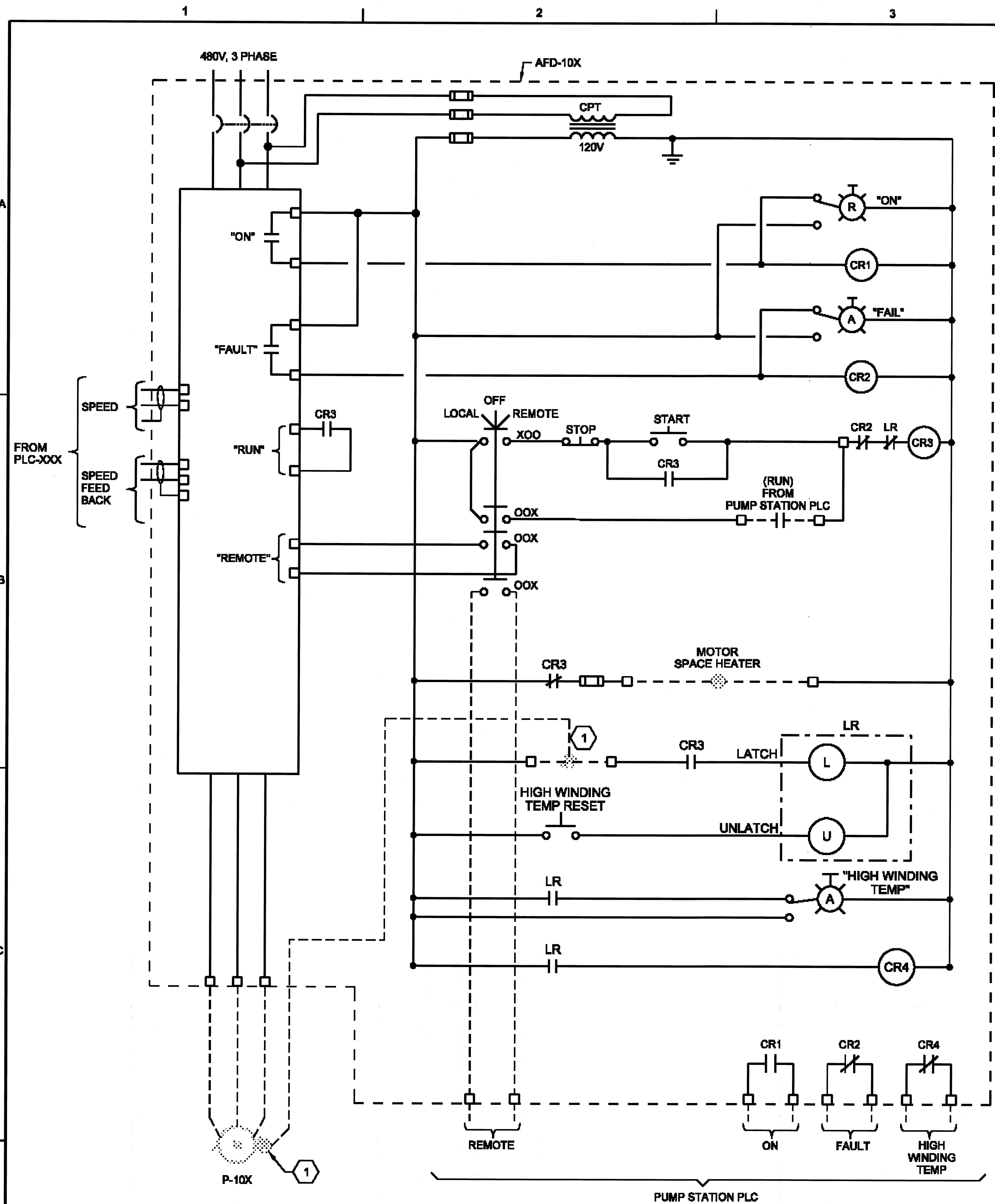
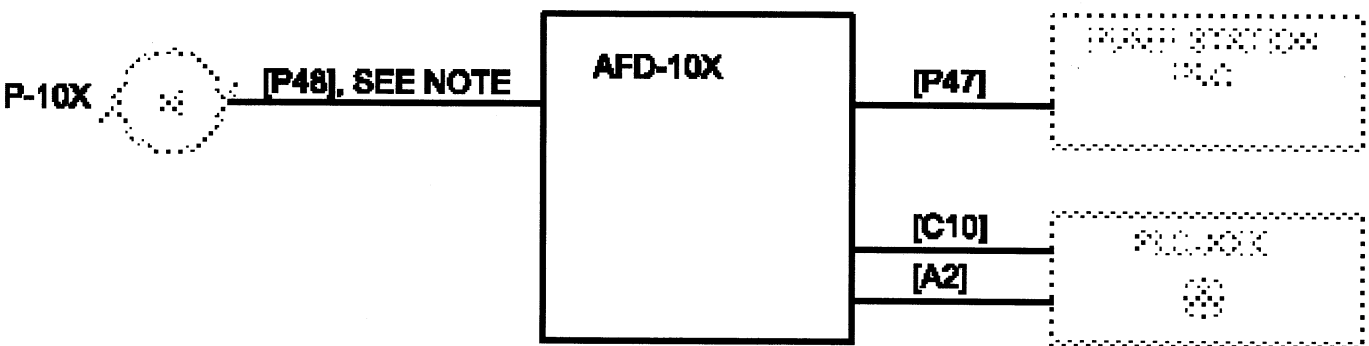


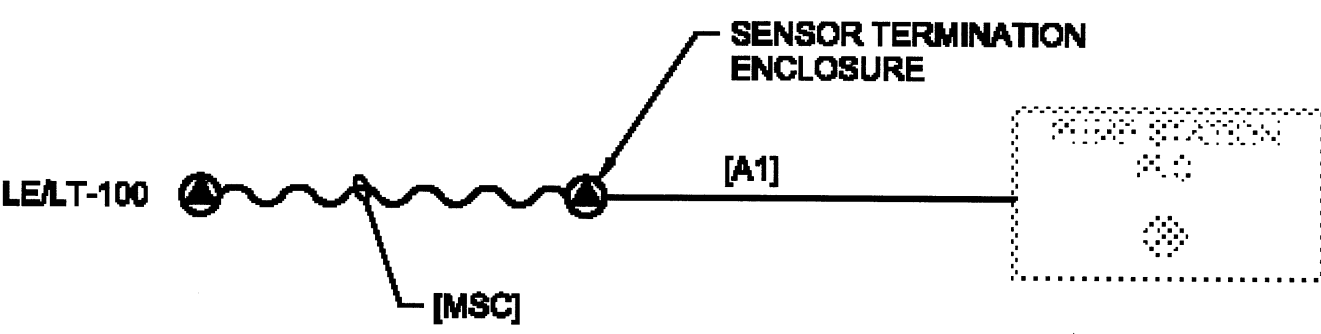


EQUIPMENT NAME	P-10X	AFD-10X
EXISTING LOW LIFT PUMP NO. 1	P-104	AFD-104
EXISTING LOW LIFT PUMP NO. 2	P-105	AFD-105

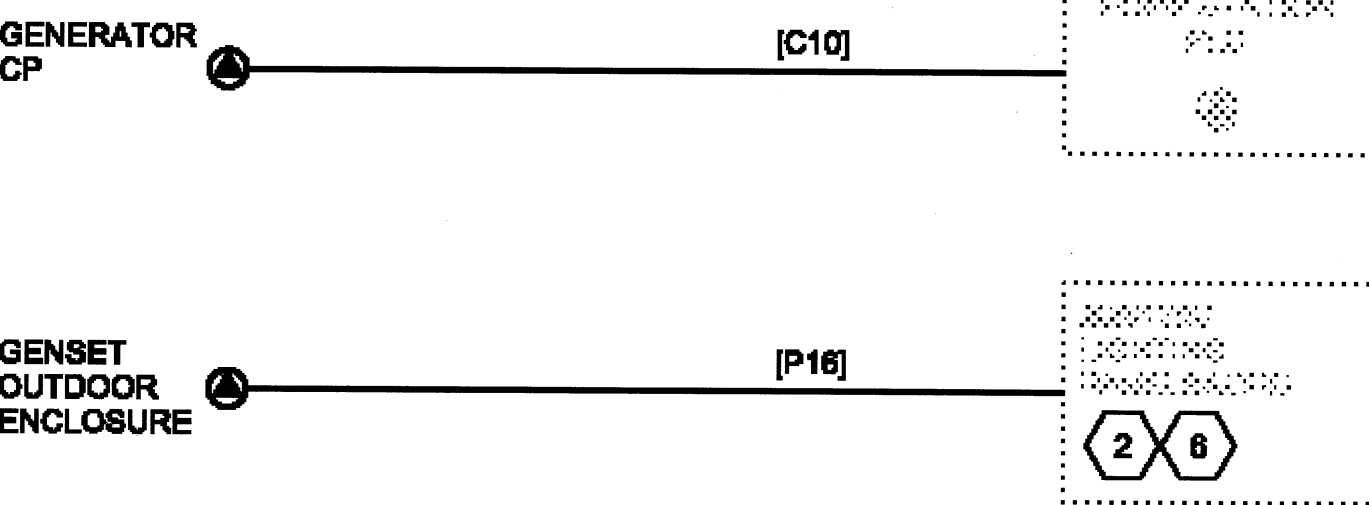
CONTROL SCHEMATIC
NTS



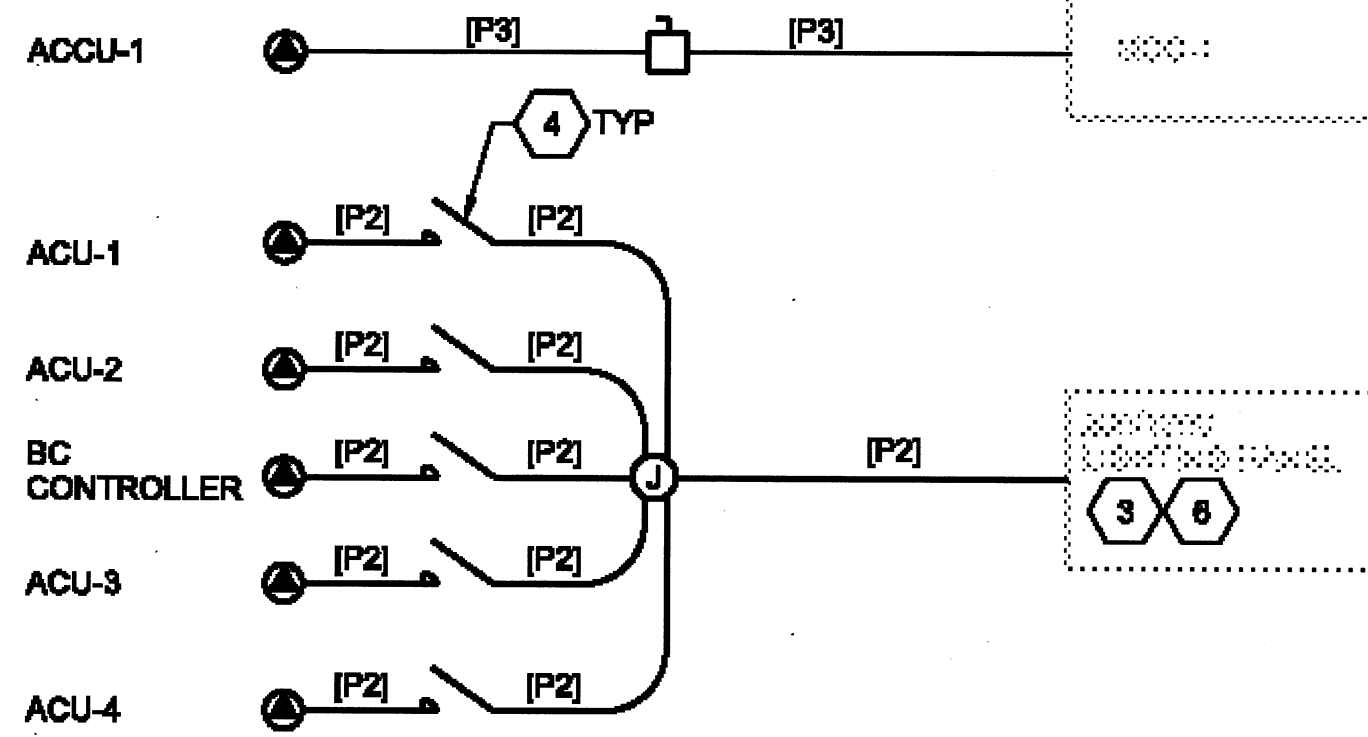
CABLE BLOCK DIAGRAM (CBD-1)
(2 - REQUIRED)



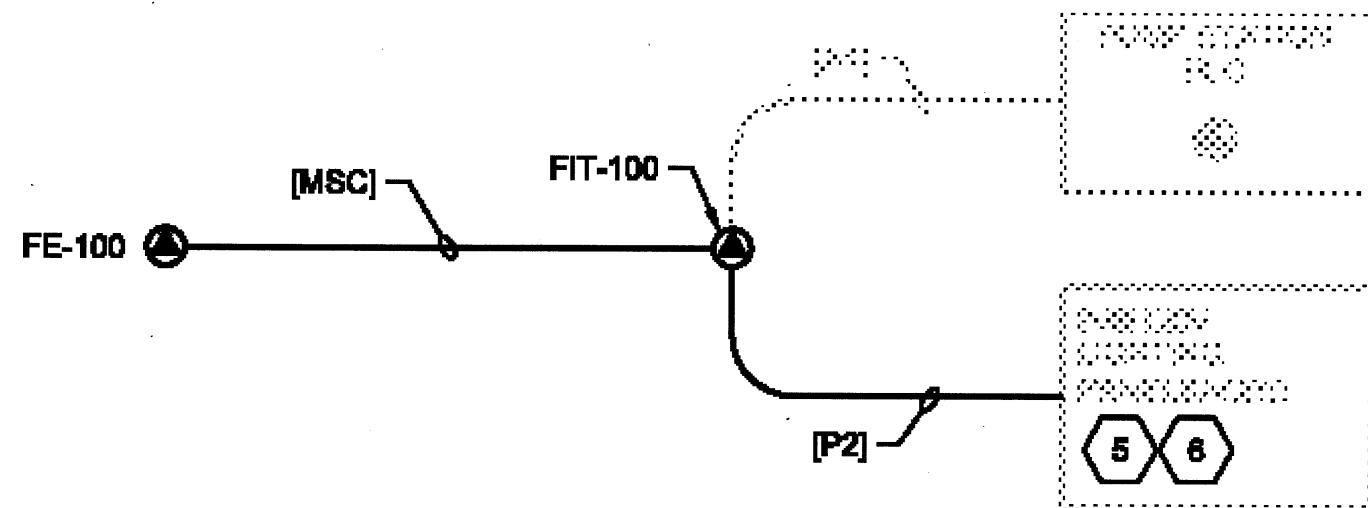
CABLE BLOCK DIAGRAM (CBD-2)
(1 - REQUIRED)



CABLE BLOCK DIAGRAM (CBD-3)
(1 - REQUIRED)



CABLE BLOCK DIAGRAM (CBD-4)
(1 - REQUIRED)



CABLE BLOCK DIAGRAM (CBD-5)
(1 - REQUIRED)

GENERAL SHEET NOTES

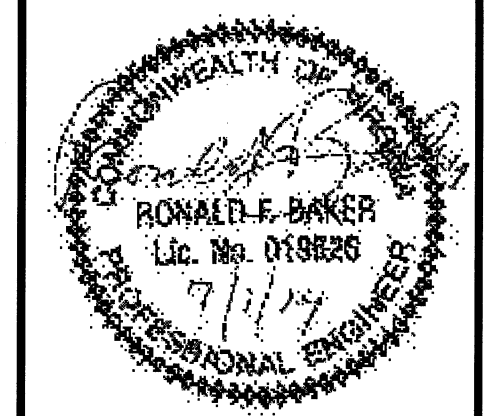
- SEE CIRCUIT AND CONDUIT IDENTIFICATION ON DWG E-0003, EXCEPT OTHERWISE SHOWN HERE.

CIRCUIT CALLOUTS (THIS DRAWINGS ONLY)

- [P47]=[3°C, 3#350 KCMIL, 1#2G]
[P48]=[3°C, 3#350 KCMIL, 1#2G, 4#12]

SHEET KEYNOTES

- PUMP MOTOR WINDING TEMPERATURE THERMOSTAT AT THE MOTOR. CONTACT OPENS ON HIGH WINDING TEMPERATURE.
- UTILIZE SPACE LOCATIONS NO. 1 AND NO. 3. PROVIDE AND INSTALL A NEW 30A, 2-POLE, 250V CIRCUIT BREAKER TO FEED A 208V, SINGLE-PHASE POWER TO DEVICE AS SHOWN.
- DISCONNECT AND REMOVE CONDUCTORS FROM CIRCUIT NO. 12 TO THE EXISTING 20A, 1-POLE SPARE BREAKER LOCATED IN CIRCUIT NO. 11. REMOVE EXISTING SPARE CIRCUIT BREAKERS LOCATED IN CIRCUITS NO. 10 AND NO. 12. PROVIDE AND INSTALL A NEW 20A, 2-POLE, 250V CIRCUIT BREAKER IN LOCATIONS NO. 10 AND NO. 12 TO FEED A 208V, SINGLE-PHASE POWER TO DEVICES AS SHOWN.
- TWO-POLE, 15A, 208V TOGGLE DISCONNECT SWITCH.
- UTILIZE SPACE LOCATION NO. 2. PROVIDE AND INSTALL A NEW 20A, 1-POLE, 250V CIRCUIT BREAKER TO FEED A 120V POWER TO THE DEVICE AS SHOWN.
- THE NEW CIRCUIT BREAKER SHALL HAVE THE SAME AIC RATINGS AS THE EXISTING CIRCUIT BREAKERS. EXISTING PANELBOARD IS MANUFACTURED BY GENERAL-ELECTRIC.



REVISION	BY	APVD	DATE	DR	DSGN
1	J. ALLEN	R. BAKER			
2	J. ALLEN	R. BAKER			
3	J. ALLEN	R. BAKER			
4	J. ALLEN	R. BAKER			
5	J. ALLEN	R. BAKER			
6	J. ALLEN	R. BAKER			
7	J. ALLEN	R. BAKER			
8	J. ALLEN	R. BAKER			
9	J. ALLEN	R. BAKER			
10	J. ALLEN	R. BAKER			

CRYSTAL SPRING WATER TREATMENT PLANT
CLEARWELL REPLACEMENT
WESTERN VIRGINIA WATER AUTHORITY
CITY OF ROANOKE, VIRGINIA

CH2MHILL
ELECTRICAL
CONTROL SCHEMATIC AND
CABLE BLOCK DIAGRAMS

VERIFY SCALE	DATE	JUNE 2014
BAR IS ONE INCH ON ORIGINAL DRAWING.	PROJ	475481
	DWG	E-8002
	SHEET	33 of 37