LIGHTING

1. DDC SYSTEM SHALL TURN LIGHTS ON/OFF BASED ON THE ZONING FLOOR PLANS, SEE SHEET M6.4A AND M6.4B. LIGHTS SHALL BE ENABLED AND DISABLED BASE ON A TIME SCHEDULE DESIGNATED BY THE OWNER. DURING UNOCCUPIED HOURS LIGHTS CAN BE OVERRIDDEN BY THE MOMENTARY LIGHT SWITCH. ALL LIGHTS SHALL BE TURNED OFF BY THE DDC SYSTEM EVERY 2 HOURS DURING THE UNOCCUPIED MODE.

2. THE LIGHT ON THE EXTERIOR ZONE SHALL BE TURNED OFF BASED INPUT FROM THE PHOTO CELL. LIGHTS SHALL BE ZONED PER THE ELECTRICAL DRAWINGS.

ENERGY CONSUMPTION

1. DDC SYSTEM SHALL MONITOR AND CALCULATE ELECTRICAL ENERGY USEAGE FOR EACH OF THE THREE MAIN HVAC SYSTEMS; GROUND LOOP HEAT PUMP SYSTEM SERVING THE SECOND FLOOR, THE VARIABLE REFRIGERANT VOLUME SYSTEM (DIAKIN) SERVING THE FIRST FLOOR AND THE OUTSIDE AIR HEAT RECOVERY SYSTEM. DDC SHALL CALCULATE ENERGY USE FOR THE DOAS SYSTEM A AS WHOLE. DDC SYSTEM SHALL PROPORTION ENERGY USE TO EACH OF THE SYSTEMS SERVING FIRST FLOOR AND SECOND FLOOR BASED ON AIRFLOWS SUMMARIZED FROM THE VAV'S SUPPLYING OUTSIDE AIRFLOW TO THE HEAT PUMPS OR DX FAN COILS.

2. DDC SYSTEM SHALL MONITOR AND CALCULATE ELECTRICAL ENERGY USE AGE FOR EACH FLOOR OF THE BUILDING.

3. DDC SYSTEM SHALL MONITOR AND CALCULATE ELECTRICAL ENERGY USEAGE FOR THE DOMESTIC WATER SYSTEM INCLUDING THE WATER HEATER AND CIRCULATING PUMP.

4. DDC SYSTEM SHALL MONITOR AND CALCULATE TOTAL BUILDING ELECTRICAL ENERGY USEAGE.

WEATHER STATION

THE ON-SITE WEATHER STATION SHALL HAVE A SERIAL INTERFACE TO THE DDC SYSTEM. ALL POINTS LISTED SHALL BE MONITORED WITH LOG TRENDING AND ALL POINTS HALL BE STORED ONCE AT THE TOP OF THE HOUR FOR A ONE YEAR TIME PERIOD.

PDK WEATHER STATION

THE DDC SYSTEM SHALL MONITOR AND TREND POINTS LISTED VIA THE INTERNET.

EMERGENCY STOP SWITCH

PROVIDE WALL MOUNTED EMERGENCY STOP SWITCH, LOCATED AS SHOWN ON THE PLANS, TO SHUT DOWN ALL AIR MOVING EQUIPMENT (ALL AHU'S, FAN COILS, EXHAUST FANS, ETC.) UPON ACTIVATION.

FIRE ALARM SYSTEM

PROVIDE FIRE ALARM INTERLOCK WITH THE FIRE ALARM SYSTEM TO SHUT DOWN ALL AIR HANDLING UNITS UPON ACTIVATION.

OUTDOOR AIR CONDITIONS

DDC SYSTEM SHALL MONITOR OUTDOOR TEMPERATURE, PRESSURE, CO2 LEVELS AND RELATIVE HUMIDITY INDEPENDENT OF THE WEATHER STATION.

INPUT/ OUTPUT SUMMARY

	OUTPUTS						INPUTS														SOFTWARE						NOTES
	DIGITAL				ANALOG		DIGITAL				ANALOG										ALARM			ENERGY MANAGEMENT			
	START/STOP	OPEN/CLOSE	ENABLE/DISABLE	OCCUPIED/UNOCCUPIED	DDC MODULATION	SETPOINT ADJUST	DIFF. PRESS. SWITCH	CURRENT SWITCH	ON/OFF	OPEN/CLOSE CONTACT	MANUAL OVERRIDE	AIRFLOW (CFM)	STATIC PRESSURE	GPM	%SPEED/HZ/CURRENT	TEMPERATURE	HUMIDITY/DEWPOINT	POWER (AMPS/KW/KWH)	CO2 LEVEL (PPM)	DIFFERENTIAL PRESSURE	KWH/AMPS	EQUIPMENT FAILURE	HI/LO LIMIT	TEMPERATURE	TIME SCHEDULE	RUN TIME	OVERRIDE PROGRAM	DAY/NIGHT SETBACK	
LIGHTING																·											
OCCUPANCY SENSOR										X																	
PHOTOCELL										X																	
FULL LIGHTING			X																								
PARTIAL LIGHTING			X																								
DOMECTIC WATER HEATER			X																								
DOMECTIC WATER CIRC. PUMP	X																										
ELECTRICAL																											
HEAT PUMP SYSTEM KWH																		X									
VRV SYSTEM KWH																		X									
ODAS SYSTEM KWH																		X									
FIRST FLOOR LIGHTING KWH																		X									
SECOND FLOOR LIGHTING KWH																		X									
DOMESTIC WATER HEATER & PUMP																		X									
TOTAL BUILDING ENERGY																		X									
FIRST FLOOR PLUG LOADS																		X									
SECOND FLOOR PLUG LOADS																		X									
WEATHER STATION																											①
WIND DIRECTION																											AS REPORTED
WIND SPEED																											AS REPORTED
OUTDOOR TEMPERATURE																X											AS REPORTED
DEW POINT																	X										AS REPORTED
RELATIVE HUMIDITY																	X										AS REPORTED
BAROMETRIC PRESSURE													X														AS REPORTED
SOLAR RADIATION																											AS REPORTED
UV RADIATION																											AS REPORTED
BACKGROUND LUMINANCE																											AS REPORTED
PDK WEATHER STATION INFORMATION																											②
WIND DIRECTION AND SPEED																											AS REPORTED
VISIBILITY																											AS REPORTED
SKY CONDITIONS																											AS REPORTED
WEATHER																											AS REPORTED
TEMPERATURE																X											AS REPORTED
DEW POINT																	X										AS REPORTED
RELATIVE HUMIDITY																	X										AS REPORTED
PRESURE													X														AS REPORTED
MAX AND MIN TELPERATURES																											PAST 6 HOURS
MAX AND MIN TEMPERATURES																											PAST 24 HOURS
24 HOUR SUMMARY																											PAST 24 HOURS
																											③
EMERGENCY STOP SWITCH										X																	
FIRE ALARM										X																	
OUTSIDE AIR TEMPERATURE																X											
OUTSIDE AIR PRESSURE													X														
OUTSIDE AIR CO2																			X								
OUTSIDE AIR HUMIDITY																	X										

① WEATHER STATION PROVIDE BY CONTRACTOR AND INSTALLED AS SHOWN ON THE PLANS
② PEACHTREE DEKALB AIRPORT WEATHER STATION DATA GATHERED THROUGH AN INTERNET INTERFACE AND REPORTED THROUGH THE DDC SYSTEM
③ 24 HOUR SUMMARY INCLUDES TIME, TEMPERATURE, DEW POINT, PRESSURE, WIND (DIRECTION AND MPH), AND WEATHER

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ASHRAE HEADQUARTERS
ADDITION AND RENOVATION

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