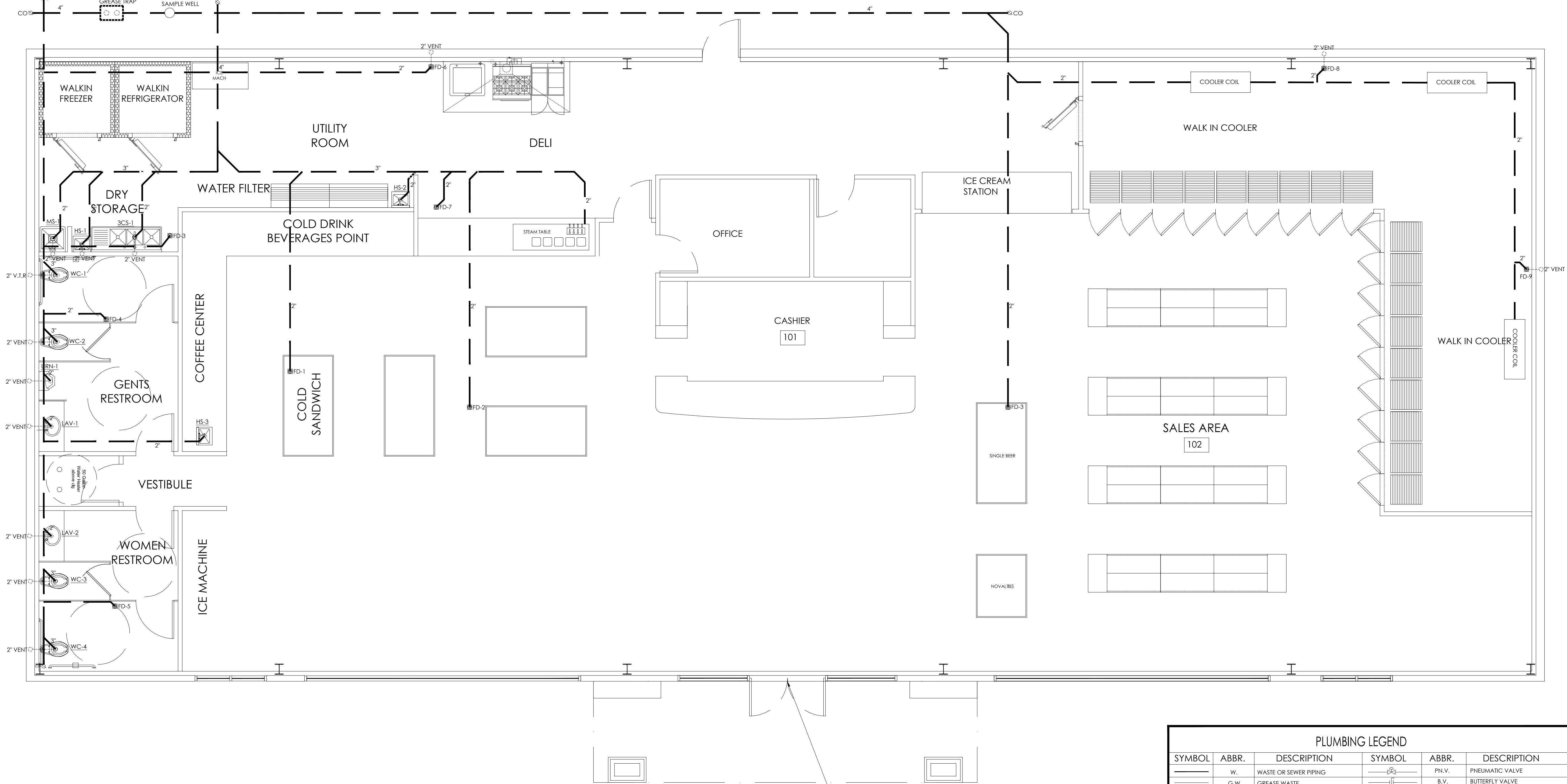


EXIST. 4" SANITARY SEWER LINE
CONTRACTOR TO FIELD VERIFY SIZE
& LOCATION @ SITE



NOTE:

INDIRECT WASTE RECEPTORS -- WALK IN COOLERS/FREEZERS FOR WALK-IN COOLERS. FLOOR DRAINS MAY BE CONNECTED TO A SEPARATE DRAINAGE LINE DISCHARGING INTO AN OUTSIDE RECEPTOR. THE FLOOD-LEVEL RIM OF THE RECEPTOR SHALL BE A MINIMUM OF SIX (6) INCHES (152 MM) LOWER THAN THE LOWEST FLOOR DRAIN. SUCH FLOOR DRAINS SHALL BE TRAPPED AND INDIVIDUALLY VENTED. CLEANOUTS SHALL BE PROVIDED AT EVERY NINETY (90) DEGREE (1.6 RAD) TURN AND SHALL BE ACCESSIBLY LOCATED. SUCH WASTE SHALL DISCHARGE THROUGH AN AIR GAP OR AIR BREAK INTO A TRAPPED AND VENTED RECEPTOR, EXCEPT THAT A FULL-SIZE AIR GAP IS REQUIRED WHERE THE INDIRECT WASTE PIPE MAY BE UNDER VACUUM. (SEC.801.2.2 OF THE 2012 UPC WITH THE CITY AMENDMENTS)

PLUMBING LEGEND

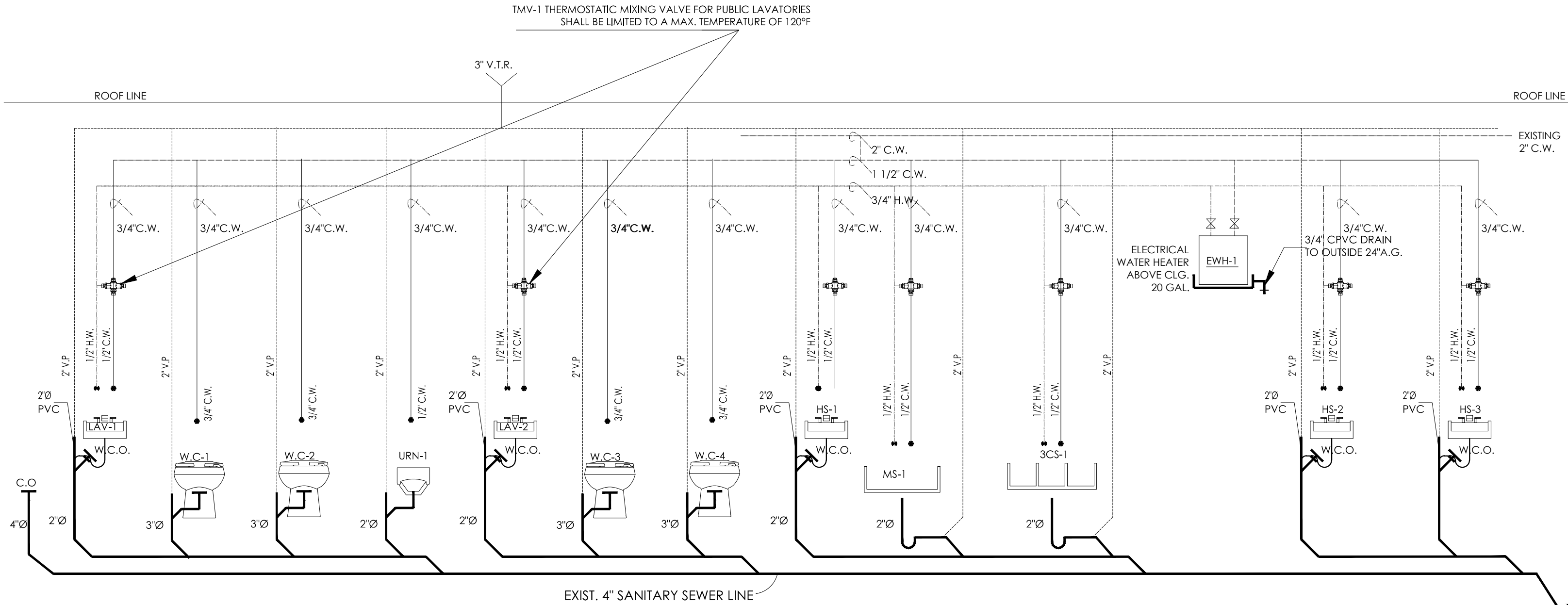
SYMBOL	ABBR.	DESCRIPTION	SYMBOL	ABBR.	DESCRIPTION
	W.	WASTE OR SEWER PIPING		PN.V.	PNEUMATIC VALVE
	G.W.	GREASE WASTE		B.V.	BUTTERFLY VALVE
	V.P.	VENT PIPING		-	REDUCER
	C.W.	COLD WATER PIPING		U.	UNION
	H.W.	HOT WATER PIPING		H.B.	HOSE BIBB
	H.W.R.	HOT WATER RETURN PIPING		F.	FIRE SPRINKLER PIPING
	G.	NATURAL GAS PIPING		F.S.	FLOOR SINK
	FW.	FILTERED WATER PIPING		F.D.	FLOOR DRAIN
	R.D.	ROOF DRAIN LEADER		FCO/SCO	FLOOR OR SURFACE CLEANOUT
	O.D.	ROOF OVERFLOW DRAIN LEADER		W.C.O.	WALL CLEANOUT
	D./C.D.	INDIRECT OR CONDENSATE DRAIN		R.D./O.D.	ROOF DRAIN/ OVERFLOW DRAIN
	G.V.	GATE VALVE		V.T.R.	VENT THRU ROOF
	G&V.	GLOBE VALVE		P.D.P.	POSITIVE DISPLACEMENT PUMP
	B.V.	BALL VALVE		C.P.	CENTRIFUGAL PUMP
	C.V.	CHECK VALVE		P.O.C.	POINT OF CONNECTION BETWEEN NEW AND EXISTING
	P.V.	PLUG VALVE		M	WATER METER
	S.V.	SOLENOID VALVE			
	S.O.V.	SHUTOFF VALVE			



PLUMBING LEGEND					
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	C.V.	CHECK VALVE		P.O.C.	POINT OF CONNECTION BETWEEN NEW AND EXISTING
	P.V.	PLUG VALVE			
	S.V.	SOLENOID VALVE			
	S.O.V.	SHUTOFF VALVE			
				M	WATER METER

PLUMBING GENERAL NOTES:

1. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
2. BEFORE SUBMITTING BID, THE PLUMBING CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS AND INCLUDE IN THEIR BID AN AMOUNT TO FURNISH AND INSTALL ANY FIXTURES WHICH ARE SHOWN IN ADDITION TO FIXTURES SHOWN ON THE PLUMBING DRAWINGS.
3. CONTRACTOR SHALL VERIFY LOCATION, SIZE, AND INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM.
4. CONTRACTOR SHALL VERIFY AND COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
5. THE INSTALLATION OF ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER INDICATING OR RECORDING EQUIPMENT, OR SPECIALITIES REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
6. ALL VENTS THROUGH ROOF SHALL BE 10'-0" REMOVED FROM ALL AIR INTAKES, EVAPORATIVE COOLERS, ETC.
7. WHERE POSSIBLE, TIE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH THE ROOF.
8. WATER CLOSETS IN PUBLIC TOILET ROOMS SHALL CENTER ON THE FINAL LAYOUT OF TOILET PARTITIONS.
9. CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.
10. CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
11. CONTRACTOR SHALL ROUGH-IN ALL WASTES AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURERS SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED.
12. CONTRACTOR TO CAPPING ANY PLUMBING PIPES WHICH ARE NOT IN USE .



PLUMBING RISER DIAGRAM
PLUMBING FIXTURE SCHEDULE

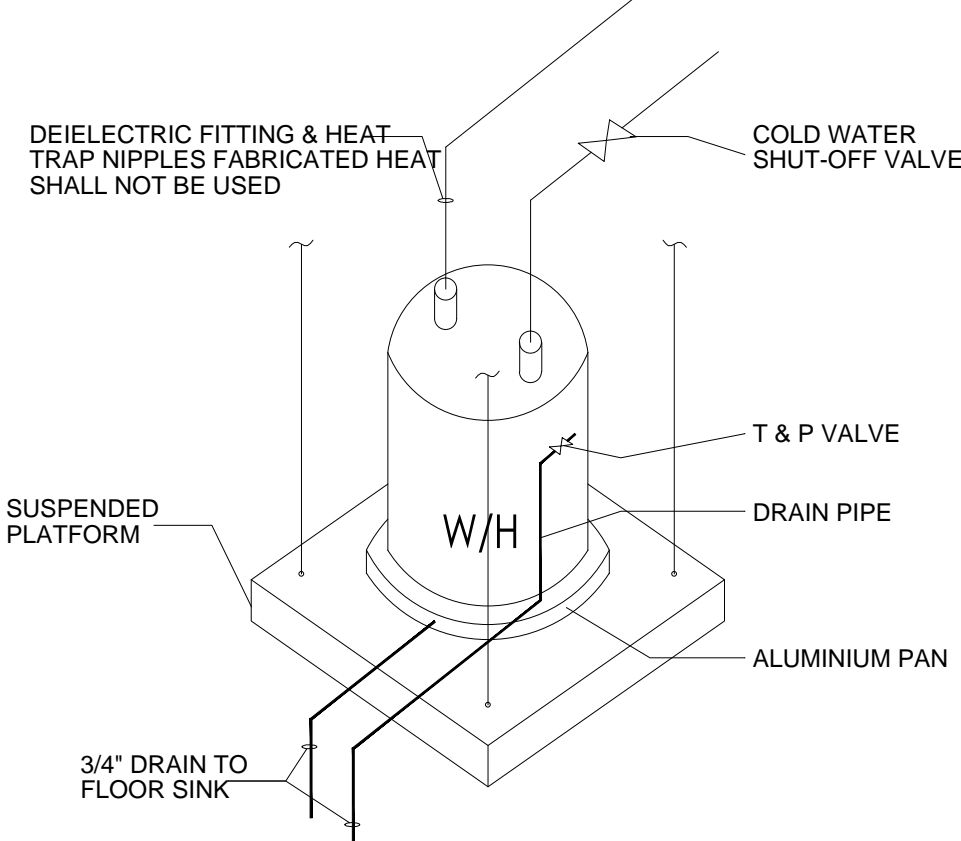
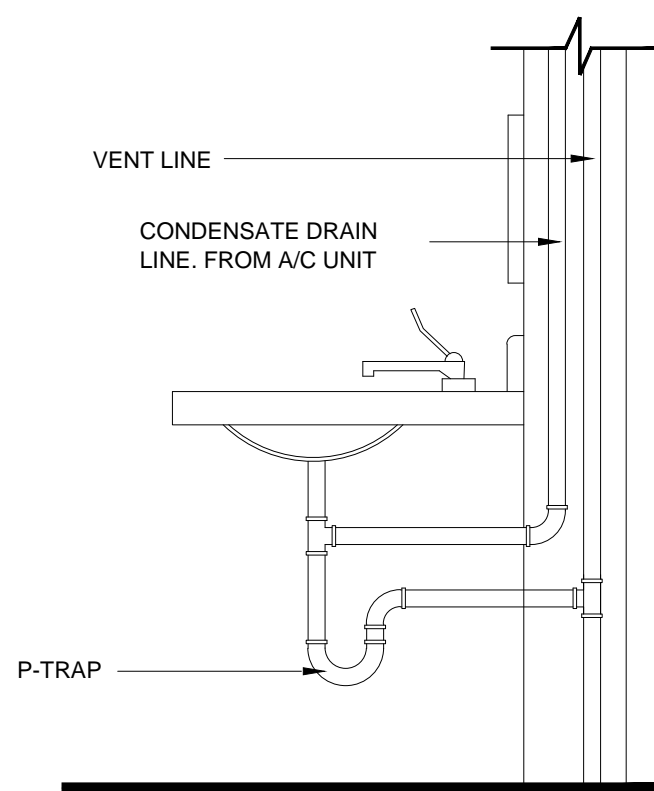
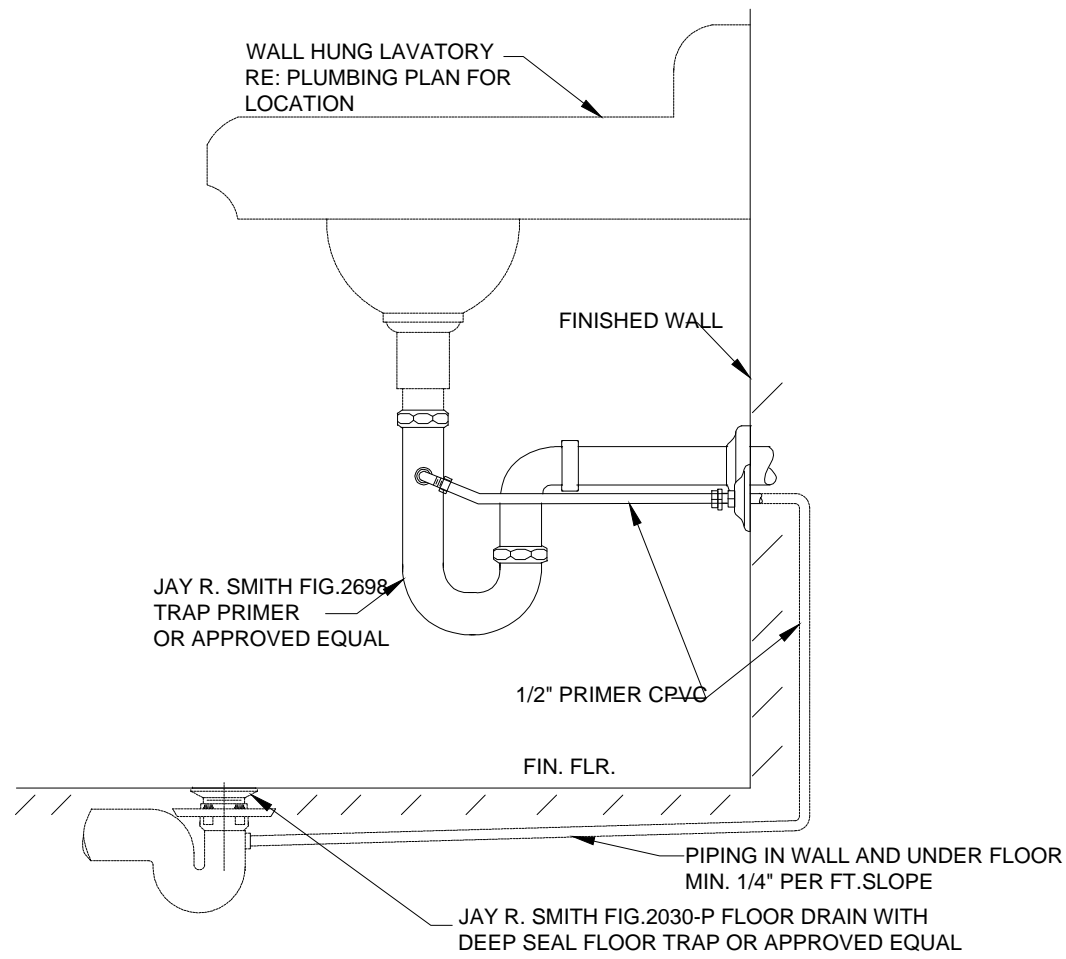
MARK	MODEL NUM.	DESCRIPTION	PIPE SIZES				REMARKS	QUANTITY
			SS	VENT	COLD	HOT		
WC	WATER CLOSET AMERICAN STANDRD HANDICAPPED ACCESSIBLE #2998.012	WHITE VITREOUS CHINA LOW CONSUMPTION (1.28 GPF) ELONGATED SIPHON ACTION BOWL FLOOR MOUNTED @ 16W" RIM HEIGHT CHURCH#9500C WHITE, OPEN-FRONT SEAT, W/CONCELED STAINLESS STEEL CHECK HINGES MCGUIRE#H1.66 STOP & SUPPLY	4"	2"	1/2"	-	WATER CLOSET	4
LAV	LAVATORY AMERICAN STANDARD #0321.026	19"X17" VITREOUS CHINA BOWL WALL-HUNG W/ WALL HANNGER TOP OF FRON RIM MOUNTED @ 34" AFF CAST-BRASS FAUCET: CONVENTIONAL SPOUT W/ WRIST BLADE HANDLES (AM STD #6500.170)	2"	2"	1/2"	1/2"	LAVATORY	2
HS-1	HAND SINK ADVANCED TABCO 76-PS-50	STAINLESS STEEL	2"	2"	1/2"	1/2"	HAND SINK	3
MS-1	AMER. STD.	MOP SINK - FLOOR MOUNTED SINGLE COMP SERVICE SINK, STAINLESS STEEL W/ ROUNDED INTERNAL CORNERS	3"	2"	3/4"	3/4"	MOP SINK	1
FD	FLOOR SINK	ROUND NICKEL BRONZE SCORIATED COVER	3"	-	-	-	FLOOR DRAIN	9
CO	FLOOR CLEANOUT,ZURN,ZN 1400	ROUND NICKEL BRONZE SCORIATED COVER	3"	-	-	-	FLOOR CLEANOUT	4
W.H.	ELECTRIC WATER HEATER	50 GALLON ROUND NICKEL BRONZE SCORIATED COVER	3/4"	3/4"	-	-	ELEC HEATER	1
URN	URINAL	0.5 GALLONS PER FLUSH, SUPPLY FLUSH VALVE K-10958 0.5 GPF	2"	1/2"	-	-	URINAL	1
TMV-1	ZURN ZW1070XL	ZW1070XL AQUA-GARD THERMOSTATIC MIXING VALVE -ASSE 1070", COMPRESSION FITTINGS, BRONZE ASTM B 584, UNS C84400 W/CHROME PLATING	-	-	3/4"	3/4"	P/C FURNISHED EQUIPMENT, ROUGH-IN AND CONNECT.	7

NOTE: ALL LAV-1 & H.S.-1 SHALL HAVE (F6) THERMOSTATIC MIXING VALVE- MIXING VALVES FOR PUBLIC LAVATORIES SHALL BE LIMITED TO A MAXIMUM TEMPERATURE OF 120°F

THERMOSTATIC MIXING VALVES
LIMITATION OF HOT WATER FOR PUBLIC LAVATORIES HOT WATER DELIVERED FROM PUBLIC-USE LAVATORIES SHALL BE LIMITED TO MAX. TEMP OF 120 DEGREE F.

IMPORTANT NOTE:
WATER CLOSETS SHALL BE COMPLY WITH TABLE OF THE IBC AND CITY OF HOUSTON AMENDMENTS TO THE 2004 IBC.
RE- ALL WATER CLOSETS SHALL BE EITHER DUAL FLUSH, OR A HIGH EFFICIENCY WATER CLOSET (1.28 GPF) FOR FLUSH VALVE.

PLUMBING PLAN NOTES

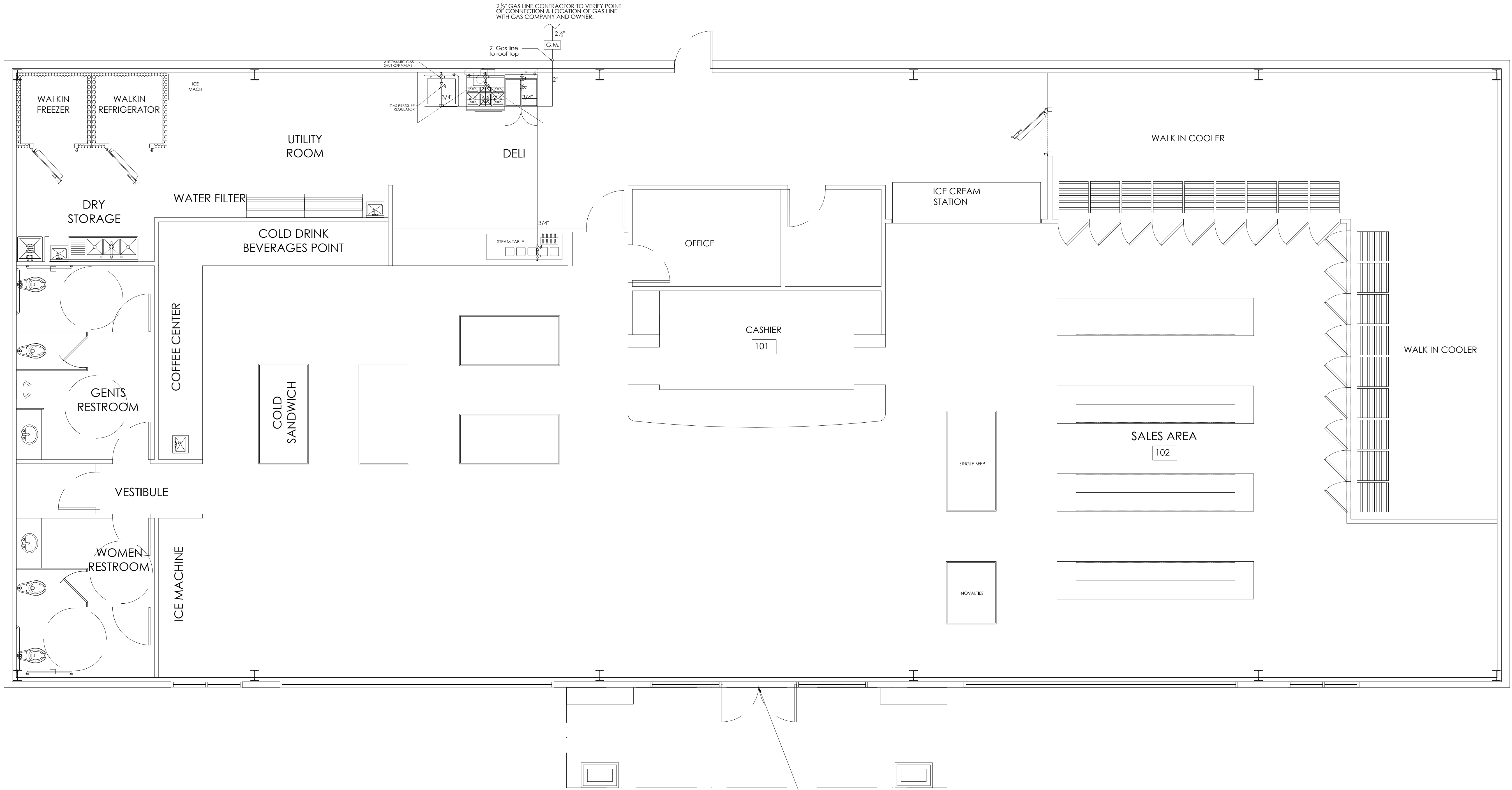


WATER HEATER DETAIL

NOTE:
FUNCTION THE WATER SAVER TRAP PRIMER UTILIZES THE TEMPORARY HEAD OF WATER IN THE P-TRAP WHICH OCCURS DURING USE OF CERTAIN PLUMBING FIXTURES LIKE LAVATORIES AND DRINKING FOUNTAINS. THIS HEAD OF WATER IS SUFFICIENT TO CAUSE AN "OVERFLOW" THROUGH THE CONNECTION TO ALLOW A SMALL AMOUNT OF WATER TO FLOW BY GRAVITY THROUGH A PIPE UNDER THE FLOOR TO THE FLOOR DRAIN TRAP PRIMER CONNECTION. THUS, THE FLOOR DRAIN TRAP SEAL IS MAINTAINED.
(JAY R. SMITH MFG.CO FIGURE NUMBER 2698 BS)

NOTES:

1. THE GENERAL CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINTS OF SERVICE CONNECTION AT EXISTING SITE UTILITIES. REFER TO THE BUILDING ELECTRICAL AND PLUMBING SHEETS FOR UTILITY SER--VICE ENTRANCE LOCATIONS, SIZES, AND CIRCUITING.
2. PROPOSED UTILITIES ARE SHOWN IN SCHEMATIC ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY GENERAL CONTRACTOR DETERMINED FOR THE MOST ECO--NOMICAL INSTALLATION.
3. CONNECTIONS AND PROPOSED UTILITIES ARE SHOWN WHERE INTENDED TO BE CONSTRUCTED. ANY MOVEMENT OF THESE FACILITIES SHALL BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.
4. SUB--CONTRACTOR TO PROVIDE SEPARATE COST TO FURNISH AND INSTALL ONE SAMPLE WELL AS SHOWN AND TO INSTALL SAME AS REQUIRED BY LOCAL CODES.
5. GENERAL CONTRACTOR SHALL SUPPLY ALL HOSE CONNECTIONS AND OTHER INSTALLATIONS, WHERE AIR GAP CANNOT NOT BE ASSURED, WITH A CITY OF JURIS--DICTION APPROVED BACKFLOW PREVENTATIVE.
6. ALL FLOOR & WALL PENETRATIONS SHALL BE WEATHER & WATER TIGHT USING SLEEVES OR OTHER APPROPRIATE MEANS, AN ASSEMBLY SEAL MADE WITH AN EXTRA HIGH QUALITY NON--HARDENING CAULKING COMPOUND
7. BACK FLOW PREVENTORS ARE TO BE TESTED ANNUALLY BY OWNER.
8. WATER SUPPLIES TO EACH FIXTURE SHALL BE MOUNTED ON PLASTIC MOUNTING RACK SUPPORTED FROM WASTE OR VENT PIPING USING FIBERGLASS ISOLATION COLLARS BETWEEN THE RACK AND SUPPORTED PIPING. PIPING SHALL BE MOUNTED WITH A COLLAR OF SUFFICIENT THICKNESS TO ACOUSTICALLY ISOLATE PIPING SEWAGE NOISE.
9. ALL PLUMBING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE 2012 UPC CODE AND PLUMBING CODE AMENDED BY THE CITY'S CODE GOVERNING AUTHORITY.
10. ALL DOMESTIC HOT AND COLD WATER INSTALLED ABOVE CEILING SHALL BE INSULATED AS IF EXPOSED TO OUTSIDE.
11. COORDINATE ALL PIPING PENETRATIONS (WATER, WASTE, VENT) WITH OTHER TRADES TO AVOID CONFLICT.
12. ALL WATER PIPING TO BE TYPE "L" COPPER OR CPVC. ALL WASTE PIPING BELOW FLOOR SLAB TO BE SCH 40 PVC OR CAST IRON.
13. ALL VENT/WASTE PIPING IN R/A PLENUM SPACES TO BE CAST IRON AS PER S.P.C. PLUMBER TO PROVIDE ALTERNATE FOR ALL SCH 40 PVC. COORDINATE WITH MECHANICAL CONTRACTOR.
14. ALL VENT PIPING TO RISE A MIN. OF 6" ABOVE FLOOD RIM PRIOR TO STARTING ANY HORIZONTAL RUN.
15. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES IS 9'-0" SAN. SWR. LINE MUST BE 1'-0" BELOW WATER LINE WHERE THEY ARE PARALLEL AND WHERE THEY CROSS.
16. ALL PLUMBING FACILITIES TO COMPLY WITH TABLE 2902.1, CHAPTER 29, 2012 IBC
17. WATER HEATER AND DOMESTIC WATER PIPING REGARDING THE PERFORMANCE EFFICIENCY, TEMPERATURE CONTROLS, HEAT TRAPS, PIPE INSULATION AND HOT WATER SYSTEM CONTROL SHALL COMPLY WITH 2015 I.E.C.C.
18. THIS LAYOUT IS FOR REPRESENTATION AND OVERALL CONTENT ONLY. IT'S NOT FOR FINAL CONSTRUCTION METHODS. THIS WORK IS THE RESPONSIBILITY OF THE CONTRACTOR SELECTED AND TO BE FINALIZED AT THE FIELD AS PER EXISTING FIELD CONDITIONS.
19. ALL FLOOR DRAIN, IF INSTALLED, REQUIRE A TRAP PRIMER AS PER 2012 U.P.O CODE.
20. ALL HOSE CONNECTIONS AND OTHER INSTALLATIONS WHERE AN AIR GAP CANNOT NOT BE ASSURED MUST BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTATIVE AS PER U.P.C
21. PLUMBING CONTRACTOR TO COORDINATE WITH STRUCTURAL CONTRACTORS BEFORE THE START OF PROJECT FOR THE PLACEMENT OF PLUMBING LINES, CONDUIT, ETC.



(THIS DOOR TO REMAIN UNLOCKED WHILE THE BUILDING IS OCCUPIED)
NOTE: OCCUPANT LOADS ARE REQUIRED TO BE POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY ON AN APPROVED SIGN

GAS SCHEMATIC DIAGRAM (<2 PSI)
NATURAL GAS CALCULATION TO BE COMPLY WITH THE
UPC 2012 TABLE 1216.2
METALLIC SCHEDULE 40 PIPE
TOTAL GAS DEMAND FOR THE FACILITY = 894,000 BTUH
(894 CU.FT. / HR.)
TOTAL LENGTH DEVELOPED FROM THE POINT OF
SERVICE DELIVER TO THE EXTREME REMOTE OUTLET = 98
FT.
NOTE: TDL= TOTAL DEVELOPED LENGTH FROM METER
INLET PRESSURE: LESS THAN 2 PSI
INSTALL ANSUL GAS AUTOMATIC SHUT OFF VALVE FOR
EACH KITCHEN EQUIPMENT AND GAD PRESSURE
REGULATOR FOR ALL EQUIPMENT

