-Lead</b>	Three part compression coupling (both ends) for 1" and 2" copper pipe.	Ford: C44-Q Jones: E-2609SG Mueller Co.: H-15403N AY McDonald: 74758 Q
<b>Coupling, Flange Adapter</b>	3" to 16", Mechanical X Flange ductile iron or steel construction, without anchor pins, epoxy coated, 304 stainless steel bolts and nuts.	Ford: FFCA Romac: FCA501, FC400 Smith-Blair: 912, 913 911, 920 JCM Industries: 301,303 Krausz: Hymax Flange Adapter PowerSeal: 3526 Powermax
<b>Coupling, High Deflection (C900 PVC) (for same diameter pipe)</b>	4" to 12-inch PVC for deflection only.	Westlake Pipe & Fittings
<b>Coupling, Closure or Repair (C900 PVC) (for same diameter pipe)</b>	4-inch to 12" for C900 PVC pipe for closure or repair.	Westlake Pipe & Fittings
<b>Coupling, Straight</b>	4" and larger, DI or steel, epoxy coated with T304 stainless steel bolts and nuts. For use on steel pipe.	Ford: FC4, FC2A Romac: 501, Macro HP, 400 Smith-Blair: 411, 441, 421, 422 JCM: 201, 210, 212 Krausz: Hymax PowerSeal: 3538

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<b>Coupling, Restrained, Straight</b>	4" to 12". For use on PVC, DI or HDPE pipe.	Krausz: Hymax Grip Romac: Alpha Smith-Blair: 471, 472, 473
<b>Coupling, Restrained, Flange Adapter for PVC</b>	C900 Class 235 and Class 305, IPS 4" to 12", Class 160 3" 12".	Romac: Alpha FC, RFCA for PVC pipe Ford: RFAP Smith-Blair: 911, 920
<b>Coupling, Restrained, Flange PVC, DI, Steel, HDPE</b>	4" to 12". For use on PVC, DI, steel or HDPE pipe.	Krausz: Hymax Grip Flange Adaptor Ford: RFAD (DI), RFAP (PVC) Romac: RFCA Smith-Blair: 911, 920
<b>Coupling, Transition</b>	4" and larger, DI, epoxy coated with T304 stainless steel bolts and nuts. For use on AC, PVC, DI or Steel Pipe.	Ford: FC2A, FC2W Romac: 501, XR 501, Macro HP Smith-Blair: 441, 442, 461, 462 JCM 212, 241, 242 Krausz Hymax PowerSeal: 3501
<b>Doors, Fiber Reinforced Plastic (FRP)</b>	Used at chemical or disinfection buildings for corrosion resistance.	Simon Door FIB-R-Door
<b>EII, Compression Type No-Lead</b>	1" and 2" bronze EII Compression X Compression for copper pipe.	Ford: L44-44-NL, L44-77-NL Jones: E-2611SG Mueller Co.: H-15526N AY McDonald: 74761 Q
<b>Emergency Shower And Eyewash</b>	For outdoor use; all components shall be stainless steel.	Speakman: SE-626
<b>Flexible Expansion Joints</b>	Used for connections to tanks and other fixed structures.	EBAA Iron: Flex-Tend Force Balanced Romac: FJ Restraint Flexible Expansion Joint Flexicraft General Rubber
<b>Fire Hydrant 200 psi</b>	WET BARREL DI: 6" Standard 200 psi wet barrel DI fire hydrant. Epoxy coated interior, shop primed and painted exterior with six-hole bolt pattern 1½" pent nut, iron caps per AWWA C550. In Culver City only: Clow 950 with 1 ¾" pent nut and CI caps.	<b><u>Region 1</u></b> AVK: 2470, 2490 Clow Valve Co.: 950 (DI), 960 (DI) American: Waterous Pacer WB-67-250 Jones: J-3700 (Bronze), J-4040 (DI), J- 4060 (DI)

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ITEM	DESCRIPTION	MANUFACTURER
	<p><b>WET BARREL BRONZE:</b> 6" Standard 200 psi wet barrel bronze body fire hydrant. Six-hole bolt pattern, 1½" pent nut, plastic caps per AWWA C503.</p>	<p><b><u>Region 2</u></b> Jones: J-3700R (Bronze), J-4040 (DI) Clow Valve Co.: 950 (DI), 2050 (Bronze)</p> <p><b><u>Region 3</u></b> Clow Valve Co.: 950 (DI), 2050 (Bronze) Jones: J-3700 (Bronze), J-4040 (DI) Waterous Pacer WB-67 Mueller Co.: Super Centurion 250 A-423</p>
	<p><b>DRY BARREL:</b> 6" 3-WAY 4"x (2) 2 ½" 250 psi DI Fire Hydrant. Painted exterior. 1 ½" pent nut, iron caps, MJ shoe, drains open per AWWA C502.</p>	<p>American: Waterous Pacer WB-67-250 Mueller Co.: Super Centurion 250 A-423 AVK: 2700 Clow Valve Co.: Clow Medallion</p>
<b>Fire Hydrant, Bury Ductile Iron</b>	6" ductile iron bury ells, 6H Flange x MJ/PO/FLG	Clow Valve Co. South Bay Foundry Sigma SIP Industries
<b>Fire Hydrant, Extension Spools</b>	6" cast iron spools shall be groove break-off and hollow bolts shall be breakaway.	Clow Valve Co. South Bay Foundry Sigma (DI) SIP Industries
<b>Fire Hydrant, Raised Pavement Markers (Blue Reflectors)</b>	Blue reflector attached to pavement to show location of fire hydrants at curb.	Hy-Viz Champion American Emedco
<b>Fitting Ductile Iron</b>	Flanged, mechanical, joint or push-on tees, bends, crosses, reducers, adapters, etc., for water lines 4" and larger. Manufactured per AWWA C110, C111, C115, and C153, cement mortar lined.	Tyler Union U.S. Pipe Sigma SIP Industries Star Pipe Products
<b>Flush Out Enclosure</b>	Low Density Polyethylene Enclosure with UV inhibitors; 12" dia. X 36" high; Colored: Sandstone	Armorcast: P6002010 SLIDE BAR
<b>Gasket</b>	1/16" thick ring gasket, asbestos-free; aramid fiber bound with nitrile bounded rubber (NBR).	Tripac Klinger Teadit Garlock

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<b>Joint Restraint Assembly for Ductile Iron Pipe</b>	Mechanical and push on joint type restraint system for ductile iron pipe, size 6" to 24" and Steel 3" to 12".	Ford: Uniflange for DIP Romac: RomaGrip (DIP) Romac: Piranha Restraint (DIP) Romac: GripRing Romac: Alpha (DIP) EBAA Iron: Megalug (DIP) US Pipe: Field Lok 350 Gasket (Push on DIP) Smith-Blair: 111 SIP Industries: EZ Grip American Pipe: Fast-Grip Gasket (DIP) McWane Ductile: Sure Stop 350 (DIP)
<b>Joint Restraint Assembly for Ductile Iron and Welded Steel Pipe</b>	Grooved end joints for sizes 3" and larger.	Victaulic, Gruvlok, ARGCO, or approved equal.
<b>Joint Restraint Assembly for PVC Pipe</b>	Radial wedge type joint restraint system for C900 PVC, size 6" to 24".	Ford: Uniflange for PVC Romac: PVC RomaGrip (PVC) Romac: Alpha (PVC) EBAA Iron: Megalug (PVC) Smith-Blair: 120  SIP Industries: EZ Grip
<b>Joint Restraint for Push On PVC Pipe</b> (To be used for parallel pipe waivers only)	Push on joint type restraint system for PVC pipe, size 6" to 12".	Ransom International: RieberLok Gaskets (PVC)
<b>Meter Box</b> (for 5/8" to 1" meters)	12" x 20" polymer meter box and cover for 5/8" to 1" water services.	<u>Armorcast:</u> A6000485 (Preferred) A6000484DQ (cover w/ read lid) A6000487 A6000484 (one piece cover) A6000484T (20K traffic lid) A6000484TDQ (20k traffic w/read lid) <u>Oldcastle Precast:</u> 1118PC FW Box 1-Mouse Hole FL12D001 1PC Cover "WATER" 1118PC Cover w/H Series Read Lid <u>Jensen Precast:</u> HPC1118-12 (box w/ lid)

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<b>Meter Box</b> (for 1 ½" to 2" meters)	17" x 30" polymer meter box and cover for 2" water services. Boxes are 12" deep; 18" deep box is available.	<u>Armorcast:</u> A6001640PCX12 (box) A6001643DZ (cover w/read lid) A6000482 (one piece cover) A6001643 (one piece cover) A6001947T (20K traffic lid) A6001643TDZ (20k traffic w/read lid) <u>Oldcastle Precast:</u> PC1730-12 T-22 Box 1-Mouse hole FL36TBOX12 1-Mouse Hole PC1730 Cover w/H Series Read Lid <u>Jensen Precast:</u> HPC1730-12 (box w/ lid)
<b>Meter Box With Traffic Rated Reinforced Fiberglass Lid</b>	Lid rated for H-20 loading. Box installed in parkways and behind curbs. Not intended for installation in traffic lanes.	J&R Concrete Products Oldcastle Precast Armorcast Jensen Precast
<b>Meter Stop, Angle Valve (Compression) X Meter Size</b>	1" bronze angle meter stop (ball valve) with 90 degree lock wing, inlet Compression X Plain Swivel Meter Nut.	Ford: BA43-444W-Q-NL Jones: E-1963W Mueller: B-24258-1 AY McDonald: 74602BQ
	2" bronze angle meter stop (ball valve) with 90 degree lock wing, inlet Compression X Meter Flange.	Ford: BFA43-777W-Q-NL Jones: E-1975WSG Mueller: B-24276N AY McDonald: 74602BQ
<b>Meter Stop, Angle Valve (FIP) X Meter Size</b>	1" bronze angle meter stop (ball valve) with 90 degree lock wing, inlet Female Iron Pipe X Plain Swivel Meter Nut.	Mueller: B-24265-1 Jones: J-1966W Ford: BA-13 AY McDonald: 74604B
<b>Meter, Pump Station and Well Discharge</b>	Magnetic and propeller flow meters.	McCrometer: Ultra Mag 3000 McCrometer: Water Specialties TR 16/12 Siemens
<b>Meter, Small Water Service (¾" to 2")</b>		GSWC to supply (Foothill District uses 5/8" meters)
<b>Meter, Large Water Service (3" to 12")</b>	Ultra-sonic flow meter	Master Meter: Octave Ultrasonic Meter (Reading in CCF)
<b>Mortar Repair</b>	Two component, non to low shrinkage, cement based with high compressive and bonding strength.	SikaTop: 122 Plus, 123 Plus Vexcon: Certi-Vex All-Patch
<b>Pipe – Service Line, Copper Tubing</b>	1" and 2" Type K soft seamless tubing	Mueller Co.: Streamline Cambridge-Lee Industries, LLC

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<b>Pipe – Service Line, HDPE Tubing</b>	Water service line HDPE tubing for 1” and 2”.	ADS PolyFlex Water Service Tubing (CTS)
<b>Pipe, Ductile Iron (DIP)</b>	Used for water lines 4” and larger; manufactured per AWWA C104, C111, C115, C150 and C151. Cement mortar lined. Class 350 minimum. Manufacture’s standard joints shall also meet the above AWWA Standards.	McWane Ductile U.S. Pipe American Cast Iron Pipe Company
<b>Pipe, HDPE (High Density Polyethylene)</b>	Size 3” and smaller shall meet AWWA C901. Pressure class 200 minimum. Size 4” to 12” shall meet AWWA C906, Class 200 minimum and shall comply with ductile iron pipe sizes.	Any brand that meets the specification
<b>Pipe, Marker Posts</b>	Used to mark pipeline alignments and valve locations in unimproved areas.	Rhino Marking & Protection Systems Compliance Signs Energy Control Systems, Inc Carsonite
<b>Pipe, PVC AWWA C900</b>	Used for water lines 4” to 30” and 8” valve cans. Class 235 (DR18) minimum and AWWA compliant.	Vinyltech PVC Pipe Westlake Pipe & Fittings Diamond Plastics Corporation JM Eagle
<b>Pipe, Steel – Cement Mortar Lined And Coated (CML&amp;C)</b>	Steel cylinder type per AWWA M11 and C200. Wall thickness shall be 10-gauge minimum. Steel pipe 6” and smaller shall be epoxy lined to meet AWWA C213; Steel pipe 8” and larger shall be cement mortar lined to meet AWWA C205. All buried steel pipe shall be cement mortar coated; above ground steel pipe shall be painted.	Ameron Water Transmission Group Northwest Steel and Pipe Southland Pipe Corporation
<b>Polyethylene Encasement</b>	8-mil polyethylene encasement for buried DIP per AWWA C105. Clear color for potable water pipe.	Any brand that meets the specification
<b>Pressure Gauge and Transmitter for Tanks</b>	Pressure gauge for water tanks. Capable of sending 4-20 mA signals to SCADA system showing depth of water. Type 316 stainless steel connections.	Rosemount: 2088 Ashcroft: K1

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<b>Pump, Vertical Turbine</b>	See project specifications.	ITT Goulds Pumps Goulds Water Technologies Pumps (a Xylem brand) Peerless Pump Company Floway Hydroflo
<b>Repair Clamps and Bands</b>	Repair clamps and bands shall be full circle stainless steel with stainless steel lugs, bolts & nuts.	Ford Romac Smith-Blair Mueller Co. PowerSeal Pipeline Products Corporation
<b>Service Saddle for Asbestos Cement Pipe</b>	Bronze saddle Silicon bronze flattened double straps. Threaded outlet for sizes 1" and 2".	Ford: 202B Jones: J-979 Mueller: BR2B Series AY McDonald: 3825 AY McDonald: 3826
<b>Service Saddle O.D. Controlled Sized for PVC C900 Pipe Sizes 4" to 12"</b>	Bronze saddle with double or wide stainless steel bands and four bolts. CC threaded outlet for sizes 1" and 2".	Ford: 202BS Jones: J-969 Mueller Co.: BR2S Series Romac: 202BS AY McDonald: 3845
<b>Service Saddle for Ductile Iron Pipe for Pipe Sizes 4" to 16"</b>	Ductile iron nylon coated saddle with double or wide stainless steel bands and four bolts. CC threaded outlet for sizes 1" and 2".	Romac: 202NS Mueller Co.: DR2S JCM: 406 Ford: FC 202 Smith-Blair: 317
<b>Silicone Sealant</b>	Waterproof multi-purpose adhesive meeting NSF/ANSI 61. An equal alternative may be used.	Sikaflex-1A Dowsil 732
<b>Tank, CP Hand hole Rubber Grommet</b>	Used under CP handhole cover.	DIVECORR ION Cathodic Protection Technology
<b>Tape, Warning And Identification</b>	6" wide, warning and identification (non-metallic) marking tape for buried facilities.	Reef Industries, Inc.: Terra Tape Seton: Detectable Underground Tape Brady: Detectable Identoline Warning Tape
<b>Tapping Sleeve for ACP, CI, DIP, PCCP, and PVC pipe</b>	Fabricated stainless steel tapping sleeve for hot taps of existing water mains; includes T304 stainless steel flange, T304 stainless steel bolts, nuts and full mat SBR gasket. See the Standard Drawings for detail information.	Ford: FTSS (S.S. Flange) Romac: SST III (S.S. Flange) Smith-Blair: 665 JCM: 432 Mueller Co.: H-304SS (S.S. Flange) Koppl PowerSeal: 3490AS

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<b>Tracer Wire Junction Box</b>	For ground level termination of tracer wire and a connection point.	Copperhead Industries, LLC: Snakepit CD14TP/Blue Bingham & Taylor
<b>Tracer Wire</b>	No. 10 gauge AWG solid copper UF type wire, with cross linked polyethylene insulation; blue color. Use 3M gel filled wire connectors at all splices.	Paige Electric Copperhead Industries, LLC Regency Wire Co.
<b>Tracer Wire, Pin Brazing Connections</b>	Connects tracer wires to metal pipes, valves or junction boxes.	ION Cathodic Products and Technologies GMC Electrical, Inc. Farwest Corrosion Control Co.
<b>Valve, Ball (No-Lead)</b>	1" and 2" brass, straight, various end connections configurations 110 compression, FIP, MIP.	Ford Jones Mueller Co. AY McDonald
<b>Valve, Ball With Locking Tabs (No- Lead)</b>	1" and 2" brass, straight, various end connections configurations 110 compression, FIP, MIP locking tabs, lever handle	Ford Jones Mueller Co. AY McDonald
<b>Valve, Insulated Ball (No-Lead)</b>	1" brass, straight, Compression X Compression, insulated type.	Mueller Co.: N-35209
<b>Valve, Lockable Ball (No-Lead)</b>	¾" and 1" brass customer shut-off ball valve, inlet FIP X Plain Meter Swivel Nut; lockable tabs with lever handle.	Ford: B13-332W-HB-34S-NL, B13-444W-HB-34S-NL Jones: E-1908 Mueller Co.: B-24351N-3 w/B-20298 AY McDonald: 76101MWHDLB
	2" brass customer shut-off ball valve, inlet FIP X Meter Flange; lockable tabs with lever handle.	Ford: BF13-777W-HB-67S-NL Jones: E-1913W Mueller Co.: B-24337N-3 w/B-20298 AY McDonald: 76101MW/SHDLB
<b>Valve, Butterfly</b>	12" and larger, rubber seated. Rubber shall be synthetic, BunaN or EPDM, AWWA C-504, Class B, 2 part liquid epoxy per AWWA C550. Coated and lined, rated for Class 250. Seat shall be in the body.	Mueller: Lineseal XP II Pratt: HP250 DeZurik: BAW

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<b>Valve, Check</b>	Check valves shall be resilient seated and shall comply with AWWA C508-09. Interior and exterior ferrous surfaces shall be coated per AWWA C550. Check valves for use on wells and boosters shall be equipped with external lever and spring assemblies.	Mueller Co.: A-2602 swing check valve Valmatic Cla-Val: B1-02PV Clow Kennedy M&H
<b>Valve, Resilient Wedge Cut-In and Sleeve,</b>	4" to 8" non-rising stem, bronze stem, cast iron body and bonnet, rubber encapsulated wedge, T316 stainless steel body, bolts and nuts, 2" op nut open left manufactured to AWWA C509 with epoxy coated interior/exterior per AWWA C550	Mueller Co.: C-2360
<b>Valve, Gate, Resilient Wedge (RWGV) (Pressure Class 150 Minimum)</b>	4" to 12" non-rising, low zinc bronze stem, full wall ductile iron body and bonnet, EPDM rubber encapsulated wedge, T316 stainless steel body bolts & nuts, 2" op nut open left. Manufactured to AWWA C515 with epoxy coated interior/exterior per AWWA C550.	Clow: 2638 Kennedy: KS-RW M&H: Style 7000 Mueller: 2362 American AVK: 65 American Flow Control: 2500-1
<b>Valve, Insertion</b>	4" to 12", A-36 steel sleeve, bolts and nuts T304 stainless steel, SBR gasket, sleeve, lined/coated fusion bonded epoxy per AWWA C213.	Romac: QuikValve (4"-8") Romac: InsertaValve (10"-12") AVT: EZ Valve (4"-24")
<b>Valve, Automatic Control</b>	4" to 24", DI body, stainless steel trim & tubing, epoxy lined & coated.	Cla-Val
<b>Valve, Pressure Regulating</b>	For reducing water pressure to the customers on ¾" to 2" services.	Cla-Val Wilkins Watts Febco
<b>Valve Box</b>	Cast iron machined frame with Cast iron lid. See standard drawings for markings.	South Bay Foundry Sigma Long Beach Iron Works Bingham & Taylor Christy G5 Concrete Meter Box
<b>Vault, Pipe Opening Seal</b>	Seal pipe opening in vault and wall with a mechanical/rubber ring that is tightened to produce a water tight seal.	GPT: Link-Seal Modular Seal

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<b>Vault, Traffic Bearing</b>	Vault shall meet the requirements for traffic bearing vault and be designed in accordance with AASHTO H-20 wheel loading. Access hatches, frames and covers shall be rated for heavy duty traffic meeting AASHTO H-20 wheel loading. When total depth is greater than 5 feet, vaults shall be equipped with an aluminum ladder and a ladder-up safety pole. Vaults for meter installation shall be equipped with meter reading lid centered over the meter. Joints between vault sections shall have a butyl rubber sealant installed.	Brooks Products Jensen Precast J & R Concrete Products, Inc. Bilco Oldcastle Precast Olsen Precast Co. (OPC)
<b>Water Sampling Test Station and/or Enclosure</b>	12-gauge steel 8" square X 36" high; single lockable door, powder polyester coated color: Sandstone or Low density Polyethylene Enclosure with UV inhibitors; 12" dia. X 36" high with hinged lid; Colored: Sandstone	Pipeline Products: WTS-858 American Machine & Conveyor: EZ-01F or Armorcast: P6002010 – Hinged
<b>Welded Wire Mesh</b>	W4 X D4 with Grade 40 steel 0.226-in dia.	

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### Revisions Log:

Date	Description
01/29/16	Added Pressure Gauge and Transmitter for Tanks
01/30/16	Added Revision Log
02/4/16	Added Welded Wire Mesh
02/8/16	Added GMC and FarWest Corrosion to Pin Brazing suppliers
05/12/16	Added American States CI Pipe products, JCM DI Service Saddle, Ford products
06/24/16	Returned AY McDonald Products to the Materials Guideline
08/8/16	Added RCT High Deflection Coupling; added Eclipse #88-SS Sample Test Station.
08/22/16	Added blue HDPE service line
10/11/16	Added FH pavement markers & pipe marker posts
10/12/16	Released Ver. 1.3
01/3/17	Divided information for Joint Restraint Assemblies between DIP and PVC.
02/23/17	Provided separate material call-outs for Joint Restraint Assembly between DIP and PVC pipe; revised meter box product identification; revised product identification for new tank painting and coating systems; changed the color of the DIP polyethylene baggie and wrap from "black" to "clear".
01/19/18	Released Ver. 1.6; added PVC Pipe Fittings list of manufacturers, added PVC pipe joint restraint manufacturers, deleted references to AWWA C-905 pipe. Added pole antenna.
11/18/19	Changed name to Approved Materials List, added cold weather climate air valve enclosure, added Piccomastic coating for buried metal, added PowerSeal Pipeline Products Corporation as a coupling, repair clamp, and tapping sleeve manufacturer, added Clow Medallion Dry Barrel Hydrants, added flush out enclosure, added SIP Industries as a joint restraint manufacturer, added JM Eagle as a PVC pipe manufacturer, added American Flow Control as a gate valve manufacturer, added AVT EZ Valve, removed non traffic rated vaults, and removed manufacturers with polymer concrete hatches from traffic rated vaults.
09/26/22	<p>Added to Joint Restraint Assembly for Ductile Iron Pipe</p> <ul style="list-style-type: none"> <li>• Description – "and push-on"</li> <li>• Manufacturer – "American Pipe: Fast-Grip Gasket (DIP), McWane Ductile: Sure Stop 350 (DIP)"</li> </ul> <p>Removed from Joint Restraint Assembly For Ductile Iron Pipe</p> <ul style="list-style-type: none"> <li>• Manufacturer – "Sigma"</li> </ul>
02/13/23	<ul style="list-style-type: none"> <li>• Added Joint Restraint Assembly for Ductile Iron and Welded Steel Pipe.</li> <li>• Valve, Check: Added manufacture model to Mueller: A-2602 swing check valve &amp; Cla-Val: B1-02PV.</li> </ul>
09/21/23	Added Joint Restraint Assembly for PVC Pipe (to be used for parallel pipe waivers only)

## APPROVED MATERIALS LIST

10/23/23	<p>Updated:</p> <ul style="list-style-type: none"> <li>• Joint Restraint Assembly for Ductile Iron Pipe <ul style="list-style-type: none"> <li>○ Manufacture - US Pipe: Field Lok 350 Gasket (Push on DIP)</li> </ul> </li> <li>• Joint Restraint for Push On PVC Pipe <ul style="list-style-type: none"> <li>○ Manufacturer – RieberLok</li> </ul> </li> <li>• Joint Restraint Assembly for PVC Pipe &gt; Joint Restraint for Push On PVC Pipe</li> </ul> <p>Removed:</p> <ul style="list-style-type: none"> <li>• Joint Restraint Assembly for PVC Pipe <ul style="list-style-type: none"> <li>○ Manufacturer – US Pipe: MJ Field Lok Gasket (PVC)</li> </ul> </li> </ul>
4/15/24	Added Acoustic Pump Enclosure around well pumps.
9/26/25	<p>Updated:</p> <ul style="list-style-type: none"> <li>• Meter Box <ul style="list-style-type: none"> <li>○ Added Manufacturer – Jensen Precast</li> </ul> </li> <li>• Meter Box With Traffic Rated Reinforced Fiberglass Lid <ul style="list-style-type: none"> <li>○ Added Manufacturer – Jensen Precast</li> </ul> </li> </ul>
10/28/25	Updated mag meter to Ultra Mag 3000
01/09/26	Added Silicone Sealant
02/04/26	Updated the name of North American Pipe Corporation to Westlake Pipe & Fittings