DATE: 10/23:96 TIME: 12:44:18
DESIGN FILE: I:\ligo\site2\mu\lah142.soz

INPUT/OUTPUT SUMMARY FOR AIR HANDLING UNIT AH-03

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG: MEASURED							CALCULATED				BINARY					OUTPUTS: DIGITAL				ANALOG				SYSTEM FEATURES: ALARMS					PROGRAMS								GENERAL					SUPPLEMENTARY NOTES
	TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	STATUS	FILTER	SMOKE	FREEZE	AIR FLOW METER	OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD		COLOR GRAPHIC					
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	●													●									●						●								●				●	●							
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							CALCULATED				BINARY					OUTPUTS: DIGITAL				ANALOG				SYSTEM FEATURES: ALARMS					PROGRAMS								GENERAL					SUPPLEMENTARY NOTES
	TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	STATUS	FILTER	SMOKE	FREEZE	AIR FLOW METER	OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD		COLOR GRAPHIC					
OUTSIDE TEMERATURE	●								●				●												●																								
OUTSIDE RELATIVE HUMIDITY (H)			●																																														
PREHEAT COIL, HC-13	●													●									●			●			●								●				●	●							
AIR FILTER, AF-03		●																											●													●							
COOLING COIL, CC-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 LA-H-001 AND LA-H-002.
2. FOR SEQUENCE OF OPERATION SEE SHEET LA-H-141.

This document and the design it covers are the property of PARSONS. They are loaned only with the borrower's expressed written agreement that they will not be reproduced, copied, loaned, exhibited, or used in any other way, except by written consent from PARSONS to the borrower.

REFERENCES

DRAWING NO.	DESCRIPTION

REVISIONS

NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION

0 ISSUED FOR CONSTRUCTION		
DRAWN	CLP	11-15-96
CHECKED	MS	10-25-96
ENGINEER	AA	10-23-96
PROJ		11/15/96

STATE OF LOUISIANA MARK S. ELLIS REG. No. 24882 REGISTERED PROFESSIONAL ENGINEER MECHANICAL ENGINEERING Exp. 9-98

PARSONS
100 WEST WALNUT STREET
PASADENA, CALIFORNIA

LIGO
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY
SITE NO. 2 - LIVINGSTON, LOUISIANA

TITLE: HVAC CORNER STATION SEQUENCES OF OPERATION & I/O SUMMARY SHEET 2

SCALE	CONTRACT NUMBER	PROJECT NUMBER
NONE	PP150969	8094

SHEET NUMBER: LA-H-142
REVISIONS: 0