

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
<p>WC-1 General Use</p>	<p><u>TOILET - FLOOR MOUNTED - EXPOSED FLUSH VALVE</u> American Standard #3451.160 'MADERA ELONGATED' 'Low Consumption' Toilet, floor mounted, vitreous china, EverClean™ antimicrobial surface which inhibits the growth of stain and odor causing bacteria, mold and mildew, elongated syphon jet flush action bowl, 2-1/8" (54mm) fully glazed internal trapway, 10" x 12" (254mm x 305mm) large water surface, 6L (1.6 gal.) per flush, 1-1/2" (38mm) top spud with condensate channel and bolt caps, for use with flush valve. Provide Floor Flange, flange bolts and gasket. Sloan #111-YO-XL REGAL Flush Valve, C.P. low consumption, 6 LPF (1.6 GPF) factory set flow, quiet action diaphragm type with non-hold open feature, vacuum breaker and seat bumper on back-check angle stop. Centoco #AM500STSCC Toilet Seat, elongated heavy duty solid plastic with Anti-Microbial Compound (to inhibit the growth of bacteria), open front less cover, with reinforced stainless steel check hinge, posts, washers and nuts.</p>
<p>WC-2 Handi Cap</p>	<p><u>TOILET - FLOOR MOUNTED - EXPOSED FLUSH VALVE (BARRIER FREE DESIGN)</u> American Standard #3461.160 'MADERA ELONGATED 16-1/2" (419mm) HIGH' Low Consumption Toilet, floor mounted, vitreous china, EverClean™ antimicrobial surface which inhibits the growth of stain and odor causing bacteria, mold and mildew, elongated syphon jet flush action bowl, 2-1/8" (54mm) fully glazed internal trapway, 10" x 12" (254mm x 305mm) large water surface, 6L (1.6 gal.) per flush, 1-1/2" (38mm) top spud with condensate channel and bolt caps, for use with Flush Valve. Provide Floor Flange, flange bolts and gasket. Sloan #111-YG-XL REGAL Flush Valve, C.P. low consumption, 6 LPF (1.6 GPF) factory set flow, quiet action diaphragm type with non hold open feature, vacuum breaker and extended seat bumper on back-check angle stop. Centoco #AM820STS Toilet Seat, elongated heavy duty solid plastic with Anti-Microbial Compound (to inhibit the growth of bacteria), open front with cover, reinforced stainless steel check hinge, posts, washers and nuts.</p>
<p>UR-1 General Use</p>	<p><u>URINAL - WALL HUNG - EXPOSED FLUSH VALVE</u> American Standard #6501.010 'WASHBROOK' Low Consumption Urinal, wall hung, vitreous china, washdown flush action 3.8L (1.0 Gal.) flush, extended sides for privacy, integral flush spreader, outlet connection, less strainer, 3/4" (19mm) top spud, wall hangers, open trap, for use with flush valve. American Standard #047068-0070A Strainer, removable stainless steel, 2" (50mm) outlet, connecting flange with gasket and bolts. Sloan #186-1-XL REGAL Flush Valve, C.P. low consumption, 3.8 LPF (1.0 GPF) factory set flow, quiet action diaphragm type with non hold open feature, vacuum breaker and back-check angle stop. Jay R. Smith #SQ4-1819 Urinal Wall Access Cleanout, with round stainless steel face and V.P. screw. Jay R. Smith #0637 Urinal Carrier, with steel pipe legs, block base feet supports and bearing plates.</p>
<p>LAV-1 General Use</p>	<p><u>BASIN - COUNTER MOUNTED</u> American Standard #0475.047 'AQUALYN' Basin, centre hole, 20-1/2" x 17-1/2" x 7-3/8" (521mm x 445mm x 187mm) deep, counter mounted, vitreous china, front overflow, tapered style rim and self rimming. Provide basin rim sealant. American Standard #2000.161X.002 'CERAMIX' Faucet, C.P. single hole C.C., solid cast brass lead-free body, washerless, ceramic drip-free disc valve cartridge, maximum temperature limit stop, with 8.3 LPM (2.2 GPM) flow aerator outlet, single control metal lever handle, 'Speed Connect' cable operated metal pop-up drain and flexible hose supplies. Provide Basin Supplies, C.P. with metal angle stops, adaptors, escutcheons and flexible metal risers. McGuire #8872C-20T 'p' Trap, C.P. brass adjustable body, 20 gauge (0.9mm), 1-1/4" (32mm) and escutcheon.</p>

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
LAV-2 Handi-Cap	<p><u>BASIN - WALL HUNG (BARRIER FREE DESIGN) LARGE FLAT SLAB DESIGN</u> American Standard #9141.011 'WHEELCHAIR BASIN', 4" (102mm) centres, 27" x 20" x 3 - 7-1/2" (686mm x 508mm x 76 - 191mm) deep, wall hung, vitreous china, flat slab, low front lip for wheelchair access, front overflow, for concealed arm carrier. Chicago Faucets #802-V-317-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal resistant 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass 4" (102mm) blade handles. McGuire #155WC Basin Drain, C.P., cast brass 1pc. top, offset open grid with 17ga. (1.5mm), 1-1/4" (32mm) tailpiece. McGuire #H170BVRB Basin Supplies, C.P., polished brass, rigid short horizontal integral copper sweat tube nipples, 1/2" (12mm) I.D. x 5" (127mm) long, all brass 1/4 turn ball valve angle stops with combination V.P. loose key and handles, escutcheons and S.S. braided flexible risers. McGuire #8872C-17T 'p' Trap, C.P. brass adjustable body, 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. Jay R. Smith #0700-Z-27 Basin Carrier, with steel pipe legs, block base feet support, narrow sleeve and base for extended concealed arms. ATS SPEC #BF-1 'Sanitary Safti-Covers' of PVC, vandal-resistant flexible seamless construction, anti-microbial, to exposed piping (to protect against heat/contusions) as per local codes.</p>
LAV-3 General Use (Wellness)	<p><u>BASIN - WALL HUNG (BARRIER FREE DESIGN) FOR TIGHT SPACE AREAS</u> American Standard #0954.000 'MURRO' Basin, 4" (102mm) centres, 21-1/4" x 22" x 5 - 7-1/2" (540mm x 559mm x 127-191mm) deep, wall hung, vitreous china, integral back splash, self draining deck area, sloped front lip, rear overflow, for concealed arm carrier. Chicago Faucets #802-V-317-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal resistant 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass 4" (102mm) blade handles. McGuire #155A Basin Drain, C.P., cast brass 1 pc. top, open grid with 17ga. (1.5mm), 1-1/4" (32mm) tailpiece. McGuire #H170BVRB Basin Supplies, C.P., polished brass, rigid short horizontal integral copper sweat tube nipples, 1/2" (12mm) I.D. x 5" (127mm) long, all brass 1/4 turn ball valve angle stops with combination V.P. loose key and handles, escutcheons and S.S. braided flexible risers. McGuire #8872C-17T 'p' Trap, C.P. brass adjustable body, 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. Jay R. Smith #0700-Z-M Basin Carrier, with concealed arms and block base feet support with semi-pedestal supported plate.</p>
LAV-4 General Use (Dressing Room)	<p><u>BASIN - WALL HUNG (BARRIER FREE DESIGN & GENERAL USE) FOR TIGHT SPACE AREAS</u> American Standard #0954.000 'MURRO' Basin, 4" (102mm) centres, 21-1/4" x 22" x 5 - 7-1/2" (540mm x 559mm x 127-191mm) deep, wall hung, vitreous china, integral back splash, self draining deck area, sloped front lip, rear overflow, for concealed arm carrier. Chicago Faucets #802-V-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal resistant 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass lever handles. McGuire #155A Basin Drain, C.P., cast brass 1 pc. top, open grid with 17ga. (1.5mm), 1-1/4" (32mm) tailpiece. McGuire #H170BVRB Basin Supplies, C.P., polished brass, rigid short horizontal integral copper sweat tube nipples, 1/2" (12mm) I.D. x 5" (127mm) long, all brass 1/4 turn ball valve angle stops with combination V.P. loose key and handles, escutcheons and S.S. braided flexible risers. McGuire #8872C-17T 'p' Trap, C.P. brass adjustable body, 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. Jay R. Smith #0700-Z-M Basin Carrier, with concealed arms and block base feet support with semi-pedestal supported plate.</p>

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
<p>LAV-5 General Use (Barrier Free)</p>	<p><u>BASIN - COUNTER MOUNTED (BARRIER FREE DESIGN)</u> American Standard #9494.001 'CADET UNIVERSAL ACCESS' Basin, 4" (102mm) centres, 21" x 17-1/2" x 5-1/4 - 6-7/8" (533mm x 445mm x 133-175mm) deep, counter mounted, vitreous china, rear overflow. Provide basin rim sealant. Chicago Faucets #802-V-317-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal resistant 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass 4" (102mm) blade handles. McGuire #155WC Basin Drain, C.P., cast brass 1pc. top, offset open grid with 17ga. (1.5mm), 1-1/4" (32mm) tailpiece. McGuire #H170BVRB Basin Supplies, C.P., polished brass, rigid short horizontal integral copper sweat tube nipples, 1/2" (12mm) I.D. x 5" (127mm) long, all brass 1/4 turn ball valve angle stops with combination V.P. loose key and handles, escutcheons and S.S. braided flexible risers. McGuire #8872C-17T 'p' Trap, C.P. brass adjustable body, 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. McGuire #PW2000WC 'PROWRAP' Sanitary Covering, of PVC, vandal-resistant flexible seamless construction, anti-microbial, to exposed piping (to protect against heat/contusions) as per local codes.</p>
<p>SH-1 General Use</p>	<p><u>SHOWER - PRESSURE BALANCING VALVE</u> Symmons #4-5000-X 'SAFETYMIX' Shower Valve, C.P. heavy duty pressure balancing controller, all brass and stainless steel body design, maximum temperature limit stop, service stops, metal escutcheon plate, heavy duty spindle with single control metal lever handle. Symmons #4-150 'SENIOR' Institutional Head, C.P. cast brass, one piece, with 7.6 LPM (2.0 GPM) flow and secured with vandal-resistant screws. Bobrick #B207 Curtain Rod, S.S. 1" (25mm) dia. 20 GA. (1.0mm). Bobrick #B204-2/B204-1 White Vinyl Curtain, 42" x 72" (1065mm x 1830mm) with S.S. hooks. Jay R. Smith #2005A Floor Drain, with water proofing flange and nickel bronze strainer. Provide 'p' Trap.</p>
<p>SH-2 Handi-Cap</p>	<p><u>SHOWER - ON/OFF - TEMPERED WATER (BARRIER FREE DESIGN) (HAND SHOWER SPRAY)</u> Symmons #022 'ON/OFF' Control Valve, C.P. vandal resistant, tempered water only, 4" (100mm) cast brass blade handle. Symmons #1.5 'Euro Flo' Hand Shower Head, C.P. cast brass, 5.7 LPM (1.5 GPM) flow. Bobrick #B207 Curtain Rod, S.S. 1" (25mm) dia. 20 GA. (1.0mm). Bobrick #B204-3/B204-1 White Vinyl Curtain, 70" x 72" (1778mm x 1830mm) with S.S. hooks. Symmons #QD C.P. Snap-On / Off Quick Disconnect, for removal of hand shower and hose assembly. Jay R. Smith #2005A Floor Drain, with water proofing flange and nickel bronze strainer. Provide 'p' Trap. <u>WATER TEMPERATURE CONTROLLER (TEMPERED WATER MIXERS)</u> Symmons #5-XXXX-A-V 'TEMPCONTROL' Thermostatic Temperature Control Valve with liquid filled motor, check stops, safety shut off and volume control valve, bimetal dial thermometer, exposed valve and standard temperature range, all chrome plated.</p>
<p>SK-1 General Use (office)</p>	<p><u>SINGLE BOWL SINK - STAINLESS STEEL - BACK LEDGE</u> Franke 'WASHROOM SYSTEMS' #LBS6808-1-3 S.S. Sink, 3 hole, 8" (203mm) centres, 20-1/2" x 20" x 8" (521mm x 508mm x 203mm) deep, counter mounted, back ledge, grade 18-8 type 302 stainless steel, single compartment, satin finished rim and bowl, self rimming, with crumb cup strainer, sound deadening and mounting kit. American Standard #4205.000.002 'RELIANT +' Faucet, C.P. 8" (203mm) C.C., deck mounted, all metal construction, lead-free waterways body, deck plate, washerless, ceramic drip-free disc valve cartridge, cast swing spout, maximum temperature limit stop, with 8.3 LPM (2.2 GPM) flow aerator outlet, single control metal lever handle and 3/8" (10mm) supply tubes. Provide Sink Supplies with metal angle stops, adaptors, escutcheons and flexible metal risers. Provide 'p' Trap, cast brass 1-1/2" (38mm) with cleanout, union and escutcheon.</p>

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
SK-2 General Use (Creative Arts/Canteen)	<u>SINGLE BOWL SINK - STAINLESS STEEL - BACK LEDGE</u> Franke 'WASHROOM SYSTEMS' ALBS6805-1-3 S.S. Sink, 3 hole, 8" (203mm) centres, 20-9/16" x 20-1/8" x 5" (522mm x 511mm x 127mm) deep, counter mounted, back ledge, grade 18-8 type 302 stainless steel, single compartment, satin finished rim and bowl, self rimming, with crumb cup strainer, sound deadening and mounting kit. Chicago Faucets #1100-V-L9-XK Faucet, C.P. 8" (203mm) C.C., deck mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, swing spout with vandal-resistant 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass hooded lever handles. Provide Sink Supplies with metal angle stops, adaptors, escutcheons and flexible metal risers. Provide 'p' Trap, cast brass 1-1/2" (38mm) with cleanout, union and escutcheon.
SK-3 General Use (Creative Arts)	<u>DOUBLE BOWL SINK - STAINLESS STEEL - BACK LEDGE</u> Franke 'WASHROOM SYSTEMS' ALBD6405-1-3 Sink, 3 hole, 8" (203mm) centres, 20-1/2" x 31-1/4" x 5" (521mm x 794mm x 127mm) deep, counter mounted, back ledge, grade 18-8 type 302 stainless steel, double compartment, satin finished rim, satin finished bowl, with spillway, self rimming, with crumb cup strainers, sound deadening and mounting kit. Chicago Faucets #1100-L9-XK Faucet, C.P. 8" (203mm) C.C., deck mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, swing spout with 7.6 LPM (2.0 GPM) flow aerator outlet and cast brass hooded lever handles. Provide Sink Supplies with metal angle stops, adaptors, escutcheons and flexible metal risers. Provide 'p' Trap, cast brass 1-1/2" (38mm) with cleanout, union and escutcheon.
SK-4 General Use (Janitor room)	<u>MOP SINK - PRECAST TERRAZZO FLOOR MOUNTED - HILOW</u> Stern Williams #HL-1800 'HILOW' Mop Sink, 24" x 24" x 12" (610mm x 610mm x 305mm) deep, floor ounted, precast terrazzo, with one piece stainless steel cast integral cap on front drop and Integral Drain with strainer. Chicago Faucets #305VB-R-XK-Hose Faucet, C.P. 8" (203mm) C.C., wall mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, 19 LPM - 34 LPM (5 GPM - 9 GPM), cast brass lever handles, body mounted vacuum breaker, integral stops, 36" (915mm) hose and hanger. Provide 'p' Trap, 3" (75mm). Stern Williams #T-40 S.S. Mop Hanger, triple. Stern Williams #BP S.S. Back Splash Panels, on two sides.
SK-5	<u>SINGLE BOWL SINK - STAINLESS STEEL - BACK LEDGE</u> Franke 'WASHROOM SYSTEMS' #LBS6807-1-3 S.S. Sink, 3 hole, 8" (203mm) centres, 20-1/2" x 20" x 7" (521mm x 508mm x 178mm) deep, counter mounted, back ledge, grade 18-8 type 302 stainless steel, single compartment, satin finished rim and bowl, self rimming, with crumb cup strainer, sound deadening and mounting kit. Chicago Faucets #1100-GN2FC-XK Faucet, C.P. 8" (203mm) C.C., deck mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, gooseneck spout with integral 7.6 LPM (2.0 GPM) flow laminar (non aerating) outlet, plain spout end and cast brass hooded lever handles. Provide Sink Supplies with metal angle stops, adaptors, escutcheons and flexible metal risers. Provide 'p' Trap, cast brass 1-1/2" (38mm) with cleanout, union and escutcheon.

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
DF-1 HAWS COOLER	<u>HI-LO DUAL DRINKING FOUNTAIN - STAINLESS STEEL WALL HUNG (B.F.D. & GENERAL USE) (Handi-Cap)</u> Haws #1119HI-LO Fountains, wall hung, dual units, stainless steel, 18 gauge (1.2mm) with #4 satin finish, bevelled front 18" (457mm) receptors, lead-free, 'Soft Touch Valve' forged brass control bubbler heads, self closing valves, automatic volume regulators, 100 micron in-line filter, vandal-resistant open grid strainer, tailpiece and S.S. cover plate.Haws #6700.4 HI-LO Fountain Mounting Plate, 36" (914mm) x 12" (305mm) x 3/16" (5mm) steel mounting plate that is predrilled and furnished with all thread studs, nuts and washers.McGuire #HST11BV Fountain Supplies, C.P. polished brass straight 1/4 turn all brass ball valve stops with loose key handles. McGuire #8872C-17T 'p' Trap, C.P., 17 gauge (1.5mm), brass adjustable body, 1-1/4" (32mm) and escutcheon (Trap is concealed in wall - provide access to meet local codes). Jay R. Smith #0823-2 Fountain Carrier, with plate and block base feet support.
DF-2 General Use	<u>DRINKING FOUNTAIN - STAINLESS STEEL WALL HUNG</u> Haws #1105Fountain, wall hung, lead-free, stainless steel, 18 gauge (1.2mm) with #4 satin finish, round front 12-1/4" (311 mm) receptor, bubbler, strainer, 'Soft Touch Valve' control bubbler, self-closing valve, automatic volume regulator.Haws #6700 Mounting Plate, 18" (457mm) x 7" (178mm) x 3/16" (5mm) steel mounting plate that is predrilled and furnished with all thread studs, nuts and washers.McGuire #HST11LK Fountain Supply, C.P. with loose key heavy all brass straight stop. McGuire #8872C 'p' Trap, C.P., polished, cast brass adjustable body, 1-1/4" (32mm) with cleanout plug, seamless brass wall bend and escutcheon. Jay R. Smith #0823 Fountain Carrier, with steel pipe legs, block base feet support and plate.
EW-1 (H/C)	<u>EMERGENCY EYE / FACE WASH S.S. RECEPTOR WALL HUNG (B.F.D & GENERAL USE)</u> Haws #7360BTWC Emergency Eye/face wash, wall hung, stainless steel receptor, min. 19 LPM (5.0 GPM) flow, dual aeration spray heads with flip-top dust covers, volume regulator, 100 micron in-line filter, in-line brass strainer, S.S. push handle ball valve with S.S. trim, all factory assembled, wall hanger, 'p' trap and emergency sign. If piping length to unit is more than 50'-0" (19.7M) provide 3/4" (19mm) C.W. supply to unit, 1/2" (12.7mm) connection and escutcheon. Provide adequate support in wall for eye wash mounting. All exposed piping shall be chrome plated. <u>THERMOSTATIC MIXING VALVE - EMERGENCY EYE / FACE WASH TEMPERED WATER MIXER (SINGLE STATION)</u> Haws #9201EW Supply Fixture, thermostatic temperature control valve, all brass and stainless steel design, with liquid filled motor, check stops, safety shut-off should cold water supply fail, hot water failure will allow cold water flow through both the fixed and variable by-pass, outlet temperature gauge, 1/2" (12mm) supplies. Tempered water factory set at 80 deg. F (26 deg.C) (Model #9201EW provides up to 26.6 LPM (7 GPM) at 30psi (246kPa) drop through valve). (Tempered water mixer - check local codes for usage.)
Cleanout	<u>CLEANOUTS - FLOOR CLEANOUT - FINISHED AREAS</u> Jay R. Smith Series 4020 'Twis-To-Floor' Floor Cleanout, duco coated cast iron body and removable positive gasket seal closure plug and heavy duty 6" (150mm) with nickel bronze frame and cover, secured with stainless steel screws, C.O. cast in cover. (For medium load traffic) (For water-proofed areas provide 'FC' flange with flashing clamp).
FD-1 (Finished Floor)	<u>FLOOR DRAINS - FINISHED AREAS</u> Jay R. Smith Series 2005AHD-P050-SS Floor Drain, all duco coated cast iron body, reversible flashing clamp with seepage openings and adjustable 5" (127mm) diameter stainless steel 1/2" (12.7mm) thick strainer, secured with S.S. screws, 4" (100mm) throat on strainer, trap primer connection 'P'.

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
FD-2 (Mechanical Room)	<u>FLOOR DRAINS - WITH COMBINATION FUNNEL - MECHANICAL ROOM & UNFINISHED AREAS</u> Jay R. Smith Series 2320-3591-P050 Floor Drain, all duco coated case iron body, flashing clamp with seepage openings and adjustable 8-1/2" (216mm) diameter cast iron grate with 4" x 9" (101.6mm x 228.6mm) cast iron oval funnel, trap primer connection.
GT-1 (Kitchen)	<u>INTERCEPTORS - GREASE INTERCEPTOR (FLUSH WITH FLOOR TYPE)</u> Jay R. Smith Series 8050E Grease Interceptor, all duco coated inside & outside C.R. steel enzyme type, removable baffles, gasketed cover with lock and lift ring, integral flow control device, deep seal trap with cleanout and bottom debris trapping leg. Flow rating of 50 GPM (190LPM) and grease capacity for [100 pounds (45.3KG)]. See drawing for sizes. For flush with floor installation provide extension 'E' as required to meet invert of pipe.
HB-1	<u>HOSE BIBB - INTERIOR - WASHDOWN</u> Acorn Series 8121CR Hose Valve, C.P. heavy duty rough cast brass body with integral cast flange, vandal-resistant lock shield bonnet with removable wheel handle, 3/4" (19mm) NPT female inlet and hose end vacuum breaker.
RD-1 General Use (Control Flow)	<u>ROOF DRAINS - FLOW CONTROL</u> Jay R. Smith Series 1083-CAN-ERCCID 'RAINTROL' Flow Control Roof Drain, all duco coated 15-1/4" (387mm) diameter cast iron body, with under deck clamp, solid extension and sump receiver, flashing clamp with seepage openings and, 11" (280mm) diameter secured cast iron dome with 6" (150mm) high flow rate control weir. (Solid extension height to suit roof construction).
Trap Primers	<u>TRAP SEAL PRIMERS - MECHANICAL</u> SMS INC. Series PR-500 Automatic Trap Seal Primer Valve serving 1 to 4 drains, cast brass body, serving individual or remote area drains (primer automatically activated when there is a pressure drop in the system) with 1/2" (12.7mm) NPT (MtoF) connections with strainer and integral back flow preventer & vacuum breaker. (For 2, 3 or 4 drains provide primer unit with distribution unit assembly #DU-U)
Urinal Cleanouts	<u>CLEANOUTS - URINAL CLEANOUT</u> Jay R. Smith Series SQ4-1819 Urinal Wall Access Cleanout, with S.S. bolt and wing nut, complete with 4" (102mm) diameter polished S.S. access cover and secured with V.P. screw.
Wall Cleanout	<u>CLEANOUTS - LINE CLEANOUT</u> Jay R. Smith Series 4420 Line Cleanout, in cast iron ferrule with cast bronze tapered thread plug, with full size pipe opening. Where cleanouts are concealed behind finished walls access shall be made by Smith 4422 round stainless steel plate and slotted flat head stainless steel screw.
Water Hammer	<u>WATER HAMMER ARRESTORS</u> SMS INC. Series SC Series 'Water Hammer Arrestors' with brass piston in a type 'K' copper casing size according to manufacturer's recommendations chart below to eliminate water hammer and shock from piping system. Provide Water Hammer Arrestors on hot and cold water supplies to all quick valves, solenoids, and plumbing fixtures, and locate in an upright position between the last two fixtures on a line, or horizontally at the end of line closest to supply source. On projects exceeding five stories in height, provide water hammer arrestors on domestic water risers as follows. Locate arrestors at the end of riser opposite supply source. Arrestor shall be two pipe sizes larger than the riser is at the connection point, not exceeding the largest pipe size diameter in the riser.

**SEPARATE PLUMBING FIXTURE & EQUIPMENT SCHEDULE "O"-R1
 (PACKAGE "A") SEPARATE PRICE ITEM NO. 10**

FIXTURE/EQUIPMENT TAG:	FIXTURE/EQUIPMENT DESCRIPTION
WH-1	<p>NON FREEZE WALL HYDRANT - BOX - EXTERIOR Jay R. Smith Series 5509QT Box Type Wall Hydrant, 1/4 turn non-drip, ceramic cartridge, 3/4" (19mm) non freeze wall type with bronze face and stainless steel with full 180 deg. cover opening box, adjustable wall-flange operating key and self-draining integral vacuum breaker. Length to suit wall thickness.</p>
DWH-1,2,3,4	<p>Domestic Hot Water Heater shall be a Bradford White model D-65T-370-3N with a rated storage capacity of not less than 246 liters (65 gallons), a minimum gas input of 370 MBH (108.5 KW), and a minimum recovery of 1359 LPH (359 GPH) at 56°C (100°F) temperature rise. It shall be design certified by CSA International for 82°C (180°F) application, either with or without a separate storage tank. The tank shall be lined with Vitraglas® vitreous enamel and shall have a bolted hand hole cleanout. The tank shall have extruded magnesium anode rods installed in separate head couplings and extended to within 76mm (3") of the bottom. The heater shall be insulated with a Non-CFC foam. Water heater shall be equipped with an ASME rated T&P relief valve, electronic ignition system (115V AC required), flue damper and Sidewall Power Kit. The entire installation shall be made in compliance with the requirements of the local authorities having jurisdiction.</p>
ST-1	<p>DOMESTIC HOT WATER STORAGE TANK Domestic Hot Water Storage tank to be Bradford White Model No. NV310J-5A with a storage capacity of 1,174 liters (310 usgallons) and overall dimensions of 2,185mm (86") high x 1016mm (40") diameter. The tank shall be constructed to achieve hot water delivery of 80% of tank capacity without a drop in outlet temperature utilizing the HydroJet HC device. The tank shall have high density foam insulation, 50mm (2") thick to meet ASHRAE 90.1b standard. The tank shall be built in accordance with ASME construction and so labeled, with a working pressure of 861.6 kPa (125 PSIG). The tank lining shall be Vitraglas with a five year warranty against tank failure. The tank shall have the following standard tapping sizes: 1) Hot Water Supply 75mm (3") 2) Heater Loop 75mm (3") 3) Relief Valve Tapping 32mm (1-1/4") 4) Tank Thermostat 20mm (3/4")</p>

END OF SCHEDULE O