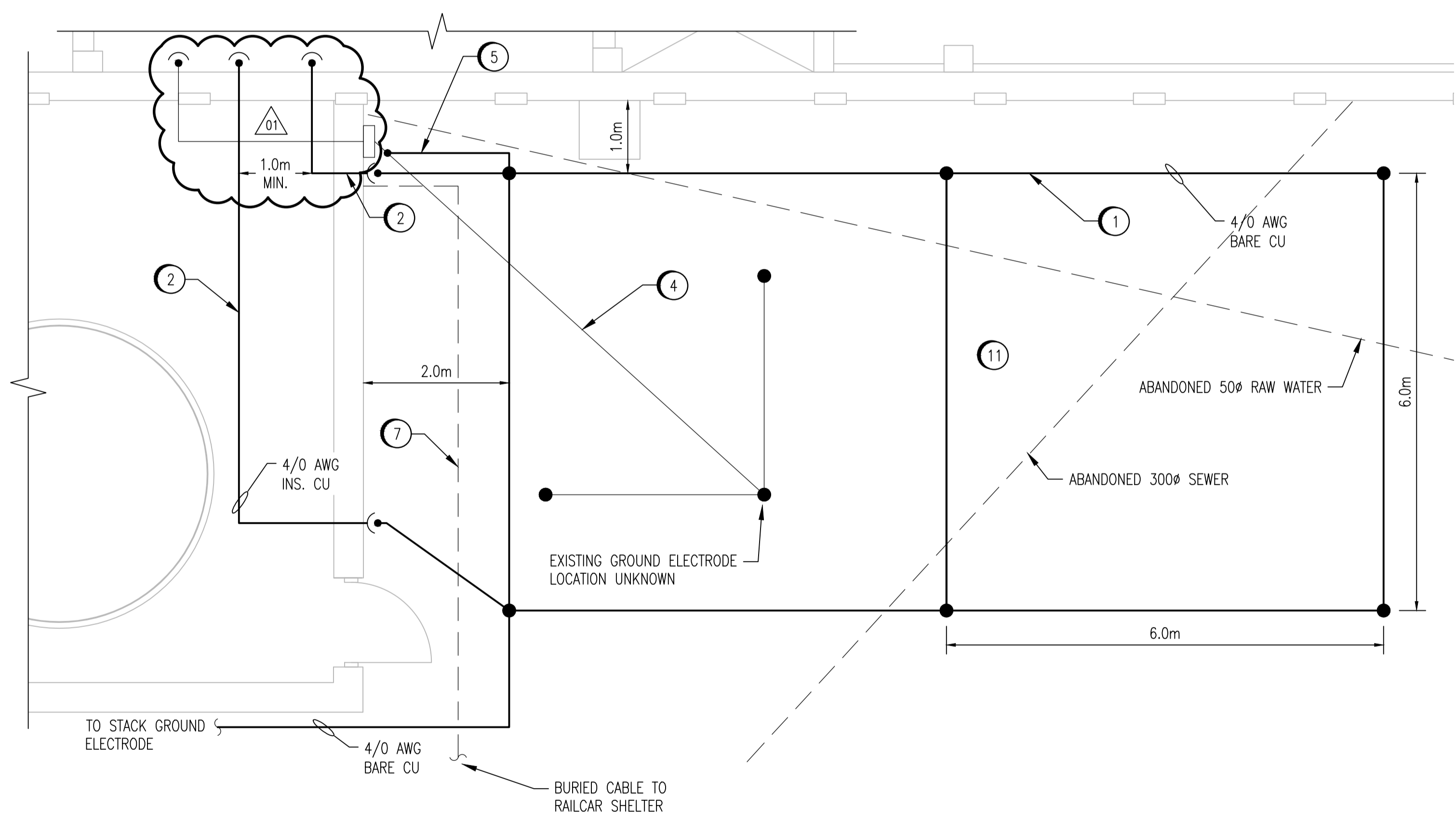
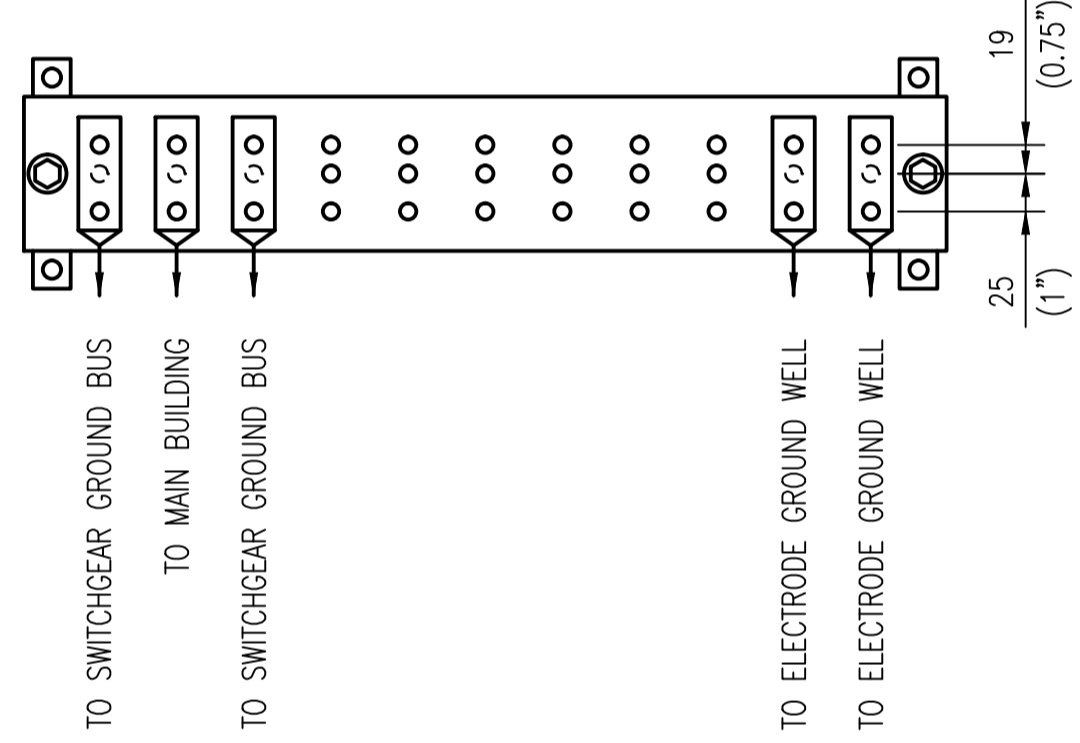


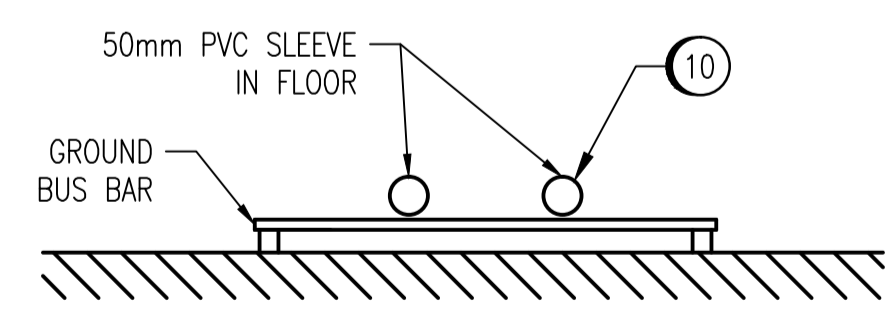
DEWATERING BUILDING PLAN - SECOND FLOOR
SCALE: 1 : 50



DEWATERING BUILDING PLAN - MAIN FLOOR
SCALE: 1 : 50



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

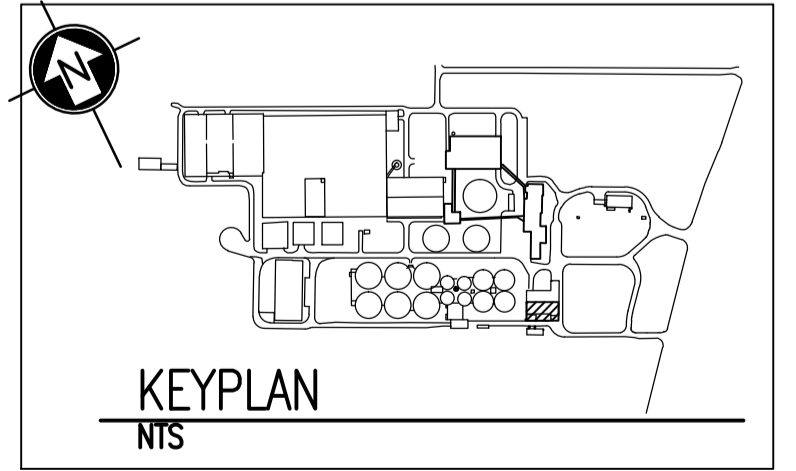


2 -- --
DETAIL - BUS BAR PLAN
SCALE: 1 : 10

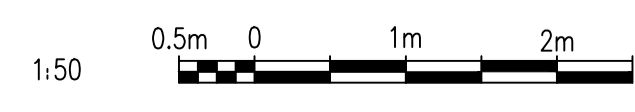
- CONSTRUCTION NOTES:
- 1 PROVIDE SIX ROD GROUND ELECTRODE AS SHOWN. LOCATE ALL EXISTING UNDERGROUND SERVICES IN AREA PRIOR TO INSTALLATION OF ELECTRODE. SEE DETAILS ON DRAWING 1-0101A-E0010. PROVIDE GROUND WELL AT EACH ROD LOCATION.
 - 2 PROVIDE 4/0 AWG CONDUCTOR FROM GROUND ELECTRODE TO GROUND BUS BAR. CORE DRILL THROUGH WALL ABOVE GRADE.
 - 3 PROVIDE 4/0 AWG INSULATED GROUND CONDUCTOR FROM MAIN BUILDING BUS BAR TO GROUND BUS BAR.
 - 4 DETECT LOCATION OF EXISTING GROUND ELECTRODE AND CONDUCTORS AND MARK ON AS-BUILT DRAWINGS.
 - 5 PROVIDE 4/0 AWG CONDUCTOR TO CONNECT NEW GROUND ELECTRODE TO EXISTING ELECTRODE AT ENTRY POINT INTO BUILDING.
 - 6 PROVIDE GROUND BUS BAR AT HEIGHT OF 400mm ABOVE FINISHED FLOOR. INSTALL CONDUCTORS IN 27mm PVC CONDUIT.
 - 7 LOCATE EXISTING BURIED CABLE PRIOR TO EXCAVATION.
 - 8 PROVIDE 4/0 AWG CONDUCTOR FROM TRANSFORMER TO GROUND BUS BAR.
 - 9 PROVIDE 4/0 AWG CONDUCTOR FROM EXISTING CONDUCTOR TO GROUND BUS BAR.
 - 10 CORE DRILL THROUGH FLOOR. AVOID EXISTING REBAR. INSTALL 50mm PVC PIPE SLEEVES IN FLOOR. SEAL PENETRATIONS.
 - 11 RESTORE THE SIDEWALK AND ALL GRASSED AND PAVEMENT SURFACES AS PER THE SPECIFICATIONS.
 - 12 NO WORK REQUIRED FOR EXISTING GROUND CONDUCTOR.

LEGEND:

- - - - - EXISTING BURIED SERVICE
- EXISTING CONDUCTOR
- NEW CONDUCTOR
- - - - - CONDUCTOR BELOW ELEVATION SHOWN
- 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 CONDUCTORS IS APPROXIMATE.
 3. THIS DRAWING SUPERSEDES PART OF NEP-1667.



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

| NO. | REVISIONS | DATE | DESIGN | CHECK |
|-----|--------------------------------------|------------|--------|-------|
| 01 | MODIFIED EXISTING GROUND CONDUCTORS | 2012/11/15 | TMC | CJR |
| 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: I. CHURCH
DRAWN BY: S. COATES
SCALE: 1:50
DATE: 2009/11/30
CONSULTANT NO.: 113312-0000-47DD-0016

CHECKED BY: C. REIMER
APPROVED BY: C. REIMER
RELEASED FOR CONSTRUCTION BY: B. STATION
DATE: 2012/10/31

ENGINEER'S SEAL
ORIGINAL DRAWING
SEALED BY:
T. M. CHURCH
SNC-LAVALIN
MEMBER #32682
2012/10/31
REV. 00

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
GROUNDING UPGRADES
PLAN LAYOUT
GROUNDING
DEWATERING BUILDING

CITY DRAWING NUMBER: 1-0101W-E0006
SHEET: 001
REV: 01
SIZE: A1

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