

- A. FLOOR SERVICE EQUIPMENT: REFER TO OTHER PORTIONS OF PLANS AND SPECIFICATIONS FOR FURTHER INFORMATION ABOUT FLOOR SERVICE ITEMS FURNISHED AND WORK PERFORMED BY OTHERS. VERIFY ROUGH-IN REQUIREMENTS WITH EQUIPMENT FURNISHED.
- B. HEALTH DEPARTMENT: COMPLY WITH LOCAL HEALTH DEPARTMENT (HD) REGULATIONS WHEREVER POSSIBLE, INSTALL ALL PIPING CONNECTED, CONFORM TO HD REQUIREMENTS FOR LOCATIONS OF FLOOR SINKS.
- C. WORKMANSHIP SHALL BE FIRST CLASS, ACCEPTABLE TO OWNER.
- D. MAKE COMPLETE: PROVIDE ITEMS AND WORK AS REQUIRED TO COMPLETE THE INSTALLATION OF PLUMBING SYSTEMS TO FIXTURES AND EQUIPMENT: TRAPS, STRAINERS, GAUGES, GAS AND WATER PRESSURE REGULATORS, FLEXIBLE CONNECTIONS, STOP VALVES, UNIONS, ETC. PROVIDE AND CONNECT PLUMBING PIPE FROM ROUGH-INS TO SHOWS, SINKS AND REQUIRES.
- E. VERIFY LOCATIONS: EXISTING PIPING, POC DRAWN ON DRAWINGS HAS BEEN LOCATED FROM INFORMATION PROVIDED BY OTHERS, VERIFY EXACT LOCATION ON JOB SITE BEFORE START WORKING.
- F. BACKFLOW PREVENTION: PROVIDE BACKFLOW PREVENTERS (BFP) IN WATER LINES ONLY IF REQUIRED BY LOCAL AUTHORITIES. USE DEVICES OF TYPE (VACUUM BREAKER, DOUBLE CHECK, REDUCED PRESSURE) AND MANUFACTURER APPROVED BY LOCAL AUTHORITIES, ONLY IN LOCATIONS REQUIRED.
- G. RESTROOM TRAP PRIMERS: SOUX CHEF "TRAP EASE" MODEL 200-090 TRAP PRIMER TAILPIECE. PROVIDE A CONTINUOUS LENGTH OF 1/2" SOFT COPPER TUBE FROM PRIMER TO TRAP, SLOPING TO TRAP. PROVIDE WATER INSULATION ABOVE ALL PIPING. INSTALL BELOW FLOOR SLAB. SEE DETAIL #9 ON SHEET P-500.
- H. WATER CONSERVATION: CONTRACTOR SHALL PROVIDE WATER FLOW LIMITING FEATURES ON FIXTURES IF/AS REQUIRED BY LOCAL AUTHORITIES.
- I. COLD WATER: CONNECT TO DOMESTIC COLD WATER VALVED STOP. EXTEND COLD WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS, TO SERVICE FIXTURES AND EQUIPMENT.
- J. HOT WATER: PROVIDE COMMERCIAL TYPE WATER HEATER, DESIGN PER PLAN. RUN HOT WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS TO SERVICE FIXTURE AND EQUIPMENT.
- K. SANITARY: CONNECT TO SANITARY WASTE LINE.
- L. BRANCHES: PROVIDE HOT AND/COLD WATER PIPES DOWN IN PARTITION TO SERVE VARIOUS EQUIPMENT PER "KITCHEN EQUIPMENT SCHEDULE".
- M. SODA CONDUIT: PROVIDE 6" CONDUIT BELOW FLOOR FROM SODA STORAGE TO SODA DISPENSER.
- N. CONDENSATE: PROVIDE 1" INSULATED PRIMARY AND SECONDARY CONDENSATE DRAIN PIPES FROM FAN-COIL UNIT ABOVE CEILING TO NEAREST FLOOR.
- O. GAS SERVICE: PROVIDE GAS PIPING AND VALVE AND CONNECTION TO GAS METER. FOR NATURAL GAS SERVICE, COORDINATE WITH GAS UTILITY COMPANY FOR METER REQUIREMENTS, PERMITS AND FEES. ROUTE PIPE AS REQUIRED, SUSPENDED FROM STRUCTURE ABOVE. USE WELDED PIPE, FITTINGS, AND JOINTS IN CEILING SPACE AND IN WALL AS ALLOWED BY LOCAL CODE.
- P. INDIRECT DRAIN: AN AIR GAP TWICE THE SIZE OF THE DRAIN LINE MUST BE PROVIDED BETWEEN THE DRAIN LINE AND THE SANITARY SINKER.
- Q. FLOOR DRAIN: ALL EQUIPMENT MUST BE DISCHARGED TO THE SANITARY SEWER.
- R. FLOOR DRAIN MUST BE PLACED ADJACENT TO EQUIPMENT WHICH DISCHARGES WASTE. FLOOR DRAIN INSTALLATION MUST NOT INTERFERE WITH PROPER FLOOR MAINTENANCE.
- S. EXPOSED UTILITY LINES ON FLOORS ARE PROHIBITED. UTILITY LINES MUST NOT BE UNNECESSARILY EXPOSED ON WALLS.
- T. ALL WATER AND GAS CONNECTIONS TO ALL PLUMBING FIXTURES TO BE HARD PIPED, NO FLEX PIPE.
- U. ALL PIPES 6" A.F.F. NO FLOOR SUPPORTS ALLOWED.
- V. ALL WATER PIPES IN EXPOSED AREAS OUTSIDE WALLS AND BELOW CEILING MUST BE COPPER UNLESS NOTED OTHERWISE.

1. WORK INCLUDES CONNECTION OF PLUMBING UTILITIES TO DEVELOPER OR LANDLORD'S UTILITIES AND INSTALLATION OF A COMPLETE PLUMBING SYSTEM WITHIN SPACE. PROVIDE NEW MATERIALS, FITTINGS, ACCESSORIES, FIXTURES AND EQUIPMENT NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING SYSTEM AS SHOWN ON PLANS AND AS REQUIRED. WORK INCLUDES FINAL CONNECTIONS TO EQUIPMENT AND FIXTURES PROVIDED BY OTHERS. PROVIDE ALL NEW MATERIALS, FITTINGS, ACCESSORIES AND EQUIPMENT NECESSARY TO COMPLETE THE WORK. THEIR WORKMANSHIP SHALL BE HIGH STANDARD, ACCEPTABLE TO OWNER.

2. CODES: ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS, OR ORDINANCES. PAY FOR ANY PERMITS REQUIRED, AND CALL FOR ANY REQUIRED INSPECTIONS TO BE MADE BY LOCAL AUTHORITIES.

3. INTENT OF DRAWINGS IS TO INDICATE GENERAL EXTENT OF WORK REQUIRED FOR PROJECT. DRAWINGS FOR PLUMBING ARE DIAGRAMMATIC, SHOWING GENERAL LOCATION, TYPE, PIPING, FIXTURES AND EQUIPMENT REQUIRED. PROVIDE THE FOLLOWING DETAILS, SPECIFICATIONS, AND METHODS OF INSTALLATION TO COMPLY WITH PLUMBING DRAWINGS. SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. USE DIMENSIONED ARCHITECTURAL DRAWINGS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURES, AND TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

4. FSE ROUGH-IN DRAWINGS: REFER TO ROUGH-IN DRAWINGS FURNISHED BY THE FOOD SERVICE EQUIPMENT SUPPLIER, FOR EXACT LOCATION OF WATER PIPING SUPPLIES AND DRAIN LOCATIONS TO SERVE FOOD SERVICE EQUIPMENT. DO NOT LAYOUT WORK OF THIS SECTION WITHOUT SUCH DRAWINGS.

5. COORDINATE WITH WORK OF OTHERS CONCERNING GRADES, WITH EQUIPMENT FURNISHED BY OTHERS, AND WITH DIMENSIONS OF EXISTING CONDITIONS OF PROJECT.

6. MISCELLANEOUS EXPENSES SUCH AS HOOK-UP CHARGES, PERMITS, INSPECTIONS, AND OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING SYSTEM ARE INCLUDED AS PART OF THIS SECTION.

7. PIPING SYSTEMS: GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR PROTECTION OF UNFINISHED SPACES. CONCEAL CONCEALED PORTION OF ALL CONNECTIONS TO OTHERS BETWEEN FERROUS PIPING AND NONFERROUS PIPING. PROVIDE AN INSULATING DIELECTRIC LINEN. SEAL PIPE PENETRATIONS OF FLOORS AND CEILING WITH FIREPROOF PUTTY OR GROUT. PROVIDE SUMNER OR EQUIVALENT PIPE HANGING SYSTEM IN CHASES. PROVIDE HANGERS AS REQUIRED BY HANGER MANUFACTURER AND MSS-SP-58, 68 AND 89.

8. WASTE PIPING: PROVIDE ALL DRAIN, WASTE AND SEWER PIPING WITHIN PROJECT SPACE WITH CONNECTION TO SANITARY WASTE SYSTEM ON SITE. PROVIDE A COMPLETE SYSTEM OF WASTE PIPING, CONSISTING OF SCH 40 BLACK STEEL PIPE, CONNECTORS AND FITTINGS. ALL PIPING SHALL BE SLOPED UNIFORMLY AT 2% UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS.

8.1. CLEANAUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT APART.

8.2. CLEANAUTS SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A SINGLE PIPE RUN, ONLY ONE (1) CLEANAUT SHALL BE REQUIRED FOR EVERY 40 FEET OF DEVELOPED LENGTH.

9. VENTS: PROVIDE A COMPLETE SYSTEM OF VENT PIPING, CONSISTING OF SCH 40 PVC PIPE, CONNECTORS AND FITTINGS, COMBINE THE VENT RISERS IN THE CEILING SPACE. CONNECT TO EXISTING VENT MAIN.

10. WATER PIPING: CONNECT TO EXISTING WATER PIPING AND PROVIDE A NEW DOMESTIC HOT AND COLD WATER PIPING SYSTEM INSIDE THE BUILDING AS SHOWN ON DRAWINGS. LAID OUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE ZURN PEX (ASTM F876, 98 TUBING) WITH ZURN PEX PRE-ASSEMBLED MANIFOLDS. FITTINGS AND JOINTS FOR PEX-A TUBE: ASTM F1890 COMPATIBLE COLORED EXPANSION FITTINGS, MATCHING PEX TUBE DIMENSIONS. USE BLUE COLOR PEX FOR COLD WATER AND RED COLOR PEX FOR HOT WATER. PEX FOR WATER PIPING SHALL BE 1/2" OR 3/4" PEX. MAKE ALL CONNECTIONS TO COPPER STUB-OUT AT EACH FIXTURE. PEX PIPING SHALL NOT BE USED WITHIN WALLS. PROVIDE WATER HAMMER ARRESTERS AT RESTROOM AREA & CHINESE WORK AREA PER DRAWING SHOWN. FLUSH WATER PIPING CLAD OF DEBRIS AND CLEAN AERATORS AND STRAINERS AT TERMINATION OF INSTALLATION.

11. NATURAL GAS PIPING INSIDE AND OUTSIDE THE BUILDING ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL ASTM A-33 PIPE WITH 125 LB MALLEABLE IRON SCREWED FITTINGS WHERE EXPOSED. PRIMER AND PAINT EXTERIOR GAS PIPING FOLLOW LOCAL REQUIREMENTS. PROVIDE ALL UNIONS, SHUT OFF VALVES AND DRIP LEAKS PER MSS-SP-58 AND ALL COVERING CODES. PROVIDE ALL TESTS, INSPECTIONS, HANGERS AND APPURTENANCES REQUIRED FOR A COMPLETE OPERATING SYSTEM. TAP ON UTILITY GAS MAIN AND GAS METER SHALL BE BY GAS COMPANY. EXTEND PIPING FROM METER TO EQUIPMENT AS DETAILED ON DRAWINGS. PROVIDE ROUTING, HANGING, AND PENETRATIONS PER OWNER'S REQUIREMENTS.

12. PIPE INSULATION: INSULATE ALL COLD WATER AND CONDENSATE PIPING WITH 1/2", AND HOT WATER PIPING WITH 1", PREFORMED FIBERGLASS WITH ALL-SERVICE JACKET WITH VAPOR BARRIER (BY CT, OC, JM, PPG, OR KNAUF). AT CONTRACTOR'S OPTION, PENUM-RATED ELASTOMERIC INSULATION (BY ARMSTRONG, RUBATEX OR EQUAL) MAY BE USED.

13. PIPE MARKING:

13.1. ALL INSTALLED PIPING WITH ANS/ISA 13.1.2 2007 APPROVED PIPE MARKER SYSTEM USING EZ ARROWS AND LOW BACKBAY TAPE IN CONJUNCTION WITH THE PIPE MARKERS. PRODUCTS AVAILABLE AT PIPEMARKER.COM. 822-274-6271. INSTALL PER MANUFACTURERS INSTRUCTIONS.

13.2. IDENTIFY ALL MANIFOLDS AND ALL VALVES ON THE MANIFOLDS FOR CORRESPONDING FIXTURES.

14. SHUT-OFF VALVES WITH UNIONS SHALL BE PROVIDED AT BRANCHES TO GROUPS OF MORE THAN TWO FIXTURES, AND AT THE WATER TREATER, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. USE CHROME-FINISHED FORGED BRONZE BODY BALL VALVE, WITH TEFLON SEALS AND PACKING, 40 LB WOG, WITH SOLDER ENDS, EQUAL TO JENKINS #892-T. GAS VALVES SHALL BE ALL BRONZE LUBRICATED PLUG COOKS FOR SCREWED PIPE, 1/2" OR 3/4" ROOFING NUTS AND WASHERS.

15. ACCESS PANELS SHALL BE PROVIDED IN CEILINGS OR WALLS WHERE CONCEALED CONTROL DEVICES ARE LOCATED, EXCEPT WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAID-IN CEILINGS.

16. SUPPLIES AND TRAPS: PROVIDE WATER SEALED TRAPS AND SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND FOOD SERVICE EQUIPMENT OR BEVERAGE DISPENSING EQUIPMENT ITEMS FURNISHED BY OTHERS, HAVING A WATER CONNECTION, OR REQUIRING WATER SERVICE. EXPOSED TRAPS AND SUPPLIES IN EXPOSED AREAS (INCLUDING CABINET INTERIORS) SHALL BE CHROME PLATED BRASS.

17. THROUGH ROOFING PENETRATIONS: PROVIDE THROUGH ROOFING PENETRATIONS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES, PER MANUFACTURER'S ROUGH-IN DIMENSIONS. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT. REPAIR ANY DAMAGE DONE TO EXISTING FIXTURES AND RESTORE TO ORIGINAL CONDITIONS. PROVIDE CLEAN CONDITIONS AT TERMINATION OF WORK.

18. TEST WATER, GAS, VENT, AND WASTE SYSTEMS PER LOCAL CODE REQUIREMENTS, WHEN TESTING INDICATES WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST TILL STANDARDS ARE ACHIEVED.

19. GUARANTEE THE WORK AND THE INSTALLATION FOR ONE YEAR AFTER FORMAL ACCEPTANCE BY THE OWNER. ALL SAW CUT AND PATCH BACK OF FLOOR TO MATCH EXISTING FINISHES. BACKFILL PER DEVELOPER OR OWNER'S SOLE ENGINEER'S RECOMMENDATIONS.

1. 1-1/4" G DOWN TO WATER HEATER W/ SOV (SHUT OFF VALVE).
2. 3/4" G DOWN TO RICE COOKER W/ SOV. PROVIDE 6" LENGTH OF RIGID PIPE BETWEEN RICE COOKER AND FLEXIBLE GAS LINE.
3. CW SHUT OFF BALL VALVE LOCATED WITHIN WALL AT 24" AFF. REFER TO DETAIL #5 ON SHEET P-400 FOR ACCESS PANEL DETAIL.
4. 1/2" G DOWN TO DEEP FRYER W/ SOV.
5. 1/2" G DOWN TO CHINESE RANGE "20A OR 20B" W/ SOV. LOCATE STUB OUT BEHIND THE END OF RANGE FOR EASY ACCESS.
6. 1" G DOWN TO CHINESE RANGE "20Q" W/ SOV.
7. EXHAUST & INTAKE VENTS UP TO ROOF. COORDINATE WITH MECHANICAL DRAWINGS AND DETAIL #10 ON SHEET P-500.
8. ROUTE NEW PIPING IN WALL.
9. 2" GAS ANSUL VALVE PROVIDED BY OWNER (G.C. CALL CAPTIVEAIRE FOR DELIVERY). INSTALL GAS ANSUL VALVE AS CLOSE TO EXTERIOR WALL AS ALLOWED PER LOCAL CODE.
10. WATER PIPE UP IN CURB. VALVE AND CAP.
11. 1" G UP TO ROOF W/ SOV. FOR ROOFTOP UNITS.
12. 3/4" CW TO TRAP PRIMER. PROVIDE WALL ACCESS PANEL. RUN 1/2" CW BELOW FLOOR TO FLOOR DRAIN. SEE DETAIL #17 ON PLAN P-500.
13. 3/4" GAS DOWN FOR FUTURE EQUIPMENT
14. SHUT OFF VALVE W/ HANDLE AT 11'-0" ABOVE FINISH FLOOR, EASILY ACCESSIBLE. G.C. TO INSTALL LOCATION INDICATOR STICKER PROVIDED BY PANDA EXPRESS
15. 1/2" GAS UP TO MAKE-UP AIR UNIT ON ROOF.
16. 3/4" HW & CW TO FAUCET (40B) FOR CHEMICAL FEED SYSTEM. LEFT SIDE PLUMBING ROUGH AT 4" OFF LEFT END OF SINK. SEE CHEMICAL FEED SYSTEM PIPING DIAGRAM ON SHEET P-400
17. GAS HEADER - INSTALL TIGHT TO WALL AND TIGHT TO BOTTOM OF TRUSSES.
18. COLD WATER MANIFOLD "C" BELOW CEILING. REF ARCH ELEVATIONS
19. COLD WATER MANIFOLD "B" BELOW CEILING. REF ARCH ELEVATIONS
20. HOT WATER MANIFOLD "A" BELOW CEILING. REF ARCH ELEVATIONS
21. SEE HOT WATER SYSTEM DIAGRAM 5/P-400

	COLD WATER PIPING
	HOT WATER PIPING
	GAS LINE
	PLUMBING VENT (V)
	PLUMBING VENT (V) BELOW SLAB/GRADE
	SANITARY WASTE (SAN) BELOW SLAB/GRADE
	PIPE TURNING UP/DOWN
	GAS COCK
	F.S. WITH HALF GRATE
	FLOOR DRAIN
	FIXTURE IDENTIFICATION
	PLAN NOTE
	KITCHEN EQUIPMENT IDENTIFICATION
	VENT THRU ROOF
	ABOVE FINISHED FLOOR/GRADE
	CLEANOUT
	WALL CLEANOUT
	FLUSH FLOOR/GRADE CLEANOUT
	FIRE PROTECTION CONTRACTOR
	DEPARTMENT OF NATURAL RESOURCE
	TYPICAL
	EXISTING
	POINT OF CONNECTION
	BALL VALVE
	CHECK VALVE
	GREASE WASTE

