

**Fallbrook Public Utility District
SECTION 5**

APPROVED MATERIAL LIST - WATER AND SEWER

This Approved Materials List is intended as a guideline for New Development and Developer Projects.
It does not apply to District Contracted Projects.

PART TYPE, MATERIAL	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 FARWEST COROSION CONTROL COMPANY
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 TRIEPECONLINE FARWEST COROSION CONTROL COMPANY
BOLTS AND NUTS, 304 SS	HEX-HEAD MACHINE, ASTM A193, GRADE B8 BOLTS AND ASTM A194, GRADE 8 NUTS	
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
BOLTS AND NUTS, A307	HEX-HEAD MACHINE, FLUOROPOLYMER COATED, ASTM A307, GRADE A BOLTS AND A307 2H HEAVY HEX NUTS	
BOLTS AND NUTS, 304 SS, 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 31/64" x 1-7/8" HOLE DRILLED in BOLT SHAFT AND FILLED WITH SILICONE SEALANT. BOLTS AND NUTS SHALL BE 304 SS.	TRIPAC FASTENERS
BURY ELLS	DUCTILE IRON, CEMENT LINED, RING-TITE BY FLANGE, 6 HOLE PATTERN, 6"X16" , 6x30, OR 6x36	SOUTH BAY FOUNDRY CLOW TYLER
CASTINGS	SEE STANDARD DRAWINGS FOR DIMENSIONS	
CASING CAP, VALVE MIN. WT. 24 LB.	8" MARKING "WATER" & "FPUD", 12" FOR BLOW OFF COVER,	SOUTH BAY FOUNDRY B6348 ALHAMBRA FOUNDRY

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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
COAL TAR	LOW GLASS, SELF-PRIMING COAL TAR MASTIC (COLOR = BLACK)	BITUMASTIC No. 50, (COLOR 0900)
CORPORATION STOPS IRON PIPE THREAD BY MALE IRON PIPE THREAD	1" AND 2"	JONES J1943E FORD F500NL
CORPORATION STOPS IRON PIPE THREAD BY FEMALE IRON PIPE THREAD	1" AND 2"	FORD F1700NL JONES J1931E
CORPORATION STOP, MIP X MIP	BRONZE MIP X MIP THREAD BALL VALVE (T-HEAD ONLY), 1" AND 2" FULL OPENING	JONES J-1943E, J-1956E A.Y. McDONALD 73131B, 73131B MUELLER B-20013N, B-2969N
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	FORD FFCA STYLE JCM 301 POWERSEAL 3521, 3528 ROMAC FCA501, FC400 SMITH-BLAIR 912, 913
COUPLING, FLEXIBLE	8" x 6" LONG PVC FLEXIBLE COUPLING WITH STAINLESS STEEL BANDS. ONLY USE FOR SECURING GATE VALVE CAP AND CAN ASSEMBLY TO 8" CLASS 200 PVC C900 GATE WELL	CALDER DFW/HPI FERNCO
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. NO SINGLE BOLT STYLES ALLOWED.	ROMAC 501 SMITH-BLAIR 411
COUPLINGS, SEWER	MAX ADAPTER (SIZES 4" TO 12")	GRIPPER GASKET
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

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FIRE DETECTOR CHECK	2-1/2" TO 10" DOUBLE CHECK DETECTOR ASSEMBLIES USED FOR FIRE SERVICE (INTERNAL SPRINKLERS). THE HOUSING SHALL BE CONSTRUCTED OF 304 (SCHEDULE 40) STAINLESS STEEL PIPE. DETECTOR CHECK METER SHALL REGISTER IN GALLON MEASUREMENT.	AMES C-300 OSY, OR APPROVED EQUAL
FIRE HYDRANT	FOR 200 PSI AND BELLOW 6" STANDARD WET BARREL DUCTILE IRON (DI) OR BRONZE FIRE HYDRANTS WITH SIX-HOLE BOLT PATTERN. DI FUSION EPOXY LINED. FOR 200 PSI AND GREATER USE THE AVK 24-72 OAE	CLOW 2050 OR 2060 JONES 3700 or 3765 AVK 24-72 RATED AT 350 PSI
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 TYLER
FITTINGS, PVC	4"-18" TEES, WYES, BENDS, CAPS, PLUGS, PER ASTM D-3034, SCH 80	VASSALLO, GPK, MULTI-FITTING
FLANGES, STEEL	WELD ON CLASS D, COMPANION, REDUCING, BLIND-STANDARD AWWA CASTING	
GASKET, METER FITTING	SIZE: 1/8" (3/4" AND 1" METERS ONLY) CLOTH INSERTED FABRIC FINISH NO ASBESTOS CONTENT.	TRIPAC
GASKET, FLANGE	1/8" 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
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 "FPUD"	ALHAMBRA FOUNDRY A-1325 SOUTH BAY FOUNDRY SBF-1325

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MANHOLE, JOINT SEALANT COMPOUND	PRE-FORMED, COLD APPLIED, ADHESIVE, ROPE-LIKE, BUTYL RUBBER GASKET TO FORM A WATER TIGHT SEAL BETWEEN MANHOLE SECTIONS	A-LOK, BUTYL LOK ASSOCIATED CONCRETE PRODUCTS, INC. QUIK-SEAL
MANHOLE, PIPE CONNECTOR	RUBBER O-RING TYPE GASKET FOR PIPE TO MANHOLE CONNECTION FOR CAST-IN-PLACE MANHOLES AND CEMENTED-IN-PLACE CONNECTIONS (BREAKING INTO EXISTING MANHOLES)	J-M PIPE NEWBY
MANHOLE, PIPE CONNECTOR	RUBBER FLEXIBLE TYPE CONNECTOR FOR PIPE TO MANHOLE CONNECTION FOR PRECAST MANHOLES	A-LOK, X-CELL NPC INC, KOR-N-SEAL
METER BOXES	PLASTIC – NOT FOR TRAFFIC AREAS	CARSON or AMETEX
METER BOX	20" x 26" HDPE METER BOX AND 2-PIECE COVER FOR 3/4" & 1" WATER SERVICES GREEN FOR POTABLE WATER USE; VIOLET FOR RECYCLED WATER USE.	CARSON INDUSTRIES MODEL 1220-12 WITH 1220-5 COVER
METER BOX	26" x 39" HDPE METER BOX WITH 2-PIECE COVER FOR 1.5" & 2" WATER SERVICES. GREEN COLOR. VIOLET FOR RECYCLED WATER USE.	CARSON INDUSTRIES MODEL 1730-12 WITH 1730-5L COVER
METER BOX – HEAVY DUTY	POLYMER CONCRETE BOX AND COVER WITH HINGED READER LID, FLARED WALLS – CONSULT DISTRICT FOR SIZES.	ARMORCAST OR APPROVED TRAFFIC RATED
METER FLANGES	1-1/2", 2" BRONZE OVAL W/ELONGATED HOLES	JONES J129E FORD 6FNL, 7FNL CARLON NO. 39004
METER BUSHING, BRONZE SCRUBBER WASHER	1" X 1-1/4"	MUELLER H10889N JONES J128-HE
MORTAR, REPAIR	TWO COMPONENT, LOW SHRINKAGE, CEMENT BASED WITH HIGH COMPRESSIVE AND BONDING STRENGTH	SIKA SIKA TOP 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,	PAINT SHALL BE SAFTEY YELLOW	RUSTOLEUM 7543
BLOWOFFS, AIRVACS, AND MARKER POSTS	PAINT SHALL BE SILVER	RUSTOLEUM

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PIPE, COPPER	1" AND 2" TYPE K SOFT MUST BE ANNEALED	HALSTEAD MUELLER CERRO REDDING CAMBRIDGE-LEE
PIPE, DUCTILE IRON	4" – 24" 300 PSI WORKING PRESSURE. 30" – 36" 250 PSI WORKING PRESSURE. CONCRETE MORTAR LINED (CLASS 52)	U.S. PIPE AMERICAN DUCTILE IRON PIPE
PIPE, STEEL SCHEDULE 40	4" THRU 12"	DOMESTIC, IMPORT
PIPE, STEEL CEMENT MORTAR LINED AND COATED	MIN. 3/16 THICK STEEL CYLINDER	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, PVC, SEWER	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. PW PIPE CERTAINTEED NORTH AMERICAN
PIPE, PVC, SEWER	18" THRU 27" ASTM D-1784, D-2855 & F-679, SDR 35 MIN. 46 PSI STIFFNESS	CERTAIN-TEED SIMPSON J-M MFG CO. NORTH AMERICAN
PLASTIC ENCASEMENT	10-MIL THICK POLYETHYLENE ENCASEMENT SLEEVE FOR DUCTILE IRON PIPE (DIP) PER AWWA C105.	
REDUCED PRESSURE BACKFLOW PREVENTION DEVICE	WITH METER INSTALLATIONS	WILKINS 975XL2
SPOOLS, FIRE HYDRANT CAST IRON	INTEGRAL CASTING, 6-HOLE PATTERN, CEMENT LINED & SCORED	TYLER RICH LONG BEACH RELIABLE SOUTH BAY

PART TYPE, MATERIAL	DESCRIPTION OF MATERIAL	MANUFACTURER
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
SADDLES, TAPPING	FABRICATED STEEL OR DUCTILE IRON - SIDE OUTLET SAME SIZE AS MAIN RUN	MUELLER 619 BAKER 430 ROCKWELL 623 JCM INDUSTRIES 414
TAPE	2" BLACK 10 MIL	CALPICO EXCOR HENRY 107 MARUIN
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
VALVES, AIR & VACUUM COMBINATION	1", 2", 4" W/STAINLESS STEEL TRIM DI OR CAST IRON BODY (PLASTIC/ COMPOSITE BODY NOT ALLOWED)	APCO 143C, 145C, 149C CRISPIN ARI FLOW CONTROL: D-040-C, D-060-C, D-060-C-HF SEWER: D-020
VALVES, AIR RELEASE, ENCLOSURES	LDPE PLASTIC W/ UV INHIBITORS, BOLT DOWN BASE, REMOVABLE COVER W/ LOCK ENCLOSURE SIZE: 18" X 30" POTABLE WATER COLOR: YELLOW	PIPELINE PRODUCTS VCAS-1830 ARI FLOW CONTROL ACCESSORIES
VALVES, ANGLE STOP	FULL PORT BRASS, NO LEAD, WITH LOCKING TAB, METER SWIVEL NUT 3/4", 1" METERS	
VALVES, ANGLE STOP	FULL PORT BRASS, NO LEAD, WITH LOCKING TAB, FLANGE METER CONNECTION 1.5", 2" METERS	

PART TYPE, MATERIAL	DESCRIPTION OF MATERIAL	MANUFACTURER
VALVES, BALL (CUSTOMER SHUTOFF)	3/4" AND 1" BRONZE, LEVER HANDLE W/SWIVEL METER NUT. 1-1/2" AND 2" BRONZE, SHORT LEVER HANDLE. FLANGE X FIP	JONES J1908E, J1913E, J1966WE FORD B13-332HB34LHNL, B13-444HB34LHNL, BF13-666HH67NL, BF13-777HH67NL JONES J1900E, J1903E
VALVES, BALL	1-1/2" AND 2" BRONZE, FIP X FIP LEVER HANDLE 2" TEE HEAD	JONES J1905E JONES J1900E JONES E5193WJ
VALVES, BALL	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
VALVE CAN LIDS	DUCTILE IRON, CAST IRON	
VALVES, GATE	1/2" TO 2" BRASS FIP X FIP	HAMMOND 606 STOCKHAM B-103 JONES J372 WATTS LFGV
VALVES, GATE	1-1/2" AND 2" BRASS FIP X FLG	CLOW JONES J372F
VALVES, GATE – RESILIENT SEAT	4" THRU 12" - NON RISING STEM. MAY BE USED-AS TAPPING VALVE	AFC MUELLER, AVK CLOW/MH/KENNEDY
VALVES, PLUG	4" AND LARGER, LUBRICATED	ROCKWELL NORDSTROM; #1489 #1589 DEZURIK
WIRE, TRACER	14 AWG MIN., SOLID COPPER WIRE, POLYETHYLENE INSULATION. COLOR: WHITE / YELLOW	