

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	CENTRIFUGAL BACKWARD CURVED, DWDI		
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	SEAMLESS COPPER		
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	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	ALUMINUM-WASHABLE EFFICIENCY % 30		
1ST BED	PLEATED EFFICIENCY % 45-50		
2ND BED	BAG EFFICIENCY % 90		
3RD BED	-		
COMPRESSOR	HERMETIC SCROLL		
QTY	2		
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	535000(EACH)	THE EXACT CAPACITY OF BOILER SHALL BE CONSIDERED BY VENDOR.
FIR-B0-002	BOILER		STORE		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.WS)	ELECTRICAL CHARACTERISTIC(*)					TYPE OF WATER	
							KW(*)	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	DHWR 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 l/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.

GENERAL NOTES

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

Client:		Consultant:	
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DRAWING TITLE:  
Fire Station No.2 HVAC Equipment Schedule

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Size: A1	SHEET No. 1 OF 1 REV. 03