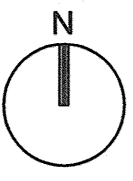


A1 SIZE - 594mm x 841mm

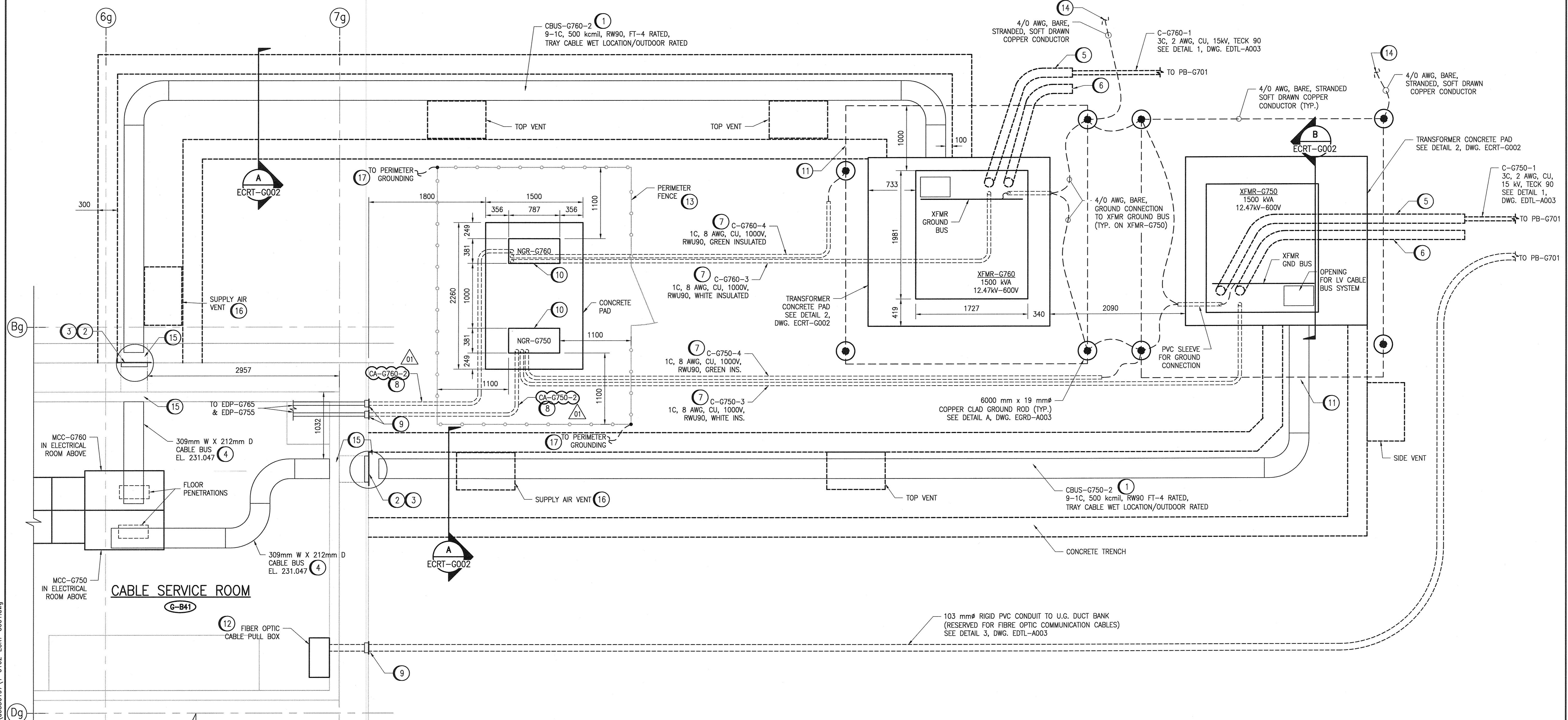
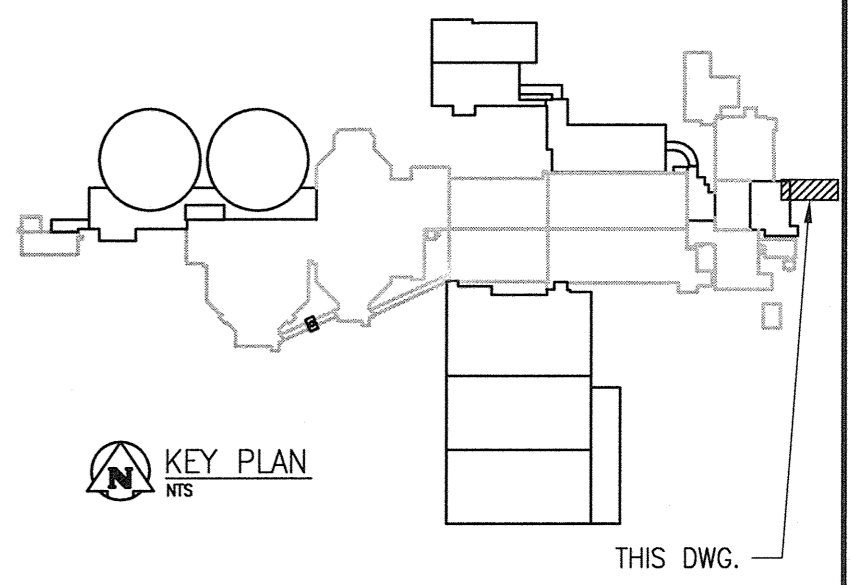


GENERAL NOTES:

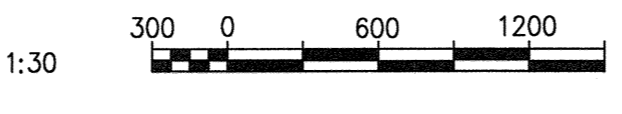
1. REFER TO STRUCTURAL DRAWINGS AND TECHNICAL SPECIFICATION 26 25 01 FOR DETAILS ON CABLE BUS TRENCH.
2. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND SHALL BE COORDINATED/ VERIFIED BY THE CONTRACTOR.
3. PROVIDE WEATHERPROOF ROXTEC CABLE / CONDUIT SEALS FOR ALL BUILDING PENETRATIONS.

SPECIFIC NOTES:

1. SUPPLY AND INSTALL CABLE BUS SYSTEM. DETAILS ON DWG. 1-0102-ECRT-G002.
2. SUPPLY AND INSTALL ROXTEC CABLE SEALS AS SHOWN. SEE DETAIL 1 ON DWG. ECRT-G002.
3. FOR EACH FRAME, CONSTRUCT A CONCRETE OPENING OF 409 mm X 245 mm FOR INSTALLATION OF ROXTEC CABLE SEAL SYSTEM. THE BOTTOM OF THE CONCRETE OPENING SHALL BE POSITIONED APPROXIMATELY 2032mm ABOVE THE CABLE SERVICE ROOM FLOOR GRADE. COORDINATE AND VERIFY ALL DIMENSIONS WITH STRUCTURAL.
4. RUN CABLE BUS SYSTEM DIRECTLY BELOW THE MCCs TO THE MAIN BREAKER COMPARTMENTS. CABLE BUS TO BE ROUTED IN CABLE SERVICE ROOM, BELOW THE ELECTRICAL ROOM. PROVIDE UNISTRUT SUPPORT FOR THE CABLE BUS SYSTEM.
5. PROVIDE 129 mmØ RIGID PVC CONDUIT SLEEVES THROUGH CONCRETE PAD EXTENDING APPROX. 1500 mm PAST THE PAD FOR ROUTING OF THE 15KV MAIN POWER CABLE. PROVIDE WEATHERPROOF SEAL AT BOTH ENDS OF THE CONDUIT SLEEVE AFTER INSTALLATION OF CABLES.
6. PROVIDE 129 mmØ RIGID PVC CONDUIT SLEEVES (SPARE) THROUGH CONCRETE PAD EXTENDING APPROX. 1500 mm PAST THE PAD. CAP BOTH ENDS.
7. RUN NGR CABLES IN 53 mmØ RIGID PVC CONDUIT.
8. REFER TO DWGS. 1-0102-EWDG-G001 AND 1-0102-EWDG-G003 FOR CABLE TYPE. RUN THE CABLES IN 53 mmØ RIGID PVC CONDUIT FOR EXTERIOR UNDERGROUND ROUTING AND TRANSITION TO RIGID ALUMINUM CONDUIT FOR INTERIOR RUN SECTION.
9. PROVIDE WEATHERPROOF, ROXTEC SEALS FOR CONDUIT PENETRATING THE WALL.
10. PROVIDE A 900mm HIGH, GALVANIZED STEEL STRUCTURAL STAND BOLTED TO THE CONCRETE PAD FOR MOUNTING OF NGR-G750 AND NGR-G760. REFER TO DWG. 1-0102-EDTL-G001, DETAIL 1 FOR NEUTRAL GROUNDING RESISTOR DETAILS.
11. GROUND CONDUCTOR TO CROSS ABOVE THE CONCRETE CABLE TRENCH AT 300mm BELOW FINISHED GRADE.
12. PROVIDE A 610 mm H X 610 mm W X 305 mm D PULL BOX FOR FIBER OPTIC CABLE. MOUNT THE BOX ON THE WALL (OR ALTERNATIVELY ON THE CEILING) OF CABLE SERVICE ROOM AT THE CONDUIT PENETRATION POINT.
13. PROVIDE 2400 mm HIGH STEEL CHAIN LINKED FENCE WITH LOCKED GATE TO RESTRICT ACCESS TO NEUTRAL GROUNDING RESISTORS IN ACCORDANCE WITH CODE REQUIREMENTS.
14. CONNECT TRANSFORMER GROUND ELECTRODES / GROUND GRID TO THE BUILDING SERVICE GROUNDING SYSTEM. REFER TO DRAWING 1-0102-EGRD-G002.
15. LEAVE ADEQUATE SPACE BETWEEN THE CABLE BUS AND THE ROXTEC MODULE ON BOTH SIDES (INDOOR AND OUTDOOR CABLE BUS) TO ALLOW FOR MANEUVERING OF CABLES IN AND OUT OF ROXTEC MODULE.
16. WIRE AND CONNECT MOTORIZED VENTILATION FANS FOR FORCED AIR VENTILATION OF CABLE BUS SYSTEM. REFER TO DRAWING EGAD-G006.
17. PROVIDE 2/0 AWG BARE CONDUCTOR BONDING CONNECTION OF FENCE TO THE PERIMETER GROUNDING CONDUCTOR. REFER TO DWG. EGRD-G002.



**CABLE TRENCH PLAN**  
SCALE: 1 : 30



NO.	REVISIONS	DATE	DESIGN	CHECK
01	ISSUED FOR ADDENDUM 4 - 976-2016	2017/06/30	WE	DEB
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	WE	DEB

**CH2MHILL**  
SNC-Lavalin  
DESIGNED BY: V. ELIMBAN  
DRAWN BY: M.J. PERSSON  
SCALE: 1:30  
DATE: 2015/05/19  
CONSULTANT NO.: 474248

**KGS GROUP**  
CHECKED BY: E. RYCZKOWSKI  
APPROVED BY: D. BECKER  
ISSUED FOR CONSTRUCTION BY: J. SHUMKA  
DATE: 2017/04/05

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

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

SOUTH END WATER POLLUTION CONTROL CENTRE  
SEWPPC UPGRADING/EXPANSION PROJECT  
ELECTRICAL - CABLE ROUTING  
HEADWORKS AREA - GRIT AND SCREENINGS BUILDING  
CABLE BUS SYSTEM LAYOUT

CITY DRAWING NUMBER: 1-0102-ECRT-G001  
SHEET: 001  
REV: 01  
SIZE: A1

REFERENCE DRAWINGS	DESCRIPTION
1-0102-EGRD-A003	GROUNDING DETAILS
1-0102-EDTL-A003	DETAILS
1-0102-ECRT-G002	CABLE BUS SYSTEM SECTION AND DETAILS

LAST SAVE: 2017/06/30 - 8:24am  
PATH: C:\pwworking\ch2mhill\wg\ve06071\1-0102-ECRT-G001.dwg