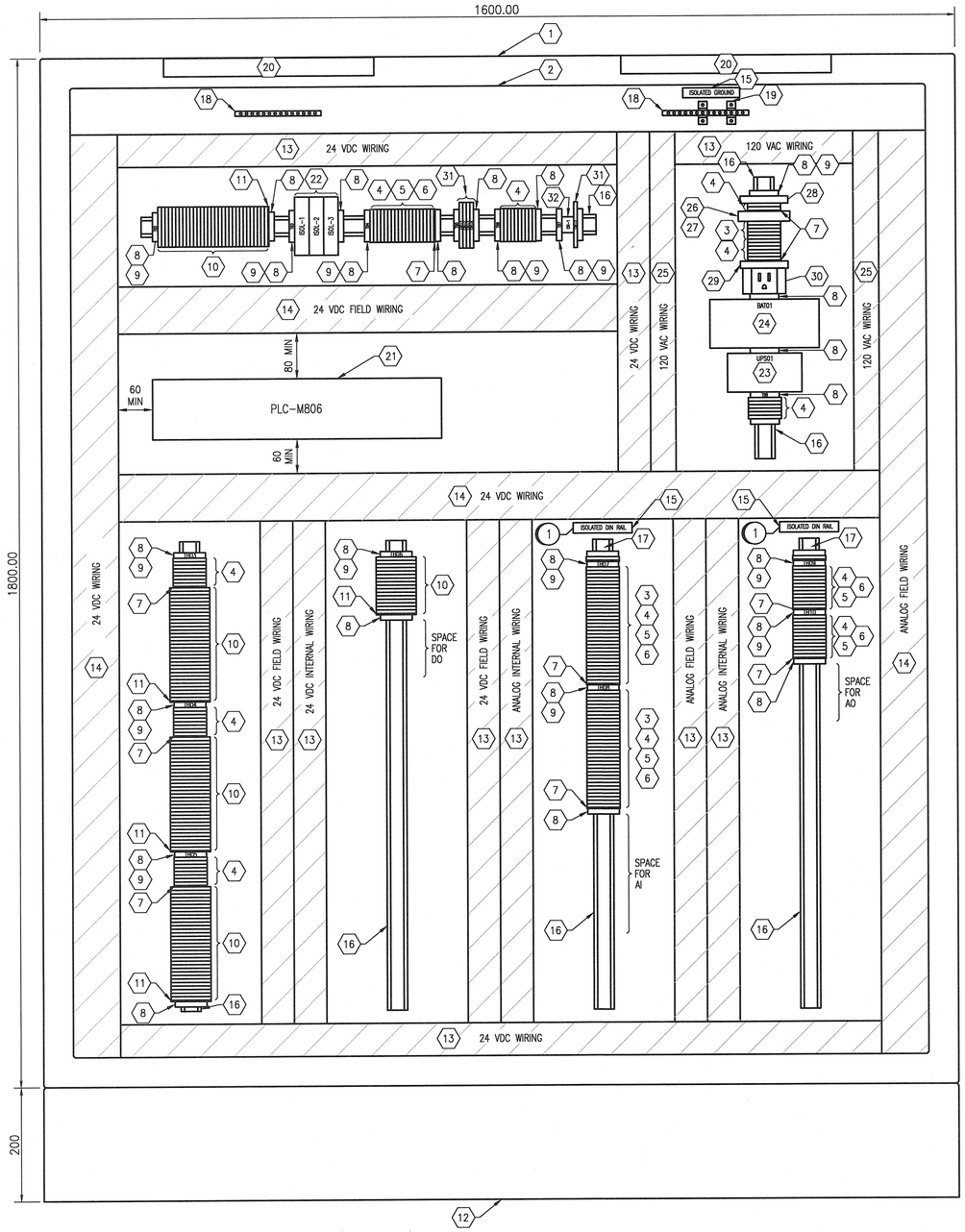
A1 SIZE – 594mm x 841mm



INTERIOR PANEL VIEW
SCALE: 1 : 5

BILL OF MATERIAL

ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	TYPE 12 FLOOR-MOUNT ENCLOSURE – 1800x1600x600mm WITH LARGE DATA POCKET	HOFFMAN	PP18166
2	1	SUB-PANEL FOR ITEM 1	HOFFMAN	PPF1816
3	AS REQ'D	FUSED TERMINAL – UT 4 WITH FUSE PLUG-P-FU 5X20	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 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	LED PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LF120V15 ALFSWD
21	1	M580 PLC RACK – AS PER DETAIL A	SCHNEIDER	–
22	3	MIT 4-WIRE, 2-CHANNEL SIGNAL ISOLATOR/CONVERTER, DIN RAIL MOUNTED	MOORE INDUSTRIES	MIT/2XPRG/2X4-20mA/U [DIN]
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	5	PLC RELAY MODULE, 24VDC	PHOENIX CONTACT	2966171
32	1	24VDC, 4CO RELAY MODULE	FINDER	55.14

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 24VDC WIRING SEPARATE FROM 120VAC WIRING.
11. JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.

SPECIFIC NOTES:

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

PLC-M806
RACK: BME XBP 1200

PS	0	1	2	3	4	5	6	7	8	9	10	11
BMX CPS 3020	BME P58 2040		SPACE (BMX XEM 010)	BMX DDI 3202K	BMX DDI 3202K	BMX DDI 3202K	BMX DDO 1602	BMX AMI 0810	BMX AMI 0810	BMX AMO 0410	BMX AMO 0410	SPACE (BMX XEM 010)
				-S1	-S1	-S1	-S2	-S3	-S3	-S3	-S3	-S3

(A) DETAIL – PLC-M806 RACK CONFIGURATION
NTS

DRAWING NUMBER	REFERENCE DRAWINGS
1-0640M-E0042	PANELBOARD SCHEDULE
1-0640M-E0040	EQUIPMENT PLAN, MEZZANINE LEVEL
1-0640M-E0036	SINGLE LINE, MCC-M730E
1-0640M-A0050-83	ALL AUTOMATION DRAWINGS

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
0.0 0.05 0.1 0.2 0.3
1:5

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

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER AND CONSTRUCTION	2019/10/18	VE	BC

SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

DESIGNED BY: S. BOGHOSIAN
CHECKED BY: B. CLEVEN
DRAWN BY: C. DUBON
APPROVED BY: D. BECKER
SCALE: AS SHOWN
ISSUED FOR CONSTRUCTION BY: A. WEISS
DATE: 2019/06/03
DATE: 2019/10/18
CONSULTANT NO.:

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ELMBAN
Member
34636
REGISTERED PROFESSIONAL ENGINEER
Oct.18/2019

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

MCPHILLIPS PUMPING STATION

PANEL LAYOUT
HVAC CONTROL PANEL CP-M826

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0640M-A0050	002	00	A1

1-0640M-A0050-002-00.dwg

LAST SAVE: 2019/10/30 – 10:39am
PATH: M:\061472\ENGV\86\DD – General DWG\01 McPhillips\1-0640M-A0050-002-00.dwg