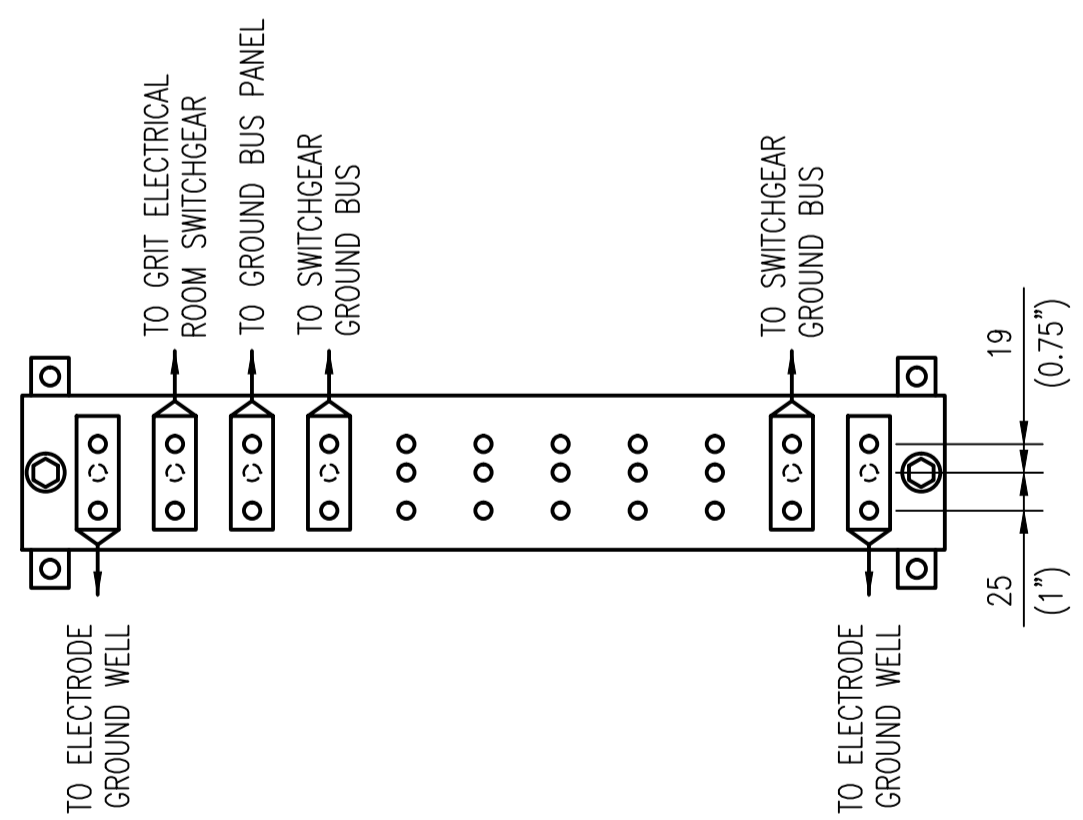


**OXYGEN REACTOR ELECTRICAL ROOM**  
SCALE: 1 : 50

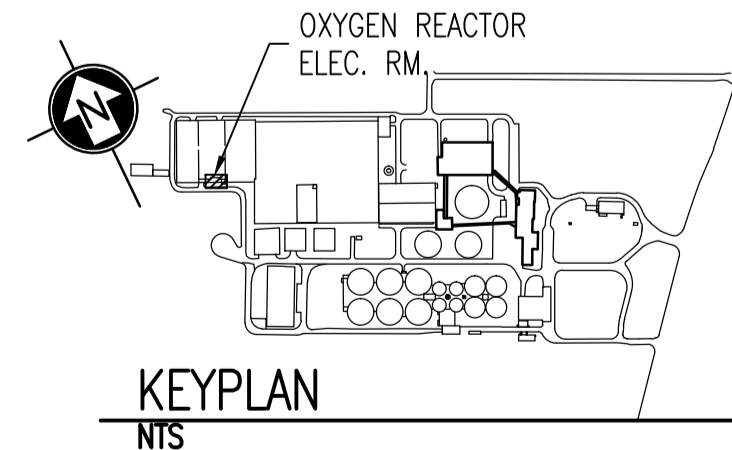


**1** **DETAIL - BUS BAR**  
SCALE: 1 : 5

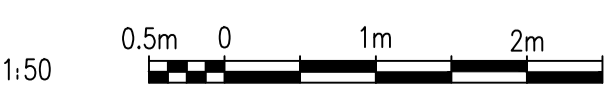
- CONSTRUCTION NOTES**
- 1 PROVIDE SIX ROD GROUND ELECTRODE AS SHOWN. LOCATE ALL EXISTING UNDERGROUND SERVICES IN AREA PRIOR TO INSTALLATION OF ELECTRODE. SEE DETAILS ON DRAWING 1-0101A-E0010. PROVIDE A GROUND WELL AT EACH ROD LOCATION.
  - 2 PROVIDE 4/0 AWG CONDUCTORS FROM GROUND ELECTRODE TO GROUND BUS BAR. CORE DRILL HOLE THROUGH WALL ABOVE GRADE.
  - 3 PROVIDE 4/0 AWG INSULATED GROUND CONDUCTOR FROM GROUND BUS BAR TO SWITCHGEAR GROUND BUS IN GRIT ELECTRICAL ROOM. INSTALL IN 27mm PVC CONDUIT WHERE NOT IN TRAY.
  - 4 PROVIDE 4/0 AWG CONDUCTOR TO CONNECT GROUND BUS BAR TO EXISTING GROUND BUS PANEL. INSTALL IN 27mm PVC CONDUIT.
  - 5 PROVIDE 4/0 AWG INSULATED GROUND CONDUCTOR FROM GROUND BUS BAR TO SWITCHGEAR GROUND BUS.
  - 6 PROVIDE GROUND BUS BAR AT HEIGHT OF 400mm ABOVE FINISHED FLOOR. INSTALL CONDUCTORS IN 27mm PVC CONDUIT.
  - 7 DETECT LOCATION OF EXISTING GROUND ELECTRODE AND CONDUCTORS AND MARK ON AS-BUILT DRAWING.
  - 8 RESTORE THE SIDEWALK AND ALL GRASSED AND PAVEMENT SURFACES AS PER THE SPECIFICATIONS.

**LEGEND:**

- EXISTING CONDUCTOR
- NEW CONDUCTOR
- GROUND ROD
- CONNECTION
- ELEVATION CHANGE



- NOTES:**
1. THE ELEVATION OF THE GROUNDING CONDUCTORS AND ELECTRODES VARIES AND IS SHOWN ON A SINGLE LEVEL TO EASE THE UNDERSTANDING OF HOW THE GROUNDING SYSTEM IS INTERCONNECTED.
  2. THE LOCATION AND ROUTING OF EXISTING GROUNDING CONDUCTORS IS APPROXIMATE.
  3. THIS DRAWING SUPERSEDES PART OF NEP-1095.



**APECM**  
Certificate of Authorization  
**SNC-Lavalin Inc.**  
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER, BID OPP. 845-2012	2012/10/30	TMC	CJR

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

DESIGNED BY: T. CHURCH  
CHECKED BY: C. REIMER  
DRAWN BY: S. COATES  
APPROVED BY: C. REIMER  
SCALE: 1:50  
RELEASED FOR CONSTRUCTION BY: B. STATION  
DATE: 2009/11/27  
DATE: 2012/10/31  
CONSULTANT NO.: 113312-0000-47DD-0011

ENGINEER'S SEAL

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

NORTH END WATER POLLUTION CONTROL CENTRE  
GROUNDING UPGRADES  
PLAN LAYOUT  
GROUNDING  
OXYGEN REACTOR ELECTRICAL ROOM

CITY DRAWING NUMBER: 1-0101R-E0013  
SHEET: 001  
REV.: 00  
SIZE: A1

1-0101A-E0010	GROUNDING INSTALLATION DETAILS
1-0101A-E0011	SITE PLAN - GROUNDING CONDUCTOR ROUTING
DRAWING NUMBER	REFERENCE DRAWINGS