

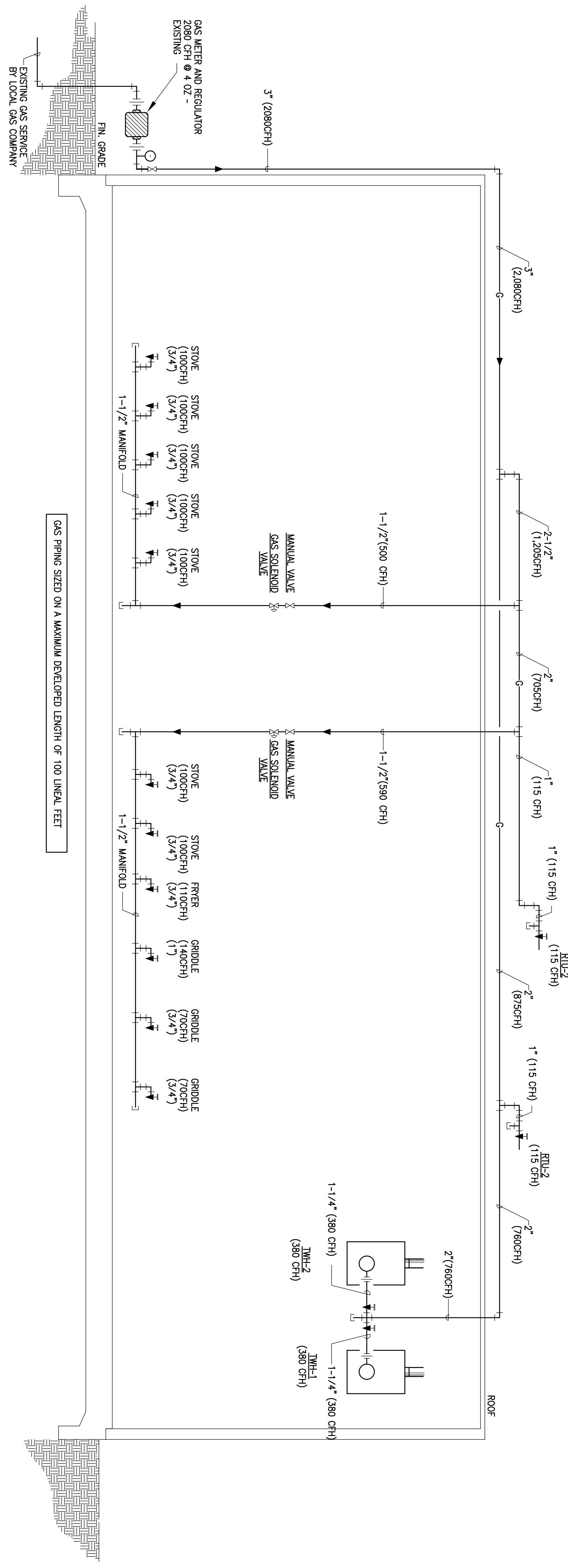
# PLUMBING LEGEND

SYMBOL	DESCRIPTION
—SAN—	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
—SAN—	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
—GW—	GREASE WASTE PIPING (GW)
—GW—	GREASE WASTE PIPING BELOW GRADE (GW)
—GW—	VENT PIPING ABOVE OR BELOW GRADE (V)
—CW—	COLD WATER PIPING (CW)
—HW—	HOT WATER PIPING (HW)
—HWR—	HOT WATER RETURN PIPING (HWR)
—TW—	TEMPERED WATER (TW)
—TP—	TRAP PRIMER LINE (TP)
—GAS—	NATURAL GAS PIPING (G)
—GV—	GAS VENT PIPING (GV)
→	FLOW DIRECTIONAL ARROW
↔	SHUT-OFF VALVE
↔	BALANCING VALVE (BV)
↔	SOLENOID VALVE (SV)
↔	BALL VALVE (BV)
↔	BUTTERFLY VALVE
↔	GAS PLUG VALVE (GPV)
↔	HORIZONTAL SWING CHECK
↔	UNION
↔	Y-STRAINER
↔	REDUCER OR INCREASER
↔	ECCENTRIC REDUCER
↔	REDUCED PRESSURE BACKFLOW PREVENTER (RPB)
↔	PIPING DOWN
↔	RISE OR DROP PIPING
↔	PIPING UP -OR- PIPING UP & DOWN
↔	CAP ON END OF PIPE
↔	CLEANOUT (WALL OR CEILING) (CO)
↔	FLOOR CLEANOUT (FO)
↔	EXTEND CLEANOUT WITH 18" X 18" X 4' CONCRETE PAD (ECO)
↔	18" X 18" X 4' CONCRETE PAD (ECO)
↔	PRESSURE REDUCING VALVE (PRV)
↔	BRANCH CONNECTION OUT OF TOP
↔	BRANCH CONNECTION OUT OF BOTTOM
↔	BRANCH CONNECTION OUT OF SIDE
↔	WYE & 1/8TH BEND BRANCH CONNECTION
↔	WYE BRANCH CONNECTION
↔	HOSE BIBB
↔	PRESSURE GAUGE WITH COCK
↔	THERMOMETER
↔	GAS PRESSURE REGULATOR
↔	TEST COCK
↔	GAS METER
↔	WALL HOBNAUT
↔	VALVE IN RISE
↔	ASME TEMPERATURE & PRESSURE RELIEF VALVE
↔	VACUUM RELIEF VALVE
↔	ANGLE VALVE
↔	REFER TO KEYED NOTE
1	FLOOR SINK (FS)
2	FLOOR DRAIN (FD)
3	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
4	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
5	HUB DRAIN (HD)
6	ACCESS PANEL FOR TRAP PRIMER
7	ACCESS PANEL LOCATION SYMBOL
8	SHOCK ABSORBER WITH ACCESS PANEL
9	AIR CHAMBER
10	EXISTING
11	NEW
12	CONNECT NEW TO EXISTING
13	INVERT ELEVATION
14	QUARTER OF AN INCH SLOPE
15	1/8TH OF AN INCH SLOPE
16	1/4TH OF AN INCH SLOPE
17	DELTA CHANGE SYMBOL
18	RISER FLAG

NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT.

## PLUMBING GENERAL NOTES

- REFER TO CIVIL DRAWINGS FOR CONTINUATION OF DOMESTIC WATER AND SANITARY WASTE UTILITIES.
- REFER TO CIVIL DRAWINGS FOR SIZE AND LOCATION OF DOMESTIC WATER METER ON SITE.
- REFER TO ARCHITECTURAL/CIVIL DRAWINGS FOR BUILDING FINISHED FLOOR ELEVATION.
- FIELD VERIFY EXACT LOCATION, SIZE, DIRECTION OF FLOW CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING SITE DOMESTIC WATER AND SANITARY WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION TO ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
- INVERT ELEVATIONS LISTED ARE APPROXIMATE. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS AND MAKE ADJUSTMENTS TO ENSURE PROPER CONNECTIONS TO SITE UTILITIES.
- PRIOR TO BEGINNING CONSTRUCTION, COORDINATE PLUMBING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL CODE AUTHORITY AND PROVIDE AS DIRECTED.
- CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
- CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
- MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES.
- COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS, SPECIFICATIONS, AND MANUFACTURER RECOMMENDATIONS PRIOR TO ANY ROUGH-INS.
- DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
- CONTRACTOR TO COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
- ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE ACCORDANCE WITH THE LATEST CODES, STANDARDS AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
- UPON COMPLETION OF WORK, THOROUGHLY ROO OUT AND FLUSH ALL SANITARY PIPING TO ENSURE IT IS FREE FROM BLOCKAGES.



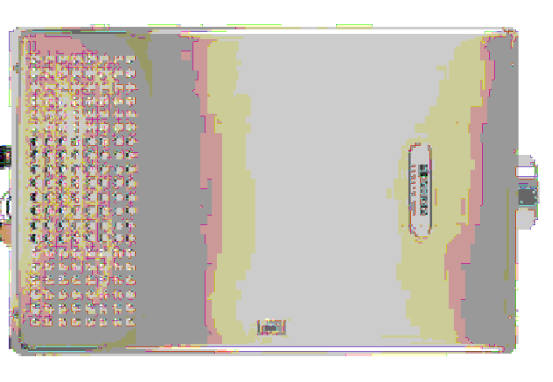
## 1 NATURAL GAS RISER

SCALE: NONE

### NORITZ Model NC380-SV-ASME Commercial Water Heater Specification Sheet

Job Name \_\_\_\_\_  
 Location \_\_\_\_\_  
 Designer/Engineer \_\_\_\_\_  
 Wholesaler \_\_\_\_\_  
 Contractor \_\_\_\_\_  
 Model No. \_\_\_\_\_  
 No. of Units \_\_\_\_\_ Total BTU/hr input \_\_\_\_\_  
 Flow Rate (GPH) \_\_\_\_\_  
 Notes \_\_\_\_\_

- Standard Input - gas consumption ranges from 22,000 BTU/h to 380,000 BTU/h
- Compact design - ANSI Z21.10.3/CSA 4.3 certified design that can be wall-mounted indoors or installed outdoors using optional vent cap
- Durable stainless steel casing
- Heat exchanger - manufactured with commercial grade copper
- Venting - available in standard power vent model that requires a Category 2B vent pipe or 3-in. vent of stainless steel
- Direct Electronic Ignition
- Multi-system capability - units can be listed together by using either the optional 2-vent Quick Connector or multi-vent system controller for up to 24 units.
- Early Modulating - BTU input can range from 22,000 to 1.1 million BTU/h (for 24-vent multi-system)
- Thermal Efficiency - 90% efficient for use with natural gas and less for propane
- Temperature Control - includes remote thermostat that can precisely adjust the output temperature from 100° to 180°
- Safety Features - flame sensor, Overheat Protection Device, lightning protection device, freeze protection
- One Year Limited Parts Warranty for Commercial Use
- ASME Certified - all models are certified by ASME and the National Board
- Approve - CSA IFC, NFPA, ASME, Low NOx approved by SCQMD (www.noritz.com)



Model	NC380-SV-ASME
Accessories	<input type="checkbox"/> Vent Cap (JFC-132)
Accessories	<input type="checkbox"/> Indoor Ventilation Kit (JFC-133)
Accessories	<input type="checkbox"/> Outdoor Ventilation Kit (JFC-134)
Accessories	<input type="checkbox"/> Quick Connector (JFC-135)
Accessories	<input type="checkbox"/> Spacer Controller
Accessories	<input type="checkbox"/> 24-vent JFC-201-1246
Accessories	<input type="checkbox"/> 24-vent JFC-201-2446



ISSUE  
 01/29/12 ISSUED FOR PERMIT  
 02/16/12 ISSUE FOR BID

**HARRELL**  
 ARCHITECTS, LP  
 9272 Katy Fwy., #200  
 Houston, Texas 77024  
 Tel: 713.22.2071  
 Fax: 713.22.2072

Holsie & Associates, Inc.  
 Consulting Engineers - Texas Reg. 15-343  
 6671 Southwest Fwy., Suite 850  
 Houston, Texas 77074 (713) 995-1351  
 www.holsie.com  
 Contact: Raju Srinivasan (832) 943-0686

PROJECT NAME  
**Maharaja Bhog**

PROJECT ADDRESS  
 8338 Southwest Freeway  
 Houston, Texas 77074

PROJECT NUMBER  
 11078  
 SHEET NAME  
**PLUMBING**  
**GAS RISER**  
 SHEET NUMBER

**P3.1**