



PANDA EXPRESS, INC.
1683 Walnut Grove Ave.
Rosemead, California
91770
Telephone: 626.799.9898
Facsimile: 626.372.8288

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REVISIONS:

ISSUE DATE:

1st	ISSUE FOR BUILDING PERMIT	08-16-18
2nd	ISSUE FOR BID	11-29-18

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PANDA EXPRESS
US 98 and PORTSIDE DRIVE
3868 GULF BREEZE PARKWAY
GULF BREEZE, FL
2200 TRUE - R1 - DAB 12

P-100
WATER & GAS PLAN

GENERAL PLUMBING NOTES

- FOOD SERVICE EQUIPMENT: REFER TO OTHER PORTIONS OF PLANS AND SPECIFICATIONS FOR FURTHER INFORMATION ABOUT FOOD SERVICE ITEMS FURNISHED AND WORK PERFORMED BY OTHERS. VERIFY ROUGH-IN REQUIREMENTS WITH EQUIPMENT FURNISHERS.
- HEALTH DEPARTMENT: COMPLY WITH LOCAL HEALTH DEPARTMENT (HD) REGULATIONS. WHEREVER POSSIBLE, INSTALL ALL PIPING CONCEALED. CONFORM TO HD REQUIREMENTS FOR LOCATIONS OF FLOOR SINKS.
- WORKMANSHIP SHALL BE FIRST CLASS, ACCEPTABLE TO OWNER.
- 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 ITEMS AS SHOWN, SPECIFIED AND REQUIRED.
- VERIFY LOCATIONS: EXISTING PIPING, POC SHOWN ON DRAWINGS HAS BEEN LOCATED FROM INFORMATION PROVIDED BY OTHERS. VERIFY EXACT LOCATION ON JOB SITE BEFORE START WORKING.
- 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.
- RESTROOM TRAP PRIMERS: SOLEX 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 ELASTOMERIC INSULATION ON PIPE INSTALLED BELOW FLOOR SLAB. SEE DETAIL #9 ON SHEET P-500.
- WATER CONSERVATION: CONTRACTOR SHALL PROVIDE WATER FLOW LIMITING FEATURES ON FIXTURES IF/AS REQUIRED BY LOCAL AUTHORITIES.
- COLD WATER: CONNECT TO DOMESTIC COLD WATER VALVE STUB. EXTEND COLD WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS, TO SERVE FIXTURES AND EQUIPMENT.
- HOT WATER: PROVIDE COMMERCIAL TYPE WATER HEATER, DESIGN PER PLAN. RUN HOT WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS TO SERVE FIXTURES AND EQUIPMENT.
- SANITARY: CONNECT TO SANITARY WASTE LINE.
- BRANCHES: PROVIDE HOT AND/OR COLD WATER PIPES DOWN IN PARTITION TO SERVE VARIOUS EQUIPMENT PER "KITCHEN EQUIPMENT SCHEDULE".
- SODA CONDUIT: PROVIDE 4" CONDUIT BELOW FLOOR FROM SODA STORAGE TO SODA DISPENSER.
- CONDENSATE: PROVIDE 1" INSULATED PRIMARY AND SECONDARY CONDENSATE DRAIN PIPES FROM FAN-COIL UNIT ABOVE CEILING TO NEAREST FLOOR SINK.
- GAS SERVICE: PROVIDE ALL PIPES, VALVES 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 ALL WELDED PIPE, FITTINGS, AND JOINTS IN CEILING SPACE AND IN WALL AS PER LOCAL CODE.
- INDIRECT DRAIN: AN AIR GAP TWICE THE SIZE OF THE DRAIN LINE MUST BE PROVIDED BETWEEN THE DRAIN LINE AND THE SANITARY SEWER.
- LIQUID WASTE FROM ALL EQUIPMENT MUST BE DISCHARGED TO THE SANITARY SEWER.
- FLOOR DRAIN MUST BE PLACED ADJACENT TO EQUIPMENT WHICH DISCHARGES WASTE. FLOOR DRAIN INSTALLATION MUST NOT INTERFERE WITH PROPER FLOOR MAINTENANCE.
- EXPOSED UTILITY LINES ON FLOORS ARE PROHIBITED. UTILITY LINES MUST NOT BE UNNECESSARILY EXPOSED ON WALLS.
- ALL WATER AND GAS CONNECTIONS TO ALL PLUMBING FIXTURES TO BE HARD PIPED. NO FLEX PIPE.
- ALL PIPES 6" A.F.F., NO FLOOR SUPPORTS ALLOWED.
- ALL WATER PIPES IN EXPOSED AREAS OUTSIDE WALLS AND BELOW CEILING MUST BE COPPER UNLESS NOTED OTHERWISE.

PLUMBING SPECIFICATIONS

- 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. FURNISH ALL NEW MATERIALS. WORK SHALL BE PERFORMED BY EXPERIENCED TRADESMEN AND THEIR WORKMANSHIP SHALL BE HIGH STANDARD, ACCEPTABLE TO OWNER.
- 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.
- 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 DIMENSIONS FROM ARCHITECTURAL DRAWINGS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURES, AND TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
- PSE 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.
- COORDINATE: WITH WORK OF OTHERS AND TRADES, WITH INFORMATION FURNISHED BY OTHERS, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE.
- MISCELLANEOUS EXPENSES SUCH AS HOOR-UP CHARGES, PERMITS, INSPECTIONS, AND OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING SYSTEM ARE INCLUDED AS PART OF THIS SECTION.
- PIPING SYSTEMS: GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO PREVENT EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES, AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. 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 NSF-61, NSF-69 AND NSF-68.
- 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 PVC PIPE, CONNECTORS AND FITTINGS ALL PIPING SHALL BE SLOPED UNIFORMLY AT 2% UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS.
- CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT APART.
- CLEANOUTS 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) CLEANOUT SHALL BE REQUIRED FOR EVERY 40 FEET OF DEVELOPED LENGTH.
- 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 MAN.
- 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. LAY OUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE PEX WITH ZURIN PEX PRE-ASSEMBLED MANIFOLDS. USE BLUE COLOR PEX FOR COLD WATER AND RED COLOR PEX FOR HOT WATER. PEX PIPING SHALL BE CONTINUOUS FROM MANIFOLD CONNECTION TO COPPER STUB-OUT AT EACH FIXTURE. PEX PIPING SHALL NOT BE SPLICED WITHIN WALLS. PROVIDE WATER HAMMER ARRESTERS AT RESTROOM AREA & CHINESE WORK AREA PER DRAWING. FLUSH WATER PIPING CLEAR OF DEBRIS AND CLEAN AERATORS AND STRAINERS AT TERMINATION OF INSTALLATION.
- NATURAL GAS PIPING INSIDE AND OUTSIDE THE BUILDING ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL ASTM A-33 PIPE WITH 125 LB WALLEABLE IRON SCREWED FITTINGS WHERE EXPOSED. PRIMER AND PAINT EXTERIOR GAS PIPING TO PREVENT RUST. PROVIDE ALL UNIONS, SHUT OFF VALVES AND DRIP LESS REQUIRED BY NFPA-54 AND GOVERNING 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.
- 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 CI, OC, JM, PPG, OR KNAUF). AT CONTRACTOR'S OPTION, PLENUM-RATED ELASTOMERIC INSULATION (BY ARMSTRONG, RUBATEX OR EQUAL) MAY BE USED.
- PIPE MARKING:
 - IDENTIFY ALL PIPING WITH ANS/ASME A13.1 2007 APPROVED PIPE MARKER SYSTEM USING EZ ARROWS AND ARROW BANDING TAPE IN CONJUNCTION WITH EZ PIPE MARKERS. PRODUCTS AVAILABLE: PPEMARKER.COM. 822-274-6271. INSTALL PER MANUFACTURERS INSTRUCTIONS.
 - IDENTIFY ALL MANIFOLDS AND ALL VALVES ON THE MANIFOLDS FOR CORRESPONDING PIPES.
 - 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 OF BRANCHES. REFER TO ARCHITECTURAL DRAWINGS FOR BRONZE BODY BALL VALVE, WITH TETLON SEALS, PACKING, AND LB WOOD WITH SOLDER. EQUAL TO JENKINS #802-T. GAS VALVES SHALL BE ALL BRASS, LUBRICATED PLUNGER VALVES FOR SCREW END, BY WALWORTH, ROCKWELL, NORDSTROM OR APPROVED EQUAL.
- ACCESS PANELS SHALL BE PROVIDED IN CEILINGS OR WALLS WHERE CONCEALED CONTROL DEVICES ARE LOCATED, EXCEPT WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS PROVIDED THROUGH ROUGH-IN CEILINGS, SUEDEES AND TRAPS. PROVIDE WATER SEALED TRAPS AND SUPPLIES. INSTALLATION SHALL BE POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND EQUIPMENT. PROVIDE OVERFLOW DISCHARGE EQUIPMENT ITEMS FURNISHED BY OTHERS, HAVING A WASTE CONNECTION OR REQUIRE SERVICE. EXPOSED TRAPS AND SUPPLIES IN RESTROOMS (NATURAL GAS CABINET INTERIORS) SHALL BE BRASS PLATED BRASS.
- INSTALLATION: THROUGH CLEAN UP BEFORE INSTALLATION. PROVIDE CLEAN CONDITIONS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED. CLEAN UP CONDITIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION PERMIT, SET FIXTURES IN PLACE AND PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT TO FIXTURES. PER MANUFACTURER'S REQUIREMENTS. INSTALL SILICONE SEALANT BETWEEN FIXTURES ADJACENT MATERIAL, FOR SANITARY JOINTS. PREPARE ANY DAMAGE DONE TO EXISTING FEATURES AND RESTORE TO ORIGINAL CONDITIONS. PROVIDE CLEAN CONDITIONS AT TERMINATION OF WORK.
- TEST: WATER, GAS, VENT, AND WASTE SYSTEMS PER LOCAL CODE REQUIREMENTS. WHEN TESTING INDICATES MATERIAL OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST TILL SUFFICIENTLY ACHIEVED.
- WARRANTY: GUARANTEE 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 SOILS ENGINEER'S RECOMMENDATIONS.

PLUMBING KEY NOTES

- 1" G DOWN TO WATER HEATER W/ SOV (SHUT OFF VALVE).
- 3/4" G DOWN TO RICE COOKER W/ SOV. PROVIDE 6" LENGTH OF RIGID PIPE BETWEEN RICE COOKER AND FLEXIBLE GAS LINE.
- ON SHUT OFF BALL VALVE LOCATED WITHIN WALL AT 24" AFF. REFER TO ARCHITECTURAL DRAWINGS FOR ACCESS PANEL DETAIL.
- 1/2" G DOWN TO DEEP FRYER W/ SOV.
- 1/2" G DOWN TO CHINESE RANGE "20A OR 20B" W/ SOV. LOCATE STUB OUT BEHIND THE END OF RANGE FOR EASY ACCESS.
- 1" G DOWN TO CHINESE RANGE "200" W/ SOV.
- EXHAUST & INTAKE VENTS UP TO ROOF. COORDINATE WITH MECHANICAL DRAWINGS AND DETAIL #10 ON SHEET P-500.
- ROUTE NEW PIPING IN WALL.
- 2" GAS ANSUL VALVE PROVIDED BY OWNER (G.C. CALL CAPTIVEWARE FOR DELIVERY). INSTALL GAS ANSUL VALVE AS CLOSE TO EXTERIOR WALL AS ALLOWED PER LOCAL CODE.
- NOT USED.
- 1" G UP TO ROOF W/ SOV. FOR RTU-1 AND 1-1/4" G UP TO ROOF W/ SOV. FOR RTU-2 AND RTU-3.
- 1/2" CW ON TRAP PRIMER. PROVIDE WALL ACCESS PANEL. RUN 1/2" CW BELOW FLOOR TO FLOOR DRAIN. SEE DETAIL #17 ON PLAN P-500.
- LAY TAILPIECE WITH TRAP PRIMER. RUN 1/2" CW BELOW FLOOR TO FLOOR DRAIN. SEE DETAIL #9 ON PLAN P-500.
- NOT USED.
- SHUT OFF VALVE W/ HANDLE AT 1'-0" ABOVE FINISH FLOOR, EASILY ACCESSIBLE. G.C. TO INSTALL LOCATION INDICATOR STICKER PROVIDED BY PANDA EXPRESS.
- 1/2" GAS UP TO MAKE-UP AIR UNIT FROM ROOF.
- 1/2" HW & CW TO FAUCET (40B) FOR CHEMICAL FEED SYSTEM.
- GAS HEADER - INSTALL TIGHT TO WALL AND TIGHT TO BOTTOM OF TRUSSES.
- COLD WATER MANIFOLD "C" BELOW CEILING. REF ARCH ELEVATIONS.
- COLD WATER MANIFOLD "D" BELOW CEILING. REF ARCH ELEVATIONS.
- NOT USED.
- HOT WATER MANIFOLD "A" BELOW CEILING. REF ARCH ELEVATIONS.
- ORIENTATION OF WATER HEATER CONTROL PANEL TO MATCH IMAGE SHOWN ON PLANS. DO NOT TURN WATER HEATER ON 45 DEGREE ANGLE.

PLUMBING SYMBOLS

---	COLD WATER PIPING
---	HOT WATER PIPING
---	HOT WATER RETURN PIPING
---	GASLINE
G	PLUMBING VENT (V)
---	PLUMBING VENT (V) BELOW SLAB/GRADE
---	SANITARY WASTE (SAN) BELOW SLAB/GRADE
---	GREASE WASTE BELOW SLAB/GRADE
---	PIPE TURNING UP/DOWN
---	GAS COCK
---	F.S. VALVE OF GRADE
---	FOR DRAIN
---	FIXTURE IDENTIFICATION
---	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
○ BV	BALL VALVE
○ CV	CHECK VALVE
●	CIRCULATION PUMP
GS	GREASE WASTE

NOTES:

- 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.
- AVOID RUNNING WATER VALVES DIRECTLY ABOVE WATER HEATER. TO AVOID DAMAGE TO WATER HEATER CAUSED BY POSSIBLE LEAKS.
- REFER TO PIPING RISER DIAGRAMS, SHEET P-400 FOR ALL PIPE SIZING NOT SHOWN ON FLOOR PLAN.
- DO NOT RUN ANY PIPING HORIZONTAL IN WALL SPACE, UN.O.
- REFER TO RISER DIAGRAMS, SHEET P-400
- ALL WATER LINES IN EXTERIOR WALL TO BE INSULATED ON CONDITIONED SIDE OF INSULATION; NO WATER LINES ARE TO BE ROUTED ON "COLD" SIDE (TYP).

