MOTOR SCHEDULE

No.	HP	DESCRIPTION	VOLTS	ø	STARTER TYPE	STARTER LOCATION	CONTROL	FEEDER
SBV-1	F.R.	VALVE SBV-1 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
SBV-2	F.R.	VALVE SBV-2 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
CV-1	F.R.	CONTROL VALVE CV-1 ACTUATOR	24	1	–	–	AS SHOWN	2 No.12
CV-2	F.R.	CONTROL VALVE CV-2 ACTUATOR	24	1	–	–	AS SHOWN	2 No.12
HRV-1a	1.5	HRV-1 SUPPLY FAN	600	3	FVNR	HRV-1 PANEL	AS SHOWN	3 No.12
HRV-1b	1	HRV-1 RETURN FAN	600	3	FVNR	HRV-1 PANEL	AS SHOWN	3 No.12
P-1a	0.75	BOILER PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
P-1b	0.75	BOILER PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
P-2	0.75	PAD LOOP PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
SMP-1	0.5	SUMP PUMP	120	1	–	–	AS SHOWN	2 No.12
UH-1	0.25	HYDRONIC UNIT HEATER UH-1	120	1	–	–	AS SHOWN	2 No.12
DWH-1	3kW	ELECTRIC WATER HEATER	208	3	–	–	INTEGRAL T-STAT	3 No.12
EF-1	0.5	EXHAUST FAN EF-1	208	3	–	–	AS SHOWN	3 No.12
EF-2	1.5	EXHAUST FAN EF-2	208	3	–	–	AS SHOWN	3 No.12

NEWPCC HAULED WASTEWATER BUILDING MOTOR SCHEDULE

MOTOR SCHEDULE

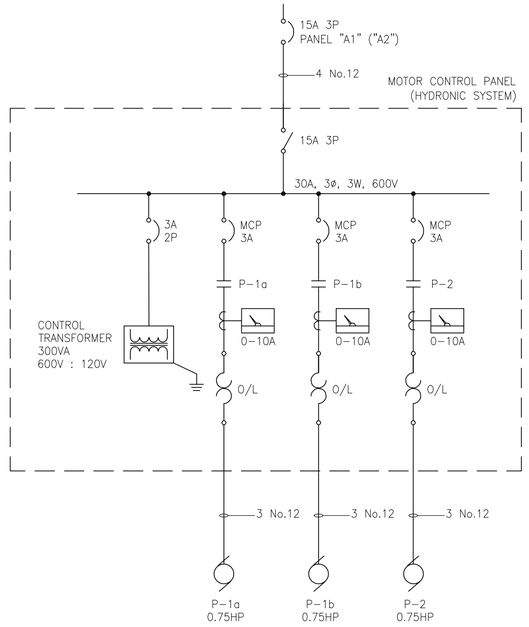
No.	HP	DESCRIPTION	VOLTS	ø	STARTER TYPE	STARTER LOCATION	CONTROL	FEEDER
LP-1	15	LEACHATE PUMP LP-1	600	3	SOFT STARTER	DEW. BLDG. MCC	AS SHOWN	3 No.8
LP-2	15	LEACHATE PUMP LP-2	600	3	SOFT STARTER	DEW. BLDG. MCC	AS SHOWN	3 No.8
LBV-1	F.R.	VALVE LBV-1 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-2	F.R.	VALVE LBV-2 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-3	F.R.	VALVE LBV-3 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-4	F.R.	VALVE LBV-4 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-5	F.R.	VALVE LBV-5 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-6	F.R.	VALVE LBV-6 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
LBV-7	F.R.	VALVE LBV-7 ACTUATOR	600	3	–	–	AS SHOWN	3 No.12
CV-1	F.R.	CONTROL VALVE CV-1 ACTUATOR	24	1	–	–	AS SHOWN	2 No.12
CV-2	F.R.	CONTROL VALVE CV-2 ACTUATOR	24	1	–	–	AS SHOWN	2 No.12
HRV-1a	1.5	HRV-1 SUPPLY FAN	600	3	FVNR	HRV-1 PANEL	AS SHOWN	3 No.12
HRV-1b	1	HRV-1 RETURN FAN	600	3	FVNR	HRV-1 PANEL	AS SHOWN	3 No.12
P-1a	0.75	BOILER PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
P-1b	0.75	BOILER PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
P-2	0.75	PAD LOOP PUMP	600	3	FVNR	MOTOR CTR'L PANEL	AS SHOWN	3 No.12
SMP-1	0.5	SUMP PUMP	120	1	–	–	AS SHOWN	2 No.12
UH-1	0.25	HYDRONIC UNIT HEATER UH-1	120	1	–	–	AS SHOWN	2 No.12
DWH-1	3kW	ELECTRIC WATER HEATER	208	3	–	–	INTEGRAL T-STAT	3 No.12
EF-1	0.5	EXHAUST FAN EF-1	208	3	–	–	AS SHOWN	3 No.12

NEWPCC LEACHATE BUILDING MOTOR SCHEDULE

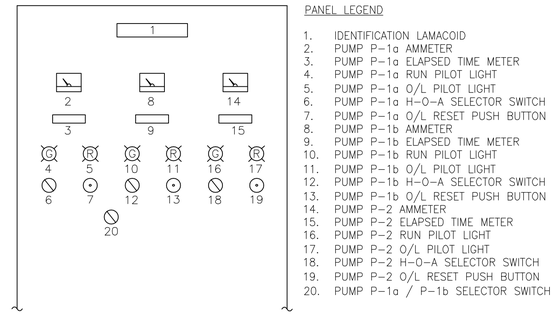
MOTOR SCHEDULE

No.	HP	DESCRIPTION	VOLTS	ø	STARTER TYPE	STARTER LOCATION	CONTROL	FEEDER
LP-3	7.5	LEACHATE PUMP LP-3	600	3	VFD	DIG. GAL. MCC	AS SHOWN	3 No.12
LP-4	7.5	LEACHATE PUMP LP-4	600	3	VFD	DIG. GAL. MCC	AS SHOWN	3 No.12
LP-5	7.5	LEACHATE PUMP LP-5	600	3	VFD	DIG. GAL. MCC	AS SHOWN	2 No.12

NEWPCC DIGESTER GALLERY MOTOR SCHEDULE



HYDRONIC SYSTEM SINGLE LINE DIAGRAM



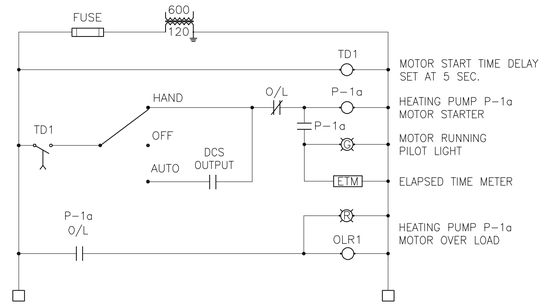
MOTOR CONTROL PANEL TO CONTAIN:

1) MOTOR STARTERS FOR PUMPS P-1a, P-1b AND P-2.
2) TRANSFORMERS 120V/24V FOR BELIMO ACTUATORS FOR CV-1, CV-1 AND CV-2.

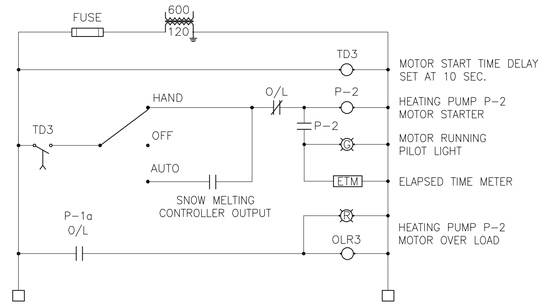
NOTES:

1) ON-OFF BELIMO ACTUATORS CV-1 CONTROLLED BY UH-1 THERMOSTATS.
2) MODULATING BELIMO ACTUATOR CV-2 CONTROLLED BY DCS.

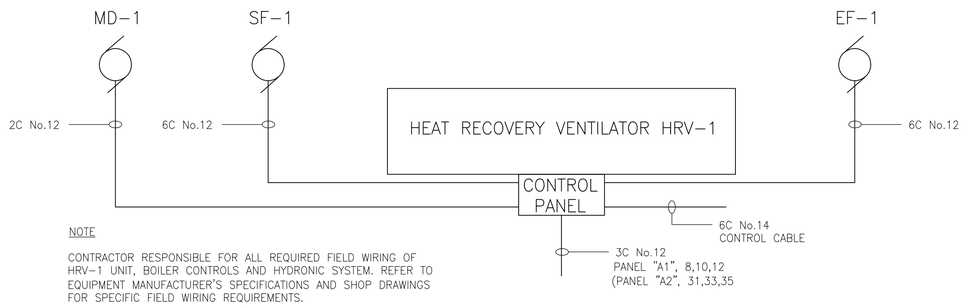
MOTOR CONTROL PANEL (HYDRONIC SYSTEM) PROPOSED LAYOUT



HEATING PUMP P-1a MOTOR WIRING DIAGRAM
(TYP. OF 2)



HEATING PUMP P-2 MOTOR WIRING DIAGRAM



NOTE

CONTRACTOR RESPONSIBLE FOR ALL REQUIRED FIELD WIRING OF HRV-1 UNIT, BOILER CONTROLS AND HYDRONIC SYSTEM. REFER TO EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS FOR SPECIFIC FIELD WIRING REQUIREMENTS.

HEAT RECOVERY VENTILATOR HRV-1 DETAIL

APEGM
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301 Expiry: April 30, 2010

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE — DATE

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.
ELEV.

NO.	REVISIONS	DATE	BY
A	ISSUED FOR TENDER	10.02.16	S.T.

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	–
HOR. SCALE: / VERTICAL:	–	RELEASED FOR CONSTRUCTION:	
DATE	10.02.10	DATE	

ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
Winnipeg

NORTH END WATER POLLUTION CONTROL CENTRE
HAULED WASTEWATER RECEIVING FACILITIES
HAULED WASTEWATER AND LEACHATE RECEIVING BUILDINGS

MOTOR SCHEDULES

TENDER NO.	CITY DRAWING NUMBER	SHEET	OF
822-2009	I-0101A-E0008-001	1	1

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