

[illegible]

The diagram illustrates the electrical connections for the 2BP42 starter compartment and its control room. A central vertical busbar, labeled '1' and 'NEW MCC, SEE REFERENCE DRAWING 2.', serves as the main distribution point. On the left, the '2BP42 STARTER COMPARTMENT' contains three main components: a '2BP42 POWER CONNECTION' block with terminals T1 (RD), T2 (BK), and T3 (BL); a '2BP42 LOCK OUT SWITCH' block with terminals 1, 2, 3, 4, 5, 6, and X2; and a 'RUN STATUS' block with terminals 200 and 201. On the right, the 'CONTROL ROOM' contains three main components: a '2BP42-LOS (NOTE 6 TYP.)' block with terminals 1 and 2; a 'BFDP-1' block with terminals 1 through 8, including a 'RED RUN LIGHT' (terminal 8) and 'HS-2BP42-01 CONTROL CIRCUIT' (terminals 1-3); and a 'CP-B8001' block with terminals 1 through 5, including 'RUN STATUS' (terminals 4-5). The diagram also shows connections to an 'EXISTING' 1x3C 12AWG TECK90 1kV cable (C-2BP42-1) and a '2BP42 AERATION BLDG. HEATING PUMP' (M) with terminals AØ, BØ, and CØ. A '1' warning symbol is present at the bottom right.

1. LOCK-OUT SWITCH LOCATED AT MOTOR.
2. EXISTING HAND AND CONTROL CONTACTS AT LOCAL CONTROL PANEL.
3. CITY OF WINNIPEG COLOUR CONVENTION REQUIRES GREEN RUN INDICATOR. EXISTING LIGHT PREDATES THE CURRENT CONVENTION.
4. TO PLC DISCRETE INPUT. TERMINAL BLOCK NUMBERS TO COORDINATE WITH DCS MIGRATION PROJECT.
5. PRIOR TO DEMOLITION FIELD CABLE TAGS TO BE VERIFIED BY CONTRACTOR DURING INSTALLATION.
6. PRIOR TO DEMOLITION LOCAL CONTROL PANEL TERMINALS TO BE VERIFIED BY CONTRACTOR DURING INSTALLATION.
7. GREY LINETYPE DENOTES EXISTING. ENGINEER'S SEAL APPLIES TO NEW WORKS ONLY.
8. WHERE FIELD CONDITIONS NECESSITATE AN EXTENSION TO EXISTING CABLES IN ORDER TO REACH NEW MCC, SEE REFERENCE DRAWING 2.

10	—	—
9	—	—
8	—	—
7	—	—
6	—	—
5	—	—
4	—	—
3	—	—
2	1-0101-EMCL-B034-001	ELECTRICAL – SCHEMATIC WIRING DIAGRAM DETAILS – TYPICAL EXISTING WIRING
1	1-0101-ESLD-B002-001	ELECTRICAL – MCC-B7002 SINGLE LINE DIAGRAM
NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
REFERENCE DRAWINGS		

**ES ENGINEERS  
GEOSCIENTISTS  
MANITOBA**

**Certificate of Authorization**

**KGS Group**

**No. 245**


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<div>KGS GROUP</div>			
DESIGNED BY	AMS	CHECKED BY	CLR
DRAWN BY	FA	APPROVED BY	CLR
SCALE:	N.T.S.	RELEASED FOR CONSTRUCTION	
DATE:	2025 03 26	DATE:	

ENGINEER'S SEAL

CONSULTANT DRAWING NUMBER

23-0107-010\_PB\_E2-27

	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION		
	NORTH END SEWAGE TREATMENT PLANT (NEWPCC) BACKUP BOILER SYSTEM AREA B – BOILER ROOM ELECTRICAL SCHEMATIC WIRING DIAGRAM – 2BP42 AERATION BLDG. HEATING PUMP		
CITY DRAWING NUMBER	1-0101-EMCL-BQ27-001	SHEET	1 OF 1