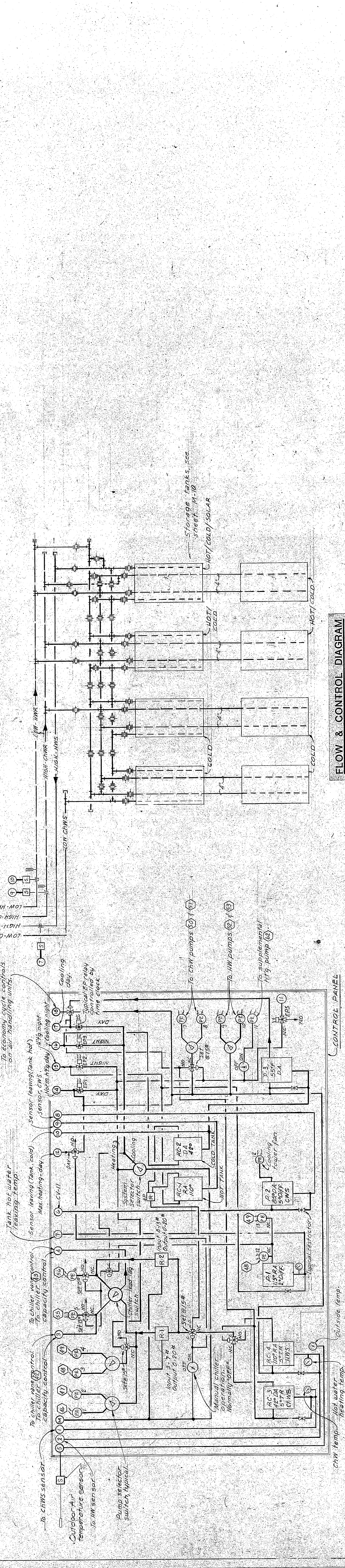
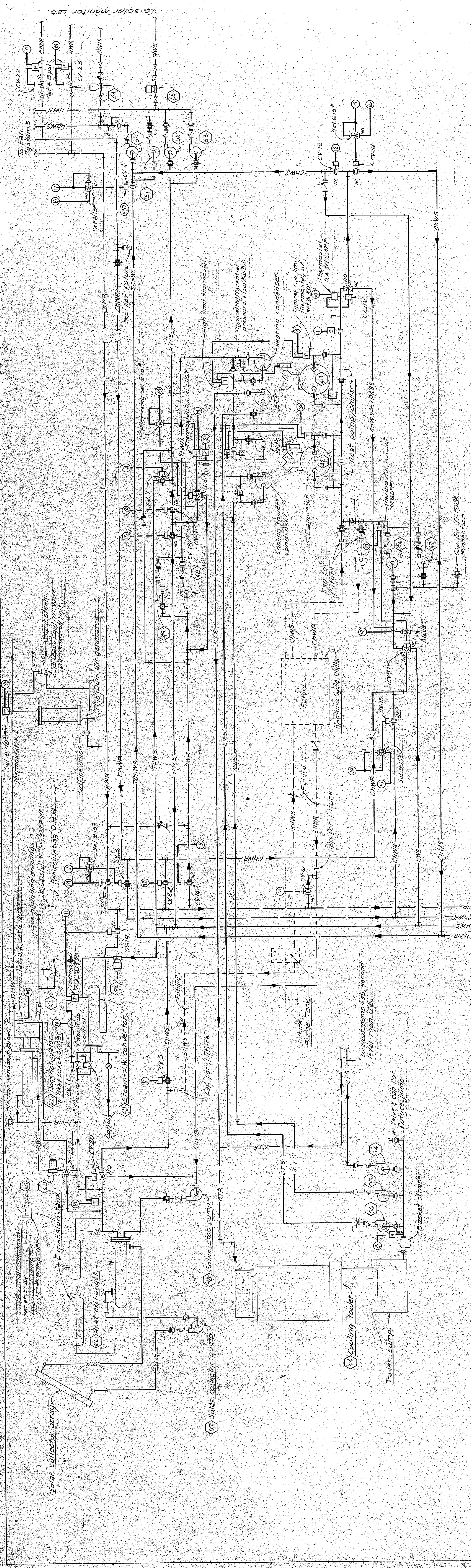




CONTROL PANEL

SCALE NONE

CONTROL AND OPERATIONAL SEQUENCE

The main tank valves are positioned to utilize a different number of units for heating and cooling for different periods of the day. In the heat mode 80% or four tanks would be used to store hot water and 20% or one tank would be used for cold water. The tank compartment isolating valves would be positioned to provide series flow through the heating tanks and series flow through the cooling tanks. As temperatures become milder and larger amount of cooling is required, a few tanks would be used for heating and the remaining tanks would be used for cooling. The cooling tower pumps are started by the cooling tower and rejected to the cooling tower; the cooling tower pumps are started by the cooling tower and rejected to the cooling tower; the cooling tower pumps are started by the cooling tower and rejected to the cooling tower.

COOLING - NIGHT - TIME MODE

Electric pneumatic switch shall direct control air to Pneumatic Line No. 16 which shall position Valve CV-15 and CV-16. Both chillers will be allowed to operate under the control of RC-2 to provide 42° water in all cold storage tanks. Heat is rejected to the cooling tower; the cooling tower pumps are started by the cooling tower and rejected to the cooling tower; the cooling tower pumps are started by the cooling tower and rejected to the cooling tower.

Heating - Daytime Mode (Continued)

With hot tank water by mixing Valve CV-11 to provide an entering chilled water temperature of 60° to the heat pump chiller. A relay will prevent chiller from starting until entering chilled water is within the 60° control range 106° water entering evaporator would cause chiller to shut down on high pressure safety).

Submersible heating from Steam Converter 69 is operated manually from selector switch which energizes EP switch, EP-5.

HEATING - NIGHT-TIME MODE

The time clock will open EF relay to Pneumatic Air Line No. 15 which operates Valves CV-13, CV-14, CV-15, and CV-16. Warm "Heat" position, the refrigeration capacity is controlled to maintain 110° supply hot water to the building. In the "Cool" position or cooling cycle, the refrigeration capacity is controlled to maintain 42° chilled water supply to the building during daytime operation. The selector switch will be positioned to coincide with the manual positioning of the tank valves.

The control system is designed to operate the system with no chillers on during night-time hours to minimize the electrical demand and to utilize both chillers during night-time hours to store both hot water and cold water.

When the time clock is set to "Heat" position, the associated air handling unit is restarted over-riding time clock control and supplemental Heating Pump 02 and Hot Water Pump 52 or 53 are also started.

HEATING - DAYTIME MODE

[illegible]

relays. For this position, the hot tank storage is the heat source to the heat pump for heating the building. Chilled water mixes