A1 SIZE - 594mm x 841mm

LEGEND:

EXISTING

NEW WORK

FUTURE

ARC FLASH VALUES ARE PRELIMINARY AND WILL BE FINALIZED DURING CONSTRUCTION.

FROM MCC-M1 (SEE DRAWING 1-630M-E0023)

C-MCC-M3E-B 3C, 250 MCM, TECK90

FROM DP-M2 (SEE DRAWING 1-0630M-E0024)

C-ATS-M3E-A 3C, 250 MCM, TECK90

GEN-M1 STANDBY GENERATOR

GEN-M2 STANDBY GENERATOR

100kW @ 0.8PF 600V, 3ø

150A

C-ATS-M1E-A 3C, 1 AWG, TECK90

C-ATS-M1E-B 3C, 1 AWG, TECK90

ATS-M1E 150A PPE 2

C-ATS-M3E-B 3C, 250 MCM, TECK90

ATS-M3E 225A PPE 2

C-MCC-M3E-A 3C, 250 MCM, TECK90

PLC VOLTAGE OK

PLC kW, kVAR V, I

MCC-M3E (ESSENTIAL)
600V, 3ø, 3W
600A
42kA BUS BRACING
INT. RATING: 18kA MINIMUM
PPE 2

ESL-M915

(3)

MCC-M3E.MCS-B 250AF

K3 - - - K3

MCC-M3E.MCS-A 250AF

400:5 (3)

PM

(3)

XXX → TVSS 120kA

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M941 30A → C-M941-1 3C, 12 AWG TECK90 → C-M941-2 3C, 12 AWG TECK90 → P-M941 (WAS P7) SUMP PUMP 3.73 kW (5 HP) 5.8 FLA 1725 RPM

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M942 30A → C-M942-1 3C, 12 AWG TECK90 → C-M942-2 3C, 12 AWG TECK90 → P-M942 (WAS P8) SUMP PUMP 3.73 kW (5 HP) 5.8 FLA 1725 RPM

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M903 30A → C-M903-1 3C, 12 AWG TECK90 → C-M903-2 3C, 12 AWG TECK90 → AC-M903 (WAS LZ-902-AC) VALVE AIR COMPRESSOR 7.5 kW (10 HP) 10.4 FLA 1745 RPM 575 V

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M902 30A → C-M902-1 3C, 12 AWG TECK90 → C-M902-2 3C, 12 AWG TECK90 → AC-M902 (WAS R2) INSTRUMENT AIR COMPRESSOR 3.7 kW (5 HP) 5.1 FLA 1725 RPM 550 V

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M601 30A → C-M601-1 3C, 12 AWG TECK90 → C-M601-2 3C, 12 AWG TECK90 → AHU-M601 (WAS FC1) PUMP ROOM AIR HANDLING UNIT 7.5 kW (10 HP) 10.0 FLA 1800 RPM

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M603 30A → C-M603-1 3C, 12 AWG TECK90 → C-M603-2 3C, 12 AWG TECK90 → AHU-M603 (WAS FC3) PUMP ROOM AIR HANDLING UNIT 7.5 kW (10 HP) 10.0 FLA 1800 RPM

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M681 30A → C-M681-1 3C, 12 AWG RW90 → J JB-M3 → C-M681-2 4C, 10 AWG RINJ → EF-M681 (WAS F1) PUMP ROOM EXHAUST FAN 0.56 kW (0.75 HP)

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M684 30A → C-M684-1 3C, 12 AWG RW90 → J JB-M3 → C-M684-2 4C, 10 AWG RINJ → EF-M684 (WAS F4) PUMP ROOM EXHAUST FAN 0.56 kW (0.75 HP) 01

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M686 → C-M686-1 3C, 12 AWG RW90 → J JB-M3 → C-M686-2 4C, 10 AWG RINJ → EF-M686 (WAS F6) CL2 EQUIP. RM. EXHAUST FAN 0.56 kW (0.75 HP)

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M689 → C-M689-1 3C, 12 AWG RW90 → J JB-M3 PPE 0 → C-M689-2 4C, 10 AWG RINJ → EF-M689 (WAS F9) CL2 SCALE RM. EXHAUST FAN 0.56 kW (0.75 HP)

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M690 30A → C-M690-1 3C, 12 AWG RW90 → 01 → EF-M690 (WAS F10) CL2 STORAGE RM. EXHAUST FAN 0.56 kW (0.75 HP) 1.4 FLA 550 V 1200 RPM

MCP 30A Im=AUTO(1) → SIZE 1 → DS-M692 30A → C-M692-1 3C, 12 AWG RW90 → 01 → EF-M692 (WAS F12) CL2 STORAGE RM. EXHAUST FAN 0.56 kW (0.75 HP) 1.4 FLA 550 V 1200 RPM

15A → C-M657-1 3C, 12 AWG TC → HCC-M657 (WAS HCP8) PPE 0 → UH-M657 (WAS E7) CL2 EQUIP. ROOM UNIT HEATER 12 kW

15A → C-M041 3C, 12 AWG TECK90 → XV-M041 (WAS SHV-1) SUCTION HEADER BUTTERFLY VALVE 1.49 kW (2 HP) 2.9 FLA 3500 RPM 550 V

15A → C-M043 3C, 12 AWG TECK90 → XV-M043 (WAS SHV-2) SUCTION HEADER BUTTERFLY VALVE 1.49 kW (2 HP) 2.9 FLA 3500 RPM 550 V

15A → C-M051 3C, 12 AWG TECK90 → XV-M051 (WAS DHV-1) DISCHARGE HEADER BUTTERFLY VALVE 0.75 kW (1 HP) 2.3 FLA 1750 RPM 550 V

15A → C-M054 3C, 12 AWG TECK90 → XV-M054 (WAS DHV-4) DISCHARGE HEADER BUTTERFLY VALVE 0.75 kW (1 HP) 2.3 FLA 1750 RPM 550 V

30A 2P → C-XFMR-M31E 2C, 10 AWG RW90 → UPS-M1 VIA XFMR-M31E (SEE DRAWING 1-0630M-E0008)

30A → C-XFMR-M30E 3C, 6 AWG TECK90 → XFMR-M30E 25kVA 600-120/208V 5.1%Z PPE 0 → C-PNL-B 4C, 2 AWG RW90 → PNL-B 120/208V 90A 3ø, 4W 30 CCT. PPE 0

DRAWING NUMBER	REFERENCE DRAWINGS
1-0630M-E0028	MCC SCHEDULES, MCC-M1 AND MCC-M3E
1-0630M-E0027	MCC ELEVATION AND DETAILS
1-0630M-E0001	ELECTRICAL SINGLE LINE DIAGRAM LEGEND AND DETAILS

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

NO.	REVISIONS	DATE	DESIGN	CHECK
01	ADDENDUM 1, BID OPP. 490-2012	2012/08/14	BJC	CJR
00	ISSUED FOR TENDER, BID OPP. 490-2012	2012/07/23	BJC	CJR

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DESIGNED BY: B. CLEVEN
CHECKED BY: C. REIMER
DRAWN BY: S. FUNK
APPROVED BY: C. REIMER
SCALE: NTS
RELEASED FOR CONSTRUCTION BY:
DATE: 2011/01/25
DATE:
CONSULTANT NO.: 508955-0000-47DD-0025

ENGINEER'S SEAL

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

MACLEAN WATER PUMPING STATION

ELECTRICAL SINGLE LINE DIAGRAM
MCC-M3E ESSENTIAL MCC

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0630M-E0025	001	01	A1

LAST SAVE: 2012/08/16 - 4:03pm
PATH: M:\508955\4ENG\47ELE\DD - General DWG\1-0630M-E0025-001-01.dwg

1-0630M-E0025-001-01.dwg