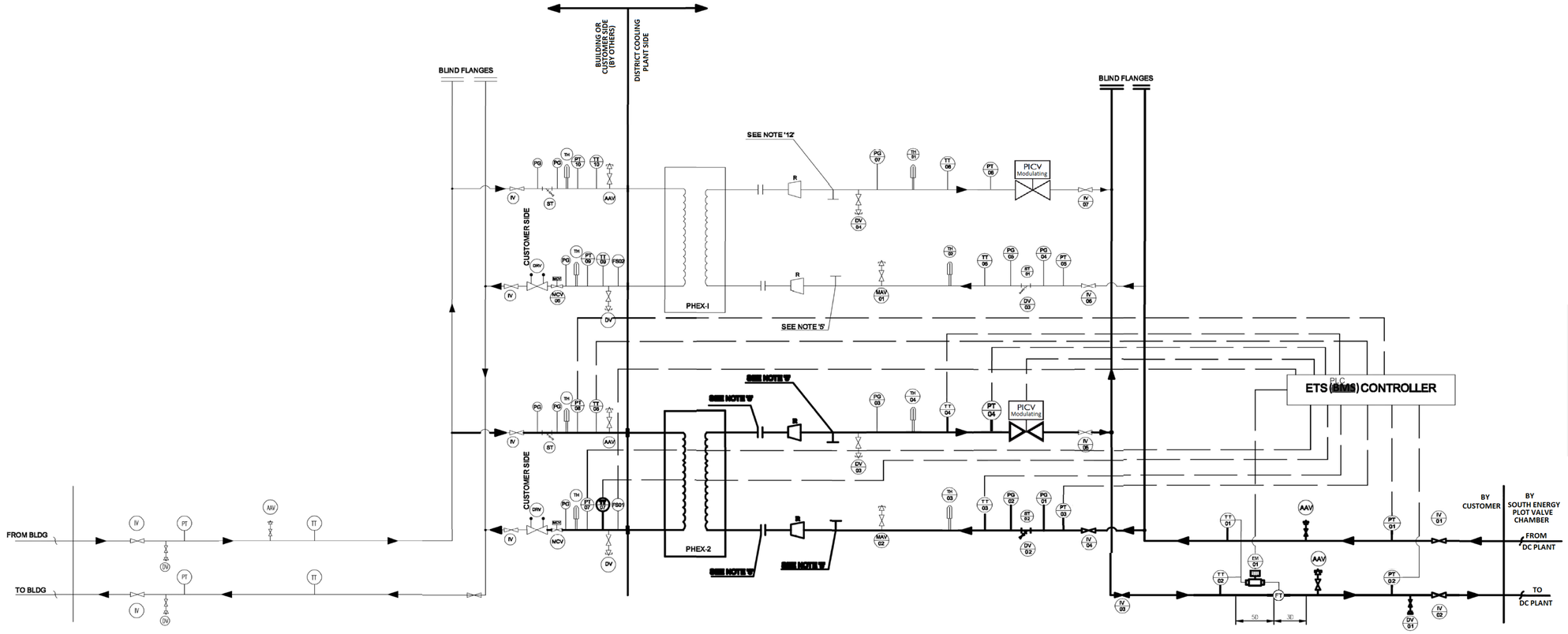

ETS P&ID CONTROL DIAGRAM

LEGEND:-

PHE	PLATE HEAT EXCHANGER
DRV	DOUBLE REGULATING VALVE
PT	PRESSURE INDICATING TRANSMITTER
TT	TEMPRATURE TRANSMITTER
PG	PRESSURE GAUGE
TH	THERMO METER
AAV	AUTOMATIC AIR VENT
MAV	MANUAL AIR VENT
DV	DRAIN VALVE
MCV	MOTORIZED CONTROL VALVE
ST	STRAINER
IV	ISOLATION VALVE
EM	ENERGY METER
FT	FLOW TRANSMMITTER
R	REDUCER
FS	FLOW SWITCH
CHW	CHILLED WATER
PICV	PRESSURE INDEPENDENT CONTROL VALVE

NOTES:-

1. FLOW METER IS INTENDED TO BE USED IN AN ENERGY METER STATIONS. THE FLOWMETER TO BE INSTALLED IN A STRAIGHT PIPE LENGTH OF 8D (UPSTREAM 5D & DOWNSTREAM 3D) WITH OUT ANY FITTINGS OR INSTRUMENTATION (LIKE PRESSURE GUAGE,THERMOMETER,TRANSMITTERS).
2. REDUCER TO BE INSTALLED DIRECTLY AT THE PHEX INLET & OUTLET
3. PHEX ARRANGEMENT SHALL BE FOR 100 % OF THE COOLING LOAD
4. LOW POINT DRAINS & HIGH POINT VENTS TO BE PROVIDED
5. CUSTOMER MUST MAINTAIN 16^0F TEMPERATURE DIFFERENCE AT ALL LOADS ACROSS HEAT EXCHANGER. NO BY PASS PIPING WILL BE ACCEPTED.
6. PIPE SIZE SHALL BE BASED ON 10 FT/S MAXIMUM VELOCITY
7. HEAT EXCHANGER SIZES LISTEDI N SCHEDULE ARE GENEFIC.
8. SELECT HEAT EXCHANGERS FOR SPECIFIC BUILDING LOAD
9. FOLLOW THE INSTALLATION,O&M INSTRUCTIONS FROM MANUFACTURER FOR PHEX,ENERGYMETER/FLOWMETER & CONTROL VALVES.
10. FLOW SHOWN IN TABLE IS GENETIC INFORMATION BUT ACTUAL FLOW TO BE DESIGNED TO MEET ETS DELTA TEMP PHEX FLOW.
11. SECONDARY SIDE ETS CONTROL WILL BE PART OF BLDG BMS.
12. EMERGENCY QUICK CONNECTION FOR PIPING TESTING & COMMISIONING.
13. ETS BMS TO BE WITH OPEN PROTOCOL,FOR COMMUNICATION WITH CENTRALIZED CONTROL SYSTEM - BACnet/IP PROTOCOL
14. THE PHEX PRIMARY/HOT SIDE & SECONDARY/COLD SIDE PIPING CONNECTION TO BE COUNTER FLOW AS PER MANUFACTURES REQUIREMENTS

OWNER:-

SOUTH ENERGY

DRAWING TITLE:-

DETAIL OF ETS ROOM

CONTROLS SCHEMATIC (P&ID)

DRAWN BY	MSF
PREPARED AND CHECKED BY	RS/SS
APPROVED BY	RS
DRAWING NO:	SCALE:NTS
	REV:1
	DATE :