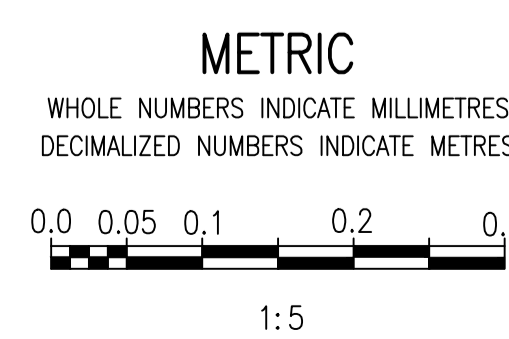


INTERIOR PANEL VIEW
SCALE: 1 : 5



**ENGINEERS
GEOSCIENTISTS
MANITOBA**

Certificate of Authorization

AtkinsRéalis Canada Inc.

No. 4489

BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	TYPE 12 FLOOR-MOUNT ENCLOSURE - 1800x1600x600mm WITH LARGE DATA POCKET C/W SUBPANEL MOUNTING PLATE	HOFFMAN	PP0D18126
2	2	SIDE COVERS FOR ITEM 1	HOFFMAN	P2CS186
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 - CLIFFIX 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	P2BP2126
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	-	NOT USED	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	1	PLC RELAY MODULE, 24VDC	PHOENIX CONTACT	2966171
32	1	12.1" HMI TOUCH SCREEN	SCHNIEDER ELECTRIC	HMICT06310
33	1	5 PORT UNMANAGED ETHERNET SWITCH	MOXA	EDS-205

GENERAL NOTES:

- 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.
- ALL 24 VDC 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.
- 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 NUMBERED 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.

SPECIFIC NOTES:

- CONNECT ISOLATED DIN RAIL TO ISOLATED GROUND BAR.
- HEIGHT OF PLC PANEL CANNOT EXCEED 2000MM.

PLC-M806
RACK: BME XBP 1200

PS	0	1	2	3	4	5	6	7	8	9	10	11
BMX CPS 3020	BMX PS8 2040	BMX DDI 3202K [CPS]	BMX DDI 3202K (SPARE)	BMX DDO 1602 [CPS]	BMX AMI 0810 [CPS]	BMX AMI 0810 (SPARE)	BMX AMO 0410 [CPS]	SPACE [CPS]	SPACE	SPACE	SPACE	SPACE

CONNECTOR LEGEND:

- BMX FCW 303
40-WAY CONNECTOR
WITH FLYING LEADS
- BMX FTB 2010
SCREW CLAMP TERMINAL BLOCK
- BMX FTW 308S
28-WAY REMOVABLE TERMINAL BLOCKS
WITH FLYING LEADS

DETAIL - PLC-M806 RACK CONFIGURATION
NTS

DESIGNED BY:
J. GRACASIN

CHECKED BY:
V. ELIMBAN

DRAWN BY:
J. GRACASIN

APPROVED BY:
V. ELIMBAN

SCALE:
AS SHOWN

ISSUED FOR CONSTRUCTION
BY: M. SKINNER

DATE: 2023/06/13

DATE: 2025/04/30

ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

MACLEAN PUMPING STATION
CHLORINE SYSTEM UPGRADE
PANEL LAYOUT
HVAC CONTROL PANEL CP-M826

CITY DRAWING NUMBER
1-0630M-A0053

SHEET
002

REV.
00

SIZE
A1

ISSUED FOR TENDER AND CONSTRUCTION

2025/04/30

VE

VE

CONSULTANT NO.:

DRAWING NUMBER	REFERENCE DRAWINGS
1-0630M-A0060	HVAC CONTROL PANEL CP-M826, ANALOG OUTPUT RACK 0, MODULE 7
1-0630M-A0059	HVAC CONTROL PANEL CP-M826, ANALOG INPUT RACK 0, MODULE 6
1-0630M-A0058	HVAC CONTROL PANEL CP-M826, ANALOG INPUT RACK 0, MODULE 5
1-0630M-A0057	HVAC CONTROL PANEL CP-M826, DISCRETE OUTPUT RACK 0, MODULE 4
1-0630M-A0056	HVAC CONTROL PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 3
1-0630M-A0055	HVAC CONTROL PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 2
1-0630M-A0054	POWER DISTRIBUTION, HVAC CONTROL PANEL CP-M826