## **FRONT VIEW - EXISTING SCALE 1:16**

SINGLE LINE DIAGRAM, 4160V ELECTRICAL DISTRIBUTION

INSTALLATION DETAILS, CABLE TRAY, AND BUSDUCT SUPPORTS

REFERENCE DRAWINGS

SINGLE LINE DIAGRAM, 480V DISTRIBUTION

1-0101U-E0013

1-0101U-E0015

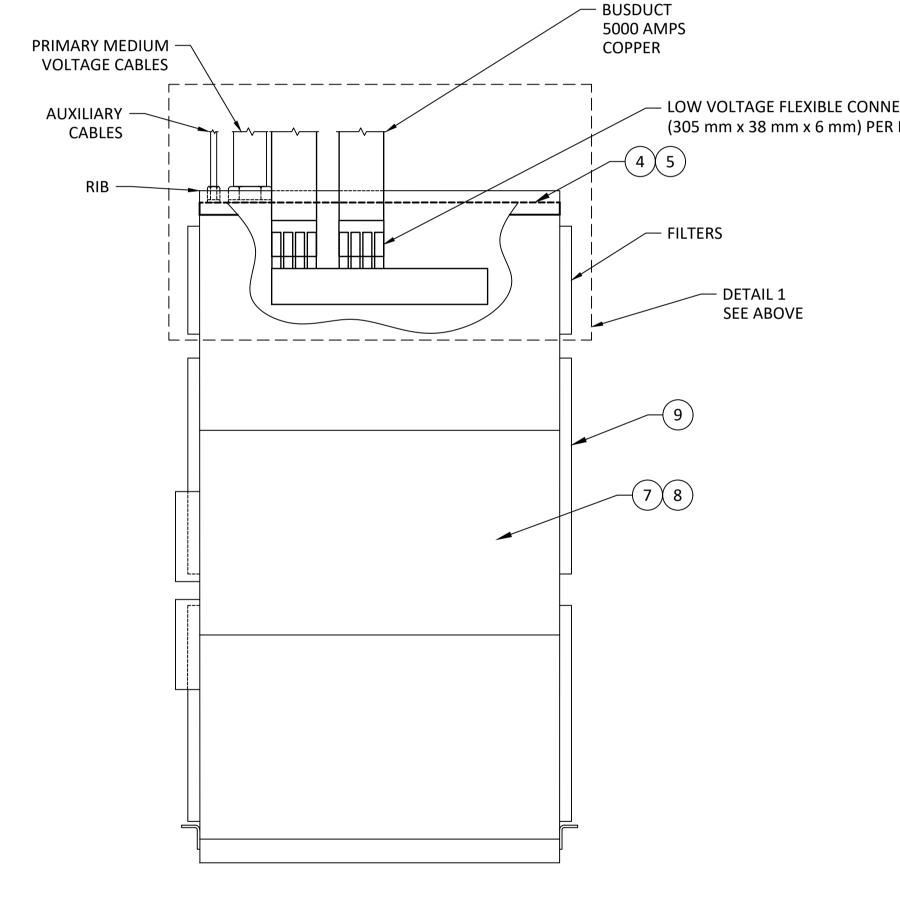
1-0101U-E0020

DRAWING NUMBER

## 1. ALL DIMENSIONS SHOWN ARE APPROXIMATE ONLY AND REQUIRE FIELD CONFIRMATION. 2. ALL BRACING AND FIELD INSTALLED CHANNELS ARE NOT SHOWN. SITE INVESTIGATION IS REQUIRED.

- BUSDUCT 31mm INCREMENT ON SIDE WALL OF SECTION 1 AND 2 (1:50 MIN. SLOPE) 6 ─ ROOF ON SECTION 3 **MAY REMAIN CLOSER** TO LEVEL TO **CABLES** ACCOMODATE **EXISTING BUSDUCT** CONNECTION

**SCALE 1:8** 



CLEAN THE TRANSFORMER INTERIOR.

TEST THE TRANSFORMER AND CABLES UPON COMPLETION OF THE REPAIR WORK.

COORDINATE, PAY FOR, AND RECEIVE AN INSPECTION AND APPROVAL OF THE TRANSFORMER MODIFICATIONS BY THE OFFICE OF THE FIRE COMMISSIONER OR APPROPRIATE AUTHORITY HAVING JURISDICTION.

C. REIMER C. REIMER APPROVED BY:

S. FUNK / E. COELHO C. REIMER SCALE: AS SHOWN ISSUED FOR CONSTRUCTION K. SCHIMKE

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

NORTH END SEWAGE TREATMENT PLANT UV TRANSFORMER REPAIR **EQUIPMENT LAYOUT** UVT-2 AND UVT-3 TRANSFORMERS

1-0101U-E0018 | 001 | 00 | A1

ENGINEERS GEOSCIENTISTS Certificate of Authorization CENGYS Ltd.

No. 6983

NO. REVISIONS

00 ISSUED FOR CONSTRUCTION (896-2021)

**RIGHT SIDE VIEW - EXISTING** 

**SCALE 1:16** 

2021-08-16 DATE: 2022-01-06 2022-01-06 | CJR | CJR | CONSULTANT NO.: 100022-011 DATE DESIGN CHECK

- QUALITY THERMOMETER **MODEL 118 SERIES SPACE HEATERS THERMOSTAT** 

**AUXILIARY** 

**RIGHT SIDE VIEW - NEW** 

BUSDUCT

- LOW VOLTAGE FLEXIBLE CONNECTORS

(305 mm x 38 mm x 6 mm) PER PHASE 1 TEST THE TRANSFORMER AND CABLES PRIOR TO REMOVING.

DISCONNECT AND CAREFULLY REMOVE THE 4160V PRIMARY POWER CABLES. DISCONNECT THE BUSDUCT AND REMOVE THE TRANSITION SECTION AND OTHER SECTIONS AS REQUIRED TO REMOVE THE TRANSFORMER ROOF.

REMOVE THE TRANSFORMER ROOF AND COVER THE TRANSFORMER AS REQUIRED TO PREVENT MOISTURE INGRESS WHILE THE ROOF IS REMOVED.

REPLACE THE EXISTING STEEL WITH A STAINLESS STEEL ROOF THAT HAS A MINIMUM SLOPE OF 1:50 ON SECTION 1 AND SECTION 2. THE SECTION 3 ROOF SLOPE MAY BE MINIMIZED TO ALLOW FOR THE BUSDUCT CONNECTION. A POSSIBLE DESIGN CONCEPT IS SHOWN IN DETAIL 1. HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE MODIFIED ROOF AND MODIFICATION OF ALL THE CONNECTIONS, INCLUDING THE BUSWAY CONNECTION. PROVIDE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION.

**CONSTRUCTION NOTES:** 

PROVIDE AND ATTACH INSULATION TO THE INTERIOR OF THE ENCLOSURE ROOF. IN ADDITION TO ATTACHING THE INSULATION REUTILIZE OR PROVIDE NEW FIBREBOARD TO PREVENT INSULATION FROM FALLING DOWN.

RE-INSTALL ALL CABLES AND BUSDUCT, REPLACE ALL THE CABLE GLANDS, AND PROVIDE THE ASSOCIATED STRUCTURE TO SUPPORT THE CABLES, TAKING CARE NOT TO DAMAGE. RE-ENTRY OF ALL AUXILIARY CABLES TO BE FROM THE RIGHT SIDE OF THE TRANSFORMER. REPAIR THE 4160V CABLES AS DESCRIBED IN THE SPECIFICATIONS.

CLEAN CORROSION ON THE ENCLOSURE EXTERIOR WALLS, DOORS, AND ALL OTHER PANELS. DO NOT UTILIZE SANDBLASTING OR OTHER TECHNIQUES WHICH COULD PANELS. DO NOT UTILIZE SANDBLASTING OR OTHER TECHNIQUES WHICH COULD

IMPACT THE TRANSFORMER. PRIME AND PAINT THE ENTIRE ENCLOSURE EXTERIOR WITH AN EPOXY PAINT.

9 REMOVE AND CLEAN ALL FILTERS.

INSTALL A NEW SIGN WITH A RED FACE CONTAINING THE WORDS: "DANGER: 4160 V".