

**INTERIOR PANEL VIEW**  
1 : 5

BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	PROLINE TYPE 12 MODULAR ENCLOSURE WITH SUBPANEL - 2000mmx1600mmx600mm WITH LARGE DATA POCKET	HOFFMAN	PP20166 ADP2
2	1	200mm PLINTH BASE FOR ITEM 1	HOFFMAN	PPB2166
3	AS REQ'D	LAMACOID	-	-
4	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
5	AS REQ'D	TERMINAL BLOCK MARKER - KLM-A	PHOENIX CONTACT	1004348
6	AS REQ'D	FUSED TERMINAL - UT 4 WITH FUSE PLUG - P-FU 5X20	PHOENIX CONTACT	3046142 3036806
7	AS REQ'D	FEED THROUGH TERMINAL - UT 4-MTD	PHOENIX CONTACT	3046184
8	AS REQ'D	TERMINAL END PLATE - D-UT 2,5/4 TWIN	PHOENIX CONTACT	3047141
9	AS REQ'D	TERMINAL END CLAMP - CLIPFIX 35	PHOENIX CONTACT	3022218
10	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 2.25"x3.12"	PANDUIT	F2X3L66
11	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 3.25"x3.12"	PANDUIT	F3X3L66
12	AS REQ'D	WIDE SLOT WIRING DUCT AND COVER, 2.25"x3.12"	PANDUIT	G2X3L66
13	AS REQ'D	WIDE SLOT WIRING DUCT AND COVER, 3.25"x3.12"	PANDUIT	G3X3L66
14	2	HOT STANDBY M580 RACK - AS PER DETAIL A	SCHNEIDER	-
15	2	ETHERNET EXTENDED MANAGED SWITCH, DRS, 8 COPPER PORTS	SCHNEIDER	TCSEMO83F23F1
16	2	PROFIBUS REMOTE MASTER	SCHNEIDER	TCSEGA23F14F
17	2	LED PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LED24V15 ALFSWD
18	2	GROUND BAR, 14 TAPS	ILSCO	D167-14
19	4	HEAD STATION TYPE 1B	PROCENTEC	101-20011B
20	21	2 CHANNEL REPEATER	PROCENTEC	101-201102
21	2	1 CHANNEL PROFIBUS PA MODULE	PROCENTEC	101-201610
22	2	6A POWER MODULE T1	PROCENTEC	101-230010
23	-	R2 PROFIBUS PA SEGMENT PROTECTOR	PEPPERL+FUCHS	R2-SP-IC6
24	8	ELECTRONIC CIRCUIT PROTECTION CLASS 2 CIRCUITS ESX10-T (1A)	WEIDMULLER	6720005301
25	8	ELECTRONIC CIRCUIT PROTECTION CLASS 2 CIRCUITS ESX10-T (2A)	WEIDMULLER	6720005302
26	2	ELECTRONIC CIRCUIT PROTECTION CLASS 2 CIRCUITS ESX10-T (3A)	WEIDMULLER	6720005303
27	2	D-SUB CONNECTOR, 9-POS., MALE CONNECTOR, PROFIBUS DP UP TO 12 Mbps WITH PG D-SUB SOCKET FOR CONNECTING A PROGRAMMING DEVICE AND TERMINATION RESISTOR	PHOENIX CONTACT	-
28	2	RELAY MODULE 24 VDC, 1PDT, FOR PLC INPUT	PHOENIX CONTACT	2966278
29	2	RELAY MODULE SEPARATING PLATE	PHOENIX CONTACT	2966841

**GENERAL NOTES:**

- ALL POWER WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 12 AWG OR LARGER WHERE CURRENT REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS. PROCENTEC COMBRICKS POWER WIRING TO BE 14 AWG.
- ALL CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.
- ALL ANALOG WIRING TO BE 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.
- COMPONENTS ARE TO BE LABELED AS SHOWN ON THE DRAWINGS.
- ALL FUSES ARE TO BE PROVIDED. IN ADDITION, TWO SPARES OF EACH FUSE SIZE ARE TO BE PROVIDED.
- TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY. DOCUMENT ALL TEST RESULTS.
- ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
- PROVIDE WIRE BARREL FERRULES FOR WIRING WHERE POSSIBLE.
- ALL TERMINAL BLOCKS SHALL BE LABELED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
- ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
- ROUTE ALL 24VDC WIRING SEPARATE FROM 120VAC WIRING.
- JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.
- PANEL MANUFACTURER TO PROVIDE ALL INTERNAL COMMUNICATION CABLES AS SHOWN ON SEGMENT AND NETWORK DIAGRAMS.

**SPECIFIC NOTES:**

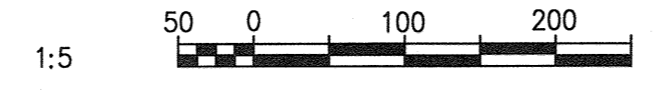
- PROVIDE MODULAR CABINET ACCESSORIES AND FRAME JOINING KITS AS REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE BARRIER PANELS BETWEEN JOINED OR GANGED ENCLOSURES. PROVIDE SOLID SIDES AT ENDS OF ENCLOSURE.

PLC-G800-A/PLC-G800-B  
RACK: BME XBP 0800  
HSBY SFP SOCKET - RJ45: 490NAC1000

PS	0	1	2	3	4	5	6	7	
BMX CPS 3020	BME HSB 4040	BME NOC 0301	BME NOC 0321	SPACE (BMX XEM 010)	BME NOC 0301	SPACE (BMX XEM 010)	SPACE (BMX XEM 010)	SPACE (BMX XEM 010)	SPACE

**DETAIL - HOT STANDBY M580 RACK CONFIGURATION**  
NTS

1-0102-EGAD-G002	POWER LAYOUT, GRIT/SCREENING ELECTRICAL ROOM
REFERENCE DRAWINGS	DESCRIPTION



DESIGNED BY: M. WANG	CHECKED BY: P. CHICATUN	DATE: 2015/07/24	DATE: 2017/04/05
DRAWN BY: M. WANG	APPROVED BY: E. RYCZKOWSKI	ISSUED FOR CONSTRUCTION BY: J. SHUMKA	CONSULTANT NO.: 474248
SCALE: AS SHOWN			
NO.	REVISIONS	DATE	DESIGN CHECK
01	ISSUED FOR ADDENDUM 1 - 976-2016	2017/05/26	SB PC
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	MW PC

ENGINEER'S SEAL

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE  
SEWPCC UPGRADING/EXPANSION PROJECT  
AUTOMATION - CABINET LAYOUT  
HEADWORKS AREA  
CP-G822, PLC AND DEVICE NETWORK EQUIPMENT CABINET

CITY DRAWING NUMBER: 1-0102-ACBD-G023  
SHEET: 002  
REV: 01  
SIZE: A1