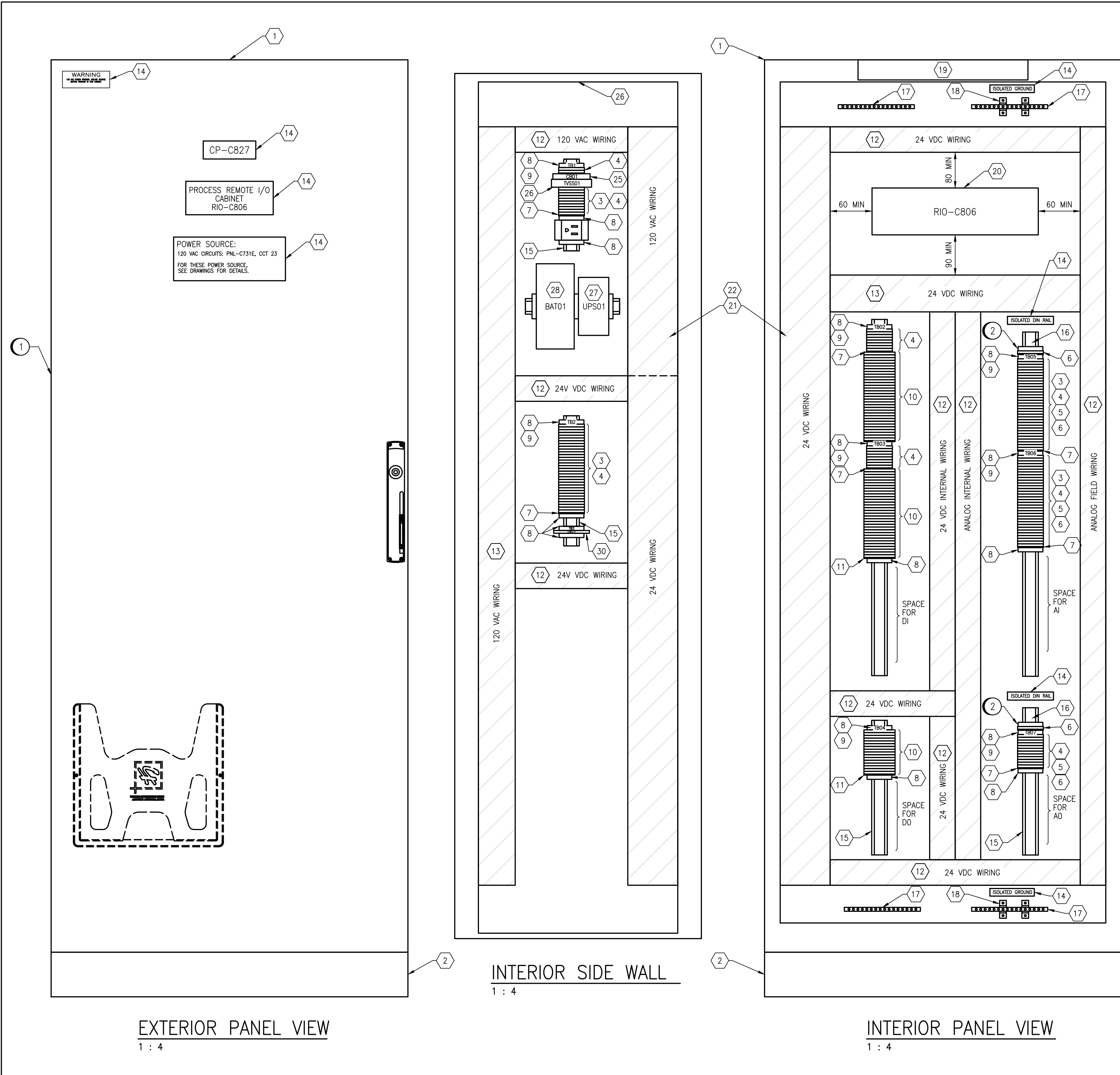




BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	NEMA TYPE 4X MODULAR ENCLOSURE WITH SUB-PANEL - 2000x800x600mm WITH SIDE PANELS AND 106 mm PLINTH BUCKET	HOFFMAN	MCSS20086HP
2	1	100mm PLINTH BASE FOR ITEM 1	HOFFMAN	PPB186SS
3	AS REQ'D	FUSED TERMINAL - UT 4 WITH FUSE PLUG-P-FU 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	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 2.25"x3.12"	PANDUIT	F2X3LG6
13	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 3.25"x3.12"	PANDUIT	F3X3LG6
14	AS REQ'D	LAMACOIDS	-	-
15	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
16	AS REQ'D	DIN RAIL INSULATED SUPPORT BRACKET	PHOENIX CONTACT	1201141
17	4	GROUND BAR, 14 TAPS	ILSCO	D167-14
18	4	GROUND BAR ISOLATION STAND OFF	PANDUIT	UGB-IN-SO
19	1	LED PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LED24V15 ALFSWD
20	1	X80 RIO RACK - AS PER DETAIL A	SCHNEIDER	-
21	AS REQ'D	CORNER TYPE WIRING DUCT 3.10" HEIGHT AND COVER	PANDUIT	CWD3LG6
22	AS REQ'D	4" HEIGHT SLOTTED DIVIDER WALL	PANDUIT	SD4H6
23	1	PROLINE SIDE PANEL	HOFFMAN	PPFSM206
24	2	MIT 4-WIRE, 2-CHANNEL SIGNAL ISOLATOR/CONVERTER, DIN RAIL MOUNTED	MOORE INDUSTRIES	MIT/2XPRG/2X4-20mA/U [DIN]
25	1	MINIATURE CIRCUIT BREAKER, 10 AMP, DIN RAIL MOUNTED, FAZ TYPE, 120 VAC	EATON	FAZ-B10/1-NA-L
26	1	SURGE ARRESTOR MODULE C/W BASE, 120V, PLT-SEC-T3-120-FM-UT	PHOENIX CONTACT	2907918
27	1	24VDC POWER SUPPLY/UPS, TRIO-UPS-2G/1AC/24DC/10	PHOENIX CONTACT	2907161
28	1	ENERGY STORAGE, UPS-BAT/VRLA/24DC/3.4AH	PHOENIX CONTACT	2320306
29	1	RECEPTACLE, 125V, 15A, DIN RAIL MOUNTED, SD-US/SC/LA/GY	PHOENIX CONTACT	2963860
30	1	PLC RELAY MODULE, 24VDC	PHOENIX CONTACT	2966171

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.

RIO-C806.R0
RACK: BME XBP 0800

PS	0	1	2	3	4	5	6	7	
BMX CPS 3020	BME CRA 312 10	BMX NRP 0200	BMX DDI 3202K	BMX DDI 3202K	BMX DDO 1602	BMX AMI 0810	BMX AMI 0810	BMX AMO 0410	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

1-0640C-E0015	ELECTRICAL EQUIPMENT AND INSTRUMENTATION PLAN, CHLORINE BUILDING
1-0640C-E0006	PANELBOARD SCHEDULES, CHLORINE BUILDING, PNL-C711 AND PNL-C731E
1-0640C-A0004-58	ALL AUTOMATION DRAWINGS
DRAWING NUMBER	REFERENCE DRAWINGS

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 TO CLOSE OPEN SIDES OF ENCLOSURE.
- CONNECT ISOLATED DIN RAIL TO ISOLATED GROUND BAR.



					 148 Nature Park Way, Winnipeg, Manitoba Canada R3P 0X7 204-786-8080	
					DESIGNED BY: V. ELIMBAN	CHECKED BY: V. ELIMBAN
					DRAWN BY: J. GRACASIN	APPROVED BY: V. ELIMBAN
					SCALE: AS SHOWN	ISSUED FOR CONSTRUCTION BY: M. SKINNER
					DATE: 2024/02/14	DATE: 2025/04/30
00	ISSUED FOR TENDER AND CONSTRUCTION		2025/04/30	VE	VE	
NO.	REVISIONS		DATE	DESIGN	CHECK	CONSULTANT NO.:

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	
MCPHILLIPS PUMPING STATION CHLORINE SYSTEM UPGRADES REMOTE I/O PANEL LAYOUT CONTROL PANEL CP-C827	
CITY DRAWING NUMBER 1-0640C-A0003	SHEET REV. SIZE 001 00 A1