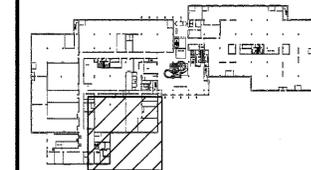
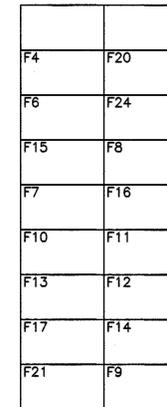




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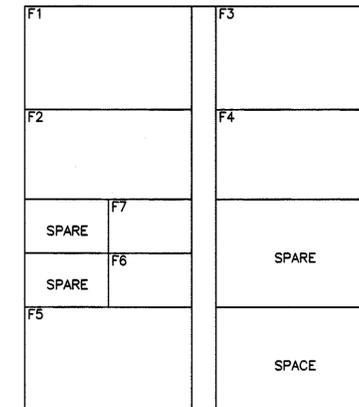
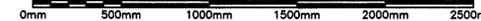


AREA OF WORK



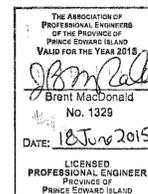
ELEVATION - SWITCHBOARD NE-1 SECTION 3

SCALE : 1:20



ELEVATION - SWITCHBOARD N3

SCALE : 1:20



P4	ISSUED FOR TENDER	JUN 19 2015
P3	ISSUED FOR 100% REVIEW	MAY 4 2015
P2	ISSUED FOR 99% REVIEW	MAR 23 2015
revisions		date



project

JOSEPH A GHIZ BUILDING CHILLER PLANT REPLACEMENT

SUMMERSIDE, PEI

drawing

ELECTRICAL EQUIPMENT SCHEDULE & MCC ELEVATIONS

designed AJ

date JAN, 2015

drawn TC

date JAN, 2015

approved JBM

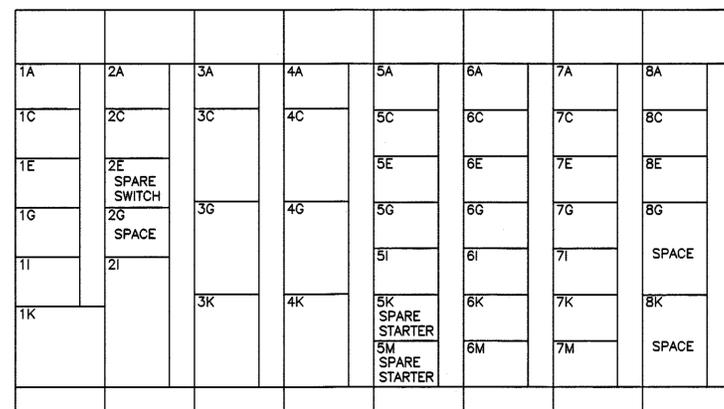
date JAN, 2015

Tender RYAN MCGUIRE PWC Project Manager

project number R055258.001

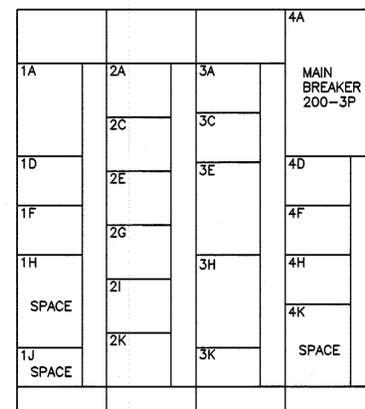
drawing no. E-1

POWER SOURCE	EXISTING CONNECTED EQUIPMENT - TO BE DEMOLISHED					NEW CONNECTED EQUIPMENT - TO BE CONSTRUCTED					CONDUIT	MAX. WIRE LENGTH	NOTES	
	ID	Q/C TYPE RATING	MOTOR HP	LOAD RATING FLA / V / PH	EQUIPMENT DISCONNECT A / V / PH	ID	Q/C TYPE RATING	MECH / HP	LOAD RATING FLA / V / PH	EQUIPMENT DISCONNECT A / V / PH				WIRE SIZE
120V PANEL						SP-1		1/HP	7.2 / 120 / 1	15 / 120 / 1	2x42AWG + #12 BND	25mm EMT	78M	CONTRACTOR TO IDENTIFY NEW CIRCUIT AND PANEL.
SWITCHBOARD N3														
N3-F5	CHILLER NO.1	FUSED SWITCH 450A/600V		360 / 575 / 3	450 / 600 / 3	CH-1	FUSED SWITCH 300A/600V (MCCP 330)	278 ton	204 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30MID - #4 BND (MCA 230)	53mm EMT	195M	RE-USE EXISTING SWITCH, FUSE AS INDICATED.
N6-F5	CHILLER NO.2	FUSED SWITCH 450A/600V		360 / 575 / 3	450 / 600 / 3	CH-2	FUSED SWITCH 300A/600V (MCCP 330)	278 ton	204 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30MID - #4 BND (MCA 230)	53mm EMT	195M	RE-USE EXISTING SWITCH, FUSE AS INDICATED.
N6-F7	SPARE					CH-3	FUSED SWITCH 300A/600V (MCCP 330)	278 ton	204 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30MID - #4 BND (MCA 230)	53mm EMT	195M	USE EXISTING SPARE SWITCH, FUSE AS INDICATED.
N6-SECTION 1	SPACE					P-96	FUSED SWITCH 15AT/30AF	3 HP	6.1 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	282M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD, MOTOR CONTROLLER INTEGRAL TO PUMP UNIT.
N6-SECTION 1	SPACE					P-94	FUSED SWITCH 15AT/30AF	3 HP	6.1 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	282M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD, MOTOR CONTROLLER INTEGRAL TO PUMP UNIT.
N6-SECTION 1	SPACE					P-95	FUSED SWITCH 15AT/30AF	3 HP	6.1 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	282M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD, MOTOR CONTROLLER INTEGRAL TO PUMP UNIT.
N6-SECTION 1	SPACE					CT-1	FUSED SWITCH 30AT/30AF	CONTROL PANEL (CP), INCLUDES 2 X 3 HP MOTORS	10 / 575 / 3	SWITCH INTEGRAL TO CP MTR1 - 30 / 600 / 3 - 3R MTR2 - 30 / 600 / 3 - 3R	CP - 30K12AWG + #12 BND MTR1 - 30K12AWG + #12 BND MTR2 - 30K12AWG + #12 BND	EMT INDOORS PVC OUTDOORS & UNDERGROUND, DETAILS ON DRAWINGS	CP - 57M MTR1 - 430M MTR2 - 430M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD TO SUPPLY CONTROL PANEL, FEED MOTORS FROM CONTROL PANEL, INSTALL NEVA 3R MOTOR DISCONNECTS AT OUTDOOR MOTOR LOCATIONS.
N6-SECTION 2	SPACE					CT-2	FUSED SWITCH 30AT/30AF	CONTROL PANEL (CP), INCLUDES 2 X 3 HP MOTORS	10 / 575 / 3	SWITCH INTEGRAL TO CP MTR1 - 30 / 600 / 3 - 3R MTR2 - 30 / 600 / 3 - 3R	CP - 30K12AWG + #12 BND MTR1 - 30K12AWG + #12 BND MTR2 - 30K12AWG + #12 BND	EMT INDOORS PVC OUTDOORS & UNDERGROUND, DETAILS ON DRAWINGS	CP - 57M MTR1 - 430M MTR2 - 430M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD TO SUPPLY CONTROL PANEL, FEED MOTORS FROM CONTROL PANEL, INSTALL NEVA 3R MOTOR DISCONNECTS AT OUTDOOR MOTOR LOCATIONS.
N6-SECTION 2	SPACE					CT-3	FUSED SWITCH 30AT/30AF	CONTROL PANEL (CP), INCLUDES 2 X 3 HP MOTORS	10 / 575 / 3	SWITCH INTEGRAL TO CP MTR1 - 30 / 600 / 3 - 3R MTR2 - 30 / 600 / 3 - 3R	CP - 30K12AWG + #12 BND MTR1 - 30K12AWG + #12 BND MTR2 - 30K12AWG + #12 BND	EMT INDOORS PVC OUTDOORS & UNDERGROUND, DETAILS ON DRAWINGS	CP - 57M MTR1 - 430M MTR2 - 430M	INSTALL NEW FUSED SWITCH IN EXISTING SWITCHBOARD TO SUPPLY CONTROL PANEL, FEED MOTORS FROM CONTROL PANEL, INSTALL NEVA 3R MOTOR DISCONNECTS AT OUTDOOR MOTOR LOCATIONS.
MCC N6-02														
MCC N6-02-20	COOLING TOWER CONTROL PANEL CT-D1 & CT-02	FUSED SWITCH	2 X 50	1 / 575 / 3	100 / 600 / 3	SPARE								REMOVE EXISTING CONTROL PANELS, VFDs, AND DISCONNECT SWITCHES.
MCC N6-02-3K	P03-M	COMBINATION STARTER	40	37.2 / 575 / 3	100 / 600 / 3	P-3	COMBINATION STARTER	30 HP	32 / 575 / 3	60 / 600 / 3	30C8AWG + #10 BND	22mm EMT	134M	CHANGE OVERLOADS IN EXISTING STARTER TO MATCH NEW MOTOR SIZE, INSTALL NEW DISCONNECT SWITCH ADJACENT TO NEW MOTOR.
MCC N6-02-4C	P04-M	COMBINATION STARTER	40	37.2 / 575 / 3	100 / 600 / 3	P-4	COMBINATION STARTER	30 HP	32 / 575 / 3	60 / 600 / 3	30C8AWG + #10 BND	22mm EMT	134M	CHANGE OVERLOADS IN EXISTING STARTER TO MATCH NEW MOTOR SIZE, INSTALL NEW DISCONNECT SWITCH ADJACENT TO NEW MOTOR.
MCC N6-02-40	P06-M	COMBINATION STARTER	25	23.5 / 575 / 3	60 / 600 / 3	P-27	COMBINATION STARTER	25 HP	27 / 575 / 3	60 / 600 / 3	30C8AWG + #10 BND	22mm EMT	134M	CHANGE OVERLOADS IN EXISTING STARTER TO MATCH NEW MOTOR SIZE, INSTALL NEW DISCONNECT SWITCH ADJACENT TO NEW MOTOR.
MCC N6-02-4K	P07-M	COMBINATION STARTER	25	23.5 / 575 / 3	60 / 600 / 3	P-28	COMBINATION STARTER	25 HP	27 / 575 / 3	60 / 600 / 3	30C8AWG + #10 BND	22mm EMT	134M	CHANGE OVERLOADS IN EXISTING STARTER TO MATCH NEW MOTOR SIZE, INSTALL NEW DISCONNECT SWITCH ADJACENT TO NEW MOTOR.
MCC N6-02-71	CHILLER EXHAUST EF-20	COMBINATION STARTER	1.5	2.4 / 575 / 3	30 / 600 / 3	SPARE								
MCC N6-02-8K	SPACE					P-99	COMBINATION STARTER	25 HP	27 / 575 / 3	60 / 600 / 3	30C8AWG + #10 BND	22mm EMT	134M	INSTALL A NEW COMBINATION FVNR 25 HP MOTOR STARTER IN EXISTING BLANK COMPARTMENT AS INDICATED. INSTALL NEW DISCONNECT SWITCH ADJACENT TO NEW MOTOR.
SWITCHBOARD N61 - GENERATOR BACKED-UP														
N61-F08	MCQUAY CHILLER 1800	FUSED SWITCH 30AT/30AF		66 / 575 / 3	100 / 600 / 3	SPARE								
N61-F09	P-62A	FUSED SWITCH 30AT/30AF	7.5	8.2 / 575 / 3	30 / 600 / 3	ELIMINATED								
N61-F10	FC-01	FUSED SWITCH 30AT/30AF		18 / 575 / 3	30 / 600 / 3	SPARE								CONTRACTOR TO IDENTIFY EXISTING POWER SOURCE.
N61-F14	P-65A	FUSED SWITCH 15AT/30AF	5	5.6 / 575 / 3	30 / 600 / 3	CH-4 TRANSFORMER 1500VA	FUSED SWITCH 175AT/200AF	100 TON	132 / 575 / 3	NOT REQ'D FOR XMR, INTEGRAL TO MECH EQUIPMENT	600V - 30K10 - #6 BND 480V - 30K40 - #4 BND + #6 GND (MCA 165)	600V - 53mm EMT 480V - 53mm EMT	600V - 317M 480V - 302M	CHILLER FID VIA NEW 150 KVA TRANSFORMER, 600V TO 480V. REMOVE EXISTING FUSED SWITCHES AT F14 AND F08, REPLACE WITH NEW FUSED SWITCH AT F14 AS INDICATED. INSTALL PRIMARY AND SECONDARY FEEDERS AS INDICATED.
N61-F16	P-65B	FUSED SWITCH 30AT/30AF	5	5.6 / 575 / 3	30 / 600 / 3	SPARE								
N61-F24	P-62B	FUSED SWITCH 30AT/30AF	7.5	8.2 / 575 / 3	30 / 600 / 3	SPARE								
MCC 1A - GENERATOR BACKED-UP														
MCC 1A-1A	SMART CHILLER	FUSED SWITCH 30AT/125AF	75	53 / 575 / 3	100 / 600 / 3	SPARE								
MCC 1A-2A	P-82	COMBINATION STARTER	1.5	1.64 / 575 / 3	30 / 600 / 3	P-62A	FUSED SWITCH 15AT	3 HP	3.9 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	440M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.
MCC 1A-2C	P-88	COMBINATION STARTER	1.5	1.64 / 575 / 3	30 / 600 / 3	P-62B	FUSED SWITCH 15AT	3 HP	3.9 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	440M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.
MCC 1A-2E	P-84	COMBINATION STARTER	7.5	7.32 / 575 / 3	30 / 600 / 3	P-82	FUSED SWITCH 15AT	3 HP	3.9 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	440M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.
MCC 1A-20	P-85	COMBINATION STARTER	7.5	7.32 / 575 / 3	30 / 600 / 3	P-83	FUSED SWITCH 15AT	3 HP	3.9 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K12AWG + #12 BND	22mm EMT	440M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.
MCC 1A-21	P-88	COMBINATION STARTER	3	3.15 / 575 / 3	30 / 600 / 3	CHILLER EXHAUST, EF-20	COMBINATION STARTER	1.5 HP	2.4 / 575 / 3	30 / 600 / 3	30K12AWG + #12 BND	22mm EMT	378M	CHANGE OVER LOADS TO MATCH REVISED SERVICE
MCC 1A-2K	P-89	COMBINATION STARTER	3	3.15 / 575 / 3	30 / 600 / 3	SPARE								
MCC 1A-3E	FC-02	FUSED SWITCH 40AT/125AF		27 / 575 / 3	60 / 600 / 3	CH-5 TRANSFORMER 1500VA	FUSED SWITCH 175AT/200AF	100 TON	132 / 575 / 3	NOT REQ'D FOR XMR, INTEGRAL TO MECH EQUIPMENT	600V - 30K10 - #6 BND 480V - 30K40 - #4 BND + #6 GND (MCA 165)	600V - 53mm EMT 480V - 53mm EMT	600V - 317M 480V - 302M	CHILLER FID VIA NEW 150 KVA TRANSFORMER, 600V TO 480V. REMOVE EXISTING STARTERS FC-02 AND FC-08 AND REPLACE WITH NEW FUSED SWITCH AS INDICATED. INSTALL PRIMARY AND SECONDARY FEEDERS AS INDICATED.
MCC 1A-3H	FC-08	FUSED SWITCH 40AT/125AF		27 / 575 / 3	60 / 600 / 3	ELIMINATED								
MCC 1A-3K	P-86	COMBINATION STARTER	3	3.15 / 575 / 3	30 / 600 / 3	COND-4	FUSED SWITCH 40AT (MCCP 40)	6 X 2 HP	16.8 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K10AWG + #10 BND (MCA 30)	EMT INDOORS PVC OUTDOORS & UNDERGROUND, DETAILS ON DRAWINGS	169M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.
MCC 1A-4F	P-87	COMBINATION STARTER	3	3.15 / 575 / 3	30 / 600 / 3	COND-5	FUSED SWITCH 40AT (MCCP 40)	6 X 2 HP	16.8 / 575 / 3	INTEGRAL TO MECH EQUIPMENT	30K10AWG + #10 BND (MCA 30)	EMT INDOORS PVC OUTDOORS & UNDERGROUND, DETAILS ON DRAWINGS	169M	CONVERT EXISTING STARTER TO FUSED DISCONNECT AS INDICATED.



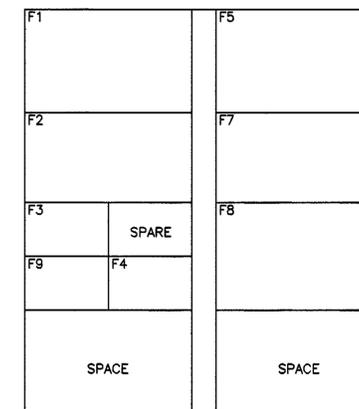
ELEVATION - MCC N6-02

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ELEVATION - MCC 1A

SCALE : 1:20



ELEVATION - SWITCHBOARD N6

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