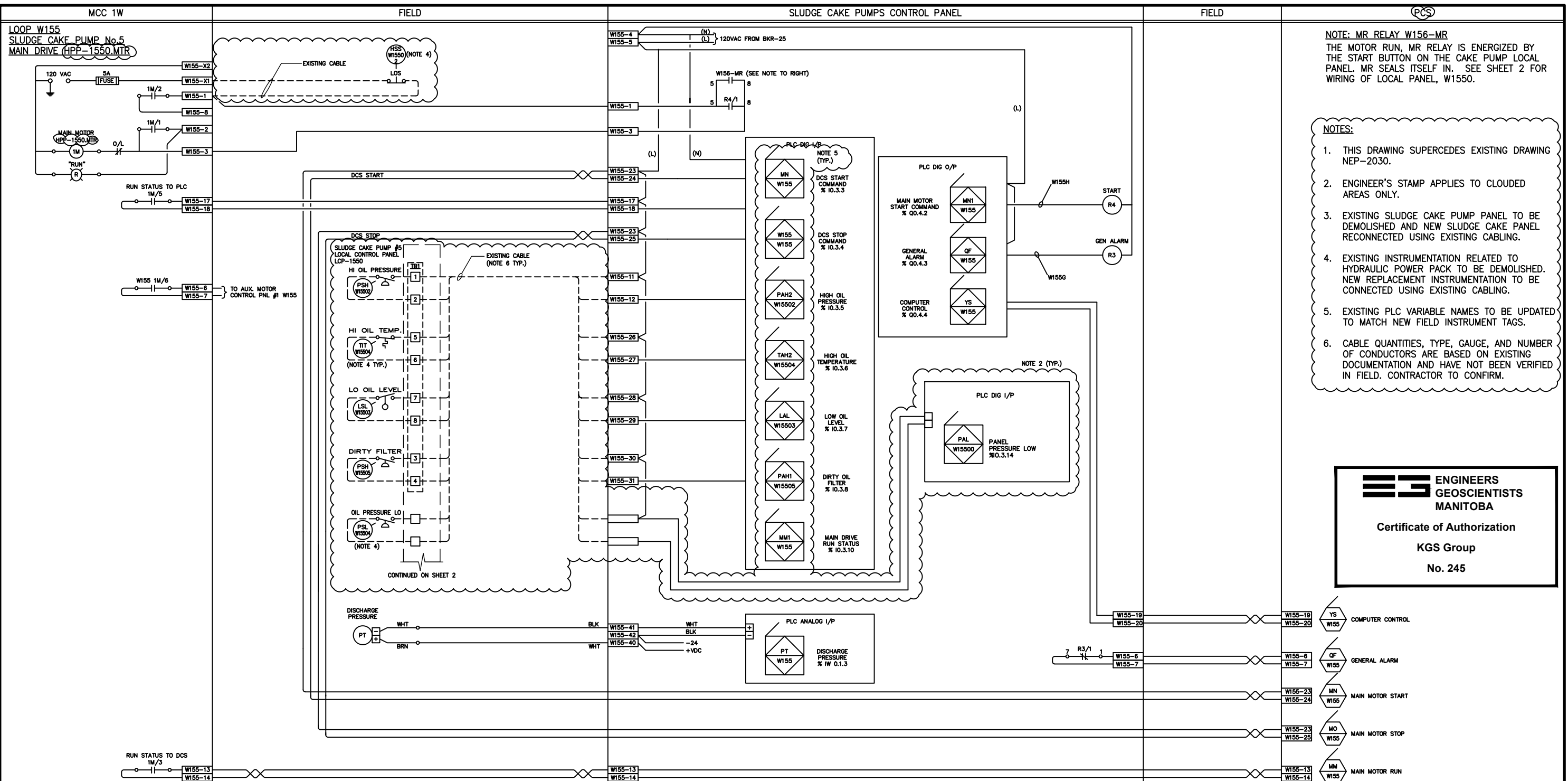


B SIZE - 279mm x 432mm
 LAST SAVE: 2026/04/08 - 3:30pm
 PATH: \\kgs-file\l-r-data\Projects\2025\25-0107-017\Dwg\Elec\1-0101-AILD-W150-001.dwg



- NOTE:** MR RELAY W156-MR
 THE MOTOR RUN, MR RELAY IS ENERGIZED BY THE START BUTTON ON THE CAKE PUMP LOCAL PANEL. MR SEALS ITSELF IN. SEE SHEET 2 FOR WIRING OF LOCAL PANEL, W1550.
- NOTES:**
1. THIS DRAWING SUPERCEDES EXISTING DRAWING NEP-2030.
 2. ENGINEER'S STAMP APPLIES TO CLOUDED AREAS ONLY.
 3. EXISTING SLUDGE CAKE PUMP PANEL TO BE DEMOLISHED AND NEW SLUDGE CAKE PANEL RECONNECTED USING EXISTING CABLING.
 4. EXISTING INSTRUMENTATION RELATED TO HYDRAULIC POWER PACK TO BE DEMOLISHED. NEW REPLACEMENT INSTRUMENTATION TO BE CONNECTED USING EXISTING CABLING.
 5. EXISTING PLC VARIABLE NAMES TO BE UPDATED TO MATCH NEW FIELD INSTRUMENT TAGS.
 6. CABLE QUANTITIES, TYPE, GAUGE, AND NUMBER OF CONDUCTORS ARE BASED ON EXISTING DOCUMENTATION AND HAVE NOT BEEN VERIFIED IN FIELD. CONTRACTOR TO CONFIRM.

**ES ENGINEERS
 GEOSCIENTISTS
 MANITOBA**

Certificate of Authorization
 KGS Group
 No. 245

1. ALL CONTROL AND POWER WIRING TO BE #14 AWG MINIMUM, TEW AND COLOUR CODED AS FOLLOWS:
 AC LINE BLACK (BLK) GROUND GREEN (GRN)
 NEUTRAL WHITE (WHT) 24 VDC (POS) ORANGE (ORNG)
 AC CONTROL RED (RED) 24 VDC (RETURN) BROWN (BRN)
 DC CONTROL BLUE (BLU) 90 VDC PURPLE (PLP)
 INTERLOCK YELLOW (YEL)
2. ALL WIRES REQUIRE IDENTIFICATION USING PLASTIC ADHESIVE OR SLEEVE TYPE MARKERS.
3. ALL WIRES SHALL CONFORM TO EITHER THE CANADIAN ELECTRICAL CODE OR EXISTING LOCAL CODE, WHICHEVER IS APPLICABLE.
4. INDICATES SHIELDED CABLE WITH SHIELD CONNECTED TO GROUND TERMINAL.
5. "L1" DESIGNATES 120 VAC HOT } SEE POWER DISTRIBUTION
 "L2" DESIGNATES 120 VAC NEUTRAL } DWG NO: 89-MJ3129-D13
6. WIRE NUMBERS TO BE THE SAME AS THEIR CORRESPONDING TERMINAL NUMBER, EXCEPT WHERE SHOWN DIFFERENTLY.
7. TERMINAL/WIRE NUMBERS USED ON THIS DWG:
 SPARE NUMBERS ALLOCATED FOR THIS DWG:

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION	2026-04-08		

KGS GROUP

ENGINEER'S SEAL

DESIGNED BY: M. BERGEN	CHECKED BY: C. ROBINSON
DRAWN BY: F. AHMED	APPROVED BY: C. ROBINSON
SCALE: NTS	DATE: 2026-04-08
ISSUED FOR CONSTRUCTION	
BY:	DATE:
CONSULTANT NO.: 25-0107-017_A2	

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

**NORTH END SEWAGE TREATMENT PLANT (NEWPCC)
 SLUDGE CAKE PUMP UPGRADE
 AUTOMATION
 INSTRUMENTATION LOOP DIAGRAMS
 SLUDGE CAKE PUMP 5 CONTROL PANEL**

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0101-AILD-W150	001	00	B