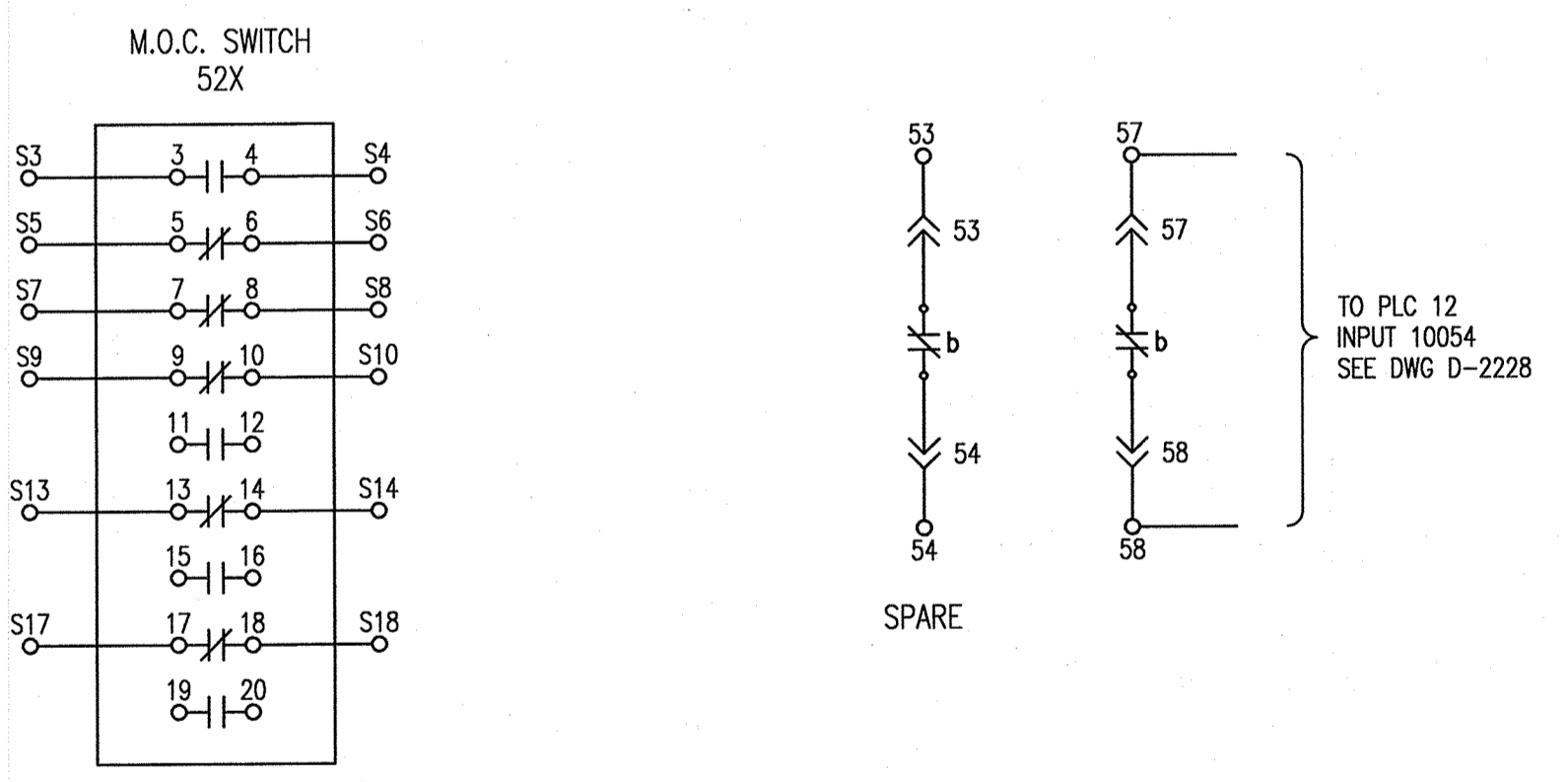


**SPECIFIC NOTE**

1. REPLACE EXISTING ANTI-PUMP RELAY. REWIRE AS PER EXISTING. REFER TO DRAWING 1-0640M-E0058 FOR ADDITIONAL DETAILS.



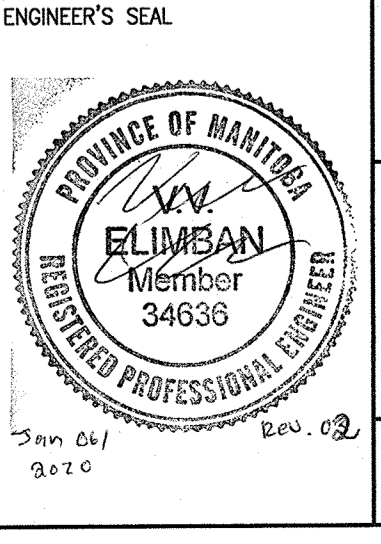
ID	MANUFACTURER & MODEL
50/51-A	BASLER BE1-50/51B-219
50/51-B	BASLER BE1-50/51B-219
50/51-C	BASLER BE1-50/51B-219
50/51-N	BASLER BE1-50/51B-205
27-1	BASLER BE27-1
27-2	WESTINGHOUSE SV

- LEGEND:**
- DEVICE IDENTIFIERS:**
- 27 UNDERVOLTAGE RELAY
  - 27T UNDERVOLTAGE TIME-DELAY RELAY
  - 50 TIME OVERCURRENT
  - 51 INSTANTANEOUS OVERCURRENT
  - CS CONTROL SWITCH
  - CTD CAPACITOR TRIP DEVICE
  - LC-SW BELIEVED TO BE TRIP LATCH CHECKING SWITCH; CLOSED WHEN LATCH IS RESET (UNCONFIRMED)
  - LO LOCK-OUT COIL
  - LS SPRING CHARGED CONTRACT
  - M SPRING CHARGING MOTOR
  - SR SPRING RELEASE COIL
  - TC TRIP COIL
  - Y ANTI-PUMP RELAY; PREVENTS RECLOSING ON A SUSTAINED CLOSE COMMAND
- DEVICE SUFFIXES:**
- a NORMALLY OPEN BREAKER POSITION, CONTACT IS CLOSED WHEN BREAKER IS CLOSED
  - aa CONTACT IS OPEN WHEN THE OPERATING MECHANISM IS IN THE NON-OPERATED POSITION.
  - b NORMALLY CLOSED BREAKER POSITION, CONTACT IS CLOSED WHEN BREAKER IS OPEN
  - C CLOSE
  - CC CLOSING COIL
  - DAC CONTROL SWITCH POSITION (UNKNOWN)
  - T TRIP

- NOTES:**
- THIS DRAWING SUPERCEDES PART OF THE ORIGINAL WESTINGHOUSE SHOP DRAWING 739C329.
  - ALL EXISTING WIRING HAS NOT BEEN FIELD VERIFIED. DESIGN RESPONSIBILITY IS LIMITED TO THE MODIFICATIONS SHOWN.
  - THE 27-2 RELAY WAS ORIGINALLY IDENTIFIED AS 27.
  - THE CONTACT TERMINALS FOR THE LO RELAY MAY NOT BE CORRECT.



		<b>SNC-LAVALIN INC.</b> 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY:	B. KING	CHECKED BY:	C. REIMER
DRAWN BY:	S. HALLU	APPROVED BY:	C. REIMER
SCALE:	NTS	ISSUED FOR CONSTRUCTION BY:	
DATE:	2009/08/17	DATE:	
CONSULTANT NO.:	113099-0000-47DD-0216		



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

MCPHILLIPS PUMPING STATION

CONTROL SCHEMATIC  
 4160V MAIN BREAKER

CITY DRAWING NUMBER: 1-0640M-E0016

SHEET: 001 OF 02

REV. A1

SIZE: A1