

WILLIAMS
ENGINEERING
CANADA



PERMIT TO PRACTICE
WILLIAMS ENGINEERING CANADA INC
 Signature [Signature]
 Date 2017.01.11
PERMIT NUMBER: P 10527
 The Association of Professional Engineers,
 Geologists and Geophysicists of Alberta

5.	ISSUED FOR BP/TENDER	17-01-11
4.	REISSUED FOR TENDER	16-11-07
3.	ISSUED FOR TENDER	16-08-22
2.	ISSUED FOR 99% REVIEW	16-06-10
1.	ISSUED FOR 50% REVIEW	16-05-16

Client/client

Western and Northern Region Ouest et Nord du Canada

PCA - MAINTENANCE BANFF COMPOUND REHABILITATION

Designed by/Concept par AB

Project Manager/Administrateur de Projets
KT













Scale:

ELECTRICAL SYMBOL LEGEND, DRAWING LEGEND AND MECHANICAL SCHEDULE

Project No./No. du projet 33374.00	Sheet/Feuille E100	Revision no./La Révision no. 5
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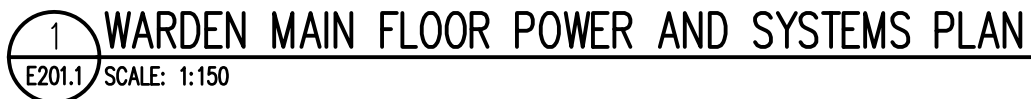
CONTROL	MCC KEY OR	CC
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EQUIP. NO.	DESCRIPTION	LOCATION	HP/W/MCA	VOLT/ PHASE	DISCONNECT/SWITCH			STARTER/VFD			CONTROL			MCC KEY OR NO.	CCT.	FUSE/ BREAKER SIZE	FEEDER	REMARKS	LEGEND
					SUPPLIED	INSTALLED	WIRED	TYPE	SIZE	SUPPLIED	INSTALLED	WIRED	TYPE						
MUA-1	MAKEUP AIR UNIT	WARDEN ROOF	35.4A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	Panel WY-19,21,23	50A	3#6+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	M - MECHANICAL
MUA-2	MAKEUP AIR UNIT	WARDEN ROOF	26.7A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	Panel WY-25,27,29	40A	3#6+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	E - ELECTRICAL
MUA-3	MAKEUP AIR UNIT	WARDEN ROOF	8.8A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	Panel WY-31,33,35	15A	3#12+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	None="none (ie wall switch)
MUA-4	MAKEUP AIR UNIT	TRADES BOILER ROOM	23.9A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	Panel TY-32,34,36	35A	3#10+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	MN="Manual starter
MUA-5	MAKEUP AIR UNIT	GARAGE ROOF	31.8A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MCC 'S'	50A	3#6+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	MG="Magnetic starter (HOA)
MUA-6	MAKEUP AIR UNIT	GARAGE ROOF	31.8A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MCC 'W'	50A	3#6+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	PKG=" Packaged unit. (Div20.)
MUA-7	MAKEUP AIR UNIT	GARAGE ROOF	45.8A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MCC 'S'	70A	3#4+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	VFD="Variable frequency drive
AHU-1	AIR HANDLING UNIT	WARDEN ROOF	57A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MDP	80A	3#6+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	1- THERMOSTAT
AHU-2	AIR HANDLING UNIT	WARDEN ROOF	39.2A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MDP	50A	3#8+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	MS- MANUAL SWITCH
AHU-3	AIR HANDLING UNIT	GARAGE ROOF	30.4A	208V/3PH	M	M	E	PKG	M	M	E	M	M	M	MCC 'S'	45A	3#8+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	TS- TAMPER SWITCH
RTU-1	ROOFTOP UNIT	WARDEN ROOF	21.7A	208V/1PH	M	M	E	PKG	M	M	E	M	M	M	Panel WY-1,3	30A	2#10+GND	DISCONNECT, STARTER,GFCI RECEPTACLE PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL	B.A.S="BUILDING AUTOMATION SYSTEM
B-1	BOILERS	TRADES BOILER ROOM	3/4 HP	208V/3PH	E	E	E	PKG	E	E	E				Panel TY-2,4,6	15A	3#12+GND	DISCONNECT AND BLOWER MANUAL MOTOR STARTER PROVIDED BY ELECTRICAL. P-1 STARTER INTEGRAL TO BOILER WITH HOA	
B-2	BOILERS	TRADES BOILER ROOM	3/4 HP	208V/3PH	E	E	E	PKG	E	E	E				Panel TY-38,40,42	15A	3#12+GND	DISCONNECT AND BLOWER MANUAL MOTOR STARTER PROVIDED BY ELECTRICAL. P-2 STARTER INTEGRAL TO BOILER WITH HOA	
P-1	BOILER PUMP	TRADES BOILER ROOM	1 1/2 HP	208V/3PH	M	M	E	MG	E	E	E	I	E	E	Panel TY-17,19,21	15A	3#12+GND	DISCONNECT AND MOTOR STARTER BY MECHANICAL, INTERLOCK WITH BOILER, WIRED BY ELECTRICAL	
P-2	BOILER PUMP	TRADES BOILER ROOM	1 1/2 HP	208V/3PH	M	M	E	MG	E	E	E	I	E	E	Panel TY-23,25,27	15A	3#12+GND	DISCONNECT AND MOTOR STARTER BY MECHANICAL, INTERLOCK WITH BOILER, WIRED BY ELECTRICAL	
P-3	CIRCULATION PUMP	TRADES BOILER ROOM	3 HP	208V/3PH	M	M	E	VFD	M	M	E	O	M	M	Panel TY-29,31,33	25A	3#12+GND	DISCONNECT AND VFD PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL. CONTROLLED BY BMS	
P-4	CIRCULATION PUMP	TRADES BOILER ROOM	3 HP	208V/3PH	M	M	E	VFD	M	M	E	O	M	M	Panel TY-35,37,39	25A	3#12+GND	DISCONNECT AND VFD PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL. CONTROLLED BY BMS	
P-5	CIRCULATION PUMP	TRADES BOILER ROOM	3 HP	208V/3PH	M	M	E	VFD	M	M	E	O	M	M	Panel TY-8,10,12	25A	3#12+GND	DISCONNECT AND VFD PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL. CONTROLLED BY BMS	
P-6	CIRCULATION PUMP	TRADES BOILER ROOM	3 HP	208V/3PH	M	M	E	VFD	M	M	E	O	M	M	Panel TY-14,16,18	25A	3#12+GND	DISCONNECT AND VFD PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL. CONTROLLED BY BMS	
EF-1	EXHAUST FAN	WARDEN ROOF	3 / 4 HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel WY-14,16,18	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED BY MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-2	EXHAUST FAN	WARDEN ROOF	1 HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel WY-20,22,24	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED BY MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-3	EXHAUST FAN	WARDEN ROOF	1 / 6 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel WY-5	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-4	EXHAUST FAN	WARDEN ROOF	1 / 60 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel WY-7	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-5	EXHAUST FAN	WARDEN ROOF	1 / 60 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel WY-9	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-6	EXHAUST FAN	WARDEN ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	O	E	E	Panel WY-11	15A	2#12+GND	DISCONNECT AND WEATHERPROOF 1 HOUR MANUAL WOUND TIMER BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-7	EXHAUST FAN	WARDEN ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel WY-13	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-8	EXHAUST FAN	WARDEN ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	O	E	E	Panel WY-15	15A	2#12+GND	DISCONNECT AND WEATHERPROOF 1 HOUR MANUAL WOUND TIMER BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-9	EXHAUST FAN	TECH SERV. ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel WY-4	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-10A	EXHAUST FAN	TECH SERV. ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel TY-3	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-10B	EXHAUST FAN	TECH SERV. ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel TY-5	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-11	EXHAUST FAN	TRADES ROOF	1 / 10 HP	120V/1PH	M	M	E	MN	E	E	E	M	M	M	Panel TY-7	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-12	EXHAUST FAN	GARAGE ROOF	1HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel GP-1,3,5	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-13	EXHAUST FAN	GARAGE ROOF	3 / 4 HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel GP-7,9,11	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-14	EXHAUST FAN	GARAGE ROOF	2HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel GP-13,15,17	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-15	EXHAUST FAN	GARAGE ROOF	3 / 4 HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel GP-19,21,23	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-16	EXHAUST FAN	GARAGE ROOF	1.5 HP	208V/3PH	M	M	E	MG	M	M	E	I	E	E	Panel GP-25,27,29	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, INTERLOCK WITH MUA, WIRED BY ELECTRICAL	
EF-17	EXHAUST FAN	GARAGE ROOF	2HP	208V/3PH	M	M	E	MG	M	M	E	M	M	M	Panel GP-31,33,35	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, WIRED BY ELECTRICAL	
EF-18	EXHAUST FAN	GARAGE ROOF	2HP	208V/3PH	M	M	E	MG	M	M	E	M	M	M	Panel GP-37,39,41	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, WIRED BY ELECTRICAL	
EF-19	EXHAUST FAN	GARAGE ROOF	3HP	208V/3PH	M	M	E	MG	M	M	E	M	M	M	Panel GP-2,4,6	25A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, WIRED BY ELECTRICAL	
EF-20	EXHAUST FAN	GARAGE ROOF	2HP	208V/3PH	M	M	E	MG	M	M	E	M	M	M	Panel GP-8,10,12	15A	3#12+GND	DISCONNECT AND MOTOR STARTER PROVIDED MECHANICAL, WIRED BY ELECTRICAL	
EF-21	EXHAUST FAN	GARAGE ROOF	FRAC	120V/1PH	M	M	E	MN	E	E	E	M	M	M	USE EXISTING CIRCUIT	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-22	EXHAUST FAN	GARAGE ROOF	FRAC	120V/1PH	M	M	E	MN	E	E	E	M	M	M	USE EXISTING CIRCUIT	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-23	EXHAUST FAN	GARAGE ROOF	1/4 HP	120V/1PH	M	M	E	MG	M	M	E		M	M	USE EXISTING CIRCUIT	15A	2#12+GND	DISCONNECT, WEATHERPROOF 1 HOUR MANUAL WOUND TIMER AND MOTOR STARTOR BY MECHANICAL, WIRED BY ELECTRICAL	
EF-24	EXHAUST FAN	TRADES CEILING PLENUM	1/60 HP	120V/1PH	M	M	E	MN	E	E	E		M	M	TY-13	15A	2#12+GND	DISCONNECT BY MECHANICAL, WEATHERPROOF MANUAL MOTOR SWITCH PROVIDED BY ELECTRICAL	
EF-25	EXHAUST FAN	GARAGE ROOF	3 / 4 HP	208V/3PH	E	E	E	MG	E	E	E				PANEL N-21	15A	3#12+GND	DISCONNECT AND WEATHERPROOF MOTOR STARTER PROVIDED BY ELECTRICAL	
EF-26	EXHAUST FAN	GARAGE ROOF	3 / 4 HP	208V/3PH	E	E	E	MG	E	E	E				PANEL N-23	15A	3#12+GND	DISCONNECT AND WEATHERPROOF MOTOR STARTER PROVIDED BY ELECTRICAL	
BMS	BUILDING AUTOMATION WORKSTATION	TRADES, BOILER ROOM	FRACTIONAL	120V/1PH								O					2#12+GND	HEADS END, CONTROLLERS PROVIDED BY CONTROLS CONTRACTOR	
BMS	BUILDING AUTOMATION TRANSFORMER	VARIOUS	FRACTIONAL	120V/1PH								O						CONTROLS PROVIDED BY CONTROLS CONTRACTOR	
CH-1,2,3,4,5	EXISTING CABINET UNIT HEATERS	VARIOUS		120V/1PH								T						EXISTING TO REMAIN, LINE VOLTAGE THERMOSTATS	
UH-1,2,3,4	EXISTING UNIT HEATERS	VARIOUS		120V/1PH								T						EXISTING TO REMAIN, LINE VOLTAGE THERMOSTATS	

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION/DISCIPLINE
	POWER
	POWER DIRECT CONNECTION, DESIGNATED SERVICE; SEE DWG. SCHEDULE
	SWITCH, DISCONNECT
	MOTOR CONNECTION
	MOTOR STARTER—MANUAL
	MOTOR STARTER – COMBINATION
	MOTOR STARTER – FUSED
	MOTOR C/W DISCONNECT
	JUNCTION BOX
	RECEPTACLE, DUPLEX
	EQUIPMENT LABEL
	PANEL, AS NOTED
	BOILER DISCONNECT

DRAWING LEGEND		
E100	ELECTRICAL SYMBOL LEGEND, DRAWING LEGEND AND MECHANICAL SCHEDULE	ISSUED
E201.1	WARDEN MAIN FLOOR POWER AND SYSTEMS PLAN	ISSUED
E201.2	TRADES MAIN FLOOR POWER AND SYSTEMS PLAN	ISSUED
E202	MAINTENANCE GARAGE BLDG. POWER AND SYSTEMS FLOOR PLAN	ISSUED
E401.1	WARDEN ROOF ELECTRICAL PLAN AND PANEL SCHEDULE	ISSUED
E401.2	TRADES AND TECH SERV. ROOF ELECTRICAL PLAN AND PANEL SCHEDULE	ISSUED
E402	MAINTENANCE GARAGE ROOF ELECTRICAL PLAN	ISSUED





1. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONDUITS AND WIRING.
2. ELECTRICAL CONTRACTOR SHALL RECONNECT ALL NEW MECHANICAL EQUIPMENT FED FROM MAIN DISTRIBUTION PANEL (MDP) AND MCC USING EXISTING EQUIPMENT BREAKERS IF POSSIBLE. REPLACE EXISTING BREAKER WITH NEW ONE IF EXISTING BREAKER DOES NOT MATCH THE REQUIREMENTS IN THE MECHANICAL SCHEDULE.
3. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL NEW 3 PHASE, 4 WIRE, 100A PANEL "WY" IN THE ELECTRICAL ROOM 106 FOR MECHANICAL EQUIPMENT. CONNECT MECHANICAL EQUIPMENT PER MECHANICAL SCHEDULE. NEW PANEL "WY" TO MEET THE REQUIREMENTS OF EXISTING MAIN DISTRIBUTION PANEL "MDP".
4. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ONE NEW 3P100A BREAKER IN THE MAIN DISTRIBUTION PANEL "MDP" AND RELATED MATERIALS, WIRING TO BE (4 #3 + GND IN 35 mm CONDUIT) AND CONNECTIONS FOR NEW PANEL "WY".
5. PANEL "MDP" AND "WC", "MCC" ARE EXISTING, PANEL "WY" IS NEW.
6. ELECTRICAL CONTRACTOR TO PROVIDE POWER TO SERVE SIX LOW VOLTAGE CONTROLS TRANSFORMERS ON MAIN FLOOR AND ONE LOW VOLTAGE CONTROLS TRANSFORMERS IN THE BASEMENT OF WARDEN AREA; COORDINATE LOCATION WITH DIV.25. LOW VOLTAGE CONTROLS TRANSFORMERS SUPPLIED BY DIV. 25.



PERMIT TO PRACTICE
WILLIAMS ENGINEERING CANADA INC.
 Signature [Signature]
 Date 2017.01.11
PERMIT NUMBER: P 10527
 The Association of Professional Engineers,
 Geologists and Geophysicists of Alberta

Public Works and
Government Services
Canada Travaux publics et
Services gouvernementaux
Canada

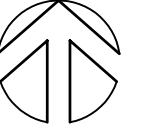
REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS

CALGARY OFFICE
N195 - 3015 5 Avenue NE
Calgary, AB T2A 6T8

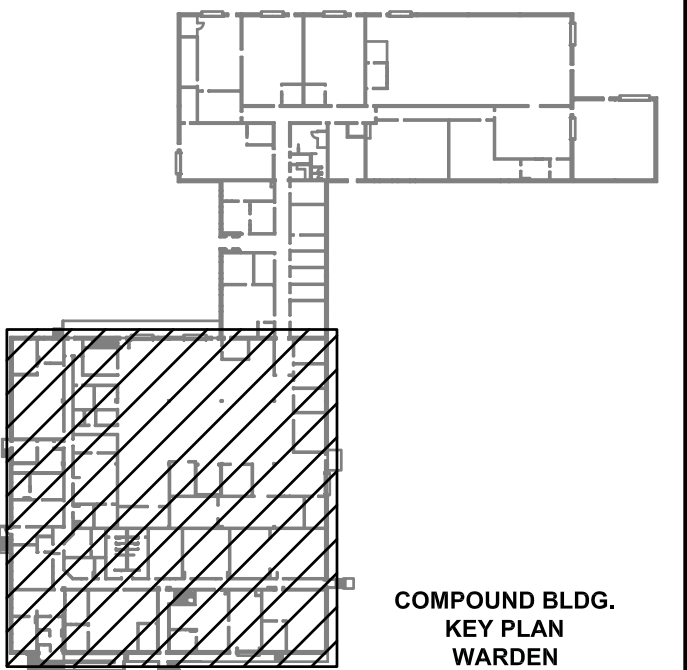
Bus: (403) 263-2393
Toll Free: 1-800-263-2393
Fax: (403) 262-9075

info@williamsengineering.com
www.williamsengineering.com

WILLIAMS
ENGINEERING
CANADA



PROJECT NORTH



5.	ISSUED FOR BP/TENDER	17-01-11
4.	REISSUED FOR TENDER	16-11-07
3.	ISSUED FOR TENDER	16-08-22
2.	ISSUED FOR 99% REVIEW	16-06-10
1.	ISSUED FOR 50% REVIEW	16-05-16

Revision/ Revision	Description/Description	Date/Date
01/01/01	Initial Issue	01/01/01

Parks Canada
Agency

L'Agence Parcs
Canada

Western and Northern Region

Ouest et Nord
du Canada

Project title/Titre du projet

Banff National Park
Banff, Alberta

PCA - MAINTENANCE BANFF COMPOUND REHABILITATION

Approved by/Approuvé par
AP

Design

AB

Drawn

MP	
Project Manager/Administrateur de Projets	
KT	

**Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'Ingénierie**

Scale:

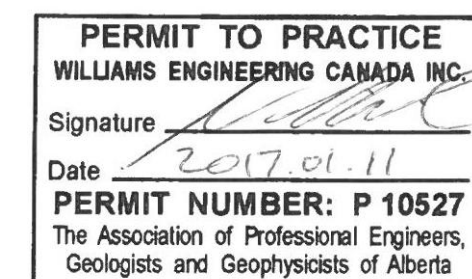
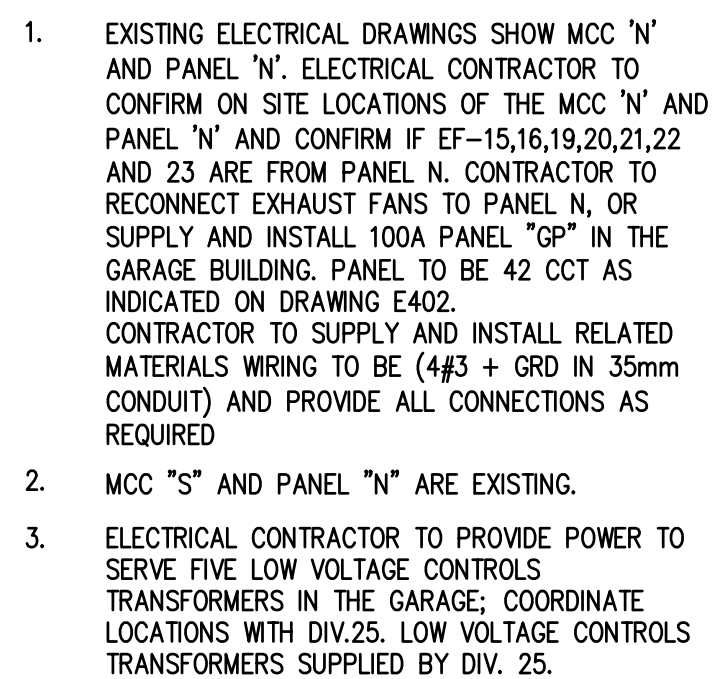
AS SHOWN


Drawing title/Titre du dessin

**WARDEN
MAIN FLOOR
POWER AND SYSTEMS PLAN**

Project No./No. du projet 33374.00	Sheet/Feuille E201.1	Revision no./La Révision no. 5
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Revision	Description	Date/Date
Client/client		
	Parks Canada Agency	L'Agence Parcs Canada
	Western and Northern Region	Ouest et Nord du Canada

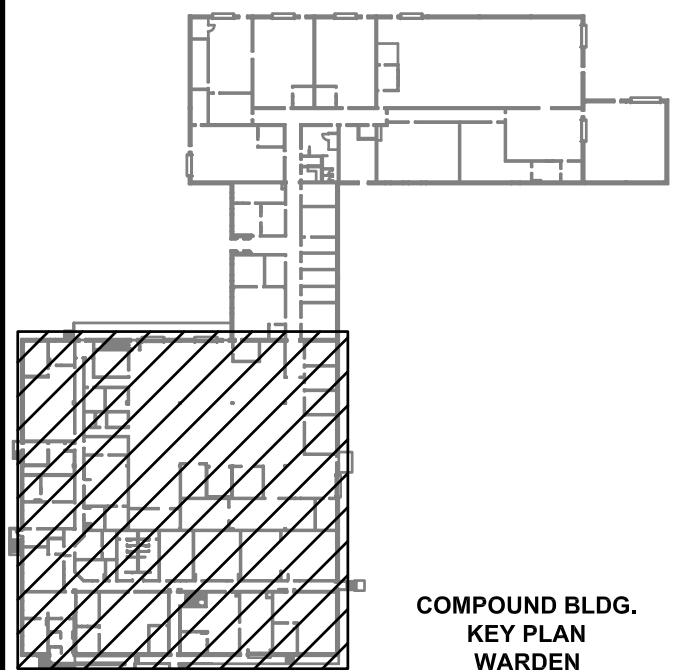
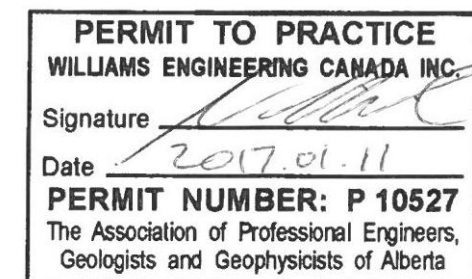
Project No./No. du projet 33374.00	Sheet/Feuille E202	Revision no./La Révision no. 4
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TOTAL PEAK LOAD	20435 W
0.8 PF & AT	208 V
CEC DEMAND FACTOR OF	0.8 APPLIED
RESULTS IN A MIN. SERVICE AMPACITY OF	57 A

1. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRING FOR BOTH POWER AND CONTROL. ANY PENETRATION FOR SERVICES TO BE THROUGH THE ROOF CURBS.
2. ELECTRICAL CONTRACTOR SHALL RECONNECT ALL NEW MECHANICAL EQUIPMENT FED FROM MAIN DISTRIBUTION PANEL (MDP) AND MCC USING EXISTING EQUIPMENT BREAKERS IF POSSIBLE. REPLACE EXISTING BREAKER WITH NEW ONE IF EXISTING BREAKER DOES NOT MATCH THE REQUIREMENTS IN THE MECHANICAL EQUIPMENT SCHEDULE.
3. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL SEPARATE CONDUITS FOR ALL GFCI WIRING AND ALL GFCI TO BE ON A SEPARATE DEDICATED CIRCUIT HAS INDICATED ON PANEL "WY" SCHEDULE.



Revision/ Revision	Description/Description	Date/Date
Client/client		
	Parks Canada Agence	L'Agence Parcs Canada
	Western and Northern Region	Ouest et Nord du Canada

Approved by/Approuvé par AP
Designed by/Concept par AB
Drawn by/Dessiné par MP
Project Manager/Administrateur de Projets KT
Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie
Scale: AS SHOWN
Drawing title/Titre du dessin

Project No./No. du projet 33374.00	Sheet/Feuille E401.1	Revision no./La Révision no. 5
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TOTAL PEAK LOAD 31045 W
0.8 PF & AT 208 V
CEC DEMAND FACTOR OF 0.8 APPLIED
RESULTS IN A MIN. SERVICE AMPACITY OF 86 A

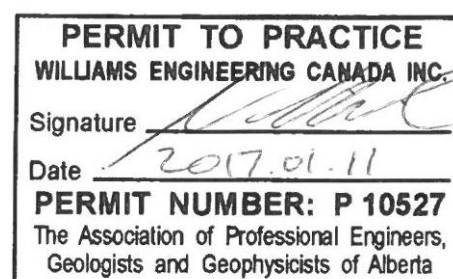
- POWER GENERAL NOTES:
1. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRING FOR BOTH POWER AND CONTROL. ANY PENETRATION FOR SERVICES TO BE THROUGH THE ROOF CURBS.
 2. ELECTRICAL CONTRACTOR SHALL CONNECT ALL NEW MECHANICAL EQUIPMENT TO NEW PANEL "TY" PER MECHANICAL EQUIPMENT SCHEDULE.
 3. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL SEPARATE CONDUITS FOR ALL GFCI WIRING AND ALL GFCI TO BE ON A SEPARATE DEDICATED CIRCUIT HAS INDICATED ON PANEL "WY" SCHEDULE.

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TOTAL PEAK LOAD	7464	W
0.8 PF & AT	208	V
CEC DEMAND FACTOR OF	0.8	APPLIED
RESULTS IN A MIN. SERVICE AMPACITY OF	21	A

1. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONDUITS AND WIRING.
2. ELECTRICAL CONTRACTOR SHALL RECONNECT ALL NEW MECHANICAL EQUIPMENT USING EXISTING EQUIPMENTS BREAKERS, REPLACE EXISTING BREAKER AND WIRING IF REQUIRED WITH NEW ONE IF EXISTING BREAKER AND WIRING DO NOT MATCH THE REQUIREMENTS IN THE MECHANICAL SCHEDULE.
3. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL NEW PANEL FOR MECHANICAL EQUIPMENT IF REQUIRED. CONNECT MECHANICAL EQUIPMENT THAT CANNOT BE FED FROM EXISTING PANEL TO THIS NEW PANEL.
4. EXISTING ELECTRICAL DRAWINGS SHOW MCC 'N', AND PANEL 'N' ELECTRICAL CONTRACTOR TO CONFIRM LOCATIONS OF THE MCC 'N' AND PANEL 'N', AND CONFIRM IF EF-15,16,19,20,21,22 AND 23 ARE FED FROM PANEL 'N'. CONTRACTOR TO RE-CONNECT NEW EXHAUST FANS TO PANEL 'N', AND PROVIDE NEW WIRE AND CONDUIT AS REQUIRED. CONTRACTOR TO CONTRIBUTE TO INSTALL NEW PANEL IN THE GARAGE, AND FEED NEW EXHAUST FANS IF EXISTING PANEL IS NOT IN GOOD CONDITION.
5. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL SEPARATE CONDUITS FOR ALL GFCI WIRING AND ALL GFCI TO BE ON A DEDICATED CIRCUIT.



5.	ISSUED FOR BP/TENDER	17-01-11
4.	REISSUED FOR TENDER	16-11-07
3.	ISSUED FOR TENDER	16-08-22
2.	ISSUED FOR 99% REVIEW	16-06-10
1.	ISSUED FOR 50% REVIEW	16-05-16

Revision/ Révision	Description/Description	Date/Date
	Client/client	
	Parks Canada Agence	L'Agence Parcs Canada
	Western and Northern Region	Ouest et Nord du Canada

Project title/Titre du projet

Banff National Park
Banff, Alberta

PCA - MAINTENANCE BANFF COMPOUND REHABILITATION

Approved by/Approuve par
AP

Des

AB

Draw

MP
P a g e : 1 1 1 / 1 1 1Project Manager/Administrateur de Projets
KT

**Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'Ingénierie**

Scale:

AS SHOWN

Drawing title/Titre du dessin

**MAINTENANCE GARAGE
ROOF ELECTRICAL PLAN**

Project No./No. du projet 33374.00	Sheet/Feuille E402	Revision no./La Révision no. 5
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