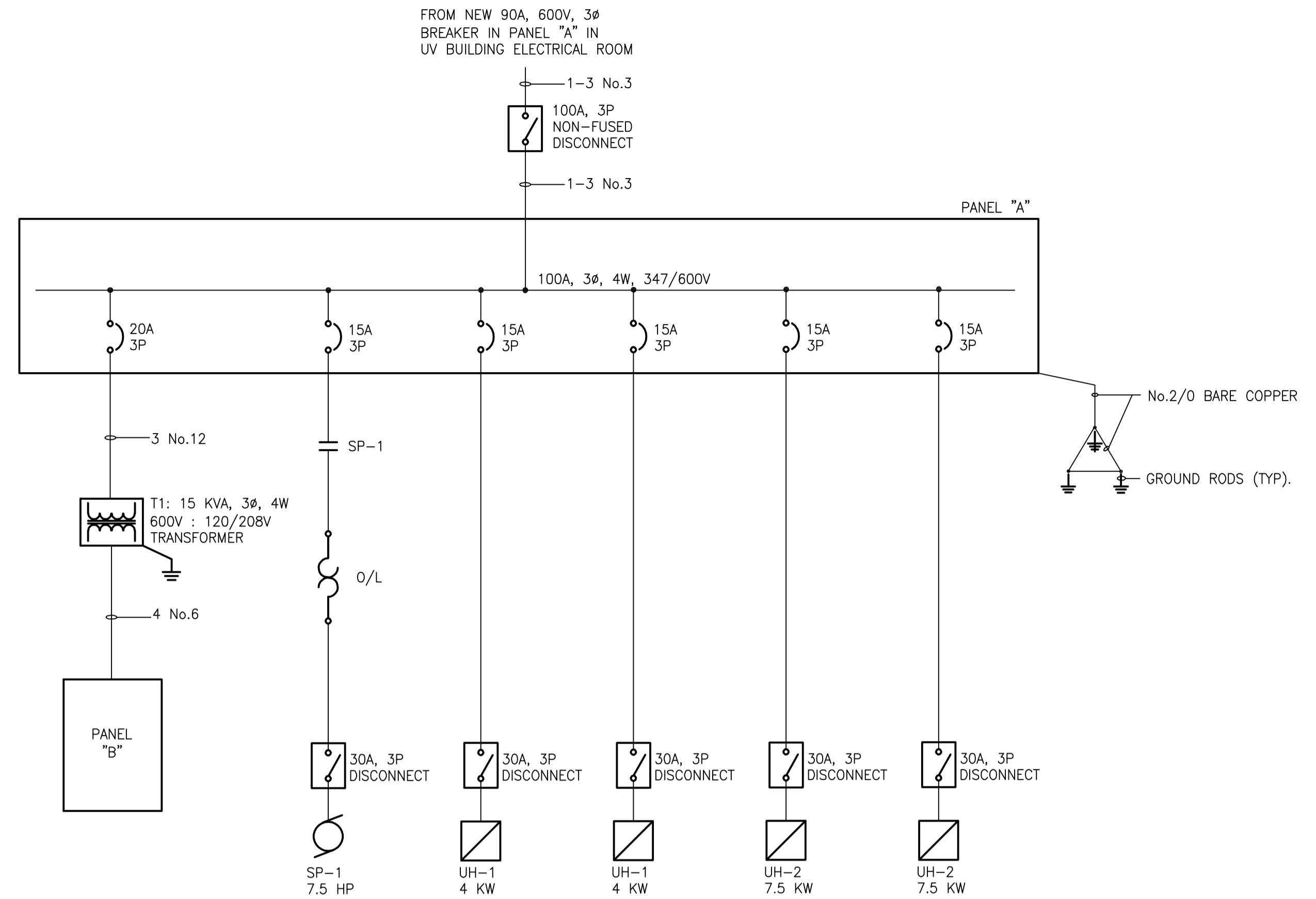


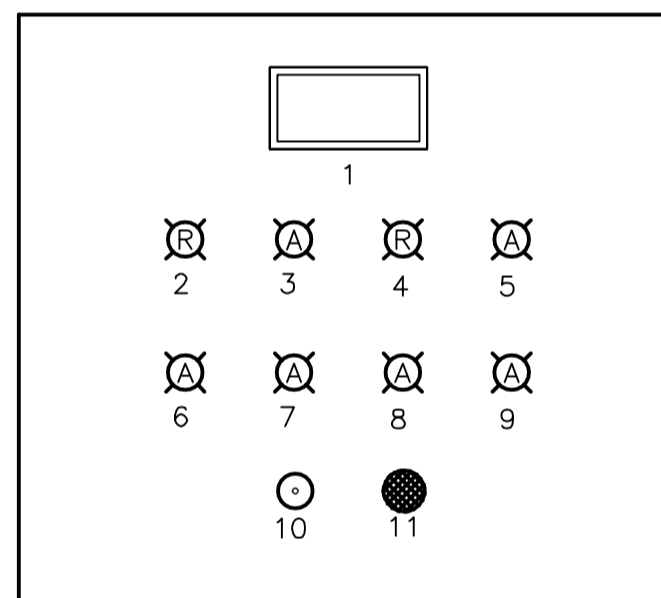
MOTOR SCHEDULE								
No.	HP	DESCRIPTION	VOLTS	Ø	STARTER TYPE	STARTER LOCATION	CONTROL	FEEDER
SP-1	7.5	SAMPLE WATER PUMP	600	3	FVNR	WALL	AS SHOWN	3 No. 12
UH-1	4kW	DRY SIDE ROOM UNIT HEATER	600	3	-	-	INTEGRAL T-STAT	3 No.12
UH-1	4kW	DRY SIDE ROOM UNIT HEATER	600	3	-	-	INTEGRAL T-STAT	3 No.12
UH-2	7.5kW	WET SIDE ROOM UNIT HEATER	600	3	-	-	INTEGRAL T-STAT	3 No.12
UH-2	7.5kW	WET SIDE ROOM UNIT HEATER	600	3	-	-	INTEGRAL T-STAT	3 No.12
SF-1	F.R.	DRY SIDE ROOM SUPPLY FAN	120	1	FVNR	INTEGRAL	LIGHT SWITCH	2 No.12
SF-2	F.R.	WET SIDE ROOM SUPPLY FAN	120	1	2-SPEED	INTEGRAL	AS SHOWN	2 No.12
AC-1	2	AIR COMPRESSOR	120	1	FVNR	INTEGRAL	INTEGRAL	2 No.6

PANEL "A"		347/600V, 3Ø, 4W				100A MAINS		
DESCRIPTION	CCT.	BRK AMP	A	B	C	BRK AMP	CCT.	DESCRIPTION
SAMPLE WATER PUMP	1	15				20	4	T1 TRANSFORMER 15KVA, 600/120-208V
DRY SIDE ROOM UNIT HEATER UH-1	9	15				15	10	WET SIDE ROOM UNIT HEATER UH-2
DRY SIDE ROOM UNIT HEATER UH-1	13	15				15	14	WET SIDE ROOM UNIT HEATER UH-2
	15	15				15	16	WET SIDE ROOM UNIT HEATER UH-2
	17	15				15	18	
	19	15				15	20	
	21	15				15	22	
	23	15				15	24	
	25	15				15	26	
	27	15				15	28	
	29	15				15	30	

PANEL "B"		120/208V, 3Ø, 4W				100A MAINS		
DESCRIPTION	CCT.	BRK AMP	A	B	C	BRK AMP	CCT.	DESCRIPTION
DRY SIDE ROOM LIGHTS	1	15				15	2	WET SIDE ROOM LIGHTS
DRY SIDE ROOM EMERGENCY/EXIT LIGHT	3	15				15	4	WET SIDE ROOM EMERGENCY/EXIT LIGHT
DRY SIDE ROOM RECEPTACLES (GFCI)	5	15				15	6	WET SIDE ROOM RECEPTACLES (GFCI)
SAMPLE REFRIGERATOR (GFCI)	7	20				15	8	MAIN CONTROL PANEL CP1
OUTDOOR LIGHT	9	15				15	10	SAMPLER CONTROL PANEL CP3
AIR COMPRESSOR	11	60				15	12	WET SIDE ROOM SUPPLY FAN SF-2, DAMPER MD-2
DRY SIDE ROOM SUPPLY FAN SF-1, DAMPER MD-1	13	15				15	14	SPARE
PORTABLE SAMPLER RECEPTACLE	15	15				15	16	SPARE
PORTABLE SAMPLER ALARM BOX RECEPTACLE	17	15				15	18	SPARE
SPARE	19	15				15	20	SPARE
	21	15				15	22	
	23	15				15	24	
	25	15				15	26	
	27	15				15	28	
	29	15				15	30	



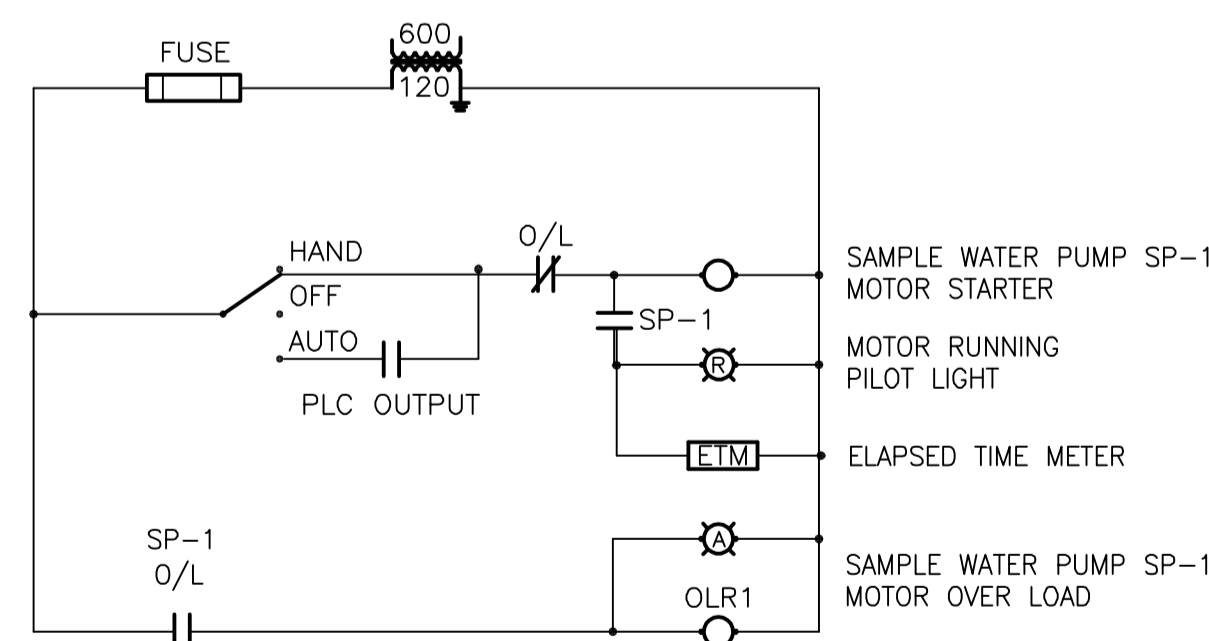
SINGLE LINE DIAGRAM



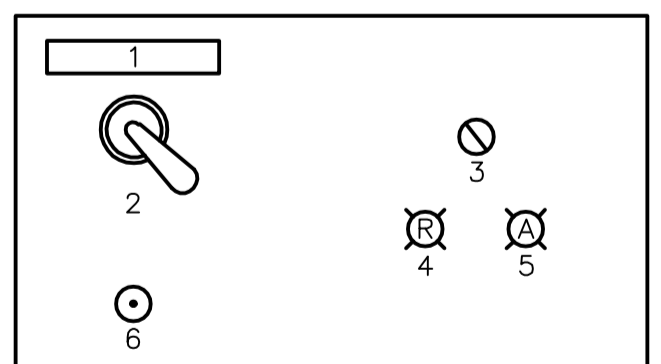
MAIN CONTROL PANEL CP1 LAYOUT  
N.T.S.

PANEL LEGEND

- OPERATOR INTERFACE HMI
- SAMPLE PUMP MOTOR RUNNING
- SAMPLE PUMP MOTOR OVERLOAD
- SAMPLER RUN STATUS
- SAMPLER LOSS OF POWER
- SAMPLE WATER FLOW
- DRY SIDE ROOM FLOOD ALARM
- DRY SIDE ROOM LOW TEMPERATURE
- WET SIDE ROOM LOW TEMPERATURE
- ALARM SILENCE
- ALARM BUZZER



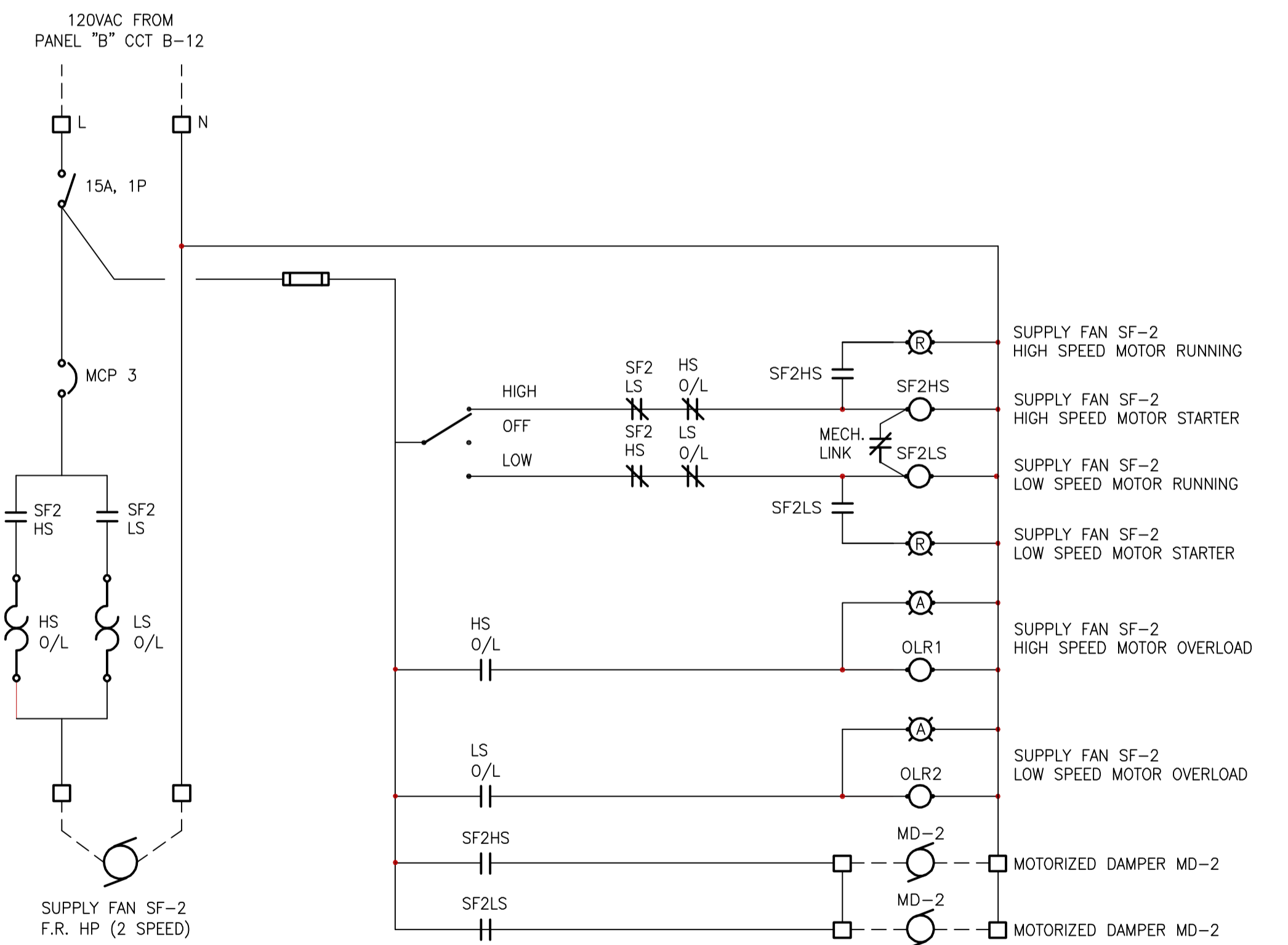
SAMPLE WATER PUMP SP-1 WIRING DIAGRAM



MOTOR STARTER SP-1 PROPOSED LAYOUT  
(TYP. FOR SAMPLE PUMP)

LEGEND

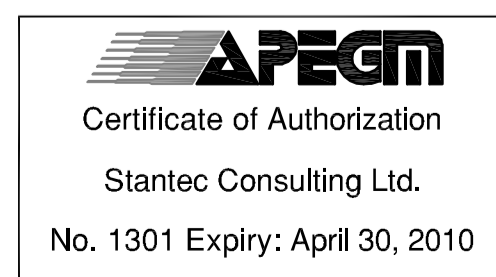
- IDENTIFICATION LAMACOID
- POWER DISCONNECT SWITCH
- HAND-OFF-AUTO SELECTOR SWITCH
- MOTOR RUN PILOT LIGHT
- MOTOR OVERLOAD PILOT LIGHT
- MOTOR OVERLOAD RESET PUSHBUTTON



WET SIDE ROOM SUPPLY FAN SF-2 WIRING

U:\11\2009\594\_09mcc\Sheet Files\06\_electrical\0605E-102.dwg  
 2009-10-13 08:13AM By: amccab

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



LOCATION APPROVED  
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES DATE COMMITTEE  
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M.	81-007		
ELEV.	230.438		
NO.	REVISIONS	DATE	BY
1	REVISED AS PER ADDENDUM #2	09.10.30	
A	ISSUED FOR TENDER	09.10.13	

**Stantec Consulting Ltd.**  
905 Waverley Street, Winnipeg, Manitoba  
Tel 204-489-5900 Fax 204-453-9012

DESIGNED BY	S.T.	CHECKED BY	D.D.
DRAWN BY	S.T.	APPROVED BY	D.D.
HOR. SCALE:		RELEASED FOR CONSTRUCTION:	
VERTICAL:		DATE	09.09.18

ENGINEER'S SEAL  
ORIGINAL SEALED BY  
S. TREBIC  
P. ENG.  
09/10/13  
BID OPPORTUNITY NO.  
709-2009

THE CITY OF WINNIPEG  
WATER AND WASTE DEPARTMENT  
Winnipeg  
**SOUTH END WATER POLLUTION CONTROL CENTRE**  
INSTALLATION OF OUTFALL PIPE,  
EFFLUENT SAMPLING BUILDING AND ASSOCIATE WORKS  
MOTOR SCHEDULE, PANELS SCHEDULE  
MOTOR WIRING DIAGRAM, PANEL LAYOUT  
CITY DRAWING NUMBER  
1-0102A-E0012-001-01  
SHEET 1 OF 1