



MECHANICAL EQUIPMENT SCHEDULE (All Starters Supplied by Electrical unless otherwise indicated))

EQUIPMENT TAG#	DESCRIPTION	ROOM	HP/AMP	VOLTAGE	FIRE ALARM SHUTDOWN	MAN MAG S/S VFD SIZE	H.O.A ON/OFF PILOT 2 SPD	BREAKER	CABLE SIZE	PANEL	CONNECTION INFO: (Wiring by Electrical unless otherwise indicated. Confirm with mechanical drawings.)
P-1,P-2	RECIRC PUMP	161	0.06KW	120V/1PH		MAN		15A/1P	12	EN	INTERLOCK WITH ASSOCIATED HEAT PUMP TO RUN WHEN HEAT PUMP IS RUNNING. PROVIDE AN INTERFACE RELAY AT EACH HEAT PUMP.
AC-1/AC-2	AIR CONDITIONER	165 166		208V/1PH				15A/2P	12	EN	INTERLOCK WITH ASSOCIATED CONDENSING UNIT
CU-1	CONDENSING UNIT	EXT.		208V/1PH				30A/2P	10	EN	
CU-2	CONDENSING UNIT	EXT.		208V/1PH				40A/2P	8	EN	
F-1	VENTILATION FAN	168	80W	120V/1PH	YES	MAG 00		15A/1P	12	EN	INTERLOCK WITH EF-1. WIRE AND CONNECT MOTORIZED DAMPERS.
F-2	VENTILATION FAN	150	144W	120V/1PH	YES	MAG 00		15A/1P	12	EN	INTERLOCK WITH EF-3. WIRE AND CONNECT MOTORIZED DAMPERS.
EF-1	EXHAUST FAN	168	60W	120V/1PH		MAN		15A/1P	12	EN	RUN CONTINUOUS UNDER NORMAL POWER. INTERLOCK WITH F-1 UNDER EMERGENCY POWER.
EF-2	EXHAUST FAN	165	48W	120V/1PH		MAN		15A/1P	12	EN	RUN CONTINUOUSLY
EF-3	EXHAUST FAN	156	144W	120V/1PH		MAN		15A/1P	12	EN	INTERLOCK WITH F-2 TO RUN WHEN F-2 IS RUNNING.
DH-1	DUCT HEATER	170	8KW	208V/1PH				50A/2P	6	EN	WIRE AND CONNECT AIR SWITCH AND OTHER PACKAGED CONTROLS.
DH-2	DUCT HEATER	150	10KW	208V/1PH				60A/2P	6	EN	WIRE AND CONNECT AIR SWITCH AND OTHER PACKAGED CONTROLS.
HP-1 TO 4	HEAT PUMP	VARIOUS		208V/1PH				15A/2P	12	EN	RECONNECT EXISTING HEAT PUMPS TO NEW PANEL. PROVIDE NEW CABLE IN CONDUIT TO EACH UNIT. COORDINATE RECONNECTION OF THERMOSTATS WITH MECHANICAL.

PANEL	CIRCUIT	LINE VOLTAGE	PHASE	WIRE	MAIN BUS	MAIN BREAKER	ICR	MOUNTING	LOCATION	FEEDER
EU	60	120V/208V	3	4	225A	-	25KA	SURFACE	REFER TO DRAWING	REFER TO SINGLE LINE

NOTE: * PROVIDE RED BREAKER
NOTE: ALL CIRCUITS TO COMPUTER OR OTHER SENSITIVE EQUIPMENT TO A DEDICATED NEUTRAL CABLES.

LOADS (kVA)			DESCRIPTION	POLE	AMP	CCT	A	B	C	CCT	AMP	POLE	DESCRIPTION	LOADS (kVA)		
A	B	C												A	B	C
X			DISPATCH REC.	1	15	1				2	15	1	DISPATCH REC.	X		
X			DISPATCH REC.	1	15	3				4	15	1	DISPATCH REC.		X	
	X		DISPATCH REC.	1	15	5				6	15	1	DISPATCH REC.			X
X			DISPATCH REC.	1	15	7				8	15	1	DISPATCH REC.	X		
X			DISPATCH REC.	1	15	9				10	15	1	DISPATCH REC.		X	
	X		DISPATCH REC.	1	15	11				12	15	1	DISPATCH REC.			X
X			TRANSFER COORD.	1	15	13				14	15	1	TRANSFER COORD.	X		
X			TRANSFER COORD.	1	15	15				16	15	1	SUPERVISOR		X	
	X		SUPERVISOR	1	15	17				18	15	1	SUPERVISOR			X
X			SPARE	1	15	19				20	15	1	SPARE	X		
X			SPARE	1	15	21				22	15	1	CALL TAKING		X	
	X		CALL TAKING	1	15	23				24	15	1	CALL TAKING			X
X			CALL TAKING	1	15	25				26	15	1	CALL TAKING	X		
X			CALL TAKING	1	15	27				28	15	1	CALL TAKING		X	
	X		CALL TAKING	1	15	29				30	15	1	CALL TAKING			X
X			CALL TAKING	1	15	31				32	15	1	CALL TAKING	X		
X			CALL TAKING	1	15	33				34	15	1	COPIER		X	
	X		OFFICE	1	15	35				36	15	1	OFFICE			X
X			TELEPHONE BACKBOARD	1	15	37				38	20	1	LAN RACK	X		
X			LAN RACK	1	20	39				40	20	1	LAN RACK		X	
	X		FUTURE MONITORS	1	15	41				42	15	1	LAN REC			X
X			FIRE ALARM PANEL *	1	15	43				44	15	1	LAN REC	X		
X			LAN REC.	1	15	45				46	20	1	LAN RACK		X	
X			LAN REC.	1	15	47				48	20	1	LAN RACK			X
X			LAN RACK	1	20	49				50	15	1	SPARE	X		
X			LAN RACK	1	20	51				52	15	1	SPARE		X	
	X		LAV RACK	1	20	53				54	15	1	RADIO RACK(PENTHOUSE)			X
X			SPARE	3	60	55				56	15	1	RADIO RACK(PENTHOUSE)	X		
X			SPARE	60	57					58	15	1	RADIO RACK(PENTHOUSE)		X	
X			SPARE	60	59					60	15	1	RADIO RACK(PENTHOUSE)			X

PANEL	CIRCUIT	LINE VOLTAGE	PHASE	WIRE	MAIN BUS	MAIN BREAKER	ICR	MOUNTING	LOCATION	FEEDER
EN	66	120V/208V	3	4	225A	-	25KA	SURFACE	REFER TO DRAWING	REFER TO SINGLE LINE

NOTE: * PROVIDE LOCK OFF

LOADS (kVA)			DESCRIPTION	POLE	AMP	CCT	A	B	C	CCT	AMP	POLE	DESCRIPTION	LOADS (kVA)		
A	B	C												A	B	C
X			EXIT/EMERGENCY LIGHTING *	1	15	1				2	15	1	LIGHTING A1	X		
	X		LIGHTING A2	1	15	3				4	15	1	LIGHTING A2		X	
		X	SPARE	1	15	5				6	15	1	SPARE			X
X			SPARE	1	15	7				8	15	1	RECEPTACLE	X		
	X		RECEPTACLE	1	15	9				10	15	1	FRIDGE		X	
	X		DISHWASHER	1	15	11				12	15	1	COFFEE MAKER			X
X			HANDI-CAP DOOR OPERATORS	1	15	13				14	15	1	WATER COOLER	X		
	X		MICROWAVE	1	15	15				16	15	1	SPARE		X	
	X		SPARE	1	15	17				18	30	2	BBH-1 (X4)			X
X			BBH-2,3	2	30	19				20	30		BBH-1 (x4)	X		
	X		BBH-2,3		30	21				22	20	2	HWT -2		X	
	X		HWT - 1	2	20	23				24	20		HWT -2			X
X			HWT - 1		20	25				26	60	2	DH - 2	X		
	X		DH - 2	2	50	27				28	60		DH - 2		X	
	X		DH - 2		60	29				30	15	1	P - 1, P - 2,			X
X			F - 1, EF - 2, EF - 2	1	15	31				32	15	1	F - 2, EF - 3	X		
	X		AC - 1	2	15	33				34	30	2	CU - 1		X	
	X		AC - 1		15	35				36	30		CU - 1			X
X			AC - 2	2	15	37				38	40	2	CU - 2	X		
	X		AC - 2		15	39				40	40		CU - 2		X	
	X		SPARE	2	40	41				42	15	1	RECEPTACLE			X
X			PORT AC UNIT	1	15	43				44	15	2	FF-1	X		
	X		PORT AC UNIT	1	15	45				46	15		FF-1		X	
	X		HP-1	2	15	47				48	15	2	HP-3			X
X			HP-1		15	49				50	15		HP-3	X		
	X		HP-2	2	15	51				52	15	2	HP-4		X	
	X		HP-2		15	53				54	15		HP-4			X
X			SPARE	1	15	55				56	15	1	SPARE	X		
	X		SPARE	1	15	57				58	15	1	SPARE		X	
	X		SPARE	1	15	59				60	15	1	SPARE			X
X			SPARE	3	60	61				62	15	1	SPARE	X		
	X		SPARE		60	63				64	15	1	SPARE		X	
X			SPARE	60	65					66	15	1	SPARE			X

DRAWING NOTES:

- ALL ELECTRICAL DISTRIBUTION EQUIPMENT IS TO BE BONDED TO GROUND WITH A DEDICATED GROUNDING CABLE DIRECT TO THE MAIN GROUND. SIZE TO CEC
- ALL EQUIPMENT IS TO BE SPRINKLER PROOF.
- ALL PENETRATIONS THROUGH RATED AREAS IS TO BE SEALED WITH A ULC LISTED FIRE STOP SYSTEM.
- PROVIDE CO-ORDINATED TRIPS AND SETTINGS FOR GENSET AND ALL OTHER NEW BREAKERS. PROVIDE CURRENT LIMITING FUSES FOR GENSET IF KA RATINGS EXCEED EXISTING EQUIPMENT VALUES.



2	ISSUED FOR ADDENDUM	KO 1/11
1	ISSUED FOR ADDENDUM	KO 1/11
0	ISSUED FOR TENDER	KO 12/10

NO.	REVISION/DESCRIPTION	BY	DATE
SEALS			



DRAWN BY	CHECKED BY	APPROVED
DATE	USER APPROVAL	

CITY OF WINNIPEG
PLANNING, PROPERTY AND
DEVELOPMENT DEPARTMENT
CIVIC ACCOMMODATIONS DIVISION
300 - 65 GARRY ST. R3C 4K4

PROJECT
MANDARIN BUILDING
ALTERNATE EMERGENCY
COMMUNICATION CENTRE DESIGN
185 KING STREET

SHEET TITLE
ELECTRICAL
SINGLE LINE DIAGRAM

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	2008-095-02	E-5