

MOTOR NO.	SERVICE DESCRIPTION	MOTOR LOCATION	MOTOR CHARACTERISTICS				SOURCE	FEEDER	BREAKER SIZE	MANUAL STARTER	MAGNETIC STARTERS								REMOTE CONTR.				REMARKS			
			H.P.	F.L.A.	VOLT	Ø					TOGGLE	PUSH BUTTON	PILOT L.T.G.	COMBINATION	VFD	BREAKER TYPE	FUSE TYPE	CONTROL TRANSFORMER	AUX.CONT. 2 N.O./N.C.	IN COVER				INTERLOCK TO	PILOT LIGHT	DISC. AT MOTOR
P-201	LIFT PUMP 1	WET WELL	5	4	600	3	MDP	3 #10 TECK	15A 3P				✓					✓								STARTER PACKAGE SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
P-202	LIFT PUMP 2	WET WELL	5	4	600	3		3 #10 TECK					✓					✓								STARTER PACKAGE SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
G-201	GRINDER PUMP	WET WELL	5	3.7	600	3		3 #10 TECK	15A 3P				✓					✓	✓							STARTER PACKAGE SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
G-202	GRINDER PUMP	WET WELL	5	3.7	600	3		3 #10 TECK	15A 3P									✓	✓							STARTER PACKAGE SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
EF-1	EXHAUST FAN	SERVICE AREA			120	1	BP-A	2 #12+GRND IN 21mmC	15A 1P				✓	✓				✓	✓							INTERLOCKS PROVIDED BY CONTROL CONTRACTOR
SF-1	SUPPLY FAN	SERVICE AREA	1/2		120	1	BP-A	4 #12+GRND IN 21mmC	15A 1P				✓	✓				✓	✓							INTERLOCKS PROVIDED BY CONTROL CONTRACTOR

1 MCC SCHEDULE

PANEL DESIGNATION DP-1				PANEL LOCATION SURFACE				
NUMBER OF POLES 24				MOUNTING SURFACE				
SYSTEM VOLTAGE 600V/3PH/3W								
MAINS CAPACITY 125A								
INTERRUPTING CAPACITY..... 14kA								
DESCRIPTION	LOAD	BRKR AMP POLE	CCT NO.	PHASE	CCT NO.	BRKR AMP POLE	LOAD	DESCRIPTION
P-201/202 DUPLEX PUMP CONTROL PANEL	•	15A 3P	1	A	2	15A 3P	•	GRINDER PUMP G-201
			3	B	4			
			5	C	6			
			7	A	8			
TRANSFORMER T-A 30kVA	•	40A 3P	9	B	10	15A 3P	•	GRINDER PUMP G-202
			11	C	12			
			13	A	14			
			15	B	16			
			17	C	18			
			19	A	20			
			21	B	22			
			23	C	24			

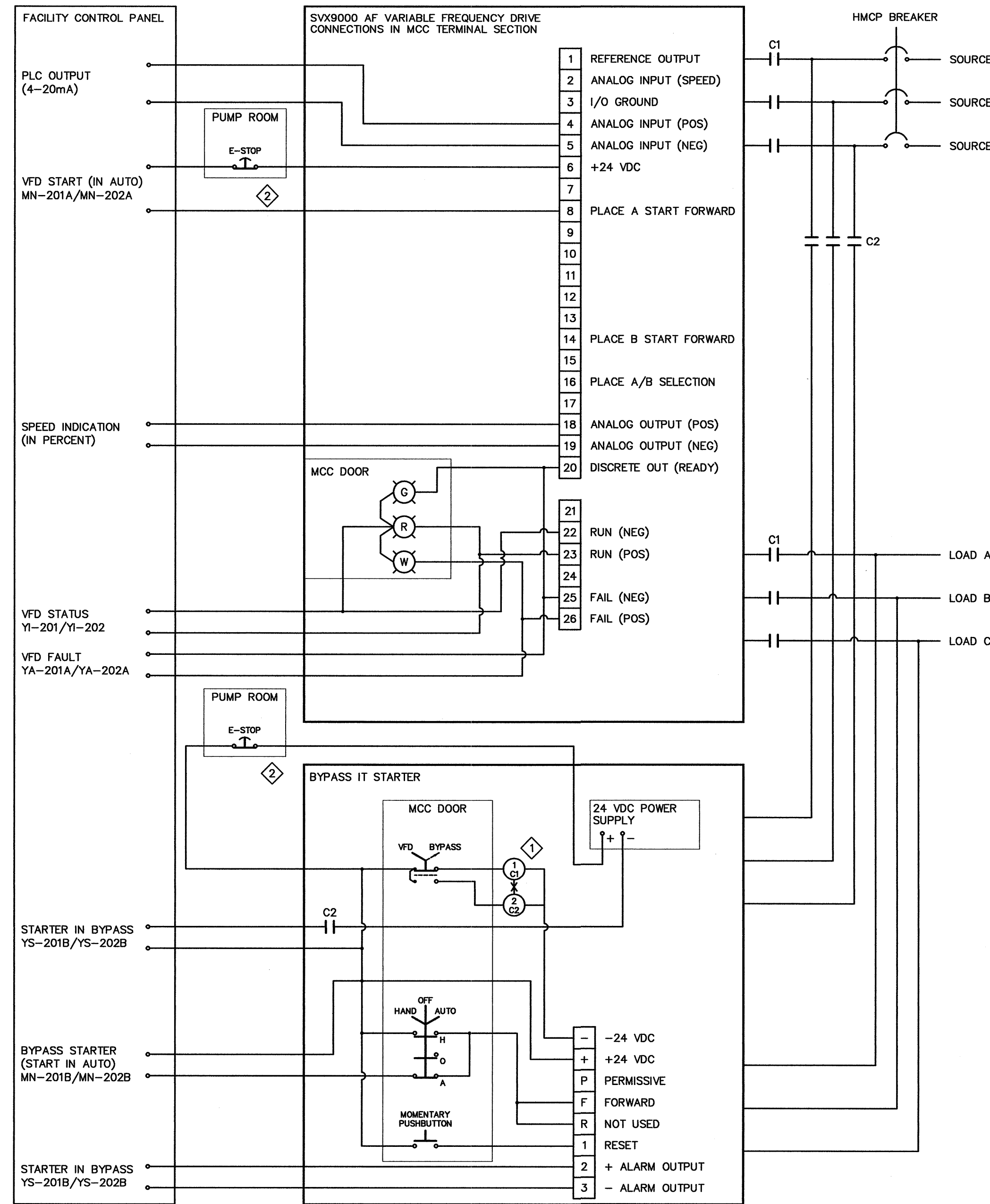
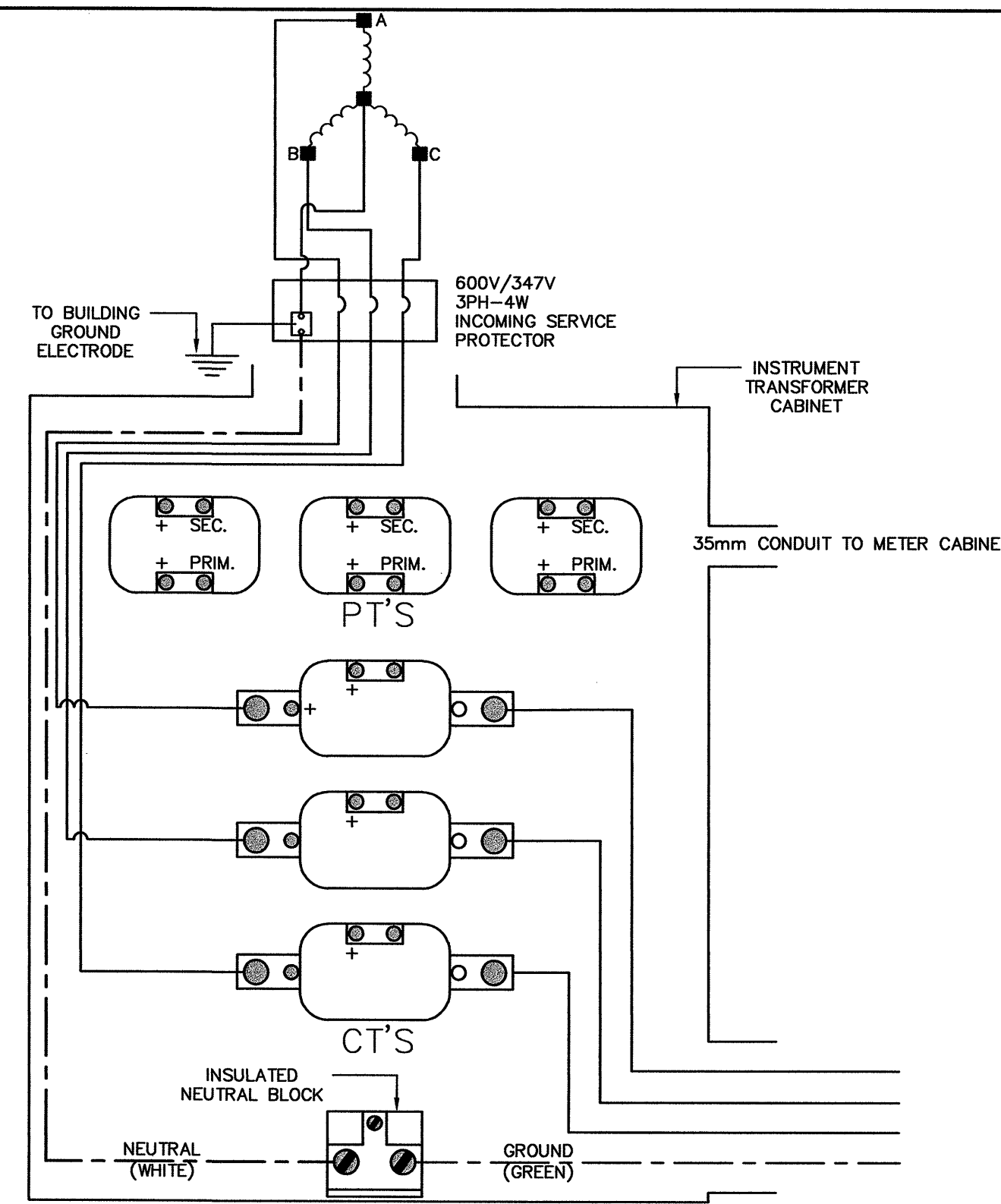
PANEL DESIGNATION		BP-A		PANEL LOCATION		SURFACE		
NUMBER OF POLES		42		MOUNTING		SURFACE		
SYSTEM VOLTAGE		120/208						
MAINS CAPACITY		225A						
INTERRUPTING CAPACITY.....		10kA						
DESCRIPTION	LOAD	BRKR AMP POLE	CCT NO.	PHASE	CCT NO.	BRKR AMP POLE	LOAD	DESCRIPTION
BOILER-02		15A 1P	1	A	2	15A 1P		GENERAL RECEPTACLES
FUEL PUMP P-02		15A 1P	3	B	4	15A 1P		EBU-1 AND LIGHTING
BOILER-01		15A 1P	5	C	6	15A 1P		FIRE ALARM PANEL
FUEL PUMP P-01		15A 1P	7	A	8	15A 1P		UNIT HEATERS
BOILER CONTROL PANEL		15A 1P	9	B	10	15A 1P		WATER BOOSTER PUMP P-03
FUEL TRANSFER PUMPS DPS-01		20A 1P	11	C	12	15A 1P		EXTERIOR LIGHTS
FUEL HEATER		15A 1P	13	A	14	15A 1P		TELEPHONE BLACKBOARD
GLYCOL FILL PUMP P-04		15A 1P	15	B	16	15A 1P		MOTORIZED DAMPER
BATTERY CHARGER		20A 1P	17	C	18	15A 1P		EXHAUST FAN EF-01
GENERATOR BLOCK HEATER		20A 1P	19	A	20	20A 1P		HOT WATER TANK
SF-01		15A 1P	21	B	22	15A 1P		PLC CABINET
			23	C	24	15A 1P		WET WELL LIGHTING
			25	A	26	15A 1P		EXTERIOR GFI RECEPTACLES
			27	B	28			
			29	C	30			
			31	A	32			
			33	B	34			
			35	C	36			
			37	A	38			
			39	B	40			
			41	C	42			

2 PANEL SCHEDULES

NOTES:
 1. WIRE EXTERIOR LIGHTING CIRCUIT THROUGH CONTROL CONTRACTOR. CONTRACTOR TO BE CONTROLLED BY WALL MOUNTED PHOTOCELL.

6 INSTRUMENT TRANSFORMERS

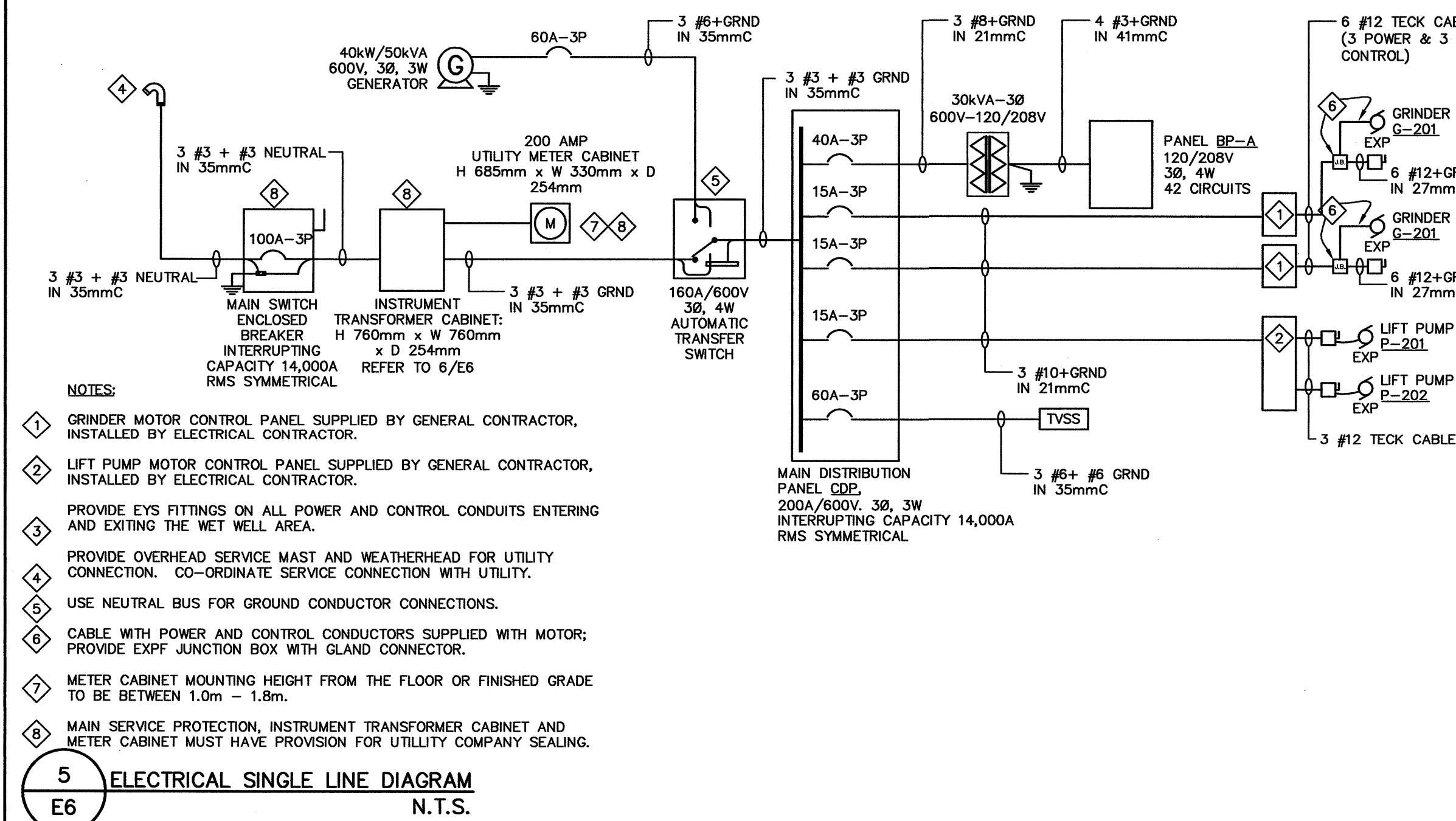
N.T.S.



- NOTES:
 1. MOTOR CONTROL CIRCUITS ARE SHOWN AT 24VDC. INSTRUMENTATION CONTRACTOR TO COORDINATE WITH DIVISION 18 AND THE SUPPLY OF MCC EQUIPMENT. SHOULD 120VAC MOTOR CONTROL BE REQUIRED, THE INSTRUMENTATION CONTRACTOR IS TO REVISE PLC I/O AS REQUIRED.
- MECHANICAL INTERLOCK
 E-STOP PUSH BUTTONS SHOWN REPRESENT ADDITIONAL CONTACTS ON A SINGLE PB PROVIDED IN THE LOCAL CONTROL PANEL AND AT THE RAW WATER PUMPS.

3 MOTOR STARTER SCHEMATIC

N.T.S.



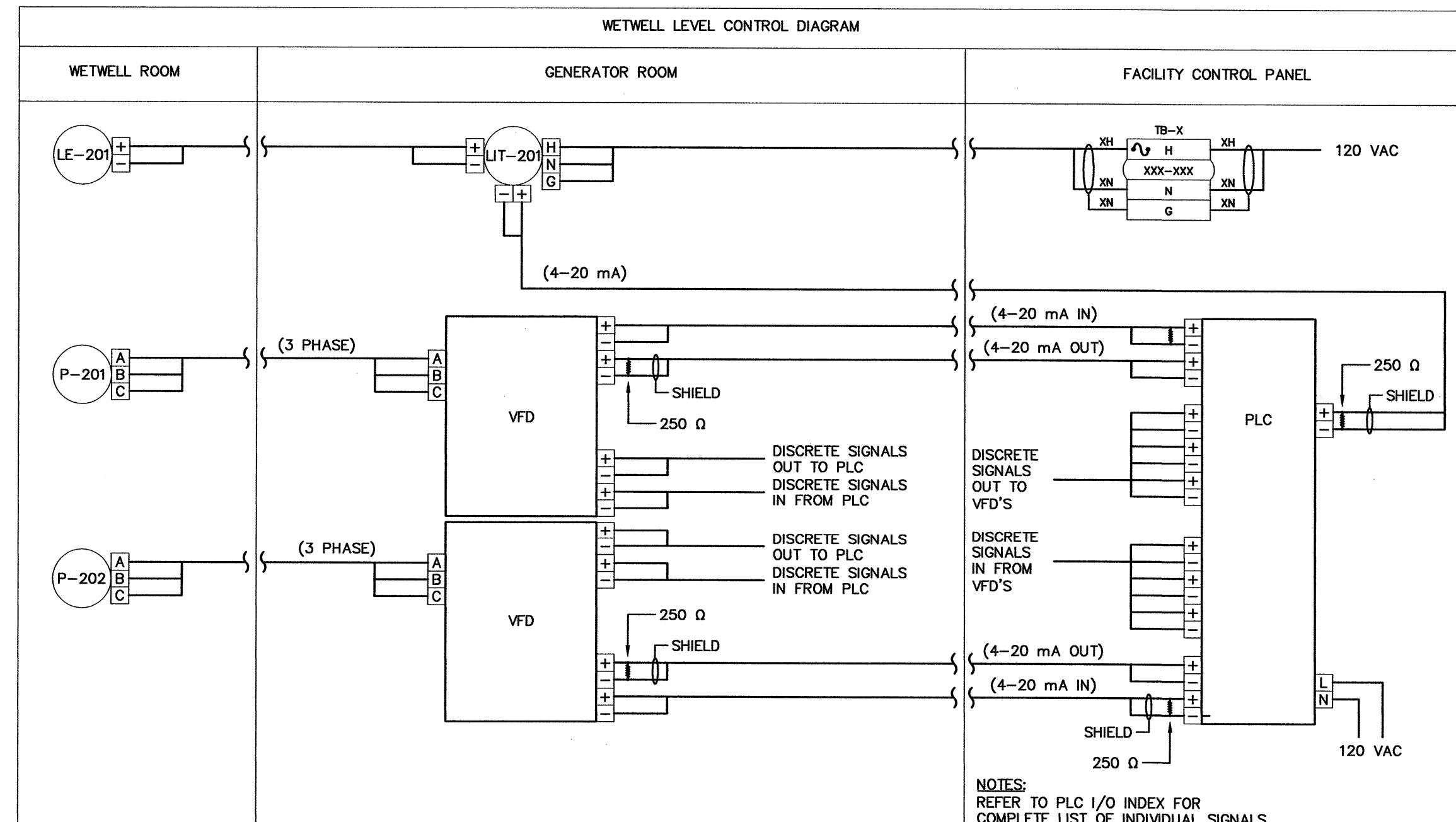
- NOTES:
 1. GRINDER MOTOR CONTROL PANEL SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
 2. LIFT PUMP MOTOR CONTROL PANEL SUPPLIED BY GENERAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
 3. PROVIDE EYE FITTINGS ON ALL POWER AND CONTROL CONDUITS ENTERING AND EXITING THE WET WELL AREA.
 4. PROVIDE OVERHEAD SERVICE MAST AND WEATHERHEAD FOR UTILITY CONNECTION. CO-ORDINATE SERVICE CONNECTION WITH UTILITY.
 5. USE NEUTRAL BUS FOR GROUND CONDUCTOR CONNECTIONS.
 6. CABLE WITH POWER AND CONTROL CONDUCTORS SUPPLIED WITH MOTOR; PROVIDE EXPF JUNCTION BOX WITH GLAND CONNECTOR.
 7. METER CABINET MOUNTING HEIGHT FROM THE FLOOR OR FINISHED GRADE TO BE BETWEEN 1.0m - 1.8m.
 8. MAIN SERVICE PROTECTION, INSTRUMENT TRANSFORMER CABINET AND METER CABINET MUST HAVE PROVISION FOR UTILITY COMPANY SEALING.

5 ELECTRICAL SINGLE LINE DIAGRAM

N.T.S.

4 LEVEL CONTROL SCHEMATIC

E6



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No.	DESCRIPTION	DATE	BY	APP'D
2	REVISED 5/E6 FOR INCOMING SERVICE AND UTILITY METER AND ADDED DETAIL 6/E6	07/27/10	WBBP	C.W.
1	ISSUED FOR CONSTRUCTION	05/04/10	WBBP	
0	ISSUED FOR TENDER	06/19/09	WBBP	C.W.

THE STAMP COLOUR IS RED FOR
 C. L. WOOD
 LICENSED PROFESSIONAL ENGINEER
 THE ORIGINAL SIGNED DRAWING

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CITY OF IQALUIT

PROJECT LIFT STATION No. 2 MODIFICATIONS

TITLE ELECTRICAL MCC & PANEL SCHEDULE, MOTOR & LEVEL SCHEMATIC, SINGLE LINE

design by	C.M.	project no.	OTCD00019365A
drawn by	F.S.	drawing no.	E6
checked by	C.M.		
date	06/11/2009		
scale	NOT TO SCALE		