

\* THE FOLLOWING IS MINIMUM CRITERIA. LANDLORD'S/OWNER'S BASE BUILDING SPECIFICATIONS AND CRITERIA GOVERN WHEN CONFLICTS BETWEEN SAME OCCUR. FIELD VERIFY PRIOR TO BID.

A. GENERAL REQUIREMENTS

1. ALL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS' REQUIREMENTS, STATE, NATIONAL, AND ALL OTHER APPLICABLE CODES AS MINIMUM. UNLESS OTHERWISE NOTED, ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES, THESE CODES ARE APART OF THIS CONTRACT AND WILL BE REFERENCED FOR ASSURING COMPLIANCE. DRAWINGS SHALL GOVERN WHERE A LARGER SIZE OR QUANTITY OR A BETTER QUALITY IS SHOWN THAN IS REQUIRED BY CODE(S), AS USED IN THE FOLLOWING. CONTRACTOR SHALL OBTAIN THE LATEST PLUMBING MECHANICAL CONTRACTOR INSTALLATION MANUALS AND SPECIFICATIONS OF THE WORK. CONTRACTOR SHALL COMPLY WITH LANDLORD STANDARDS IN ADDITION TO THE ABOVE REQUIREMENTS.
2. DRAWINGS ARE DIAGRAMMATIC IN NATURE ONLY AND DO NOT SHOW EVERY REQUIRED MATERIALS AND EQUIPMENT. CONTRACTOR SHALL VERIFY ALL MATERIALS AND EQUIPMENT REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM WHETHER OR NOT SHOWN ON THE DRAWINGS.
3. COORDINATE INSTALLATION WITH OTHER TRADES TO ASSURE INSTALLATION OF MATERIALS AND EQUIPMENT IS REQUIRED FOR THE PROPER SEQUENCE OF WORK. PROVIDE PROVISIONS SUCH AS VALVES AND PANELS FOR ACCESS AND SERVICE AND REMOVAL.
4. CONTRACTOR SHALL INSPECT PRIOR TO BID, THE SITE AND INFORM HIMSELF OF THE CONDITIONS AFFECTING THE WORK. NO ADDITIONAL ALLOWANCES WILL BE MADE BECAUSE OF FAILURE TO OBTAIN INFORMATION ON EXISTING SITE CONDITIONS. COORDINATE AND INSTALL WORK AS REQUIRED BY LOCAL UTILITY COMPANIES STANDARDS.
5. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS MANNER CONSISTANT WITH MINIMUM INDUSTRY STANDARDS. MATERIALS OR EQUIPMENT WHICH DO NOT PRESENT A REASONABLY NEAT OR WORKMANLIKE APPEARANCE MAY BE REQUIRED BY THE ARCHITECT TO BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
6. FURNISH 3 COPIES OF BROCHURES/SHOP DRAWINGS FOR APPROVAL PRIOR TO STARTING WORK. AT PROJECT CLOSEOUT, PROVIDE (3) COPIES OF OPERATING MANUALS, (1) COPY OF "AS BUILT" RECORD DRAWINGS, AND INSTRUCT OWNER IN THE OPERATION OF ALL EQUIPMENT.
7. ALL MISCELLANEOUS WORK SUCH AS EXCAVATION BACKFILL, CONCRETE, PAINT, SLEEVES, ETC. REQUIRED TO PERFORM WORK UNDER THIS DIVISION SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT HIS OWNERS RISK AND SHALL BE FINISHED AND INSTALLED BY THE CONTRACTOR AT HIS OWNERS RISK. PERMITS AND CERTIFICATES REQUIRED FOR WORK UNDER THIS SECTION.
8. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND IN A WORKMANSHIP FOR PERIOD OF (1) YEARS FROM THE DATE OF COMPLETION. FROM ACCEPTABLE TO THE ARCHITECT. GUARANTEE SHALL INCLUDE CORRECTIONS OR REPLACEMENT OF DAMAGE OR REPLACEMENT TO OTHERS WORK OF MATERIALS WHICH IS CAUSED BY WORK UNDER THIS DIVISION.
9. CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND FEES.
10. PRODUCTS SHOWN ON DRAWINGS MAY BE SUBSTITUTED WITH EQUALS APPROVED BY THE ENGINEER. CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL COSTS ARISING FROM USE OF EQUAL PRODUCTS.
11. ALL MATERIAL SHALL BE NEW, COMMERCIAL GRADE AND BE U.L. LABELED AND CONFORM TO APPLICABLE CODES.
12. REFER TO LANDLORD CRITERIA FOR REQUIREMENTS IN ADDITION TO THESE.
13. CONTRACTOR IS TO COORDINATE AND PERFORM ALL NECESSARY DEMOLITION WORK, RELOCATION WORK, AND CAPPING OF EXISTING WORK NECESSARY WHETHER SHOWN OR NOT, AS PART OF THE BASE BID.

D. PLUMBING SYSTEM GUIDE SPECIFICATIONS:

1. DOMESTIC WATER INSIDE BUILDING SHALL BE TYPE "K" RIGID COPPER TUBING WITH WROUGHT COPPER FITTINGS OR SCHEDULE 40 GALVANIZED STEEL PIPE AND SCREWED GALVANIZED FITTINGS. COPPER LINES BELOW SLABS SHALL BE TYPE "K" COPPER.
2. ALL DOMESTIC WATER LINES SHALL BE INSULATED PER CODE WITH SHALL BE OWENS-CORNING FIBERGLAS 25 ASJ OR APPROVED EQUAL. FOR UNDERGROUND PIPING, COVER WITH TWO COATS OF MASTIC DESIGNED FOR BELOW GRADE SERVICE.
3. WASTE & VENT PIPING BELOW GRADE INSIDE BUILDING SHALL BE STANDARD WEIGHT PVC, CAST IRON PIPE & FITTINGS, BELL & SPIGOT LEAD & OAKUM OR, BELL & SPIGOT WITH COMPRESSION GASKETS.
4. WASTE & VENT PIPING ABOVE GRADE INSIDE BUILDING SHALL BE STANDARD WEIGHT CAST IRON PIPE & FITTINGS, BELL & SPIGOT LEAD & OAKUM OR, NO-HUB JOINTS & FITTINGS.
5. DRAINAGE PIPING 3" AND SMALLER SHALL HAVE A MINIMUM CONTINUOUS SLOPE OF 1/4" PER FOOT. DRAINAGE PIPING 4" AND LARGER SHALL HAVE A MINIMUM CONTINUOUS SLOPE OF 1/8" PER FOOT. VENT PIPING SHALL BE SLOPED NOT LESS THAN 6" PER 100 FEET.
6. PVC IS NOT ALLOWED IN RETURN/SUPPLY AIR PLenums.

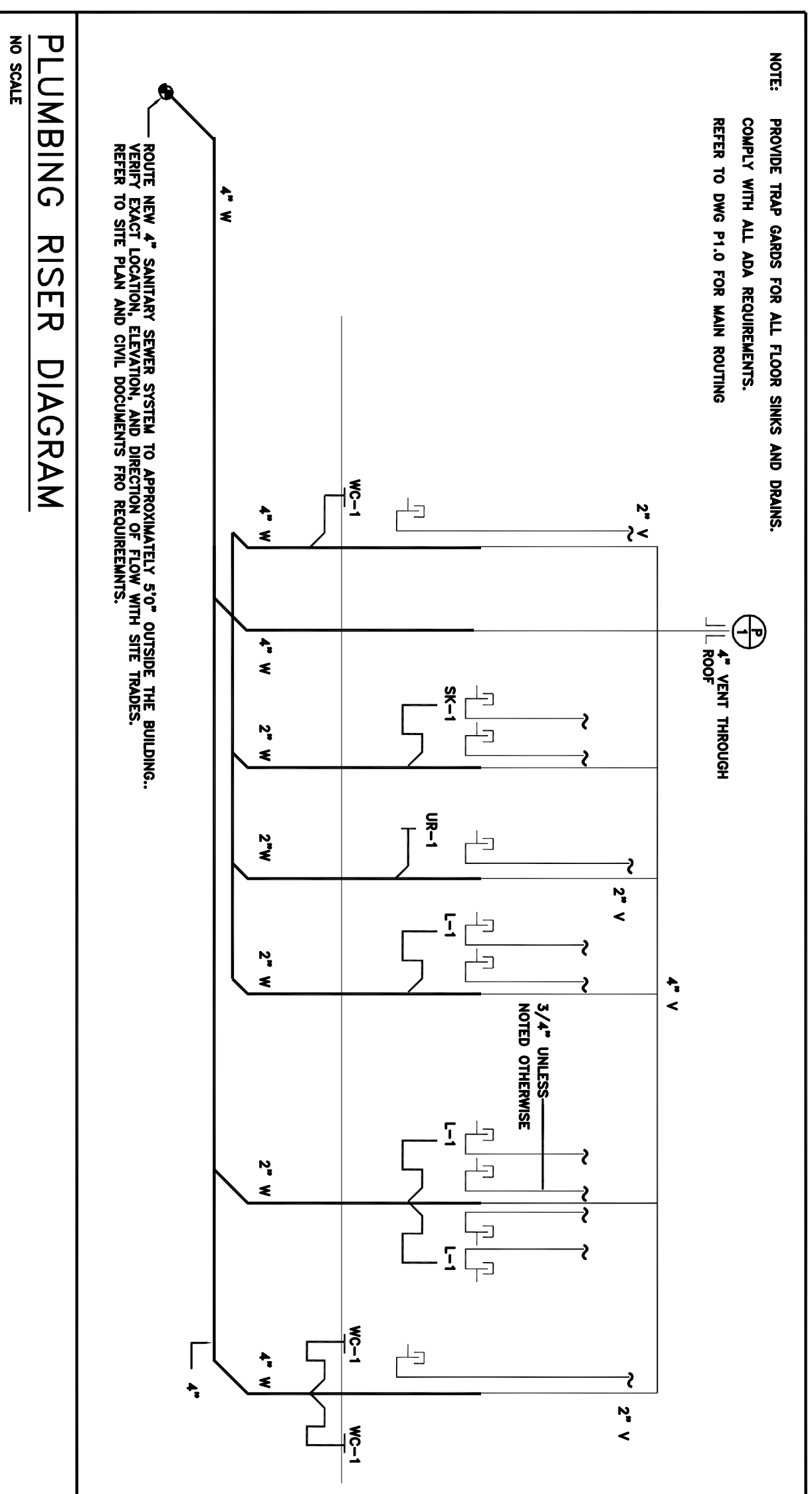
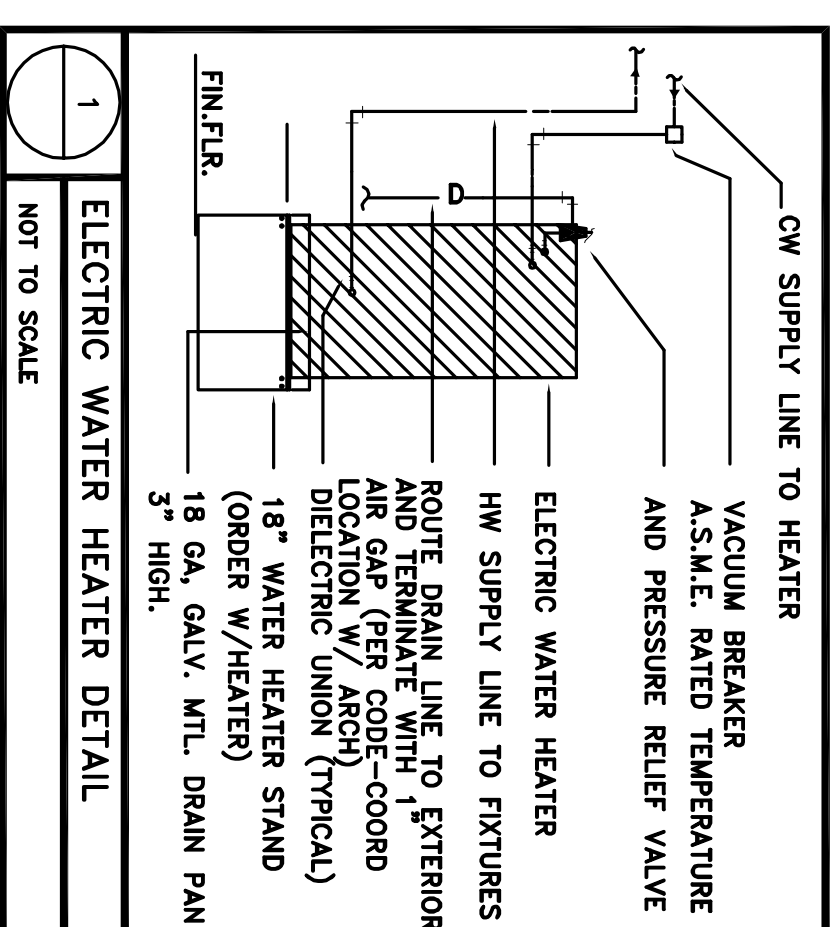
PLUMBING LEGEND:

SYMBOL	ABBREVIATION	DESCRIPTION
SAN	SAN	SANITARY WASTE
V	V	VENT PIPING
CW	CW	COLD WATER
HW	HW	HOT WATER
G	G	GAS PIPING
VTR	VTR	VENT THRU ROOF
G.V.	G.V.	GLOBE VALVE
	-	CHECK VALVE
	C.V.	GAS LUBRICATED PLUG
	P.V.	UNION
	U.	UNION
	H.B.	HOSE BIBB W/ VACUUM BREAKER
	W	FIRE SPRINKLER LINE
	FS	FLOOR SINK
	FD	FLOOR DRAIN
	FCO	FLOOR CLEANOUT
	SCO	SURFACE CLEANOUT
	WCO	WALL CLEANOUT
	CD	CONDENSATE DRAIN PIPING
	AUX	AUXILIARY CD

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	CONNECTION SIZES	REMARKS
WC-1	WATER CLOSET (ADA COMPLIANT)	3/4" CW / 2" HW / VENT 4"	TOTO ELONGATED PRESSURE ASSISTED SERIES 18" HIGH FLOOR MOUNTED, ADA COMPLIANT WITH WHITE OPEN FRONT SEAT, LESS COVER.
L-1	LAVATORY (ADA COMPLIANT)	1/2" CW / 2" HW	AMER STD. - WALL HING, VITRIOUS CHINA WITH/FALCET, SUPPLIES, STOPS, DRAIN, P-TRAP AND WALL HANGER.
SK-1	BREAK RM. SINK (ADA)	1/2" CW / 2" HW	ELKAY OR EQUAL - SELECTED BY OTHERS
UR-1	URINAL (ADA COMPLIANT)	3/4" CW / 2" HW	1.5" DEEP SINK WITH GOODHONOR SLOPE, SUPPLIES AMER STD. ALIBOROK S841.132 SLOAN 186-1 FLUSH VALVE, JET SMITH 644 CARRIER.
HB-1	HOSE BIBB	3/4" CW / 2" HW	WOODFORD BRASS BODY W/ INTERNAL VACUUM BREAKER AND HAND WHEEL, YARD HYDRANT IN BRASS BOX WITH LOCKING COVER.
EHW-1	WATER HEATER	3/4" CW / 3/4" HW	RHEIM POINT OF USE MODEL 68V10S, 240 VOLT, 4500 WATT, 10 GALLON TANK.
FS-1	FLOOR SINK	2"	SMITH SERIES 12" X 12" DEEP FLOOR SINK WITH 1/2 GATE & FINISH PER AMY/OWNER.
FD-1	FLOOR DRAIN	2"	ZURN #2B-Z415-1, W/INTERNAL TRAP, FLOOR STRAINER WITH TRAP FRAMER CONNECTION.
W.C.O.-1	WALL CLEAN OUT	4"	SMITH - FIG. 4550, 4" SW/STAINLESS STEEL SQUARE COVER & SCREW NO HUB

NOTE: PROVIDE TRAPBOARDS ON ALL FLOOR DRAINS AND FLOOR SINKS.



PLUMBING - SCHEDULES, RISERS, DETAIL, LEGENDS

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