

Order P1

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

- GENERAL AND SPECIAL CONDITIONS: GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THIS DIVISION OF THE SPECIFICATIONS INsofar AS SAME ARE APPLICABLE TO THE WORK UNDER THIS DIVISION AND UNLESS OTHERWISE SPECIFIED.
- SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH ALL APPLICABLE CODES.
- PERMITS: APPLY FOR AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION.
- WARRANTY: PROVIDE ALL MATERIALS AND EQUIPMENT UNDER THIS SECTION OF THE SPECIFICATIONS WITH A ONE YEAR WARRANTY FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER.
- COORDINATION: VERIFY ALL ROUGH-IN LOCATIONS AND COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID CONFLICTS. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC. TO PROPERLY BE INSTALLED. ANY CONFLICTS SHALL BE RESOLVED AT NO CHARGE TO THE OWNER. COORDINATE INSTALLATION OF ALL PLUMBING LINES AT CMU WALLS SO THAT PLUMBING LINES ARE PLACED IN WALL DURING CMU WALL CONSTRUCTION. CUTTING AND PATCHING OF CMU WALLS IN PLACE WILL NOT BE PERMITTED.
- FIELD VERIFICATION: FIELD VERIFY EXISTING CONDITIONS BEFORE STARTING CONSTRUCTION AND NOTIFY THE ARCHITECT/ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.
- PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO:
 - PLUMBING FIXTURES AND EQUIPMENT
 - FIRE STOPPING
 - DOMESTIC WATER SYSTEM
 - SANITARY WASTE AND VENT SYSTEM
 - GAS SYSTEM
 - STORM DRAIN/SEWER SYSTEM
- SEE ARCHITECTURAL PLANS FOR FINAL EQUIPMENT LOCATIONS. COORDINATE WITH EQUIPMENT SUPPLIER AND THE GENERAL CONTRACTOR FOR FINAL WALL LOCATIONS.

FIXTURES:

- PROVIDE COMPLETE FIXTURES AND INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.

FIRE STOPPING:

- FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

DOMESTIC WATER PIPING:

- FURNISH AND INSTALL A COMPLETE SYSTEM OF HOT AND COLD WATER, AND WASTE PIPING FROM EXISTING SUPPLIES TO ALL FIXTURES AND/OR EQUIPMENT REQUIRING THIS SERVICE. VERIFY LOCATION OF BEGINNING POINTS.
- DOMESTIC WATER PIPING BELOW GRADE: SOFT ANNEALED SEAMLESS COPPER TUBING, TYPE 'K' WITH NO JOINTS BELOW GRADE (ASTM B 88).
- DOMESTIC WATER PIPING AND JOINTS ABOVE GRADE: HARD DRAWN SEAMLESS COPPER TUBING, TYPE 'L' WITH 80-5 SILVER SOLDERED JOINTS (ASTM B 88), CPVC OR OR CROSS-LINKED POLYETHYLENE (PEX) (ASTM F877) PLASTIC HOT AND COLD WATER DISTRIBUTION IS ALLOWED WHERE PERMISSIBLE AND PRE-APPROVED.
- STERILIZE DOMESTIC WATER PIPING IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
- INSULATE DOMESTIC WATER PIPING ABOVE GRADE EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES WITH ENGINEERED POLYMER FOAM INSULATION OR FIBERGLASS WITH FIBERGLASS INSULATE AND PVC COVERS. FOLLOW THIS SCHEDULE:

SERVICE	PIPE SIZE	INS. THICKNESS
DOMESTIC HOT WATER 105-140°	1/2" - 1-1/2"	1/2"
DOMESTIC HOT WATER 105-140°	2" AND UP	3/4"
DOMESTIC HOT WATER 140°	ALL	"
DOMESTIC HOT WATER DISTRIBUTION	ALL	1/2"
DOMESTIC COLD WATER	ALL	1/2"

DO NOT INSTALL DOMESTIC WATER PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL WATER PIPING IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.

- SHUT OFF VALVES: PROVIDE FULL PORT, BALL TYPE, AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. PROVIDE ACCESS DOORS IF REQUIRED.
- PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH OTHER METALS.
- PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.

- FURNISH BURST PROOF BRAIDED FLEXIBLE CONNECTORS FOR SINK CONNECTIONS AND CONNECTIONS TO EQUIPMENT.
- PROVIDE ZURN WILKINS MODEL 740 (OR EQUAL) BACKFLOW PREVENTION TYPE VACUUM BREAKER FOR ICE MACHINE, CARBONATOR, AND OTHER EQUIPMENT AS REQUIRED BY CODE.
- P.C. SHALL VERIFY THE INCOMING WATER PRESSURE AND PROVIDE A PRESSURE REDUCING VALVE IF PRESSURE IS 80 PSI OR GREATER.
- P.C. SHALL INSTALL HAMMER ARRESTORS ON PROJECTS THAT USE QUICK CLOSING DEVICES SUCH AS FLUSH VALVES, ICE MAKER, WASHER MACHINES, ETC., SIZED PER MANUFACTURER RECOMMENDATIONS.

SANITARY WASTE AND VENT PIPING:

- FURNISH AND INSTALL COMPLETE SYSTEMS OF SOIL, WASTE, AND VENT PIPING FROM ALL PLUMBING FIXTURES, AND/OR OTHER EQUIPMENT. ALL SOIL, WASTE AND VENT LINES SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION WHERE POSSIBLE.
- INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE WASTE PIPING IS INSTALLED IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED.
- SANITARY WASTE AND VENT PIPING AND FITTINGS: SERVICE WEIGHT CAST IRON, HUB AND SPIGOT TYPE WITH COMPRESSION JOINTS (ASTM A 74) OR NO-HUB PIPING WITH COUPLINGS (IC8P1 50).

IF PERMITTED BY LOCAL CODES, SCHEDULE 40 PVC (ASTM D 2665) WITH SCHEDULE 40 SOCKET-TYPE PIPE FITTINGS (ASTM D 3311) MAY BE USED. DO NOT INSTALL PVC PIPING IN RETURN AIR PLENUMS. PVC FOAM CORE DWV PIPING NOT PERMITTED.
- SLOPE SANITARY WASTE PIPING 2-1/2" AND SMALLER AT 1/4" PER FOOT MIN. SLOPE SANITARY WASTE PIPING 3" AND LARGER AT 1/8" PER FOOT MINIMUM.
- WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, WITH MATCHING STOPS AND ESCUTCHEONS. PROVIDE REMOVABLE TRAPS WITH INTEGRAL CLEAN-OUT PLUG FOR ALL LAVATORIES.
- INSTALL CLEAN-OUTS IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS AT EACH CHANGE IN DIRECTION.
- ALL INDIRECT WASTE CONNECTIONS TO BE INSTALLED WITH AN AIR GAP BETWEEN INDIRECT WASTE PIPE AND THE FLOOD RIM OF THE WASTE RECEPTOR SHALL BE MINIMUM OF TWICE THE EFFECTIVE OPENING OF THE INDIRECT WASTE PIPE.

SEISMIC REQUIREMENTS:

- PROPERLY SUPPORT AND BRACE VERTICALLY AND HORIZONTALLY ALL PIPING, APPARATUS, EQUIPMENT, ETC. IN ACCORDANCE WITH APPLICABLE CODES TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC CONDITIONS.

BACKFLOW PREVENTION:

- VERIFY BACKFLOW PREVENTOR REQUIREMENTS OF LOCAL AUTHORITY AND PROVIDE BACKFLOW PREVENTION DEVICES AS REQUIRED. COORDINATE LOCATION WITH OTHER TRADES.

WATER METER:

- VERIFY DOMESTIC WATER METER REQUIREMENTS OF LOCAL AUTHORITY AND PROVIDE DOMESTIC WATER METER AS REQUIRED. COORDINATE LOCATION WITH OTHER TRADES.

GAS PIPING:

- WORK TO INCLUDE PIPING FROM GAS METER TO GAS FIRED EQUIPMENT. PLUMBING CONTRACTOR TO PROVIDE SHUT-OFF VALVE, DIRT TRAP AND PRESSURE REGULATOR AT THE GAS FIRED EQUIPMENT. FOOD SERVICE EQUIPMENT VENDOR SHALL PROVIDE SHUT-OFF VALVES FOR FOOD SERVICE EQUIPMENT (SEE 'FOOD SERVICE EQUIPMENT NOTES' ON THIS SHEET FOR ADDITIONAL NOTES).
- ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODE REQUIREMENTS, AND THE PROVISIONS OF NFPA-54 AND NFPA-58.
- ALL NATURAL GAS PIPING AND SYSTEMS SHALL COMPLY WITH THE CURRENT EDITION AS APPROVED BY OSF OF THE INTERNATIONAL FUEL GAS CODE.
- THE CONTRACTOR SHALL SUPPLY ALL PERMITS, FEES AND LICENSES REQUIRED FOR THE WORK, AND FOR ALL INSPECTIONS REQUIRED.
- ALL ABOVE GROUND PIPING 4" AND LARGER SHALL BE ASTM A 53 BLACK STEEL WITH ASME B16.11 SOCKET-WELDED FITTINGS. LOW PRESSURE PIPING AFTER REGULATORS MAY BE ASME B16.3 THREADED MALLEABLE IRON FITTINGS. BELOW GRADE PIPING SHALL BE ASTM D 253 PE PIPE. BELOW GRADE PIPING SHALL BE PERMANENTLY IDENTIFIED AND PROTECTED WITH WARNING AND I.D. TAPE AND TRACER WIRE. KITCHEN EQUIPMENT FLEXIBLE CONNECTORS SHALL BE AGA LISTED FOR SUCH USE. ALL GAS PIPING SHALL BE PROPERLY IDENTIFIED AND LABELED.
- VALVES SHALL BE GAS COCKS MANUFACTURED BY NIBCO.
- ALL PIPING EXPOSED TO THE OUTDOORS OR RUN IN UNCONDITIONED SPACES SHALL BE PAINTED WITH TWO COATS OF RUST RESISTANT ENAMEL.
- PIPE 3" AND SMALLER SHALL BE SCHEDULE 40 STEEL WITH THREADED MALLEABLE FITTINGS.

FOOD SERVICE EQUIPMENT NOTES

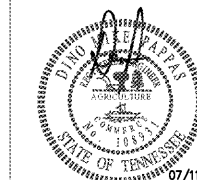
- FOOD SERVICE EQUIPMENT AND FIXTURES FURNISHED AND INSTALLED BY OTHERS, REFERENCE KITCHEN DRAWINGS FOR EQUIPMENT LOCATION AND REQUIREMENTS.
- PROVIDE FINAL CONNECTIONS TO EQUIPMENT WITH SHUT-OFF VALVES, PRESSURE REGULATORS, VACUUM BREAKERS, BACK FLOW PREVENTORS, UNIONS, FLEXIBLE CONNECTORS, FILTERS, DIRT LEGS, TRAPS, STOP VALVES, ETC. AS SPECIFIED, AS REQUIRED BY CODE, AND AS NECESSARY FOR COMPLETE AND OPERATING EQUIPMENT.
- CONNECT WASTE LINES OR EXTEND WASTE LINES TO FLOOR DRAINS WITH AIR GAP. CONNECT WATER SUPPLIES AND CONNECT GAS SUPPLIES.
- COORDINATE WITH GENERAL CONTRACTOR, OWNER AND FOOD SERVICE EQUIPMENT SUPPLIER/CONTRACTOR FOR EQUIPMENT IDENTIFICATION, CONNECTION REQUIREMENTS, EXACT LOCATIONS AND MOUNTING HEIGHTS. FURNISH ESCUTCHEON PLATES AT WALL ON FLOOR ENTRY INTO ROOM.
- INSTALL AUTOMATIC GAS SHUT-OFF VALVE IN GAS LINE UPSTREAM OF ALL KITCHEN EQUIPMENT AND CONNECT TO HOOD FIRE SUPPRESSION SYSTEM.
- BACKFLOW PROTECTION SHALL BE INSTALLED FOR BEVERAGE DISPENSERS IN ACCORDANCE WITH 2012 IPC SECTION 608.16.1.

PLUMBING LEGEND

---	DOMESTIC COLD WATER PIPING
-FCW---	FILTERED COLD WATER PIPING
----	140° DOMESTIC HOT WATER PIPING
-140HWR---	140° HOT WATER RECIRC PIPING
-----	VENT PIPING
-----	WASTE (SANITARY SEWER)
-----	GREASE WASTE
-----	GAS PIPING
-----	EXIST. GAS PIPING
-----	STOP VALVE
-----	BALANCE VALVE
-----	CHECK VALVE
-----	PIPE UP
-----	PIPE DOWN
-----	FIXTURE DESIGNATION
A.F.F.	ABOVE FINISHED FLOOR
P.C.	PLUMBING SUB-CONTRACTOR
G.C.	GENERAL CONTRACTOR
M.C.	MECHANICAL SUB-CONTRACTOR
E.C.	ELECTRICAL SUB-CONTRACTOR
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
AAV	AIR ADMITTANCE VALVE
VTR	VENT THROUGH ROOF
FPHB	FREEZE PROOF HOSE BIBB
F.D.	FLOOR DRAIN
CW	COLD WATER
HW	HOT WATER
⊕	TIE INTO EXISTING

PLUMBING DRAWING INDEX

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COOK OUT

975 W. Poplar Ave.
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Mk	Date	Description
		Revisions

PLUMBING LEGEND AND NOTES

Date 07-11-17
 Drawn By APP
 Check By AWC
 Job No. 17-019-000
 Sheet

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