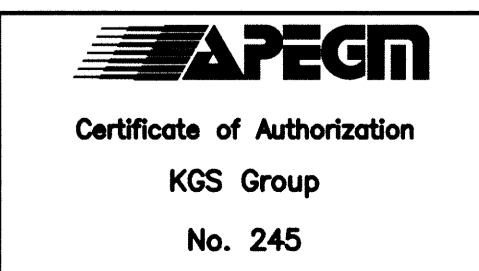
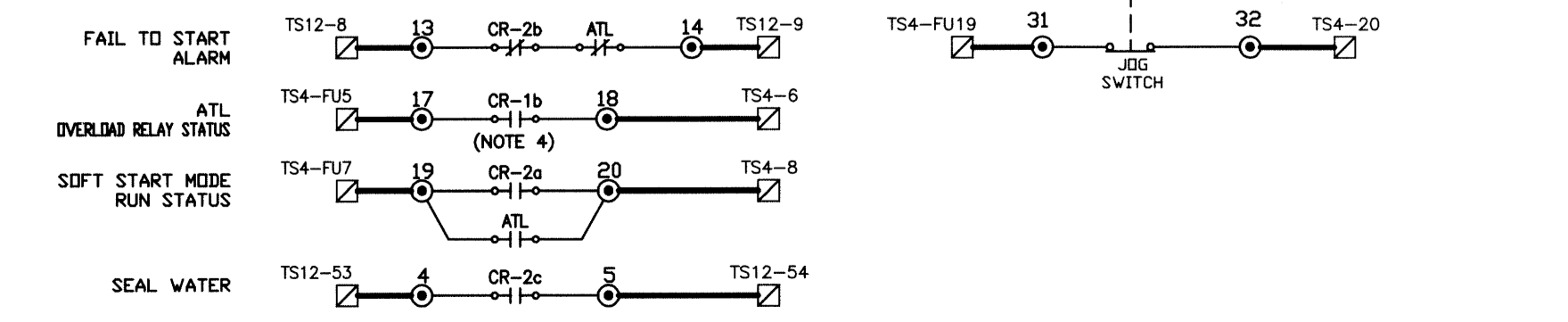
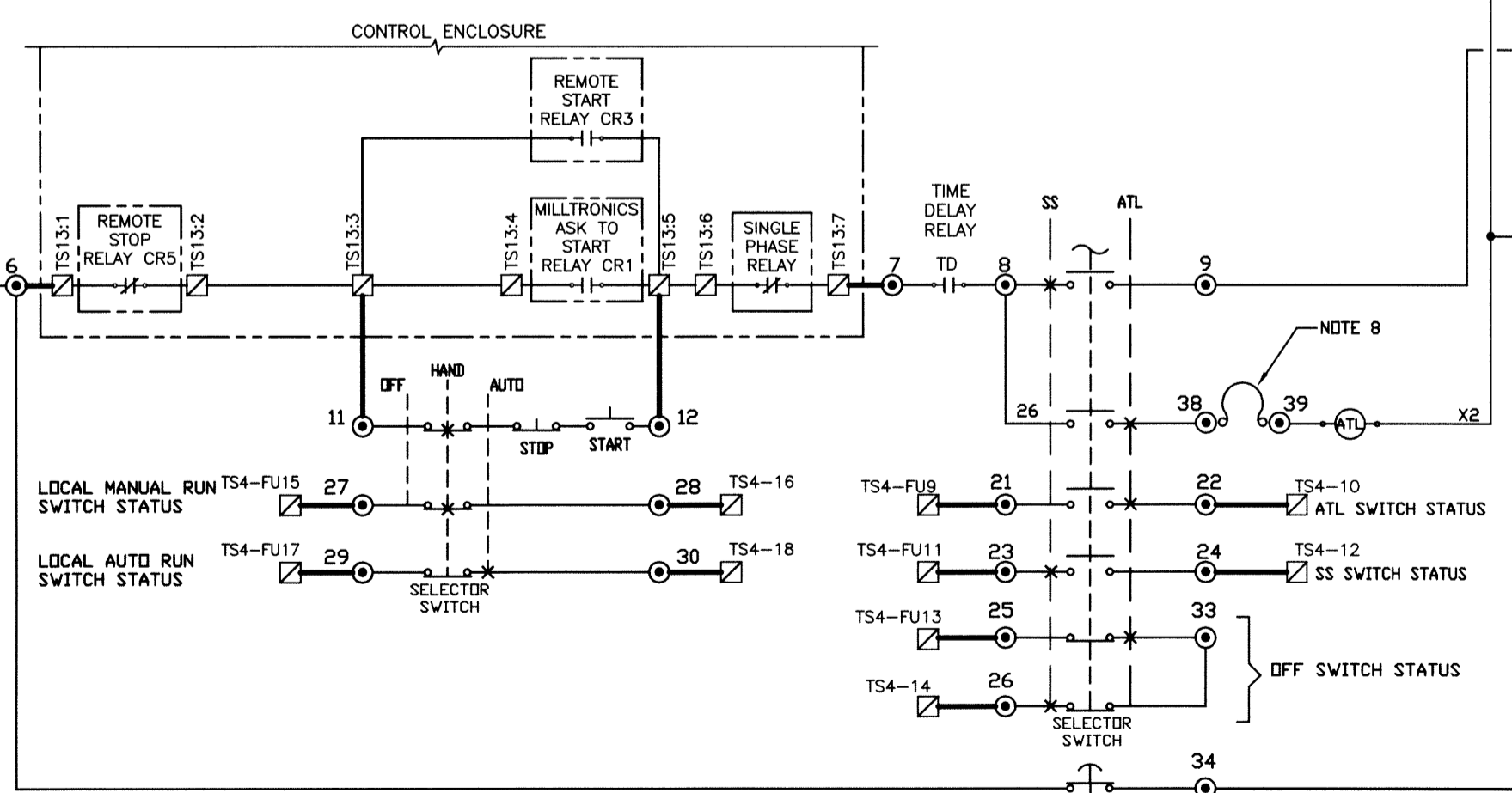


**LEGEND**

- WIRE NODE SYMBOL MAY HAVE TERMINAL BLOCK
- POWER TERMINAL
- CUSTOMER TERMINAL
- BENSHAW TERMINAL
- DEVICE TERMINAL
- ELAPSED TIME METER
- PC BOARD TERMINALS
- TWISTED PAIR
- FIELD WIRING
- PANEL WIRING
- CONNECTOR
- SHIELDED WIRE
- CONTROL RELAYS

**\*\*\* IMPORTANT \*\*\*** CUSTOMER TERMINALS  
 PASSCODE # - - - -  
 L1 L2 L3  
 T1 T2 T3

- NOTES:**
1. INCOMING POWER THROUGH CT'S. SEE CT FASTENING DIAGRAM IN INSTRUCTION MANUAL FOR DETAILS.
  2. SOLID-STATE TIMER WITH PROGRAMMABLE ON-DELAY TIME RANGE SETTABLE FROM 0.05 sec TO 300 HOURS.
  3. MAXIMUM RAMP DOWN TIME SHALL BE 10 SECONDS AND THE VOLTAGE SHALL NOT BE ALLOWED TO RAMP BELOW 60% OF FULL VOLTAGE BEFORE SOFT START IS DEACTIVATED TO ALLOW PUMP MOTOR TO COME TO A COMPLETE STOP. VERIFY DECELERATION SETTINGS WITH PUMP MANUFACTURER.
  4. THIS CONTACT IS NORMALLY OPEN AND CLOSING ON AN ACROSS THE LINE OVERLOAD FAULT WHEN THE STARTER IS IN ACROSS THE LINE MODE.
  5. PROGRAMMABLE RELAY R1 IS ENERGIZED WHEN SOFT START IS FUNCTIONING AND DE-ENERGIZED WHEN SOFT START HAS A FAULT.
  6. PROGRAMMABLE RELAY R2 & R3 IS ENERGIZED WHEN PUMP IS ON AND DE-ENERGIZED WHEN PUMP IS OFF. CONTACTS CLOSE TO INDICATE PUMP RUNNING.
  7. ANALOG OUTPUT TO BE PROGRAMMED TO PROVIDE A 4-20mA SIGNAL FOR LOAD CURRENT DRAW TO THE CITY SCADA PANEL.
  8. PROVIDE JUMPER CABLE TO ENABLE ATL MODE.
  9. EMERGENCY STOP PUSHBUTTONS SHALL BE PUSH-PULL, CORROSION RESISTANT, ALLEN BRADLEY 800H-FPX6D4.



FIELD BOOK #			ENGINEER'S SEAL 
POSTED TO LBIS			
DESIGNED BY	DDW	CHECKED BY	
DRAWN BY	GCN	APPROVED BY	
HDR. SCALE	N.T.S.	RELEASED FOR CONSTRUCTION	
VERTICAL	N.T.S.		
0 ISSUED FOR CONSTRUCTION	14/12/15	AP	
ND. REVISIONS	DATE	BY	DATE
			2014 01 13

**THE CITY OF WINNIPEG**  
 WATER AND WASTE DEPARTMENT

FLOOD PUMPING STATION UPGRADES  
 DUMOULIN STATION  
**ELECTRICAL**  
 FLOOD PUMP P-F01  
 SCHEMATIC/WIRING DIAGRAM

SHEET 1 OF 2  
 CITY DRAWING NUMBER  
 1-0139F-A0001-001

D-E04.1