

DOMESTIC WATER HEATER SCHEDULE						
MARK	SPECIFICATION	STORAGE CAPACITY	RECOVERY CAPACITY	WATS	PHASE	NOTES
DWH-1	A.O. SMITH DEL-50	50 GALLONS	36 GPH AT 100°F RISE	9000	3	TWO 4500-WATT ELEMENTS WIED FOR SIMULTANEOUS OPERATION. VOLUME AS INDICATED ON THE ELECTRICAL DRAWINGS.
DWH-2	A.O. SMITH DEL-50	50 GALLONS	36 GPH AT 100°F RISE	9000	3	TWO 4500-WATT ELEMENTS WIED FOR SIMULTANEOUS OPERATION. VOLUME AS INDICATED ON THE ELECTRICAL DRAWINGS.

DRAINAGE FIXTURE UNIT (DFU) INVENTORY	
ADD 1 MOP SINK x 2 DFU	= 2 DFU
ADD 1 FUNNEL FLOOR DRAIN (EMERGENCY) x 0 DFU	= 0 DFU
ADD 3 FUNNEL FLOOR DRAINS WITH 3" TRAP x 5 DFU	= 15 DFU
ADD 8 FLOOR SINKS WITH 3" TRAPS x 5 DFU	= 40 DFU
ADD 1 HAND SINK WITH 1.5" TRAP x 2 DFU	= 2 DFU
NET CHANGE	= 59 DFU

INTERCEPTOR SCHEDULE						
MARK	DESCRIPTION	SPECIFICATION	FLOW RATE	CAPACITY	PIPE SIZE	NOTES
GI	MANUAL CLEANING, GREASE INTERCEPTOR CONFORMING TO PDI G101 WITH FABRICATED STEEL BODY, ACID-RESISTING INTERIOR AND EXTERIOR COATING, STEEL EXTENSION TO LOCATE DRAINING, STEEL EXTENSION TO LOCATE FLANGE FOR CONNECTION TO FLOOR SLAB COVER RECESSED FOR TILE AND FLOW CONTROL/AIR INTAKE FITTING.	ZURN Z-1170-E-K-1-8000	25 GPM	50 POUNDS	3"	PROVIDE BOX WITH STEEL COVER FLUSH WITH FLOOR FOR ACCESS TO FLOW CONTROL/AIR INTAKE FITTING. GREASE INTERCEPTOR COVER AND ACCESS BOX COVER SHALL HAVE RECESS TO ACCEPT FLOOR TILE.

KITCHEN EQUIPMENT CONNECTION SCHEDULE							
EQUIP. No.	DESCRIPTION	ROUGH PIPE CONNECTION SIZE	HW	TW	DW	W	NOTES
(10)	PREP SINK	0.5"	0.5"	-	-	-	HW TO FS
(11)	INGREDIENT WATER FAUCET	0.5"	0.5"	-	-	-	FILTERED CW FROM (41)
(14)	PREP SINK, LARGE	0.5"	0.5"	-	-	-	HW TO FS
(16)	ICE MAKER	0.5"	-	-	-	-	0.75" FILTERED CW FROM (41) HW TO FS
(18)	HAND SINK	0.5"	0.5"	-	1.5"	1.5"	HW TO FS
(27)	DROP-IN SINK	0.5"	0.5"	-	-	-	1.5" HW TO FS
(35)	SCULLERY SINK	0.75"	0.75"	-	-	-	1.5" HW TO FS
(38)	UNDERCOUNTER WAREWASHER	-	0.75"	-	-	-	TREATED HW FROM (40) HW TO FS
(40)	HOT WATER TREATMENT UNIT	-	0.75"	-	-	-	TREATED HW TO (38)
(41)	WATER TREATMENT SYSTEM	0.75"	-	-	-	-	0.75" TREATED HW TO (38) AND (16)
(47)	MOP RECEPTOR & FAUCET	0.5"	0.5"	-	3"	-	-

DRAIN SCHEDULE		
MARK	DESCRIPTION	SPECIFICATION
FFD	FLOOR DRAIN WITH FUNNEL	ZURN ZN-415-B7 CAST IRON DRAIN WITH 7" DIAMETER NICKEL BRONZE STRAINER, ZURN ZN-329-9 OVAL FUNNEL AND CAST IRON P-TRAP.
FS	FLOOR SINK	ZURN ZN-1900-2, 12"x12"x 6" DEEP CAST IRON FLOOR SINK WITH PORCELAIN ENAMEL INTERIOR, 1/2 GRADE WITH NICKEL BRONZE FINISH AND CAST IRON P-TRAP.

DOMESTIC WATER EXPANSION TANK SCHEDULE			
MARK	SPECIFICATION	TOTAL TANK VOLUME	ACCEPTANCE VOLUME
ET	WATS DET-5-M1	2.1 GALLONS	0.85 GALLONS

THERMOSTATIC WATER MIXING VALVE SCHEDULE				
MARK	DESCRIPTION	SPECIFICATION	CAPACITY	NOTES
TW	THERMOSTATIC WATER MIXING VALVE WITH WALL MOUNTING BRACKET.	SIMMONS "MAXLINE" 5-220-CK-MS-W-X.	2 GPM AT 10 PSI	ASSE 1017 AND ASSE 1070. PROVIDE DIAL TYPE THERMOMETER ON TEMPERED WATER LINE AT TW OUTLET. SET OUTLET TEMPERATURE AT 105 DEGREES F.

PLUMBING NOTES

- DOMESTIC WATER, DRAINAGE AND VENT PIPING SHALL CONFORM TO THE 2006 VIRGINIA PLUMBING CODE.
- BEFORE STARTING WORK FIELD VERIFY THE SIZES AND LOCATIONS OF EXISTING NATURAL GAS DOMESTIC WATER, DRAINAGE, AND VENT PIPING. COORDINATE THE LAYOUT OF THE NEW WORK WITH EXISTING CONDITIONS. RELOCATE ALL EXISTING PIPING WHICH MUST REMAIN ACTIVE BUT WHICH INTERFERES WITH THE NEW WORK.
- PAY FOR AND SECURE ALL PERMITS. PROVIDE THE NECESSARY TEST EQUIPMENT, PERFORM ALL TESTS, AND ARRANGE FOR ALL INSPECTIONS REQUIRED TO OBTAIN AN OCCUPANCY PERMIT.
- CONCEAL ALL ROUGH PIPING.
- PROVIDE ALL CUTTING, DRILLING, AND STEERING OF EXISTING CONSTRUCTION REQUIRED FOR THE WORK, BEFORE CUTTING HOLES IN THE EXISTING FLOOR SLAB, PREPARE SHOP DRAWINGS INDICATING THE SIZES AND LOCATIONS OF THE PROPOSED PENETRATIONS, OBTAIN APPROVAL OF THE SHOP DRAWINGS FROM THE OWNER'S REPRESENTATIVE BEFORE CUTTING THE SLAB, RESTORE ALL EXISTING FINISH SURFACES WHICH ARE NOT TO RECEIVE NEW FINISHES AND WHICH ARE DISTURBED BY THE WORK. MATCH THE EXISTING FINISH SURFACES.
- CONNECT NEW PIPING TO EXISTING PIPING USING APPROPRIATE FITTINGS AND ADAPTERS.
- UNDERGROUND DRAINAGE AND VENT PIPING: HUB TYPE CAST IRON PIPE AND FITTINGS (ASTM A74) JOINED WITH NEOPRENE GASKETS OR SCHEDULE 40 PVC PIPE AND FITTINGS (ASTM D2685) JOINED WITH SOLVENT CEMENT.
- DRAINAGE AND VENT PIPING ABOVE SLAB ON GRADE: NO-HUB CAST IRON PIPE AND FITTINGS (CSP 301) JOINED WITH STAINLESS STEEL SHIELD AND CLAMP ASSEMBLIES OR DWV COPPER PIPE (ASTM B309) WITH WROUGHT COPPER FITTINGS AND SOLDERED OR BRAZED JOINTS.
- HORIZONTAL SANITARY DRAINAGE PIPING 2" AND SMALLER IN NOMINAL DIAMETER SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/4" PER FOOT OF RUN. HORIZONTAL SANITARY DRAINAGE PIPING 3" AND LARGER IN NOMINAL DIAMETER SHALL BE INSTALLED WITH A MINIMUM SLOPE OF 1/8" PER FOOT OF RUN.
- DOMESTIC WATER, INDIRECT WASTE AND TRAP PRIMER PIPING, TYPE 1", COPPER TUBE (ASTM B89) WITH WROUGHT COPPER FITTINGS AND SOLDERED OR BRAZED JOINTS. FOR ALL DOMESTIC WATER PIPING PROVIDE FIBERGLASS INSULATION WITH VAPOR BARRIER JACKET. INSULATION FOR COLD WATER AND TEMPERED WATER PIPING SHALL BE 0.5" THICK. INSULATION FOR HOT WATER PIPING 0.75" AND LARGER IN DIAMETER SHALL BE 1" THICK. INSULATION FOR HOT WATER PIPING 0.5" AND SMALLER IN DIAMETER SHALL BE 0.5" THICK. WHERE DOMESTIC WATER PIPING RUNS BELOW OR THROUGH FLOOR SLABS, PROVIDE PROTECTIVE FIBERGLASS INSULATION 4" PVC PIPE AND FITTINGS BEFORE USE. DISINSECT THE DOMESTIC WATER SYSTEM USING THE PROCEDURE DESCRIBED IN THE INTERNATIONAL PLUMBING CODE.
- DOMESTIC WATER SHUT-OFF VALVE: BRONZE BALL VALVE, WITH LEVER
- TRAP PRIMER (TP): PRECISION PLUMBING PRODUCTS (PPP) PP-500 TRAP PRIMER VALVE (ASSE 1016).
- VACUUM RELIEF VALVE (VRV): WATS N36 (ANSI Z21.22).
- BACKFLOW PREVENTER TYPE 1 (BP-1): WATS 90 DUAL CHECK BACKFLOW PREVENTER WITH INTERMEDIATE ATMOSPHERIC VENT (ASSE 1012).
- BACKFLOW PREVENTER TYPE 2 (BP-2): WATS 7 OR WATS 7C DUAL CHECK BACKFLOW PREVENTER (ASSE 1024).
- BACKFLOW PREVENTER, TYPE 3 (BP-3): WATS U-007 DOUBLE CHECK VALVE BACKFLOW PREVENTER WITH UNION CONNECTIONS, INLET SHUT-OFF VALVE, OUTLET SHUT-OFF VALVE AND TEST COCKS.
- AIR ADMITTANCE VALVE (AAV): STUDOR "MINI-VENT" 20301 (ASSE 1051).
- RECESSED BOX WITH LOWERED METAL GRILL FOR AIR ADMITTANCE VALVE: STUDOR 20306.

PLUMBING SYMBOLS AND ABBREVIATIONS

ABV	ABOVE
AP	ACCESS PANEL (AP)
AW	AIR ADMITTANCE VALVE (AAV)
AS	ANGLE SUPPLY WITH SERVICE STOP
BP	BACKFLOW PREVENTER (BP)
BL	BELOW
BO	BOTTOM TAKE-OFF
CP	CAP ON END OF PIPE
CLG	CEILING
CS	CHECK STOP
CO	CLEANOUT PLUG (CO)
CE	CONNECT TO EXISTING PIPE
DW	DIRECT WASTE
OW	DOMESTIC COLD WATER PIPE (CW)
HW	DOMESTIC HOT WATER PIPE (HW)
EW	DOMESTIC TEMPERED WATER PIPE (TW)
ET	DOMESTIC WATER EXPANSION TANK (ET)
DWH	DOMESTIC WATER HEATER (DWH)
EX	DOMESTIC WATER RISER DESIGNATION DRAINAGE FIXTURE UNIT EXISTING
EX-CW	EXISTING DOMESTIC COLD WATER PIPE (EX-CW)
EX-S	EXISTING SANITARY DRAINAGE PIPE (EX-S)
EX-V	EXISTING VENT PIPE (EX-V)
FL	FLOOR
FFD	FLOOR DRAIN WITH FUNNEL (FFD)
FS	FLOOR SINK (FS)
GF	FLOW CONTROL/AIR INTAKE FITTING
GPH	GALLONS PER FLUSHING CYCLE
GPM	GALLONS PER HOUR
GM	GALLONS PER MINUTE
GI	GREASE INTERCEPTOR (GI)
INC	INCREASER
IND	INDIRECT WASTE PIPE (IW)
CONT	PIPE CONTINUOUS
DN	PIPE TURNS DOWN
UP	PIPE TURNS UP
PRV	PRESSURE AND TEMPERATURE RELIEF VALVE (PTRV)
SD	SANITARY DRAINAGE AND VENT RISER DESIGNATION
S	SANITARY DRAINAGE PIPE (S)
SS	SERVICE STOP
SO	SHUT-OFF VALVE
SV	SHUT-OFF VALVE IN VERTICAL PIPE
SOV	SOLENOID SHUT-OFF VALVE
TM	THERMOMETER
TW	THERMOSTATIC WATER MIXING VALVE (TW)
TR	TRAP
TP	TRAP PRIMER (TP)
UT	TRAP PRIMER TUBE
UR	UNION
VRV	VACUUM RELIEF VALVE (VRV)
V	VENT PIPE (V)
WF	WATER FILTER (WF)

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REVISIONS

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SYMBOLS LIST,
 NOTES AND
 SCHEDULES

SHEET NO.