PLUMBING MATERIAL LIST

THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY QUANTITIES AND FURNISH ALL MATERIALS REQUIRED FOR FULLY OPERATIONAL SYSTEMS, WHETHER SPECIFIED OR NOT.

CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE, BUT ARE GIVEN AS AN AID TO THE CONTRACTOR AND TO INDICATE THE QUALITY REQUIRED. CONTRACTOR IS RESPONSIBLE FOR COMPLETE DESCRIPTION OF MATERIAL ON THESE DRAWINGS AND IN THE SPECIFICATIONS BEFORE ORDERING. THE DESCRIPTION OF THE MATERIAL TAKES PRECEDENCE OVER THE CATALOG NUMBER. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN.

ACCEPTABLE PRODUCTS: LISTED HEREIN ARE MANUFACTURER'S PRODUCTS WHICH HAVE BEEN IDENTIFIED AS MEETING THE SALIENT CHARACTERISTICS OF THIS THE ITEM. SUCH INFORMATION IS ONLY PROVIDED TO IDENTIFY A PRODUCT WHICH MEETS THE SALIENT CHARACTERISTICS OF THE PRODUCT DESCRIBED HEREIN AND DO NOT, IN ANY WAY, LIMIT THE OFFEROR FROM PROVIDING PRODUCTS FROM OTHER MANUFACTURERS WHICH MEET THE SALIENT PRODUCT CHARACTERISTICS AS IDENTIFIED HEREIN.

CONTRACTOR SHALL VERIFY THAT FIXTURES SUPPLIED ARE APPROVED PER ALL APPLICABLE STATE, LOCAL AND GOVERNING AUTHORITIES.

BFP-1

BACK FLOW PREVENTER - REDUCED PRESSURE ZONE, BRONZE OR FDA APPROVED EPOXY COATED CAST IRON CONSTRUCTION, SIZE SAME AS PIPE, NON-CORROSIVE INTERNAL PARTS, STAINLESS STEEL SPRINGS, DIFFERENTIAL PRESSURE RELIEF VALVE BETWEEN SPRING-LOADED CHECK VALVES, SHUT-OFF VALVES ON INLET AND OUTLET OF UNIT, AIR GAP DRAIN FITTING, TEST PORTS WITH SHUT-OFF VALVES, FACTORY TESTED, RATED FOR 175 PSI AT 33°F TO 140°F, 15 PSI (MAXIMUM) PRESSURE DROP AT 10 FPS, ALL PARTS TO BE SERVICEABLE WITHOUT REMOVING UNIT FROM LINE, APPROVED BY USC FCCC & HR, AWWA C511-92, ASSE 1013, IAPMO AND SBCCI LISTED.

ACCEPTABLE MANUFACTURERS: WATTS (009/909), CONBRACO (40-200), FEBCO (860), WILKINS (975XL/375)

MOUNT AT 60" (MAXIMUM) ABOVE FINISHED FLOOR. PROVIDE AND INSTALL BRONZE OR EPOXY COATED STRAINER UPSTREAM OF EACH UNIT. INSTALL ADDITIONAL VALVE UPSTREAM FROM EACH STRAINER FOR SERVICING STRAINER. FLOW PRESSURE DROP CURVES SHALL BE SUBMITTED.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

BFP-2

BACK FLOW PREVENTER - DOUBLE CHECK, BRONZE OR FDA APPROVED EPOXY COATED CAST IRON CONSTRUCTION, SAME SIZE AS PIPE, NON-CORROSIVE INTERNAL PARTS, STAINLESS STEEL SPRINGS, SPRING-LOADED CHECK VALVES, SHUT-OFF VALVES ON INLET AND OUTLET OF UNIT, TEST PORTS WITH SHUT-OFF VALVES, FACTORY TESTED, RATED FOR 175 PSI AT 33°F TO 140°F, 8 PSI (MAXIMUM) PRESSURE DROP AT 10 FPS, ALL PARTS TO BE SERVICEABLE WITHOUT REMOVING UNIT FROM LINE, APPROVED BY USC FCCC & HR, AWWA C510-92, ASSE 1015, IAPMO AND SBCCI LISTED.

ACCEPTABLE MANUFACTURERS: WATTS (SERIES 007/709), CONBRACO (40-100), FEBCO (850), WILKINS (950XL/350)

MOUNT AT 60" (MAXIMUM) ABOVE FINISHED FLOOR. PROVIDE AND INSTALL BRONZE OR EPOXY COATED STRAINER UPSTREAM FROM UNIT. INSTALL ADDITIONAL VALVE UPSTREAM FROM STRAINER IF REQUIRED FOR SERVICING STRAINER. FLOW PRESSURE DROP CURVES SHALL BE SUBMITTED.

REFER TO RISER DIAGRAM ON 1-P-502 FOR LOCATIONS.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

CP-1

CIRCULATING PUMP - BRONZE CONSTRUCTION, PERMANENTLY LUBRICATED SEALED BEARINGS, MECHANICAL SEAL, OIL LUBRICATED, OPEN DRIP-PROOF NON OVERLOADING MOTOR WITH THERMAL OVERLOAD PROTECTION, FLANGED CONNECTIONS, RATED FOR 125 PSIG AT 225°F, UL LISTED.

5 GPM @ 23 FEET OF HEAD. MOTOR SHALL BE 1/12 HP OPERATING AT 2650 RPM.

ACCEPTABLE MANUFACTURERS: B&G (PL SERIES), TACO (OO SERIES), GRUNDFOS (UP SERIES)

ELECTRICAL REQUIREMENTS - 115V-1 PHASE (HARD-WIRE)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

ET-1

EXPANSION TANK - WELDED BLACK STEEL CONSTRUCTION, ASME STAMPED , GUARANTEED AIRTIGHT AND LEAKPROOF, STAINLESS STEEL SYSTEM CONNECTION, HEAVY DUTY BUTYL DIAPHRAGM AND RIGID POLYPROPYLENE LINER MECHANICALLY BONDED TO TANK TO PROVIDE A 100% NON-CORROSIVE WATER RESERVOIR, DIAPHRAGM AND LINER SHALL BE APPROVED FOR USE IN POTABLE WATER SYSTEMS, ALL WETTED COMPONENTS OF FDA APPROVED MATERIALS. . PROVIDE STANDARD SCHRADER AIR VALVE FOR FIELD CHARGING.

TANK SHALL HAVE A WORKING TEMPERATURE OF 200°F AND A WORKING PRESSURE OF 150 PSIG. MINIMUM TANK VOLUME TO BE 2.1 GALLONS, MINIMUM ACCEPTING VOLUME TO BE 0.9 GALLONS. FACTORY PRE-CHARGED TO 55 PSIG.

ACCEPTABLE MANUFACTURERS: AMTROL (THERM-X-TROL), TACO (PAX SERIES), WESSELS (TX), ELBI (DT)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

FCO-1

FLOOR CLEANOUT - ADJUSTABLE, CAST IRON HOUSING, ANCHOR FLANGE, TAPERED THREAD PLUG, SECURED NICKEL BRONZE TOP. TOP STYLE SHALL MATCH FLOOR FINISH AS FOLLOWS:

UNFINISHED FLOOR - ROUND SOLID SCORIATED TOP
TILE OR TERRAZZO - ROUND RECESSED TOP
CARPET - ROUND TOP WITH CARPET MARKER

ACCEPTABLE MANUFACTURERS: ZURN (Z1400), JOSAM (55000), MIFAB (C1100), SMITH (4000), WADE (6000), WATTS (CO-200)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

FD-1

FLOOR DRAIN - CAST IRON BODY, NICKEL BRONZE ADJUSTABLE TOP, 6" ROUND, 4" BOTTOM OUTLET UNDERFLOOR, FLASHING COLLAR, DEEP SEAL TRAP. PROVIDE WITH TRAP PRIMER OR TRAP SEAL.

ACCEPTABLE MANUFACTURERS: ZURN (Z415), SMITH (2005), WADE (1100), JOSAM (30000), WATTS (FD-100), MIFAB (F1100)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

FD-2
LINEAR TRENCH DRAIN - SEE SH-1.

FD-3

FLOOR DRAIN - CAST IRON BODY, MEDIUM DUTY CAST/DUCTILE IRON TOP, 9" ROUND, 3" BOTTOM OUTLET, SHALLOW SUMP, FREE STANDING SEDIMENT BUCKET, FLASHING COLLAR, DEEP SEAL TRAP. PROVIDE WITH TRAP PRIMER OR TRAP SEAL.

ACCEPTABLE MANUFACTURERS: ZURN (Z-550), SMITH (2110), WADE (1310), JOSAM (32100). WATTS (FD-300), MIFAB (F1320)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

GI-1

GREASE INTERCEPTOR - RECESSED ENCASED IN CONCRETE, STAINLESS STEEL CONSTRUCTION, REMOVABLE BAFFLES, INTEGRAL AIR RELIEF, FLOW CONTROL FITTING, INTEGRAL CLEANOUT, GASKETED STAINLESS STEEL OVER WITH LOCK AND LIFT RING, TRAFFIC RATED COVER, PDI G101 COMPLIANT, PDI APPROVED AND LISTED FOR USE BY THE VA.

PROVIDE STEEL EXTENSION TO MATCH CONCRETE HEIGHT.

20 GPM FLOW, 70 LB. GREASE CAPACITY, 17 GALLONS HOLDING CAPACITY

ACCEPTABLE MANUFACTURERS: ZURN (ZS-1170), SMITH (8200 SERIES), WADE (W-5100-XT), JOSAM (60120), ROCKFORD (GFE SERIES), WATTS (WD SERIES), MIFAB (MI-G), SCHIER (ATG SERIES)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

PLUMBING MATERIAL LIST (CONTINUED)

GD-1

GARBAGE DISPOSAL - CONTINUOUS FEED UNIT, CORROSION RESISTANT GRIND CHAMBER, CONTROL CENTER WITH AUTOMATIC REVERSING ACTION, MANUAL RESET OVERLOAD PROTECTION, DISPOSER MOUNTING ASSEMBLY, SUPPORT LEGS, SERVICE WRENCH, FULL 1 YEAR WARRANTY.

ELECTRICAL REQUIREMENTS - 115V-1 PHASE, HARD-WIRED, 1 HP MOTOR, 11.6 AMPS.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

HB-1

HOSE BIBB - FREEZELESS WALL HYDRANT, BRASS VALVE BODY AND SEAT, STANDARD FINISH, NON-FERROUS METAL STEM, AUTOMATIC DRAINING, VACUUM BREAKER, 3/4" MALE HOSE THREAD, WALL CLAMP, CONCEALED IN FLUSH MOUNTED LOCKABLE WALL BOX , KEY OPERATED, ASSE 1019 APPROVED AND LISTED.

ACCEPTABLE MANUFACTURERS: WOODFORD (B67), ZURN (Z1300), JOSAM (71000), WATTS (HY-725), PRIER (C-534-WB), MIFAB (MHY-20), SMITH (5509QT)

VERIFY NUMBER OF KEY OPERATORS TO BE PROVIDED WITH OWNER. BOX COVER AND HYDRANT SHALL USE A COMMON KEY. MOUNT AT 18" ABOVE GRADE UNLESS NOTED OTHERWISE ON DRAWINGS.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

LAV-1

LAVATORY TRIM - TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, RIGID GOOSENECK SPOUT WITH NOMINAL 6" REACH AND LAMINAR FLOW OUTLET, 4" WRIST BLADE HANDLES AT 4" CENTERS, CERAMIC DISC CARTRIDGE, PERFORATED GRID STRAINER WITH 1-1/4" 17 GAUGE TAILPIECE.

MAXIMUM FLOW TO BE 1.5 GPM IN COMPLIANCE WITH ENERGY POLICY ACT OF 2005 AND ASME/ANSI STANDARD A112.18.1M. FAUCET SHALL COMPLY WITH FEDERAL ACT S.3874. PROVIDE RESTRICTIVE DEVICE AS REQUIRED.

ACCEPTABLE MANUFACTURERS: DELTA (27C4924), AMERICAN STANDARD (7500.170), CHICAGO FAUCET (895), MOEN (8279)

LAVATORY BOWL INTEGRAL TO THE COUNTERTOP AND SUPPLIED BY THE G.C.

PROVIDE POINT OF USE TMV, MV-2, AT EACH LAVATORY.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

LT-1

LAUNDRY TUB - SINGLE TUB, MOLDED-STONE CONSTRUCTION, WALL MOUNTED, 23"x22", 14" DEEP, DRAINING SOAP TRAY, HEAVY DUTY BRACKET AND ASSOCIATED HANGERS, DRAIN OPENING.

ACCEPTABLE MANUFACTURERS: FIAT (L-1), SWAN (MF-W), MUSTEE (15W)

SINK TRIM - TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, DOMED SINGLE WING HANDLES, 4" CENTERS, 8" SWING SPOUT, AERATOR. FAUCET SHALL COMPLY WITH FEDERAL ACT S.3874.

ACCEPTABLE MANUFACTURERS: DELTA (27C4), AMERICAN STANDARD (7573.240), CHICAGO FAUCET (1891-XKABCP), MOEN (8273), ZURN (Z812F3-XL)

ACCESSORIES - REMOVABLE STRAINER PLATE AND NEOPRENE STOPPER, 1-1/2" 17 GAUGE CHROME PLATED BRASS TAILPIECE, 1-1/2" CAST BRASS P-TRAP, QUARTER-TURN 3/8" CHROME PLATED BRASS ANGLE SUPPLIES WITH LOOSE KEY STOPS, IN-LINE CHECK VALVES, CHROME PLATED SOFT COPPER SUPPLY LINES.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

MV-1

DIGITAL MIXING VALVE - MASTER THERMOSTATIC MIXING VALVE FOR TEMPERED WATER CONTROL, STAINLESS STEEL VALVE CONSTRUCTION WITH POLYMER ELECTRONICS ENCLOSURE, FACTORY SKID MOUNTED INCLUDING SHUT OFF VALVES, CHECK VALVES, TEMPERATURE SENSORS, RECIRCULATION PUMP, RECIRCULATION BYPASS AND MIXING VALVE COMPONENTS. PLUMBING CONTRACTOR SHALL MOUNT ON WALL, MAKE ELECTRICAL CONNECTION, AND CONNECT THE FOLLOWING PIPES: COLD WATER SUPPLY, HOT WATER SUPPLY, MIXED HOT WATER DELIVERY, HOT WATER RETURN FROM SYSTEM, HOT WATER RETURN TO WATER HEATERS.

1 1/2" INLET/OUTLET CONNECTIONS WITH A FLOW OF 70 GPM AT 10 PSI PRESSURE LOSS MAXIMUM.

OPERATIONAL FEATURES: +/- 2 DEGREE F WATER TEMPERATURE CONTROL AT POINTS OF USE 25 FEET DOWNSTREAM DURING DEMAND AND ALSO AT THE VALVE DURING ZERO SYSTEM DEMAND. AUTOMATIC SHUTOFF OF HOT WATER UPON COLD WATER SUPPLY FAILURE AND ALSO IN THE EVENT OF POWER FAILURE.

CONNECTIVITY: SPCO RELAY OUTPUTS. LCD DISPLAY WHICH CAN PROVIDE DELIVERED TEMPERATURE, ERROR CODES, AND ALERT CONDITIONS. RS485 SERIAL PORT TO CONNECT TO THE BUILDING AUTOMATION SYSTEM VIA [MODBUS] [BRAINSCAN].

PROGRAMMABLE FEATURES: SET POINT RANGE, THERMAL DISINFECTION MODE, FIRST LEVEL HI/LOW TEMPERATURE ALARM DISPLAY, AND TEMPERATURE ERROR LEVEL FOR SAFETY SHUTDOWN.

ELECTRICAL CONNECTIONS - 100-240 VAC, HARD WIRED, UL LISTED.

PROVIDE FIELD ADJUSTMENT BY FACTORY AUTHORIZED REPRESENTATIVE. UNIT SHALL BE ASSE 1017 LISTED AND APPROVED. VALVE SHALL COMPLY WITH FEDERAL ACT S.3874.

MANUFACTURERS: ARMSTRONG BRAIN (DMC40), POWERS INTELLISTATION (LFIS150)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

MV-2

MIXING VALVE - POINT-OF-USE ANTI-SCALD THERMOSTATIC MIXING VALVE ARRANGEMENT FOR TEMPERED WATER CONTROL, ALL BRONZE/BRASS CONSTRUCTION, ROUGH FINISH, UNION/THREADED INLETS WITH STRAINERS, COMBINATION CHECK STOPS OR SEPARATE SUPPLY CHECK VALVES AND SHUT OFF VALVES.

RATED FOR 2.2 GPM OUTPUT MAXIMUM AT 10 PSI DIFFERENTIAL AND 0.5 GPM OUTPUT MINIMUM. UNIT TO MIX 140 DEGREE F HOT WATER SUPPLY AND 40 DEGREE F COLD WATER SUPPLY FOR 110 DEGREE F OUTLET.

UNIT SHALL BE ASSE 1070 LISTED AND APPROVED. VALVE SHALL COMPLY WITH FEDERAL ACT S.3874.

MANUFACTURERS: LEONARD (LF-270), BRADLEY (S59 SERIES), LAWLER (310/570)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

SH-1

SHOWER - PRE FAB UNIT WITH INTEGRAL TRENCH DRAIN, OD 38.5" x 37.25" x 79", ID 36"x 36" CENTER POINT. ACCEPTABLE MANUFACTURERS : COMFORT DESIGNS (3838TR.75 RRF) OR EQUIVALENT. COORDINATE COLOR WITH ARCHITECT.

ACCESSORIES - 1 1/2" 18 GAUGE TYPE 304 STAINLESS STEEL HORIZONTAL GRAB BAR ON BACK WALL AND END WALLS, 1" DIAMETER STAINLESS STEEL CURTAIN ROD, COMMERCIAL GRADE VINYL SHOWER CURTAIN.

GRAB BAR SHALL BE MOUNTED WITH STAINLESS STEEL NUTS AND BOLTS AND FASTENED FROM THE BACKSIDE OF THE UNIT WITH MINIMUM 3"x3" METAL PLATES. UNIT SHALL BE RECESSED IN SUB-FLOOR TO ELIMINATE ANY CURB AT FINISHED FLOOR LEVEL. IN COMPLIANCE WITH LATEST ASTM F-446, ANSI A117.1, AND ADA STANDARDS. MOUNT SHOWER CURTAIN ROD AS HIGH AS POSSIBLE.

SHOWER VALVE - ACCESSIBLE, SINGLE HANDLE PRESSURE BALANCED MIXING FAUCET, BRASS OR BRONZE CONSTRUCTION, WASHERLESS DESIGN, OFF-COLD-HOT TEMPERATURE RANGE INDICATOR DIAL, POLISHED CHROME CAST METAL LEVER HANDLE, INTEGRAL CHECK STOPS, ADJUSTABLE TEMPERATURE LIMIT STOP, ADJUSTABLE SPRAY HAND HELD SHOWER, CHROME-PLATED 24" MOUNTING RAIL, CHROME-PLATED BRASS SWIVEL CONNECTOR, 60" CHROME-PLATED METAL HOSE, CHROME-PLATED BRASS SUPPLY ELBOW WITH FLANGE, CHROME-PLATED IN-LINE VACUUM BREAKER WITH CHROME-PLATED PIPING AND FLANGES, ASSE 1016 LISTED.

ACCEPTABLE MANUFACTURERS : SYMMONS (1-25), LEONARD (PAM-II), POWERS (P413-9)

INSTALL ALL CONTROLS BETWEEN 38" AND 48" ABOVE FINISHED FLOOR IN COMPLIANCE WITH LATEST ADA STANDARDS. MAXIMUM FLOW TO BE 1.75 GPM IN COMPLIANCE WITH ENERGY POLICY ACT OF 1992 AND ASME/ANSI STANDARD A112.18.1M. SET SAFETY LIMIT STOP TO 110 DEGREE F DISCHARGE.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

PLUMBING MATERIAL LIST (CONTINUED)

SK-1

SINK - ACCESSIBLE, SELF-RIMMING TRIPLE COMPARTMENT WITH FAUCET DECK AND OVERFLOW IN EACH BOWL, 16 GAUGE TYPE 304 STAINLESS STEEL, COMPLETELY UNDERCOATED, 48-1/4" (SIDE-TO-SIDE) x 18-1/4" (FRONT-TO-BACK) OVERALL SIZE, EACH COMPARTMENT 14" x 16" x 6.5" DEEP, 3-1/2" DIAMETER DRAIN OUTLET LOCATION CENTERED IN EACH BOWL, REMOVABLE TYPE 304 STAINLESS STEEL BASKET STRAINERS WITH NEOPRENE STOPPERS.

ACCEPTABLE MANUFACTURES: JUST (T-ADA-1949-A-GR)

SINK TRIM - SINGLE HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, NOMINAL 10" HIGH-RISE SWING SPOUT, CERAMIC CARTRIDGE, NOMINAL 8" REACH, PULL DOWN SPRAY HOSE WITH AERATOR STREAM / SPRAY SELECTOR, LEVER HANDLE.

ACCEPTABLE MANUFACTURES: DELTA (9178-DST), AMERICAN STANDARD (4285.300), ELKAY (LK6000), MOEN (7594C), SYMMONS (S-2302-PD)

MAXIMUM FLOW TO BE 2.2 GPM IN COMPLIANCE WITH ENERGY POLICY ACT OF 2005 AND ASME/ANSI STANDARD A112.18.1M. FAUCET SHALL COMPLY WITH FEDERAL ACT S.3874. PROVIDE RESTRICTIVE DEVICE AND ESCUTCHEON PLATE AS REQUIRED.

ACCESSORIES - 1-1/2" 17 GAUGE CHROME-PLATED BRASS TAILPIECE AND P-TRAP, QUARTER-TURN BALL VALVE TYPE 3/8" CHROME-PLATED BRASS ANGLE SUPPLIES WITH LOOSE KEY STOPS, CHROME-PLATED SOFT COPPER SUPPLY LINES.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

SK-2

HAIR WASHING SINK - ACCESSIBLE, PORCELAIN ENAMEL CAST IRON SHAMPOO BOWL, TRADITIONAL RECTANGULAR SHAPE, 18-3/4" W x 8-3/4" D x 19-1/2" FRONT TO BACK

ACCEPTABLE MANUFACTURES: BELVEDERE (3800 ALPHA BOWL)

ACCESSORIES - 1-1/2" 17 GAUGE CHROME-PLATED BRASS TAILPIECE AND P-TRAP, QUARTER-TURN BALL VALVE TYPE 3/8" CHROME-PLATED BRASS ANGLE SUPPLIES WITH LOOSE KEY STOPS, CHROME-PLATED SOFT COPPER SUPPLY LINES, 3-1/2" BASKET STRAINER, 503 VACUUM BREAKER, 522 FIXTURE, 603C BACKFLOW PREVENTER, 5001741 NECKREST, HT1 HAIR TRAP, 50001872 WHIZ SPRAY, 5B01007 BRACKET FOR WALL MOUNTING.

INSTALL PER MANUFACTURER'S REQUIREMENTS. COORDINATE FINISH AND MOUNTING WITH ARCHITECT.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

WC-1

WATER CLOSET - ACCESSIBLE, FLOOR MOUNTED, TANK TYPE, WHITE VITREOUS CHINA, EVERCLEAN SURFACE, CLOSE COUPLED, SIPHON JET, ELONGATED BOWL, BOLT CAPS, 12" ROUGH-IN, PISTON ACTION ACCELORATOR FLUSH VALVE WITH VACUUM BREAKER, CHROME-PLATED TRIP LEVER, INSULATED TANK LINER, 1.28 GALLONS PER FLUSH (MAXIMUM) IN COMPLIANCE WITH ENERGY POLICY ACT OF 1992.

ACCEPTABLE MANUFACTURERS: AMERICAN STANDARD (2535.128), KOHLER (K-3946), TOTO MS854114EL (G) (R)

SEAT - WHITE, ELONGATED SEAT WITH COVER, INJECTION MOLDED SOLID PLASTIC, SLOW-CLOSE SNAP-OFF HINGE, STAINLESS STEEL OR PLATED STEEL POSTS AND NUTS.

ACCEPTABLE MANUFACTURERS: AMERICAN STANDARD (5321.110), BEMIS (1200SLOWT), CHURCH (380SLOWT)

ACCESSORIES - QUARTER-TURN 3/8" CHROME-PLATED BRASS ANGLE SUPPLY WITH LOOSE-KEY STOP, CHROME-PLATED SOFT COPPER SUPPLY LINE,

TOP OF SEAT SHALL BE AT 17"-19" ABOVE FINISHED FLOOR. VERIFY EQUIPMENT REQUIREMENTS AND ROUGH-IN LOCATIONS.

FLUSH HANDLE SHALL BE LOCATED ON THE WIDE SIDE OF THE TOILET STALL AND OPERATE WITH NO GREATER THAN 5 LB OF FORCE IN COMPLIANCE WITH LATEST ADA STANDARDS.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

WH-1

WATER HEATER - GAS FIRED, VERTICAL, MINIMUM 94% EFFICIENT, SEALED COMBUSTION, METAL CABINET, BAKED ENAMEL FINISH, GLASS-LINED ASME STAMPED WELDED STEEL TANK, 160 PSI WORKING PRESSURE, FIBERGLASS OR FOAM INSULATION, BRASS WATER CONNECTIONS AND DRAIN VALVE, ASME APPROVED T&P RELIEF VALVE, MULTIPLE ANODE RODS, VENT PIPING KIT, HIGH TEMPERATURE GAS SHUT OFF, AUTOMATIC WATER THERMOSTAT, BUILT-IN GAS REGULATING VALVE, ADJUSTABLE TEMPERATURE RANGE, 3-YEAR WARRANTY, UL LISTED, COMPLIANT TO NAECA, ASHRAE 90.1 AND ASHRAE 90A.

60 GALLON CAPACITY, 120,000 BTUH INPUT NATURAL GAS, 154 GPH RECOVERY AT 90°F RISE.

ACCEPTABLE MANUFACTURERS: A.O. SMITH (BTH), BOCK (HEC), BRADFORD WHITE (EF SERIES), RHEEM (GHE), STATE (SUF)

ELECTRICAL REQUIREMENTS - 120V CIRCUIT FOR BLOWER AND CONTROLS, HARD-WIRED

SET WATER TEMPERATURE AT 140°F. SET SUPPLY GAS PRESSURE AT 7" W.C.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

WH-2

WATER HEATER - GAS FIRED, VERTICAL, MINIMUM 94% EFFICIENT, SEALED COMBUSTION, METAL CABINET, BAKED ENAMEL FINISH, GLASS-LINED ASME STAMPED WELDED STEEL TANK, 160 PSI WORKING PRESSURE, FIBERGLASS OR FOAM INSULATION, BRASS WATER CONNECTIONS AND DRAIN VALVE, ASME APPROVED T&P RELIEF VALVE, MULTIPLE ANODE RODS, VENT PIPING KIT, HIGH TEMPERATURE GAS SHUT OFF, AUTOMATIC WATER THERMOSTAT, BUILT-IN GAS REGULATING VALVE, ADJUSTABLE TEMPERATURE RANGE, 3-YEAR WARRANTY, UL LISTED, COMPLIANT TO NAECA, ASHRAE 90.1 AND ASHRAE 90A.

60 GALLON CAPACITY, 120,000 BTUH INPUT NATURAL GAS, 154 GPH RECOVERY AT 90°F RISE.

ACCEPTABLE MANUFACTURERS: A.O. SMITH (BTH), BOCK (HEC), BRADFORD WHITE (EF SERIES), RHEEM (GHE), STATE (SUF)

ELECTRICAL REQUIREMENTS - 120V CIRCUIT FOR BLOWER AND CONTROLS, HARD-WIRED

SET WATER TEMPERATURE AT 140°F. SET SUPPLY GAS PRESSURE AT 7" W.C.

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

WMF-1

WASHING MACHINE FIXTURE - GALVANIZED STEEL ENCLOSURE, 2" CENTER DRAIN, TWO INDEXED 1/2" DOMESTIC VALVES WITH THREADED OUTLETS .

ACCEPTABLE MANUFACTURERS: GUY GRAY (B200 SERIES)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

WHA-1

WATER HAMMER ARRESTER - BELLOWS TYPE, PRE-CHARGED, ALL LEAD FREE STAINLESS STEEL CONSTRUCTION, ASSE 1010 APPROVED, PDI CERTIFIED, RATED FOR 1-11 FIXTURE UNITS. PROVIDE ON MAINS SERVING TOILETS AND ON BRANCH TO WMF. REFER TO RISER DIAGRAM ON SHEET 1-P-502 FOR LOCATIONS.

INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
ACCEPTABLE MANUFACTURERS: ZURN (Z1700), JR SMITH (5005-5050), WADE (W5-100), JOSAM (75000 SERIES), WATTS (SS), MIFAB (WHB)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

FS-1
FLOOR SINK - CAST IRON BODY, NICKEL BRONZE RIM AND GRATE, 12" SQUARE, 4" BOTTOM OUTLET, 6" DEEP RECEPTOR WITH ALUMINUM DOME STRAINER] ACID RESISTANT COATED INTERIOR, SEEPAGE FLANGE WITH CLAMP, DEEP SEAL TRAP.

ACCEPTABLE MANUFACTURERS: ZURN (Z1901), SMITH (3151), WADE (9140), JOSAM (49340A), WATTS (FS-740), SIOUX CHIEF (861-2xXFNWC)

IN ACCORDANCE WITH VAAR 811.104-71 (B), BASED ON THE INCLUSION OF VAAR 811.104-71, BRAND NAME OR EQUAL, BIDDERS PROPOSING TO FURNISH AN "EQUAL PRODUCT OTHER THAN REFERENCED IN THE SOLICITATION, SHALL INSERT THE FOLLOWING DESCRIPTION FOR EACH EQUAL PRODUCT (SEE ALSO VAAR 852.211-73 (C)(1) AND (C)(2)). BIDDING ON: MANUFACTURER'S NAME: _____ BRAND: _____ NO.: _____

PLUMBING FIXTURE ROUGH-IN SCHEDULE

FIXTURE DESCRIPTION	DOMESTIC C.W. (NOTE 3)	DOMESTIC H.W. (NOTE 3)	SANITARY (NOTE 3)	VENT (NOTE 3)	NOTES (NOTE 4)
WATER CLOSET	3/4"	-	4"	2"	(TANK TYPE - NON-PUBLIC)
WATER CLOSET	1 1/4"	-	4"	2"	(FLUSH VALVE)
LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	NOTE 1 & 2
SERVICE SINK	3/4"	3/4"	3"	1 1/2"	-
KITCHEN SINK	3/4"	3/4"	1 1/2"	1 1/2"	NOTE 1 (COMMERCIAL KITCHEN)
CLINICAL SINK	1 1/4"	3/4"	4"	2"	
MOP BASIN	3/4"	3/4"	3"	1 1/2"	-
BATHTUB	1/2"	1/2"	2"	1 1/2"	NOTE 2
SHOWER	1/2"	1/2"	2"	1 1/2"	NOTE 2
WASHING MACHINE FIXTURE	3/4"	3/4"	2"	1 1/2"	-
FLOOR DRAIN/FLOOR SINK	-	-	2"	1 1/2"	-
FLOOR DRAIN/FLOOR SINK	-	-	3"	1 1/2"	-
FLOOR DRAIN/FLOOR SINK	-	-	4"	2"	-
HOSE BIBB	3/4"	-	-	-	-

NOTES:

1. SANITARY RISER UP IN WALL TO FIXTURE SHALL BE A MINIMUM OF 2".
2. 1/2" CW AND HW APPLIES ONLY TO THE FINAL VERTICAL RISE-DROP TO EACH FIXTURE. BRANCH PIPING TO VERTICAL RISE-DROP SHALL BE A MINIMUM OF 3/4" INCH UNLESS NOTED OTHERWISE.
3. SIZES SHOWN ARE MINIMUMS. SIZES SHOWN ON THE DRAWING THAT ARE LARGER THAN THE SIZES LISTED IN THE SCHEDULE SHALL DICTATE THE ROUGH-IN SIZE.
4. ALL UNDERGROUND SANITARY LINES TO BE 4".

Construction Documents ACCOMPANYING AMENDMENT VA69D-17-B-0889-A00004

Revisions: | Date

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Approved: Chief of MH
Date:
Approved: Chief of FMS
Date:
Approved: Director
Date:
Approved: VA Energy Engineer
Date:

Drawing Title
PLUMBING SCHEDULES

Location
TOMAH VAMC
500 E. VETERANS STREET
TOMAH, WI. 54660

Project Name
VA Tomah CLC Homes

Building Number
411 & 412

Checked
RHC

Drawn
MAG

Project Number
676-324

Date
10/12/2017

Drawing Number
1-P-401
Dwg.

Office of Construction and Facilities Management

VA FORM 08-6231

"ACCOMPANYING AMENDMENT VA69D-17-B-0889 - A00005"