COOLING TOWER & CHILLER COMPONENT DETAIL

SCALE: NONE

NOTES FOR DESIGNER:

1. WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM MECHANICAL POC.

2. REFER TO THE FOLLOWING MECHANICAL STANDARDS FOR ADDITIONAL REQUIREMENTS
A. ENGINEERING MANUAL, MECHANICAL, CHAPTER 1
B. MECHANICAL DRAWING ST-D2020-2, PUMP PIPING DETAILS
C. MASTER SPECIFICATION 23 01 65, WATER DISCHARGE REQUIREMENTS
D. MASTER SPECIFICATION 23 01 12, HYDRONIC PIPING
E. MASTER SPECIFICATION 23 02 22, HVAC WATER TREATMENT
F. MASTER SPECIFICATION 23 02 25, INDUCED DRAFT COOLING TOWERS, STEEL
G. MASTER SPECIFICATION 23 02 37, INDUCED DRAFT COOLING TOWERS, FIBERGLASS

3. WHEN TOWER IS USED DURING WINTER SEASON WITH A REFRIGERANT CHILLER, PROVIDE A DIVERTING VALVE TO MAINTAIN TOWER WATER SUPPLY TEMPERATURE AT CHILLER CONDENSER, NO LOWER THAN 60°F. LOCATE DIVERTING VALVE IN EQUIPMENT ROOM.

4. SELECT TYPE OF WATER LEVEL ALARM (AUDIBLE, LIGHT, ETC.) AS DETERMINED BY SITE REQUIREMENTS.

5. SIZE COOLING TOWER DRAIN AND OVERFLOW PIPING AS REQUIRED. MINIMUM SIZE TO MATCH COOLING TOWER CONNECTIONS.

6. ANALYZE SYSTEM (PIPES WATER LEVELS, DIVERTING VALVE OPERATION, ETC.) AND HEAT TAPE AND INSULATE TOWER PIPING AS REQUIRED TO PREVENT FREEZING.

7. DUAL PARALLEL STRAINERS OR BYPASS LINE MAY BE REQUIRED IN SYSTEMS TO AVOID SHUTTING DOWN THE CHILLED WATER SERVICE DURING MAINTENANCE ACTIVITIES.

FIELD WIRING TO ALARM [SEE NOTE 4]

LEVEL, CONTROL (FURNISHED WITH TOWER) [SEE NOTE 2]

1/2" DRAIN VALVE [SEE NOTE 3]

1/2" DRAIN VALVE [SEE NOTE 2]

COOLING TOWER DRAIN & CHILLER LOW TO SANITARY DRAIN

DIVERTING VALVE [SEE NOTE 3]

TOWER DRAIN & CHILLER LOW TO SANITARY DRAIN

DIVERTING VALVE [SEE NOTE 2]

TOWER DRAIN & CHILLER LOW TO SANITARY DRAIN

DIVERTING VALVE [SEE NOTE 2]

TOWER DRAIN & CHILLER LOW TO SANITARY DRAIN

DIVERTING VALVE [SEE NOTE 2]

STRAINER [SEE NOTE 7]

LOCK SHIELD GATE VALVE (TYPE EXPANSION TANK)

CONDENSER

CHILLED WATER PUMP/ACC. [SEE NOTE 2]

DIAPHRAGM TYPE EXPANSION TANK

ASME RELIEF VALVE (TYPE)

AIR SEPARATOR W/AUTO/MANUAL AIR VENT

CHEMICAL POT FEEDER

2" FLUSHING VALVE (TYPE)

TOWER DRAIN & CHILLER LOW TO SANITARY DRAIN