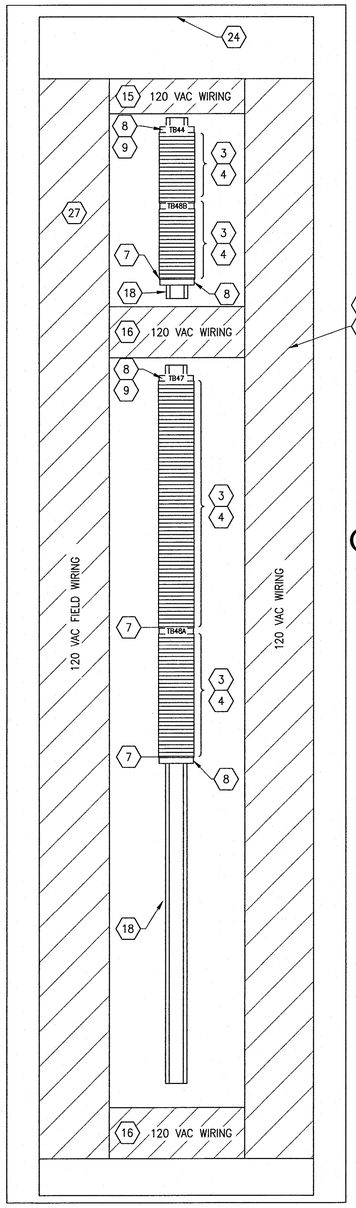
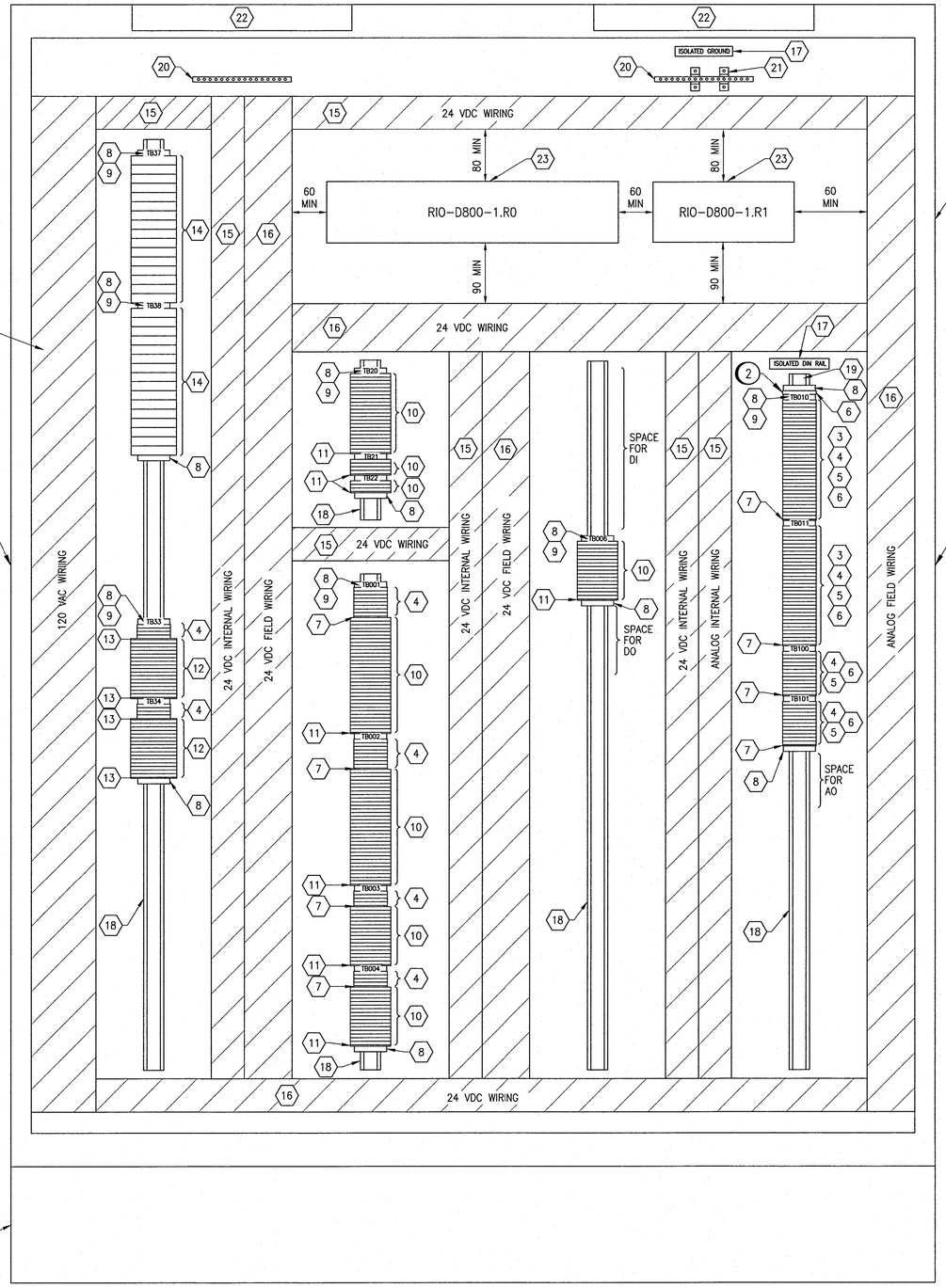
A1 SIZE – 594mm x 841mm



SIDE PANEL VIEW

1 : 5



INTERIOR PANEL VIEW

1 : 5

BILL OF MATERIAL

ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	TYPE 12 MODULAR ENCLOSURE WITH SUB-PANEL – 2000x1600x600mm WITH LARGE DATA POCKET	HOFFMAN	PP20166 ADP2
2	1	200mm PLINTH BASE FOR ITEM 1	HOFFMAN	PPB2166
3	AS REQ'D	FUSED TERMINAL WITH CONNECTOR	PHOENIX CONTACT	3046142 3036806
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	TERMINAL 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 – 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	AS REQ'D	RELAY MODULE, 120 VAC, 1PDT, FOR PLC INPUT	PHOENIX CONTACT	2966281
13	AS REQ'D	RELAY MODULE SEPARATING PLATE	PHOENIX CONTACT	2966841
14	AS REQ'D	48 SERIES – RELAY INTERFACE MODULE, 1 POLE, 16A	FINDER	48.61.7.024.0050
15	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 2.25"x3.12"	PANDUIT	F2X3LG6
16	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 3.25"x3.12"	PANDUIT	F3X3LG6
17	AS REQ'D	LAMACOIDS	–	–
18	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
19	AS REQ'D	DIN RAIL INSULATED SUPPORT BRACKET	PHOENIX CONTACT	1201141
20	2	GROUND BAR, 14 TAPS	ILSCO	D167-14
21	2	GROUND BAR ISOLATION STAND OFF	PANDUIT	UGB-IN-SO
22	2	LED PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LED24V15 ALFSWD
23	1	X80 RIO RACKS – AS PER DETAIL A	SCHNEIDER	–
24	1	PROLINE SIDE PANEL	HOFFMAN	PPFSM206
25	AS REQ'D	CORNER TYPE WIRING DUCT 3.10" HEIGHT AND COVER	PANDUIT	CWD3LG6
26	AS REQ'D	4" HEIGHT SLOTTED DIVIDER WALL	PANDUIT	SD4H6
27	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 4.25"x3.12"	PANDUIT	F4X3LG6

GENERAL NOTES:

1. 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.
2. ALL 24 VDC CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.
3. ALL ANALOG WIRING TO BE 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.
4. COMPONENTS ARE TO BE LABELED AS SHOWN ON THE DRAWINGS.
5. TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY. DOCUMENT ALL TEST RESULTS.
6. ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
7. PROVIDE WIRE BARREL FERRULES FOR WIRING WHERE POSSIBLE.
8. ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
9. ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
10. ROUTE ALL 24 VDC WIRING SEPARATE FROM 120 VAC WIRING.
11. JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.
12. PANEL MANUFACTURER TO PROVIDE ALL INTERNAL COMMUNICATION CABLES AS SHOWN ON SEGMENT AND NETWORK DIAGRAMS.

SPECIFIC NOTES:

(1) 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 TO CLOSE OPEN SIDES OF ENCLOSURE.

(2) CONNECT ISOLATED DIN RAIL TO ISOLATED GROUND BAR.

RIO-D800-1.RO
RACK: BME XBP 1200

PS	0	1	2	3	4	5	6	7	8	9	10	11	
BMX CPS 3020	BME CRA 312 10	BMX DDI 3202K S1	BMX DDI 3202K S1	BMX DDI 3202K S1	BMX DDI 3202K S1	SPACE (BMX XEM 010)	BMX DDO 1602 S2	BMX DDO 1602 S2	BMX DDO 1602 S2	SPACE (BMX XEM 010)	BMX AMI 0810 S3	BMX AMI 0810 S3	SPACE

TSX TLY EX

BMX XBC 008K
X-BUS CORDSET

RIO-D800-1.R1
RACK: BMX XBP 0400

PS	0	1	2	3	
BMX CPS 3020	BMX AMO 0410 S2	BMX AMO 0410 S2	SPACE (BMX XEM 010)	SPACE (BMX XEM 010)	BMX XBE 1000

TSX TLY EX

CONNECTOR LEGEND:

S1 – BMX FCW 303 40-WAY CONNECTOR WITH FLYING LEADS

S2 – BMX FTB 2010 SCREW CLAMP TERMINAL BLOCK

S3 – BMX FTW 308S 28-WAY REMOVABLE TERMINAL BLOCK WITH FLYING LEADS

(A) DETAIL – RIO RACK CONFIGURATION

NTS

REFERENCE DRAWINGS	DESCRIPTION
1-0102-EGAD-D002	POWER LAYOUT, ELECT. ROOM B, MECH. AND JUNCTION CHAMBER ROOM

1:5 50 0 100 200

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976-2016	2017/04/05	MW	PC

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: M. WANG	CHECKED BY: P. CHICATUN
DRAWN BY: B. DE GUZMAN	APPROVED BY: E. RYCZKOWSKI
SCALE: AS SHOWN	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2016/08/17	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
CHICATUN Member 30307
REGISTERED PROFESSIONAL ENGINEER
APR. 4, 2017 REV00

Winnipeg THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
AUTOMATION – CABINET LAYOUT
FERMENTERS/THICKENERS/BIOFILTERS
CP-D821, PROCESS RIO CABINET – RIO-D800-1

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-ACBD-D010	002	00	A1

LAST SAVE: 2017/04/01 – 10:11am
PATH: C:\pw_workdir\ch2mhill_wbg\sh043264\d035273\1-0102-ACBD-D010-002.dwg

PLOT DATE: Apr 01, 2017 – 10:11am

FILE NAME:1-0102-ACBD-D010-002.dwg