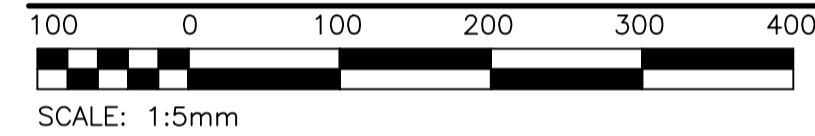
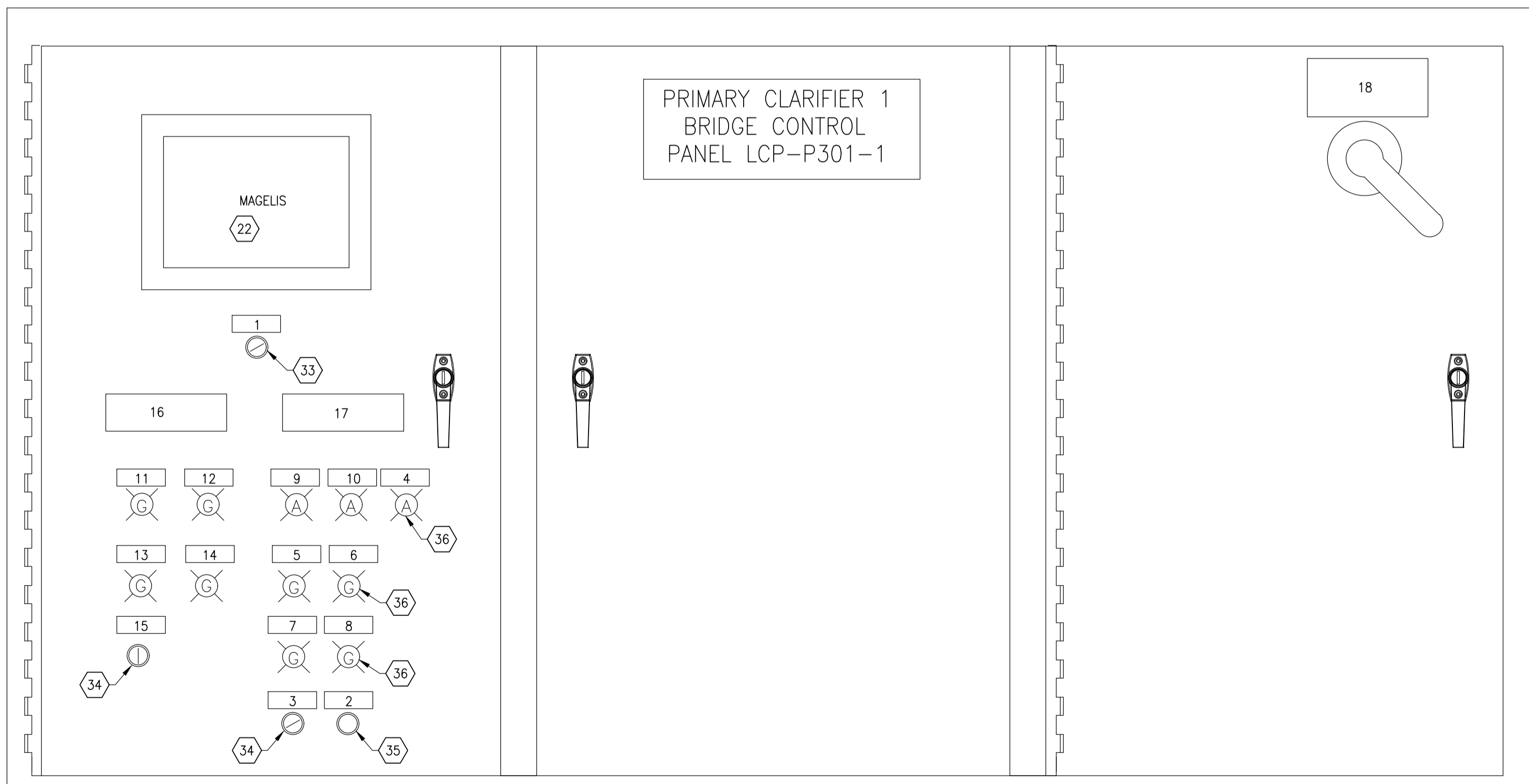


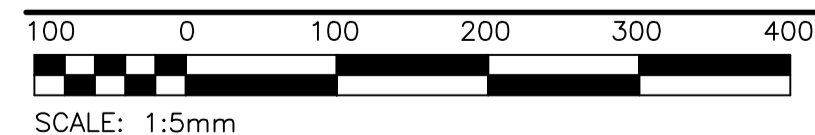
**INTERIOR PANEL VIEW**



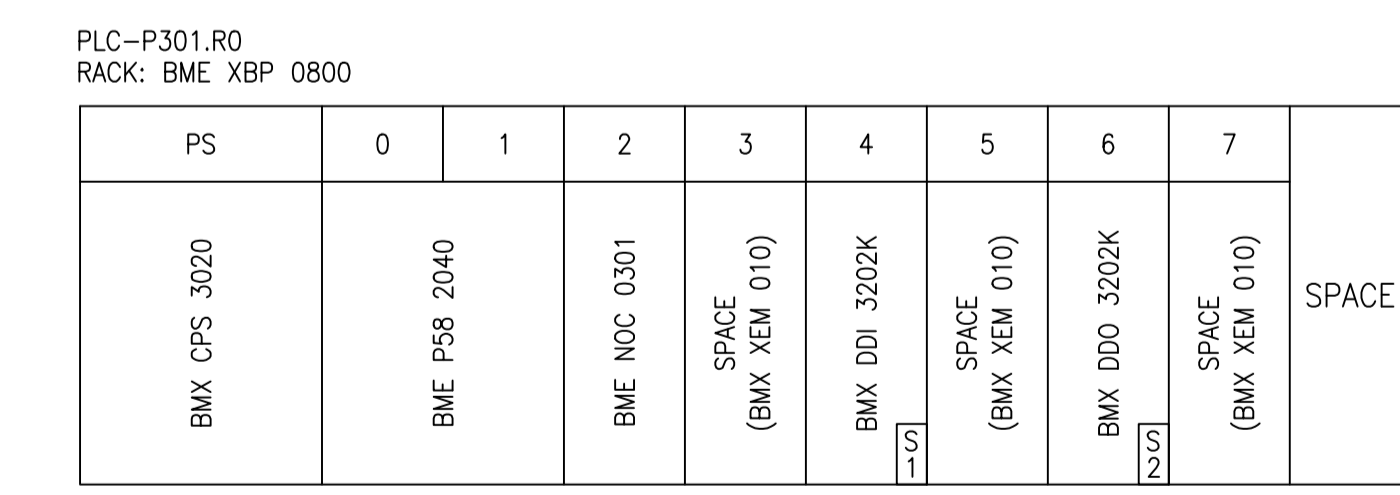
BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	TYPE 4X WITH LARGE DATA POCKET	HOFFMAN	T.B.D.
2	1	SUB-PANEL FOR ITEM ONE	HOFFMAN	T.B.D.
3	AS REQ'D	FUSED TERMINAL UT 4 WITH FUSE PLUG - P-FU 5X20	PHOENIX CONTACT	3046142 3036806
4	AS-REQ'D	FEED-THROUGH TERMINAL - UT 4-MTD	PHOENIX 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	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 1.75"x3.12"	PANDUIT	F1.5X3LG6
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	LED24V15 ALFSWD
21	1	M580 PLC RACK - AS PER DETAIL A	SCHNEIDER	
22	1	265 [10.4"] MAGELIS XBT GT HMI	SCHNEIDER	HMDT542 HMG3U
23	2	TESYS T ELECTRONIC OVELOAD FOR ETHERNET TCP/IP	SCHNEIDER	LTMRO8EFM
24	4	NEMA SIZE 1 CONTACTOR	T.B.D.	T.B.D.
25	AS REQ'D	CONTROL RELAYS	T.B.D.	T.B.D.
26	AS REQ'D	CONTROL TRANSFORMERS	T.B.D.	T.B.D.
27	2	24VDC POWER SUPPLY	PHOENIX CONTACT	T.B.D.
28	1	LOCKABLE MAIN FUSED DISCONNECT	SCHNEIDER	T.B.D.
29	1	SPLITTER 600VAC	SCHNEIDER	T.B.D.
30	2	MOTOR CIRCUIT PROTECTOR	SCHNEIDER	T.B.D.
31	2	ADVANTYS TELEFAST ABE7	SCHNEIDER	ABE7R16T210
32	1	COMMUNICATION SWITCH	MOXA	EDS-GS12E-4GSFP
33	1	4 POSITION SELECTOR SWITCH	T.B.D.	T.B.D.
34	2	3 POSITION SELECTOR SWITCH	T.B.D.	T.B.D.
35	1	MOMENTARY PUSHBUTTON	T.B.D.	T.B.D.
36	11	PILOT LIGHT	T.B.D.	T.B.D.



**EXTERIOR PANEL VIEW**



LAMACOID LIST	
1	HS-P3010-1 REMOTE-OFF-LOCAL-MAINTENANCE
2	RESET HSS-P3010-3
3	HS-P3010-2 EAST OFF WEST
4	OVER CURRENT IA-P3010
5	RUNNING EAST YL-P3010
6	RUNNING WEST YLH-P3010
7	EAST END ZL-P3010
8	WEST END ZL-P3012
9	EAST OVERTRAVEL ZL-P3013
10	WEST OVERTRAVEL ZL-P3014
11	HOIST RAISING ZLH-P3030
12	HOIST LOWERING ZLL-P3030
13	HOIST UP ZLH-P3031
14	HOIST DOWN ZLL-P3032
15	HS-P3030 UP OFF DOWN
16	BRIDGE HOIST CONTROL CM-P303
17	BRIDGE DRIVE CONTROL TBC-P301
18	MAIN SWITCH LCP-P301-1



**DETAIL - M580 PLC RACK CONFIGURATION**  
NTS

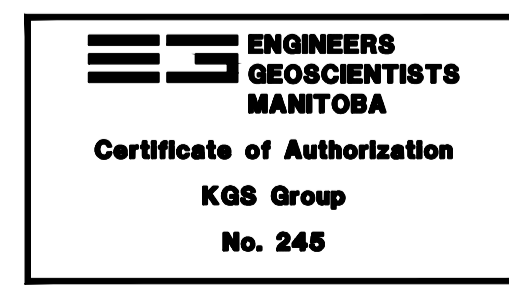
**GENERAL NOTES:**

- 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 24 VDC WIRING SEPARATE FROM 120 VAC WIRING.
- JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.
- ALL 600 VAC WIRING SHALL BE SEPARATE AND BARRIRED FROM THE REST OF THE CONTROL PANEL.
- FINAL CONTROL PANEL DIMENSIONS TO BE FINALIZED BY PANEL MANUFACTURER.

**CONNECTOR LEGEND:**

- BMX FCW 303  
40-WAY CONNECTOR WITH  
FLYING LEADS
- BMX FTB 2010  
SCREW CLAMP TERMINAL BLOCK

1-0102-EGAD-P002	GENERAL ARRANGEMENT, ELECTRICAL ROOM AND STORAGE ROOM LAYOUT
REFERENCE DRAWINGS	DESCRIPTION



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION - 682-2018	2018/08/27	DDW	JAB

**KGS GROUP**  
CONSULTING ENGINEERS

DESIGNED BY: D. WILSON  
CHECKED BY: J. BOUCHARD  
DRAWN BY: G. NELSON  
APPROVED BY: D. WILSON  
SCALE: AS SHOWN  
ISSUED FOR CONSTRUCTION BY: B. STATION  
DATE: 2018/07/20  
DATE: 2018/08/27

CONSULTANT NO.: 1-0102-ACBD-P301-001

ENGINEER'S SEAL

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

SOUTH END WATER POLLUTION CONTROL CENTRE  
TRAVELLING BRIDGES REFURBISHMENT  
AUTOMATION - CABINET LAYOUT  
PRIMARY CLARIFIERS  
LCP-P301-1, TRAVELLING BRIDGE PLC CABINET - PLC-P301

CITY DRAWING NUMBER: 1-0102-ACBD-P301  
SHEET: 001  
REV: 00  
SIZE: A1