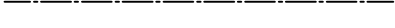
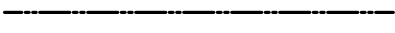

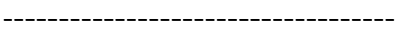


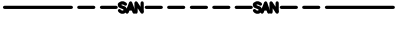

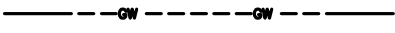







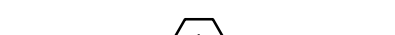



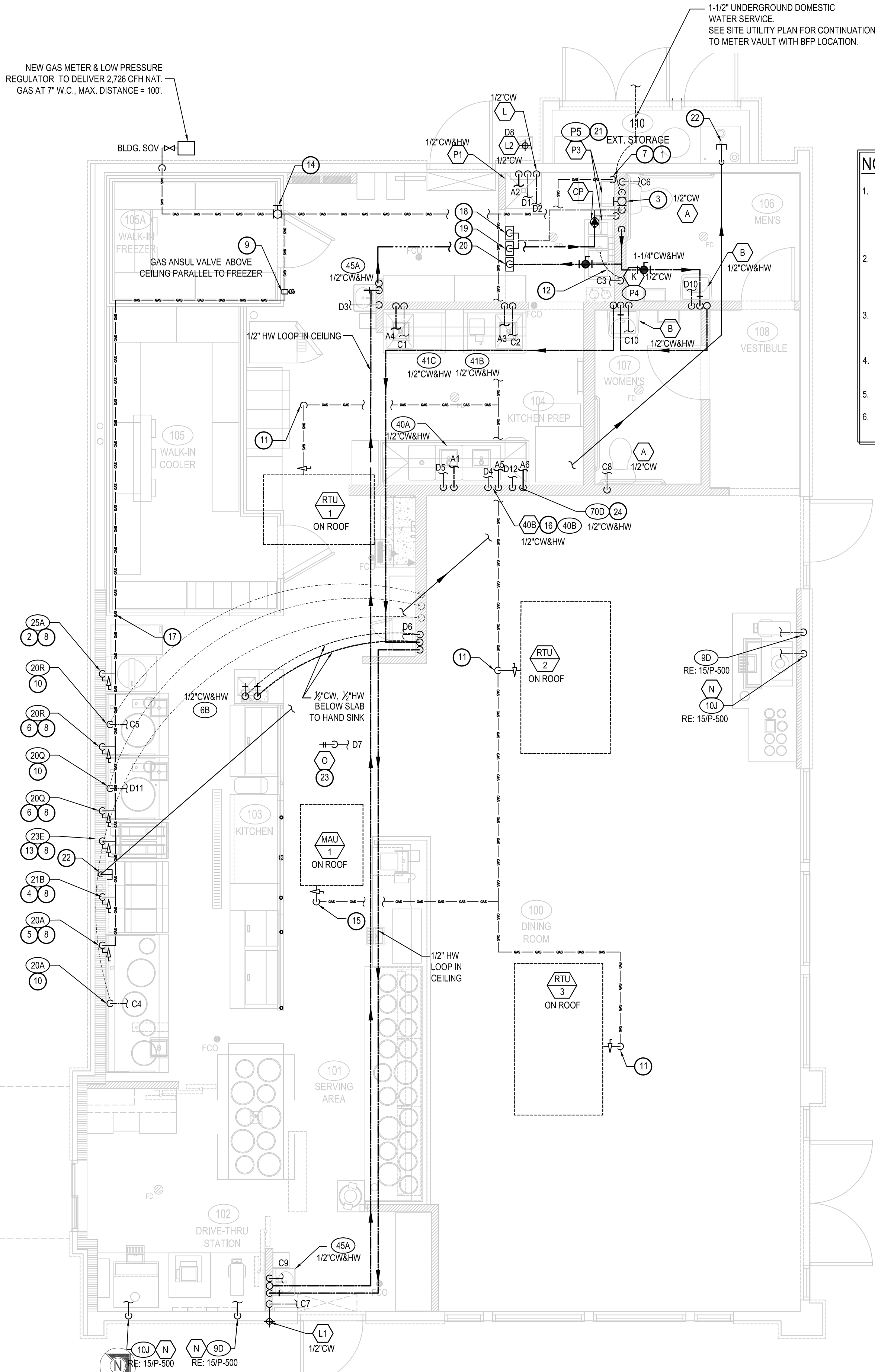


⊙ PLUMBING KEY NOTES

- WORK INCLUDES CONVEYEN 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 THEREON. PROVIDE ALL NECESSARY MATERIALS, FITTINGS, ACCESSORIES, AND LABOR. THE TRADESMAN, AND THEIR WORKSMANSHIP SHALL BE HIGH STANDARD, SAFETY 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 WORK ARE DIAGRAMMATIC, SHOWING GENERAL LOCATION, TYPE, PIPING, FIXTURES AND EQUIPMENT REQUIRED. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FULFILL INTENT OF PLANS. 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 OTHER SECTIONS AND TRADES, WITH EQUIPMENT FURNISHED BY OTHERS, AND WITH ARCHITECTURAL DRAWINGS. PROVIDE PROTECTIVE COVERINGS OF EXISTING WORK.
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. INSURE AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR FUTURE EXPANSION OF OTHER WORK. DRIVING DUCTS, ELECTRICALS, TOOL MANIFOLD CONNECTION TO BETWEEN PERFOROUS PIPING, AND NONPERFOROUS PIPING TO PROVIDE AN ISOLATING INTERFERENCE. SEAL PIPE PENETRATIONS OF FIRE FLOORS AND FIREWALLS WITH FIREPROOF PUTTY OR GROUT. PROVIDE SUMMER OR EQUIVALENT PIPE HANGING SYSTEM IN CHASES. PROVIDE HANGERS AS RECOMMENDED BY HANGER MANUFACTURER AND MSS-SP-58, 69 AND 89.
8. WASTE PIPING: PROVIDE ALL DRAIN, WASTE AND SEWER PIPING WITH PROJECT SPACE WITH CONNECTION TO SANITARY WASTE SYSTEM ON SITE. PROVIDE A COMPLETE SYSTEM OF WASTE PIPING, CONSISTING OF SCH 40 PLASTIC OR METAL PIPE. EXISTING DRAINAGE ALL PIPING SHALL BE SLOPED UNIFORMLY AT 2% UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS.
- 8.1. CLEANSUITS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT APART.
- 8.2. CLEANSUITS 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) CLEANSUIT 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 INTO THE BUILDING AS SHOWN ON DRAWINGS. LAU OUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE ZURN PEX (ASTM F877, 98 TUBING) WITH ZURN PEX PRE-ASSEMBLED MANIFOLDS, FITTINGS AND JOINTS FOR PEX-A/TM. SCH 2160 COMPATIBLE COLD EXPANSION FITTINGS, MATCHING PEX TUBE DIMENSIONS. USE BLUE COLOR PEX FOR COLD WATER AND RED COLOR PEX FOR HOT WATER. PROVIDE 1/2" VENT PIPING, CONTINUING TO TOOL MANIFOLD CONNECTION TO COPPER STUB-OUT AT EACH FIXTURE. PEX PIPING SHALL NOT BE SPLICED UNDER WALLS. PROVIDE WATER HAMMER ARRESTERS AT RESTROOM AREA AND CHINA'S WORK AREA PER DRAWING SHOWN. FLUSH WATER PIPING CLARD 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 LEAD TO PREVENT RUPT. PROVIDE ALL UNIONS, SHUT OFF VALVES AND DRIP LEAKS. PROVIDE PER 3779-4000 FOR PIPING JOINTS. PROVIDE ALL TESTS, INSPECTIONS, HANGERS AND APPURTENANCES REQUIRED FOR A COMPLETE OPERATING SYSTEM. STOP 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 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, PLENUM-RATED ELASTOMERIC INSULATION (BY ARMSTRONG, RUBATEX OR EQUAL) MAY BE USED.
13. PIPE MARKING:
- 13.1. IDENTIFY ALL PIPING WITH AISC/ASME A13.1 2007 APPROVED PIPE MARKER SYSTEM USING EZ ARROWS. PROVIDE ALL PIPING WITH AISC/ASME A13.1 2007 APPROVED PIPING IDENTIFICATION TAGS AVAILABLE AT PIPEMARKER.COM. 822-677-5271. INSTALL PER MANUFACTURERS INSTRUCTIONS.
- 13.2. IDENTIFY ALL MANIFOLDS AND ALL VALVES ON THE MANIFOLDS FOR CORRESPONDING FIXTURES.
- 13.4. SHUT-OFF VALVES WITH UNIONS SHALL BE PROVIDED AT BRANCHES TO GROUPS OF MORE THAN TWO FIXTURES, AND AT THE WATER HEATER, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. USE CHROME-FINISHED FORGED BRONZE BALL VALVE. WITH TEFLON SEALS AND PACKING, 40 LB WG, WITH SOLIDER ENDS, EQUAL TO JENKINS #902-1. GAS VALVES SHALL BE ALL BRONZE LUBRICATED PLUG COCKS FOR SCREWED PIPE, BALL VALVE ROOMED FOR BALL VALVE. PROVIDE 1/2" VENT PIPING, CONTINUING TO TOOL MANIFOLD CONNECTION TO COPPER STUB-OUT AT EACH FIXTURE. PEX PIPING SHALL NOT BE SPLICED UNDER WALLS. PROVIDE WATER HAMMER ARRESTERS AT RESTROOM AREA AND CHINA'S WORK AREA PER DRAWING SHOWN. FLUSH WATER PIPING CLARD OF DEBRIS AND CLEAN AERATORS AND STRAINERS AT TERMINATION OF INSTALLATION.
14. 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 LAY-IN CEILINGS.
15. SUPPLIES AND TRAPS: PROVIDE WATER SEALED TRAPS AND SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND FOOD SERVICE EQUIPMENT OR REVERSED 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.
16. INSTALLATION: PROVIDE CLEAN LINE BEFORE INSTALLATION. TAKE PRECAUTIONS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND ALL CONNECTIONS HAVE BEEN MADE. PROCEED AS PROPER 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 MATERIALS OR WORKMANSHIP ARE DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST ILL.
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. SO'S ENGINEER'S RECOMMENDATIONS

PLUMBING SYMBOLS

- | | |
|---|----------------------------------|
|  | COLD WATER PIPING |
|  | HOT WATER PIPING |
|  | GAS LINE |
|  | PLUMBING VENT (V) |
|  | PLUMBING VENT (V) |
|  | BELOW SLAB/GRADE |
|  | SANITARY (SAN) |
|  | BELOW SLAB/GRADE |
|  | GREASE WASTE (GW) |
|  | BELOW SLAB/GRADE |
|  | PIPE TURNING UP/DOWN |
|  | GAS COCK |
|  | F.S. WITH HALF GRATE |
|  | FLOOR DRAIN |
|  | FIXTURE IDENTIFICATION |
|  | PLAN NOTE |
|  | KITCHEN EQUIPMENT IDENTIFICATION |
| VTR | VENT THRU ROOF |
| AFF/AFG | ABOVE FINISHED FLOOR/GRADE |
| CO | CLEANOUT |
| WCO | WALL CLEANOUT |
| FCO FGCO | FLUSH FLOOR/GRADE CLEANOUT |
| FPC | FIRE PROTECTION CONTRACTOR |
| DNR | DEPARTMENT OF NATURAL RESOURCES |
| TYP | TYPICAL |
| (E) | EXISTING |
|  | POINT OF CONNECTION |
|  | BALL VALVE |
|  | CHECK VALVE |
| GS | GREASE WASTE |



1. ALL WATER LINES SERVING WATER HEATERS SHALL RUN DOWN FROM CEILING SPACE IN WALL, OFFSET OVER THROUGH WALL 6" BELOW CEILING, ABOVE WATER HEATER, THEN DROP DOWN TO HEATER.
2. AVOID RUNNING WATER VALVES DIRECTLY ABOVE WATER HEATER, TO AVOID DAMAGE TO WATER HEATER CAUSED BY POSSIBLE LEAKS.
3. REFER TO PIPING RISER DIAGRAMS, SHEET P-400 FOR ALL PIPE SIZING NOT SHOWN ON FLOOR PLAN.
4. DO NOT RUN ANY PIPING HORIZONTAL IN WALL SPACE, U.N.O.
5. REFER TO RISER DIAGRAMS, SHEET P-400
6. ALL PEX PIPING TO BE CONTINUOUS FROM MANIFOLD

PANDA HOME 2600 R3