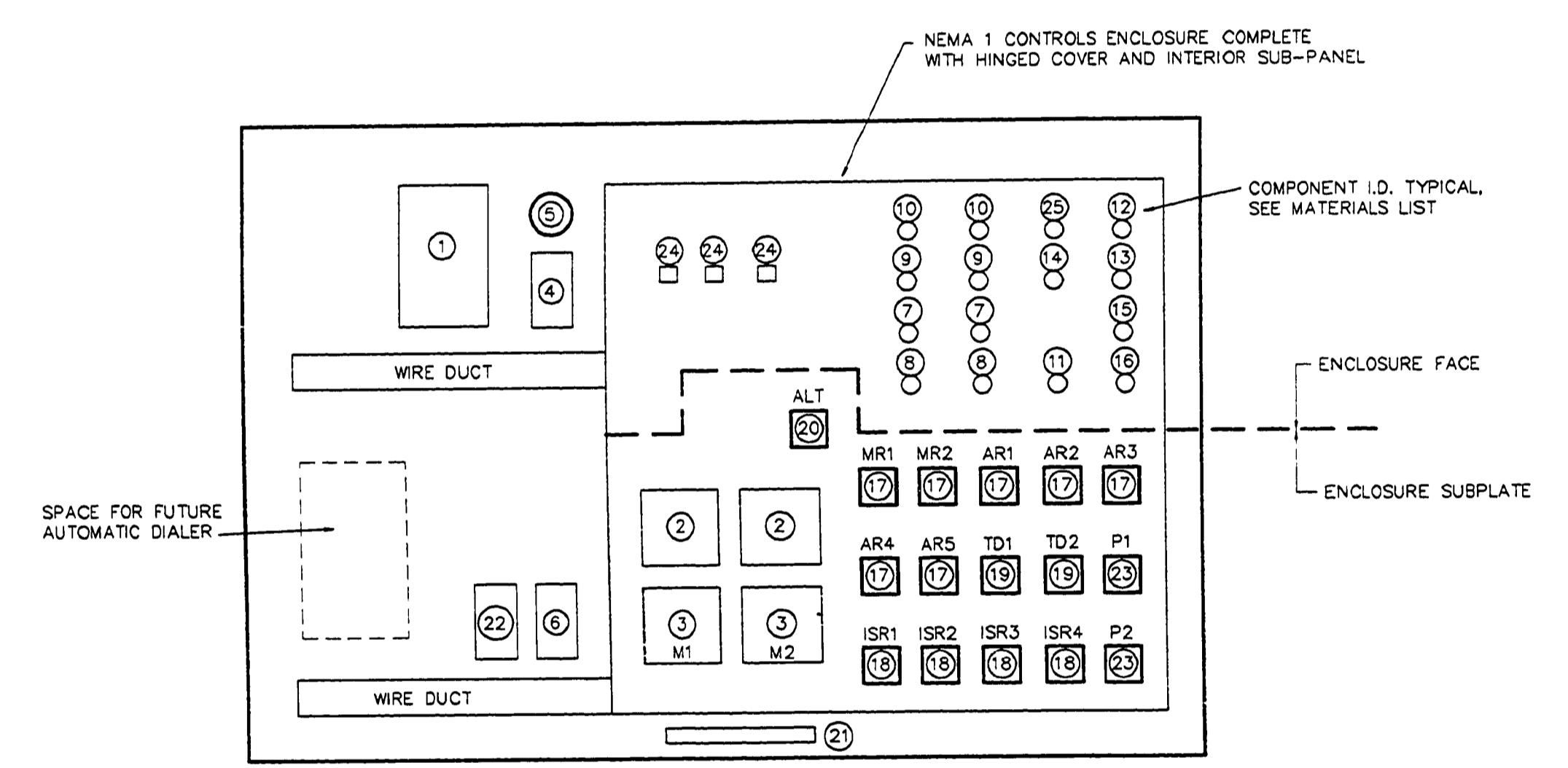
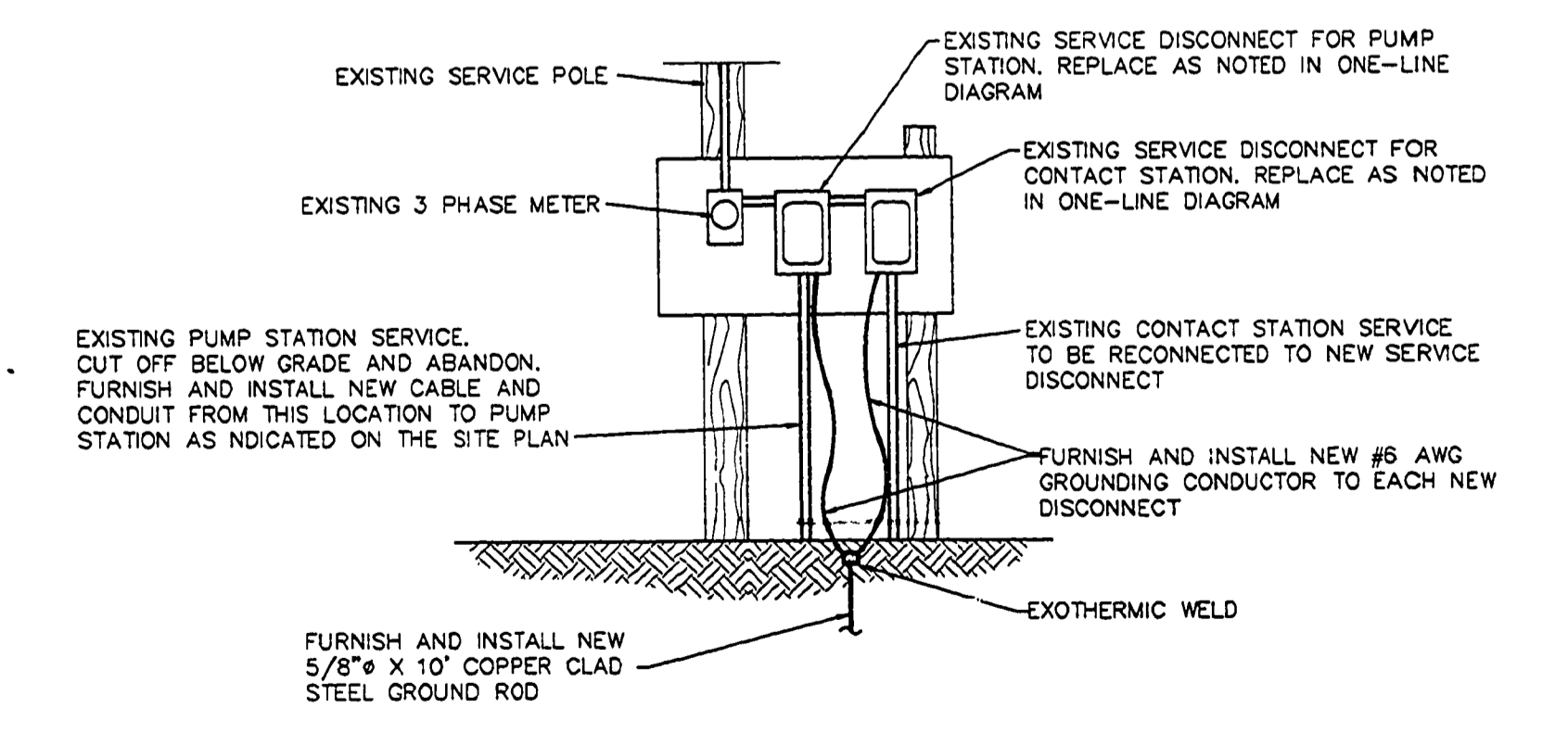


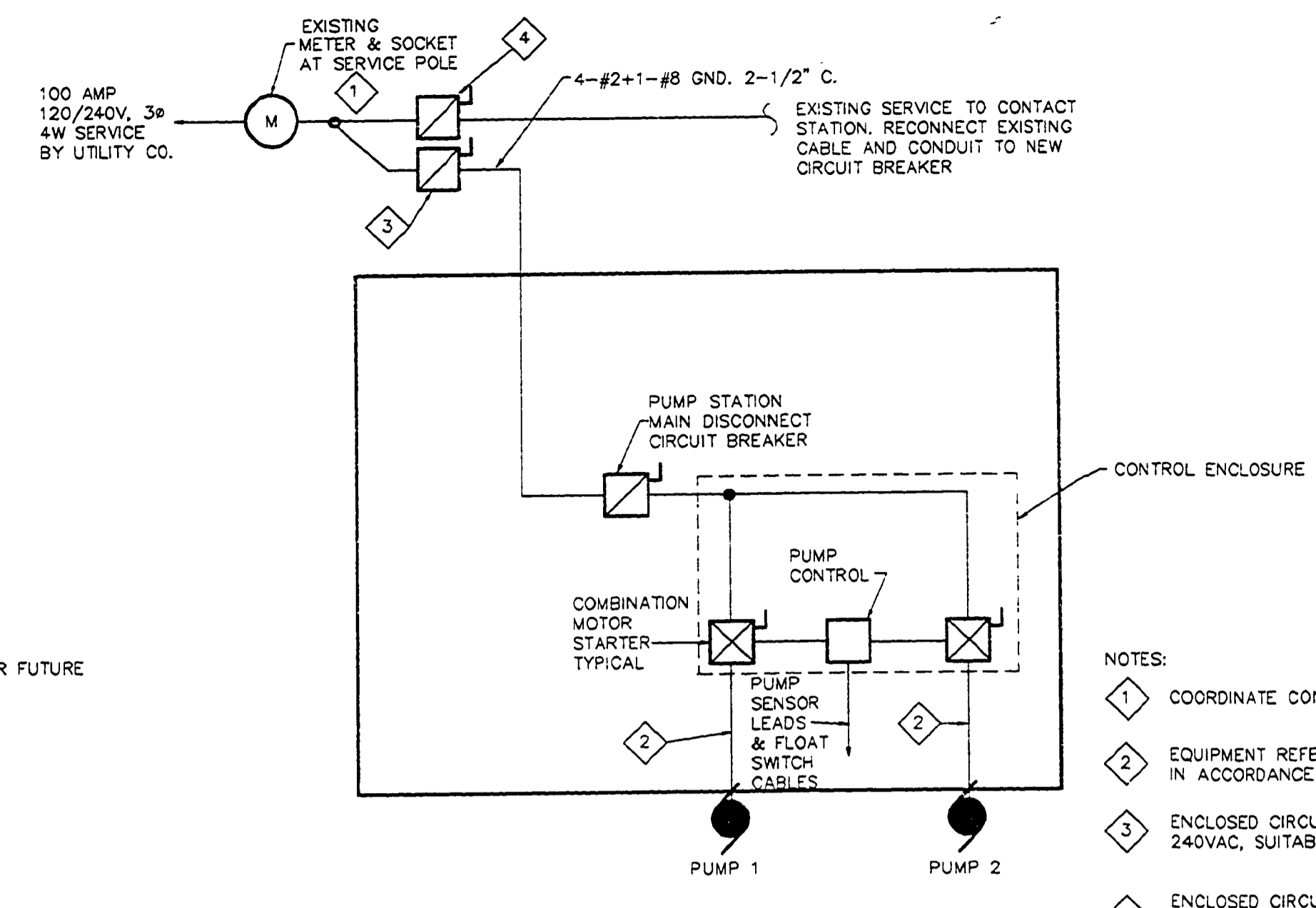
SERVICE ENCLOSURE DETAIL
NO SCALE



TYPICAL SUB-PANEL LAYOUT - SERVICE ENCLOSURE DETAIL
NO SCALE



SERVICE POLE DETAIL
NO SCALE

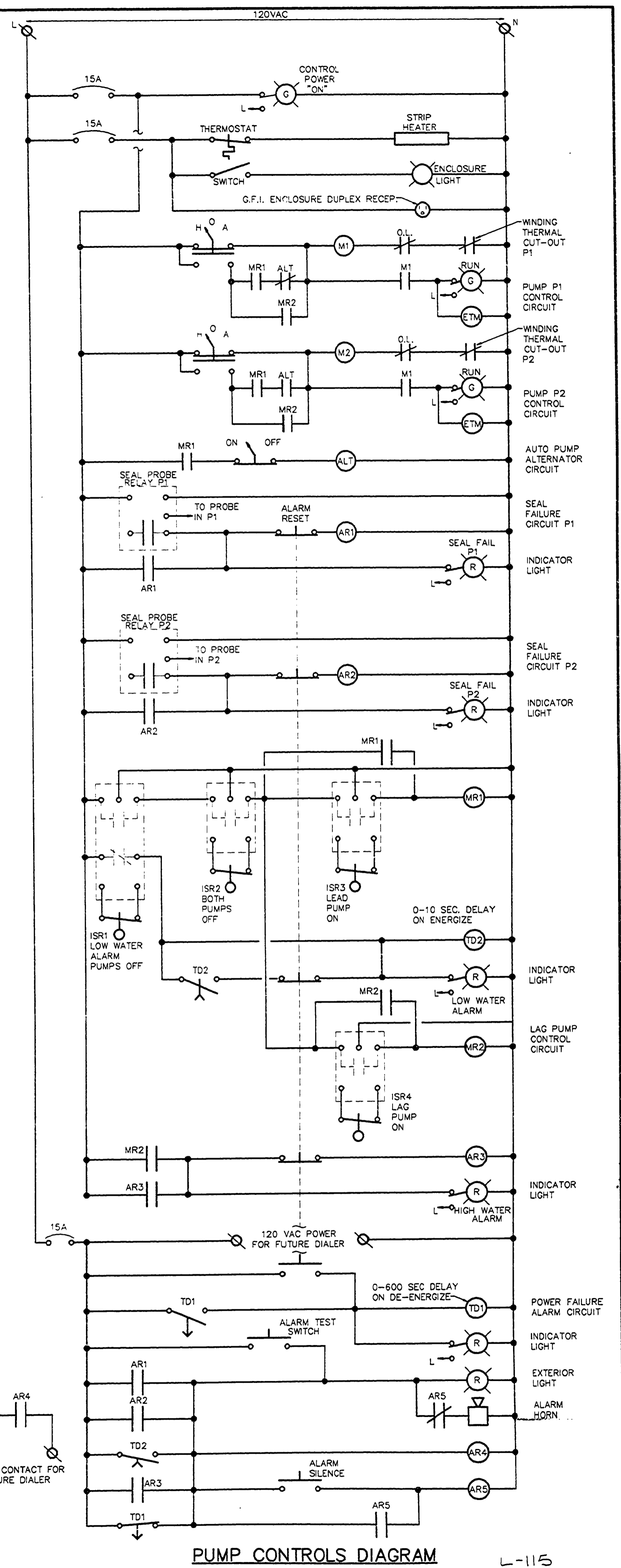


ONE-LINE DIAGRAM
120/240V 3Ø - 4W

- NOTES:
- 1. COORDINATE CONNECTIONS TO METER WITH UTILITY COMPANY.
 - 2. EQUIPMENT REFERENCED TO THIS NOTE SHALL BE SIZED IN ACCORDANCE WITH APPROVED PUMPS AND THE N.E.C.
 - 3. ENCLOSED CIRCUIT BREAKER, NEMA 4 ENCLOSURE, 60A, 3P, 240VAC, SUITABLE FOR USE AS SERVICE EQUIPMENT.
 - 4. ENCLOSED CIRCUIT BREAKER, NEMA 4 ENCLOSURE, 100A, 2P, 240VAC, SUITABLE FOR USE AS SERVICE EQUIPMENT, COORDINATE AMPERE RATING OF CIRCUIT BREAKER WITH AMPACITY OF EXISTING SERVICE CABLE TO CONTACT STATION.

COMP. I.D.	DESCRIPTION	MANUFACTURER	NOTES
1	60 AMP, 3 POLE, 240V ENCLOSED CIRCUIT BREAKER	SQUARE-D, WESTINGHOUSE	1
2	15 AMP, 3 POLE, 240V MOTOR CIRCUIT PROTECTOR	SQUARE-D, WESTINGHOUSE	4
3	MOTOR STARTER, RESET BUTTON THROUGH FACE OF CONTROL ENCLOSURE	SQUARE-D, FURNAS	2
4	LIGHT SWITCH COVER PLATE	LEVITON, BRYANT	--
5	4-1/2" PORCELAIN SOCKET W/60W BULB	LEVITON, BRYANT	--
6	DUPLEX RECEPTACLE (GFI) AND COVER PLATE	LEVITON, BRYANT	--
7	PUSH-TO-TEST "RUN" INDICATOR LIGHT WITH LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
8	"HAND-OFF-AUTO" OIL-TIGHT SELECTOR SWITCH WITH LEGEND PLATE	SQUARE-D, FURNAS	--
9	PUSH-TO-TEST "PUMP SEAL FAILURE" INDICATOR LIGHT WITH LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
10	ELAPSED TIME METER	CRAMER, ITC	--
11	"AUTOMATIC-ALTERNATOR" SELECTOR SWITCH WITH LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
12	PUSH-TO-TEST "LOW WATER ALARM" INDICATOR LIGHT WITH LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
13	PUSH-TO-TEST "HIGH WATER ALARM" INDICATOR LIGHT WITH LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
14	MOMENTARY CONTACT "ALARM TEST" BUTTON AND LEGEND PLATE, OIL TIGHT	SQUARE-D, FURNAS	--
15	MOMENTARY CONTACT "ALARM RESET" BUTTON AND LEGEND PLATE, OIL-TIGHT	SQUARE-D, FURNAS	--
16	MOMENTARY CONTACT "ALARM SILENCE" BUTTON AND LEGEND PLATE, OIL TIGHT	SQUARE-D, FURNAS	--
17	INDUSTRIAL CONTROL RELAY, "ICE-CUBE" TYPE WITH MATCHING MOUNTING SOCKET, 5 AMP CONTACTS	SQUARE-D, FURNAS, OR EQUAL	3
18	INTRINSICALLY SAFE RELAY	SEE SPECIFICATIONS	3
19	PNEUMATIC TIME DELAY RELAY	AGASTAT, SQ-D, OR EQUAL	3
20	AUTOMATIC PUMP ALTERNATOR	FURNAS, CUTLER-HAMMER OR EQUAL	3
21	CABINET HEATER AND THERMOSTAT	WATLOW, HOFFMAN, OR EQUAL	--
22	RJ-11 TELEPHONE JACK & BOX	HUBBELL OR EQUAL	--
23	SEAL FAILURE RELAY	BY PUMP SUPPLIER	3
24	CONTROL POWER CIRCUIT BREAKER	SQUARE-D, FURNAS	3,4
25	PANEL POWER INDICATING LAMP	SQUARE-D, FURNAS	--
--	EXTERNAL ALARM LIGHT	SEE SPECIFICATIONS	--
--	ALARM HORN	EDWARDS, OR EQUAL	--

1. ENCLOSED CIRCUIT BREAKERS SHALL BE LISTED AND LABELED AS SUITABLE FOR USE AS SERVICE EQUIPMENT.
2. PROVIDE CIRCUIT BREAKER AND THERMAL OVERLOAD ELEMENTS (HEATERS) PER THE N.E.C. ARTICLE 430.
3. MOUNT EQUIPMENT REFERENCED TO THIS NOTE ON SUB-PANEL OF CONTROLS ENCLOSURE. ALLOW MINIMUM OF TWENTY PERCENT SPACE ON SUB-PANEL FOR FUTURE EQUIPMENT.
4. CIRCUIT BREAKER HANDLES SHALL PROJECT THROUGH FACE OF CONTROL ENCLOSURE.



PUMP CONTROLS DIAGRAM

DRN BY:	SAH
DES'D BY:	MJJ
CHK'D BY:	GDA
APP'D BY:	



STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
Office of Facilities

QUALITY OF LIFE RECREATION 50ND
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
PARKS DIVISION - STATE ACCT. NO. 607-75-2450-400

ALGONAC STATE PARK
MAIN PUMP STATION ELECTRICAL

SCALE: NONE
PROJ. NO.: 90103
SHEET 17 OF 17

5-10-90
0103PCL