

MOTOR/EQUIPMENT SCHEDULE																				
ITEM	DESCRIPTION	EQUIPMENT			FEED FROM	PKG UNIT	STARTER					CONTROLS				FIRE ALARM SHUT DOWN	REMARKS	SEE NOTES BELOW		
		LOCATION	KW/HP/AMPS	VOLTS/Ø			TYPE	FUNC	PL	PE	HOA	SUPPLY BY	TYPE	SUPPLY BY	INSTALL BY				WIRE BY	
ACH-1	AIR COOLED CHILLER	SCREENED SERVICES (EXTERIOR)	168 MCA 200 MOC	208/3	MD-1	Y									DDC	MECH	MECH	MECH		
ERV-1	ENERGY RECOVERY VENTILATOR	MECHANICAL ROOM	26 MCA 40 MOC	208/3	MD-1	Y									DDC	MECH	MECH	MECH	Y	COORD. LOCATION OF DUCT SMOKE DET. WITH MECH
B-1	BOILER	MECHANICAL ROOM	6 FLA, 15 MOC	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
B-2	BOILER	MECHANICAL ROOM	6 FLA, 15 MOC	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
H-1	HUMIDIFIER	MECHANICAL ROOM	94.4 A 125 MOC	208/3	MD-1	Y									DDC	MECH	MECH	MECH		
CP-1A	CIRCULATING PUMP	MECHANICAL ROOM	2.11 HP	208/1	PANEL M	Y									DDC	MECH	MECH	MECH		
CP-1B	CIRCULATING PUMP	MECHANICAL ROOM	2.11 HP	208/1	PANEL M	Y									DDC	MECH	MECH	MECH		
CP-2A	CIRCULATING PUMP	MECHANICAL ROOM	0.82 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
CP-2B	CIRCULATING PUMP	MECHANICAL ROOM	0.82 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
CP-3A	CIRCULATING PUMP	MECHANICAL ROOM	1.74 HP	208/1	PANEL M	Y									DDC	MECH	MECH	MECH		
CP-3B	CIRCULATING PUMP	MECHANICAL ROOM	1.74 HP	208/1	PANEL M	Y									DDC	MECH	MECH	MECH		
RCP-1	RE-CIRCULATING PUMP	JANITOR ROOM	0.06 HP	120/1	PANEL M	Y									DDC	ELEC	ELEC	ELEC		
HWT-1	HOT WATER TANK	MECHANICAL ROOM	4.5 KW	208/3	PANEL M	Y									INT	MECH	MECH	MECH		
FC-1	FAN COIL	ABOVE MPR STORAGE	0.11 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
FC-2	FAN COIL	ABOVE MPR STORAGE	0.11 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
TF-1	TRANSFER FAN	ABOVE MPR STORAGE	0.5 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
TF-2	TRANSFER FAN	ELECTRICAL ROOM	0.3 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
TF-3	TRANSFER FAN	ABOVE BRANCH HEAD OFFICE	0.2 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
TF-4	TRANSFER FAN	ABOVE MPR STORAGE	0.1 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
WSP-1	WEeping SUMP PUMP	CRAWLSPACE	DUPLEX 1/2 HP	120/1	PANEL M	Y									F	MECH	MECH	MECH		COORDINATE CONTROL PANEL LOCATION WITH MECH
WSP-2	WEeping SUMP PUMP	CRAWLSPACE	DUPLEX 1/2 HP	120/1	PANEL M	Y									F	MECH	MECH	MECH		COORDINATE CONTROL PANEL LOCATION WITH MECH
UH-1	HYDRONIC UNIT HEATER	MECHANICAL ROOM	0.05 HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
VAV-1-9	VAV BOX	AS SHOWN	FR. HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		EC TO CONNECT 120V TO 24V TRANSFORMER
RHP-1	ENERGY RECOVERY HEAT PIPE	MECHANICAL ROOM	FR. HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		
RHC-2	ENERGY RECOVERY HEAT PIPE	ELECTRICAL ROOM	FR. HP	120/1	PANEL M	Y									DDC	MECH	MECH	MECH		

GENERAL NOTES:

- MANUAL MOTOR STARTER TO BE C/W PILOT LIGHT AND OVERCURRENT PROTECTION
- ALL STARTERS TO BE SUPPLIED & INSTALLED BY THE ELECTRICAL CONTRACTOR (EC) UNLESS OTHERWISE NOTED.
- DISCONNECT SWITCHES TO BE SUPPLIED & INSTALLED BY THE ELECTRICAL CONTRACTOR
- ELECTRICAL CONTRACTOR TO PROVIDE CIRCUIT BREAKERS AND WIRING ACCORDING TO THE FINAL NAMEPLATES OF THE MECHANICAL EQUIPMENT AT NO COST.
- REFER TO PANEL BOARD SCHEDULES AND SINGLE LINE DIAGRAM FOR MOTOR AND EQUIPMENT OVERLOAD PROTECTION.

F = FLOAT SWITCH
 FVNR = FULL VOLTAGE NON-REVERSING
 HOA = HAND/OFF/AUTO
 INT = INTEGRAL
 MAG = MAGNETIC STARTER
 MAN = MANUAL STARTER
 PL = PILOT LIGHT
 PS = PRESSURE SWITCH
 RVNR = REVERSE VOLTAGE NON-REVERSING
 SS = SOFT STARTER

T = THERMOSTAT
 Y = YES
 AD = AMMONIA DETECTION SYSTEM
 CHL = CHLORINE SENSOR
 CO = CARBON MONOXIDE SENSOR
 CO2 = CARBON DIOXIDE SENSOR
 ES = END SWITCH
 ESC = ELECTRONIC SPEED CONTROLLER
 FS = FLOW SWITCH
 H = HUMIDISTAT

LS = LEVEL SWITCH
 MS = MANUAL SWITCH
 MT = MANUAL TIMER (WALL MOUNTED)
 TDS = TIME DELAY SWITCH (WALL MOUNTED)
 DDC = DIGITAL DATA CONTROL SYSTEM
 I = INTERLOCK
 PB = PUSH BUTTON
 RP = REMOTE PANEL
 TC = TIME CLOCK
 VFD = VARIABLE FREQUENCY DRIVE

ELECTRIC HEATER SCHEDULE							
TYPE	MANUFACTURER	CATALOGUE NO.	KW	VOLTS/Ø	MOUNTING	REMARKS	NOTES
EFFH-1	OUELLET	OAWH04808	4.8 KW	208/1	W	C/W RELAYS FOR INTEGRATION WITH DDC CONTROLS	1
EUH-1	OUELLET	OAS04008AM	4.0 KW	208/1	S	C/W RELAYS FOR INTEGRATION WITH DDC CONTROLS	1

NOTES: 1. FINISH/COLOUR AS SELECTED BY OWNER.

W = WALL P = PENDANT CH = CHAIN
 S = SUSPENDED DW = DRYWALL

BATTERY BANK SCHEDULE								
NO.	MANUFACTURER	CATALOGUE NO.	INPUT VOLTS	OUTPUT VOLTS	SOURCE PANEL	QUANTITY		MINIMUM WATTAGE x 1.25
EBB#1	LUMACELL	RG12S-360-2-LD7-AT-VSR4	120	12		23	6	256x1.25=320
	BEGHELLI	NV-12-550-2SR-5WLED-AT-ZSP-4-120						320x1.25=400
	LUMACELL	LUMACELL LS SERIES, SELF POWERED	120			SEE DWG		

NOTES:

LUMACELL MQM-2-LD7
 BEGHELLI SR-2-12V/5WLED

LUMACELL MQM-3-LD7
 BEGHELLI SR-3-12V/5WLED

LUMACELL MQM-2-LD7
 BEGHELLI SR-2-12V/5WLED

LUMACELL MQM2NX-LD7

<p>TOWER PROJECT NO.: 181335 TOWER ENGINEERING GROUP UNIT 1-1140 WAVERLEY ST. WINNIPEG, MB R3T 0P4 TEL: (204) 925-1150 FAX: (204) 925-1155 EMAIL: towereng@towereng.ca WEB: www.towereng.ca • WINNIPEG • CALGARY</p>	5 2019-07-08 ISSUED FOR CONSTRUCTION SMM 4 2019-06-26 ISSUED FOR 100% PRE-TENDER REVIEW SMM 3 2019-05-13 ISSUED FOR PRE-TENDER REVIEW SMM 2 2019-04-17 ISSUED FOR REVIEW SMM 1 2019-02-22 ISSUED FOR 60% REVIEW SMM	<p>Certificate of Authorization Tower Engineering Group No. 4156 Expiry: April 30, 2020</p>	<p>2019-07-16</p>	<p>Bill and Helen Norrie Library Project No.: 2017-082 Tender No.: 542-2019 Address: 15 Poseidon Bay, Winnipeg, MB.</p>
	Drawn By: VREGUNAY Printing Date:			