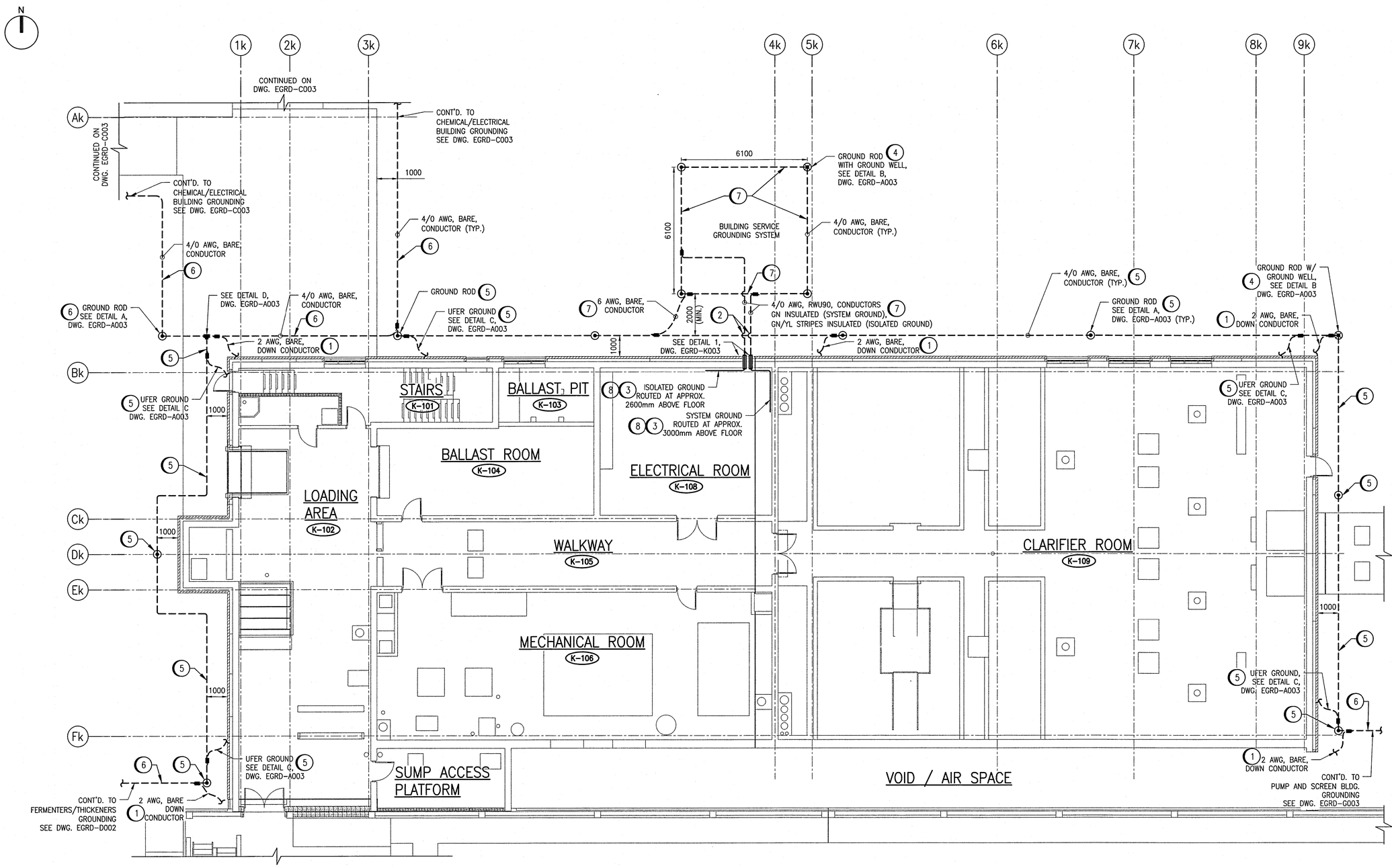
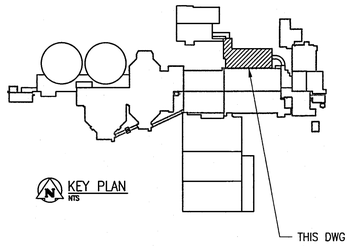
A1 SIZE – 594mm x 841mm



GROUND FLOOR PLAN

1 : 100



GENERAL NOTES:

1. CONNECTIONS TO SYSTEM GROUND ELECTRODES SHALL BE EXOTHERMIC WELD IN ACCORDANCE WITH CEC 10-806.
2. PERIMETER BURIED GROUND WIRING SHALL BE LAID IN UNDISTURBED NATIVE SOIL OR MECHANICALLY COMPACTED SOIL. GROUND RODS SHALL BE INSTALLED IN UNDISTURBED NATIVE SOIL OR MECHANICALLY COMPACTED SOIL.
3. ALL GROUNDING CONDUCTORS SHALL BE STRANDED, SOFT DRAWN COPPER, UNLESS NOTED OTHERWISE.
4. ALL CABLING SHALL BE PHYSICALLY PROTECTED BY DIRECT BURIAL OR BY SURFACE RUN CONDUIT. EXPOSED GROUND CABLES ARE NOT ACCEPTABLE.
5. ALL EQUIPMENT SHOWN ON THIS DRAWING IS NEW AND SHALL BE PROVIDED BY THE CONTRACTOR (UNLESS SPECIFICALLY IDENTIFIED AS PREVIOUSLY COMPLETED)

LEGEND:

- GROUNDING CONDUCTOR (ABOVE GRADE/INSIDE OF BUILDING)
- GROUNDING CONDUCTOR (BELOW GRADE)
- GROUND ROD WITH GROUND WELL
- GROUND ROD
- TEE CONNECTION (EXOTHERMIC WELD)
- PARALLEL CONNECTION (EXOTHERMIC WELD)

SPECIFIC NOTES:

1. PROVIDE DOWN CONDUCTORS RUN IN RIGID PVC CONDUIT FROM PERIMETER GROUNDING SYSTEM TO AIR TERMINALS AND MAIN CONDUCTORS ON THE ROOF. ALL LIGHTNING SYSTEM DOWN CONDUCTORS AND ASSOCIATED CONNECTIONS ARE INCLUDED IN THE SCOPE OF WORKS FOR CONTRACT C4. REFER TO DRAWING EGRD-K004 FOR CONTINUATION AT ROOF LEVEL.
2. EQUIPMENT GROUNDING SYSTEM CONDUCTORS SHALL BE SEPARATED (NOT TOUCHING) FROM THE PERIMETER GROUNDING CONDUCTOR AT THIS POINT. A 1000mm LONG, BURIED, RIGID PVC CONDUIT SLEEVES AT CROSSING POINT PROVIDED UNDER CONTRACT C2.
3. FOR GROUNDING CONNECTION TO EQUIPMENT, REFER TO DWG. EGRD-K001.
4. FOR GROUND ROD WELLS WHERE VEHICULAR TRAFFIC IS POSSIBLE, PROVIDE WELLS RATED FOR TRUCK TRAFFIC, OLDCASTLE B1017 SERIES EMBEDDED IN THE GENERAL PARKING AREAS (TYPICAL). GROUNDING RODS WERE INSTALLED UNDER CONTRACT C2.
5. BURIED PERIMETER GROUNDING SYSTEM (GROUND RODS AND CONDUCTORS) INCLUDING THE UFER GROUND CONNECTIONS WERE SUPPLIED AND INSTALLED UNDER CONTRACT C2.
6. PERIMETER GROUNDING SYSTEM (GROUND RODS AND CONDUCTORS) EXTENDING FROM THE HRC BUILDING ARE INCLUDED IN THE SCOPE OF WORK UNDER CONTRACT C4. UTILIZE EXOTHERMIC WELD FOR SPLICING OF GROUNDING CONDUCTORS.
7. SUPPLY AND INSTALLATION OF BUILDING SERVICE GROUNDING SYSTEM INCLUDING ALL GROUND RODS, CONDUCTORS AND CONNECTIONS (INCLUDING CONNECTION TO PERIMETER GROUND) WERE UNDER CONTRACT C2. CONNECTIONS TO ELECTRICAL ROOM K-108 ARE INCLUDED IN THE SCOPE OF WORK UNDER CONTRACT C4.
8. CONTRACTOR FOR CONTRACT C4 SHALL PROVIDE CONDUITS, FITTINGS, SUPPORTS, WALL PENETRATIONS, ROXTEC CONDUIT SEALS, ETC., FOR ROUTING AND INSTALLATION OF GROUNDING CONDUCTORS INTO AND WITHIN THE ELECTRICAL ROOM K-108. UTILIZE EXCESS GROUNDING CONDUCTORS PROVIDED BY C2 CONTRACTOR AT EXTERIOR WALL OF BUILDING TO COMPLETE THE INSTALLATION.

REFERENCE DRAWINGS	DESCRIPTION
1-0102-EGRD-A003	ELECTRICAL – GROUNDING DETAILS

1:100 1000 0 2000 4000

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

NO.	REVISIONS	DATE	DESIGN	CHECK
02	ISSUED FOR CONSTRUCTION – 976-2016	2017/04/05	SLJ	DEB
01	ISSUED FOR CONSTRUCTION	10/2015	SLJ	DEB
00	ISSUED FOR TENDER	08/2015	SLJ	DEB

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: S. JUGANAS	CHECKED BY: E. RYCZKOWSKI
DRAWN BY: S. JUGANAS	APPROVED BY: D. BECKER
SCALE: 1:100	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2015/02/25	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
D.E. BECKER
Member 23646
REGISTERED PROFESSIONAL ENGINEER
April 5 2017

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL – GROUNDING LAYOUT
HIGH RATE CLARIFICATION BUILDING
GROUND FLOOR PLAN

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-EGRD-K002	001	02	A1

LAST SAVE: 2017/03/30 – 3:08pm
PATH: C:\pw_workdir\ch2mhill_wbg\ve006717\d0356262\1-0102-EGRD-K002.dwg

PLOT DATE: Mar 30, 2017 – 3:08pm

FILE NAME:1-0102-EGRD-K002.dwg