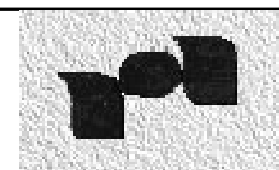
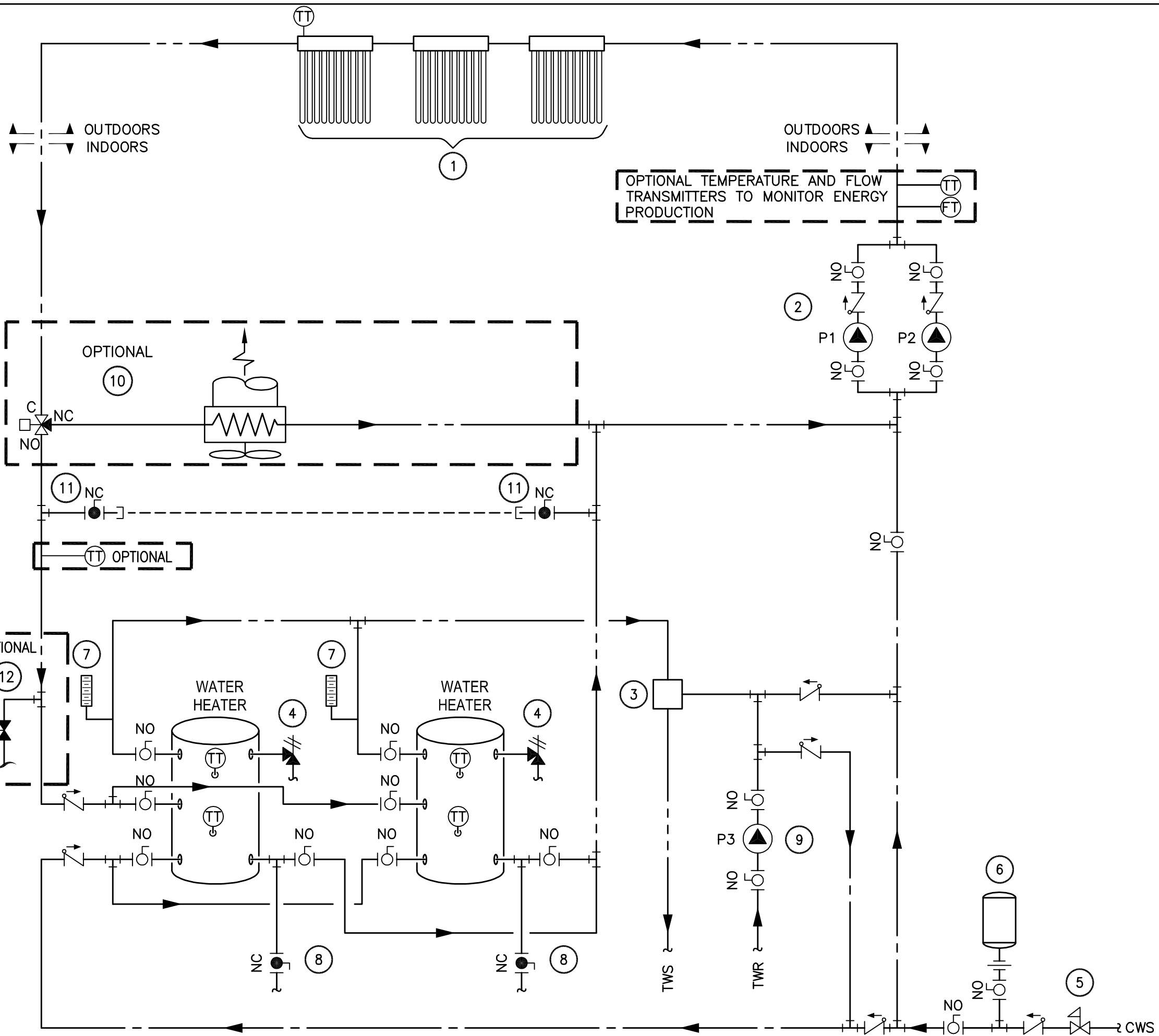


GENERAL NOTE :

1. ADD ISOLATION VALVES AND UNIONS AS NEEDED.

KEYED NOTES :

- 1 INSTALL KINGSPAN, HP-450 SOLAR COLLECTORS IN SERIES UP TO 6 UNITS. FOR MULTIPLE ROW SYSTEMS REFER TO SOLAR ARRAY FLOW DIAGRAM, DHW-10.
- 2 SOLAR CONTROL AND PUMP STATION. CONNECT TO ALL RTD's (TT) AND OPTIONAL HEAT DISSIPATER (11).
- 3 MIXING VALVE (SEE MIXING VALVE DETAIL DHW-0)
- 4 ROUTE T&P RELIEF VALVE (PRESSURE RELIEF ONLY FOR SOLAR STORAGE TANKS) DISCHARGE, FULL SIZE, TO FLOOR DRAIN.
- 5 PRESSURE REDUCING VALVE - INSTALL ONLY IF WATER SUPPLY PRESSURE EXCEEDS 75% OF WATER HEATING SYSTEM DESIGN PRESSURE.
- 6 ASME THERMAL EXPANSION TANK - SIZE ACCORDING TO MANUFACTURER'S RECOMMENDATION.
- 7 COMBINATION TEMPERATURE AND PRESSURE GAUGE. INSTALL WITHIN 12" OF HOT WATER OUTLET.
- 8 PROVIDE FULL-PORT DRAIN VALVE AND ROUTE TO FLOOR DRAIN.
- 9 RECIRCULATION PUMP. PROVIDE AQUASTAT ONLY IF REQUIRED BY CODE WITH LETTER TO OWNER REQUIRING RELEASE OF LIABILITY (NON-MOVING WATER PROMOTES LEGIONELLA).
- 10 FAN COIL UNIT, SIZED TO DISCHARGE AT LEAST 5,000 BTUH PER COLLECTOR. 3 PORT VALVE TO DIVERT COLLECTOR RETURN AWAY FROM STORAGE TANKS TO DISSIPATER AND ACTIVATE HEAT DISSIPATOR FAN WHEN COLLECTOR REACHES 230 DEG F. DUCT DISCHARGE THROUGH NEAREST OUTSIDE WALL.
- 11 PROVIDE 3/4" SHUTOFF VALVES FOR FUTURE ACCESS POINTS, ACCESSIBLE WITHIN SAME AREA.
- 12 INSTALL BATTERY OPERATED FREEZE PROTECTION VALVE, 3/4", STAINLESS VALVE BODY, WITH ACTUATOR TO OPEN TO FLOOR DRAIN WHEN COLLECTOR TEMPERATURE SENSOR DETECTS ABOUT 38 DEG. F AND SOLAR PUMP IS NOT ACTIVATED.



RAND ASSOCIATES INCORPORATED
 Domestic Hot Water Flow Diagram
 Dual Water Heater
 Dual Water Heaters are Solar Storage

PIPING DIAGRAM

Size: B	FSCM No: -	Drawing No: DHW-2	Version: 16
Drawn By: BLW	Scale: NONE	Date: 09.16.2012	Sheet: 1 of 1

03/28/13-14:40 PATH: DHW-02v16