DATE: 04/09:96 TIME: 12:15:12
DESIGN FILE: I:\ligo\site1\mu\wah142.soz

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INPUT/OUTPUT SUMMARY FOR AIR HANDLING UNIT AH-03

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	INPUTS: ANALOG CALCULATED: KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIR FLOW	METER	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	OUTPUTS: ANALOG: DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD	GENERAL: COLOR GRAPHIC	SUPPLEMENTARY NOTES
OUTSIDE TEMERATURE	●																																											
OUTSIDE RELATIVE HUMIDITY (H)			●																																									
PREHEAT COIL, HC-11	●													●									●				●				●							●	●						
PREHEAT COIL, HC-12	●													●									●				●				●							●	●						
AIR FILTER, AF-03 (TYP 2)		●																												●											●		2 SENSORS
COOLING COIL, CC-05	●																								●					●											●	●		
COOLING COIL, CC-06	●																								●					●											●	●		
HEATING COIL, HC-09	●													●									●				●				●							●	●						
HEATING COIL, HC-10	●													●									●				●				●							●	●						
HUMIDIFIER, HU-05		●												●									●				●				●	●						●	●						
HUMIDIFIER, HU-06		●												●									●				●				●	●						●	●						
SUPPLY FAN, SF-05							●			●				●			●			●								●			●			●			●			●	●				
SUPPLY FAN, SF-06							●			●				●			●			●								●			●			●			●			●	●				
COLD AIR DECK	●	●			●																										●	●								●					
WARM AIR DECK	●	●			●																										●	●								●					
WARM AIR RELATIVE HUMIDITY			●																												●									●					
SPACE AVERAGE RELATIVE HUMIDITY			●																												●	●								●					
ROOM TEMPERATURE (TYPICAL 17 ZONES)	●																														●	●								●					
SMOKE DETECTOR (SD-02)																●																								●					RETURN AIR
MIXING AIR TEMP	●																																											
MIXING AIR RELATIVE HUMIDITY			●																																									
ROOM PRESSURIZATION (TYP 2)		●																														●												
AIR FLOW DIAGRAM																																										●	
FUME HOOD EXHAUST SYSTEM (TYP 2)											●			●						●																				●	●	
HEPA FILTER		●																													●											●		LOCATE SENSOR AT THE MOST REMOTE HEPA FILTER
RETURN & OUTSIDE AIR DAMPERS (TYP 3)																										●															●		
FLOOR PLANS																																										●	
VIBRATIONS FOR FANS								●																							●												

INPUT/OUTPUT SUMMARY FOR AIR HANDLING UNIT AH-04

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	INPUTS: ANALOG CALCULATED: KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIR FLOW	METER	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	OUTPUTS: ANALOG: DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD	GENERAL: COLOR GRAPHIC	SUPPLEMENTARY NOTES
OUTSIDE TEMERATURE	●									●			●																															
OUTSIDE RELATIVE HUMIDITY (H)			●																																									
PREHEAT COIL, HC-13	●													●									●				●				●							●	●						
AIR FILTER, AF-03		●																												●											●		
COOLING COIL, CC-05	●																								●					●											●	●		
HUMIDIFIER, HU-05			●											●									●				●				●	●						●	●						
SUPPLY FAN							●			●				●			●			●								●			●			●			●			●	●				
SUPPLY AIR	●	●																													●	●								●					
SUPPLY AIR RELATIVE HUMIDITY			●																												●									●					
ROOM TEMPERATURE (TYPICAL 20 ZONES)	●																														●	●								●					
SPACE AVERAGE RELATIVE HUMIDITY			●																												●	●								●					SEE PLANS FOR LOCATION
ZONE DUCT HEATERS (TYPICAL 20 ZONES)	●													●									●																	●					
EXHAUST FAN, EF-01											●			●						●													●			●			●	●				
EXHAUST FAN, EF-02											●			●						●													●			●			●	●				
SMOKE DETECTOR																●																								●					
AIR FLOW DIAGRAM																																											●	
ECONOMIZER DAMPERS																										●															●			
FLOOR PLANS																																											●	

NOTES:

1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEETS WA-H-001 AND WA-H-002.
2. FOR SEQUENCE OF OPERATION SEE SHEET WA-H-141.

REFERENCES		REVISIONS						
DRAWING NO.	DESCRIPTION	NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
		A	4-19-96	CLP	ME	AA		FINAL DESIGN REVIEW & BID

DRAWN	CLP
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PROJ	

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100 WEST WALNUT STREET
PASADENA, CALIFORNIA

LIGO
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY
SITE NO. 1 - HANFORD, WASHINGTON

TITLE	SCALE	CONTRACT NUMBER	PROJECT NUMBER
HVAC CORNER STATION SEQUENCES OF OPERATION & I/O SUMMARY SHEET 2	NONE	PP150969	8094
LIGO-D960358-A-O	SHEET NUMBER: WA-H-142	REVISIONS: A	

LIGOWAF.BDR

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