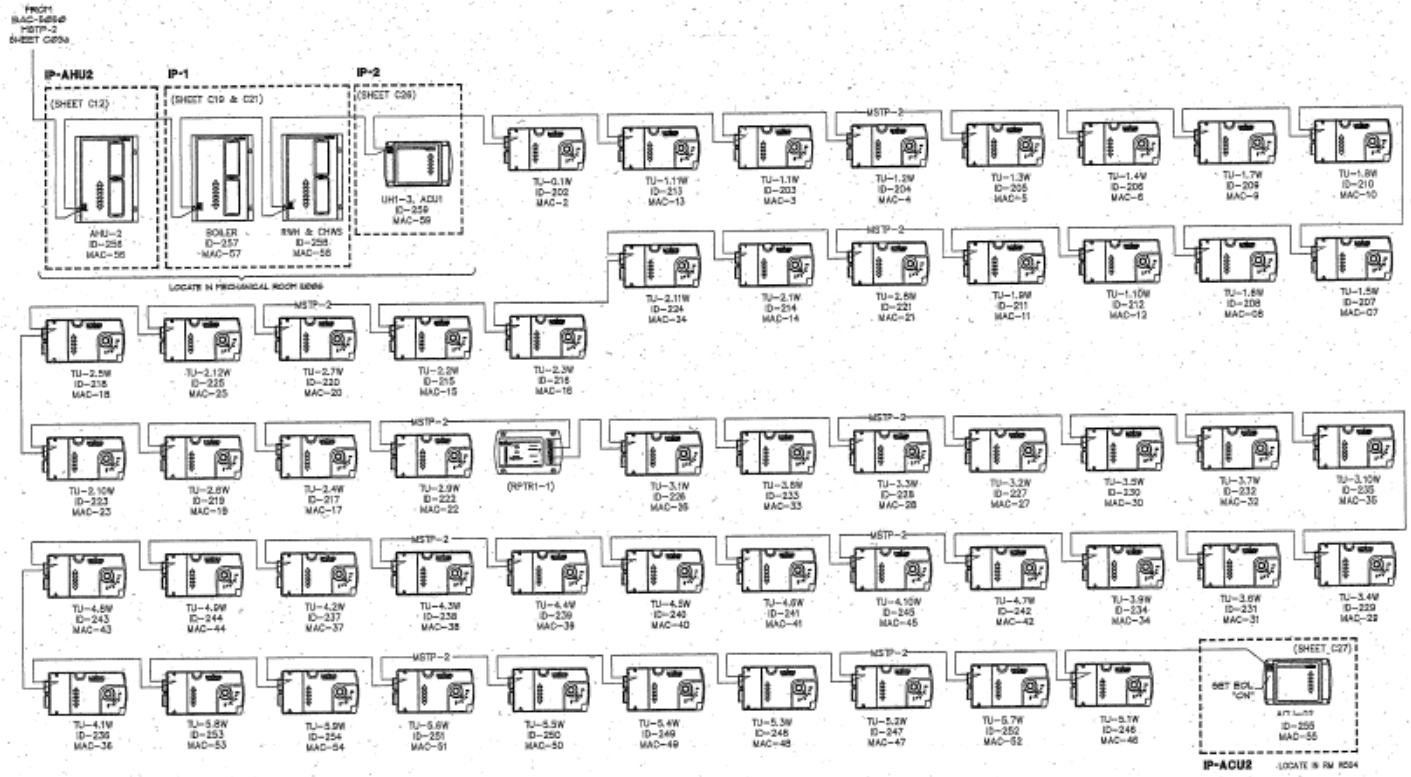
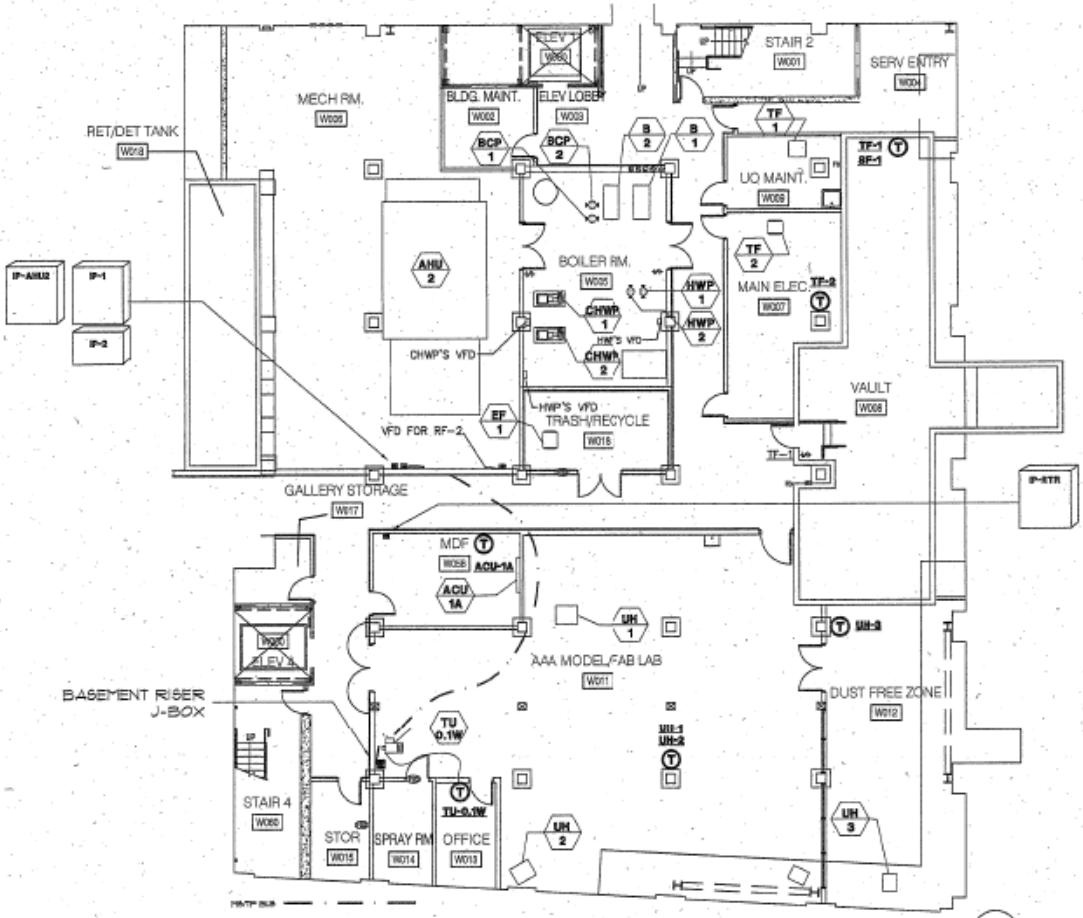
BILL OF MATERIAL					
TAG	PART NUMBER	MANUFACTURER	DESCRIPTION	TOTAL	[illegible]
AAC1	BAC-[illegible]	KMC	[illegible] ADVANCED APPLICATION CONTROLLER	5	[illegible]
AAC2	BAC-[illegible]	KMC	[illegible] ADVANCED APPLICATION CONTROLLER	[illegible]	[illegible]
AAC3	BAC-[illegible]	KMC	[illegible] ADVANCED APPLICATION CONTROLLER	[illegible]	[illegible]
[illegible]	HPO-[illegible]	KMC	[illegible] RELAY OUTPUT CARD	14	[illegible]
[illegible]	HPO-[illegible]	KMC	4-20MA OUTPUT CARD	1	[illegible]
BAC-R	BAC-5050	KMC	BACNET ROUTER	1	[illegible]
CO2-1	[illegible]	VAISALA	DUCT MOUNT CO2 SENSOR	4	[illegible]
CO2-2	[illegible]	[illegible]	WALL MOUNT CO2 SENSOR W/10K THERMISTOR	[illegible]	[illegible]
CO2-3	[illegible]	[illegible]	WALL MOUNT CO2 SENSOR	[illegible]	[illegible]
CS1	[illegible]	FUNCTIONAL DEVICES	[illegible] CURRENT SENSOR	[illegible]	[illegible]
CS2	[illegible]	[illegible]	RELAY W/ CURRENT SWITCH	[illegible]	[illegible]
CS3	[illegible]	FUNCTIONAL DEVICES	[illegible] CURRENT SWITCH	[illegible]	[illegible]
CS4	[illegible]	[illegible]	SPLIT CORE CURRENT SWITCH	[illegible]	[illegible]
DA1	[illegible]	BELIMO	[illegible] PROPORTIONAL SPRING RETURN DAMPER ACTUATOR	12	[illegible]
DA2	[illegible]	BELIMO	[illegible] PROPORTIONAL SPRING RETURN DAMPER ACTUATOR	[illegible]	[illegible]
DA3	[illegible]	BELIMO	[illegible] PROPORTIONAL NON SPRING RETURN DAMPER ACTUATOR	[illegible]	[illegible]
DPS1	[illegible]	[illegible]	DIFFERENTIAL PRESSURE SWITCH	[illegible]	[illegible]
DPT1	[illegible]	MAMAC	PRESSURE TRANSMITTER [illegible]	[illegible]	[illegible]
DPT2	[illegible]	MAMAC	PRESSURE TRANSMITTER [illegible]	[illegible]	[illegible]
DPT3	[illegible]	[illegible]	DIFF PRESS TRANSMITTER	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	VALVE ASSEMBLY	[illegible]	[illegible]
FRZ1	[illegible]	[illegible]	AUTO RESET LOW LIMIT	7	[illegible]
FT1	[illegible]	[illegible]	FLOW SENSOR [illegible]	[illegible]	[illegible]
FT1a	[illegible]	[illegible]	FLOW TRANSMITTER [illegible]	[illegible]	[illegible]
HL1	[illegible]	[illegible]	AUTO RESET HIGH STATIC CUTOUT	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] CONTROL PANEL	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] CONTROL PANEL	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	FLOW SWITCH	[illegible]	[illegible]
LT1	[illegible]	[illegible]	ULTRASONIC LEVEL TRANSMITTER	[illegible]	[illegible]
PB1	[illegible]	[illegible]	MOMENTARY PUSH BUTTON	[illegible]	[illegible]
PE1	[illegible]	MAMAC	DIFFERENTIAL PRESSURE ELEMENT	12	[illegible]
PE2	[illegible]	[illegible]	[illegible] STATIC PRESSURE ELEMENT	[illegible]	[illegible]
PE3	[illegible]	[illegible]	OUTSIDE AIR PRESSURE ELEMENT	[illegible]	[illegible]
PS1	[illegible]	[illegible]	[illegible] POWER SUPPLY	[illegible]	[illegible]
R1	[illegible]	[illegible]	[illegible] RELAY	[illegible]	[illegible]
R1a	[illegible]	[illegible]	[illegible] RELAY SOCKET	[illegible]	[illegible]
R2	[illegible]	[illegible]	[illegible] RELAY	14	[illegible]
R2a	[illegible]	[illegible]	RELAY SOCKET	14	[illegible]
R3	[illegible]	[illegible]	[illegible] RELAY	[illegible]	[illegible]
R4	[illegible]	[illegible]	[illegible] RELAY	[illegible]	[illegible]
R4a	[illegible]	[illegible]	[illegible] RELAY SOCKET	[illegible]	[illegible]
[illegible]	[illegible]	KMC	NETWORK REPEATER	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TS1	[illegible]	[illegible]	[illegible] DUCT AVERAGING SENSOR (10K-2 THERMISTOR)	7	[illegible]
TS2	[illegible]	[illegible]	[illegible] TEMP SENSOR (10K-2 THERMISTOR)	[illegible]	[illegible]
TS3	[illegible]	[illegible]	IMMERSION SENSOR (10K-2 THERMISTOR)	[illegible]	[illegible]
TS3a	[illegible]	[illegible]	[illegible] WELL	[illegible]	[illegible]
TS4	[illegible]	KMC	SPACE SENSOR (10K-2 THERMISTOR)	[illegible]	[illegible]
TS5	[illegible]	[illegible]	[illegible] DUCT SENSOR (10K-2 THERMISTOR)	[illegible]	[illegible]
TS6	[illegible]	[illegible]	OUTSIDE AIR SENSOR (10K-2 THERMISTOR)	1	[illegible]
[illegible]	[illegible]	KMC	[illegible] TERMINAL BOX CONTROLLER	[illegible]	[illegible]
XF	[illegible]	[illegible]	[illegible] CLASS-2 TRANSFORMER W/ BREAKER	[illegible]	[illegible]
[illegible]	[illegible]	[illegible] CONTROL	[illegible] CONTROL PANEL	[illegible]	[illegible]

BILL OF MATERIAL

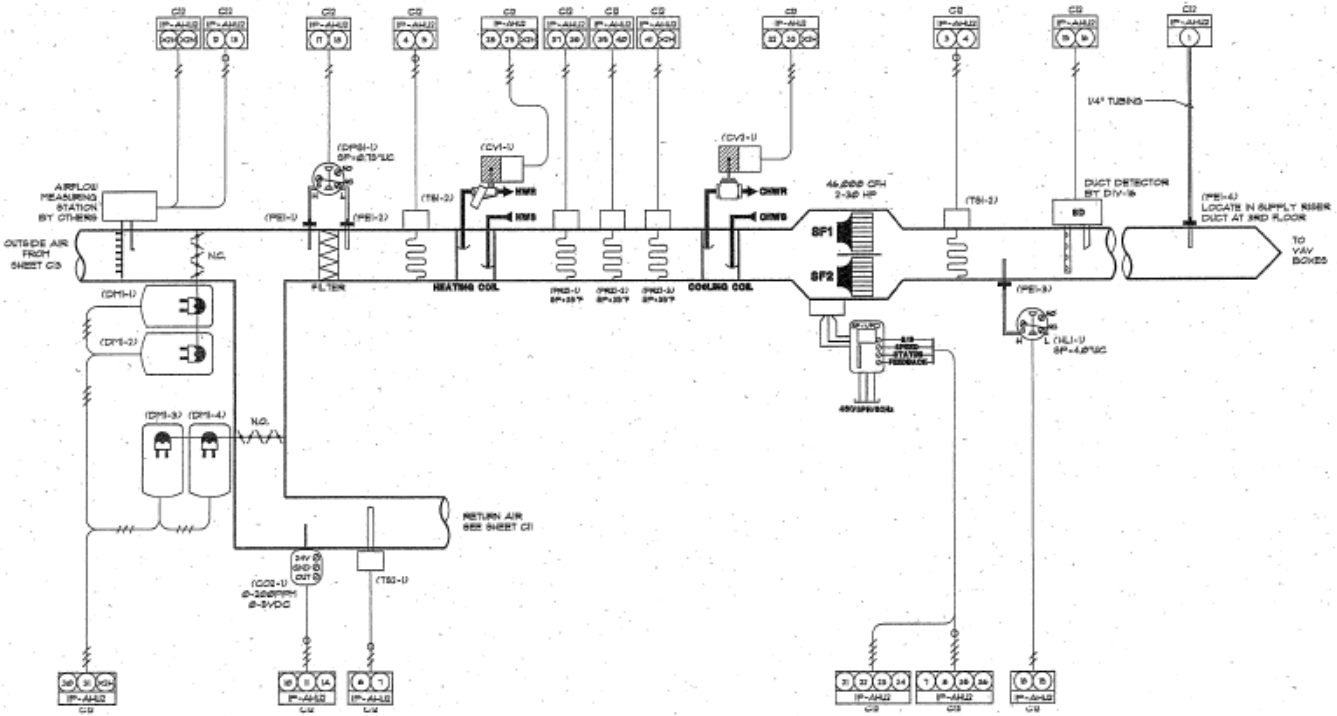


1 C05a **SYSTEM ARCHITECTURE**
SERVES: WHITE STAG BUILDING



1 FLOOR PLAN
SERVES: BASEMENT WHITE STAG BUILDING

Control Contractors 07/13/07 07:26 P25



AHU-2 FLOW DIAGRAM

SERVES: WHITE STAG BUILDING

VAV AIR HANDLING UNIT (AHU-2):

1. **OCCUPIED MODE:**

1.1. Supply Fan run continuously during "OCCUPIED MODE". "STOP" Fans on Fire/Smoke Alarm, Low Discharge Air Temp (Freeze), or High Duct Static.

1.2. Supply Fan Variable Frequency Drive varies Fan Speed to maintain Supply Duct Static Pressure Set-point. Initial Set-point to be 1.0"WC. This set-point is then adjusted using a Proportional and integral control strategy, such that the zone damper which is being given the greatest open command to be commanding 90% "OPEN". In this way, the fans will only be providing the static pressure required to provide air for the "neediest" zone.

1.3. Stop all Fans when Duct Static Pressure exceeds 4.0"wc and Alarm Operators Workstation. Reset Fans via command from Operators Workstation.

1.4. Relief Damper is "OPEN", if the status doesn't prove, Relief fan is "DISABLED"

1.5. Start Relief Fan when average Space Static Pressure exceeds 0.05"WC (adjustable), or the highest Space Static reaches 0.07"WC (adjustable). Modulate Relief fan speed to maintain the average Space Static of 0.05"WC (adjustable). Relief Fan is commanded to "STOP" if all zones fall below 0.045"WC (adjustable).

1.6. Space Static Pressures are maintained individually by modulating zone relief dampers to maintain Set-point of 0.05"WC.

1.7. If Mixed Air Temperature drops below 36°F. (adjustable) for a period of 5 minutes, "CLOSE" Outside Air Damper, Alarm Operators Workstation. If condition exists for an additional 5 minutes. "STOP" Fans and generate an additional Alarm.

1.8. Return to "NORMAL OPERATION" when Mixed Air Temperature rises above 38°F (adjustable).

1.9. Supply Air Temperature is reset between 55°F. and 62°F. (adjustable) based upon damper position of AHU's associated VAV boxes. If "NO" boxes are being commanded "OPEN" more then 90% (adjustable), reset Temperature down by 0.5°F. Reset Temperature upward if "ANY" box is more than 90% "OPEN". Reset Temperature every 5 minutes (adjustable).

1.10. Supply Air Temperature is maintained by staging Economizer Cooling, Chill Water Cooling, and Hot Water Heating, as follows:

1.10.1. IF OA Temp is 2 degrees or more (adjustable) below Return Air Temp, Outside Air Damper and Return Air Damper are operated in opposition as a first stage cooling (Economizer Mode). If OA Temp rises to the Return Air Temp, Economizer Mode is disabled, and the Outside Air and Return Air Dampers are modulated to provide minimum outside air.

1.10.2. A minimum position for the Outside Air Damper is determined as the greater of two calculations; either to maintain the required flow of fresh air as measured at the Outside Air Flow station, determined by the air balancer, or to maintain a Return Air CO2 reading below the set-point, 850 PPM (adjustable).

1.10.3. Modulate Chilled Water Valve to maintain Set-point in all cases for which Economizer Cooling is Insufficient.

1.10.4. If Discharge Air Temperature drops below Set-point 55°F. (adjustable) modulate Hot Water Coil Valve to maintain Discharge Air Set-point.

1.11. If CO2 concentration exceeds 1000 PPM, Alarm Operators Workstation.

1.12. If CO2 concentration exceeds 1500 PPM, or drops below 200 PPM, Alarm Operators Workstation and Disable CO2 Control. Operator has the ability to Manually Enable or Disable CO2 Control.

2. **WARMUP MODE:**

2.1. Supply Fan "STARTS" based on Optimized Start Time.

2.2. Modulate Heating Water Valve to maintain 85°F. Supply air Temperature.

2.3. "CLOSE" Reheat Valves, modulate damper to maintain Space Temperature Set-point using Reverse-acting Control.

2.4. Outside Air Dampers "CLOSED".

2.5. Supply Fan Speed modulates to maintain Supply Duct Static Pressure Set-point.

2.6. Terminate Warmup Mode when the Average Zone Space Temperature reaches Set-point or Occupancy Schedule becomes occupied.

3. **COOLDOWN MODE:**

3.1. Start Fans in Cooldown Mode based on Average Zone Space Temperature above Cooldown Set-point (adjustable).

3.2. Supply Fan Speed modulates to maintain Supply Duct Static Pressure Set-point.

3.3. If Outside Air Temperature is less than Return Air, enable Economizer, else Enable Chilled Water System.

3.4. Modulate Chilled Water Valve to maintain 55°F (adjustable) Supply Air Temperature Set-point.

3.5. Terminate Cooldown Mode when the Average Zone Space Temperature reaches Cooldown Set-point (adjustable), or when System enters Occupied Mode.

4. **NIGHT LOW LIMIT MODE:**

4.1. Supply Fan "STARTS" when average Zone Space Temperature drops below Night Low Limit Set-point, 58°F. (adjustable).

4.2. Supply Fan Speed modulates to maintain Supply Duct Static Pressure Set-point.

4.3. Enable Heating Water System in Occupied Mode.

4.4. Modulate Heating Water Valve to maintain 85°F. (adjustable) Supply Air Temperature.

4.5. "CLOSE" Reheat Valves, modulate damper to maintain Space Temperature Set-point using Reverse-acting Control.

4.6. Outside Air Dampers "CLOSED".

4.7. Terminate Night Low Limit Mode when the Average Zone Space Temperature reaches Night Low Limit Set-point plus 5°F (adjustable).

5. **UNOCCUPIED MODE:**

5.1. Supply and Relief Fans "OFF", Outside Air Dampers "CLOSED", Relief Dampers "CLOSED", HW and CHW Valves "CLOSED"

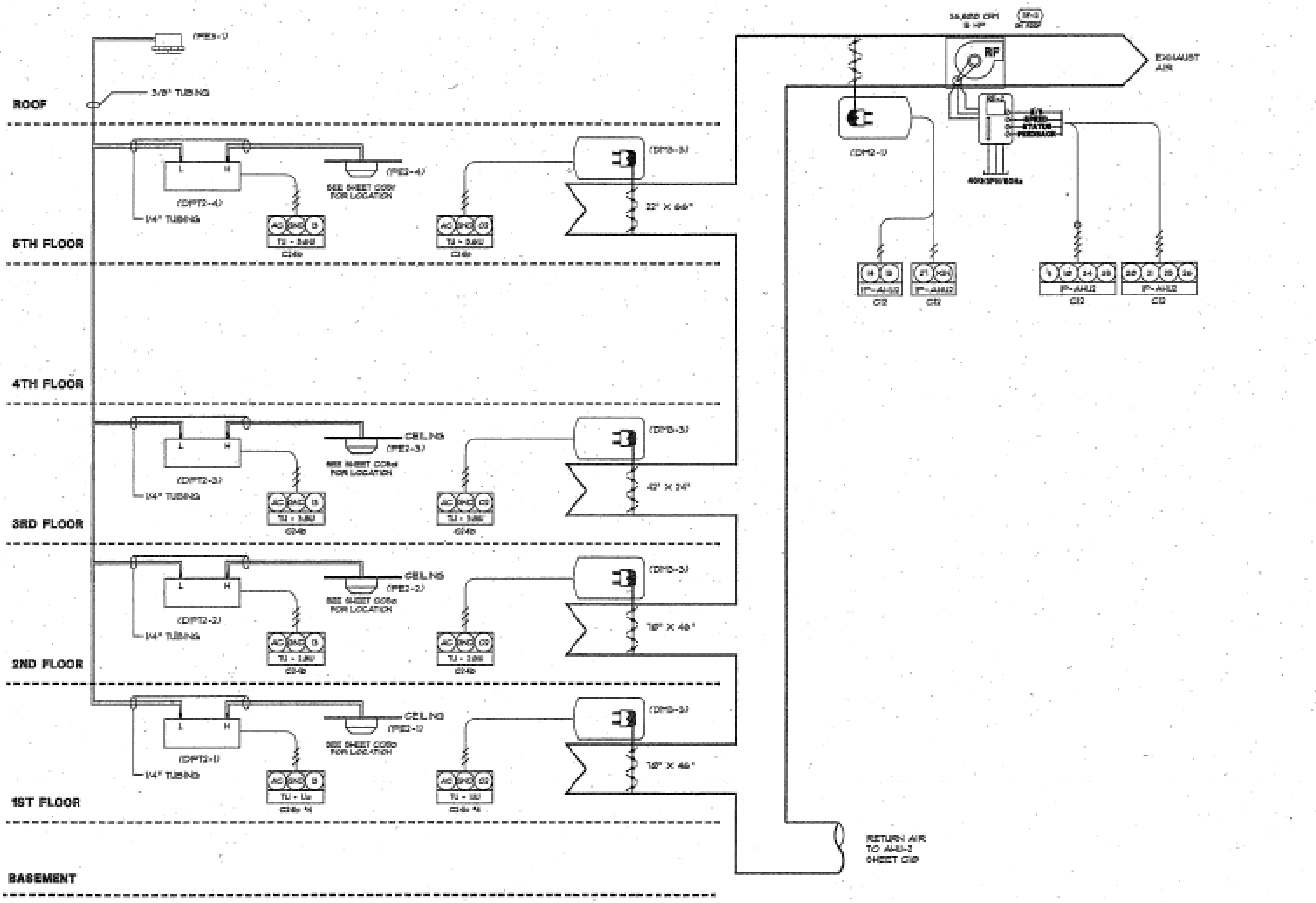
6. **SAFETIES**

6.1. Supply and Relief fans are interlocked to "STOP" on activation of Freeze Status Alarm, Smoke Detection Alarm, or Fire Alarm System Activation.

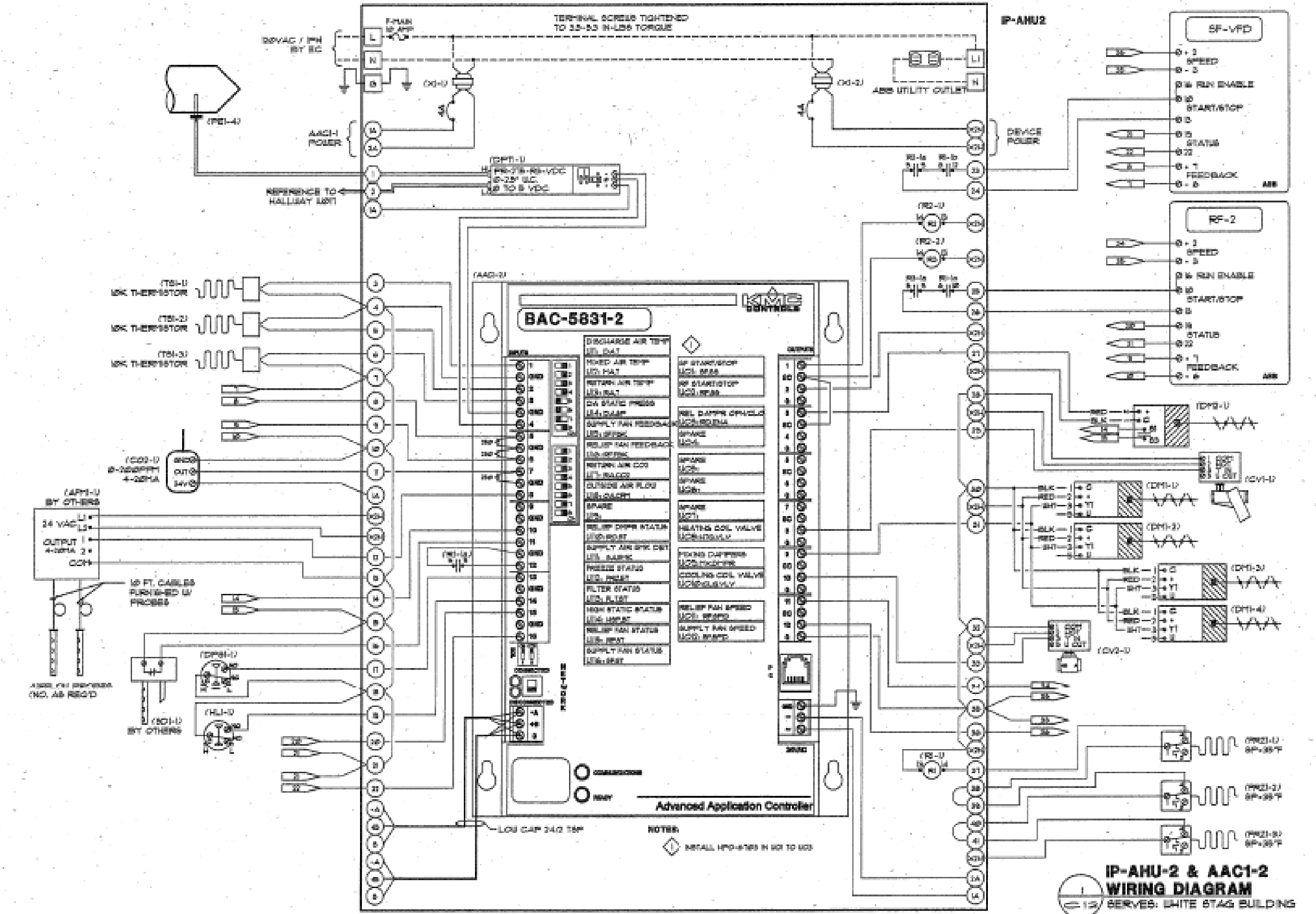
6.2. A Dirty Filter alarm will inform Operator of poor air flow.

6.3. Relief Fan will not be permitted to run unless Relief damper open detected by mechanical "End Switch".

1 SEQUENCE OF OPERATION
SERVES: AHU-2



AHU-2 DUCT RISER DIAGRAM
SERVES: WHITE STAG BUILDING



IP-AHU-2 & AAC1-2 WIRING DIAGRAM

SERVES: WHITE STAG BUILDING

System	Analog		Digital		Alarms
AHU-1, AHU-2, & AHU-3	In	Out	In	Out	
Discharge Air Temperature	X				High, Low
Mixed Air Temperature	X				
Return Air Temperature	X				
Supply Duct Static Pressure	X				High
Discharge Air High Status Pressure			X		Nml/Alm
Return Air CO2	X				
Supply Fan On/Off (VFD)				X	
Supply Fan Status (VFD)			X		Fail
Supply Fan Speed (VFD)		X			
Supply Fan Feedback (VFD)	X				
Relief Fan On/Off (VFD)				X	
Relief Fan Status (VFD)			X		Fail
Relief Fan Speed (VFD)		X			
Relief Fan Feedback (VFD)	X				
Cooling Valve		X			
Heating Valve		X			
Mixing Dampers		X			
Outside Air Flow	X				
Filter Status			X		Clean, Dirty
Discharge Air Duct Detector			X		Shutdown
Freezestat Status			X		Shutdown
Occupied Floor Static Pressure	X				
Occupied Floor Exhaust Damper		X			

System	Analog		Digital		Alarms
CHILLER Water System	In	Out	In	Out	
Chilled Water Supply Temperature	X				
Chilled Water return Temperature	X				
Chiller Enable (On/Off)				X	
Chilled Water Setpoint		X			
Chilled Water Differential Pressure	X				
CHWP-1 & 2 On/Off (VFD)				X	
CHWP-1 & 2 Status (VFD)			X		Fail
CHWP-1 & 2 Speed (VFD)		X			
CHWP-1 & 2 Feedback (VFD)	X				

System	Analog		Digital		Alarms
HOT Water System	In	Out	In	Out	
HotWater System Enable (BMS)				X	
BMS Fault			X		Nml/Alm
BMS Status			X		
Hot Water Setpoint		X			
Hot Water Differential Pressure	X				
HWP-1 & 2 On/Off (VFD)				X	
HWP-1 & 2 Status (VFD)			X		Fail
HWP-1 & 2 Speed (VFD)		X			
HWP-1 & 2 Feedback (VFD)	X				
Boiler-1 Supply Temperature	X				
Boiler-1 Return Temperature	X				
Boiler-2 Supply Temperature	X				
Boiler-2 Returm Temperature	X				
How Water Supply Temperature	X				
How Water Return Temperature	X				

System	Analog		Digital		Alarms
Rainwater Harvest System	In	Out	In	Out	
Fill Pump Start/Stop (CP-1)				X	
Fill Pump Status (CP-1)			X		Fail
Main Tank Isolation Valve (Opn/Clo)				X	
City Water Isolation Valve (Opn/Clo)				X	
Storage Tank Level	X				
RainWater Gallons	X				
City Water Gallons	X				

System: EXHAUST FANS	Analog		Digital		Alarms
EF-1, 2, 4, 5, 6, 7, 8, 9, & 10	In	Out	In	Out	
Fan Start/Stop				X	
Fan Status			X		Fail
EF-3					
Fan Status			X		

System: TRANSFER FANS	Analog		Digital		Alarms
TE-1, 10, & 11	In	Out	In	Out	
Fan Start/Stop			X		
Fan Status			X		Fail

System: UNIT HEATERS	Analog		Digital		Alarms
UH-1, 2, & 3	In	Out	In	Out	
Fan Start/Stop			X		
Fan Status			X		Fail
Space Temperature	X				

System:	Analog		Digital		Alarms
MISCELLANEOUS	In	Out	In	Out	
ACU-1 Space Temperature	X				
ACU-1 Fan Status			X		
ACU-2 Space Temperature	X				
ACU-2 Fan Status			X		
Outside Air Temperature	X				
Building Fire Alarm			X		Nml/Alm
Outside Air CO2	X				
DHW Circulation Pump Start/Stop				X	
DHW Circulation Pump Status			X		Fail
Specialy Lighting				X	
Supply Fan SF-1 Start/Stop				X	
Supply Fan SF-1 Status			X		Fail
DH-1 Enable				X	
DH-1 Discharge Temperature	X				
Overflow Roof Drain Status			X		

1
C25

HARDWARE POINT LIST

VALVE SCHEDULE

WATER MAX DEL P= 5 PSI STEAM SUPPLY PRES= 1.00 STEAM PRESS. DP= 1.00

TAG	LOCATION	REV	QTY	SIZE	TYPE	PIPING DETAIL	VALVE ASSEMBLY #	FLOW GPM	VALVE TRAVEL	CV CALC	CV ACTUAL	DEL P W/ ACTUAL CV	REMARKS
AHU-2 CHW	WHITE STAG BUILDING		1	4"	2-WAY	"B"	G6100C+2XAF24-MFT-P10001	250.0		111.80	170.00	2.16	PROPORTIONAL
AHU-2 HW	WHITE STAG BUILDING		1	1 1/2"	2-WAY	"A"	PICCV-40-033+AKX24-MFT-P10019	30.0	9.2VDC				PROPORTIONAL
TU-0.1W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-050+LRX24-MFT-P10019	0.3	5.2VDC				PROPORTIONAL
TU-1.5W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B309+LRB24-SR	1.6		0.72	0.80	4.00	PROPORTIONAL
TU-1.6W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	6.8VDC				PROPORTIONAL
TU-1.7W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.3	9.4VDC				PROPORTIONAL
TU-1.8W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.6	6.0VDC				PROPORTIONAL
TU-1.9W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-005+LRX24-MFT-P10019	1.8	6.2VDC				PROPORTIONAL
TU-1.10W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.6	6.0VDC				PROPORTIONAL
TU-2.1W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.4	6.0VDC				PROPORTIONAL
TU-2.5W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.5	5.8VDC				PROPORTIONAL
TU-2.7W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-005+LRX24-MFT-P10019	1.6	6.2VDC				PROPORTIONAL
TU-2.8W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.2	8.8VDC				PROPORTIONAL
TU-2.9W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B308+LRB24-SR	0.5		0.36	0.48	5.02	PROPORTIONAL
TU-2.10W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.5	6.0VDC				PROPORTIONAL
TU-2.11W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B309+LRB24-SR	1.4		0.83	0.80	3.06	PROPORTIONAL
TU-2.12W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-3.6W	WHITE STAG BUILDING	1	1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.5	5.6VDC				PROPORTIONAL
TU-3.7W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-005+LRX24-MFT-P10019	1.5	6.0VDC				PROPORTIONAL
TU-3.8W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B309+LRB24-SR	1.4		0.83	0.80	3.06	PROPORTIONAL
TU-3.9W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B308+LRB24-SR	1.0		0.45	0.48	4.73	PROPORTIONAL
TU-3.10W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-005+LRX24-MFT-P10019	2.2	6.8VDC				PROPORTIONAL
TU-3.11W	WHITE STAG BUILDING	1	1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.5	5.6VDC				PROPORTIONAL
TU-4.1W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.2	8.8VDC				PROPORTIONAL
TU-4.2W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-4.3W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	6.8VDC				PROPORTIONAL
TU-4.4W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	6.8VDC				PROPORTIONAL
TU-4.5W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	6.8VDC				PROPORTIONAL
TU-4.6W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.6	6.0VDC				PROPORTIONAL
TU-4.7W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B309+LRB24-SR	1.5		0.58	0.80	2.64	PROPORTIONAL
TU-4.8W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B310+LRB24-SR	2.0		0.89	1.20	2.78	PROPORTIONAL
TU-5.1W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B310+LRB24-SR	1.8		0.80	1.20	2.25	PROPORTIONAL
TU-5.2W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-5.3W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-5.4W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-5.5W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	1.0	7.8VDC				PROPORTIONAL
TU-5.6W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.5	5.8VDC				PROPORTIONAL
TU-5.7W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-005+LRX24-MFT-P10019	1.8	6.4VDC				PROPORTIONAL
TU-5.8W	WHITE STAG BUILDING		1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.6	6.0VDC				PROPORTIONAL
TU-5.9W	WHITE STAG BUILDING		1	1/2"	3-WAY	"C"	B309+LRB24-SR	1.1		0.49	0.80	1.80	PROPORTIONAL
UH-1	WHITE STAG BUILDING	1	1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	5.8VDC				PROPORTIONAL
UH-2	WHITE STAG BUILDING	1	1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	5.8VDC				PROPORTIONAL
UH-3	WHITE STAG BUILDING	1	1	1/2"	2-WAY	"A"	PICCV-15-001+LRX24-MFT-P10019	0.8	5.8VDC				PROPORTIONAL
CVI-1	RAINWATER HARVEST	1	1	2 1/2"	2-WAY	"B"	B255+AF24						LINE SIZE 2-POSITION
CVI-1	RAINWATER HARVEST	1	1	2 1/2"	2-WAY	"B"	B255+AF24						LINE SIZE 2-POSITION

3-WAYS 9/42 TU'S

TOTAL GPM : 72.6
3-WAY GPM : 10.8

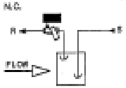
1 / V01 WHITE STAG BUILDING VALVE SCHEDULE

PROJECT TOTALS 8 3 WAYS 14/63 TU'S = 22% BYPASS

123.9 TOTAL PROJECT GPM
29.0 TOTAL PROJECT 3-WAY GPM
23% BYPASS GPM

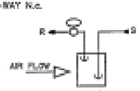
"A"

FOR 2-WAY N.C. PICCV



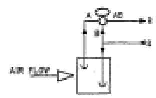
"B"

FOR 2-WAY N.C.



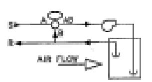
"C"

FOR 3-WAY BALL VALVE MIXING APPLICATIONS.



"D"

FOR 3-WAY MIXING APPLICATIONS WITH CIRC. PUMP



Mounting:
The valves can be mounted in any position, except stem below horizontal.