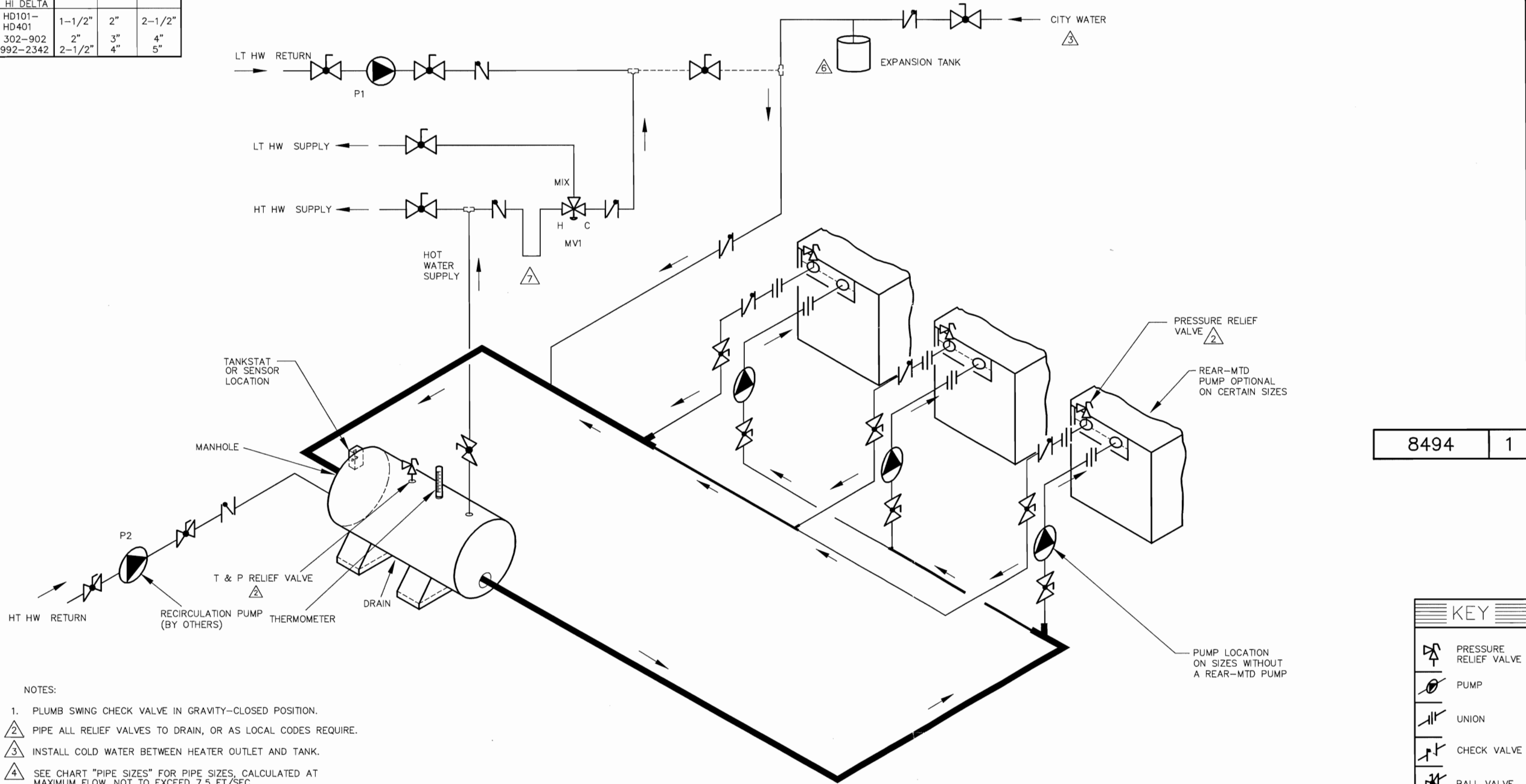


RAYTHERM	PIPE SIZES		
	UNIT	2 UNITS	3 UNITS
133	1-1/4"	1-1/2"	2"
181-401	1-1/2"	2"	2-1/2"
514-824	2"	3"	4"
926-1826	2-1/2"	3"	4"
2100-4001	3"	4"	6"
MVB			
503-754	2"	3"	4"
1003-2004	2-1/2"	4"	5"
HI DELTA			
HD101-HD401	1-1/2"	2"	2-1/2"
302-902	2"	3"	4"
992-2342	2-1/2"	4"	5"

THIS PIPING DIAGRAM IS RAYPAK'S RECOMMENDATION AND IS NOT INTENDED TO REPLACE AN ENGINEERING PIPING SYSTEM DESIGN BY A PROFESSIONAL ENGINEER.

REVISIONS					
REV	ZONE	DESCRIPTION	E.O.	BY	DATE
1		REVISED TITLE, NOTE 4, SYMBOLS, TANK. REMOVED NOTE 8, 122-322 USAGE. ADDED HD101-401, MVB USAGE.		KA	3-27-12



8494 1

- NOTES:
1. PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
 2. PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
 3. INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
 4. SEE CHART "PIPE SIZES" FOR PIPE SIZES, CALCULATED AT MAXIMUM FLOW, NOT TO EXCEED 7.5 FT/SEC.
 5. STANDARD PUMP SIZING BASED ON 75 EQUIVALENT FEET OF PIPING. IF DISTANCE IS GREATER, THE PUMP MUST BE SIZED TO ACCOMMODATE INCREASE IN PIPING-RELATED LOSSES.
 6. PROVIDE FOR THERMAL EXPANSION OF HOT WATER IF A BACKFLOW PREVENTER, CHECK VALVE, WATER METER OR PRESSURE-REDUCING VALVE IS INSTALLED IN THE COLD WATER LINE.
 7. 24-INCH HEAT SINK "U" REQUIRED PER RECOMMENDATIONS OF MANUFACTURER OF 3-WAY MIXING VALVE OR SOME OTHER TEMPERATURE SAFETY DEVICE.
 8. A TWO-FOOT MINIMUM CLEARANCE SHOULD BE USED FOR THE SPACING BETWEEN ADJACENT RAYTHERM AND HI DELTA HEATERS FOR MAINTENANCE.
 9. IF HOT WATER SETPOINT EXCEEDS 150°F WITH MAX FLOW, SPECIFY "H" BOILERS INSTEAD OF "WH" WATER HEATERS.

GUARANTEED 60% DRAW WITHOUT TEMPERATURE DROP, USE RAYPAK HEATER, TANK, SIZING TABLE AND HOOK-UP DATA

<small>UNLESS OTHERWISE SPECIFIED: ALL UNITS ARE IN INCHES FRACTIONS ±1/32 ANGLES ±1° X.XX = ±.12 X.XX = ±.06 X.XXX = ±.03 X.XXX = ±.010 DRAFT WALL RADI CONCENTRICITIES .020 DIA. SQUARENESS .015 IN./IN. BREAK EDGES .015 MAX. SURFACE FINISH PER ASME Y14.36M-1996</small>	<small>APPROVED</small> <small>CHECKED</small> D BALDWIN	<small>DATE</small> 4/1/14 <small>DATE</small> 2-18-05	 <small>OXNARD, CALIFORNIA</small>
	<small>DRAWN</small> E ALVARADO	<small>DATE</small> 2-15-05	
<small>THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC.</small>			
PIPING, UNI-TEMP 60: 3 HEATERS, 1 H TANK, 2 TEMP			
<small>MAT'L.</small>	<small>SERIES/MODEL</small> WH	<small>DWG. NO.</small> 8494	<small>REV</small> 1

KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

ACAD: 8494.DWG
HEATERS SHOWN REPRESENT VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.