

BUILT-UP AIR HANDLING UNIT SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	SUPPLY AIR FAN *	CHILLED WATER COIL *	HEATING COIL *	HUMIDIFIER *	FILTER *	AIR FLOW		REMARKS
									SUPPLY AIR CFM	OUTSIDE AIR CFM	
W-CS-107-AH-01	LVEA BUILDING	LVEA	BUILT-UP	W-CS-107-SF-01 W-CS-107-SF-02	W-CS-107-CC-01 W-CS-107-CC-02	-----	W-CS-107-HU-01 W-CS-107-HU-02	W-CS-107-AF-01	33,000	2,600	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-CS-107-AH-02	LVEA BUILDING	LVEA	BUILT-UP	W-CS-107-SF-03 W-CS-107-SF-04	W-CS-107-CC-03 W-CS-107-CC-04	-----	W-CS-107-HU-03 W-CS-107-HU-04	W-CS-107-AF-02	33,000	2,600	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-CS-107-AH-03	LVEA BUILDING	OSB (LAB)	BUILT-UP	W-CS-107-SF-05 W-CS-107-SF-06	W-CS-107-CC-05 W-CS-107-CC-06	W-CS-107-HC-09 W-CS-107-HC-10	W-CS-107-HU-05 W-CS-107-HU-06	W-CS-107-AF-03	24,000	1,720	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-MA-203-AH-01	MID STATION A	MID STATION A	BUILT-UP	W-MA-203-SF-01 W-MA-203-SF-02	W-MA-203-CC-01 W-MA-203-CC-02	-----	W-MA-203-HU-01 W-MA-203-HU-02	W-MA-203-AF-01 W-MA-203-AF-02	13,200	840	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-MB-203-AH-01	MID STATION B	MID STATION B	BUILT-UP	W-MB-203-SF-01 W-MB-203-SF-02	W-MB-203-CC-01 W-MB-203-CC-02	-----	W-MB-203-HU-01 W-MB-203-HU-02	W-MB-203-AF-01 W-MB-203-AF-02	13,200	840	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-EA-203-AH-01	END STATION A	END STATION A	BUILT-UP	W-EA-203-SF-01 W-EA-203-SF-02	W-EA-203-CC-01 W-EA-203-CC-02	-----	W-EA-203-HU-01 W-EA-203-HU-02	W-EA-203-AF-01 W-EA-203-AF-02	13,200	840	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL
W-EB-203-AH-01	END STATION B	END STATION B	BUILT-UP	W-EB-203-SF-01 W-EB-203-SF-02	W-EB-203-CC-01 W-EB-203-CC-02	-----	W-EB-203-HU-01 W-EB-203-HU-02	W-EB-203-AF-01 W-EB-203-AF-02	13,200	840	CONTRACTOR WILL SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION DETAILS FOR APPROVAL

OMIT

NOTES:
 1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEETS WA-H-001 AND WA-H-002.

* SEE INDIVIDUAL EQUIPMENT SCHEDULES

PACKAGED AIR-COOLED WATER CHILLER SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	CHILLED FLUID	AMBIENT		COMPRESSOR		MINIMUM CAPACITY (TONS)	MAX KW	REFRIGERANT	EVAPORATOR		CONDENSER		SINGLE POINT ELECT CONN		OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS			
					DESIGN TEMP (°F DB)	ALTITUDE (FT)	MIN OPER TEMP (°F DB)	TYPE				DRIVER	ENT TEMP (°F)	LVG TEMP (°F)	GPM	MAX PD (FT)	NO. FANS EACH UNIT				HP EACH FAN	VOLTS/ PHVHZ	TOTAL RLA
W-CS-190-CH-01	CORNER STATION	CORNER STATION	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	185	296	R-22	53.3	42	365	15	17	1.5	460/3/60	163	896	16800	ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-CS-190-CH-02	CORNER STATION	CORNER STATION	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	185	296	R-22	53.3	42	365	15	17	1.5	460/3/60	163	896	16800	ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-CS-190-CH-03	CORNER STATION	CORNER STATION	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	185	296	R-22	53.3	42	365	15	17	1.5	460/3/60	163	896	16800	TRANE RTAA 240 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F), STANDBY
W-MA-200-CH-01	MID STATION A	MID STATION A	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-MA-200-CH-02	MID STATION A	MID STATION A	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F), STANDBY
W-MB-200-CH-01	MID STATION B	MID STATION B	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-MB-200-CH-02	MID STATION B	MID STATION B	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F), STANDBY
W-EA-200-CH-01	END STATION A	END STATION A	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-EA-200-CH-02	END STATION A	END STATION A	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F), STANDBY
W-EB-200-CH-01	END STATION B	END STATION B	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F)
W-EB-200-CH-02	END STATION B	END STATION B	AIR COOLED	WATER 40% GLYCOL	105	400	0°F	SCREW	ELECT MOTOR	55	77	R-22	54.8	42	105	15	8	1.1	460/3/60	112	229	4950	TRANE CGAE-C60 ALL PERFORMANCE DATA ARE AT ACTUAL CONDITIONS, LOW AMBIENT (-10°F), STANDBY

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CHILLED WATER COOLING COIL SCHEDULE

UNIT NO.	LOCATION	SERVICE	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	MAX FACE VEL (FPM)	ACFM	MAX AIR PD (IN. WG)	ROWS	MAX FPI	EAT				LAT				EWT (°F)	LWT (°F)	GPM	MAX WTR PD (FT)	MANUFACTURER/ MODEL NO.	OVERALL SIZE (IN. X IN.)	REMARKS
										°FDB	°FWB	°FDB	°FWB	°FDB	°FWB	°FDB	°FWB							
W-CS-107-CC-01	CORNER STATION	LVEA	505	500	435	14,500	0.70	8	11	83.7	62.8	51	50	42	53	106	12	CARRIER BC	72 X 68	40% GLYCOL	72 X 68	40% GLYCOL	OMIT	
W-CS-107-CC-02	CORNER STATION	LVEA	505	500	435	14,500	0.70	8	11	83.7	62.8	51	50	42	53	106	12	CARRIER BC	72 X 68	40% GLYCOL	72 X 68	40% GLYCOL	OMIT	
W-CS-107-CC-03	CORNER STATION	LVEA	505	500	435	14,500	0.70	8	11	83.7	62.8	51	50	42	53	106	12	CARRIER BC	72 X 68	40% GLYCOL	72 X 68	40% GLYCOL	OMIT	
W-CS-107-CC-04	CORNER STATION	LVEA	505	500	435	14,500	0.70	8	11	83.7	62.8	51	50	42	53	106	12	CARRIER BC	72 X 68	40% GLYCOL	72 X 68	40% GLYCOL	OMIT	
W-CS-107-CC-05	CORNER STATION	OSB	393	387	445	11,500	0.60	8	8	83.1	62.7	50.9	50	42	50	95	15	CARRIER BC	36 X 105	40% GLYCOL	36 X 105	40% GLYCOL		
W-CS-107-CC-06	CORNER STATION	OSB	393	387	445	11,500	0.60	8	8	83.1	62.7	50.9	50	42	50	95	15	CARRIER BC	36 X 105	40% GLYCOL	36 X 105	40% GLYCOL		
W-MA-203-CC-01	MID STATION A	MID STATION A	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-MA-203-CC-02	MID STATION A	MID STATION A	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-MB-203-CC-01	MID STATION B	MID STATION B	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-MB-203-CC-02	MID STATION B	MID STATION B	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-EA-203-CC-01	END STATION A	END STATION A	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-EA-203-CC-02	END STATION A	END STATION A	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-EB-203-CC-01	END STATION B	END STATION B	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		
W-EB-203-CC-02	END STATION B	END STATION B	418	414	460	11,400	0.75	8	11	86.7	63.7	51	49.9	42	52.8	95	10	CARRIER BC	2(30 X 60)	40% GLYCOL	2(30 X 60)	40% GLYCOL		

OMIT

EXPANSION TANK SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	MIN CAP (GAL)	MAX WORKING PRESS (PSIG)	MAX OPER TEMP (°F)	OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS
W-CS-107-TK-01	CORNER STATION	CHILLED WATER	DIAPHRAM	45	150	110	510	TACO CX170	OMIT
W-MA-203-TK-01	MID STATION A	CHILLED WATER	DIAPHRAM	23	150	110	285	TACO CX24	
W-MB-203-TK-01	MID STATION B	CHILLED WATER	DIAPHRAM	23	150	110	285	TACO CX24	
W-EA-203-TK-01	END STATION A	CHILLED WATER	DIAPHRAM	23	150	110	285	TACO CX24	
W-EB-203-TK-01	END STATION B	CHILLED WATER	DIAPHRAM	23	150	110	285	TACO CX24	

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AIR SEPARATOR SCHEDULE

UNIT NO.	LOCATION	SERVICE	MIN CAP (GPM)	SIZE (IN.)	OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS
W-CS-107-AS-01	CORNER STATION	CHILLED WATER	700	6"	750	BELL & GOSSETT R-6	OMIT
W-MA-203-AS-01	MID STATION A	CHILLED WATER	170	3"	200	BELL & GOSSETT R-3	
W-MB-203-AS-01	MID STATION B	CHILLED WATER	170	3"	200	BELL & GOSSETT R-3	
W-EA-203-AS-01	END STATION A	CHILLED WATER	170	3"	200	BELL & GOSSETT R-3	
W-EB-203-AS-01	END STATION B	CHILLED WATER	170	3"	200	BELL & GOSSETT R-3	

OMIT

NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
B	4-19-96	CLP	ME	AA	TDM	FINAL DESIGN REVIEW & BID
A	10-31-95	CLP	ME	AA	TDM	PRELIMINARY DESIGN REVIEW

DRAWN	CLP
CHECKED	
ENGINEER	
PROJ	

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 PASADENA, CALIFORNIA

LIGO
 CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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

TITLE: HVAC EQUIPMENT SCHEDULES SHEET 1

SCALE: NONE CONTRACT NUMBER: PP150969 PROJECT NUMBER: 8094

SHEET NUMBER: WA-H-003

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