

PANEL ID:		VOLTS:		RATINGS:		PHASE:		WIRES:		MAIN BREAKER:		MAIN BREAKER TYPE:		MAIN BREAKER SETTINGS:																		
MCC-X710		600V		1200A		3P		3 W		1200AT/1600AF		LSIG		LTPU: 1200A INST: - LTPU: - GFPU: - STPU: - GFD: - STD: -																		
DESCRIPTION:		LOCATION:																														
MCC SYSTEM 1		ELECTRICAL ROOM																														
UNIT LOC'N	ID	LOAD DESCRIPTION	MOTOR			NON-MOTOR		STARTER			CIRCUIT PROTECTION		NOTES	CPT VA	MOTOR PROTECTION	STARTER CONTROL DEVICES			STARTER INDICATING LIGHTS		FIELD CONTROL	HIM	MMC INPUTS	INTERLOCKS	N.O.	N.C.						
			HP	KW	FLA	KW	NEMA SIZE	TYPE	OVERLOAD	RATING	TYPE	HOR				LOR	S-S	RUN	FAULT													
1A	CB-X710-T	TIE BREAKER										1200AT	LSIG, 3P																			
2A	MCC-X710.MCB	MAIN BREAKER										1200AT	LSIG, 3P																			
3A	METERING	METERING				12 VA						2A / 1A	FUSE, 3P																			
3C	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR										BY MFG	TM, 3P																			
3I	XFMR-X713	208/120V DISTRIBUTION TRANSFORMER				45 KVA						100A	TM, 3P																			
3K	DP-X712E	600 V ESSENTIAL POWER PANEL				80 KVA						200A	LSIG																			
4A	PFC-X710	POWER FACTOR CORRECTION UNIT				0						250A	TM, 3P																			
4E	FN-X502	AIR COMPRESSOR SUPPLY FAN	3	2.2	2.9			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
4I	P-X503	PIPE FLUSHING PUMP	2	1.5	1.7			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
4M	CMP-X504	INSTRUMENT AIR COMPRESSOR	60	44.8	60							150A	TM, 3P																			
4O	H-X505	HOIST	8	6.0	7.5							20A	TM, 3P																			
4Q	24VDC P/S	24VDC POWER SUPPLY FOR NETWORK SWITCH										BY MFG	BY MFG		MFG																	
4S	MCC-X710.NSW-1	NETWORK SWITCH, 16 PORT																														
5A	FN-X203	CHANNEL AERATION BLOWER	75	56.0	75			4	SOFT START			175A	TM, 3P		R+150	GF								1	1 (LOR)		1	1				
5O	WELD. RECEPT.	WELDING RECEPTACLE										60A	TM, 3P																			
5Q	P-X631	HOT WATER CIRCULATING PUMP	1.5	1.1	1.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
5U	P-X632	CHILLED WATER PUMP	1.5	1.1	1.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
6A	P-X501	FLUSHING WATER PUMP	100	74.6	95			4	SOFT START			200A	TM, 3P		R+150	GF, RTD								1	1 (LOR)		1	1				
6U	P-X633	COOLING TOWER PUMP	5	3.7	5.3			1	FVNR	MMC	BY MFG	MCP, 3P		100										1		1	1					
7A	P-X112	CLARIFIER 1 SAMPLE PUMP	1.5	1.1	1.9			1	FVNR	MMC	BY MFG	MCP, 3P		100										1		1	1					
7E	P-X113	CLARIFIER 1 SCUM PUMP	7.5	5.6	7.7			1	FVNR	MMC	BY MFG	MCP, 3P		100										2 (HOR, DS)		1	1					
7I	CM-X011	CLARIFIER 1 BRIDGE DRIVE	1	0.7	1			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
7M	FN-X634	COOLING TOWER FAN	7.5	5.6	7.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
7O	P-X635	GLYCOL HEAT RECOVERY PUMP	15	11.2	16			2	FVNR	MMC	BY MFG	MCP, 3P		150										1 (HOR)		1	1					
7U	AHU-X651	ELECTRICAL ROOM AIR HANDLING UNIT	1.5	1.1	1.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
8A	P-X132	CLARIFIER 3 SAMPLE PUMP	1.5	1.1	1.9			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
8E	P-X133	CLARIFIER 3 SCUM PUMP	7.5	5.6	7.7			1	FVNR	MMC	BY MFG	MCP, 3P		100										2 (HOR, DS)		1	1					
8I	CM-X031	CLARIFIER 3 BRIDGE DRIVE	1	0.7	1			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
8M	AHU-X652	GALLERY AIR HANDLING UNIT	10	7.5	11			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
8O	EF-X653	GALLERY EXHAUST FAN	1.5	1.1	1.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
8U	EF-X654	TRUCK BAY EXHAUST FAN	1	0.7	1.2			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
9A	P-X202	WAS PUMP	15	11.2	16							30A	FUSE, 3P		R+50									1	2 (HOR, DS)	DS	1	1				
9M	EF-X655	SCRUBBER ROOM EXHAUST FAN	1	0.7	1.2			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
9Q	AHU-X656	BLOWER AND PUMP ROOM AIR HANDLING UNIT	7.5	5.6	7.8			1	FVNR	MMC	BY MFG	MCP, 3P		100										1 (HOR)		1	1					
10A	P-X201	SLUDGE RECIRCULATION PUMP	25	18.7	28							40A	FUSE, 3P		R+50									1	1 (HOR)		1	1				
10Q	24VDC P/S	24VDC POWER SUPPLY FOR NETWORK SWITCH										BY MFG	BY MFG		MFG																	
10Q	MCC-X710.NSW-2 AND MCC-X710.NSW-3	NETWORK SWITCHES, 16 PORT																														
11A	AHU-X611	CLARIFIER 1 AIR HANDLING UNIT	40	29.8	38							70A	FUSE, 3P		R+100									1	1 (HOR)		1	1				
12A	AHU-X613	CLARIFIER 3 AIR HANDLING UNIT	40	29.8	38							70A	FUSE, 3P		R+100									1	1 (HOR)		1	1				
13A	P-X111	CLARIFIER 1 RAS PUMP	60	44.8	60							100A	FUSE, 3P		R+150	GF								1	1 (HOR)		1	1				
14A	P-X131	CLARIFIER 3 RAS PUMP	60	44.8	60							100A	FUSE, 3P		R+150	GF								1	1 (HOR)		1	1				
15A	EF-X612	CLARIFIER 1 EXHAUST FAN	60	44.8	60							100A	FUSE, 3P		R+150	GF								1	1 (HOR)		1	1				
16A	EF-X614	CLARIFIER 3 EXHAUST FAN	60	44.8	60							100A	FUSE, 3P		R+150	GF								1	1 (HOR)		1	1				
TOTAL CONNECTED LOAD:			850 KVA			TOTAL DEMAND LOAD - SUMMER:			754 KVA			TOTAL DEMAND LOAD - WINTER:			757 KVA			LEGEND:														
									FVNR			FULL VOLTAGE NON-REVERSING			MCP			MOTOR CIRCUIT PROTECTOR			S-S			START-STOP PUSHBUTTONS			RTD			RESISTANCE TEMPERATURE DEVICE		
									TM			THERMAL MAGNETIC			3P			3 POLE			HOR			HAND-OFF-REMOTE			VA			VOLT-AMPERE		
									MMC			MOTOR MANAGEMENT CONTROLLER			MCS			MOULDED CASE SWITCH			LOR			LOCAL-OFF-REMOTE			GF			GROUND FAULT		
									CPT			CONTROL POWER TRANSFORMER			HIM			HUMAN INTERFACE MODULE			DS-L			DISCONNECT SWITCH (LOCAL)			R+			REQUIRED PLUS		

LAST SAVE: 2013/10/30 - 3:01pm
 PATH: M:\612620\0005\4EN\40EN\00 - General DWG\SK-E0003.dwg

SK-E0002	MCC ELEVATION AND DETAILS
SK-E0001	MCC SINGLE LINE DIAGRAM
DRAWING NUMBER	REFERENCE DRAWINGS



00	ISSUED FOR TENDER	2013/10/30	TMC	CJR
NO.	REVISIONS	DATE	DESIGN	CHECK

SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL	
DESIGNED BY:	I. CHURCH	CHECKED BY:	C. REIMER
DRAWN BY:	K. MOHAMMED	APPROVED BY:	C. REIMER
SCALE:	NTS	RELEASED FOR CONSTRUCTION BY:	
DATE:	2013/05/02	DATE:	
CONSULTANT NO.:		612620-0005-40DD-0003	

PRELIMINARY
 NOT TO BE
 USED FOR
 CONSTRUCTION

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

WASTEWATER TREATMENT SYSTEM

MCC SCHEDULE
 MCC SYSTEM 1

CITY DRAWING NUMBER: SK-E0003

SHEET: 001 REV: 00 SIZE: A1