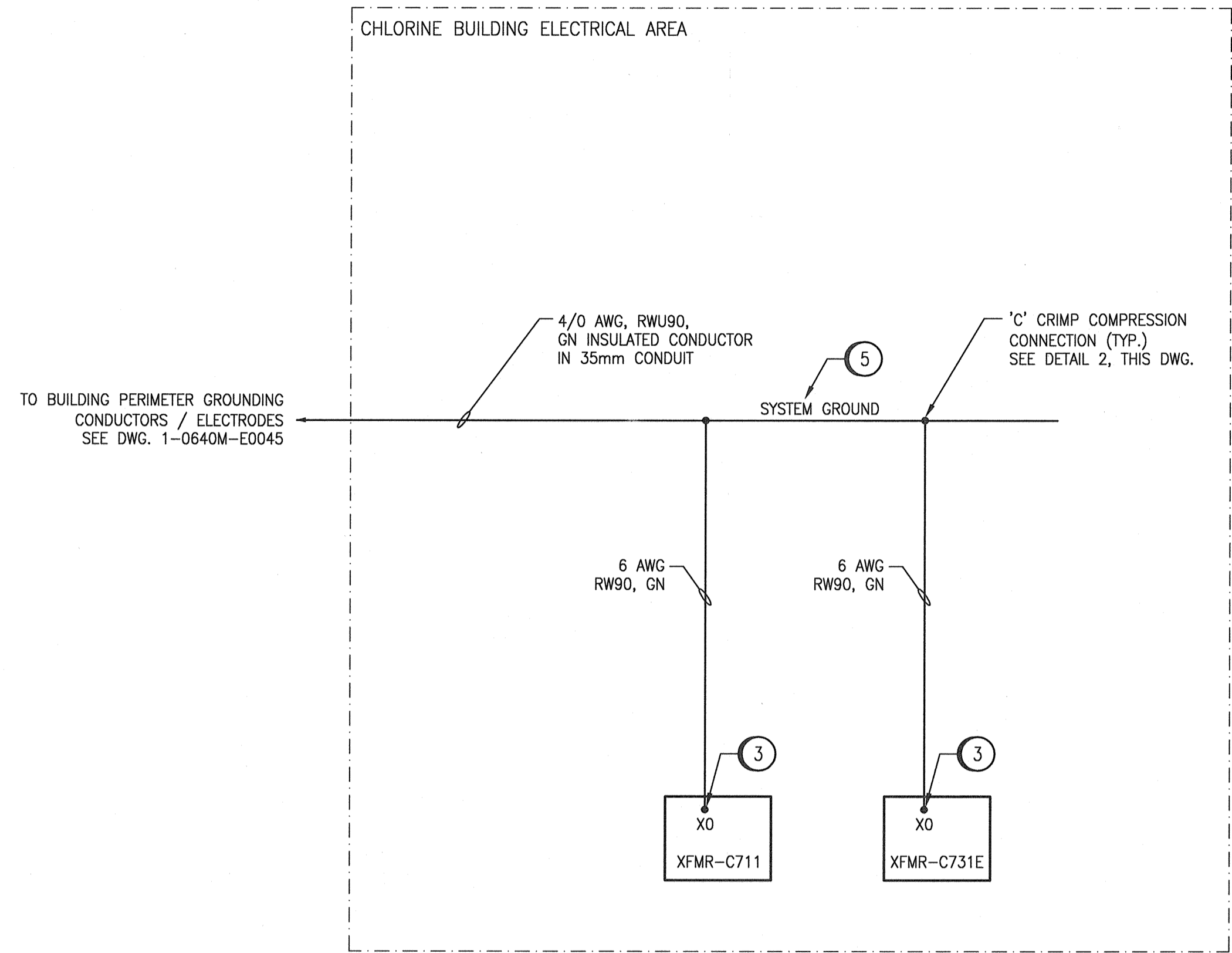
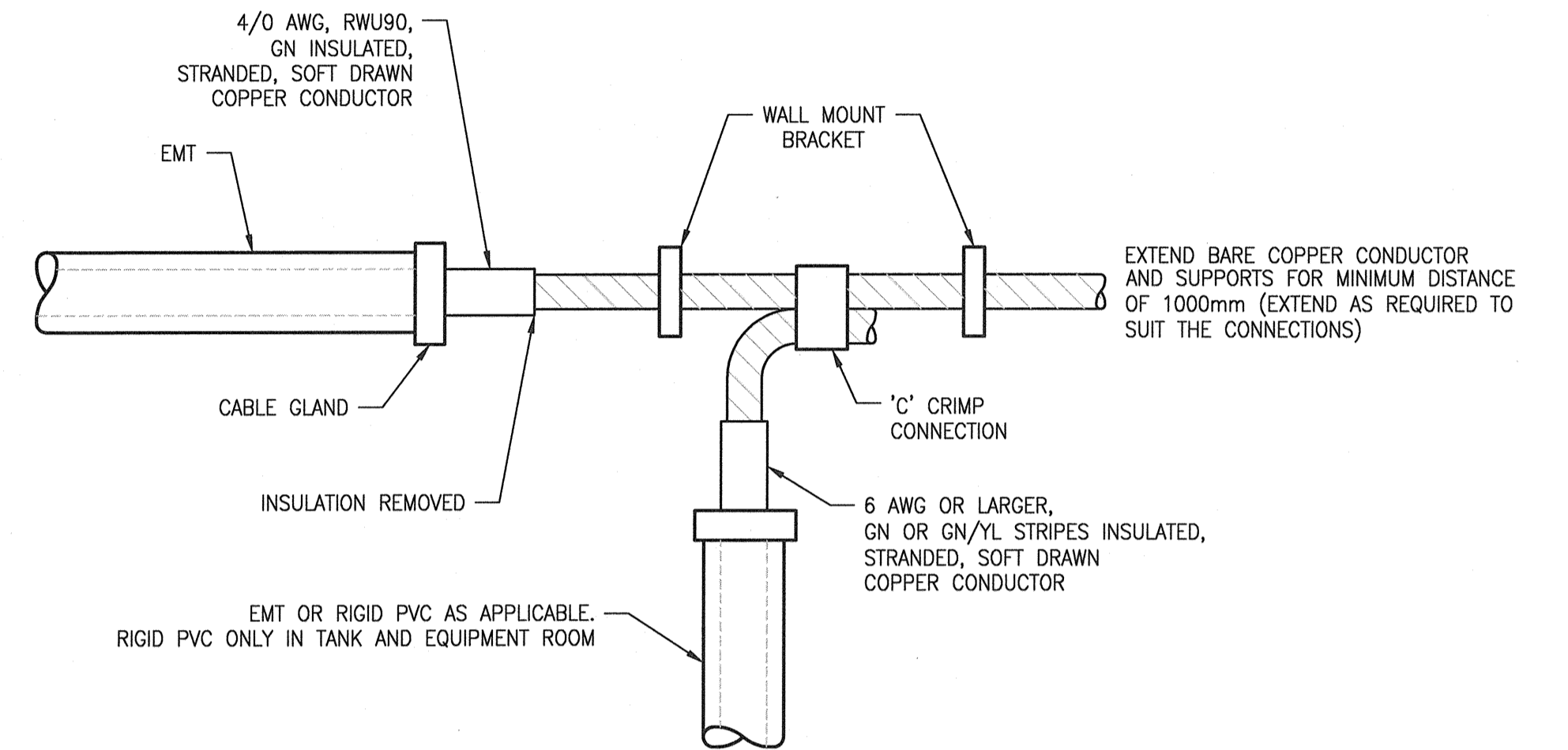


**CHLORINE BUILDING - ELECTRICAL PLAN LAYOUT (AT GALLERY LEVEL)**

SCALE: 1 : 20



**1 EQUIPMENT GROUNDING CONNECTION**  
SCALE: NTS



**2 GROUND CONNECTION POINT DETAIL (TYP.)**  
SCALE: NTS

**CONSTRUCTION NOTES:**

- 1 NOT ALL ELECTRICAL EQUIPMENT ARE SHOWN. REFER TO DRAWING 1-0640C-E0005 FOR COMPLETE LAYOUT.
- 2 SYSTEM GROUND CONDUCTOR TO BE MOUNTED ON THE WALL AT APPROXIMATELY 2500MM ABOVE FLOOR. SEE DETAIL 1 AND 2 ON THIS SHEET FOR EQUIPMENT GROUNDING CONNECTION.
- 3 PROVIDE GROUND CONNECTION FROM SYSTEM GROUND TO NEW TRANSFORMER'S X0 TERMINAL.
- 4 PROVIDE THREE RUNS OF 4/0 BONDING CABLES IN SEPARATE CONDUITS FROM PERIMETER GROUND AT MAIN PUMPHOUSE TO CHLORINE BUILDING MCC.
- 5 PROVIDE LAMACOID TAG ON WALL, ABOVE THE GROUND CONDUCTORS INDICATING "SYSTEM GROUND".

**GENERAL NOTES:**

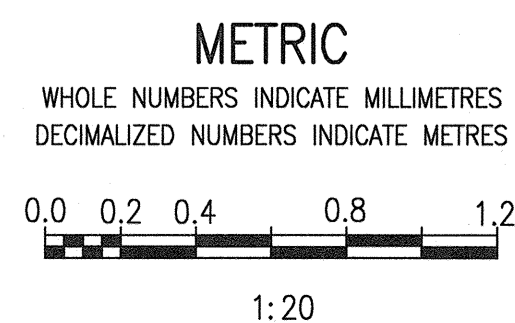
- 1. CONNECTIONS TO PERIMETER GROUNDING CONDUCTORS SHALL BE 'C' CRIMP PRESSURE CONNECTION OR EXOTHERMIC WELD. ALL COMPRESSION CONNECTIONS SHALL UTILIZE PENETROX JOINT COMPOUND.
- 2. ALL GROUNDING CONDUCTOR SHALL BE STRANDED, SOFT DRAWN COPPER, UNLESS NOTED OTHERWISE.
- 3. FOR CONDUIT RUNS CONFINED WITHIN THE ELECTRICAL ROOM, EMT MAY BE USED. FOR ANY CONDUITS EXITING THE ELECTRICAL ROOM, RIGID THREADED ALUMINUM CONDUIT SHALL BE USED.
- 4. ALL WIRES/CABLES SHALL BE RUN IN CONDUIT. SIZE CONDUITS IN ACCORDANCE WITH THE CEC.
- 5. NOT ALL BOND CONNECTION ARE SHOWN. PERFORM AS A MINIMUM BONDING IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.

**LEGEND:**

- GROUNDING CONDUCTOR (ABOVE GRADE / INSIDE OF BUILDING)
- EQUIPMENT GROUND CONNECTION

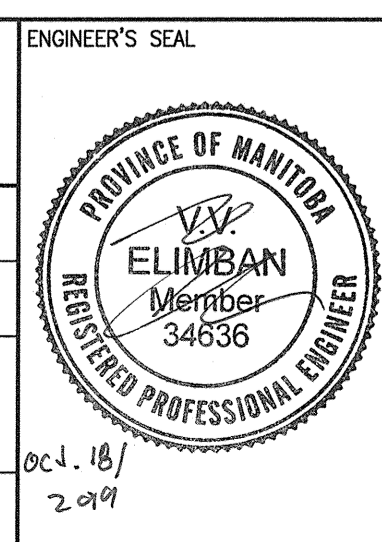
**NOTES:**

- 1. THIS DRAWING SUPERCEDES PART OF DRAWING Q-MCP-186.
- 2. SPACE FOR NEW EQUIPMENT IS LIMITED. ENSURE EQUIPMENT PROVIDED FITS IN AVAILABLE SPACE AND MEETS APPLICABLE CODES AND STANDARDS.
- 3. ALL EQUIPMENT ARE NEW UNLESS SPECIFICALLY STATED OTHERWISE.



00	ISSUED FOR TENDER AND CONSTRUCTION	2019/10/18	VE	KS
NO.	REVISIONS	DATE	DESIGN	CHECK

DESIGNED BY:	V. ELIMBAN
CHECKED BY:	K. SAPIAK
DRAWN BY:	J. GRAGASIN
APPROVED BY:	D. BECKER
SCALE:	AS SHOWN
ISSUED FOR CONSTRUCTION BY:	A. WEISS
DATE:	2019/08/28
DATE:	2019/10/18



THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT			
MCPHILLIPS PUMPING STATION ELECTRICAL AND HVAC UPGRADES, MCC REPLACEMENT ELECTRICAL GROUNDING DETAILS CHLORINE BUILDING			
CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0640C-E0011	001	00	A1

1-0640C-E0012	ELECTRICAL - HAZARDOUS LOCATION, CHLORINE BLDG GROUND LEVEL
1-0640M-E0045	ELECTRICAL GROUNDING LAYOUT, MAIN FLOOR PLAN
1-0640M-E0043	ELECTRICAL GROUNDING, INSTALLATION DETAILS
1-0640C-E0007	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING
1-0640C-E0005	PANEL LAYOUT, MCC-C710/MCC-C720E LOCATION PLAN
1-0640C-E0003	ELECTRICAL SINGLE LINE DIAGRAM MCC-C710/MCC-C720E
DRAWING NUMBER	REFERENCE DRAWINGS