

- KEY NOTES:
- SEE CIVIL SITE PLAN FOR SAW CUTTING AND REPAIR COORDINATION.
  - REFER TO GENERATOR SHOP DRAWINGS FOR ACTUAL ELECTRICAL CONNECTION LOCATIONS. ALL CONDUIT TO COME FROM BELOW GENERATOR ENCLOSURE, NO EXPOSED CONDUIT PERMITTED.
  - CONTRACTOR TO INSTALL INSULATED HOFFMAN PANEL TO HOUSE FIRE PUMP ATS/CONTROLLER CABINET. POWER FOR PANEL HEATER TO COME FROM PANEL C IN ELECTRICAL ROOM. HOFFMAN PANEL, FIRE PUMP ATS/CONTROLLER SUPPLIED BY DIV 21, INSTALLED BY DIV 26.
  - ADD AIR TERMINAL AND DOWN CONDUCTOR TO LIGHT STANDARD ON TOP OF BUCKET ELEVATOR FOR LIGHTNING PROTECTION. ELEVATOR HEIGHT IS APPROXIMATELY 31M. TOTAL CONDUCTOR LENGTH SHOULD BE APPROXIMATELY 50M. DOWN CONDUCTOR SHOULD BE CONNECTED TO GROUND GRID BY TRANSFORMER.
  - OVER CURRENT DEVICE TO BE SIZED BY FIRE PUMP MANUFACTURER AND NFPA20 REQUIREMENTS.
  - POWER DOWN ELECTRICAL EQUIPMENT, OPEN UP AND CLEAN OUT DUST FROM INSIDE.
  - INFRARED TESTING TO BE CARRIED OUT ON ALL ELECTRICAL EQUIPMENT.

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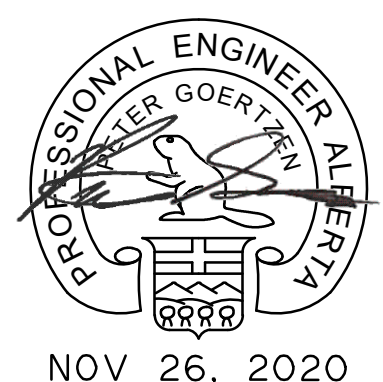
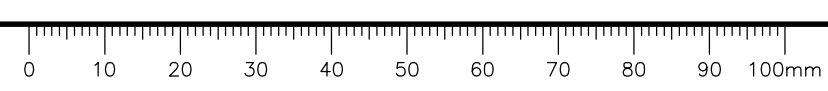
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project title  
**LETHBRIDGE, AB  
AAFCLeRDC**  
**FEED MILL (116)  
BUILDING UPGRADES**

Designed by T.J.G., P.P.G.	Conçu par
Drawn by T.J.G.	Dessiné par
Approved by T.J.G., P.P.G.	Approuvé par
PWGSC Project Manager GREG SPENCE	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

ELECTRICAL  
SITE PLAN AND SINGLE LINE  
DIAGRAM

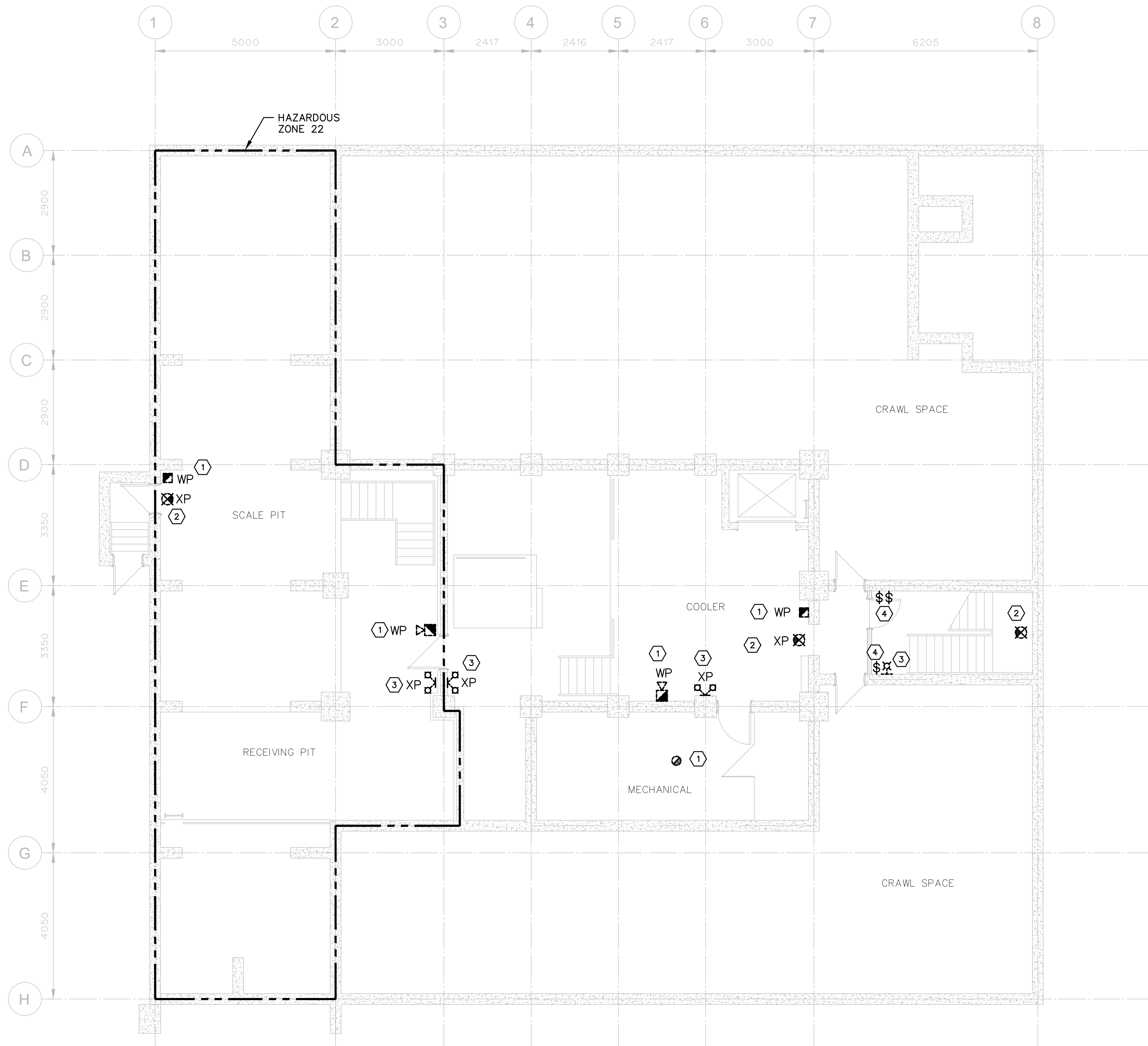
Project no./No. du projet <b>R.097511.001</b>	Drawing no./No. du dessin <b>E0.2</b> OF XX	Revision no. <b>0</b>
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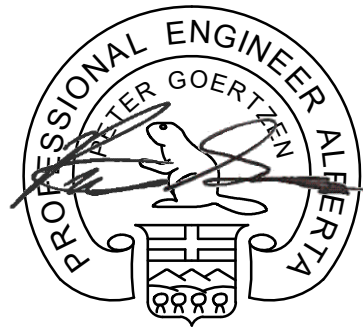
- KEY NOTES:
1. REMOVE FIRE ALARM DEVICES AND WIRING. CONDUIT MAY BE RE-USED FOR NEW FIRE ALARM SYSTEM. VERIFY ROUTING OF CONDUIT WITH PROPOSED LAYOUTS PRIOR TO DEMOLISHING CONDUIT.
  2. REMOVE EXISTING EXIT SIGNS. DO NOT REMOVE WIRING, REVISE AS REQUIRED FOR NEW INSTALLATION.
  3. REMOTE HEADS ARE TO BE REPLACED. MODIFY EXISTING WIRING FOR NEW EMERGENCY LIGHTING ON NEW CIRCUITS.
  4. RELOCATE SWITCHES, EXTEND WIRING TO NEW LOCATIONS AS SHOWN ON E2.1.



BASEMENT DEMOLITION PLAN

1  
E1.1 1:75

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PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title  
**LETHBRIDGE, AB  
AAFC LeRDC**  
**FEED MILL (116)  
BUILDING UPGRADES**

Designed by  
**T.J.G., P.P.G.**

Conçu par

Drawn by  
**T.J.G.**

Dessiné par

Approved by  
**T.J.G., P.P.G.**

Approuvé par

PWGSC Project Manager  
**GREG SPENCE**

Administrateur de Projets TPSGC

Drawing title

Titre du dessin

**ELECTRICAL  
BASEMENT DEMOLITION FLOOR PLAN**

Project no./No. du projet  
**R.097511.001**

Drawing no./No. du dessin  
**E1.1  
OF XX**

Revision no.  
**0**





Engineering Ltd.

KEY NOTES:

1. DEMOLISH FIRE PUMP CONTROLLER AND FIRE PUMP BACK TO SOURCE.
2. DEMOLISH FIRE PUMP BREAKER.
3. DEMOLISH EXISTING FIRE ALARM SYSTEM. EXISTING CONDUIT MAY BE RE-USED TO MINIMIZE NEW CONDUIT. DEMOLISH ABANDONED CONDUIT BACK TO SOURCE.
4. DEMOLISH EXISTING EXIT SIGNS. EXISTING WIRING MAY BE REUSED FOR NEW EXIT SIGNS.
5. DEMOLISH EXISTING EMERGENCY LIGHTING. EXISTING WIRING MAY BE REUSED.
6. DEMOLISH HEADS. EXISTING WIRING MAY BE REUSED.
7. DEMOLISH EXISTING TRANSFER FAN. REMOVE WIRING BACK TO SOURCE, MP-3 SWITCHGEAR IN BASEMENT ELECTRICAL ROOM. DEMOLISH INPUT/OUTPUT BACK TO PLC TERMINAL, REMOVE LABEL ON STARTER, ADD STICKER FOR SPARE IN MCC, REMOVE LAMICIDS.
8. DEMOLISH HEAT DETECTOR. EXISTING WIRING MAY BE REUSED.

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CANADA

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AAFC LeRDC**

**FEED MILL (116)  
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Conçu par

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**T.J.G.**

Dessiné par

Approved by  
**T.J.G., P.P.G.**

Approuvé par

PWSSC Project Manager  
**GREG SPENCE**

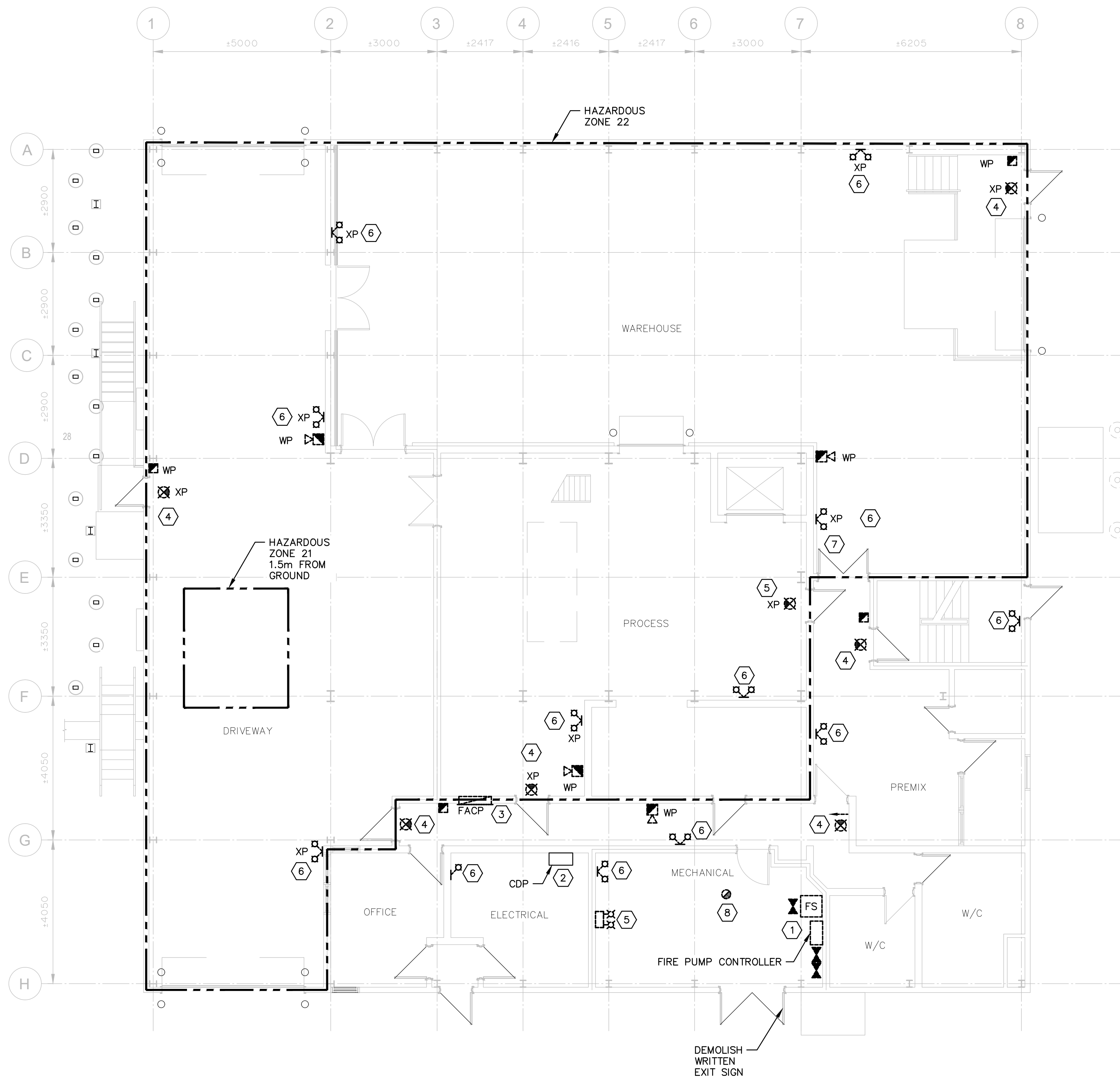
Administrateur de Projets TPSGC

Drawing title

Titre du dessin

**ELECTRICAL  
MAIN FLOOR DEMOLITION PLAN**


Project no./No. du projet	Drawing no./No. du dessin	Revision no.
<b>R.097511.001</b>	<b>E1.2 OF XX</b>	<b>0</b>



MAIN FLOOR DEMOLITION PLAN

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E1.2  
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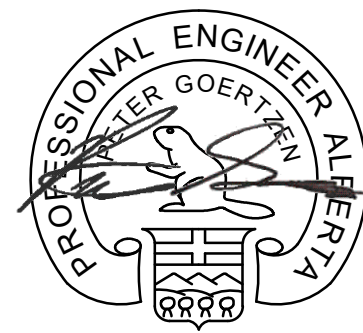
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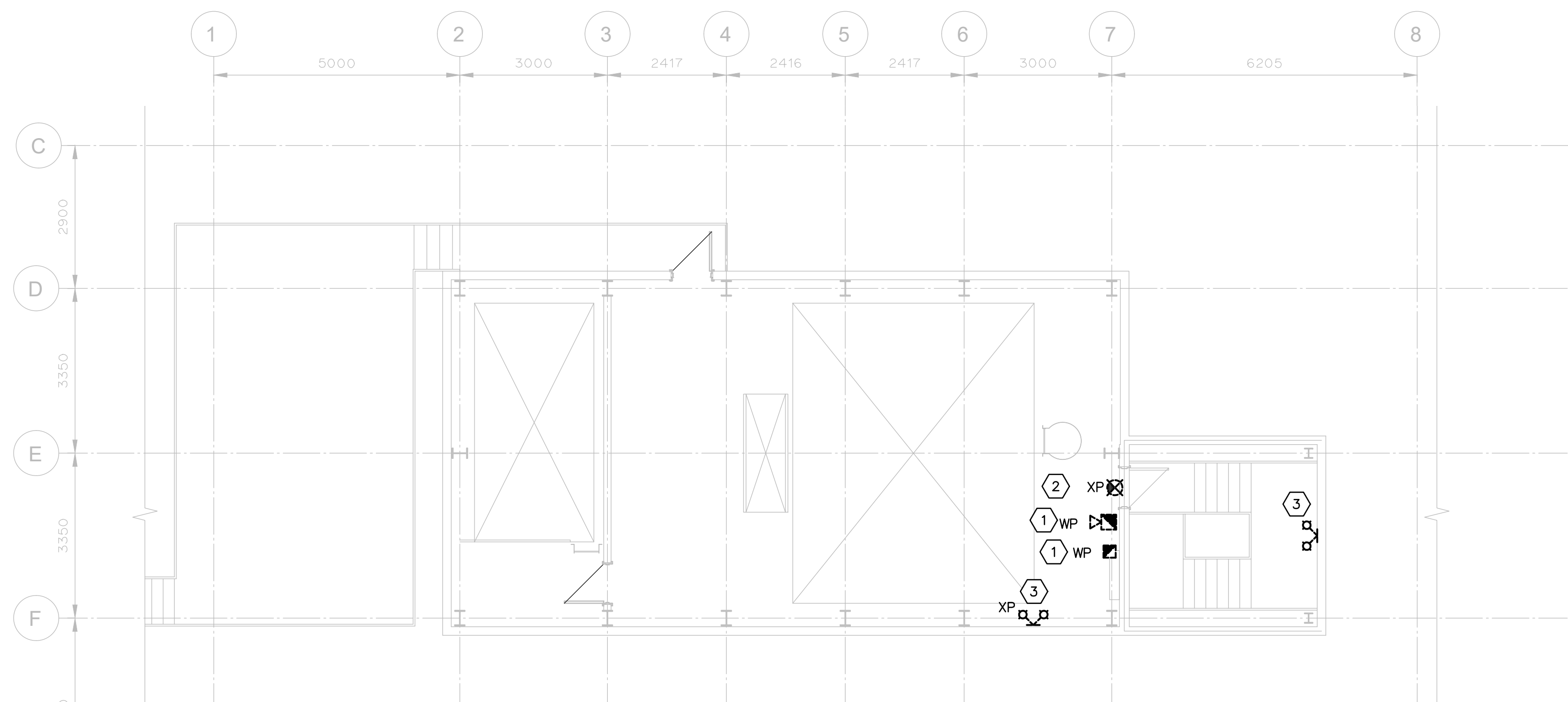
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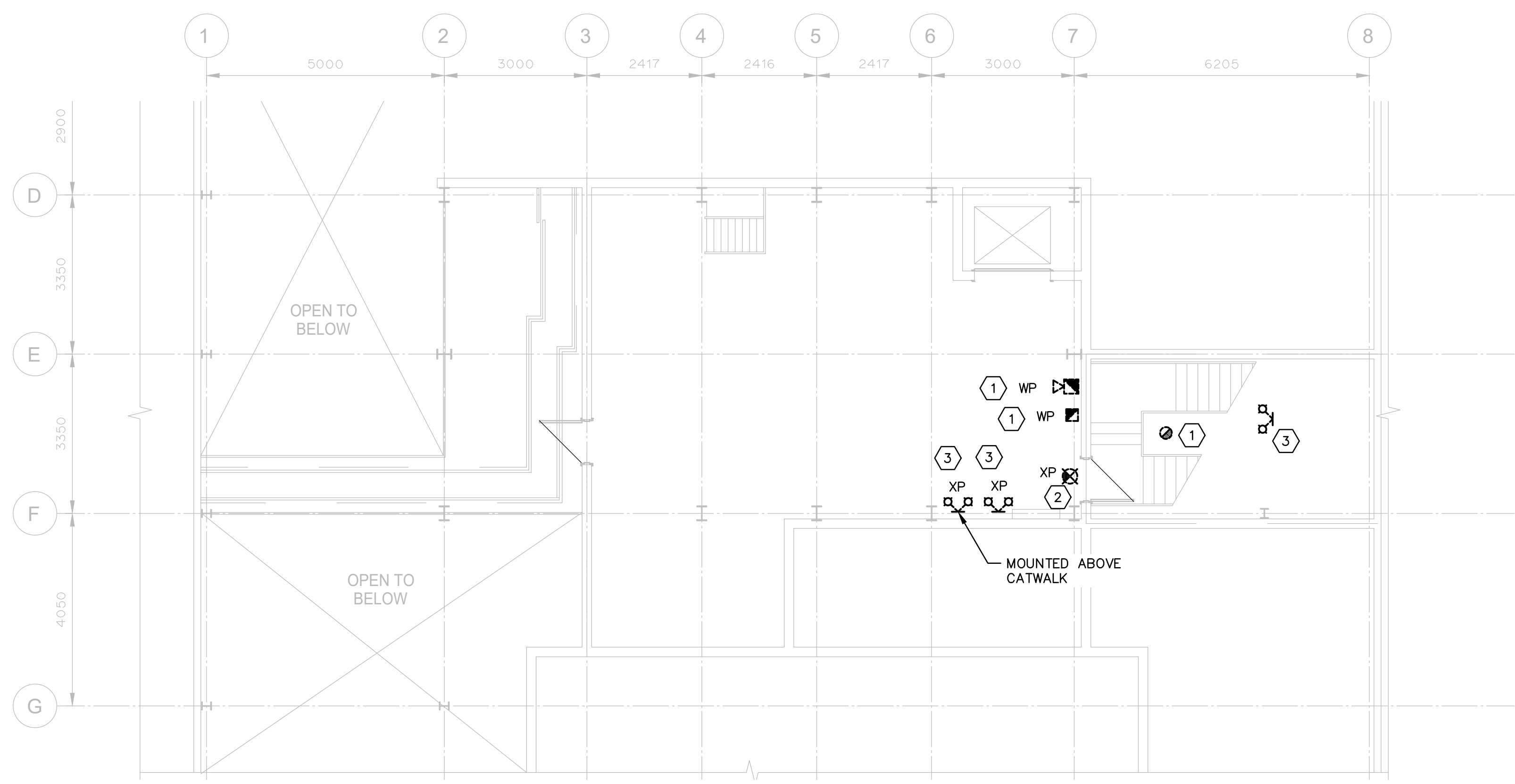


- KEY NOTES:
- DEMOLISH FIRE ALARM DEVICES.  
CONDUIT MAY BE RE-USED FOR NEW  
FIRE ALARM SYSTEM.
  - DEMOLISH EXISTING EXIT SIGNS.  
EXISTING WIRING MAY BE RE-USED.
  - DEMOLISH HEADS. EXISTING WIRING  
MAY BE RE-USED.



BOTTOM BIN DEMOLITION PLAN

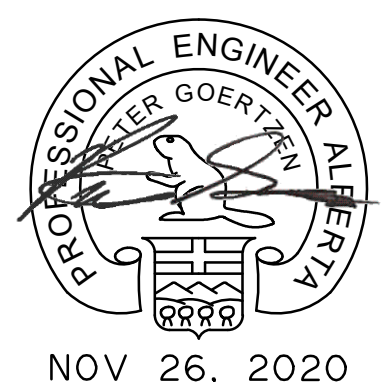
1  
E1.3 1:75



MEZZANINE DEMOLITION PLAN

2  
E1.3 1:75

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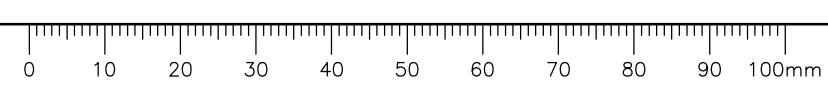
PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title  
**LETHBRIDGE, AB  
AAFC LeRDC**  
**FEED MILL (116)  
BUILDING UPGRADES**

Designed by  
T.J.G., P.P.G.  
Drawn by  
T.J.G.  
Approved by  
T.J.G., P.P.G.  
PWGSC Project Manager  
GREG SPENCE  
Drawing title  
Titre du dessin

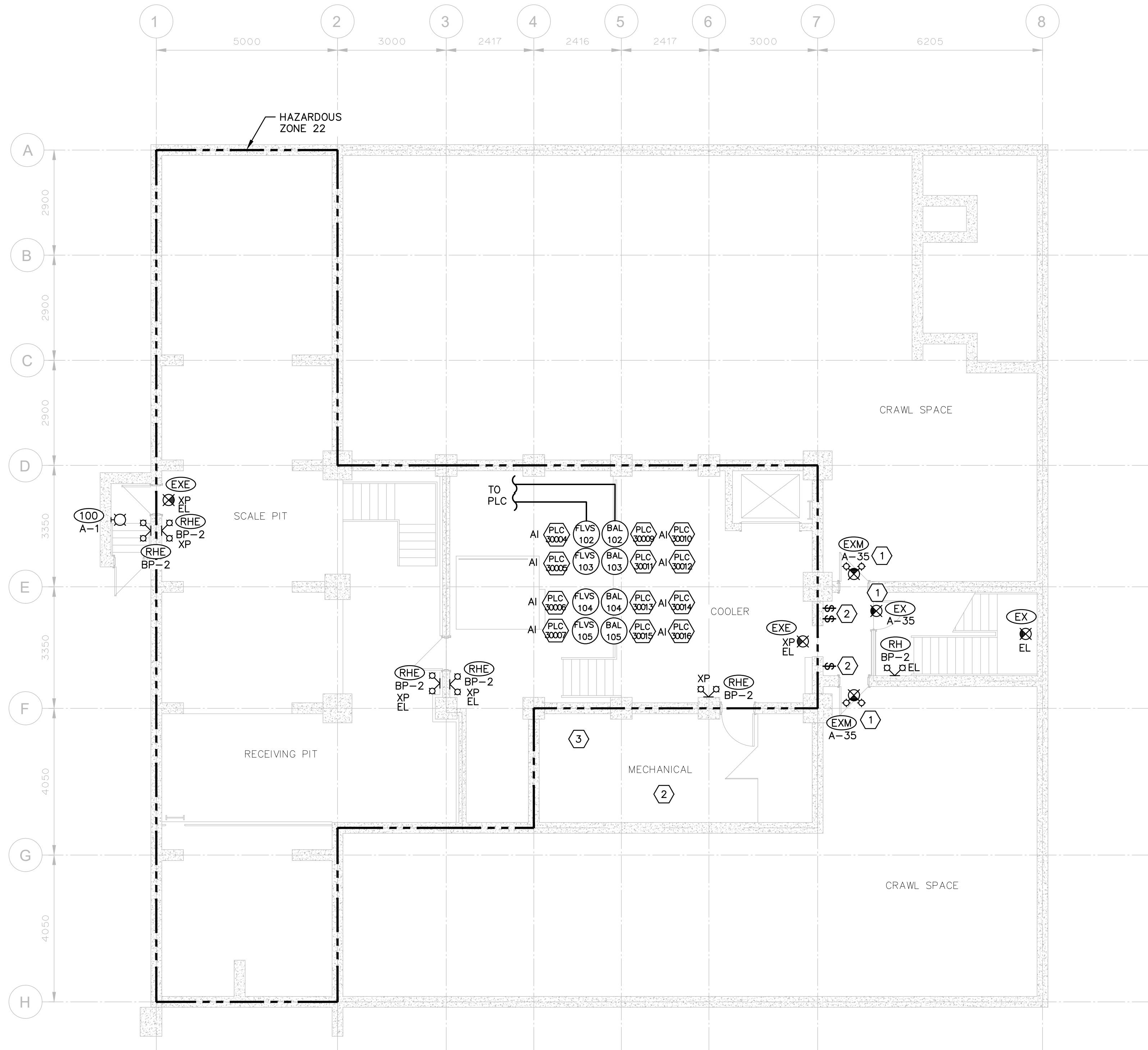
**ELECTRICAL  
BOTTOM BIN MEZZANINE  
DEMOLITION FLOOR PLANS**

Project no./No. du projet  
**R.097511.001**  
Drawing no./No. du dessin  
**E1.3  
OF XX**  
Revision no.  
**0**





- KEY NOTES:
- CONNECT TO NEAREST EXIT SIGN CIRCUIT, OR SUPPLY NEW PANEL CONNECTION.
  - RELOCATE SWITCHES FROM ORIGINAL LOCATION, EXTEND WIRING, MAINTAIN FUNCTIONALITY OF SWITCHES.

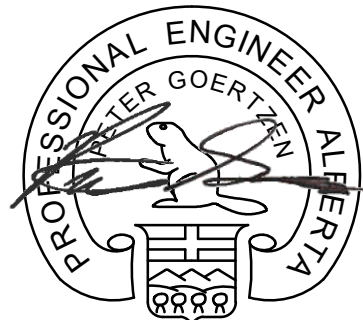


BASEMENT ELECTRICAL FLOOR PLAN

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E2.1  
1:75



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ELECTRICAL  
BASEMENT PROPOSED ELECTRICAL  
FLOOR PLAN

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R.097511.001	E2.1 OF XX	0

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Revision	Description	Date
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PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title  
LETHBRIDGE, AB  
AAFC LeRDC  
FEED MILL (116)  
BUILDING UPGRADES

Designed by  
T.J.G., P.P.G.

Conçu par

Drawn by  
T.J.G.

Dessiné par

Approved by  
T.J.G., P.P.G.

Approuvé par

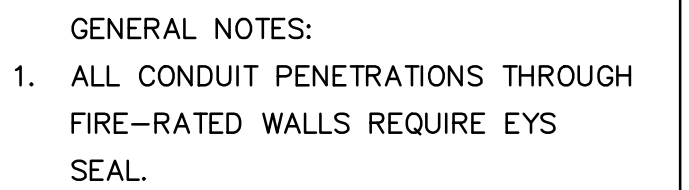
PWSSC Project Manager  
GREG SPENCE

Administrateur de Projets TPSGC

Drawing title

Titre du dessin





**PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA**

Project title	Project
<p><b>LETHBRIDGE, AB</b>  <b>AAFC LeRDC</b></p> <p><b>FEED MILL (116)</b>  <b>BUILDING UPGRADES</b></p>	

Designed by <b>T.J.G., P.P.G.</b>	Conçu par
Drawn by <b>T.J.G.</b>	Dessiné par
Approved by <b>T.J.G., P.P.G.</b>	Approuvé par
PWSCS Project Manager <b>GREG SPENCE</b>	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

### ELECTRICAL MAIN FLOOR ELECTRICAL PROPOSED PLAN

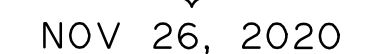
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
<b>R.097511.001</b>	<b>E2.2</b> OF XX	<b>0</b>



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E2.2 1:75

1. MOUNT MOTOR STARTER IN THE MECHANICAL ROOM. MOTOR STARTER TO BE
2. PROVIDE ZONE 22 MANUAL MOTOR STARTER.
3. CO/NOX SENSOR IN CONTROL BOX CONNECTED TO SAME CIRCUIT AS EF-1.
4. VERIFY PLC OPERATION OF 10163 DUST COLLECTOR (COLD AIR). VERIFY CONTINUITY OF WIRING FROM 10163 TO 10163 N. VERIFY THAT OUTPUT TO RELAY (227A-B) IS FUNCTIONAL AND CONTINUOUS. REPLACE RELAY AND HOA SWITCH.
5. MOUNT JUNCTION BOXES ON CATWALK FOR POWER TO DUST CONTROL CHUTE.
6. TEMPERATURE TRANSMITTER TO BE PLACED ON UNDERSIDE OF SOFFIT OUTSIDE OF ELECTRICAL ROOM.
7. CONNECT BELL OUTPUT TO PLC.
8. RUN ALL CONDUIT OUT OF WEST SIDE OF CONTROLLER UNDERGROUND, AND SWITCH MATERIAL TO RPVC, MAINTAINING SAME DIAMETER.
9. RE-ROUTE EXISTING CONDUIT TO AVOID CONFLICT WITH NEW STAIR, EXTEND AS REQUIRED.

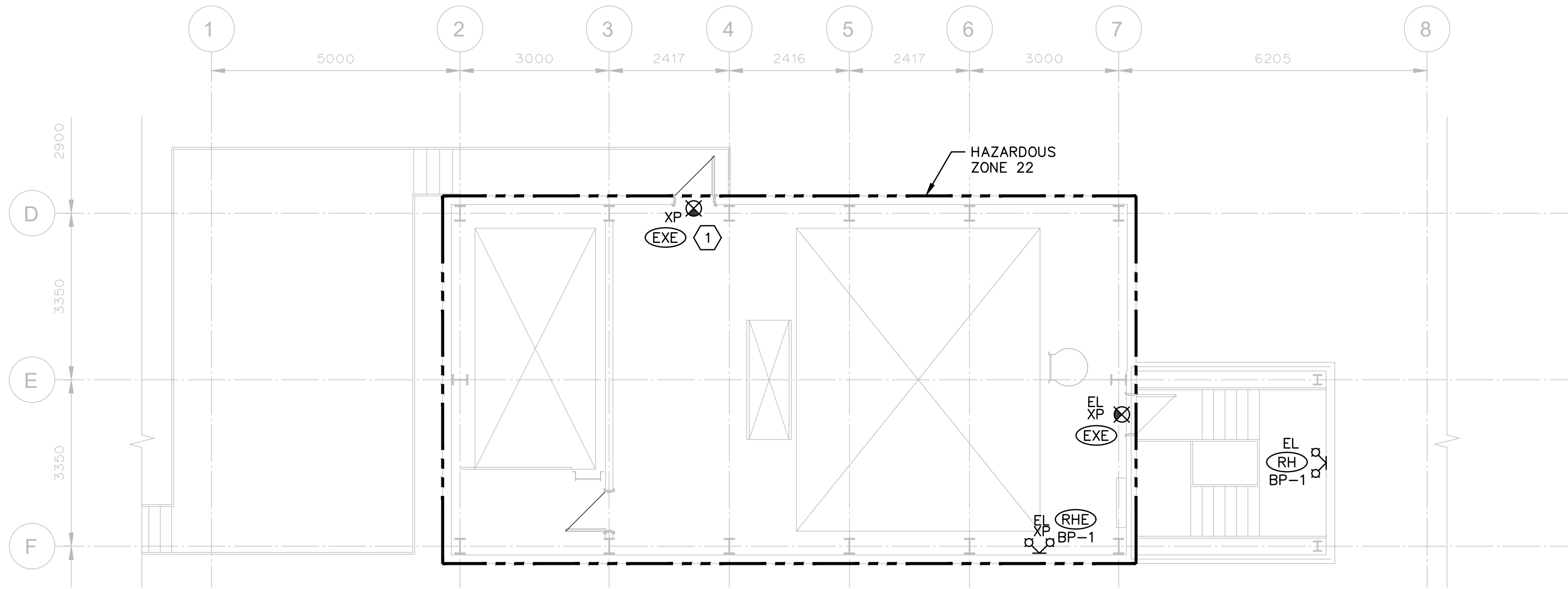
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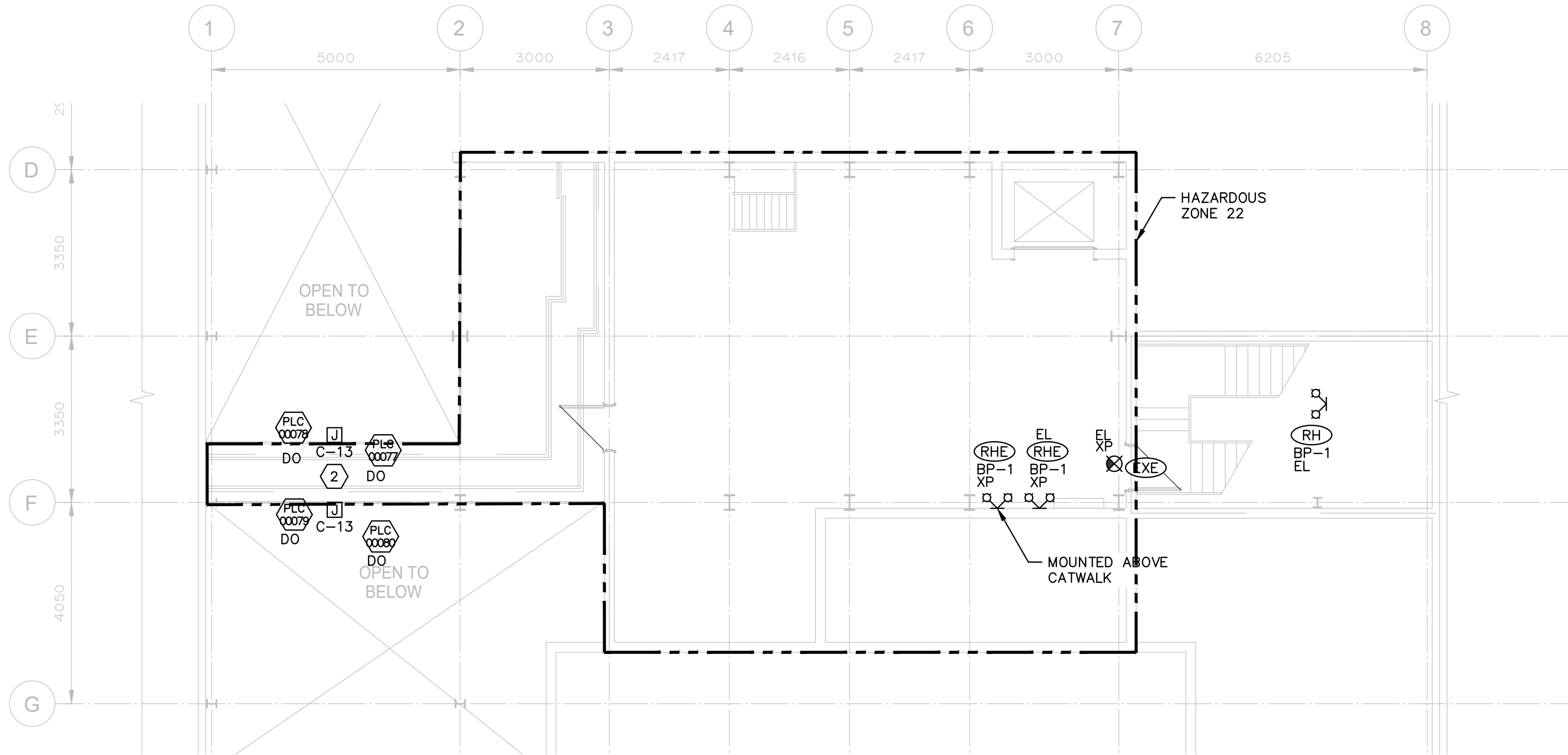
KEY NOTES:

1. CONNECT TO NEAREST EXIT SIGN  
CIRCUIT, OR SUPPLY NEW BREAKER  
AND CONNECT TO PANEL.
2. JUNCTION BOXES FOR POWER TO CHUTE  
LOWERING MOTOR.



BOTTOM BIN ELECTRICAL FLOOR PLAN

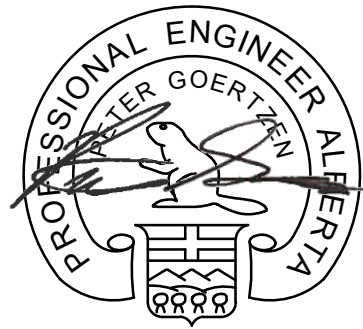
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E2.3 1:75



MEZZANINE ELECTRICAL FLOOR PLAN

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E2.3 1:75

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ELECTRICAL  
BOTTOM BIN & MEZZANINE  
PROPOSED ELECTRICAL FLOOR  
PLANS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E2.3 OF XX	0

Revision	Description	Date
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0	ISSUED FOR TENDER	2020/11/26

Client	client
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA	

Project title  
LETHBRIDGE, AB  
AAFC LeRDC  
FEED MILL (116)  
BUILDING UPGRADES

Designed by  
T.J.G., P.P.G.  
Congru par  
T.J.G.  
Drawn by  
T.J.G.  
Dessiné par  
T.J.G.  
Approved by  
T.J.G., P.P.G.  
Approuvé par  
T.J.G.  
PWSCC Project Manager  
GREG SPENCE  
Administrateur de Projets TPSGC  
Drawing title  
Titre du dessin





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PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title  
**LETHBRIDGE, AB  
AAFC LeRDC**  
**FEED MILL (116)  
BUILDING UPGRADES**

Designed by  
**T.J.G., P.P.G.**

Conçu par

Drawn by  
**T.J.G.**

Dessiné par

Approved by  
**T.J.G., P.P.G.**

Approuvé par

PWSSC Project Manager  
**GREG SPENCE**

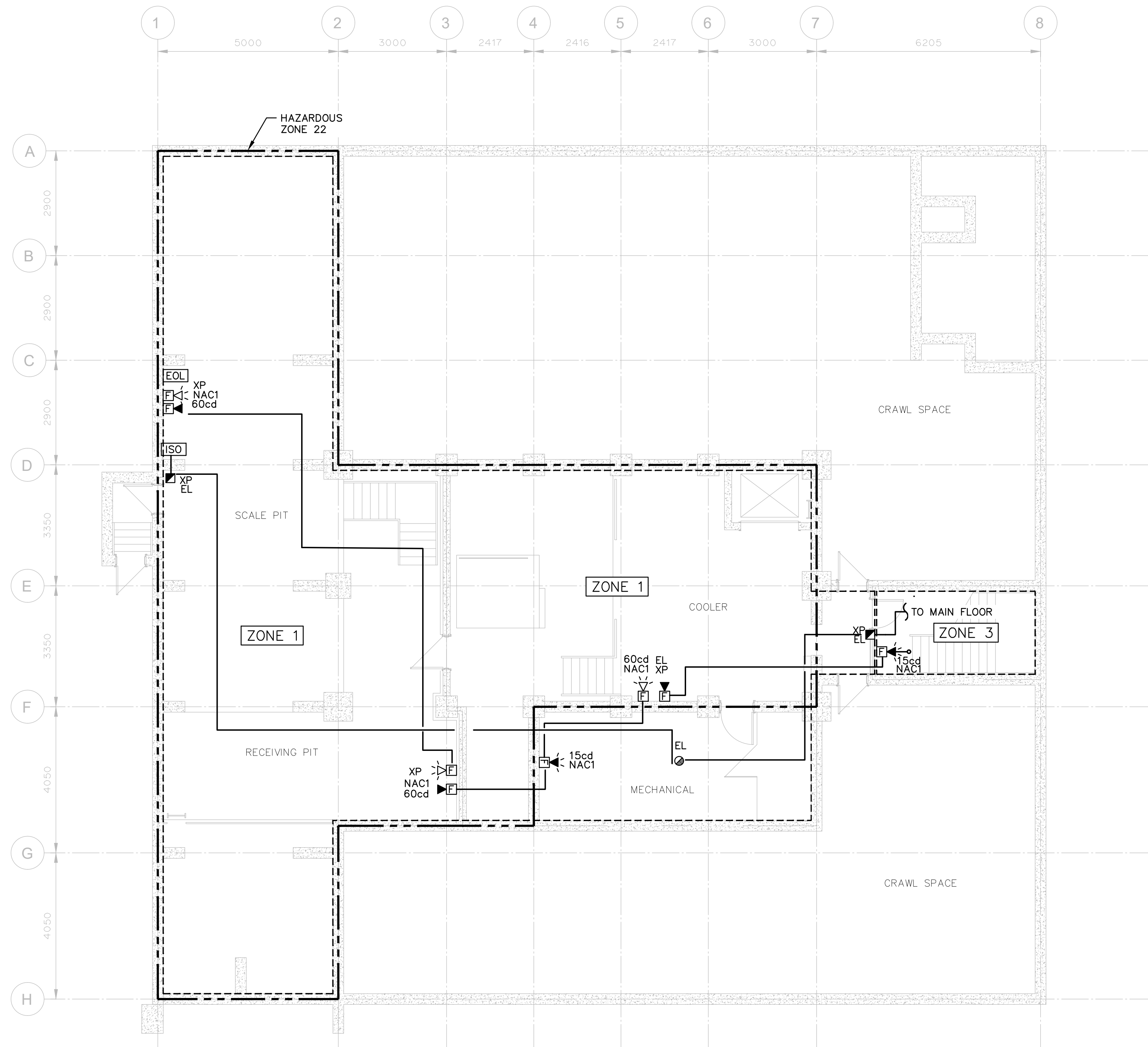
Administrateur de Projets TPSGC

Drawing title

Titre du dessin

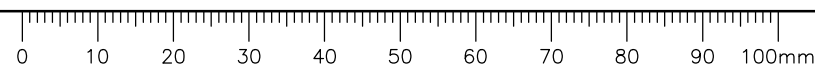
**ELECTRICAL  
BASEMENT FIRE ALARM FLOOR PLAN**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
<b>R.097511.001</b>	<b>E3.1 OF XX</b>	<b>0</b>

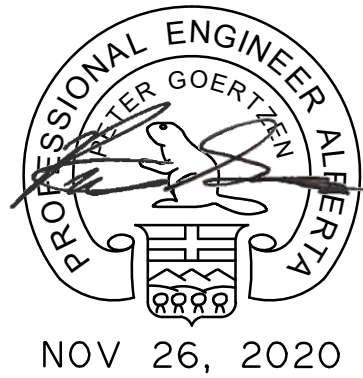


BASEMENT FIRE ALARM FLOOR PLAN

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E3.1 1:75



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KEY NOTES:

1. TAMPER VALVES ARE CURRENTLY CHAINED SHUT – REMOVE CHAIN AND CONNECT EXISTING TAMPER VALVES TO FIRE ALARM PANEL AS SUPERVISORY SIGNALS.
2. FIRE PUMP CONTROLLER/ATS TO BE INSTALLED IN CONTRACTOR SUPPLIED HEATED CABINET.
3. REFER TO E4.2 FOR FIRE ALARM SINGLE LINE DIAGRAM.
4. ADD 2 SUPERVISORY MICRO-SWITCHES TO ISOLATION VALVES THAT ARE MISSING TAMPER SWITCHES.
5. SUPPLY AND INSTALL HINGED J.BOX TO HOUSE FIRE ALARM INPUT MODULES FOR SPRINKLER SYSTEM, GENERATOR, AND FIRE PUMP. LOCATE IN EXISTING FIRE PUMP CONTROL PANEL LOCATION.
6. REFER TO FIRE ALARM SINGLE LINE DRAWING FOR QUANTITIES OF INPUT MODULES FOR SPRINKLER SYSTEM, GENERATOR AND FIRE PUMP CONTROLLER.

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CANADA

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**LETHBRIDGE, AB  
AAFCLeRDC**

**FEED MILL (116)  
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Drawn by  
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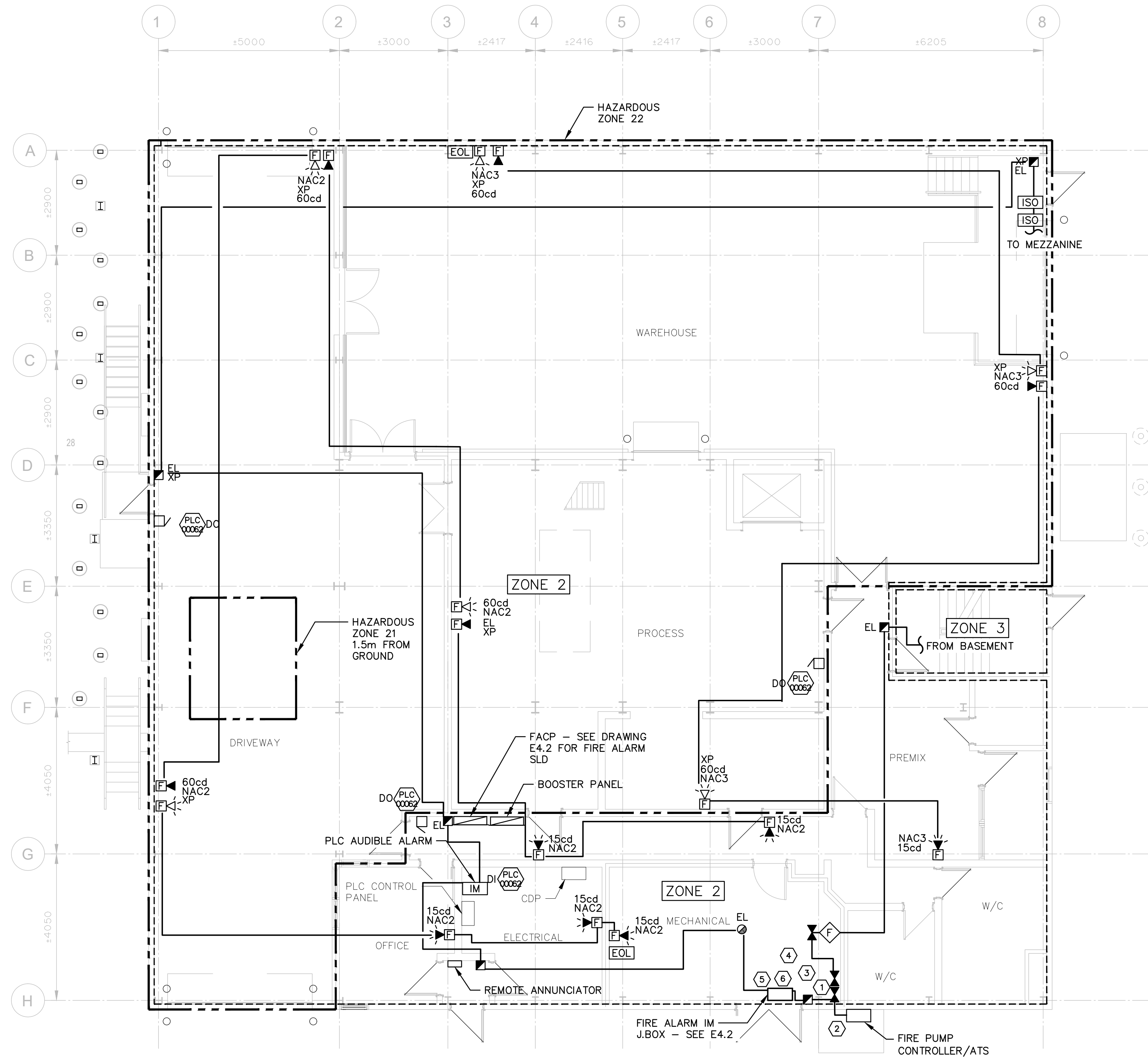
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**T.J.G., P.P.G.**

PWSSC Project Manager  
**GREG SPENCE**

Drawing title  
Titre du dessin

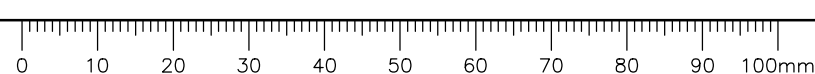
**ELECTRICAL  
MAIN FLOOR FIRE ALARM PLAN**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
<b>R.097511.001</b>	<b>E3.2</b> OF XX	<b>0</b>



MAIN FLOOR FIRE ALARM PLAN

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E3.2  
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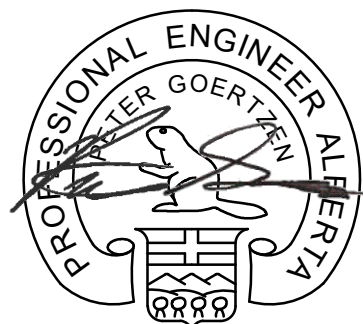
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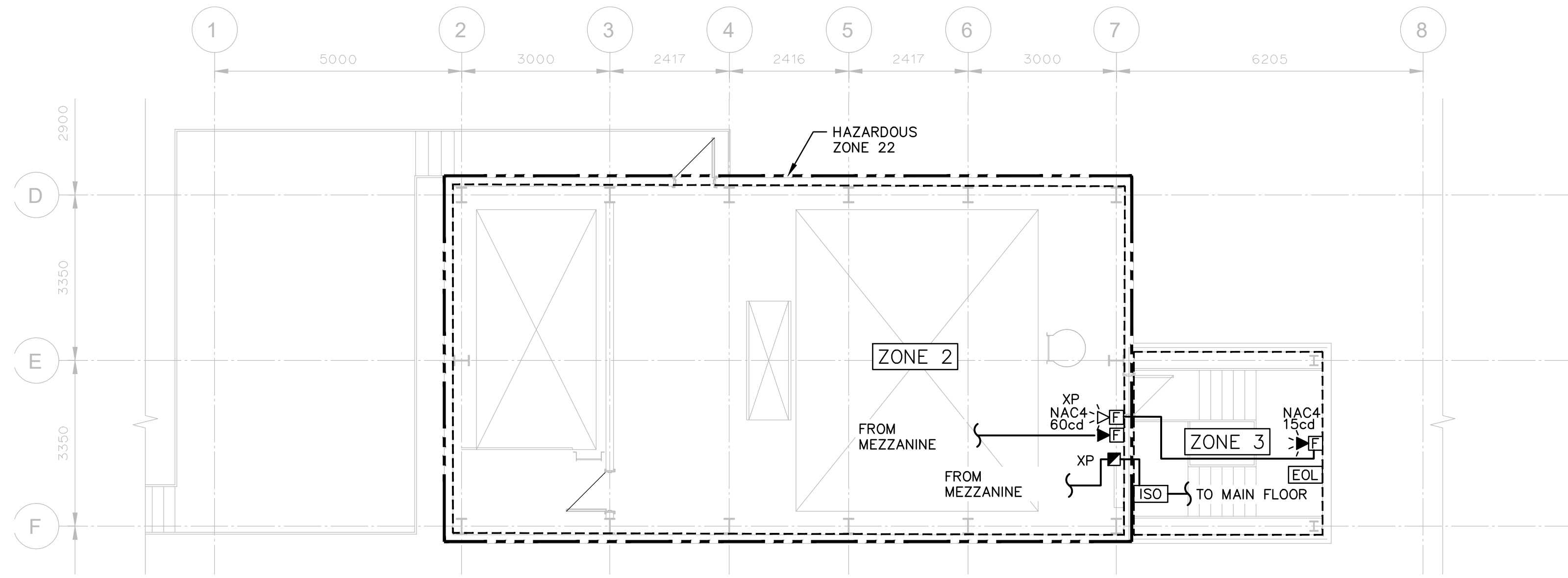


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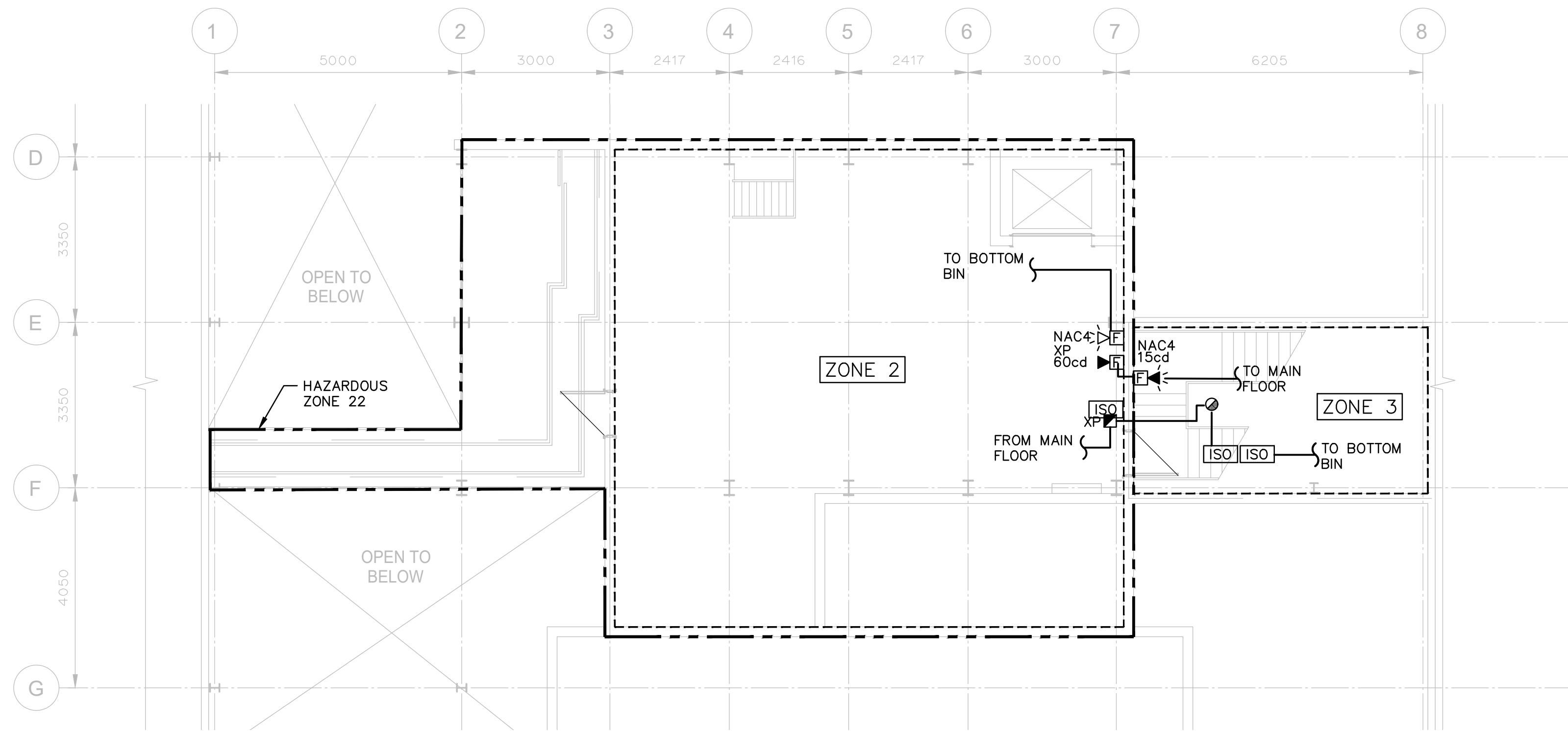


- KEY NOTES:
1. REMOVE FIRE ALARM DEVICES. CONDUIT PATHS MAY BE RE-USED FOR NEW FIRE ALARM SYSTEM, IF ROUTING WORKS WITH NEW CIRCUIT WIRING.
  2. REMOVE EXISTING EXIT SIGNS. DO NOT REMOVE WIRING, REVISE AS REQUIRED FOR NEW INSTALLATION.
  3. REMOTE HEADS ARE TO BE REPLACED. MODIFY EXISTING WIRING FOR RE-INSTALLATION OF NEW EMERGENCY LIGHTING ON NEW CIRCUITS.



BOTTOM BIN FIRE ALARM FLOOR PLAN

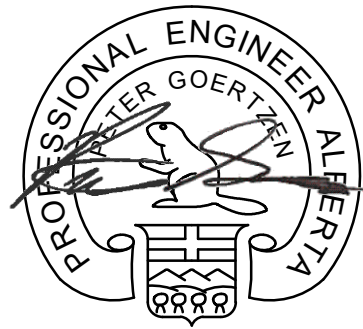
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E3.3 1:75



MEZZANINE FIRE ALARM FLOOR PLAN

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E3.3 1:75

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ELECTRICAL  
BOTTOM BIN & MEZZANINE FIRE  
ALARM FLOOR PLANS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E3.3 OF XX	0

Revision	Description	Date
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PUBLIC WORKS AND  
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PWOSC Project Manager GREG SPENCE	Administrateur de Projets TPSGC
Drawing title	Titre du dessin



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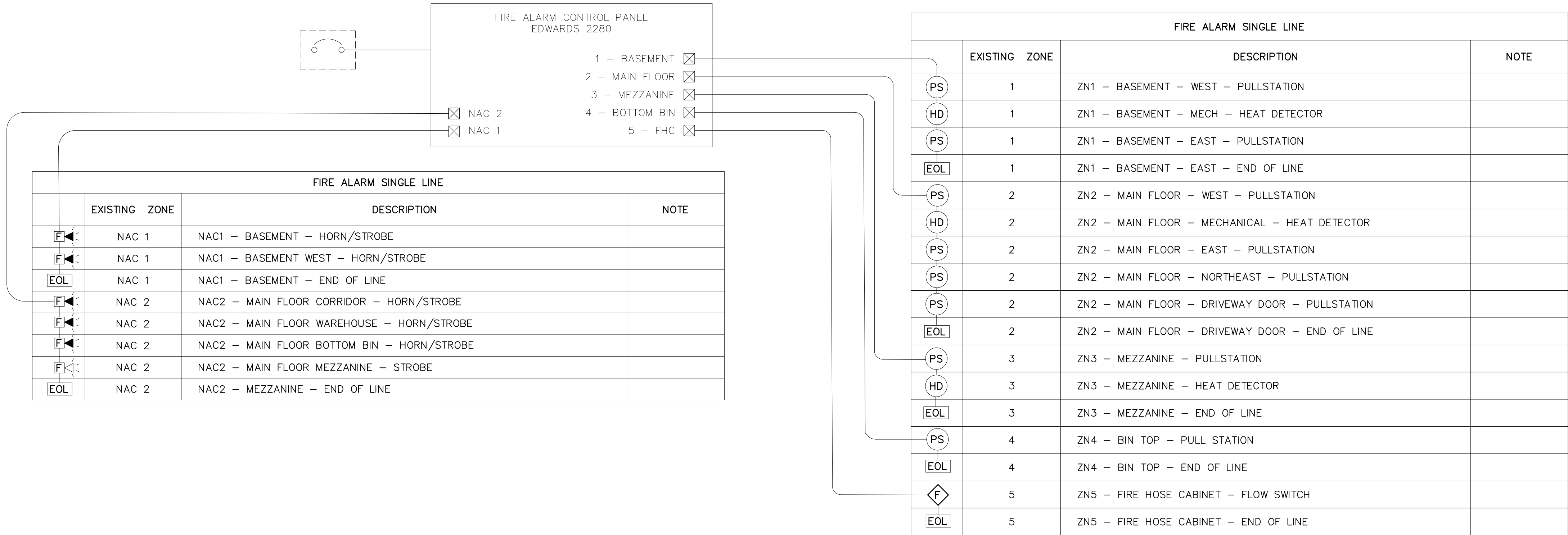
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PWOSC Project Manager <b>GREG SPENCE</b>	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

**ELECTRICAL  
EXISTING FIRE ALARM SINGLE LINE**

Project no./No. du projet <b>R.097511.001</b>	Drawing no./No. du dessin <b>E4.1 OF XX</b>	Revision no. <b>0</b>
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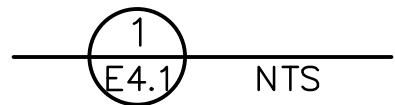
BASIC ELECTRIC REQUIREMENTS

- REGULATORY REQUIREMENTS
  - COMPLY WITH SAFETY CODES ACT AND RULES AND REGULATIONS MADE PURSUANT THERETO, INCLUDING THE CANADIAN ELECTRICAL CODE.
  - ELECTRICAL PRODUCTS SHALL BE TESTED, CERTIFIED AND LABELLED IN ACCORDANCE WITH A CERTIFICATION PROGRAM ACCREDITED BY THE STANDARDS COUNCIL OF CANADA. WHERE A PRODUCT IS NOT SO LABELLED, PROVIDE WRITTEN APPROVAL BY THE AUTHORITY HAVING JURISDICTION.
  - SUBMIT TO AUTHORITY HAVING JURISDICTION, NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF ELECTRICAL WORK. PAY ASSOCIATED FEES
- FIRE BARRIERS
  - ALL PENETRATIONS OF FIRE SEPARATION BARRIERS MUST BE SEALED TO BUILDING CODE STANDARDS.
- RECORD DRAWINGS
  - RECORD ACTUAL LOCATIONS OF ALL PULL BOXES, CONDUIT, FEEDERS, ELECTRICAL EQUIPMENT AND ELECTRICAL
  - RECORD ANY CHANGES TO CIRCUIT DESIGNATIONS.

FIRE ALARM SYSTEM

- ALL WIRING IS TO BE DONE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE (CEC) AND THE CAN/ULC-S524 "STANDARD FOR INSTALLATION OF FIRE ALARM SYSTEMS."
- THE FIRE ALARM SYSTEM IS TO BE VERIFIED IN ACCORDANCE WITH CAN/ULC-S537 "STANDARD FOR VERIFICATION OF FIRE ALARM SYSTEMS."
- ALL NEW FIRE ALARM SYSTEM EQUIPMENT SHALL BE THE SAME AS THE EXISTING EQUIPMENT.
- ASSIST AND COOPERATE WITH THE OWNER IN VERIFICATION PROCEDURE:
  - PROVIDE FOLLOWING EQUIPMENT:
    - VOLTMETER
    - ARTIFICIAL SMOKE
    - RATE OF RISE HEAT DETECTOR TESTER.

EXISTING FIRE ALARM SINGLE LINE DIAGRAM







- KEY NOTES:
1. RECONNECT NEW FIRE ALARM CONTROL PANEL TO EXISTING MONITORING SYSTEM.
  2. PROVIDE RED LOCKABLE BREAKER.

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0	ISSUED FOR TENDER	2020/11/26
Revision	Description	Date
Client		client

PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title

LETHBRIDGE, AB  
AAFC LeRDC

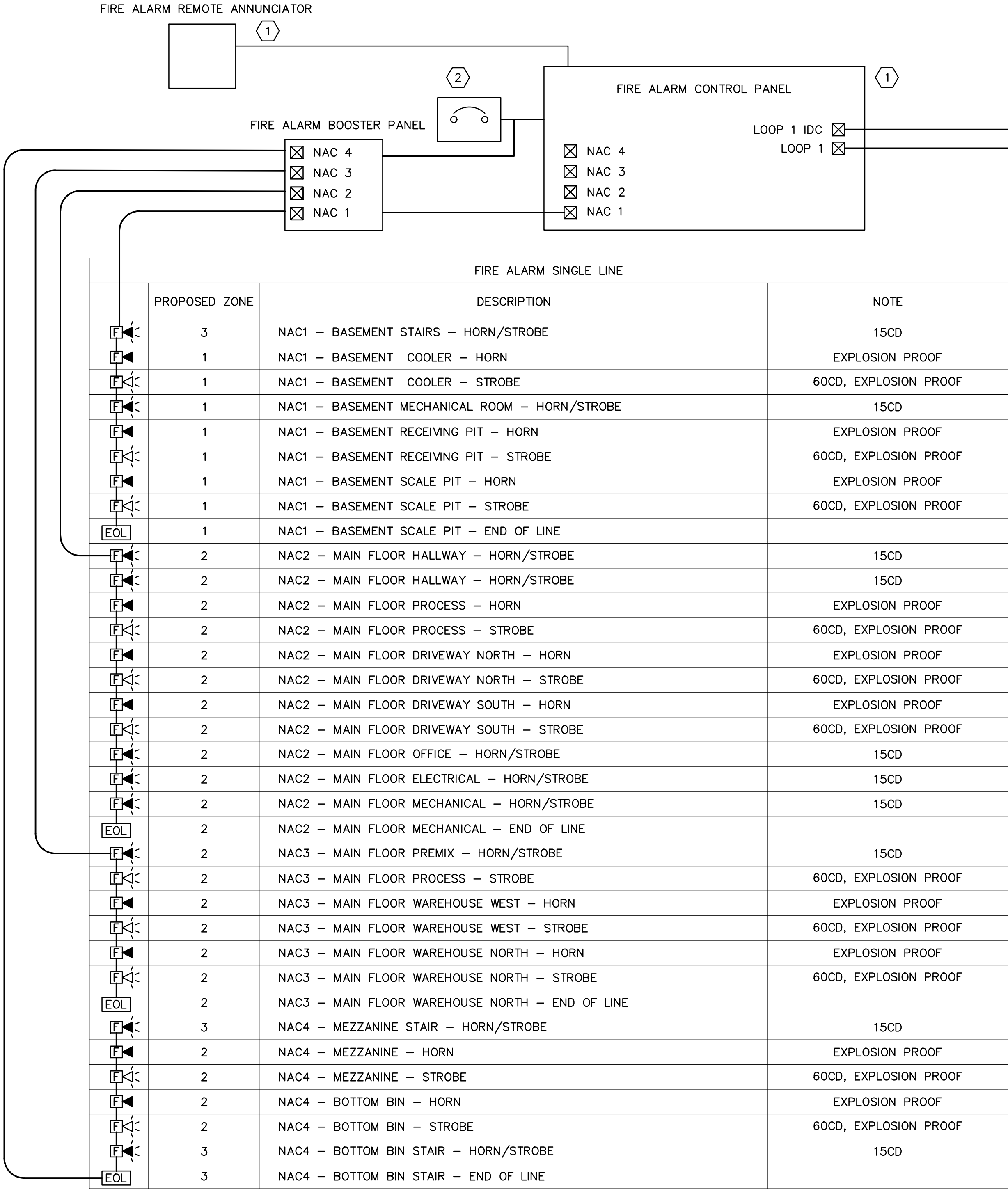
Project

FEED MILL (116)  
BUILDING UPGRADES

Designed by T.J.G., P.P.G.	Conçu par
Drawn by T.J.G.	Dessiné par
Approved by T.J.G., P.P.G.	Approuvé par
PWOSC Project Manager GREG SPENCE	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

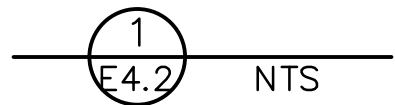
ELECTRICAL  
PROPOSED FIRE ALARM SINGLE LINE

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E4.2 OF XX	0

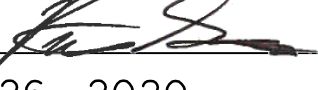


FIRE ALARM SINGLE LINE					
	EXISTING	ZONE	PROPOSED ZONE	DESCRIPTION	NOTE
ISO			2	ZN1 – BASEMENT – WEST – ISOLATION MODULE	
PS			1	ZN1 – BASEMENT – WEST – PULLSTATION	EXPLOSION PROOF
HD			1	ZN1 – BASEMENT – MECH – HEAT DETECTOR	
PS			1	ZN1 – BASEMENT – EAST – PULLSTATION	EXPLOSION PROOF
PS			2	ZN2 – MAIN FLOOR – EAST STAIRWAY – PULLSTATION	
F			2	ZN2 – MAIN FLOOR – MECHANICAL – FLOW SWITCH	
HD			2	ZN2 – MAIN FLOOR – MECHANICAL – HEAT DETECTOR	
TS			2	ZN2 – MAIN FLOOR – MECHANICAL – TAMPER SWITCH	SUPERVISORY
TS			2	ZN2 – MAIN FLOOR – MECHANICAL – TAMPER SWITCH	SUPERVISORY
TS			2	ZN2 – MAIN FLOOR – MECHANICAL – TAMPER SWITCH	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – FIRE PUMP RUN	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – FIRE PUMP SUPERVISORY	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – GENERATOR POWER SUPPLY	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – TAMPER VALVE	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – TAMPER VALVE	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – TAMPER VALVE	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – TAMPER VALVE	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – TAMPER VALVE	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – GENERATOR AUXILIARY	SUPERVISORY
IM			2	ZN2 – MAIN FLOOR – FIRE PUMP CONTROLLER AUXILIARY	SUPERVISORY
PS			2	ZN2 – MAIN FLOOR – MAIN ENTRANCE PULLSTATION	
IM			2	ZN2 – MAIN FLOOR – ELECTRICAL – PLC	
PS			2	ZN2 – MAIN FLOOR – EAST – PULLSTATION	
PS			2	ZN2 – MAIN FLOOR – DRIVEWAY DOOR – PULLSTATION	EXPLOSION PROOF
PS			2	ZN2 – MAIN FLOOR – NORTHEAST – PULLSTATION	EXPLOSION PROOF
ISO			2	ZN2 – MAIN FLOOR – NORTHEAST – ISOLATION MOD	
ISO			2	ZN2 – MAIN FLOOR – NORTHEAST – ISOLATION MOD	
PS			2	ZN2 – MEZZANINE – PULLSTATION	EXPLOSION PROOF
HD			3	ZN3 – MEZZANINE – HEAT DETECTOR	
ISO			3	ZN3 – MEZZANINE – ISOLATION MOD	
ISO			3	ZN3 – MEZZANINE – ISOLATION MOD	
PS			2	ZN2 – BIN TOP – PULL STATION	EXPLOSION PROOF
ISO			3	ZN3 – BIN TOP – ISOLATION MOD	

FIRE ALARM SINGLE LINE DIAGRAM



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Date NOV 26, 2020

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NOTES:

1. NEW FUSE AND TERMINAL LABELS ARE SHOWN FOR INTENT. CONTRACTOR TO LABEL NEW FUSES AND TERMINALS FOLLOWING EXISTING LABELLING CONVENTION.

KEY NOTES:

1. CONTACT FROM R10062 TO CONNECT TO FIRE ALARM INPUT MODULE.

Revision	Description	Date
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0	ISSUED FOR TENDER	2020/11/26

Client		client

PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title

LETHBRIDGE, AB  
AAFC LeRDC

FEED MILL (116)  
BUILDING UPGRADES

Designed by T.J.G., P.P.G.	Conçu par
Drawn by T.J.G.	Dessiné par
Approved by T.J.G., P.P.G.	Approuvé par
PWSSC Project Manager GREG SPENCE	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

ELECTRICAL  
PLC IO 1 OF 3

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E4.3 OF XX	0

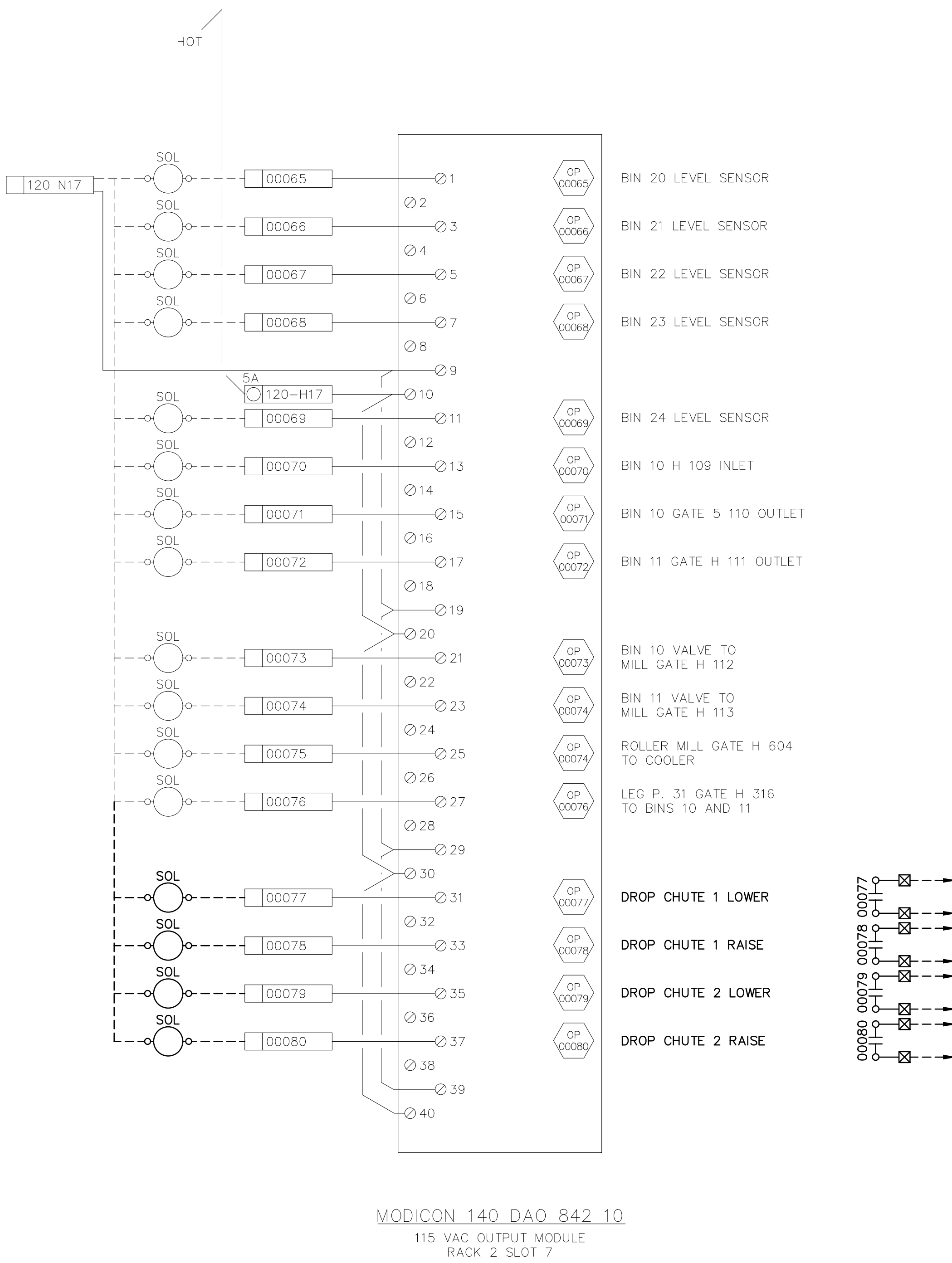
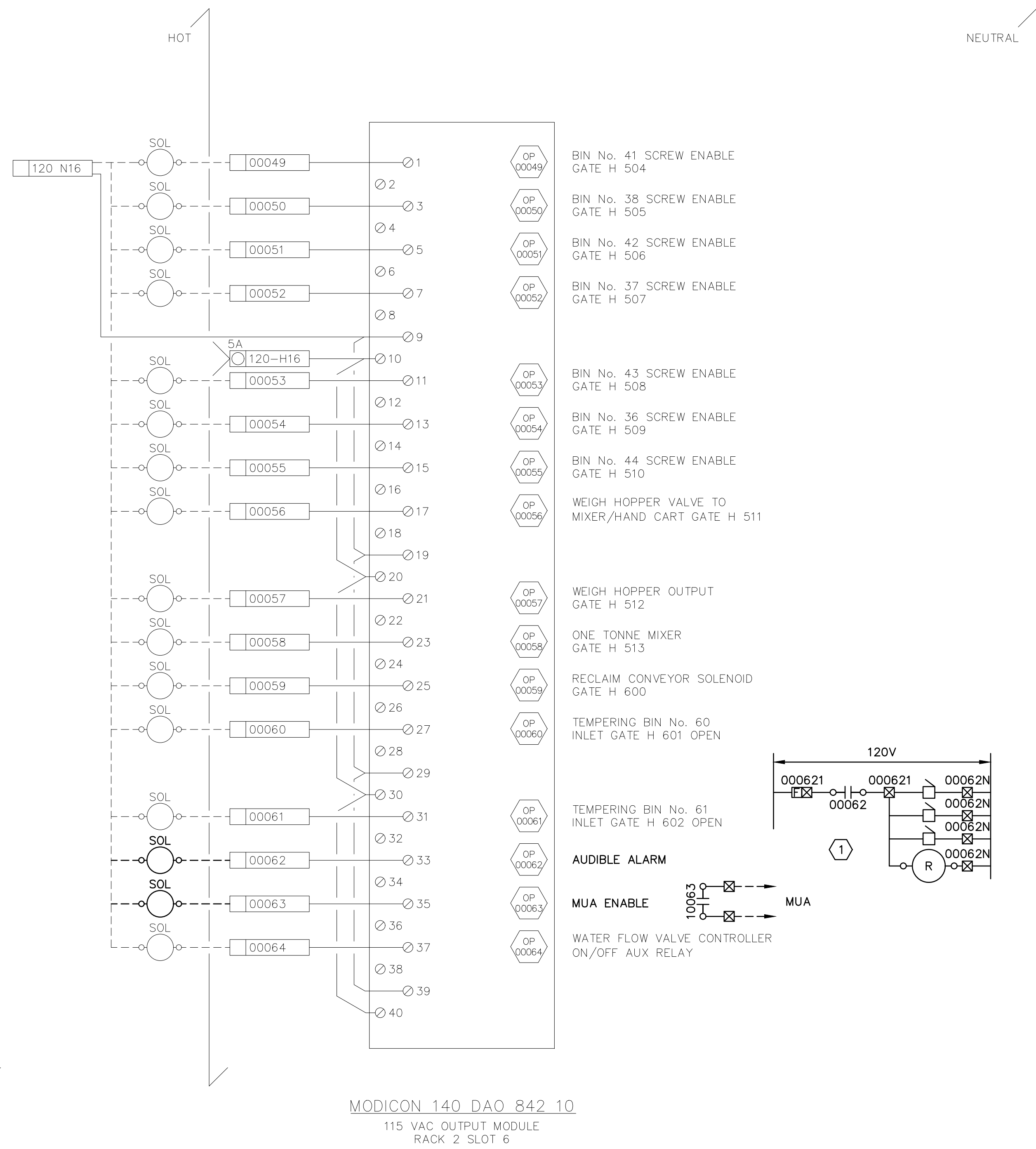
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Date NOV 26, 2020

PERMIT NUMBER: P3680

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NOTES:

1. NEW FUSE AND TERMINAL LABELS ARE SHOWN FOR INTENT. CONTRACTOR TO LABEL NEW FUSES AND TERMINALS FOLLOWING EXISTING LABELLING CONVENTION.
2. SUPPLY NEW MODICON 140 ACI03000 CARDS FOR PLC SYSTEM. PROVIDE TERMINALS AND OTHER ACCESSORIES AS REQUIRED.

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Revision	Description	Date
Client		client

PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title

LETHBRIDGE, AB  
AAFCLeRDC

FEED MILL (116)  
BUILDING UPGRADES

Designed by  
T.J.G., P.P.G.

Conçu par

Drawn by  
T.J.G.

Dessiné par

Approved by  
T.J.G., P.P.G.

Approuvé par

PWSSC Project Manager  
GREG SPENCE

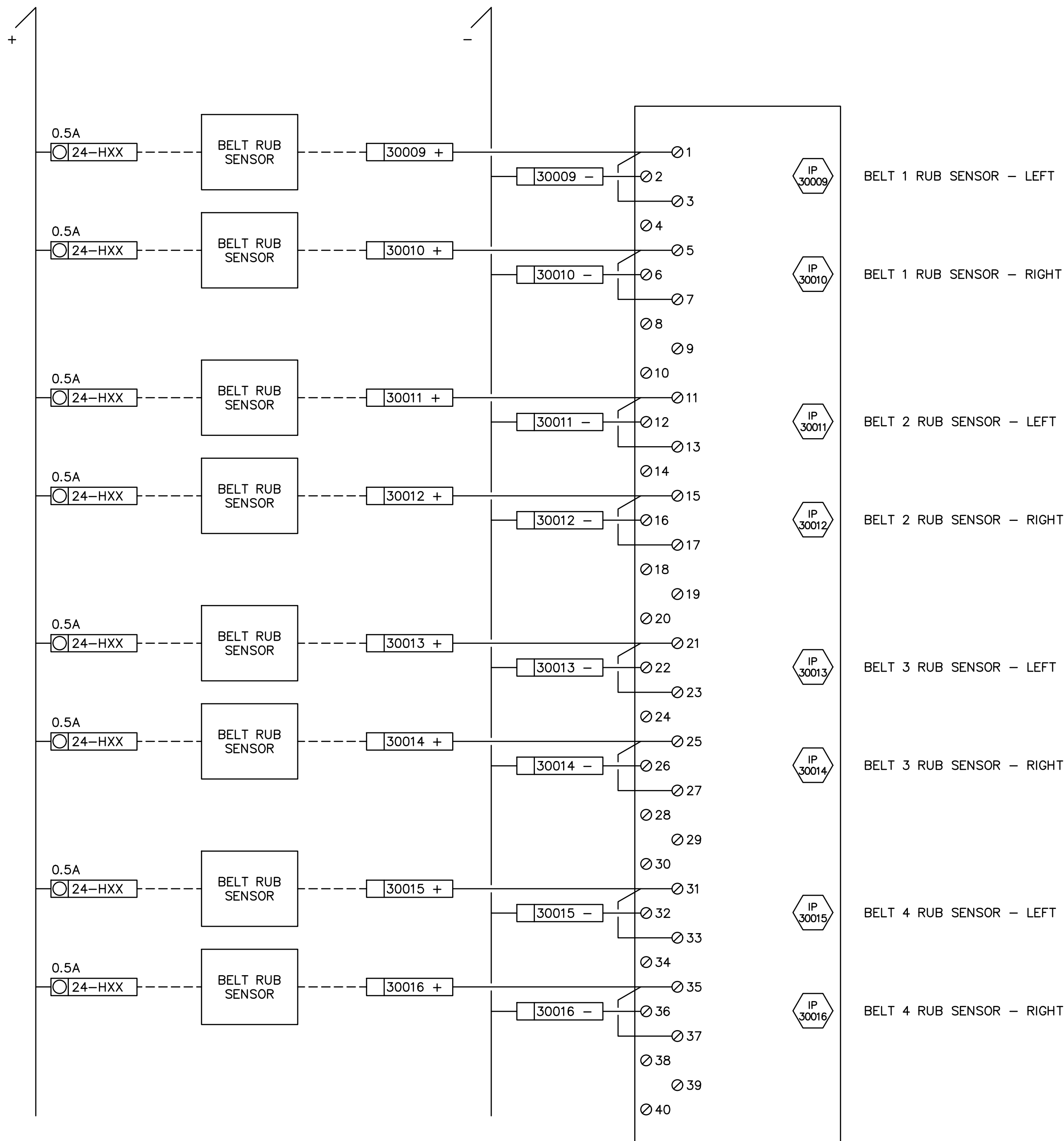
Administrateur de Projets TPSGC

Drawing title

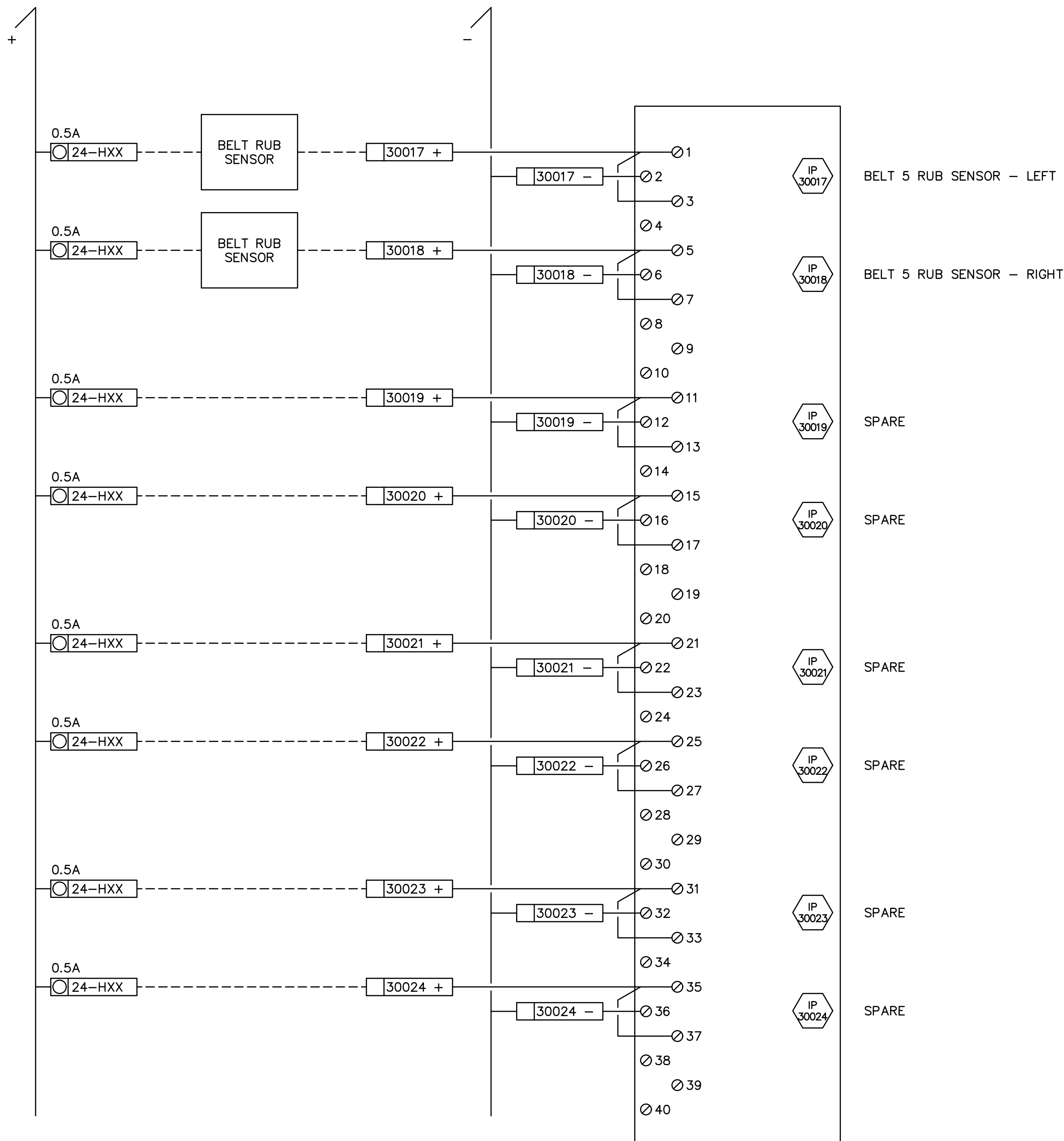
Titre du dessin

ELECTRICAL  
PLC IO 2 OF 3

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E4.4 OF XX	0



MODICON 140 ACI 030 00  
ANALOG INPUT MODULE (UNI-POLAR)  
RACK 2 SLOT 13



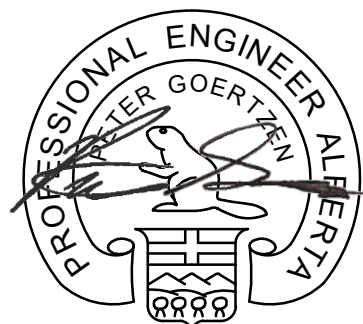
MODICON 140 ACI 030 00  
ANALOG INPUT MODULE (UNI-POLAR)  
RACK 2 SLOT 14

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NOTES:  
1. NEW FUSE AND TERMINAL LABELS ARE SHOWN FOR INTENT. CONTRACTOR TO LABEL NEW FUSES AND TERMINALS FOLLOWING EXISTING LABELLING CONVENTION.

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Revision	Description	Date
Client		client

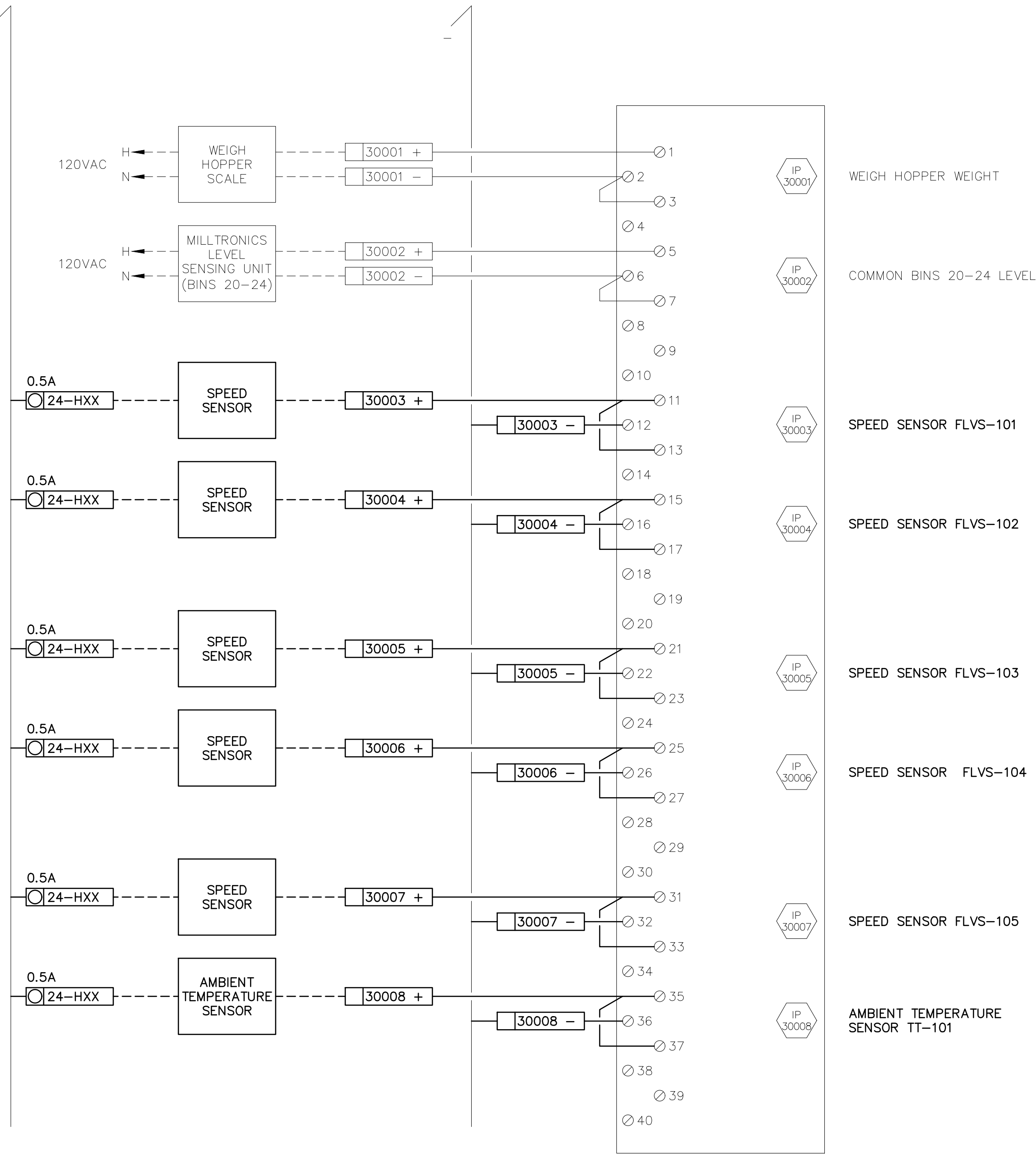
**PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA**

Project title  
**LETHBRIDGE, AB  
AAFC LeRDC**  
  
**FEED MILL (116)  
BUILDING UPGRADES**

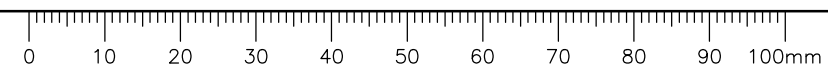
Designed by <b>T.J.G., P.P.G.</b>	Conçu par
Drawn by <b>T.J.G.</b>	Dessiné par
Approved by <b>T.J.G., P.P.G.</b>	Approuvé par
PWSSC Project Manager <b>GREG SPENCE</b>	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

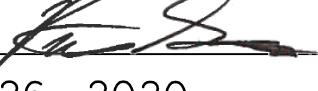
**ELECTRICAL  
PLC IO 3 OF 3**

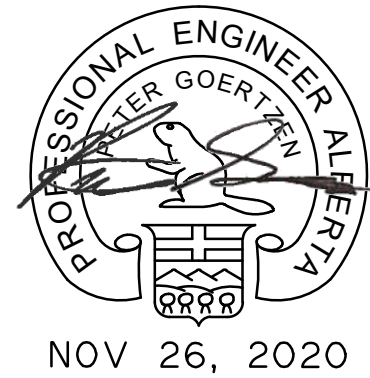
Project no./No. du projet <b>R.097511.001</b>	Drawing no./No. du dessin <b>E4.5 OF XX</b>	Revision no. <b>0</b>
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MODICON 140 ACI 030 00  
ANALOG INPUT MODULE (UNI-POLAR)  
RACK 2 SLOT 15



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Date NOV 26, 2020  
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NOTES:

1. MANUFACTURER AND MODEL INFORMATION IS ONLY PROVIDED AS A BASIS OF DESIGN. SELECTED LUMINAIRES SHOULD MATCH CLASSIFICATION, FORM FACTOR, LIGHT OUTPUT, POWER CONSUMPTION AND VOLTAGE.

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PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project titleProjet

LETHBRIDGE, AB  
AAFC LeRDC

FEED MILL (116)  
BUILDING UPGRADES

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PWOSC Project Manager GREG SPENCE	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

ELECTRICAL  
SCHEDULES

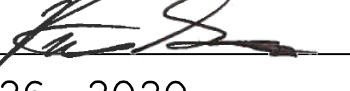
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.097511.001	E5.1 OF XX	0

	PANEL: C					
	LOCATION: ELECTRICAL ROOM					
	120/208V 3PH 4W 100A					
DESCRIPTION	TRIP AMPS	BRK. NO.	PHASE	BRK. NO.	TRIP AMPS	DESCRIPTION
HOT WATER BOILER AND DRINKING FOUNTAIN	15	1	A	2	15	HEATING CABLE P-55
GRAIN PREP CONTROLLER	15	3	B	4	15	BAGGER RECEPTACLE
SPARE	15	5	C	6	15	BOILER VENT FAN MF-12
SPARE	15	7	A	8	3P15	MP3
SPARE	15	9	B	10	—	—
SPARE	15	11	C	12	—	—
		13	A	14		
SPARE	15	15	B	16	15	BOILER 2 SLAVE
SPARE	15	17	C	18		
SUMP PUMPS MP-13 AND MP-14	15	19	A	20	2P40	WELDER PLUG
A/C UNIT	2P20	21	B	22	—	—
—	—	23	C	24		
BLOWER UNIT	2P15	25	A	26	2P20	HOT WATER TANK
—	—	27	B	28	—	—
		29	C	30	15	OVERHEAD DOOR
BASEBOARD HEATERS WASHROOM AND LAB	2P20	31	A	32		
—	—	33	B	34	15	BOILER / "MASTER"
BASEBOARD HEATERS HALLWAY	2P20	35	C	36	15	EF-1
—	—	37	A	38	15	EF-2
BASEBOARD HEATERS OFFICE	2P20	39	B	40	15	EF-3
—	—	41	C	42	20	EUH-1

LUMINAIRE SCHEDULE								
TAG	DESCRIPTION	MANUFACTURER (OR APPROVED EQUIVALENT)	MODEL (OR APPROVED EQUIVALENT)	VOLTAGE	WATTAGE	MOUNTING	LAMP TYPE	REMARKS
EXE	EXPLOSION PROOF EXIT SIGN	LUMACELL	LH SERIES	UNV	2.5W	SURFACE	LED	SPECIFIED FOR ZONE 21 / 22
RHE	EXPLOSION PROOF REMOTE HEAD	LUMACELL	RS10XP LED SERIES	6/12/24/120	6W	SURFACE	LED	SPECIFIED FOR ZONE 21 / 22
RH	REMOTE HEAD	LUMACELL	MP-BLD	6 / 12	3W	SURFACE	LED	
EX	EXIT SIGN	LUMACELL	LA-3-W-U	UNV	3W	SURFACE	LED	
EXM	COMBINATION EXIT LIGHT	LUMACELL	CMPC-L SERIES	UNV	4W	SURFACE	LED	
EMB	BATTERY PACK W/ DOUBLE HEAD	LUMACELL	LHP-1275-2-L6	UNV	75W	SURFACE	LED	
100	WALL SCONCE	EATON	EV LED - C201	120-277	15W	SURFACE	LED	SPECIFIED FOR ZONE 21 / 22
101	EXTERIOR WALL SCONCE	RAB	WP3LED-110-N-W/PC	120-277	110W	SURFACE	LED	C/W INTEGRAL PHOTOCELL

MECHANICAL SCHEDULE													
TAG	DESCRIPTION	LOCATION	LOAD	VOLTAGE	PHASE	NUMBER OF POLES	MCA	STARTER	BREAKER (MOCP)	CCT NO.	CONTROL	INTERLOCKS	REMARKS
MUA-1	MAKE-UP AIR UNIT	EAST OF WAREHOUSE	3 HP	575	3	3	5.1	INTERNAL	15	100-31,33,35	PLC OUTPUT	DUST COLLECTION SYSTEM	
EF-1	EXHAUST FAN	DRIVEWAY	0.5 HP	208	1	2	5.4	FULL VOLTAGE NON-REVERSING MOTOR STARTER	15	C-36,38	CO AND NOX SENSORS		
EF-2	EXHAUST FAN	WAREHOUSE	0.25 HP	208	1	2	2.7	FULL VOLTAGE NON-REVERSING MOTOR STARTER	15	C-40,42			
EF-3	EXHAUST FAN	WAREHOUSE	0.1 HP	115	1	1	0.64	FULL VOLTAGE NON-REVERSING MOTOR STARTER	15	C-24			
EUH-1	ELECTRIC UNIT HEATER	FIRE PUMP PANEL	1500 W	120	1	1	12.5	INTEGRAL	20	C-29	INTEGRAL T-START	N/A	

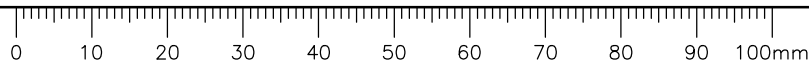
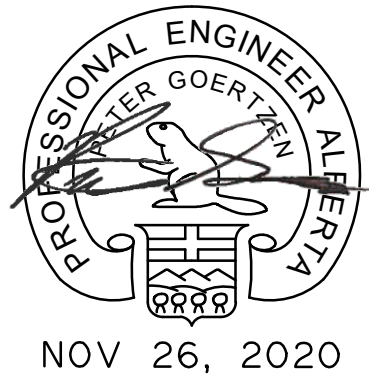
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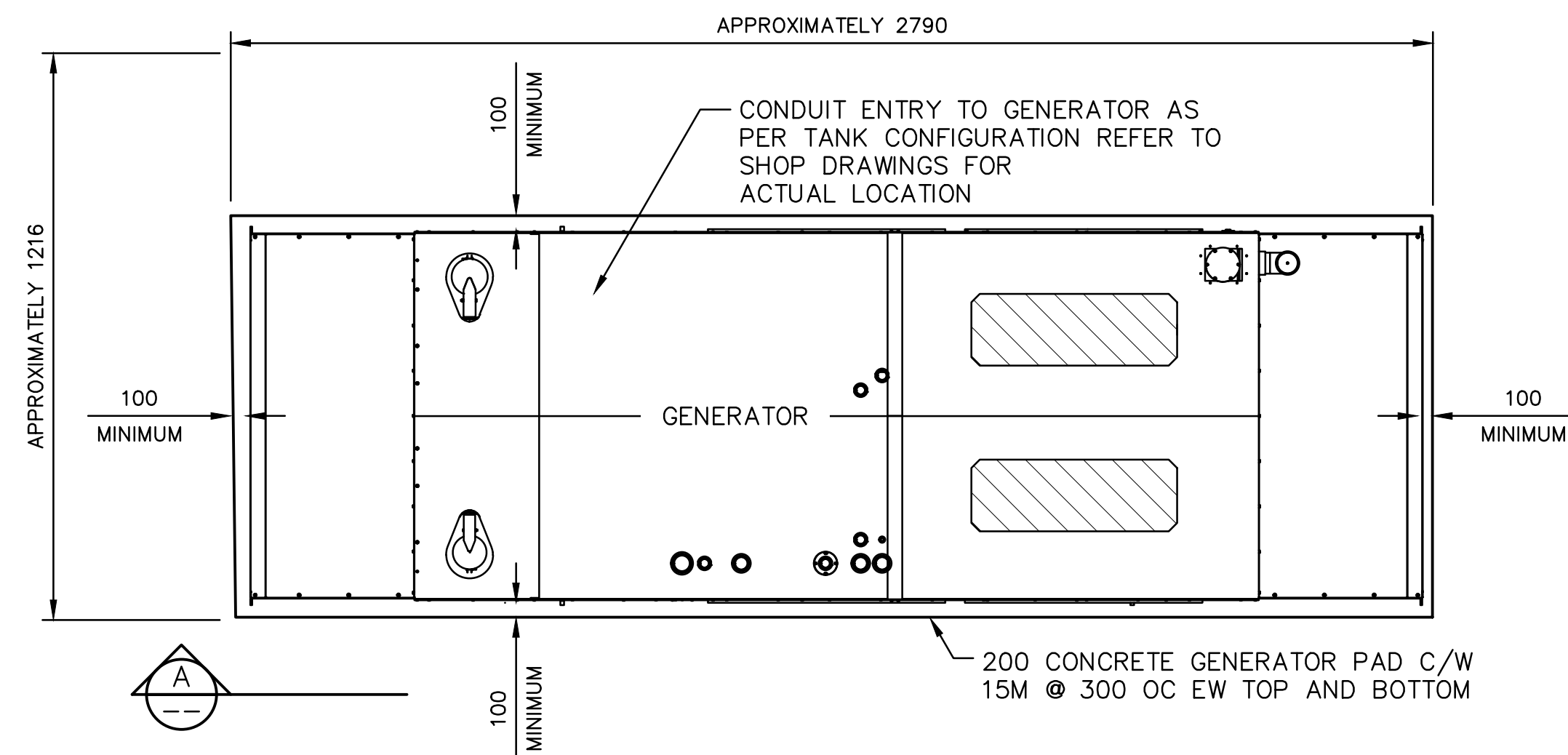
Signature 

Date NOV 26, 2020

PERMIT NUMBER: P 3680

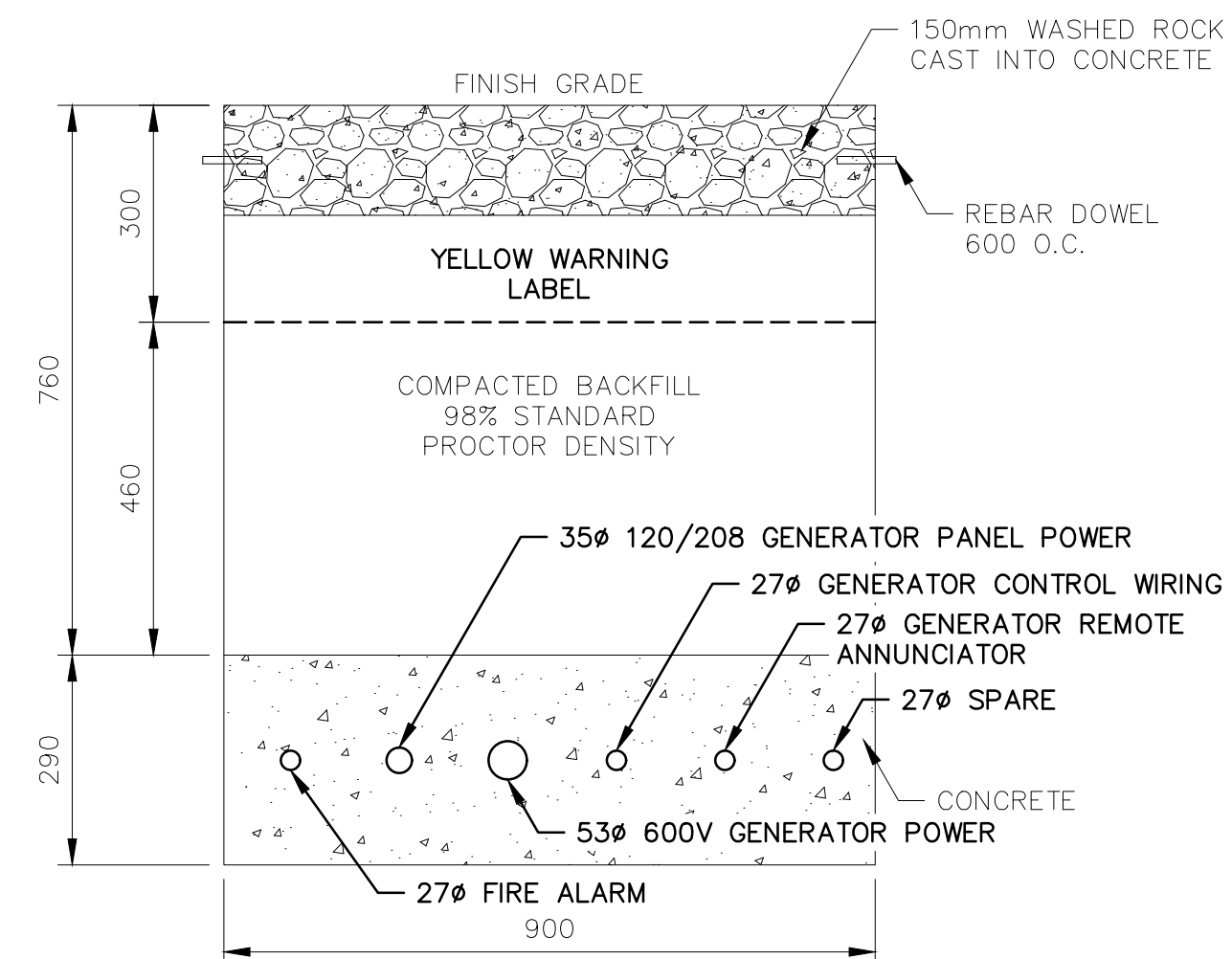
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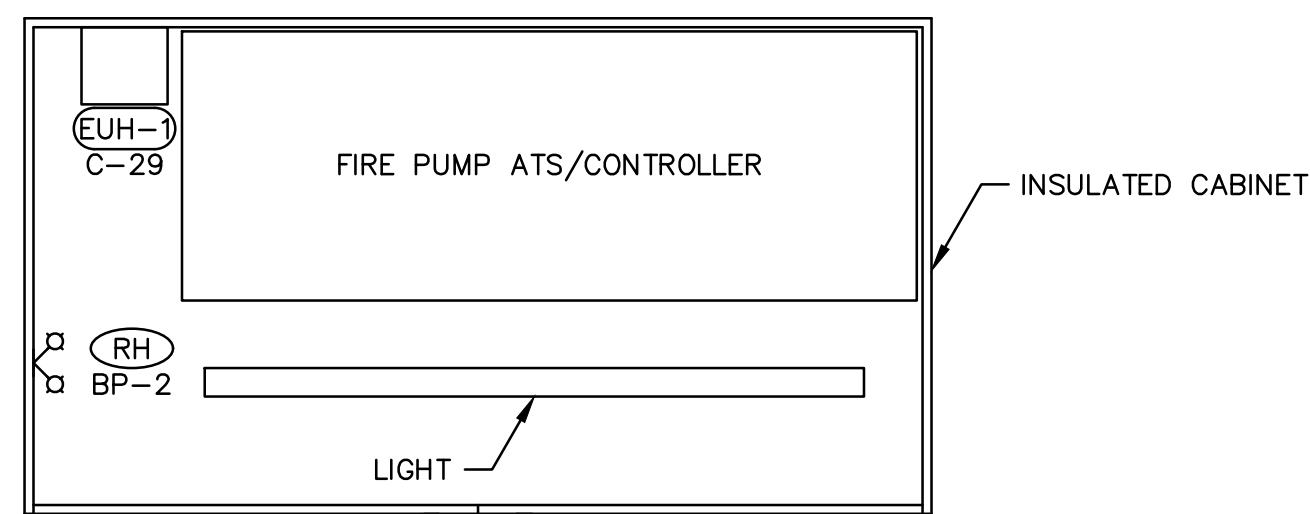
GENERATOR PAD DETAIL

1  
E0.2  
NTS



TRENCHING DETAIL

2  
E0.2  
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FIRE PUMP CONTROL PANEL LAYOUT

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0	ISSUED FOR TENDER	2020/11/26
Revision	Description	Date
Client		client

PUBLIC WORKS AND  
GOVERNMENT SERVICES  
CANADA

Project title  
**LETHBRIDGE, AB  
AAFC LeRDC**

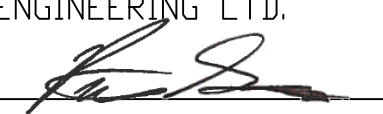
**FEED MILL (116)  
BUILDING UPGRADES**

Designed by <b>T.J.G., P.P.G.</b>	Conçu par
Drawn by <b>T.J.G.</b>	Dessiné par
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PWGSC Project Manager <b>GREG SPENCE</b>	Administrateur de Projets TPSGC
Drawing title	Titre du dessin

**ELECTRICAL  
DETAILS**

Project no./No. du projet <b>R.097511.001</b>	Drawing no./No. du dessin <b>E6.1 OF XX</b>	Revision no. <b>0</b>
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