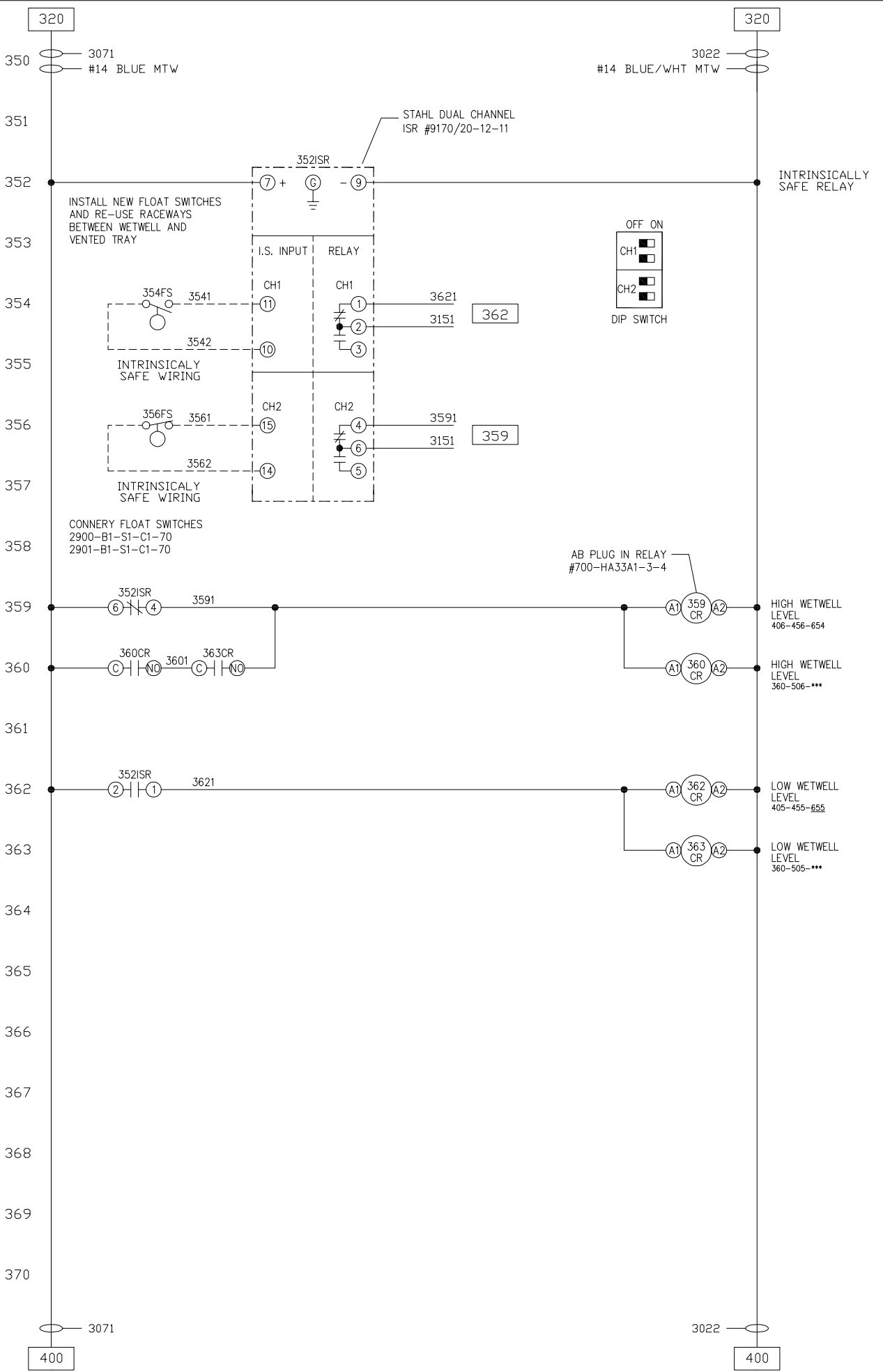
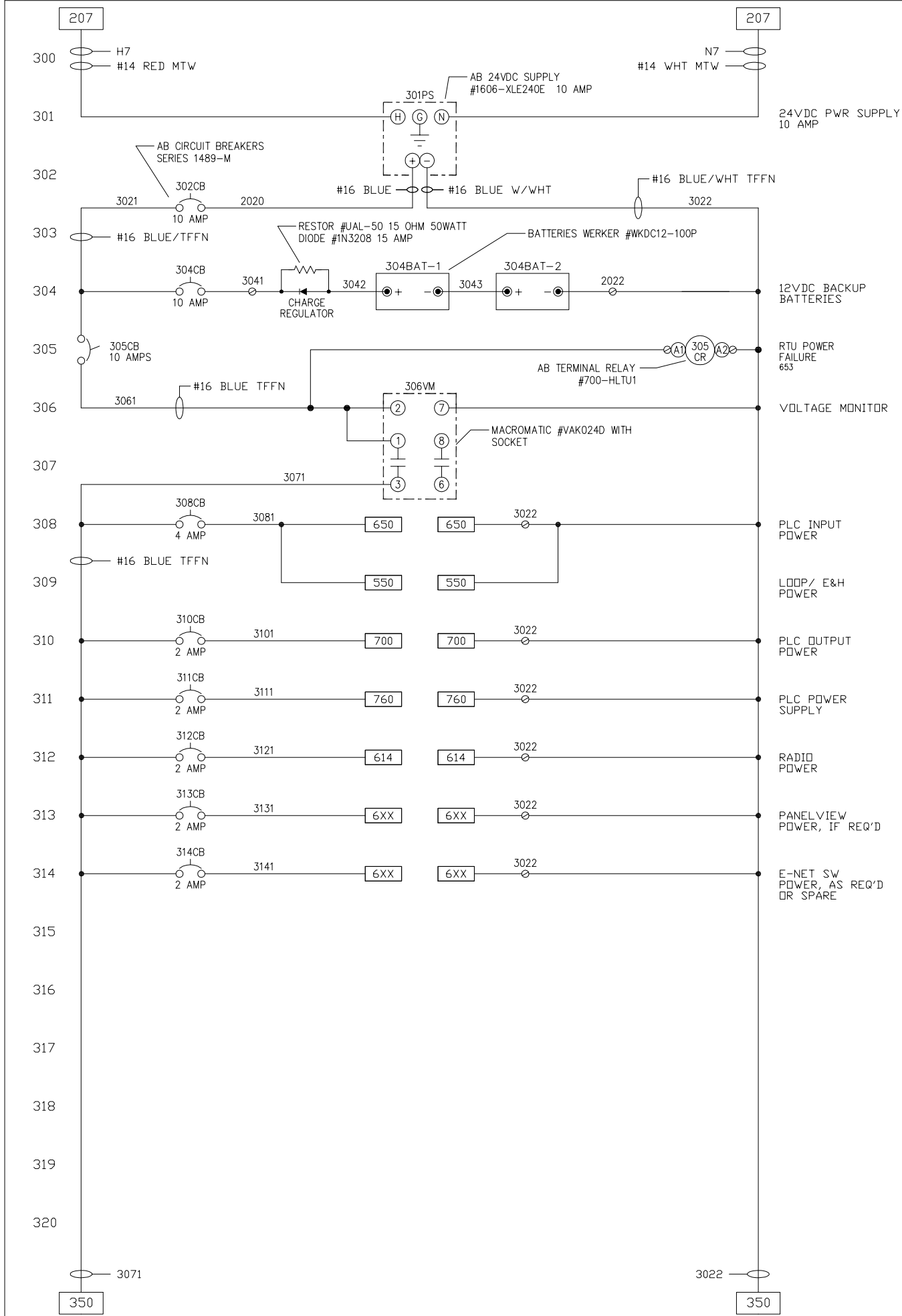



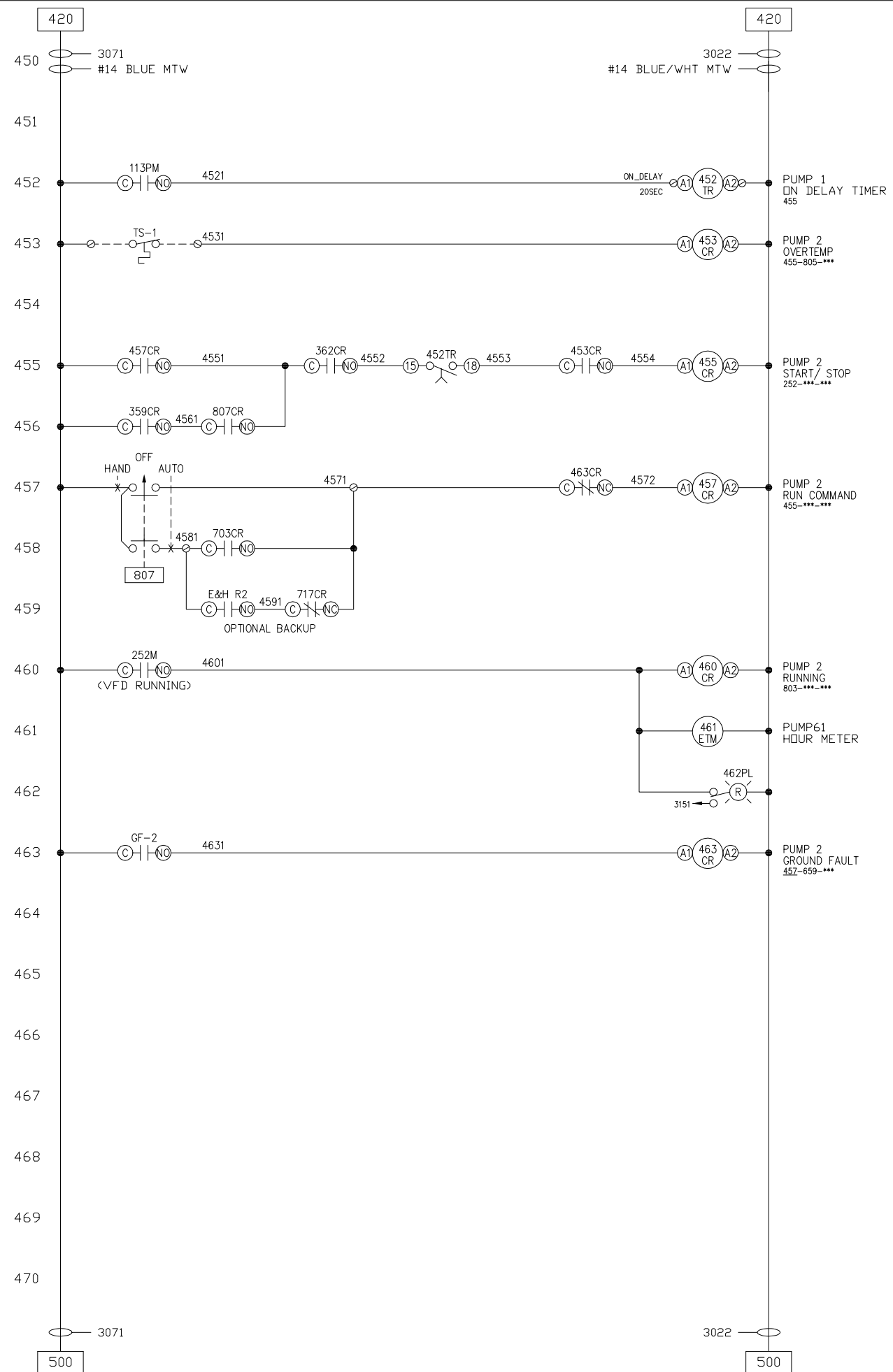
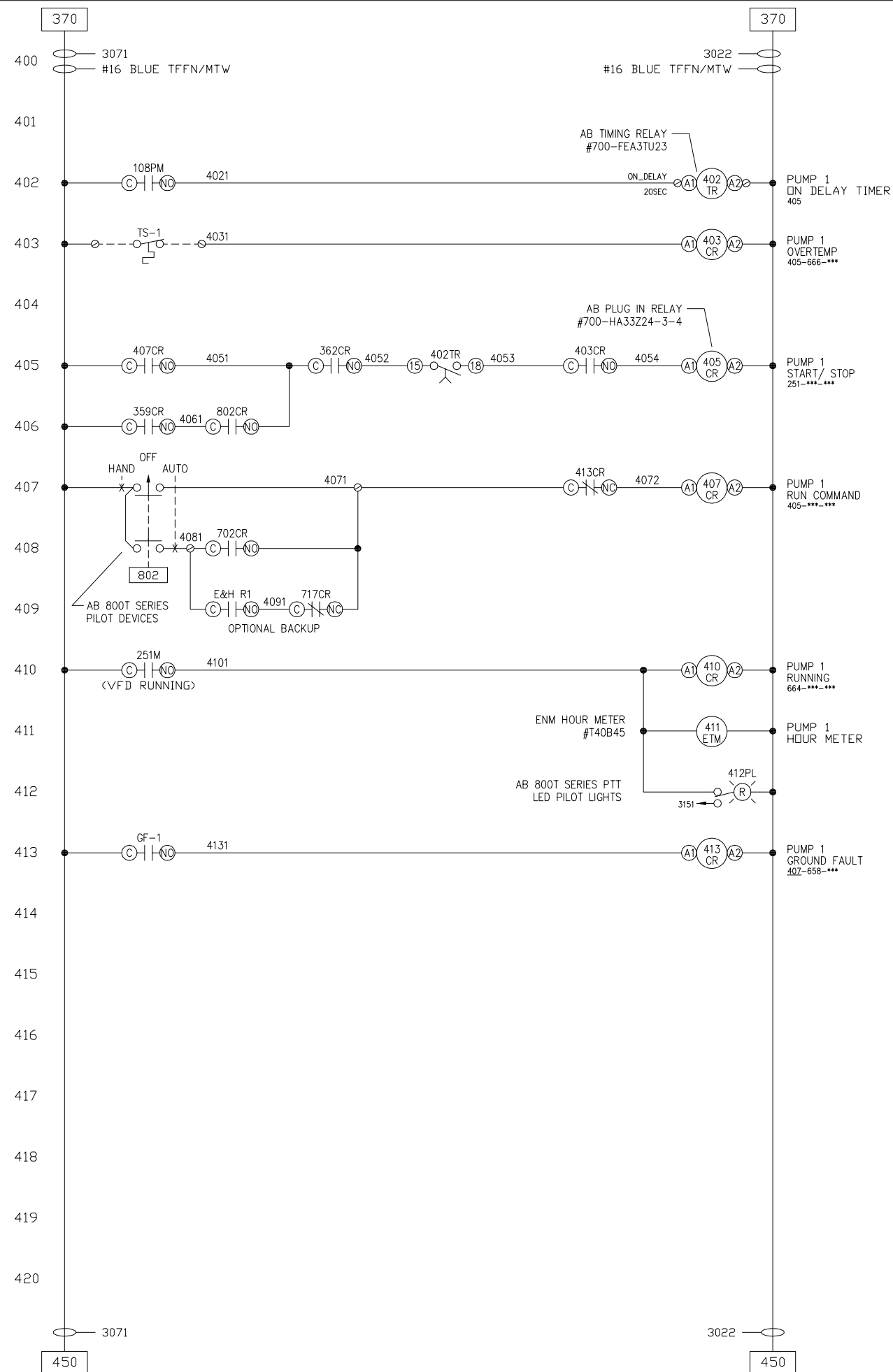
BY				
REVISIONS				
REV				
OAKLAND COUNTY WRC	PANEL NAME:	PUMP/SCADA CONTROL PANEL	DRAWING TITLE:	LIGHTING PANEL CIRCUITS
SEWAGE LIFT STATION				
DESIGN BY:	GB			
DRAWN BY:	GB			
SCALE	NONE			
JOB:	4415-XX			
SHEET:	02 OF 10			



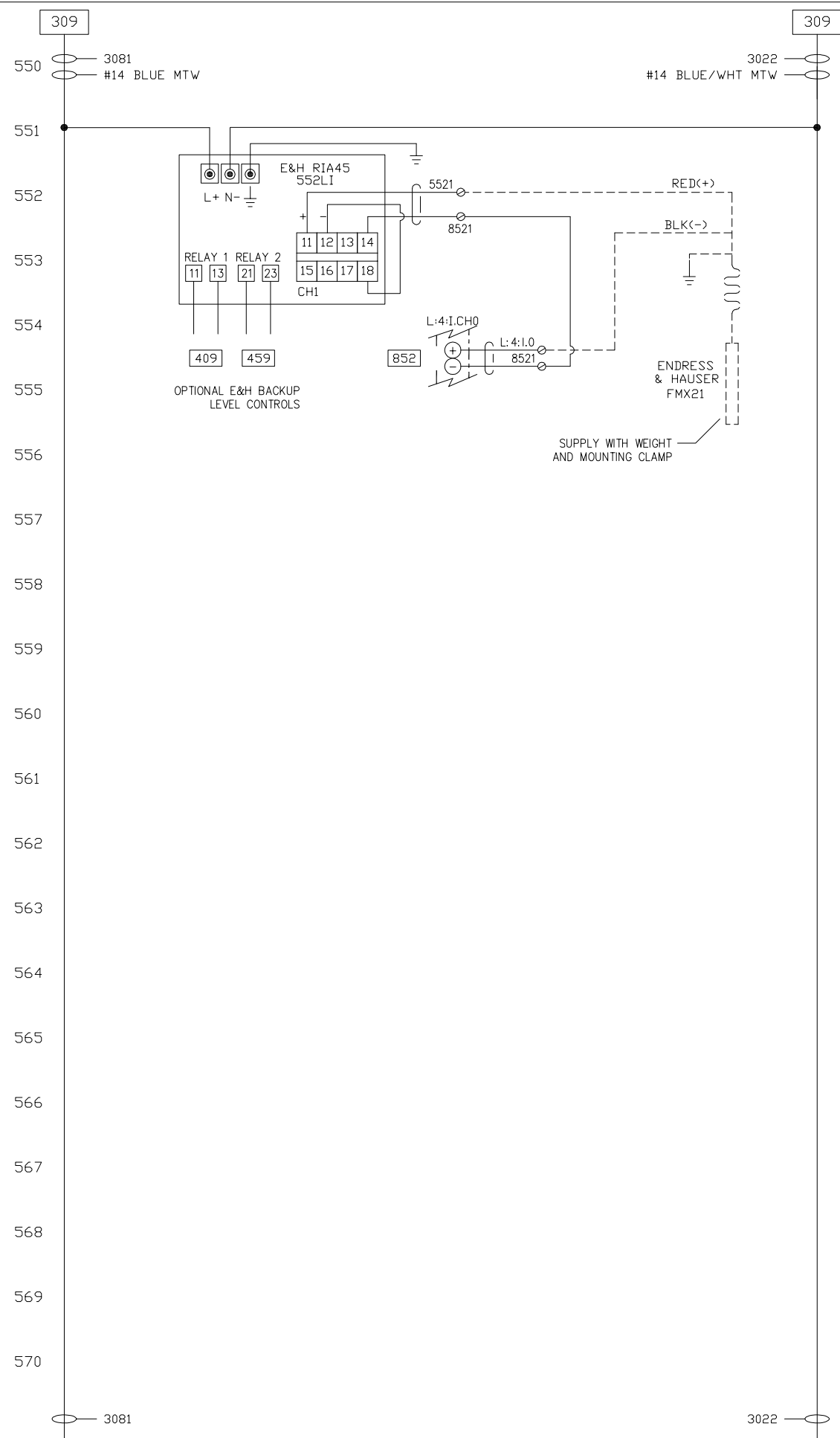
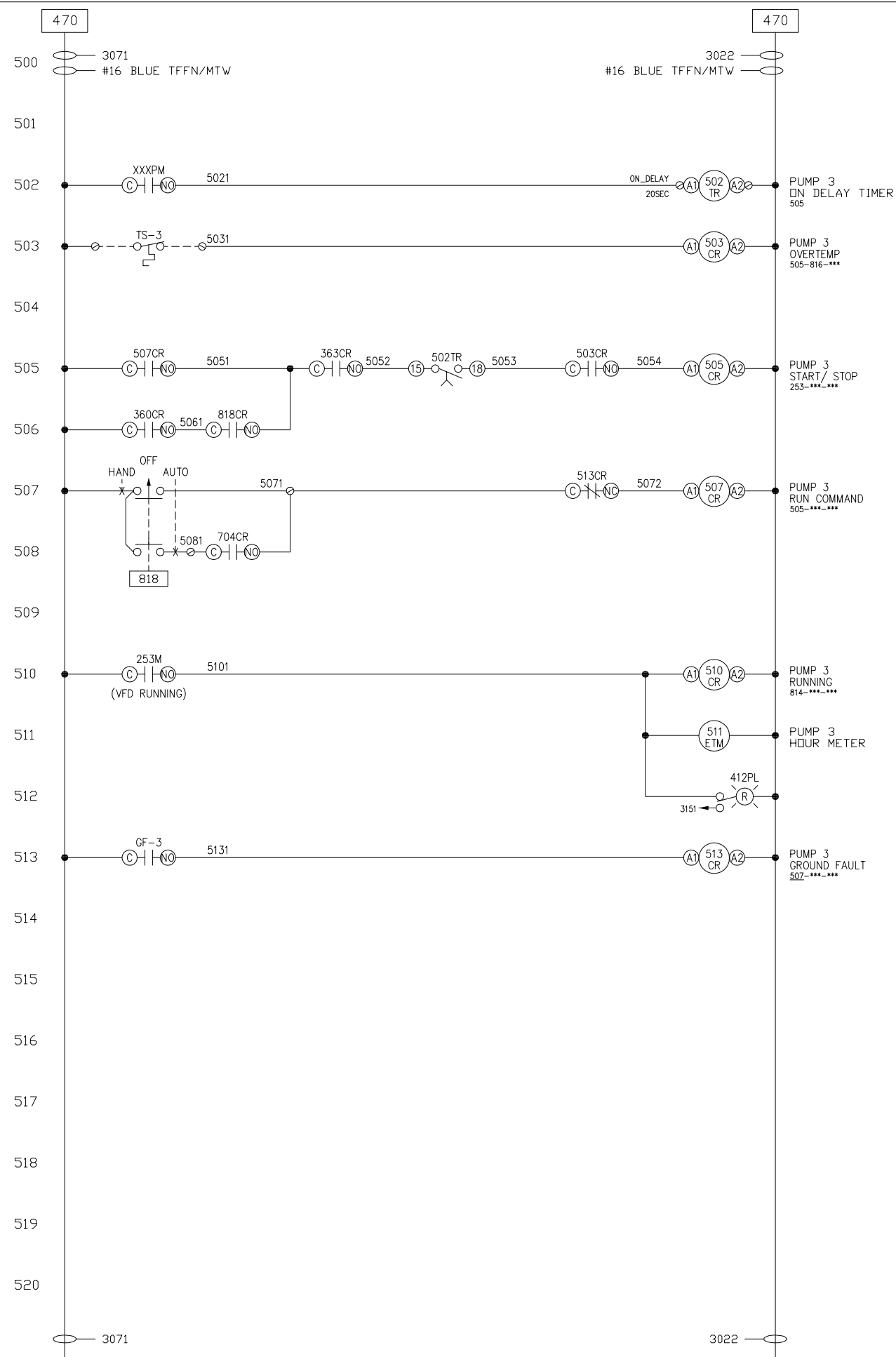


WATER RESOURCES COMMISSIONER

BY				
REVISIONS				
REV				
OAKLAND COUNTY WRC	SEWAGE LIFT STATION	PANEL NAME:	PUMP/SCADA CONTROL PANEL	DRAWING TITLE:
				24VDC CONTROL POWER
DESIGN BY: GB				
DRAWN BY: GB				
SCALE NONE				
JOB: 4415-XX				
SHEET: 03 OF 10				



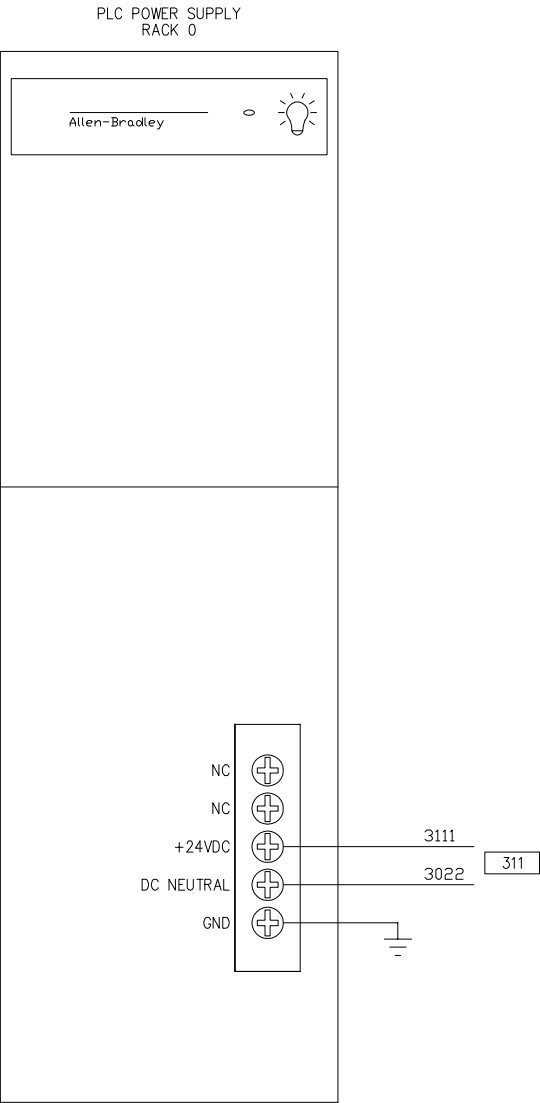
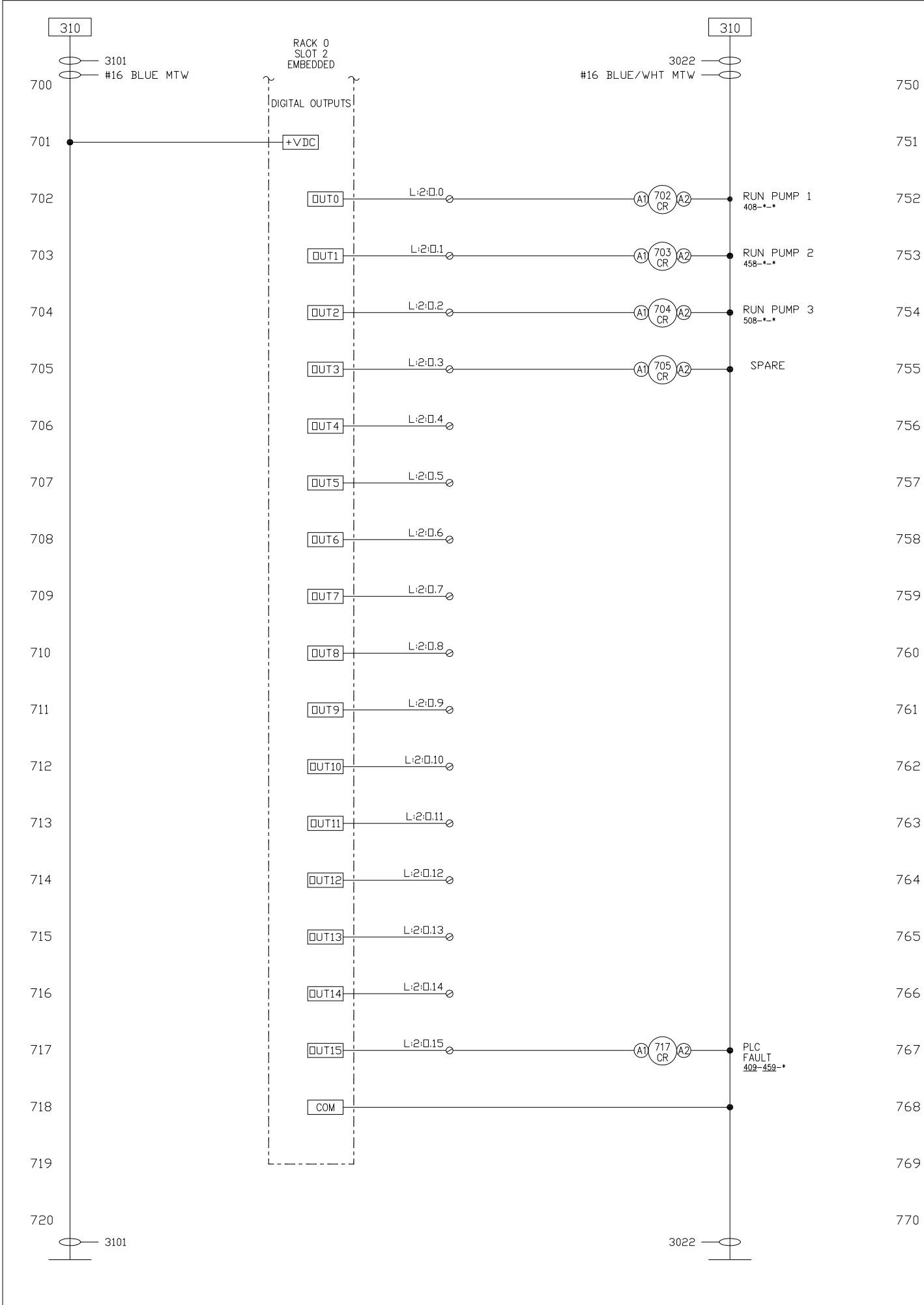
OAKLAND COUNTY WRC		REV	REVISIONS	BY
SEWAGE LIFT STATION				
<u>PANEL NAME:</u>				
PUMP/SCADA CONTROL PANEL				
<u>DRAWING TITLE:</u>				
24VDC CONTROL POWER				
DESIGN BY: GB				
DRAWN BY: GB				
SCALE NONE				
JOB: 4415-XX				
SHEET: 04 OF 10				



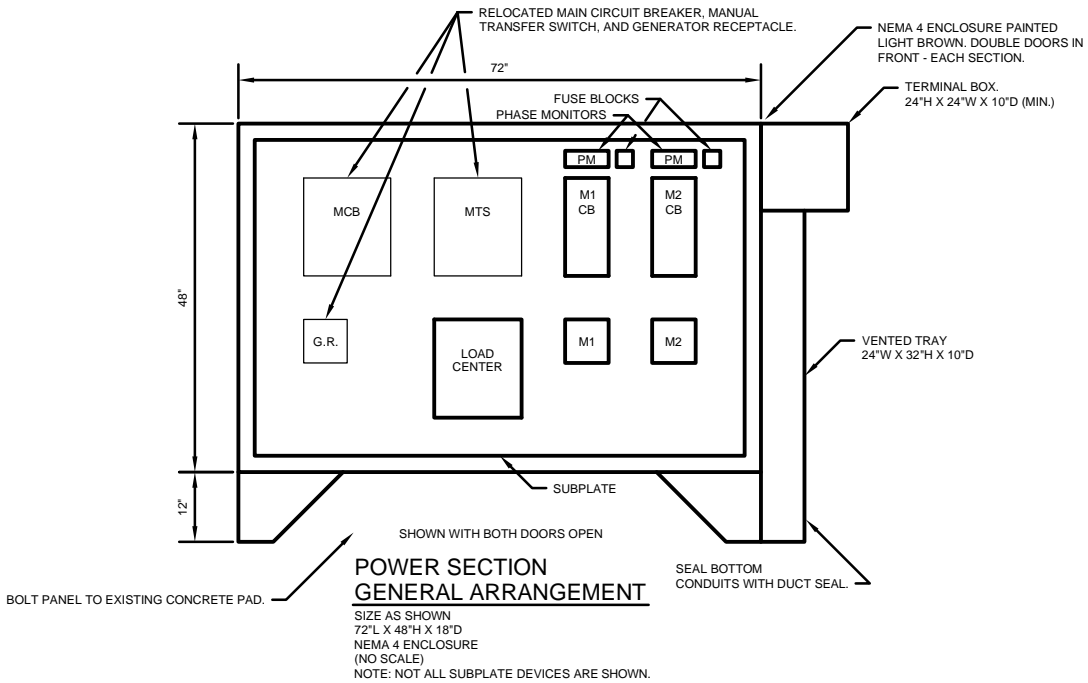
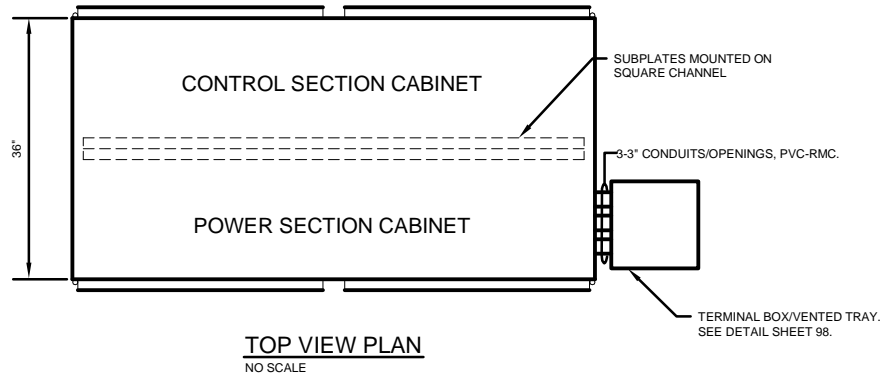
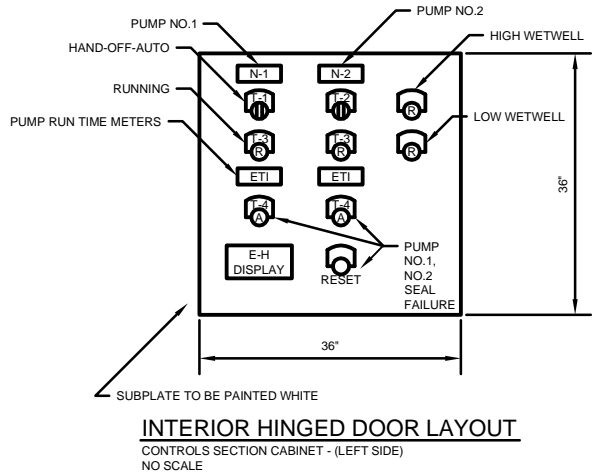
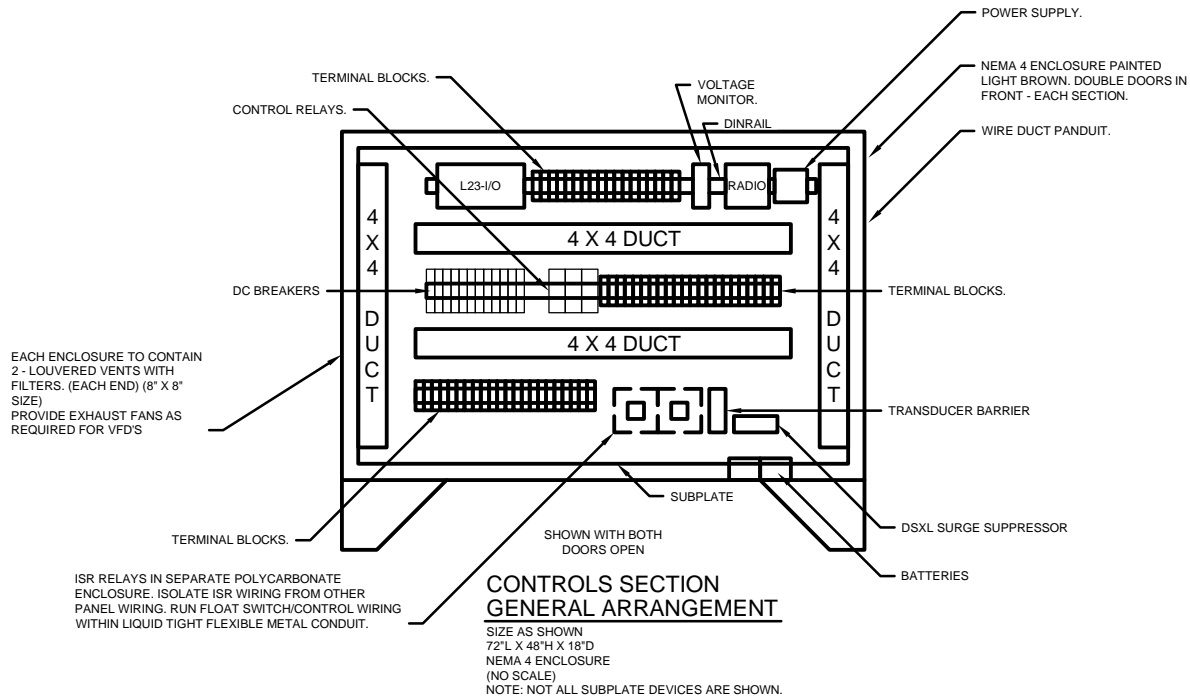
DESIGN BY: GB		OAKLAND COUNTY WRC SEWAGE LIFT STATION PUMP/SCADA CONTROL PANEL 24VDC CONTROL POWER	REV	REVISIONS	BY
DRAWN BY: GB					
SCALE NONE					
JOB: 4415-XX SHEET: 05 OF 10					



WATER RESOURCES COMMISSION



BY				
REVISIONS				
REV				
OAKLAND COUNTY WRC	SEWAGE LIFT STATION	PANEL NAME:	PUMP/SCADA CONTROL PANEL	DRAWING TITLE:
				PLC I/O WIRING
DESIGN BY: GB				
DRAWN BY: GB				
SCALE NONE				
JOB: 4415-XX				
SHEET: 07 OF 10				



NOTES:

- DEMOLISH THE EXISTING PUMP CONTROL PANEL IN ITS ENTIRETY.
- INSTALL THE NEW PUMP CONTROL PANEL IN PLACE OF THE EXISTING PANEL.
- RE-WORK THE EXISTING ELECTRICAL SERVICE CONDUIT AND WIRE. INSTALL A NEMA 4X JUNCTION BOX ON SIDE OF PANEL AND EXTEND EXISTING WIRES TO MAIN BREAKER.
- ON THE SIDE OF THE PANEL, CUT OFF THE CONDUITS THAT COME FROM THE WETWELL AT GROUND LEVEL. INSTALL OVER THE EXISTING CONDUITS A NEW 316 STAINLESS STEEL VENTED TRAY, AND TERMINAL BOX. SEE DETAIL THIS SHEET FOR TRAY AND BOX REQUIREMENTS. LOCATE BOX BESIDE PANEL. INSTALL CHASE NIPPLES BETWEEN BOX AND NEW PUMP CONTROL PANEL. RECONNECT EXISTING PUMP POWER AND SENSOR CABLES TO NEW STARTERS AND RELAYS AS SHOWN.
- RELOCATE THE EXISTING SERVICE ENTRANCE CIRCUIT BREAKER DISCONNECT SWITCH, MANUAL TRANSFER SWITCH, AND GENERATOR RECEPTACLE TO THE NEW PANEL.
- NEW PANEL TO BE SUPPLIED IN TWO SEPARATE SECTIONS. ONE SECTION FOR POWER, AND THE OTHER SECTION FOR CONTROLS.
- SECURE NEW PANEL TO EXISTING CONCRETE PAD. BOLT PANEL LEGS TO PAD WITH STAINLESS STEEL BOLTS.
- INSTALL DUCT SEAL IN THE CONDUITS THAT COME FROM THE WETWELL, AND IN THE PENETRATIONS BETWEEN THE NEW TERMINAL BOX AND PUMP CONTROL PANEL.
- RECONNECT THE EXISTING CONDUIT AND SERVICE GROUND CONDUCTOR TO PANEL GROUND.
- FROM THE NEW PUMP CONTROL PANEL, INSTALL A 2 INCH PVC SCHEDULE 80 CONDUIT TO THE EXISTING RADIO POLE. TURN CONDUIT UP ON OUTSIDE OF POLE 8 FEET ABOVE GRADE. INSTALL CORD GRIP CONNECTOR AT END OF CONDUIT AND SEAL END WITH SILICONE TO PREVENT WATER FROM ENTERING CONDUIT. SECURE CONDUIT TO SIDE OF POLE WITH STAINLESS STEEL CLAMPS. INSTALL RF CABLE ON EXTERIOR OF POLE. AT TOP OF POLE, INSTALL A 20 FOOT 2 INCH ALUMINUM MAST PIPE. SECURE MAST PIPE TWICE TO POLE WITH STAINLESS STEEL STRUT AND STRAPS. MOUNT NEW YAGI ANTENNA AT TOP OF MAST PIPE. SECURE RF CABLE TO MAST PIPE AND EXISTING POLE WITH STAINLESS STEEL CLAMPS.
- DEMOLISH EXISTING RADIO, POWER, SIGNAL WIRES, AND CONDUIT FROM EXISTING PANEL TO RADIO POLE. TURN OVER DEMOLISHED PANEL, AND RADIO TO WRC.
- ORIENT ANTENNA AS DIRECTED BY ENGINEER/WRC.

BY				
REVISIONS				
REV				
OAKLAND COUNTY WRC	SEWAGE LIFT STATION	PANEL NAME: PUMP/SCADA CONTROL PANEL	DRAWING TITLE: ENCLOSURE LAYOUT	
DESIGN BY:		GB		
DRAWN BY:		GB		
SCALE		NONE		
JOB:		4415-0XX		
SHEET:		10 OF 10		