

PLUMBING SPECIFICATIONS

CODES AND PERMITS: ALL WORK TO BE DONE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES. PERMIT AND CONNECTION FEES TO BE PAID BY CONTRACTORS AS REQUIRED.

WARRANTY: WORK AND MATERIALS TO BE WARRANTED FOR ONE (1) YEAR AFTER PROJECT COMPLETION.

DOMESTIC WATER:
INTERIOR ABOVE SLAB - TYPE L HARD-DRAWN COPPER WITH SOLDERED JOINTS. WHERE ACCEPTABLE TO LOCAL AUTHORITIES, CONTRACTOR MAY USE CROSSLINKED POLYETHYLENE (PEX) PIPING AND COLD-SHRINK MEMORY FITTINGS IN INTERIOR CONCEALED LOCATIONS.

INSULATION: INSULATE DOMESTIC WATER LINES ABOVE GRADE WITH HD RIGID FIBERGLASS WITH ASJ COVERING. THICKNESS AS FOLLOWS: 1/2" AT CW LINES AND 1" AT HW, HWR.

WATER HAMMER CONTROL:
PROVIDE SHOCK ARRESTORS, SIZED AND APPLIED IN ACCORDANCE WITH PD1-WH201, IN THE DOMESTIC CW AND HW PIPING AT EACH PLUMBING FIXTURE OR FIXTURE GROUP, AND AT EACH AUTOMATICALLY OPERATED CONTROL OR SHUTOFF VALVE.

ARRESTORS TO BE PISTON TYPE, WITH TRIPLE "O" RINGS, SEALED PRECHARGED ASSEMBLY, AND SOLDERED CONNECTIONS, SUITABLE FOR MOUNTING IN VERTICAL OR HORIZONTAL POSITION. INSTALL UNITS IN TEES, AND ORIENT IN DIRECT PATH OF SHOCK WAVE TO ALLOW MAXIMUM EFFECTIVENESS. LOCATE ARRESTORS IN WALL CAVITY WITHIN 24" OF LAST FIXTURE CONNECTION TO SUPPLY LINE.

FIRE PROTECTION SYSTEM:
PROVIDE MODIFICATIONS AND ADDITIONS TO EXISTING SPRINKLER SYSTEM, WITH COVERAGE OF ALL APPLICABLE BUILDING AREAS, PER NFPA #13.

SPRINKLERS:
FINISHED AREA W/ CEILING - PENDANT, SEMI-RECESSED, WHITE FINISH (UNLESS OTHERWISE DIRECTED)
EXPOSED STRUCTURE - UPRIGHT, BRASS FINISH

PIPING, INTERIOR ABOVE SLAB - BLACK STEEL WITH THREADED OR GROOVED/ROLLED FITTINGS EQUAL TO VICTAULIC, PER NFPA #13

PIPING PASSING THROUGH FLOORS, WALLS, AND SIMILAR BUILDING COMPONENTS TO HAVE APPROPRIATE CLEARANCES PER NFPA 13 PARAGRAPHS 9.3.4.1 THROUGH 9.3.4.3. PIPE SIZES 3-1/2" AND SMALLER TO HAVE OPENING DIAMETER 2" LARGER THAN PIPE DIAMETER. PIPE SIZES 4" AND LARGER TO HAVE OPENING DIAMETER 4" LARGER THAN PIPE DIAMETER.

SANITARY WASTE AND VENT (DWV) SYSTEM:
ALL LOCATIONS - SERVICE WEIGHT OR NO-HUB CAST IRON WITH GASKETED JOINTS, OR WHERE LOCAL CODES PERMIT, DWV (SCH. 40) PVC WITH SOLVENT-WELDED JOINTS.

NOTE: PLASTIC PIPE IS NOT ACCEPTABLE IN RETURN AIR PLENUMS, OR RATED WALL ASSEMBLIES.

PLUMBING FIXTURES, TRIM, AND ACCESSORIES:
PROVIDE FIXTURES, TRIM, CARRIERS AND ACCESSORIES AS SCHEDULED AND REQUIRED FOR COMPLETE INSTALLATION AND PROPER OPERATION.

FAUCETS FOR LAVATORIES AND SINKS TO HAVE WASHERLESS CARTRIDGES WITH POSITIVE POSITIONING SHUTOFF AGAINST METALLIC OR CERAMIC STOPS.

SUPPLIES TO BE NPS BRASS. EXPOSED FINISHED METAL PARTS TO BE CHROMIUM PLATED, ROUGH BOODED PARTS TO BE HEAVILY NICKEL OR CHROMIUM PLATED.

TRAPS FOR LAVATORIES AND SINKS TO BE CHROMIUM-PLATED "P" TRAPS, EACH WITH ADJUSTABLE CAST BRASS BODY, CLEANOUT, SLIP JOINT INLET AND 17 GAUGE TUBING OUTLET WITH WALL ESCUTCHEON.

ESCUTCHEONS ON SUPPLIES AND WASTE TO BE CAST BRASS, WITH POLISHED CHROME FINISH.

CAULK AROUND WALL AND FLOOR MOUNTED FIXTURES WITH FINE CONTINUOUS BEAD OF WHITE SILICON SEALANT.

SUPPLIES TO EACH FIXTURE OR PIECE OF EQUIPMENT TO BE VALVED FOR SERVICE.

ALL DRAINS CONNECTED TO SANITARY SEWER SYSTEM TO BE TRAPPED AND VENTED.

CONNECTION BETWEEN CHINA AND SOIL PIPE FLANGES SHALL BE MADE GAS AND WATER-TIGHT WITH ONE-PIECE MOLDED GASKET.

AT FIXTURE CW AND HW ROUGH IN, PROVIDE ELBOWS WITH DROP EARS SECURELY FASTENED TO WOOD BLOCKING WITH SCREWS.

PROVIDE CLEANOUTS PER CODE AND WHERE INDICATED AS FOLLOWS:
FLOOR: ZURN ZN-1400, WALL: ZURN Z-1441 WITH STAINLESS STEEL COVER

HANDICAPPED PROVISIONS:
HEIGHTS OF FIXTURES DESIGNATED FOR HANDICAPPED USE SHALL BE IN ACCORDANCE WITH ANSI A117.1-80, ADA, OR LOCALLY APPLICABLE HANDICAP CODES.

OFFSET P-TRAPS TO MAXIMIZE KNEE SPACE AT SINKS AND LAVATORIES. INSULATE EXPOSED WATER AND WASTE PIPING WITH PREFABRICATED INSULATING ASSEMBLY, EQUAL TO "LAV GUARD" BY TRUEBRO.

FAUCET TRIM FOR SINKS AND LAVATORIES TO HAVE BLADE HANDLES (OR BE SINGLE-LEVER TYPE), SUITABLE FOR HANDICAPPED USE. SINKS FOR HANDICAPPED USE TO HAVE A MAXIMUM DEPTH OF 5-1/2".

FLUSH OPERATOR DEVICE FOR WATER CLOSETS TO BE LOCATED ON SIDE OF FIXTURE WITH WIDE DISTANCE IN TOILET STALL OR ENCLOSURE.

FLUSH VALVE FOR URINALS TO BE LOCATED NO MORE THAN 48" AFF. URINAL LIPS TO EXTEND NO LEAST 1" FROM WALL.

FIRESTOPPING AND FIRE/SMOKE CAULKING:
PENETRATIONS OF FIRE-RATED BUILDING COMPONENTS BY PIPES, TUBING, DUCTWORK, RACEMAYS, AND WIRING/CABLING SHALL BE PROVIDED WITH APPROPRIATE FIRE BARRIERS. METHODS AND MATERIALS SHALL BE UL LISTED AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM-E817/UL.

VOIDS AND OPENINGS SHALL BE SEALED WITH INTUMESCENT CAULK/SEALANT, EQUAL TO STI "LCI SEALANT", 3M #CP-25, OR DOW CORNING #2000. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

WHERE PLASTIC PIPES OR TUBING PENETRATE RATED ASSEMBLIES, PROVIDE INTUMESCENT COLLARS, EQUAL TO STI "SERIES SSC OR LCC FIRESTOP COLLARS".

WHERE ELECTRICAL BOXES ARE INSTALLED IN STUD WALL RATED ASSEMBLIES, PROVIDE INTUMESCENT PUTTY PADS AROUND EXTENSION OF BOX, EQUAL TO STI "SSP PUTTY PADS".

WHERE UL LISTED SYSTEMS (FIRE THROUGH-PENETRATION FIRESTOP SYSTEMS) ARE REQUIRED, USE COMPONENTS MANUFACTURED BY 3M, DOW CORNING, HILTI, METALINES, STI, HEVI-DUTY NELSON, OR JOHNS MANVILLE.

PENETRATIONS OF FIRE-TIGHT BUILDING COMPONENTS BY PIPES, TUBING, DUCTWORK, RACEMAYS, AND WIRING/CABLING SHALL BE PROVIDED WITH APPROPRIATE SMOKE-TIGHT CAULKING. METHODS AND MATERIALS SHALL BE UL LISTED AND SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE ASTM/UL STANDARDS.

PLUMBING SYMBOLS	
---	SANITARY WASTE
---	EXISTING SANITARY WASTE
----	SANITARY VENT
----	DOMESTIC COLD WATER
----	DOMESTIC HOT WATER
----	DOMESTIC HOT WATER RETURN
⊗	SHUTOFF VALVE (OR COCK)
⊕	CHECK VALVE
⊕	BALANCING VALVE
⊕	UNION OR FLANGED CONNECTION
⊕ SA	SHOCK ARRESTOR (FOR DOMESTIC WATER)
VTR	VENT THROUGH ROOF
CO	CLEANOUT
WD	WALL CLEANOUT
HD	HUB DRAIN
PRV	PRESSURE REDUCING VALVE
BFP	BACKFLOW PREVENTER
BV	BLENDED VALVE
HWC	HOT WATER CIRCULATOR
CW	COLD WATER
HW	HOT WATER
HWR	HOT WATER RETURN
FD	FLOOR DRAIN (REFER TO PLBG. FIXT. SCHED.)
FS	FLOOR SINK (REFER TO PLBG. FIXT. SCHED.)
WF	WALL FAUCET (REFER TO PLBG. FIXT. SCHED.)
HB	HOSE BIBB (REFER TO PLBG. FIXT. SCHED.)
AF	ABOVE FINISHED FLOOR
⊕	CONNECT NEW TO EXISTING CONNECTION POINT

PLUMBING FIXTURE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER AND CATALOG NO.	ACCESSORIES AND REMARKS	CONNECTION SIZES
WC	WATER CLOSET FLUSH VALVE FLOOR MOUNT	KOHLER "WELLWORTH" K-4406	VALVE: ZURN Z-6000AV-HET, SEAT: CHURCH 295C VITREOUS CHINA, SIPHON JET, ELONGATED BOWL, OPEN FRONT WHITE SEAT, 1.28 GPF, 15" RIM	CW: 1" WD: 3"
WCH	WATER CLOSET FLUSH VALVE FLOOR MOUNT ADA COMPLIANT	KOHLER "HIGHLINE" K-4405	VALVE: ZURN Z-6000AV-HET, SEAT: CHURCH 295C VITREOUS CHINA, SIPHON JET, ELONGATED BOWL, OPEN FRONT, WHITE SEAT, 1.28 GPF, 17" RIM	CW: 1" WD: 3"
WCA	WATER CLOSET TANK TYPE (HET) FLOOR MOUNT ADA COMPLIANT	KOHLER "CIMARRON" K-3609 OR K-3609-RA	TRIM: TANK ACCESSORIES (CLASS 5) K-7637 SUPPL SEAT: CHURCH 295C 2.125" GLASS TRIM VITREOUS CHINA, SIPHON JET, ELONGATED BOWL, OPEN FRONT WHITE SEAT, 1.28 GPF, 16.5" RIM	CW: 1/2" WD: 3"
UR URH	URINAL 0.125 GPF WALL HUNG	KOHLER "BARDON" K-4991-ET URH: NOTE U	VALVE: ZURN Z6003-UL CARRIER: ZURN Z-1222 VITREOUS CHINA, 1.0 PINNACLES FINISH, INTEGRAL TRAP	CW: 3/4" WD: 2"
LA	LAVATORY WALL HUNG ADA COMPLIANT	KOHLER "CHESAPEAKE" K-1729 W/ "BVA"	TRIM: SYMONS S320-DRAIN/TRAP: K-9000/K-7715 SUPPLIES K-7600 CARRIER: ZURN Z-1231 20" X 14" VITREOUS CHINA, FIXED DRAIN, SINGLE HANDLE TRIM, WASHERLESS	CW: 1/2" HW: 1/2" WD: 1 1/4"
SA	COUNTER SINK 1-COMPARTMENT ADA COMPLIANT	ELKAY/DAYTON K-2521 NOTE H	TRIM: LK35, ZURN Z-831-B4 5.5" MAX DEPTH C.P.B. P-TRAP, ANGLE STOPS 25"X21", TYPE 304 S.S., 22 GAUGE 3-HOLE DRILLING	CW: 1/2" HW: 1/2" WD: 1 1/2"
SB	COUNTER SINK 2-COMPARTMENT ADA COMPLIANT	ELKAY GECR35 NOTE H	TRIM: LK4100, (2) LKAD35, LK53, 5.5" MAX DEPTH C.P.B. OFFSET TAILPIECES, P-TRAP, ANGLE STOPS 33"X21", TYPE 304 S.S., 20 GAUGE 3-HOLE DRILLING	CW: 1/2" HW: 1/2" WD: 1 1/2"
SH	SHOWER TRIM FOR TILE ENCLOSURE	SYMONS S-1-151-X WILLIAMS WH-2200	PRESSURE BALANCED VALVE, HEAD W/ ADJUSTABLE SPRAY PATTERN, INTEGRAL SERVICE STOPS, 36"X 36" PRECAST TERRAZZO BASIN, ROD & CURTAIN	CW: 1/2" HW: 1/2" WD: 2"
HW	HANDWASH STATION	EXISTING UNIT TO BE RELOCATED	EXISTING UNIT TO BE RELOCATED	CW: 1/2" HW: 1/2" WD: 2"
BV	BLENDED VALVE THERMOSTATIC SINGLE FIXTURE	SYMONS 7-210-CK	SERVICE VALVES, UNION/COUPLINGS AT ALL CONNECTIONS, 3 GPM @ 20 PSI DROP	CW: 3/8" HW: 3/8" BW: 3/8"
IMB	ICE MAKER BOX METAL BOX	OATEY 38688	1/4 TURN VALVE W/ WATTS 8AC VACUUM BREAKER, METAL BOX, FLUSH MOUNT, BTM SUPPLY, WATER HAMMER ARRESTOR	CW: 1/2"
EWCD	WATER COOLER BI-LEVEL ADA, BOTTLE FILL	ELKAY LZSTL8WS(VR)K	SUPPLY: ANGLE STOP, BOTTLE FILL STATION TRAP: C.P. BRASS WALL MOUNTING BRACKET 8.0 GPH RECOVERY, FRONT PUSH BAR, 1/5 HP, 115V	CW: 1/2" WD: 1 1/4"
FD	FLOOR DRAIN PVC BODY	ZURN FROSINPXSC NOTE TP	TRAP: PVC P-TRAP PVC BODY, 5" DIA. NICKEL STRAINER AND TRIM ZURN Z-1022 TRAP PRIMER	WD: 3" UNO CW: 1/2"

NOTES, GENERAL:

- LISTED MANUFACTURERS AND MODEL NUMBERS ARE TO INDICATE QUALITY STANDARDS. EQUAL PRODUCTS BY OTHER MANUFACTURERS ARE ACCEPTABLE.
- IN JURISDICTIONS WITH STANDARDS/CODES FOR HIGH EFFICIENCY PLUMBING FIXTURES, COMPONENTS SHALL COMPLY WITH APPLICABLE LIMITATIONS FOR GALLONS PER FLUSH (GPF) AND FLOW RATES (GPM).
- FIXTURES USED FOR PUBLIC HAND WASHING TO HAVE THERMOSTATIC BLENDING VALVE, EQUAL TO SYMONS 5-210-CK OR LAWLER TMM-1070. MOUNT VALVE ABOVE HANDICAPPED ZONE SO DEVICE IS NOT REQUIRED TO BE INSULATED. SET TEMPERATURE AT 110 DEG OR AS DIRECTED.

NOTES, REFERENCED:

- H. PROVIDE PROTECTIVE INSULATING COVERS FOR WATER AND DRAIN PIPING, AND OFFSET TAILPIECE, AT HANDICAPPED FIXTURES PER ADA. INSULATING COVERS FOR PIPING MAY BE OMITTED WHERE PIPING IS PROTECTED BY MILLWORK.
- FC. IN LIEU OF CARRIER, WALL PLATE FURNISHED WITH FIXTURE MAY BE USED. PROVIDE 2X10 WOOD BLOCKING BETWEEN WALL STUDS.
- T. FLUSH ACTUATOR TO BE LOCATED ON WIDE SIDE OF TOILET ENCLOSURE NO MORE THAN 44" AFF PER ADA.
- U. MOUNT LIP OF URINAL 17" AFF AND FLUSH ACTUATOR NO MORE THAN 44" AFF (UNITS DESIGNATED FOR HANDICAPPED) PER ADA.
- TP. WHERE ACCEPTABLE TO LOCAL AHJ, "TRAP-GUARD" BY PRO-SET, "MI-GARD" BY MIFAB, OR "SURE-SEAL" BY RECTORSEAL MAY BE USED IN LIEU OF TRAP PRIMERS.

Official Plans

WWW.DIILINE.COM

EXPIRATION DATE:

river street architecture
architecture planning interiors

123 E 7th street, suite 400 chattanooga, tennessee 37402
p: 423 634 0806 www.riverstreetarchitecture.com

DRS BRUCE & SMITH MEDICAL OFFICES
ORTHOPEDIC OFFICES

1ST FLOOR
RIVERFRONT PARKWAY
CHATTANOOGA, TN 37402

PRELIMINARY
PRICING SET
NOT FOR CONSTRUCTION

Revision Schedule

Rev. #	Rev. Date	Revision Description

Release Date: 05.10.2020
Project No.: 20021
PLUMBING DETAILS

Smith Engineering
Mechanical & Electrical
Professional Corporation
103 Jordan Drive STE 1 Chattanooga, TN 37421
Phone: (423)499-9532 Fax: (423)894-4440

Project #: AZ021

P2.01