







| ITEM | QTY | BILL OF N Description | MANUFACTURER | CATALOG NUMBER |
|----------|----------|---|--------------------|-------------------------------|
| 11 E IVI | 1 | ENCLOSURE, FREE STAND, SINGLE DOOR, NEMA 12 | HOFFMAN | A723618FS |
| 2 | 1 | BACKPAN FOR ITEM 1 | HOFFMAN | A72936F1 |
| 2 3 | | NOT USED | | |
| 4 | 1 | FOLDING SHELF | HOFFMAN | AASHLF1818 |
| 5 | 1 | 8 SLOT RACK | SCHNEIDER ELECTRIC | BMX XBP 0800 |
| 6 | 1 | RACK POWER SUPPLY, 17 W | SCHNEIDER ELECTRIC | BMX XBP 0000 BMX CPS 2010 |
| 7 | 1 | PROCESSOR | SCHNEIDER ELECTRIC | BMX CF3 2010 BMX P34 2020 |
| / 8 | 1 | 32–POINT DIGITAL INPUT | SCHNEIDER ELECTRIC | BMX P34 2020 BMX DDI 3202K |
| 9 | 1 | 16-POINT DIGITAL OUTPUT | SCHNEIDER ELECTRIC | BMX DDI 3202K BMX DDO 1602 |
| 9 10 | 2 | | | |
| 10 | 2 | 8-CHANNEL ANALOG INPUT | SCHNEIDER ELECTRIC | BMX AMI 0810 |
| 12 | 3 | 4-CHANNEL ANALOG OUTPUT | SCHNEIDER ELECTRIC | BMX AMO 0410 |
| 13 | 2 | SCREW CLAMP TERMINAL BLOCK | SCHNEIDER ELECTRIC | BMX FTB 2010 |
| | | SCREW CLAMP TERMINAL BLOCK | SCHNEIDER ELECTRIC | BMX FTB 2810 |
| 14 | - | NOT USED | | |
| 15 | 2 | 24 VDC POWER SUPPLY | SOLA | SDN 5-24-100C |
| 16 | AS REQ'D | 35mm DIN RAIL | PHOENIX CONTACT | 0801733 |
| 17 | | NARROW SLOT WIRING DUCT, 3.25" x 3.12" | PANDUIT | |
| 18 | | NARROW SLOT WIRING DUCT, 1.26" x 3.12" | PANDUIT | |
| 19 | AS REQ'D | FEED-THROUGH TERMINAL | PHOENIX CONTACT | 3046184 |
| 20 | AS REQ'D | FUSED TERMINAL | PHOENIX CONTACT | 3046142 |
| 21 | AS REQ'D | FUSE CONNECTOR | PHOENIX CONTACT | 3036806 |
| 22 | AS REQ'D | KNIFE-DISCONNECT TERMINAL | PHOENIX CONTACT | 3046139 |
| 23 | AS REQ'D | POTENTIAL-EARTH TERMINAL | PHOENIX CONTACT | 3046207 |
| 24 | AS REQ'D | TERMINAL END PLATE | PHOENIX CONTACT | 3047141 |
| 25 | AS REQ'D | TERMINAL END CLAMP | PHOENIX CONTACT | 1201442 |
| 26 | AS REQ'D | DOUBLE LEVEL FUSED TERMINAL | PHOENIX CONTACT | 3044720 |
| 27 | AS REQ'D | DOUBLE LEVEL TERMINAL END PLATE | PHOENIX CONTACT | 3047293 |
| 28 | AS REQ'D | PLUG-IN BRIDGE | PHOENIX CONTACT | 3030365 |
| 29 | 4 | GROUND BAR, 14 TAPS | ILSCO | - |
| 30 | 1 | ETHERNET SWITCH 5 PORT | MOXA | EDS-305 |
| 31 | | NOT USED | | |
| 32 | 1 | POWER & DATA ACCESS PORT | HUBBELL | P155E |
| 33 | 1 | PANEL LIGHT | - | - |
| 34 | 1 | DOOR SWITCH, METAL ENCLOSED | - | - |
| 35 | 1 | PREFORMED CORDSET | SCHNEIDER ELECTRIC | BMX FCW 303 |
| 36 | 2 | 120:24 VAC TRANSFORMER, 100 VA | _ | - |
| 37 | _ | NOT USED | | |
| 38 | _ | NOT USED | | |
| 39 | AS REQ'D | LAMACOIDS, WHITE BACKEGROUND, BLACK TEXT | - | - |
| 40 | 1 | SWITCH, 3 POSITION, MAINTAINED | ALLEN BRANLEY | 800T |
| 41 | AS REQ'D | RELAY TERMINAL BLOCK, 120 VAC | PHOENIX CONTACT | 2966197 |
| 42 | AS REQ'D | RELAY TERMINAL BLOCK, 24 VDC | PHOENIX CONTACT | 2966171 |
| 43 | 1 | ARC FLASH LAMACOID | - | - |
| 44 | AS REQ'D | NARROW SLOT WIRING DUCT, 2.25" x 3.12" | PANDUIT | - |
| 45 | AS REO'D | NARROW SLOT WIRING DUCT, 2.75" x 3.12" | PANDUIT | _ |

NOTES:

- REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS. 2. ALL CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.

- 7. ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR
- DESCRIPTIONS ON THE DRAWINGS. 8. PROVIDE WIRE BARREL FERULES FOR ALL WIRING.
- 10. ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
- 11. ROUTE ALL 24VDC WIRING SEPARATE FROM 120VAC WIRING.
- FROM 120VAC WIRING.
- 14. DOOR CLAMP BLOCKS TO BE REMOVED.
- 15. JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.

 $\bullet)$ **SNC-**148 Na INTERIOR PANEL VIEW Winnipe SNC+LAVALIN 204-72 SCALE: 1 : 4 DESIGNED BY: B. CLEVEN DRAWN BY: MJ. PERSSON SCALE: Certificate of Authorization 1:5 2013/01/15 TMC CJR DATE: 2011/11/14 SNC-Lavalin Inc. 01 ISSUED FOR TENDER, BID OPP. 42–2013 DATE 2012/08/31 TMC CJR CONSULTANT NO.: 00 ISSUED FOR TENDER, BID OPP. 545-2012 No. 4489 112577-011 NO. REVISIONS DATE DESIGN CHECK

1. ALL POWER WIRING TO BE TEW/MTW 600V, 105°C INSULATION, STRANDED COPPER, 12 AWG OR LARGER WHERE CURRENT

3. ALL ANALOG WIRING TO BE 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.

4. EXTERNAL COMPONENTS ARE TO BE LABELED AS SHOWN ON THE DRAWINGS.

5. ALL FUSES ARE TO BE PROVIDED. IN ADDITION, TWO SPARES OF EACH FUSE SIZE ARE TO BE PROVIDED.

6. TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION

INTEGRITY. THREE COPIES OF CERTIFIED TEST DOCUMENTATION ARE TO BE PROVIDED.

9. ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.

12. ALL ETHERNET CABLING IS TO BE ATTACHED TO THE SIDE WALLS OF THE ENCLOSURE AND KEPT AS FAR AS POSSIBLE

13. CLEARLY LABEL DEVICE IDENTIFIERS ON THE DOOR INTERIOR USING LAMACOIDS.

| —LAVALIN INC. lature Park Way eg, MB, Canada R3P 0X7 786—8080 | ENGINEER'S SEAL | Winnipeg THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT | | | | | | |
|---|-----------------|--|-------|------|------|--|--|--|
| KED BY: C. REIMER OVED BY: | | SOUTH END WATER POLLUTION CONTROL CENTRE VENTILATION & MISC. UPGRADES PANEL LAYOUT | | | | | | |
| C. REIMER EASED FOR CONSTRUCTION | | | | | | | | |
| N. HARRINGTON 2012/08/31 | | LCP-G2 | | | | | | |
| 2012/00/01 | | CITY DRAWING NUMBER | SHEET | REV. | SIZE | | | |
| 6-48DD-0108 | | 1-0102G-A0107 | 001 | 01 | A1 | | | |
| 1-0102G-A0107-001-01.dwg | | | | | | | | |