

[illegible]

The diagram illustrates the electrical connections between the 1BP21 starter compartment and the control room. The starter compartment is divided into three main sections: Power Connection, Lock Out Switch, and Run Status.

- Power Connection:** Includes terminals T1 (RD), T2 (BK), and T3 (BL). These are connected to a 1x3C 12AWG TECK90 1kV cable (C-1BP21-1) which leads to a 1BP21 Digester Sludge Heating Pump (M) in the control room.
- Lock Out Switch:** Includes terminals TB01, 1, 2, 3, 4, 5, 6, and X2. These are connected to various 1BP21-1, 1BP21-2, 1BP21-3, and 1BP21-4 lines, which are then connected to a 1BP21 Lock-Out Switch (XX) in the control room.
- Run Status:** Includes terminals TB02, 200, and 201. These are connected to 1BP21-200 and 1BP21-201 lines, which are then connected to a Run Status indicator (XX) in the control room.

The control room section includes a 1BP21-LOS (Lock Out Switch) and a BFDP-1 (Bypass/Feed/Disconnect Panel) with terminals 1 through 8. The BFDP-1 is connected to a HS-1BP21-01 Control Circuit and a RED RUN LIGHT. The control room also includes a CP-B8001 (Control Panel) with terminals 1 through 5, which are connected to the Run Status indicator.

Notes and labels include:

- NEW MCC, SEE REFERENCE DRAWING 2.
- EXISTING -
- (NOTE 5 TYP.)
- (NOTE 6 TYP.)
- (NOTE 8)
- 1BP21 POWER CONNECTION
- 1BP21 LOCK OUT SWITCH
- 1BP21-1, 1BP21-2, 1BP21-3, 1BP21-4
- 1BP21-200, 1BP21-201
- 1BP21-LOS
- BFDP-1
- HS-1BP21-01 CONTROL CIRCUIT
- RED RUN LIGHT
- CP-B8001
- RUN STATUS
- CONTROL ROOM

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-B001-001	ELECTRICAL – MCC-B7001 SINGLE LINE DIAGRAM
NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
REFERENCE DRAWINGS		


**ENGINEERS
GEOSCIENTISTS
MANITOBA**

Certificate of Authorization


KGS Group

No. 245

B.M.					
ELEV.					
CONSTRUCTION COMPLETION DATE: YYYY MM DD					
1	RE-ISSUED FOR CONSTRUCTION		2025	04	30
0	ISSUED FOR CONSTRUCTION		2025	03	25 CLR
NO.	REVISIONS		DATE		BY

		DESIGNED BY		AMS	CHECKED BY		CLR
		DRAWN BY		FA	APPROVED BY		CLR
SCALE:		N.T.S.		RELEASED FOR CONSTRUCTION			
DATE		2025 03 26		DATE			

[illegible]

	<p>THE CITY OF WINNIPEG</p> <p>WATER AND WASTE DEPARTMENT</p> <p>ENGINEERING DIVISION</p>	
	<p>NORTH END SEWAGE TREATMENT PLANT (NEWPCC)</p> <p>BACKUP BOILER SYSTEM</p> <p>AREA B – BOILER ROOM</p> <p>ELECTRICAL</p> <p>SCHEMATIC WIRING DIAGRAM – 1BP21 DIGESTER SLUDGE HEATING PUMP</p>	
<p>CITY DRAWING NUMBER</p>	<p>1-0101-EMCL-B007-001</p>	<p>SHEET 1 OF 1</p>