

152.4 00 0 0 0 0 0 GROUND FAULT INDICATING LIGHTS CABLE ENTRY LEVEL CONTROL ALARMS SP1 SPACE PANEL '2A' SOFT START 120/240V 75 HP 100A SP1 PFC 24 CCT (20 kVAR) 3 SP2 PFC (20 kVAR) SP3 PFC (20 kVAR) <sub>3K</sub> SF1 EXHAUST FAN BREAKER SP3 SP2 SOFT START SOFT START XFRMR 'TA' 75 HP 75 HP 15 kVA 600:208/120V

## <u>DETAIL A - MCC '6A' ELEVATION</u>

## GENERAL NOTES:

- 1. THE MOTOR CONTROL CENTRE SHALL BE COMPLETE WITH 600A, HORIZONTAL TIN PLATED COPPER BUS BARS, 300A VERTICAL TIN PLATED COPPER BUS BARS. THE MCC SHALL HAVE AN INTEGRAL 15kVA TRANSFORMER, PANELBOARD, 15A BREAKER, THREE 75 HP SOFT STARTERS, CAP BANKS, AND A CONTROL CELL AS SHOWN IN THE DETAIL.
- 2. THE TOTAL WEIGHT OF THE MCC IS APPROXIMATELY 1077 KG'S, AND SHALL BE SHIPPED IN 3 SEPARATE SECTIONS FROM THE FACTORY IN ORDER TO FACILITATE ENTRY INTO THE LOWER LEVEL OF THE LIFT STATION. THE CONTRACTOR SHALL ASSEMBLE ALL 3 MCC SECTIONS ON SITE.
- 3. SUPPLY AND INSTALL THICK PLASTIC LAMACOID NAMEPLATES ON MCC SECTIONS. LAMACOIDS SHALL INCLUDE THE TEXT AS SHOWN ON THE MCC DETAIL.
- 4. SUPPLY AND INSTALL NEW, COMPLETE TYPEWRITTEN PANEL DIRECTORY FOR PANELBOARD
- 5. ALL DISCONNECT SWITCHES / BREAKERS WITHIN THE MCC SHALL BE EQUIPPED WITH 'LOCK OFF' DEVICES.

## SPECIFIC NOTES:

- TERMINATE EXISTING PANELBOARD CIRCUITS INTO NEW PANEL '2A' (INTEGRAL TO MCC '6A'). EXTEND OR MODIFY CABLING AS REQUIRED.
- WHERE CIRCUIT NUMBERS ARE MARKED AS "(UNKNOWN)", THE ELECTRICAL CONTRACTOR SHALL SITE CONFIRM AND CIRCUIT TRACE THE CIRCUIT NUMBERS TO DETERMINE THEIR USE. THE CONTRACTOR SHALL INDICATE THE USE AND PROVIDE A DESCRIPTION, IN THE PANEL DIRECTORY.
- SUPPLY AND INSTALL TERMINAL BLOCKS, RELAYS, MOTOR ALTERNATOR, ETC IN MCC CELL. RELOCATE THE PRECISION DIGITAL METER FROM THE EXISTING MCC TO THE NEW MCC. PROVIDE CUSTOM MODIFICATIONS AS REQUIRED.
- COMPLETE DEMOLITION OF EXISTING CONCRETE PAD. SUPPLY AND INSTALL NEW 102mm CONCRETE HOUSEKEEPING PAD TO ACCOMODATE NEW MCC.
- THE CONTRACTOR SHALL INCLUDE ALL PROVISIONS TO REMOVE THE EXISTING MCC (2 SECTIONS - REFER TO EXISTING SINGLE LINE DRAWING FOR DETAILS) LOCATED AT THIS LOCATION (IN ORDER TO PROVIDE ROOM TO INSTALL THE NEW MCC '6A'). INCLUDE ALL PROVISIONS TO INSTALL NEW MCC '6A' AT THIS LOCATION, INCLUDING TRANSPORTATION AND INSTALLATION (IE/ GETTING THE MCC DOWN INTO WORKSPACE WITHOUT DAMAGE ETC.).
- COMPLETE STAIR HAND RAIL MODIFICATIONS AS REQUIRED IN ORDER TO ACCOMMODATE MCC
- SUPPLY AND INSTALL 2 SPEED (HI / LO) MAGNETIC MOTOR STARTER COMPLETE WITH 'HI SPEED', 'LOW SPEED', PILOT LIGHTS, AND FRONT MOUNTED OVERLOAD RESET BUTTON. STARTER SHALL BE A SQUARE D CLASS 8810 STARTER, TYPE SBG2V02 FORM C7FF4T HI LO SELECTOR SWITCH, COMPLETE WITH EUTECTIC OVERLOAD SIZED IN ACCORDANCE WITH MOTOR NAMEPLATE FULL LOAD CURRENT AND CEC C22.1-06 CODE REQUIREMENTS.

PANEL: 2A							VOLTAGE: 120/208 BUS: 100A, COPPER BUS			PHASE: 3 WIRE: 4	
DESCRIPTION CABLE NO LO WAT			LOAD WATTS	BKR SIZE	CIRCI	JIT	BKR LOA SIZE WAT	AD TS CABLE NO	DESCRIPTION		
1ST FLOOR LIGHTS		15 1			2 15			ALARM PANEL			
2ND / 3RD FLOOR LI			15 3			15	1ST FLO		OR PLUGS		
FAN			15 5		<del>r</del> 6	15		CONTROL PANEL			
2ND FLOOR PLUGS			15 7	_ +	<del>  8</del>	15		(UNKNO	(UNKNOWN)		
3RD FLOOR PLUGS		15 9			10 30		(UNKNOWN) (02)				
SUMP PUMP				15 11		12	2P	)   (UNAI)		OWN)	
SPARE			15 13	_	<u>  14</u>			SPACE			
SPARE			15 15	_	- 16 l			SPACE			
SPARE				15 17	_ ++	18			SPACE		
SPARE				15 19		<u>  20</u>			SPACE		
SPARE				15 21		22			SPACE		
SPARE 15 23 —			<del>-</del>	24			SPACE				
	HTG. –	LTG. –		MTR.	_		MISC.	_	TOTAL	- kW	

	B.M. ELEV.		FIELD BOOK #:			SNC • LAVALIN	ENGINEER'S SEAL			
	POSTED TO LBIS					SNC • LAVALIN Engineers & Constructors  148 Nature Park Way Winnipeg, Manitoba Canada R3P 0X7				
						DESIGNED D.E.BECKER	CHECKED BY C. ASMUNDSON			
						DRAWN D.E.BECKER	APPROVED BY			
						HOR. SCALE AS SHOWN	RELEASED FOR CONSTRUCTION			
	00	ISSUED FOR TENDER		2007/12/11	BDK	DATE 2007/04/12	DATE	BID OPPORTUNITY		
┙	NO.	REVISIONS		DATE	BY	FILENAME: 06799.dwg	905-2007			

THE CITY OF WINNIPEG Winnipeg Water and Waste Department

2007 PUMPING STATION UPGRADES INSTALLATION OF NEW PUMPING UNITS AND MODIFICATIONS TO THE BALTIMORE WASTEWATER PUMPING STATION

SECTION AND SCHEDULES LIFT STATION AND MCC 6A SHEET REV. SIZE