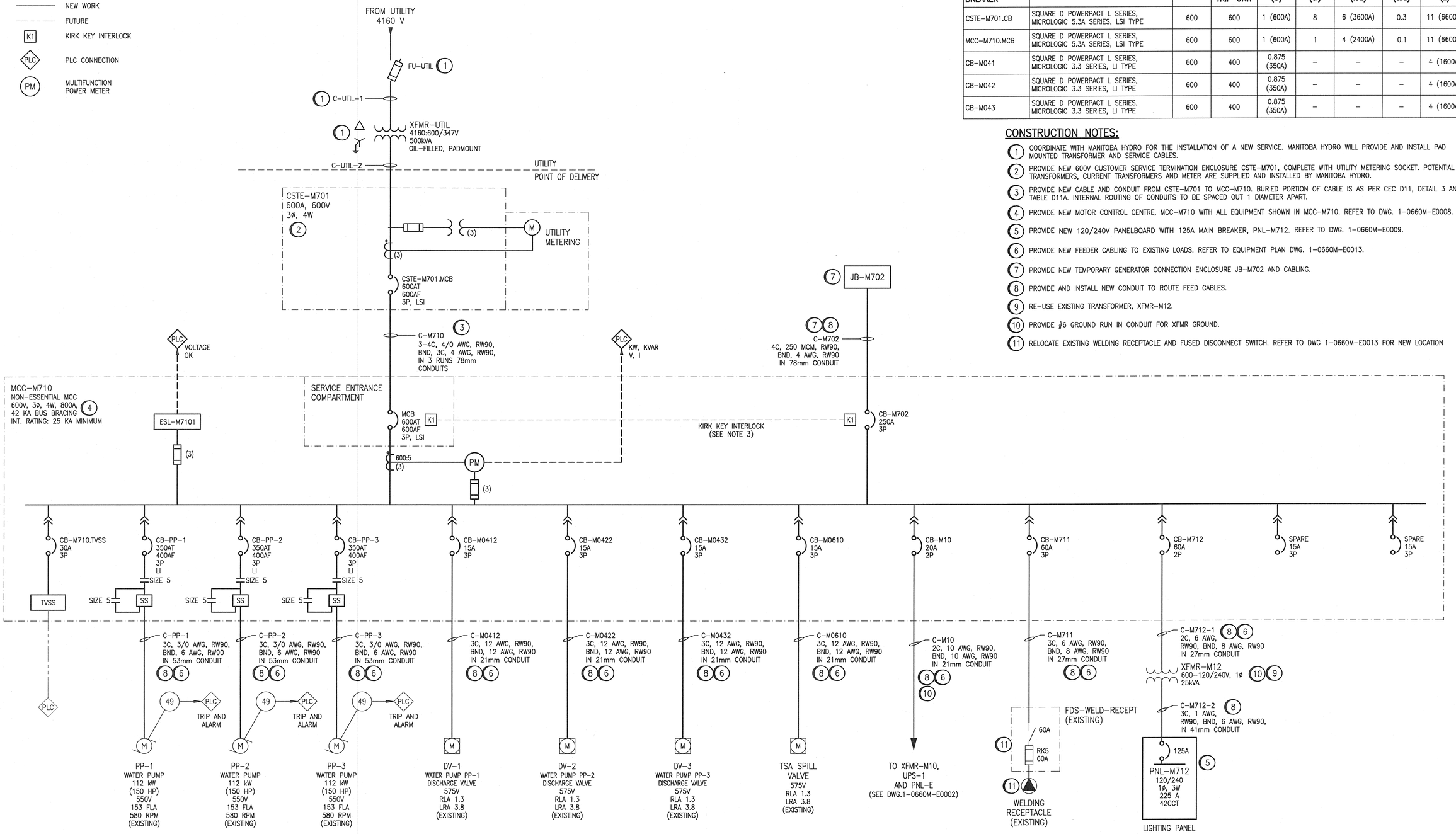
A1 SIZE – 594mm x 841mm

LEGEND:

- EXISTING
- NEW WORK
- FUTURE
- K1 — KIRK KEY INTERLOCK
- PLC — PLC CONNECTION
- PM — MULTIFUNCTION POWER METER




## BREAKER PROTECTION SETTINGS

| CIRCUIT BREAKER | MODEL | FRAME | SENSOR/ TRIP UNIT | LTPU (Ir) | LTD (tr) | STPU (Isd) | STD (tsd) | INST (Ii) |
|---|---|---|---|---|---|---|---|---|
| CSTE-M701.CB | SQUARE D POWERPACT L SERIES, MICROLOGIC 5.3A SERIES, LSI TYPE | 600 | 600 | 1 (600A) | 8 | 6 (3600A) | 0.3 | 11 (6600A) |
| MCC-M710.MCB | SQUARE D POWERPACT L SERIES, MICROLOGIC 5.3A SERIES, LSI TYPE | 600 | 600 | 1 (600A) | 1 | 4 (2400A) | 0.1 | 11 (6600A) |
| CB-M041 | SQUARE D POWERPACT L SERIES, MICROLOGIC 3.3 SERIES, LI TYPE | 600 | 400 | 0.875 (350A) | – | – | – | 4 (1600A) |
| CB-M042 | SQUARE D POWERPACT L SERIES, MICROLOGIC 3.3 SERIES, LI TYPE | 600 | 400 | 0.875 (350A) | – | – | – | 4 (1600A) |
| CB-M043 | SQUARE D POWERPACT L SERIES, MICROLOGIC 3.3 SERIES, LI TYPE | 600 | 400 | 0.875 (350A) | – | – | – | 4 (1600A) |

## CONSTRUCTION NOTES:

1. COORDINATE WITH MANITOBA HYDRO FOR THE INSTALLATION OF A NEW SERVICE. MANITOBA HYDRO WILL PROVIDE AND INSTALL PAD MOUNTED TRANSFORMER AND SERVICE CABLES.
2. PROVIDE NEW 600V CUSTOMER SERVICE TERMINATION ENCLOSURE CSTE-M701, COMPLETE WITH UTILITY METERING SOCKET. POTENTIAL TRANSFORMERS, CURRENT TRANSFORMERS AND METER ARE SUPPLIED AND INSTALLED BY MANITOBA HYDRO.
3. PROVIDE NEW CABLE AND CONDUIT FROM CSTE-M701 TO MCC-M710. BURIED PORTION OF CABLE IS AS PER CEC D11, DETAIL 3 AND TABLE D11A. INTERNAL ROUTING OF CONDUITS TO BE SPACED OUT 1 DIAMETER APART.
4. PROVIDE NEW MOTOR CONTROL CENTRE, MCC-M710 WITH ALL EQUIPMENT SHOWN IN MCC-M710. REFER TO DWG. 1-0660M-E0008.
5. PROVIDE NEW 120/240V PANELBOARD WITH 125A MAIN BREAKER, PNL-M712. REFER TO DWG. 1-0660M-E0009.
6. PROVIDE NEW FEEDER CABLING TO EXISTING LOADS. REFER TO EQUIPMENT PLAN DWG. 1-0660M-E0013.
7. PROVIDE NEW TEMPORARY GENERATOR CONNECTION ENCLOSURE JB-M702 AND CABLING.
8. PROVIDE AND INSTALL NEW CONDUIT TO ROUTE FEED CABLES.
9. RE-USE EXISTING TRANSFORMER, XFMR-M12.
10. PROVIDE #6 GROUND RUN IN CONDUIT FOR XFMR GROUND.
11. RELOCATE EXISTING WELDING RECEPTACLE AND FUSED DISCONNECT SWITCH. REFER TO DWG 1-0660M-E0013 FOR NEW LOCATION

| DRAWING NUMBER | REFERENCE DRAWINGS |
|---|---|
| 1-0660M-A0004 | LOOP DIAGRAM, MCC-M710 VOLTAGE PRESENT |
| 1-0660M-E0020-E0022 | SCHEMATIC AND CONNECTION DIAGRAM, PUMP PP-1, PP-2 AND PP-3 |
| 1-0660M-E0017 | PANEL LAYOUT, JB-M702, TEMP. GEN. CONNECTION |
| 1-0660M-E0016 | ELECTRICAL SITE PLAN |
| 1-0660M-E0013 | ELECTRICAL EQUIPMENT PLAN, MAIN FLOOR |
| 1-0660M-E0009 | PANEL SCHEDULE AND DETAILS, PNL-M712 |
| 1-0660M-E0008 | MCC ELEVATION AND SCHEDULE, MCC-M710 |
| 1-0660M-E0002 | SINGLE LINE DIAGRAM & LAYOUT, UPS |

## NOTES:

1. ALL EQUIPMENT SHOWN ON THIS DRAWING ARE NEW AND SHALL BE PROVIDED BY THE CONTRACTOR UNLESS SPECIFIED AS EXISTING.
2. ALL CONDUIT SHALL BE RIGID, THREADED ALUMINUM CONDUIT.
3. FOR THE KIRK KEY INTERLOCK, MCC-M710.MCB (MAIN) BREAKER IS REQUIRED TO BE INTERLOCKED WITH CB-M702 (GENERATOR) BREAKER TO PREVENT PARALLELING OF SOURCES. THE KIRK KEY IS REQUIRED TO CLOSE EITHER MCC-M710.MCB (MAIN) BREAKER OR CB-M702 (GENERATOR) BREAKER. ONCE A KEY IS INSIDE THE KEY LOCK AND THE CORRESPONDING BREAKER IS CLOSED, THE KIRK KEY IS LOCKED INTO POSITION UNTIL THE BREAKER IS OPENED.
4. PAD MOUNTED SERVICE TRANSFORMER XFMR-UTIL TO BE TAPPED DOWN TO 585V ON THE SECONDARY DUE TO 550V MOTOR LOADS.

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

| NO. | REVISIONS | DATE | DESIGN | CHECK |
|---|---|---|---|---|
| 00 | ISSUED FOR TENDER AND CONSTRUCTION | 2019/10/18 | SB | BC |

SNC·LAVALIN
SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

| | |
|---|---|
| DESIGNED BY: S. BOGHOSIAN | CHECKED BY: B. CLEVEN |
| DRAWN BY: J. GRAGASIN | APPROVED BY: D. BECKER |
| SCALE: NTS | ISSUED FOR CONSTRUCTION BY: A. WEISS |
| DATE: 2019/01/18 | DATE: 2019/10/18 |

CONSULTANT NO.:

ENGINEER'S SEAL
PROVINCE OF MANITOBA
J.V.V. ELIMBAN
Member
34636
REGISTERED PROFESSIONAL ENGINEER
Oct. 18/2019

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

TACHE BOOSTER PUMPING STATION

ELECTRICAL SINGLE LINE DIAGRAM
MCC-M710

| CITY DRAWING NUMBER | SHEET | REV. | SIZE |
|---|---|---|---|
| 1-0660M-E0007 | 001 | 00 | A1 |

1-0660M-E0007-001-00.dwg

LAST SAVE: 2019/10/29 – 8:12am
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