

**RAINBOW MUNICIPAL WATER DISTRICT
APPROVED MATERIALS LIST**

TYPE	DESCRIPTION OF MATERIAL	MANUFACTURER
ANODE, MAGNESIUM	HIGH OR STANDARD POTENTIAL ANODE WITH GALVANIZED STEEL CORE ENCASED IN SQUARE MAGNESIUM ALLOY. INGOT PRE-PACKAGED IN PERMEABLE COTTON CLOTH BAG FILLED WITH 75% GYPSUM, 20% BENTONITE, 5% SODIUM SULFATE MIX. PROVIDE INGOT WEIGHT AS SPECIFIED ON APPROVED PLANS. SEE STANDARD DRAWING CP-14.	HYTECH PIPELINES PRODUCTS CALPICO FARWEST CORROSION CORRPRO
ANODE, ZINC	PRE-PACKAGED 15 LBS. MIN. SACRIFICIAL ANODE, #12 THHN LEAD WIRE, TO PROTECT COPPER TUBIN. SEE STANDARD DRAWINGS CP-16 and CP-17.	HYTECH PIPELINES PRODUCTS CP-Z15 TRIPECONLINE CALPICO FARWEST CORROSION CORRPRO
ANTI-BACTERIAL CONCRETE ADDITIVE	USED TO RENDER THE CONCRETE UNINHABITABLE FOR BACTERIAL GROWTH	CONMIC SHIELD
ANTI-GALLING COMPOUND	FOR USE WITH STAINLESS TEEL FASTENERS	RAMCO TRX-SYNLUBE HUSK_IT HUSKY LUBE-O-SEAL TRIPAC 2000 OAE
BACKFLOW PREVENTION DEVICES	INSTALLED WITH METERS: REDUCE PRESSURE PRINCIPLE DEVICE FIRE SYSTEMS	WILKINS 975 XL2 WILKINS 950 XLT WILKINS 350 XLT WILKINS-375
BOLTS AND NUTS, 304 SS	HEX-HEAD MACHINE, ASTM A193, GRADE B8 BOLTS AND ASTM A194, GRADE 8 NUTS	

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BOLTS AND NUTS, 316 SS	HEX-HEAD MACHINE, ASTM A 193, GRADE B8M BOLTS AND ASTM A194, GRADE 8M NUTS. TRIPAC BLUE NUT.	TRIPAC FASTENERS PACIFIC COAST BOLT INDUSTRIAL THREADED PRODUCTS
BOLTS AND NUTS, A307 (CADMIUM/ZINC)	HEX-HEAD MACHINE, CADMIUM/ZINC PLATED, ASTM A307, GRADE A BOLTS AND A307 2H HEAVY HEX NUTS.	
BOLTS AND NUTS, A307 (FLUOROPOLYMER)	HEX-HEAD MACHINE, FLUOROPOLYMER COATED, ASTM A307, GRADE A BOLTS AND A307 2H HEAVY HEX NUTS	
BOLTS AND NUTS, A307, BREAK AWAY, 19MM (3/4") FOR FIRE HYDRANTS	WET BARREL FIRE HYDRANT FLANGE BOLTS, HEX HEAD MACHINE, BREAK AWAY BOLTS, 3/4" x 3-1/4" AND NUTS. BOLTS SHALL INCORPORATE 13/32 for 3/4" HOLE DRILLED in BOLT SHAFT AND 2 3/8" DEEP FILLED WITH SILICONE SEALANT TO MEET ASTM C920. BOLTS AND NUTS SHALL BE ZINC PLATED ASTM A307 CARBON STEEL.	TRIPAC FASTENERS PACIFIC COAST BOLT INDUSTRIAL THREADED PRODUCTS
BURY ELLS	DUCTILE IRON, CEMENT LINED, RING-TITE BY FLANGE, 6 HOLE PATTERN, LONG RADIUS	SOUTH BAY FOUNDRY CLOW TYLER
CASING END SEAL	1/4" THICK STYRENE BUTADIENE RUBBER SHEET END SEAL. USE 1" WIDE STAINLESS-STEEL BANDS. ZIPPERED END SEALS WITH STAINLESS STEEL BANDS MAY ALSO BE USED.	ADVANCED PRODUCTS SYSTEMS CASCADE CALPICO PIPELINE SEAL & INSULATOR POWERSEAL RAYCHEM
CASING SPACER	STAINLESS STEEL CASING SPACER, CENTER RESTRAINED, POSITION TYPE WITH PVC LINER AND NON-METALLIC ANTI-FRICTION RUNNERS	ADVANCED PRODUCTS SYSTEMS CASCADE PIPELINE SEAL & INSULATOR (PSI) POWERSEAL RAYCHEM CALPICO
CASTINGS	SEE STANDARD DRAWINGS FOR DIMENSIONS	
CASING CAP, VALVE MIN. WT. 24 LB.	8" MARKING "WATER" & "RMWD", 1208N 12" FOR BLOW OFF COVER,	SOUTH BAY FOUNDRY B6348 ALHAMBRA FOUNDRY
CASING END SEALS		RAYCEHM CASEAL CANUSA CSK CASING SEAL

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CATHODIC TEST STATION BOX	54 LB CONCRETE BODY WITH 12 LB DUCTILE IRON LID AND LID RING. "CP TEST" SHALL BE CAST INTO LID IN 1" LETTERS. FOR CATHODIC PROTECTION TEST STATIONS, ANODE GROUND BEDS AND INSULTAED FLANGE TEST STATIONS.	BROOKS 1-RT SERIES CHRISTY FARWEST TYPE 1-RT J & R Model V6-R
CLEAN OUT BOX		U.S. CONCRETE 5,000
COAL TAR	LOW GLASS, SELF-PRIMING COAL TAR MASTIC (COLOR = BLACK)	BITUMASTIC NO. 50, (COLOR 0900) A1 DIVERSIFIED INC.
CONCRETE ANCHORS	ADHEISVE, WEDGE OR SCREW ANCHORS AS REQUIRED PER PLANS	WEDGE HILTI: KWIK BOLT TZ ANCHORS (ICC ESR-1917) HILTI: KWIK BOLT 3 ITW RED HEAD TRUBOLT (ICC ESR-2251) ITW RAMSET/REDHEAD DYNABOLT SIMPSON STRONG-TIE: STRONG-BOLT (ICC ESR1771) ADHESIVE HILTI HIT HY-150 (ICC ER-5193) ITW EPCON SYSTEM, CERAMIC 6 SCREW HILTI KWIK CON II (ICBC ER_5259)
CORPORATION STOPS (MALE)	1" AND 2" IRON PIPE THREAD BY MALE IRON PIPE THREAD, BALL CORP	JONES E1943 FORD FB 500 MCDONALD 73131B
CORPORATION STOPS (FEMALE)	1" AND 2" IRON PIPE THREAD BY FEMALE IRON PIPE THREAD, BALL CORP	FORD FB 1700 JONES E1931 MCDONALD 73149B
CORPORATION STOP (MIP X MIP)	BRONZE MIP X MIP THREAD BALL VALVE (T-HEAD ONLY), 1" AND 2" FULL OPENING	JONES E1943, E1956 A.Y. MCDONALD 3131B MUELLER B-20013, B-2969 Ford
CORPORATION STOP (COMPRESSION)	ALL SIZES, 300 PSI	JONES E1935SG FORD FB1100 MCDONALD 74704BQ
COUPLING ADAPTOR, FLANGE	6" AND LARGER, MECHANICAL X FLANGE. STEEL OR DUCTILE IRON CONSTRUCTION WITHOUT ANCHOR PINS, EPOXY COATED, 304 STAINLESS STEEL BOLTS AND NUTS	HYMAX HIGH PRESSURE GRIP (130-56, 134-96) ROMAC MACRO COUPLINGS
COUPLING, FLEXIBLE	6" LONG PVC FLEXIBLE COUPLING WITH STAINLESS STEEL BANDS. USE FOR SECURING GATE VALVE CAP AND CAN ASSEMBLY TO 8" CLASS 200 PVC C900 GATE WELL	CALDER DFW/HPI FERNCO

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COUPLING, STRAIGHT FLEXIBLE	4" AND LARGER, STEEL OR DUCTILE IRON CONSTRUCTION, SLIP X SLIP, EPOXY COATED WITH 304 OR 316 STAINLESS STEEL BOLTS AND NUTS. FOR USE ON AC, PVC, DI, OR STEEL PIPE.	HYMAX ROMAC MACRO
DEFLECTION BEND, PVC C900 AND C905	5° DEFLECTION BEND MANUFACTURED FROM C900 AND C905 PVC PIPE	IPEX
EPOXY ADHESIVE	HIGH-MODULUS, LOW VISCOSITY, EPOXY RESIN BASED ADHESIVE SUITABLE FOR GROUTING BOLTS OR DOWELS	SIKA SIKADUR 31, SIKADUR 35
FACTORY BUILD PRS-CONTROL VALVE	USED WITH EFI PREFABRICATED PRESSURE REGULATING STATION	CAL-VAL MODEL 90G-01BCSYPVKC WITH MODEL X101C VALVE POSITION INDICATOR.
FACTORY BUILD PRS-AIR RELEASE & VACUUM VALVE	USED WITH EFI PREFABRICATED PRESSURE REGULATING STATION	VENT-O-MAT MODEL RBX
FACTORY BUILD PRS-GAUGE PRESSURE TRANSMITTER	USED WITH EFI PREFABRICATED PRESSURE REGULATING STATION	FOXBORO SERIES IGP10
FIRE HYDRANT	FOR 250 PSI AND BELOW 6" STANDARD WET BARREL DUCTILE IRON (DI) OR BRONZE FIRE HYDRANTS WITH SIX-HOLE BOLT PATTERN. DI FUSION EPOXY LINED. FOR 250 PSI AND GREATER USE THE AVK 24-72 OAE	AVK 24-42 OR 24-52 JONES J4048 THREADED 2.5" THREADED DOME AVK 24-72 RATED AT 350 PSI
FITTINGS, COPPER	FITTINGS FOR SOFT SHALL BE JONES SUPERGRIP	JONES MCDONALD Q SERIES FORD JW PRESS MUELLER
FITTINGS, COMPRESSION	1" TO 2" METER VALVES (CURB) 300 PSI 1" TO 2" CORPORATION VALVES 300 PSI	JONES FORD AY MCDONALD
FITTINGS, DUCTILE IRON	FLANGED, MECHANICAL, JOINT OR PUSH-ON TEES, BENDS, CROSSES, REDUCERS, ADAPTERS, ETC., FOR WATER LINES 4" AND LARGER. MANUFACTURED PER AWWA C110, C111, C153. (SSB FITTINGS WILL NOT BE PERMITTED ON C905 PIPE.)	BACHMAN GRIFFIN NAPPCO/SIGMA PIPELINE COMPONENTS STAR CLOW TYLER SOUTH BAY FOUNDRY
FITTINGS, PVC	4"-18" TEES. WYES, BENDS, CAPS, PLUGS, PER ASTM D-3034	GPK MULTI-FITTING PLASTIC TRENDS VYNYLTECH

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FLANGES	WELD ON, COMPANION, REDUCING, BLIND-STANDARD AWWA CASTING	
FUSION BONDED EPOXY	VALVE INTERIORS, FLEIXBLE COUPLINGS, FITTINGS, ETC.	SCOTCHKOTE LILY POWDER COATINGS HB FULLER
GALVANIZING (SPRAY)	FOR FIELD TOUCH UPS ONLY	RUSTOLEUM ZINC RICH COLD GALVANIZING CRC ZINC-IT SPRAY-ON #740 ZINC-RICH SHERWIN WILLAIMS 140 ZINC-RICH
GASKET	1/16" THICK FULL FACE OR RING, ARAMID FIBER BOUND WITH NITRILE. NO ASBESTOS CONTENT.	CALPICO GARLOCK 3000 JOHNS-MANVILLE KLINGER 4401 TRIPAC 5000
GROUT	NON-SHRINK CEMENT BASED CONSTRUCTION GROUT FOR CRACK REPAIR, FLOORING MORTAR, DOWEL GROUTING, CRACK SEALING AND GENERAL BINDING	REDLINE SPEEDCRETE FOR CML&C RAPID SET CONCERTE MIX 60 LB
INSULATION FLANGE KIT	FULL FACE OR TING	CALPICO
LIFT STATION DEGREASER	DEGREASER	GOLDEN BELL PRODUCTS
LUBRICANT, PIPE GASKET	RUBBER GASKET PIPE LUBRICANT FOR USE ON PVC OR DUCTILE IRON PIPE JOINTS, NSF LISTING REQUIRED	CHRISTY PRO-LUBE WHITLAM BLUE LUBE
MANHOLE, FRAME AND COVER	36" NOMINAL DIAMETER CAST IRON FRAME AND COVERS PER ASTM A48, CLASS 30, WITH MACHINED SEATS. INNER COVER: 155 POUNDS OUTER COVER: 320 POUNDS FRAME: 330 POUNDS MARKED WITH "SEWER" AND "RMWD" LOCKING COVER	ALHAMBRA FOUNDRY A-1325 SOUTH BAY FOUNDRY SBF-1325 MAR-CON PRODUCTS, INC.
MANHOLE, JOINT SEALANT COMPOUND	PRE-FORMED, COLD APPLIED, ADHESIVE, ROPE-LIKE, BUTYL RUBBER GASKET TO FORM A WATERTIGHT SEAL BETWEEN MANHOLE SECTIONS	A-LOK, BUTYL LOK ASSOCIATED CONCRETE PRODUCTS, INC. QUIK-SEAL
MANHOLE, ODOR CONTROL	INSERT ACTIVATED CARBON GRANUALES	PARSON ENVIRONMENTAL PRODUCTS CARBON HDPE 24" RAINSTOPPER GOLDEN BELL PRODUCTS
MANHOLE, PIPE CONNECTOR	SAND COLLAR	GPK OR APPROVED EQUAL
MANHOLE, PIPE CONNECTOR	RUBBER FLEXIBLE TYPE CONNECTOR FOR PIPE TO MANHOLE CONNECTION FOR PRECAST MANHOLES	A-LOK, X-CELL NPC INC, KOR-N-SEAL

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METER BOX (20"X26")	20" x 26" HDPE METER BOX AND 2-PIECE COVER FOR 1" WATER SERVICES BLACK FOR POTABLE WATER USE; VIOLET FOR RECYCLED WATER USE.	CARSON INDUSTRIES MODEL 1220-12 WITH 1220-5 COVER Sigma NDS Bx24 3220W Box 321B Lid APPLIED ENGINEERING PRODUCTS (CARSON CLONE)
METER BOX (26"X39")	26" x 39" HDPE METER BOX WITH 2-PIECE COVER FOR 1.5" & 2" WATER SERVICES. BLACK COLOR. CONCRETE BOX IF 5' FROM TREES.	CARSON INDUSTRIES MODEL 1730-12 WITH 1730-5L COVER
METER FLANGES	1-1/2", 2" BRONZE OVAL W/ELONGATED HOLES	JONES J129 FORD 6F, 7F CARLON NO. 39004 MCDONALD 7610FDN ELKHART PRODUCTS CORP MATCO NORCO 431T07LF
METER BUSHING, BRONZE SCRUBBER WASHER METERING STATION	1" X 1-1/4" FACTORY BUILT	MUELLER H10889 JONES J128-H MCDONALD 710J34 ENGINEERED FLUID, INC. FORD
MORTAR, REPAIR	TWO COMPONENT, LOW SHRINKAGE, CEMENT BASED WITH HIGH COMPRESSIVE AND BONDING STRENGTH	SIKA SIKATOP 122, 123 STO CR 735, CR 740
PAINT FOR CML&C WELD JOINTS	RUST INHIBITING PAINT FOR CML&C WELD JOINTS PRIOR TO EXTERIOR GROUTING	TNEMEC DEVOE CARBOLINE
PAINT FOR HYDRANTS, BLOWOFFS, AIRVACS, AND MARKER POSTS	PAINT SHALL BE OSHA SAFTEY YELLOW	RUSTOLIUM 1644830
PAINTING & COATING	PAINTING FOR GENERAL METAL ITEMS	ICI DEVOE COATINGS TNEMEC COMPANY SHERWIN WILLIAMS
PAINTING (VALVES)	EXTERIOR COATING ONLY. MULTI-COAT SYSTEM 3 COATS-ABOVE GROUND (8-11 MILS), 3 COATS BURIED (12-16MILLS)	TNEMEC ICE DEVOE SHERWIN WILLIAMS
PIPE, COPPER	1" AND 2" TYPE K SOFT MUST BE ANNEALED	HALSTEAD MEULLER CERRO REDDING CAMBRIDGE-LEE
PIPE, POLYVINYL CHLORIDE	4" – 24" 225 PSI WORKING PRESSURE OR LOWER – NOTE: MUST BE DR14	VYNYLTECH JM EAGLE DIAMOND

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PIPE SPACING INSULATORS	NO WOODEN SKIS OF HDPE ALLOWED	PSI Model A12G-2
PIPE, STEEL SCHEDULE 40	4" THRU 12"	DOMESTIC, IMPORT
PIPE, STEEL CEMENT MORTAR LINED AND COATED	10 OR 12 GAGE STEEL CYLINDERS	KELLEY PIPE CEMENT LINING SPECIALTIES AMERON U.S. PIPE WEST COAST PIPE LINING, INC. LAKEWOOD PIPE SERVICE, INC. SAN DIEGO PIPE & SUPPLY NORTHWEST PIPE & CASING CO. KEENAN SUPPLY INC. MARCH PIPE CO. WATERWORKS SUPPLY
PIPE, SEWER, POLYVINYL CHLORIDE	4" THRU 15", ASTM D-1784, D-2321, D-2855, D-3034, SDR-35, F-477, 46 PSI MINIMUM STIFFNESS C900 SDR 18 FOR DEPTHS OVER 15' AND FORCE MAINS	J-M MFG. CO. VINYLTECH DIAMOND NORTH AMERICAN
PIPE, SEWER, POLYVINYL CHLORIDE	18" THRU 27" ASTM D-1784, D-2855 & F-679, SDR 35 MIN. 46 PSI STIFFNESS	VINYLTECH DIAMOND NORTH AMERICAN J-M MFG. CO.
PLASTIC ENCASEMENT	8-MIL THICK POLYETHYLENE ENCASEMENT SLEEVE FOR DUCTILE IRON PIPE (DIP) PER AWWA C105.	
SADDLES, SERVICE, FOR ACP, DI, AND PVC PIPE	BRONZE OR BRASS SADDLE WITH STAINLESS STEEL FOUR BOLT STRAP(S), IP THREAD OUTLET FOR SIZES 1" AND 2" FOR PIPE SIZES 4" THROUGH 12".	FORD 202BS JONES J-969 A.Y. MCDONALD 3846 MUELLER BR2S SERIES ROMAC 202BS SMITH-BLAIR 393
SADDLES, TAPPING	FABRICATED STEEL-SIDE OUTLET SIZE LESS THAN MAIN RUN	BAKER 428 INTERNATIONAL 228 ROCKWELL 622 JCM INDUSTRIES 412 ROMAC FTS-420
SADDLES, TAPPING	FABRICATED STEEL OR DUCTILE IRON - SIDE OUTLET SAME SIZE AS MAIN RUN	MUELLER 619 BAKER 430 ROCKWELL 623 JCM INDUSTRIES 414

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SAMPLE STATION	CANISTER STEEL WATER TEST STATION (EPOXY-POWDER COATED) GOOSE NECK	PIPELINE PRODUCTS, WTS-858E (BLUE) KORALLEN ENTERPRISES
SPOOLS, FIRE HYDRANT CAST IRON	INTEGRAL CASTING, 6-HOLE PATTERN, CEMENT LINED & SCORED	TYLER RICH LONG BEACH RELIABLE SOUTH BAY
TAPE, PLASTIC ADHESIVE	2" BLACK 10 MIL	CHRISTY'S CALPICO EXCOR DIRECTEX
TAPE, WARNING/ IDENTIFICATION	6" WIDE, WARNING/IDENTIFICATION (NON-METALLIC) MARKING TAPE FOR BURIED FACILITIES. TRACEABLE TAPE.	CALPICO, TYPE 1 LINE-TEC, TYPE B T. CHRISTY ENT., TYPE 1 TERRA TAPE, STANDARD 250 THOR, ELAST TEC NORTHTOWN
TRACER WIRE / BOXES / SPLICE KIT	AMERICAN WIRE GAUGE 14 AWG SNAKE PIT MAGNETIZED DIRECT BURY SPLICE KITS	COPPERHEAD INDUSTRIES 3M JR52
VALVES, COMBINATION AIR & VACUUM	1", 2", 4" W/STAINLESS STEEL TRIM	APCO 143C, 145C, 149C ARI FLOW CONTROL (D-040) VENT-O-MAT ARV (UNDER REVIEW)
VALVES, AIR RELEASE, ENCLOSURES	LDPE PLASTIC W/ UV INHIBITORS, BOLT DOWN BASE, REMOVABLE COVER W/ LOCK ENCLOSURE SIZE: 18" X 30" POTABLE WATERCOLOR: YELLOW	PIPELINE PRODUCTS VCAS-1830 ARI FLOW CONTROL ACCESSORIES
VALVES, BALL (3/4" & 1")	3/4" AND 1" BRONZE, LEVER HANDLE W/SWIVEL METER NUT.	JONES E1908, E1913, E1966W FORD B11-332-HT-23-NL B11-444-HT-34-NL MCDONALDS 76101MW – SHDLB
VALVES, BALL (1 1/2" & 2")	1-1/2" AND 2" BRONZE, FIP X FIP LEVER HANDLE 2" TEE HEAD	JONES E1905 JONES E1900 MCDONALDS 76101MW – SHDLB Ford B11-XXX-NL
VALVES, BALL (8" & LARGER)	8" AND LARGER 300# AWWA SPEC C07 MODEL 90RR DOUBLE RUBBER SEATED BALL VALVES, 250# FLANGES DUCTILE IRON BODIES S/S BALLS. WHEN USED BELOW GRADE MUST HAVE BURIED SERVICE WORM GEAR ACTUATORS S/S OPERATING NUT	MUELLER PRATT

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VALVE BOXES & COVERS, MANUAL AIR RELEASES AND BLOW ASSEMBLIES	CAST IRON FRAME AND LID AND 12" PIPE SLEEVE. SHALL HAVE "RMWD" AND "WATER" CAST INTO LID.	SOUTH BAY FOUNDRY SBF 1243
VALVE BOX AND COVERS, GATE VALVE	CAST IRON FRAME AND LID AND EXTENSION PIPE. SHALL HAVE "RMWD" AND "WATER" CAST INTO LID.	SOUTH BAY FOUNDRY SBF1208-N
VALVES, COMPRESSION	1" METER VALVES (CURB) 300 PSI 1 ½ TO 2" METER VALVE (CURB) 300 PSI	JONES E1963 WSG, E1925 WSG E1975 WSG, E1939 WSG, E1945 FORD B81 FXM BALL VALVE AY MC DONALD 6107
VALVES, GATE – RESILIENT SEAT	4" THRU 12" - NON-RISING STEM - MAY BE USED-AS TAPPING VALVE	AVK HOLIDAY FREE ONLY MULLER AFC
VALVES, PRESSURE REDUCING	75-125 PSI RANGE 400 PSI MAX INLET PS1 25-300 PSI RANGE 150-600 PSI RANGE	WILKINS 510XL CLA-VAL 091
VALVE SETTER		CLA-VAL MODEL VS FEBCO MODEL 611
WAX TAPE WRAP	3 PART SYSTEM: PRIMER, WAX TAPE, OUTER-COVERING	TRENTON

END OF SECTION