

PACKAGED UNIT SCHEDULE					
AIR HANDLING UNIT		FIR-AHU-01			
QTY		1			
LOCATION		FIRE STATION BUILDING ? ROOF			
TYPE		HORIZONTAL		WITH MIXING BOX	
FAN DISCHARGE POSITION		FRONT DISCHARGE			
SITE ALTITUDE ABOVE SEA LEVEL		1,685		m	
CONDENSING UNIT		FIR-ACC-01			
QTY		1			
CONDENSING UNIT LOCATION		ROOF			
REFRIGERANT		R134A			
OUTDOOR AIR DB / WB		50	/	25	*c
SUPPLY FAN	QTY	1			
	TYPE	CENTRIFUGAL BACKWARD CURVED, DWDI			
	SUPPLY AIR	1,370		l/s	
	FRESH AIR	379		l/s	
	EXTERNAL STATIC PRESSURE	236		Pa	
COOLING COIL	ENTERING DB / WB	31.3	/	19.4	*c
	LEAVING DB / WB	14.5	/	13.4	*c
	COOLING CAPACITY	26.3		kW	
	SENSIBLE LOAD	22.6		kW	
	TUBE MATERIAL	SEAMLESS COPPER			
	FIN MATERIAL	ALUMINUM			
	COATING	ANTI CORROSION			
HEATING COIL	TYPE	HOT WATER			
	ENTERING DB	13.4		*c	
	LEAVING DB	29.0		*c	
	HOT WATER TEMP (IN/OUT)	82	/	71	*c
	TOTAL LOAD	21.2		kW	
	WATER FLOW RATE	0.45		L/S	
	TUBE MATERIAL	SEAMLESS COPPER			
	FIN MATERIAL	ALUMINUM			
	COATING	ANTI CORROSION			
FILTER	PRE-FILTER	ALUMINUM-WASHABLE		EFFICIENCY % 30	
	1ST BED	PLEATED		EFFICIENCY % 45-50	
	2ND BED	BAG		EFFICIENCY % 90	
	3RD BED	-		-	
COMPRESSOR	TYPE	HERMETIC			SCROLL
	QTY	2			
AIR COOLED CONDENSER	TUBE MATERIAL	SEAMLESS COPPER			
	FIN MATERIAL	ALUMINUM			
	CONDENSING TEMP.	62.2		*C	
	TYPE OF FANS	AXIAL, ROTOREX			
	ENTERING AIR TEMP.	50		*c	
	HEAT REJECTION	35 (*)		kW	
	COATING	BLYGOLD OR EQUAL			
ELECTRICAL CHARACTERISTICS	TOTAL POWER CONSUMPTION	AIR HANDLING UNIT 2.2 (*)		kW	
		AIR COOLED CONDENSER 12.8 (*)		kW	
	VOLT/PHASE/HZ	400/3/50			
	SUPPLY FAN ELECTRICAL MOTOR IP	55			
	CONDENSER FAN ELECTRICAL MOTOR IP	55			
OPERATING WEIGHT	AHU	(*)		KG	
	ACCU	(*)		KG	

(*) THIS DATA SHALL BE FILLED OR FINALIZED BY VENDOR.

BOILER PACKAGE UNIT SCHEDULE					
TAG No.	TYPE	QTY	LOCATION	CAPACITY (BTU/HR)	REMARK
FIR-B0-001	CONDENSING	2	FIRE STATION NO.2 STORE	535000(EACH)	THE EXACT CAPACITY OF BOILER SHALL BE CONSIDERED BY VENDOR.
FIR-B0-002	BOILER				THE TEMPERATURE SENSOR FOR CALCULATING THE OUTDOOR TEMP. SHALL BE CONSIDERED BY VENDOR.

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PUMP SCHEDULE													
TAG No.	TYPE	QTY	LOCATION	SERVICE AREA	FLOW RATE (GPM)	TOTAL HEAD (FT.WG)	KW(°)	ELECTRICAL CHARACTERISTIC(°)					TYPE OF WATER
								PHASE	VOLT	HZ	IP	RPM	
FIR-PU-101 & FIR-PU-102	CENTRIFUGAL IN-LINE	2x100%	STORE	HW CIRCULATION FOR AHU	7.2	28	0.578	1	230	50	54	1450	HOT WATER
FIR-PU-103 & FIR-PU-104	CENTRIFUGAL IN-LINE	2x100%	STORE	HW CIRCULATION FOR UNIT HEATER	44.1	31	1.02	1	230	50	54	1450	HOT WATER
FIR-PU-105 & FIR-PU-106	CENTRIFUGAL IN-LINE	2x100%	STORE	DHW CIRCULATION FOR DHWG	9.4	24	0.578	1	230	50	54	3SPEED	DOMESTIC HOT WATER
FIR-PU-107 & FIR-PU-108	CENTRIFUGAL IN-LINE	2x100%	STORE	DHW R CIRCULATION FOR HOT WATER RETURN	0.55	12	0.09	1	230	50	54	3SPEED	DOMESTIC HOT WATER

UNIT HEATER SCHEDULE												
TAG No.	UNIT HEATER TYPE	QTY	LOCATION	AIR FLOW CFM	PRESSURE DROP(*) WATER SIDE (IN.W.G)	HEATING LOAD BTU/H	HOT WATER FLOW GPM	ELECTRICAL CHARACTERISTIC(*)				REMARKS
								W	PHASE	VOLT	HZ	
FIR-UH-101A-D	HOT WATER	4	FIRE ENGINE	2400	2.5	110325	11	370	1	230	50	

EXHAUST FAN SCHEDULE												
TAG NO.	TYPE	SERVICE AREA	LOCATION	QTY.	AIR FLOW I/s	STATIC PRESSURE (Pa)	(*)ELECTRICAL CHARACTERISTICS					REMARKS
							KW	VOLT	PHASE	CYCLE	IP	
FIR-EF-101 ~103	AXIAL FAN WALL MOUNTED	FIRE ENGINE	WALL	3	2044	75	0.37	220	1	50	55	
FIR-EF-104	AXIAL FAN WALL MOUNTED	Work Bench	WALL	1	165	75	0.25	220	1	50	55	
FIR-EF-105	AXIAL FAN WALL MOUNTED	Locker Room	WALL	1	73	75	0.02	220	1	50	55	
FIR-EF-106	AXIAL FAN WALL MOUNTED	Toilet	WALL	1	75	75	0.02	220	1	50	55	
FIR-EF-107	AXIAL FAN WALL MOUNTED	Pantry	WALL	1	67	75	0.02	220	1	50	55	
FIR-EF-108	AXIAL FAN WALL MOUNTED	Store	WALL	1	123	75	0.25	220	1	50	55	

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DOMESTIC HOT WATER GENERATOR SCHEDULE									
TAG No.	TYPE	QTY	TANK CAP. (LITR)	HEATING CAP. (BTU/HR)	DOMESTIC WATER WATER INLET/OUTLET TEMP.(F)	HOT WATER- WATER INLET/OUTLET TEMP.(F)	DOMESTIC WATER FLOW RATE (GPH)	HOT WATER FLOW RATE (GPM)	REMARK
FIR-DHWG-101	WITH HOT WATER HEATING COIL	1	600	94'000	40/140	180/160	112	9.4	

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EXPANSION TANK SCHEDULE					
TAG No.	LOCATION	TYPE	VOLUME (LITR)	MAX. AVERAGE OPERATING TEMP(°F)	REMARK
FIR-C-EXT-01	STORE	CLOSED	200	180	

(*) THIS DATA SHALL BE FINALIZED BY VENDOR.

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REFERENCE DOCUMENTS	DOC. NO.
Fire Station No.2 HVAC Calculation	LRP-TNA-HV-15-CAL-0001
Fire Station No.2 HVAC Equipment Data Sheets	LRP-TNA-HV-15-DSH-0001

LEGEND



KEY PLAN

03	24-JAN-24	AFC	H.RASOOLI	H.RASOOLI	R.JAVADZADEH
02	03-DEC-23	AFC	H.RASOOLI	H.RASOOLI	AR.AHOOEI
01	29-JUL-23	AFC	H.RASOOLI	H.RASOOLI	AR.AHOOEI
00	11-MAY-23	IFI	H.RASOOLI	H.RASOOLI	AR.AHOOEI
Rev.	Date	Purpose of Issue	PRE'D.	CHK'D.	APR'D.

Project

Completing the Remaining Documents of Design
and Engineering Services for LAB2 Unit

P.O. No.:6258	SCALE : 1:100
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Client:		Consultant:	
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DRAWING TITLE:

Fire Station No.2 HVAC Equipment Schedule

OLD Doc. No.: -		Doc. No.: LRP-TNA-HV-15-LIS-0001	
Size: A1	SHEET No.	1 OF 1	REV. 03