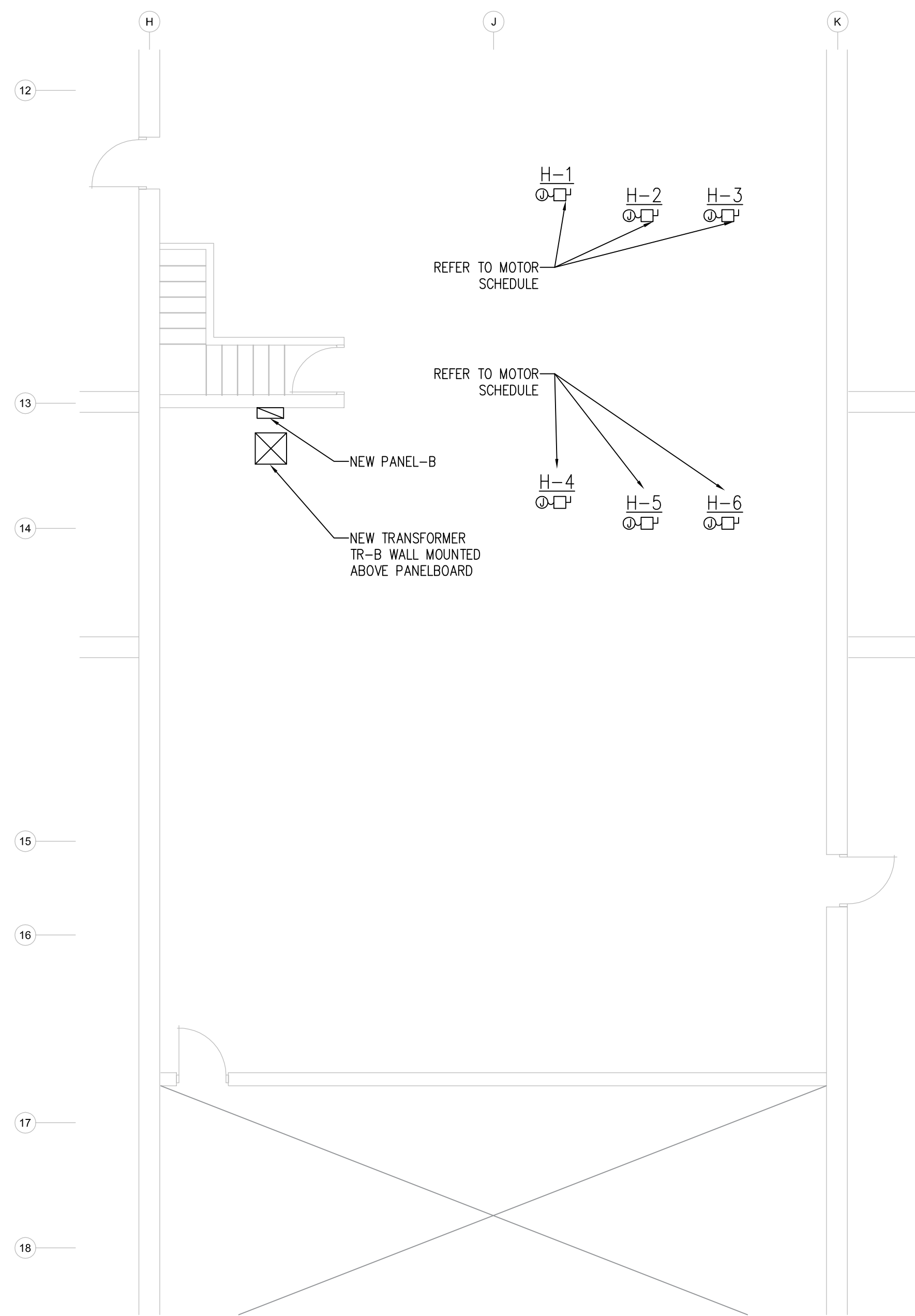
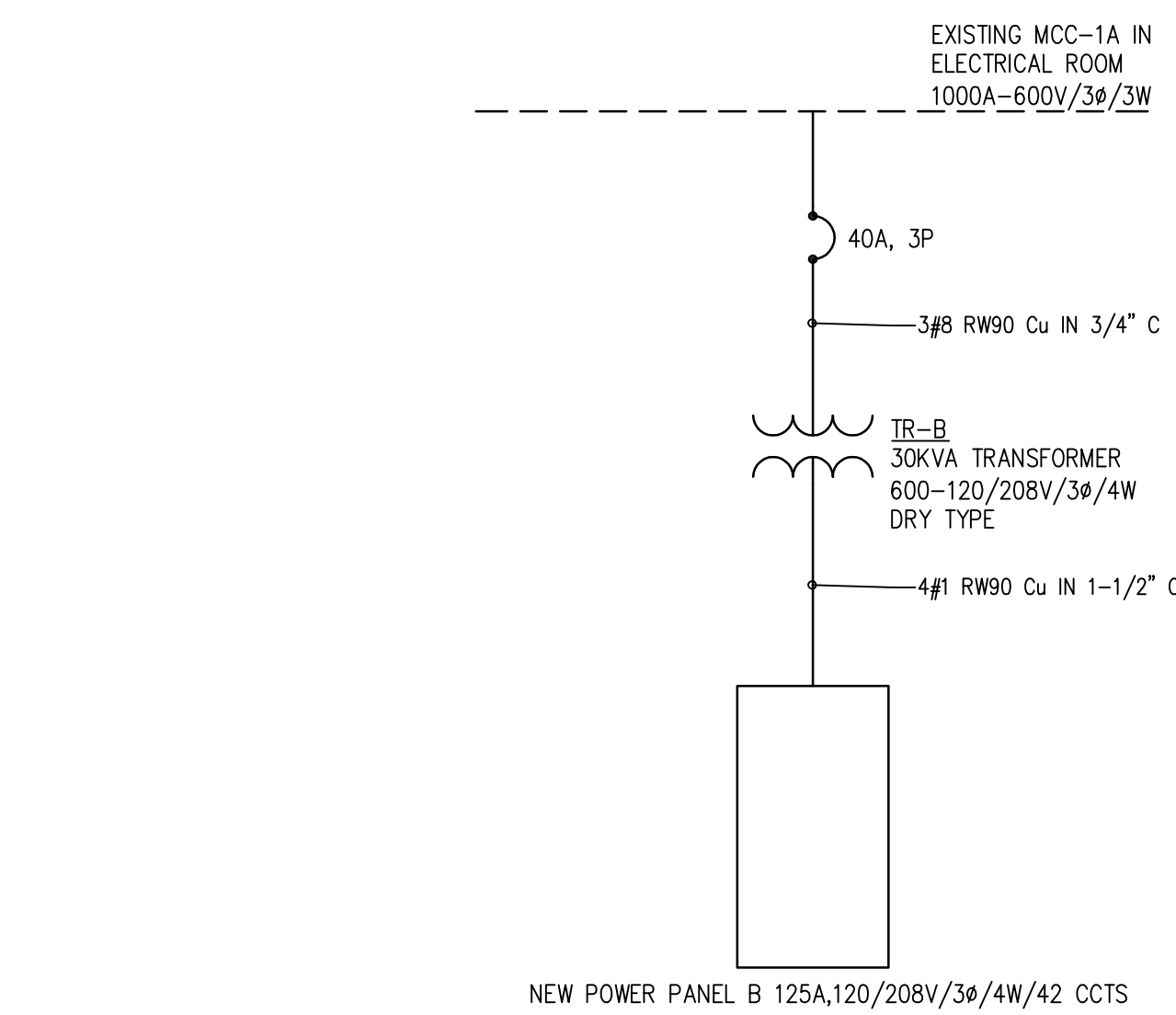


1 FAN ROOM 2670 - ELECTRICAL DEMOLITION  
E2 1/75



2 FAN ROOM 2670 - NEW ELECTRICAL LAYOUT  
E2 1/75



3 FAN ROOM - PARTIAL ELECTRICAL DISTRIBUTION DIAGRAM  
E2 NTS

PANELBOARD DIRECTORY B											
ITEM	LOAD (kW)	OCB	C	C	ITEM	LOAD	OCB				
HUMIDIFIER H-1	0.84	15A	1	2	HUMIDIFIER H-2	0.84	15A				
HUMIDIFIER H-3	0.84	15A	3	4	HUMIDIFIER H-4	0.612	15A				
HUMIDIFIER H-5	0.612	15A	5	6	HUMIDIFIER H-6	0.24	15A				
SPARE		15A	7	8	SPARE		15A				
SPARE		15A	9	10	SPARE		15A				
SPARE		15A	11	12	SPARE		15A				
SPACE			13	14	SPACE						
SPACE			15	16	SPACE						
SPACE			17	18	SPACE						
SPACE			19	20	SPACE						
SPACE			21	22	SPACE						
SPACE			23	24	SPACE						
SPACE			25	26	SPACE						
SPACE			27	28	SPACE						
SPACE			29	30	SPACE						
SPACE			31	32	SPACE						
SPACE			33	34	SPACE						
SPACE			35	36	SPACE						
SPACE			37	38	SPACE						
SPACE			39	40	SPACE						
SPACE			41	42	SPACE						
NOTES: CONFIRM PANEL NAMING DESIGNATION WITH DEPARTMENTAL REPRESENTATIVE.								MOUNTING: SURFACE RATING: 125A, 120/208V/3ø/4W			

MECHANICAL EQUIPMENT SCHEDULE																						
EQUIPMENT			ELECTRICAL CHARACTERISTICS			PACKAGED UNIT	STARTERS					CONTROLS				DRIVE ISOLATION TRANSFORMER	CIRCUITRY INFORMATION				NOTES	
ITEM	DESCRIPTION	LOCATION	HP/KW	AMPS	VOLTS/ø		TYPE	HOA	PILOT LIGHT	PUSH BUTTON	SUPPLIED BY	TYPE	SUPPLIED BY	INSTALLED BY	WIRED BY		PANEL—CCT #	O.C.P.	WIRE	CONDUIT		
B-1	GAS FIRED BOILER	MECHANICAL ROOM		8.0A	600V/3ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			EXISTING MCC-1A	15A-3P	3 #12 AWG RW90 Cu + GRD.	21mm	EMERGENCY POWER/PROVIDE NEW ELECTRICAL
B-2	GAS FIRED BOILER	MECHANICAL ROOM		8.0A	600V/3ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			EXISTING MCC-1A	15A-3P	3 #12 AWG RW90 Cu + GRD.	21mm	EMERGENCY POWER/PROVIDE NEW ELECTRICAL
B-3	GAS FIRED BOILER	MECHANICAL ROOM		8.0A	600V/3ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			EXISTING MCC-1A	15A-3P	3 #12 AWG RW90 Cu + GRD.	21mm	EMERGENCY POWER/PROVIDE NEW ELECTRICAL
H-1	HUMIDIFIER	FAN ROOM		7.0 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-1	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
H-2	HUMIDIFIER	FAN ROOM		7.0 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-2	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
H-3	HUMIDIFIER	FAN ROOM		7.0 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-3	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
H-4	HUMIDIFIER	FAN ROOM		5.1 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-4	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
H-5	HUMIDIFIER	FAN ROOM		5.1 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-5	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
H-6	HUMIDIFIER	FAN ROOM		2.0 A	120V/1ø	X	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____	_____	P A C K A G E D	_____			B-6	15A-1P	2 #12 AWG RW90 Cu + GRD.	21mm	
P-1	BOILER RECIRCULATION PUMP	MECHANICAL ROOM	10 HP	11.0 A	600V/3ø		_____	VFD	_____	_____						14KVA	EXISTING MCC-1A	20A-3P	3 #12 AWG RWRx VFD CABLE Cu + GRD.	21mm	PROVIDE NEW ELECTRICAL/LEAD/LAG/REFER TO NOTE #6	
P-2	BOILER RECIRCULATION PUMP	MECHANICAL ROOM	10 HP	11.0 A	600V/3ø		_____	VFD	_____	_____						14KVA	EXISTING MCC-1A	20A-3P	3 #12 AWG RWRx VFD CABLE Cu + GRD.	21mm	PROVIDE NEW ELECTRICAL/LEAD/LAG/REFER TO NOTE #6	
P-23	BOILER RADIATION PUMP	MECHANICAL ROOM	3 HP	3.9 A	600V/3ø		_____	VFD	_____	_____						7.5KVA	EXISTING MCC-1A	15A-3P	3 #12 AWG RWRx VFD CABLE Cu + GRD.	21mm	PROVIDE NEW ELECTRICAL/LEAD/LAG/REFER TO NOTE #6	
P-24	BOILER RADIATION PUMP	MECHANICAL ROOM	3 HP	3.9 A	600V/3ø		_____	VFD	_____	_____						7.5KVA	REFER TO NOTE #5	15A-3P	3 #12 AWG RWRx VFD CABLE Cu + GRD.	21mm	PROVIDE NEW ELECTRICAL/LEAD/LAG/REFER TO NOTE #5	
NOTES:																						
1. DIVISION 26 TO CONFIRM FINAL LOCATION OF ALL EQUIPMENT WITH MECHANICAL DRAWINGS PRIOR TO ROUGHING IN OF CONDUIT. CONFIRM FINAL EQUIPMENT RATINGS WITH MECHANICAL PRIOR TO ROUGHING-IN OF CONDUIT, WIRING AND CIRCUIT BREAKERS. SIZE OVERLOADS ACCORDINGLY. CONFIRM FINAL RATINGS WITH EQUIPMENT NAMEPLATES. INFORM DEPARTMENTAL REPRESENTATIVES PRIOR TO ROUGHING IN OF EQUIPMENT.																						
2. ALL CONTROL WIRING TO BE BY DIVISION 23 UNLESS OTHERWISE NOTED. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS. ALL CONDUIT REQUIRED FOR CONTROLS TO BE SUPPLIED AND INSTALLED BY DIVISION 26. COORDINATE ALL WORK WITH DIVISION 23.																						
3. PROVIDE DISCONNECTS FOR ALL EQUIPMENT AS REQUIRED.																						
4. PROVIDE CONTROL TRANSFORMERS FOR ALL VAV'S. CONFIRM LOCATIONS AND QUANTITIES WITH MECHANICAL. COORDINATE ALL WORK WITH MECHANICAL CONTRACTOR.																						
5. P-24 TO BE FED FROM EXISTING MCC-1A. REMOVE EXISTING B-4 CELL AND REPLACE WITH NEW CIRCUIT BREAKER CELL.																						
6. REPLACE EXISTING STARTER CELLS FOR P-1, P-2 AND P-23 WITH NEW CIRCUIT BREAKER CELLS.																						
7. REPLACE COMBINATION STARTERS FOR ALL PUMPS EQUIPPED WITH VFD'S.																						

Environment Canada

Real Property Management Division

Technical Services

Division Gestion des biens Immobilier

Services Techniques

Building Key Plan

LEGEND

PROFESSIONAL ENGINEER

HA

CEAGANAS

MEMBER 2016

2016-01-20

2016-01-20

2016-01-20

SASKATCHEWAN

Association of Professional Engineers & Geoscientists of Saskatchewan

CERTIFICATE OF AUTHORIZATION

HDK Consulting Incorporated

Number 30340

Permission to Consult held by:

Discipline: ELECTRICAL

Sk. Reg. No.: 26785

Signature: [Signature]

HDK

HDK CONSULTING INCORPORATED

Mechanical | Electrical | Communications | Security Engineering

1

ISSUED FOR CONSTRUCTION

30-JUN-2017

0

ISSUED FOR BIL REVIEW

28-APR-2017

revisions

description

date

A

C

A detail no.  
no. du detail

A

B

C

B location drawing no.  
sur dessin no.

A

B

C

C drawing no.  
dessin no.

project

project

NHRC

MECHANICAL UPGRADES

BOILERS REPLACEMENT

NATIONAL HYDROLOGY RESEARCH CENTRE

11 INNOVATION BOULEVARD

SASKATOON, SASKATCHEWAN

drawing

dessin

FAN ROOM 2670-DEMO

& NEW ELEC'L LAYOUT

SCHEDULE & DETAIL

Designed By  
PL  
2017/04/28

Conçu par  
(yyyy/mm/dd)

Drawn By  
RD  
2017/04/28

Dessiné par  
(yyyy/mm/dd)

Reviewed By  
HCC  
2017/06/19

Examiné par  
(yyyy/mm/dd)

Approved By  
HCC  
2017/06/23

Approuvé par  
(yyyy/mm/dd)

Tender

Soumission

NIKOLAS FEHR

Project Manager

Administrateur de projets

EC Proj no.

NHRC-010

Consultant Proj no.

16131

Drawing no.

No. du dessin

E2

PW55C A0 (1189a04)

0 10 20mm 40 60 80 100 120 140 160 180 200mm