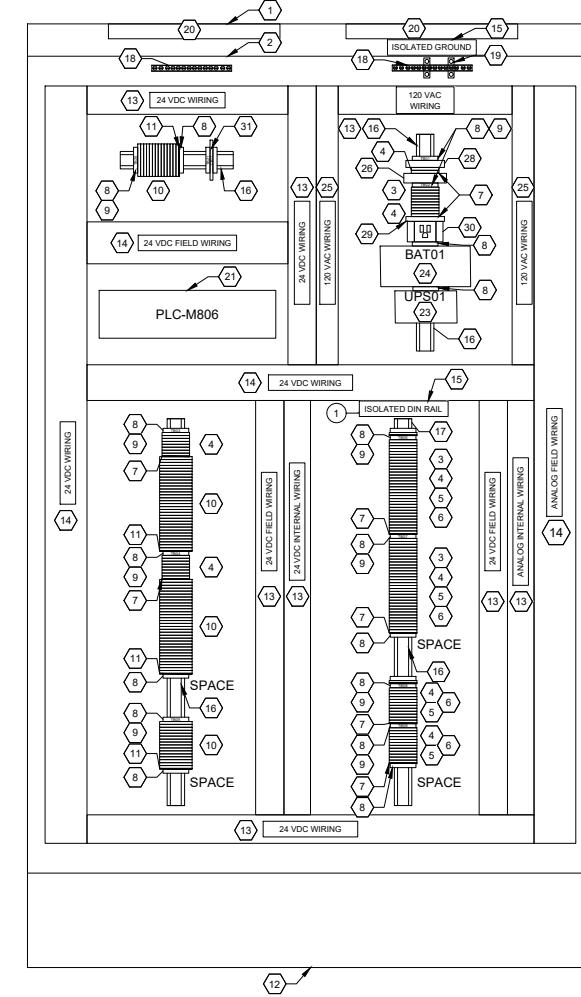


EXTERIOR PANEL VIEW



INTERIOR PANEL VIEW

BILL OF MATERIAL				
ITEM	QTY.	DESCRIPTION		
		MANUFACTURER		
		CATALOG NUMBER		
1	1	TYPE 12 FLOOR-MOUNT ENCLOSURE - 1800x1200x600mm WITH LARGE DATA POCKET	HOFFMAN	PP18126
2	1	SUB-PANEL FOR ITEM 1	HOFFMAN	PPF1812
3	AS REQ'D	FUSED TERMINAL - UT 4 WITH FUSE PLUG-P-FU 5X20	PHOENIX CONTACT	3046142
4	AS REQ'D	FEED-THROUGH TERMINAL - UT 4-MTD	PHOENIX CONTACT	3046184
5	AS REQ'D	KNIFE DISCONNECT TERMINAL - UT 4-MT	PHOENIX CONTACT	3046139
6	AS REQ'D	POTENTIAL-EARTH TERMINAL - UT 4-MTD-PE/S	PHOENIX CONTACT	3046207
7	AS REQ'D	TERMINAL END PLATE - D-UT 2,5/4 TWIN	PHOENIX CONTACT	3047141
8	AS REQ'D	TERINAL END CLAMP - CLIPFIX 35	PHOENIX CONTACT	3022218
9	AS REQ'D	TERMINAL BLOCK MARKER - KLM-A	PHOENIX CONTACT	1004348
10	AS REQ'D	DOUBLE LEVEL FUSED TERMINAL - UTTB 4 WITH FUSE PLUG-P-FU 5X20	PHOENIX CONTACT	3044720
				3036806
11	AS REQ'D	DOUBLE LEVEL TERMINAL END PLATE - D-UTTB 2,5/4	PHOENIX CONTACT	3047293
12	1	200mm PLINTH BASE FOR ITEM 1	HOFFMAN	PPB2166
13	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 2.25"X3.12"	PANDUIT	F2X3LG6
14	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 3.25"X3.12"	PANDUIT	F3X3LG6
15	AS REQ'D	LAMACOIDS		-
16	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
17	AS REQ'D	DIN RAIL INSULATED SUPPORT BRACKET	PHOENIX CONTACT	1201141
18	2	GROUND BAR, 14 TAPS	ILSCO	D167-14
19	2	GROUND BAR ISOLATION STAND OFF	PANDUIT	UGB-IN-SO
20	2	PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LF120V15 ALFSWD
21	1	M580 PLC RACK - AS PER DETAIL A	SCHNEIDER	-
22	1	HMI SCREEN	SCHNEIDER	HMIGTO6310
23	1	24VDC POWER SUPPLY/UPS, TRIO-UPS-2G/1AC/24DC/10	PHOENIX CONTACT	2907161
24	1	ENERGY STORAGE, UPS-BAT/VRLA/24DC/3.4AH	PHOENIX CONTACT	2320306
25	AS REQ'D	NARROW SLOT WIRING DUCT, 1.75"X3.12"	PANDUIT	F1.5X3LG6
26	1	SURGE ARRESTOR MODULE C/W BASE, 120V, PLT-SEC-T3-120-FM-UT	PHOENIX CONTACT	2907918
27	1	FOLDING SHELF, GREY	HOFFMAN	AASHLF1818
28	1	MINIATURE CIRCUIT BREAKER, 10 AMP, DIN RAIL MOUNTED, FAZ TYPE, 120 VAC	EATON	FAZ-B10/1-NA-L
29	1	MINIATURE CIRCUIT BREAKER, 5 AMP, DIN RAIL MOUNTED, FAZ TYPE, 120 VAC	EATON	FAZ-B5/1-NA-L
30	1	RECEPTACLE, 125V, 15A, DIN RAIL MOUNTED, SD-US/SC/LA/GY	PHOENIX CONTACT	2963860
31	1	PLC RELAY MODULE, 24VDC	PHOENIX CONTACT	2966171

GENERAL NOTES:
 1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm)
 2. ALL POWER AND 120 VAC WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 12 AWG OR LARGER WHERE CURRENT REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS.
 3. ALL 24 VDC CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16AWG.
 4. ALL ANALOG WIRING TO BE 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.
 5. COMPONENTS ARE TO BE LABELED AS SHOWN ON THE DRAWINGS.
 6. TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY. DOCUMENT ALL TEST RESULTS.
 7. ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
 8. PROVIDE WIRE BARREL FERRULES FOR WIRING WHERE POSSIBLE.
 9. ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
 10. ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
 11. ROUTE ALL 24VDC WIRING SEPARATE FROM 120VAC WIRING.
 12. JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.
 13. THE BILL OF MATERIALS MAY NOT INCLUDE ALL MISCELLANEOUS MATERIALS REQUIRED, IT IS INTENDED TO BE USED AS A GENERAL GUIDELINE ONLY, IT IS RESPONSIBILITY OF THE VENDOR TO PROVIDE ALL REQUIRED MATERIALS FOR COMPLETE AND OPERATING SYSTEM.

* THIS BILL OF MATERIALS MAY NOT INCLUDE ALL MISCELLANEOUS MATERIALS REQUIRED, AND IS INTENDED TO BE USED AS A GENERAL GUIDELINE ONLY. IT IS THE RESPONSIBILITY OF THE VENDOR / FABRICATOR TO PROVIDE ALL REQUIRED MATERIALS FOR A COMPLETE AND WORKING SYSTEM.

REV 0 OF THIS DRAWING NOT AS -
 BUILT DURING TIME OF THIS
 TENDER.
 CONTRACTOR TO PROVIDE
 MODIFICATIONS SHOWN IN
 REDLINE MARKUPS AS PART OF
 SCOPE OF WORK.

PS	0	1	2	3	4	5	6	7	8	9	10	11
BMX CPS 3020	BME/P58 2040	BME/OC0301	BMX/DDI 3202K	BMX/DDI 3202K	BMX/DDI 1602	BMX/AMI 0810	BMX/AMI 0810	BMX/AMO 0410	BMX/AMO 0410	BMX/NRP 0200	BMX/NRP 0200	SPACE

DETAIL A - PLC-M806 RACK CONFIGURATION

1. PROVIDE NEW MODICON X80, MULTIMODE FIBRE CONVERTER MODULE IN EXISTING HVAC CONTROL PANEL TO CONNECT TO REMOTE I/O PANEL CP-C827.

 AECOM Certificate of Authorization AECOM Canada Ltd. No. 4671 Date: 2023-07-14			THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT		ENGINEER'S SEAL BOGHMAN Member 32454 REGISTERED PROFESSIONAL ENGINEER
MAM	ALV	DRAWN BY:	APPROVED BY:		
MAM	SSB	SCALE:	RELEASED FOR CONSTRUCTION BY:		
NTS		DATE:	DATE:		
2023-07-14					
0 ISSUED FOR TENDER/CONSTRUCTION	MAM ALV	CONSULTANT NO.:			
01 FUTURE AS-BUILT					
0 ISSUED FOR TENDER/CONSTRUCTION	2023-07-14	MAM ALV			
0 NO. REVISIONS	DATE	DESIGN CHECK			
CITY DRAWING NUMBER			1-0650M-A0040	SHEET	001
				REV.	0
				SIZE	A1