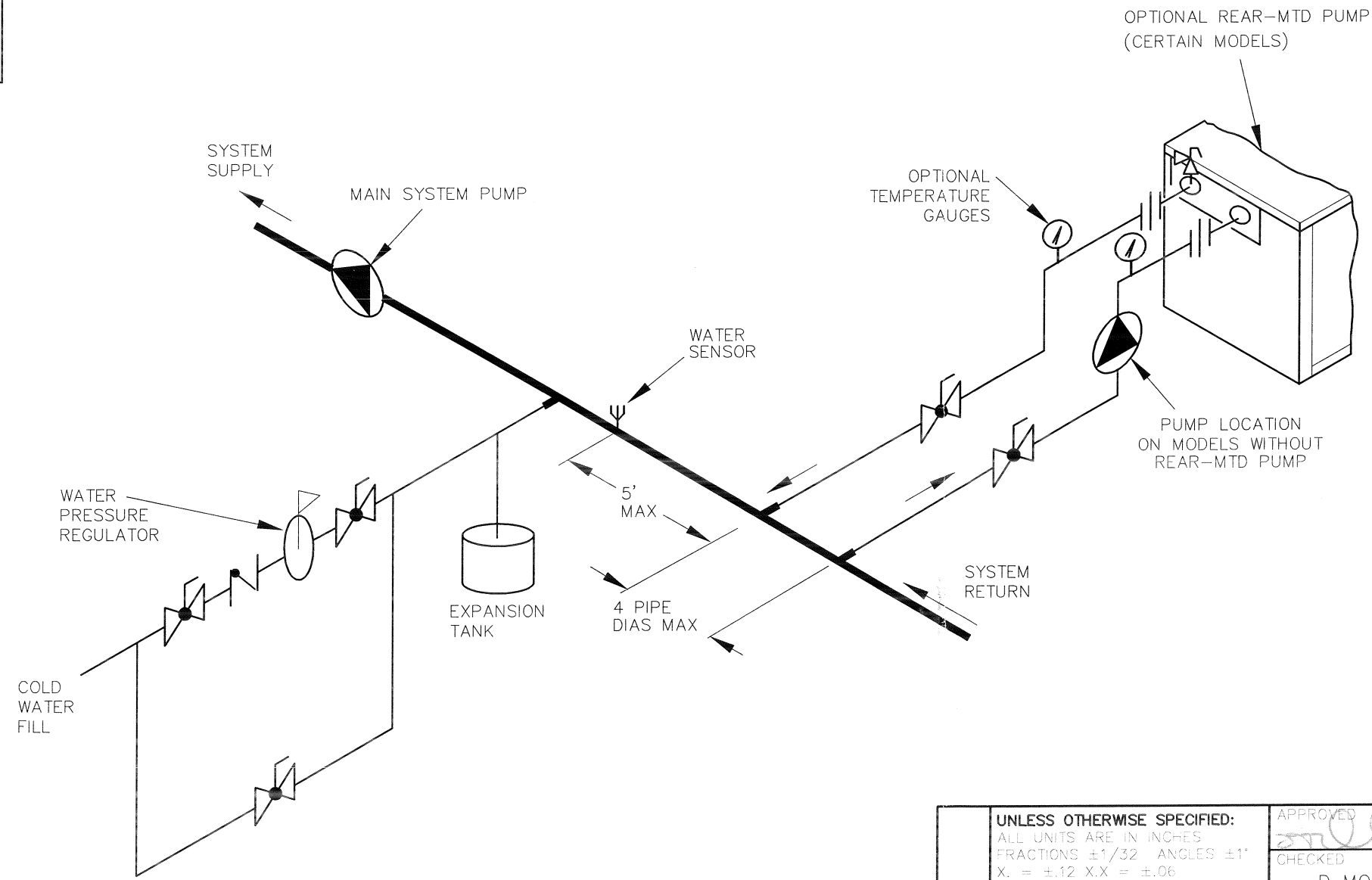


| PIPE SIZES  |        |
|-------------|--------|
|             | BOILER |
| RAYTHERM    |        |
| 133         | 1-1/4" |
| 181-401     | 1-1/2" |
| 514-824     | 2"     |
| 926-1826    | 2-1/2" |
| 2100-4001   | 3"     |
| MVB         |        |
| 503-754     | 2"     |
| 1003-2004   | 2-1/2" |
|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

3

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

| REVISIONS |  |      |     |         |
|-----------|--|------|-----|---------|
| REV       | DESCRIPTION  | E.O. | BY  | DATE    |
| 2         | UPDATE FORMAT AND MODEL NUMBERS. BALL VALVE WAS GATE VALVE. REVISED LOGIC.                               |      | EA  | 3-17-04 |
| 3         | REVISED PUMP CALLOUTS & ADDED CHECK VALVE  |      | RDN | 3-17-04 |
| 4         | ADDED NOTE 3, OUTLET PUMP. REVISED PUMP NOTES. RELOCATED EXPANSION TANK.                                 |      | JMB | 3-17-07 |
| 5         | UPDATED FORMAT, TITLE, REMOVED NOTE 3. REMOVED ADB, ADDED MVB IN PIPE SIZE/ USAGE TABLE. ADDED ENG NOTE. |      | KA  | 1-28-11 |



- NOTES:
- PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
  - PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
  - SEE TABLE FOR PIPE SIZES, CALCULATED AT MAXIMUM FLOW IF LOWER FLOW RATES THAT ARE ACCEPTABLE FOR THE UNIT ARE USED, SMALLER PIPE SIZES MAY BE USED.

ACAD: 8087.DWG  
 BOILER SHOWN REPRESENTS VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC BOILER TYPE FOR DETAILS.

|                                     |   |                                |                           |  |
|-------------------------------------|---|--------------------------------|---------------------------|--|
| 8087                                | UNLESS OTHERWISE SPECIFIED:<br>ALL UNITS ARE IN INCHES<br>FRACTIONS ±1/32 ANGLES ±1°<br>X. = ±.12 X.X = ±.06<br>X.XX = ±.03 X.XXX = ±.010<br>DRAFT ___ WALL ___ RADII ___<br>CONCENTRICITIES .020 DIA.<br>SQUARENESS .015 IN./IN.<br>BREAK EDGES .015 MAX.<br>SURFACE FINISH PER<br>ASME Y14.36M-1996 | APPROVED<br><i>[Signature]</i> | DATE<br>3-7-11            | OXNARD, CALIFORNIA   |
|                                     | CHECKED<br>D MOTTA  | DATE<br>12-6-96                | E.O.<br>SCALE<br>SPR NONE |  |
|                                     | DRAWN<br>D BALDWIN  | DATE<br>12-6-96                | SIZE<br>B                 | THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC. |
| TITLE<br>PIPING, HYDRONIC: 1 BOILER |   |                                |                           |  |
| MATL.<br>5                          | SERIES/MODEL<br>H   | DWG. NO.<br>8087               | REV<br>5                  |  |