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600 CIVIL / CIVIL

700 COMMUNICATION / COMMUNICATION

800 SECURITY / SÉCURITÉ

900 INTERIOR DESIGN / CONCEPTION INTÉRIEUR

388 ONTARIO STREET
Address | Adresse

KINGSTON
City | Ville

ONTARIO
Province | Province

DATE	2026/06/05
BANGUERA, HARLY 701	Digitally signed by BANGUERA, HARLY 701 Date: 2026.07.14 12:52:12-04'00'
	Hall Bergum, Project Manager
DCC NO. – CCX. NO.	KN229976
ST JOHN, STEVEN 376	Digitally signed by ST JOHN, STEVEN 376 Date: 2026.07.14 13:05:35-04'00'
	Steve St. John, Chief Fire Inspector
PROJECT NO. – PROJET NO.	PF500659505
SANTOS, FERNANDO 989	Digitally signed by SANTOS, FERNANDO 989 Date: 2026.07.16 10:00:02-04'00'
	Fernando Santos, Engineering Officer
JOB NO.	K-B35-9306/91

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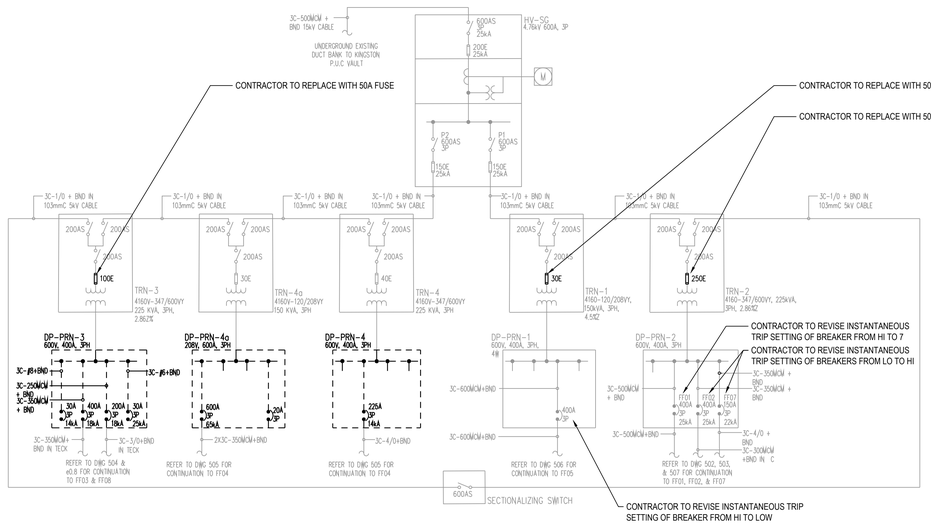
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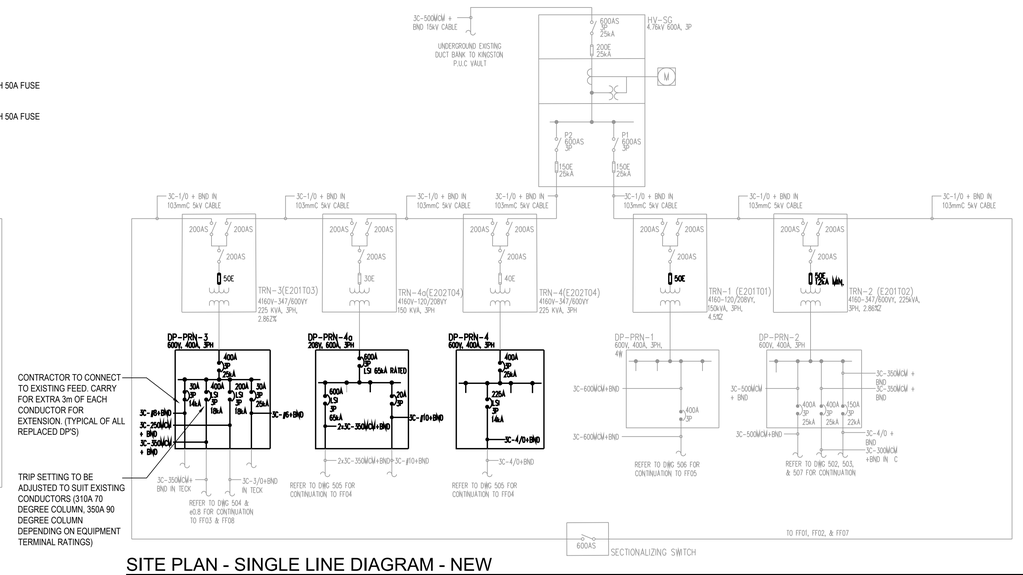
DRAWING NOTES:

1. CONTRACTOR RE-APPLY OXIDE-INHIBITING ELECTRICAL JOINT COMPOUND TO CABLE CONNECTIONS AT THE FOLLOWING HIGH VOLTAGE TRANSFORMERS:
   1.1. TRN-2
2. CONTRACTOR TO PROVIDE NEW GASKET FOR NEMA 3R TRANSFORMER ENCLOSURE DOOR FOR THE FOLLOWING HIGH VOLTAGE TRANSFORMERS:
   2.1. TRN-4
3. CONTRACTOR TO APPLY FOR FIELD INSPECTION FOR NEW ESAFE RATING. AND APPLY NEW ESAFE STICKERS TO THE FOLLOWING DISTRIBUTION PANELS:
   3.1. DP-PRN-2
4. DISTRIBUTION PANEL DP-PRN-3 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   4.1. WEATHER PROOF PAD MOUNT DISTRIBUTION CENTER (SIZE TO SUIT EXISTING CONCRETE PAD), SERVICE ENTRANCE RATED WITH MAIN BREAKER, STEEL CONSTRUCTION, HINGED FRONT DOOR WITH 4" SNOW KICK, OIL RESISTANT GASKET MATERIAL INSIDE DOOR, DEAD FRONT INTERIOR COVER OVER CDP AND MAIN, OPEN BOTTOM FOR CABLE ENTRY WITH 3" MOUNTING FLANGE, BOTTOM ENTRY AND EXIT, 600V, 400A MAINS, 400A MBC, 3PH, CIRCUIT MOUNTING SPACE TO SUIT EXISTING BREAKER COUNT AND SIZE, COPPER MAINS, NEUTRAL AND GROUND BUSSING, NEMA 3R ENCLOSURE, CSA CERTIFIED.
5. DISTRIBUTION PANEL DP-PRN-4 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   5.1. WEATHER PROOF PAD MOUNT DISTRIBUTION CENTER (SIZE TO SUIT EXISTING CONCRETE PAD), SERVICE ENTRANCE RATED WITH MAIN BREAKER, STEEL CONSTRUCTION, HINGED FRONT DOOR WITH 4" SNOW KICK, OIL RESISTANT GASKET MATERIAL INSIDE DOOR, DEAD FRONT INTERIOR COVER OVER CDP AND MAIN, OPEN BOTTOM FOR CABLE ENTRY WITH 3" MOUNTING FLANGE, BOTTOM ENTRY AND EXIT, 600V, 400A MAINS, 400A MCB , 3PH, CIRCUIT MOUNTING SPACE TO SUIT EXISTING BREAKER COUNT AND SIZE, COPPER MAINS, NEUTRAL AND GROUND BUSSING, NEMA 3R ENCLOSURE, CSA CERTIFIED.
6. DISTRIBUTION PANEL DP-PRN-4a TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   6.1. WEATHER PROOF PAD MOUNT DISTRIBUTION CENTER (SIZE TO SUIT EXISTING CONCRETE PAD), SERVICE ENTRANCE RATED WITH MAIN BREAKER, STEEL CONSTRUCTION, HINGED FRONT DOOR WITH 4" SNOW KICK, OIL RESISTANT GASKET MATERIAL INSIDE DOOR, DEAD FRONT INTERIOR COVER OVER CDP AND MAIN, OPEN BOTTOM FOR CABLE ENTRY WITH 3" MOUNTING FLANGE, BOTTOM ENTRY AND EXIT, 208V, 600A MAINS, 600A LSI MCB, 3PH, CIRCUIT MOUNTING SPACE TO SUIT EXISTING BREAKER COUNT AND SIZE, COPPER MAINS, NEUTRAL AND GROUND BUSSING, NEMA 3R ENCLOSURE, CSA CERTIFIED.



SITE PLAN - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



SITE PLAN - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S.

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

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ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
ELECTRICAL SITE PLAN
SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.			DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.			PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.			DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 501

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
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KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN299976

TRADE | MÉTIER	DATE
ELECTRICAL | ELECTRIQUE	2026/06/05

SUBJECT | SUJET
ELECTRICAL SITE PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ N.F.		DES O | AGENT CONC
DRAWN | DESSINÉ B.R.		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.		DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

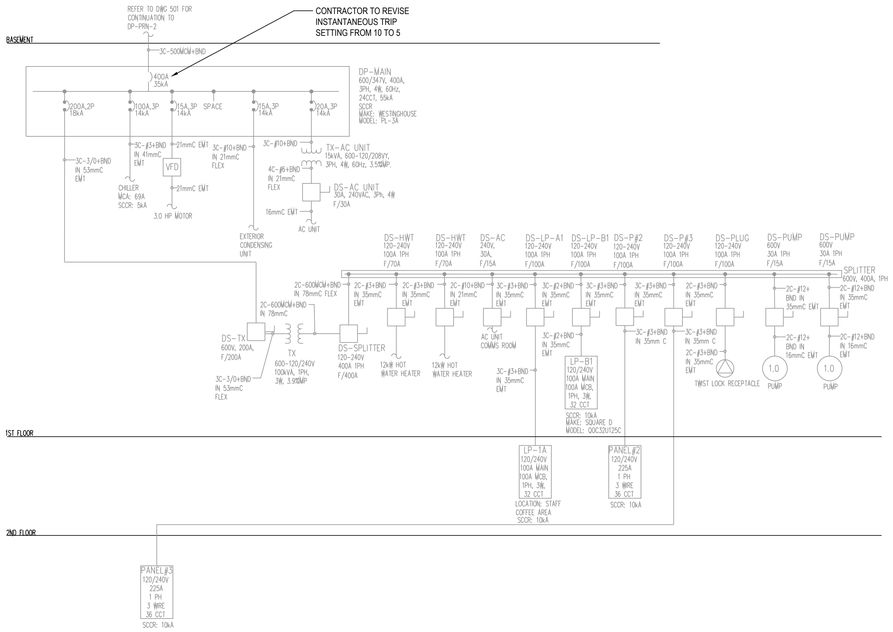
DWG. NO. | NO. DESSIN
K-B35-9306/91 - 502

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2026/Jun/05, 11:56am brittwage B1 1:100 x 707 E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-930691-502.dwg

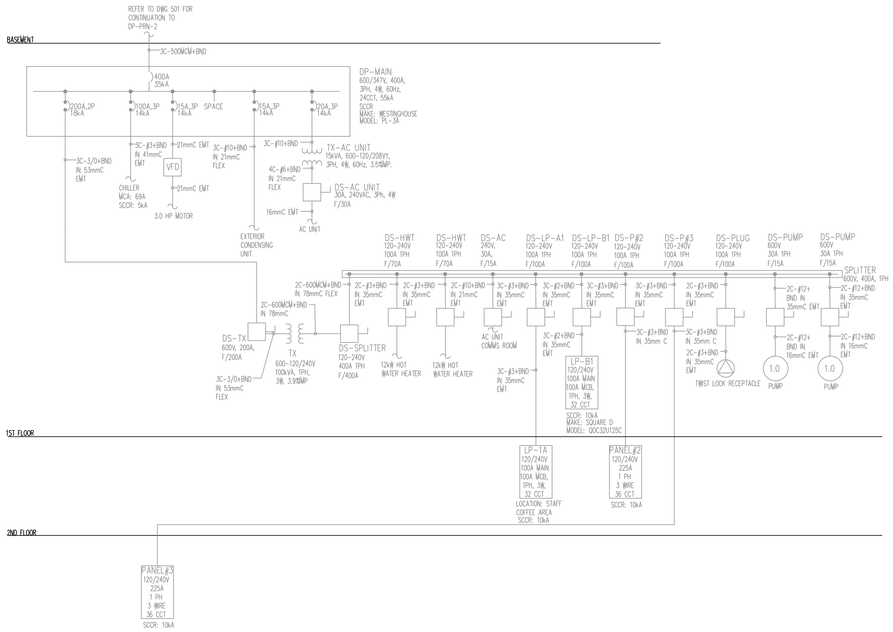
THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. DP-MAIN - WESTINGHOUSE PL-3A
2. LP-A1 - SQUARE D QOC32U125C
3. LP-B1 - SQUARE D QOC32U125C
4. PANEL #2 - SQUARE D QBL-336 T2
5. PANEL #3 - SQUARE D QBL-336 T2



FF01 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S



FF01 - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S

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SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
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PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
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TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF01 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.		DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

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PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 510

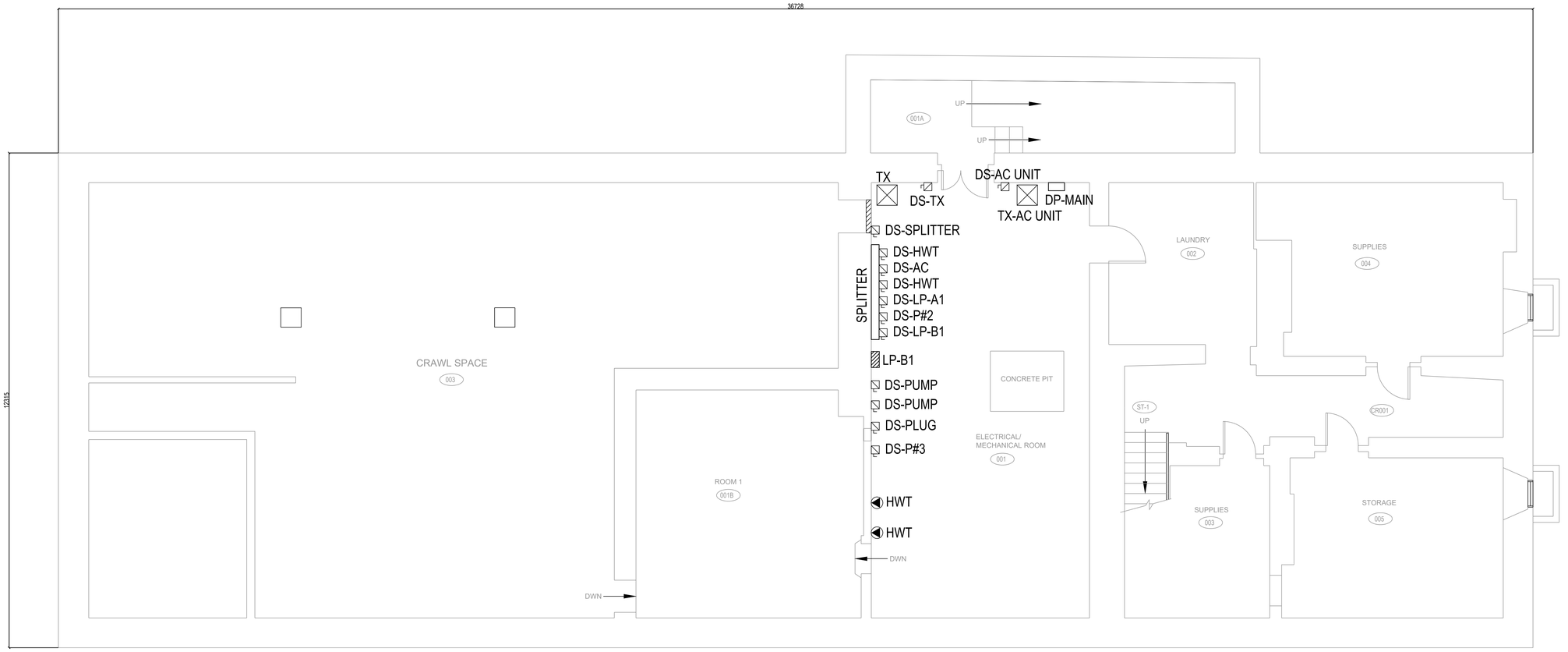
Canada

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   1.1. DP-MAIN
   1.2. LP-B1
2. CONTRACTOR TO PROVIDE AND INSTALL NEW INSULATED BUSHING ON CONDUIT AT ENTRANCE OF THE FOLLOWING ELECTRICAL PANELS:
   2.1. DP-MAIN
3. DP-MAIN IS CURRENTLY NOT ANCHORED PROPERLY. IT'S CURRENTLY MOUNTED ON UNISTRUT SECURED TO A STONE WALL. PROVIDE 2x 2400X1200 20mm FIRE RATED PLYWOOD BACK BOARDS. DETACH DP-MAIN FROM UNISTRUT, ANCHOR PLYWOOD BEHIND DP-MAIN TO STONE WALL, AND SECURE DP-MAIN TO THE PLYWOOD.
4. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   4.1. LP-B1
5. CONTRACTOR TO CLEAN CONTACTS, VERIFY TERMINATION TORQUE, PERFORM NEW THERMAL SCAN, AND FURTHER INVESTIGATE ANY ABNORMALITIES THE FOLLOWING DISCONNECT SWITCHES:
   5.1. DS-HWT
   5.2. DS-HWT
   5.3. DS-LP-A1
   5.4. DS-LP-B1
6. CONTRACTOR TO PROVIDE NEW SCREWS FOR THE FOLLOWING ELECTRICAL PANEL COVERS:
   6.1. LP-B1

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



FF01 - BASEMENT
SCALE: 1:50

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100515208
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SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF01 - BASEMENT
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED	ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN	DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED	VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 511

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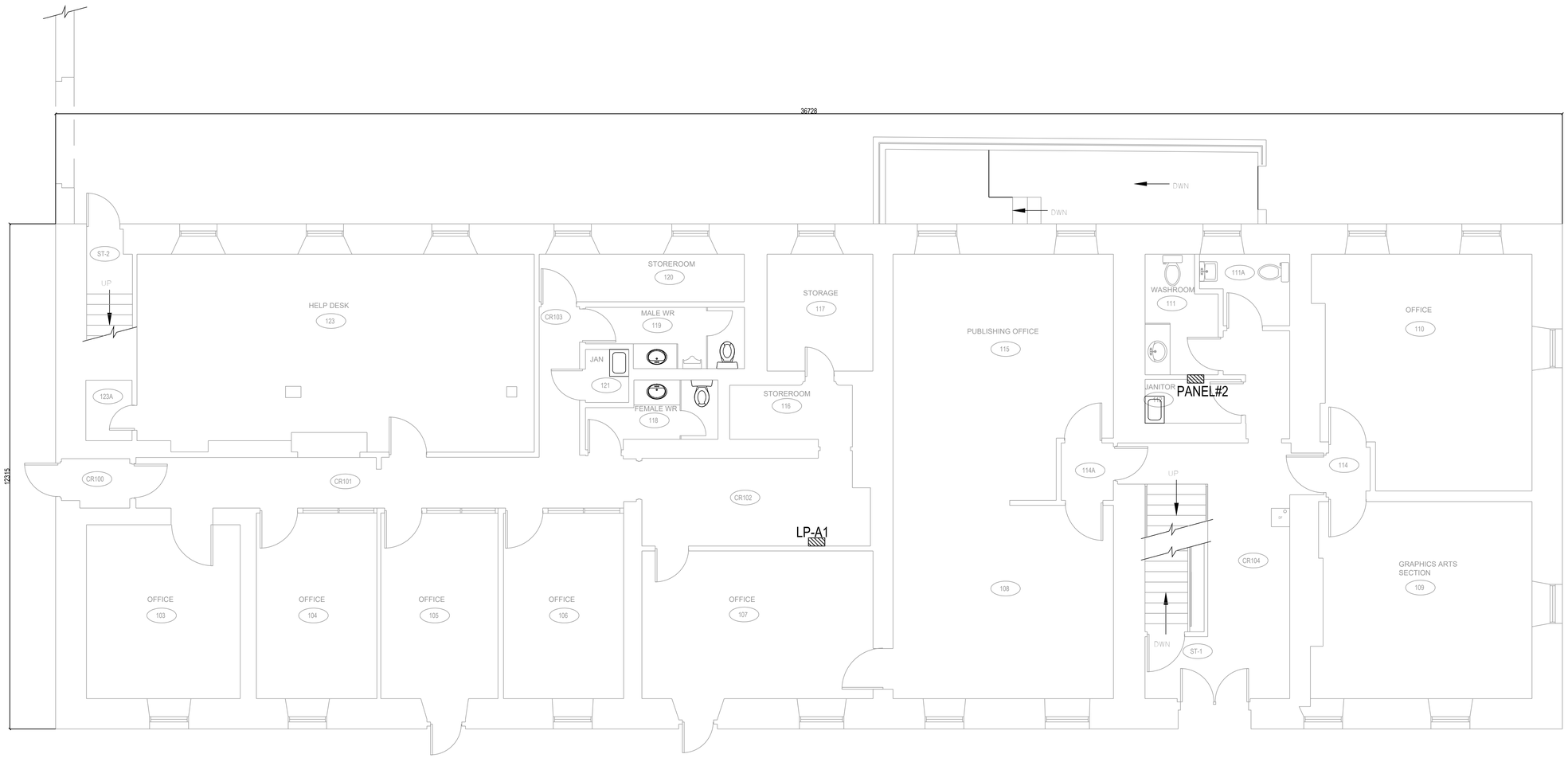
2026/Jun/05, 11:57am brittwage B1 1000 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-93069\1-511.dwg

DRAWINGS NOTES:

1. CONTRACTOR TO REPLACE EXISTING LOCKING MECHANISM ON THE FOLLOWING ELECTRICAL PANELS TO PROVIDE PROPER SECURITY:
   1.1. LP-A1
2. CONTRACTOR TO PROVIDE NEW SCREWS FOR THE FOLLOWING ELECTRICAL PANEL COVERS:
   2.1. PANEL P-#2

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   LP-1A
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF01 - LEVEL 01
SCALE: 1:50

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SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
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PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF01 - LEVEL 01
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
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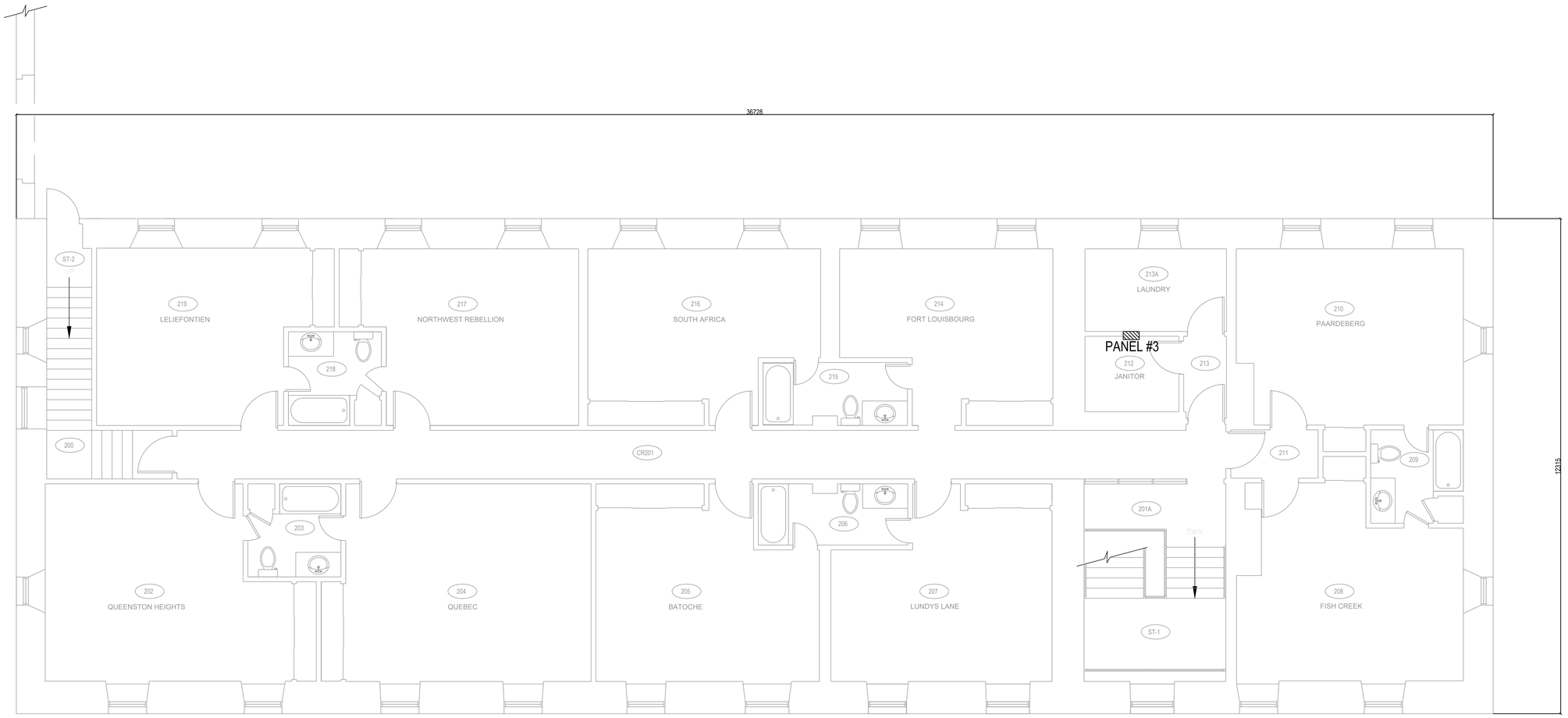
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DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE NEW SCREWS FOR THE FOLLOWING ELECTRICAL PANEL COVERS:
   1.1. PANEL P-#3
2. CONTRACTOR TO HEAT SHRINK CONDUCTORS FOR PROPER PHASE IDENTIFICATION ON THE FOLLOWING PANELS:
   2.1. PANEL P-#3

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF01 - LEVEL 02
SCALE: 1:50

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PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF01 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91- 513

Canada

2026/Jun/05, 11:56am brittwage H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-930691-513.dwg
B1 1000 x 707_E

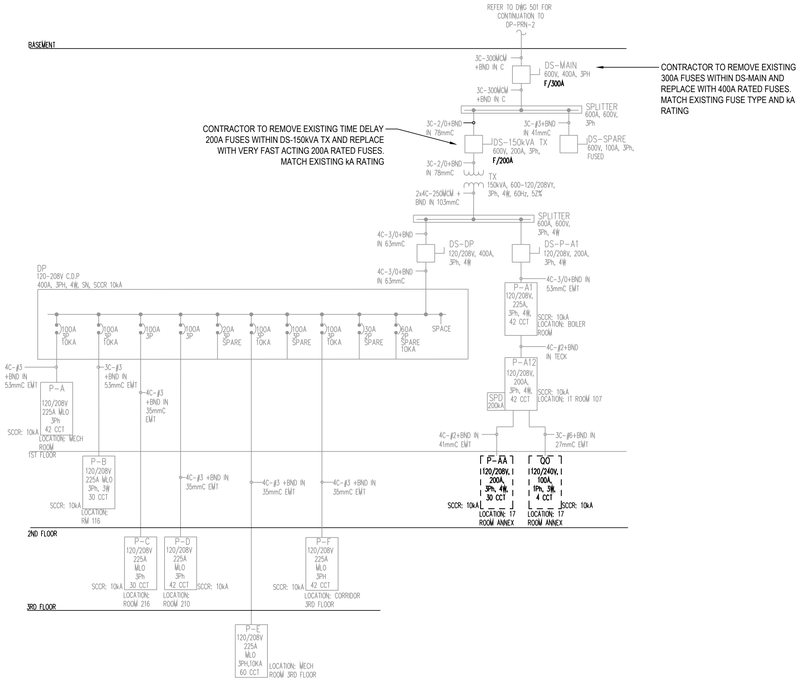
Sheet # of #

DRAWING NOTES:

1. PANEL P-AA TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   1.1. 120/208V, 200A, 3PH, 4W, 30CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, SURFACE MOUNTED W/ DOOR, NEMA 4 ENCLOSURE, CSA LISTED.
   1.2. 10x 1P 15A, 2x 1P 20A, 1x 2P 20A, 1x 3P 30A.
2. PANEL P-QO TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   2.1. 120/240V, 100A, 1PH, 3W, 4CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, SURFACE MOUNTED W/ DOOR, NEMA 4 ENCLOSURE, CSA LISTED.
   2.2. 2x 1P 15A, 1x 2P 25A
3. PROVIDE NEW 2P 30A BREAKERS IN SPACES 19,21 AND 23,25, AND A NEW 2P 15A BREAKER IN SPACES 24,26 FOR PANEL P-A1. BREAKER MAKE AND MODEL TO SUIT EXISTING PANEL TYPE.

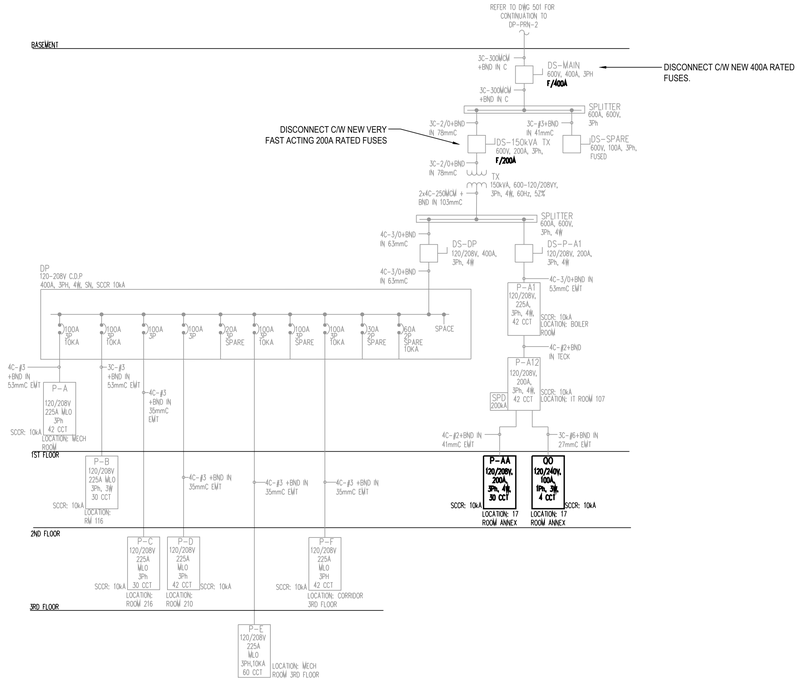
THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. DP - SQUARE D HCN-2345-4
2. P-A - SIEMENS NLAB442C
3. P-B - SIEMENS NLAB430CS
4. P-C - SIEMENS NLAB430CS
5. P-D - SIEMENS NLAB442C
6. P-E - SIEMENS CDP-7
7. P-F - SIEMENS NLAB442C
8. P-A1 - WESTINGHOUSE PL-1
9. P-A12 - SQUARE D NQOD442L225CU
10. P-AA - SQUARE D QO424ML-2
11. QO - SQUARE D QO4L-100S



FF02 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



FF02 - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S.

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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LICENSED PROFESSIONAL ENGINEER
24-Oct-25
N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF02 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.		DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 520

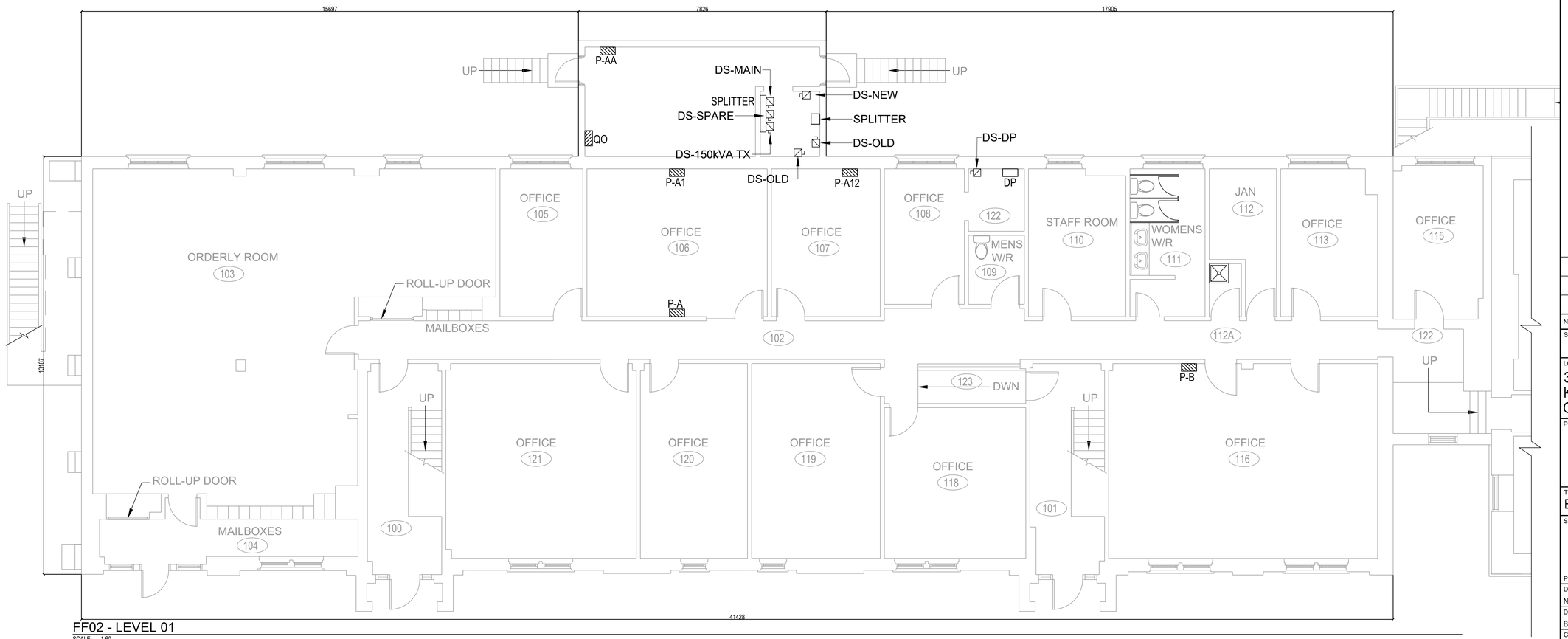
Canada

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW FILLER PLATES FOR ALL CIRCUIT SPACES CURRENTLY MISSING FILLER PLATES IN THE FOLLOWING ELECTRICAL PANELS:
   1.1. DP - 3 FILLER PLATES REQUIRED
2. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   2.1. P-A1
3. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   3.1. DP
   3.2. P-A12
4. CONTRACTOR TO REPLACE EXISTING LOCKING MECHANISM ON THE FOLLOWING ELECTRICAL PANELS TO PROVIDE PROPER SECURITY:
   4.1. P-A
5. CONTRACTOR TO PROVIDE NEW SCREWS FOR THE FOLLOWING ELECTRICAL PANEL COVERS:
   5.1. P-A1
6. CONTRACTOR TO REPLACE EXISTING 2" CONDUIT SERVING BRANCH CIRCUITS AT PANEL P-B. UPSIZE CONDUIT TO 3" TO MEET 40% MAXIMUM CONDUIT FILL IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. INVESTIGATE CEILING SPACE TO CONFIRM CONTINUATION OF UNDERSIZED CONDUIT. CARRY FOR 50' OF 3" CONDUIT AND LABOUR TO REPLACE.
7. CONTRACTOR TO PERFORM PHASE BALANCING ON PANEL P-A1 AND REVISE BREAKER LAYOUT ACCORDINGLY.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   1.1. DP
   1.2. P-A
   1.3. P-B
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. P-B
   3.2. P-A12
4. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



FF02 - LEVEL 01
SCALE: 1:60

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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2026-06-05
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF02 - LEVEL 01
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 521

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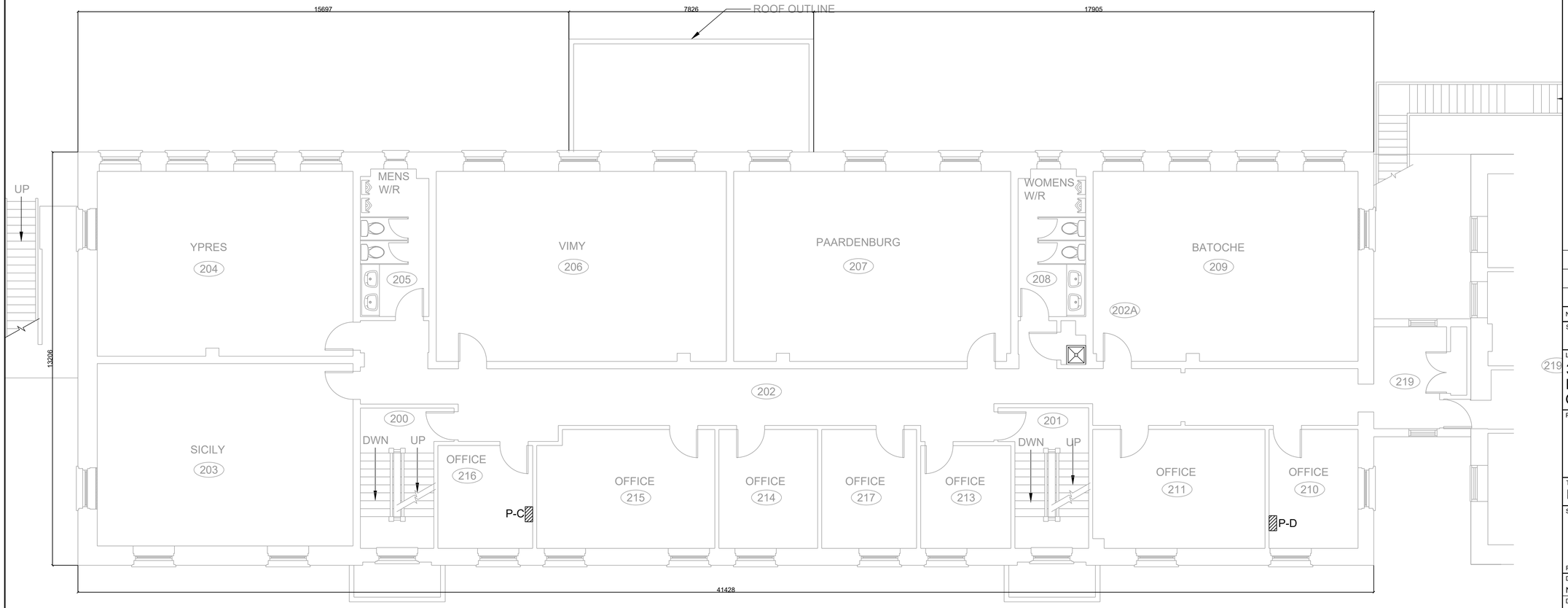
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B1 1000 x 707_E

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW INSULATED BUSHING ON CONDUIT AT ENTRANCE OF THE FOLLOWING ELECTRICAL PANELS:
   1.1. P-D
2. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   2.1. P-D
3. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   3.1. P-C
4. CONTRACTOR TO REPLACE EXISTING CONDUIT SERVING BRANCH CIRCUITS AT PANEL P-D. UPSIZE CONDUIT AS REQUIRED TO MEET 40% MAXIMUM CONDUIT FILL IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. INVESTIGATE CEILING SPACE TO CONFIRM CONTINUATION OF UNDERSIZED CONDUIT. CONTRACTOR TO CARRY FOR A 3" CONDUIT UP TO 50' IN LENGTH FOR REPLACEMENT.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. P-C
   3.2. P-D



FF02 - LEVEL 01
SCALE: 1:60

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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LICENSED PROFESSIONAL ENGINEER
2026-06-05
N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIOR STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF02 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	XX | XX: X.X.	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.		DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 522

Canada

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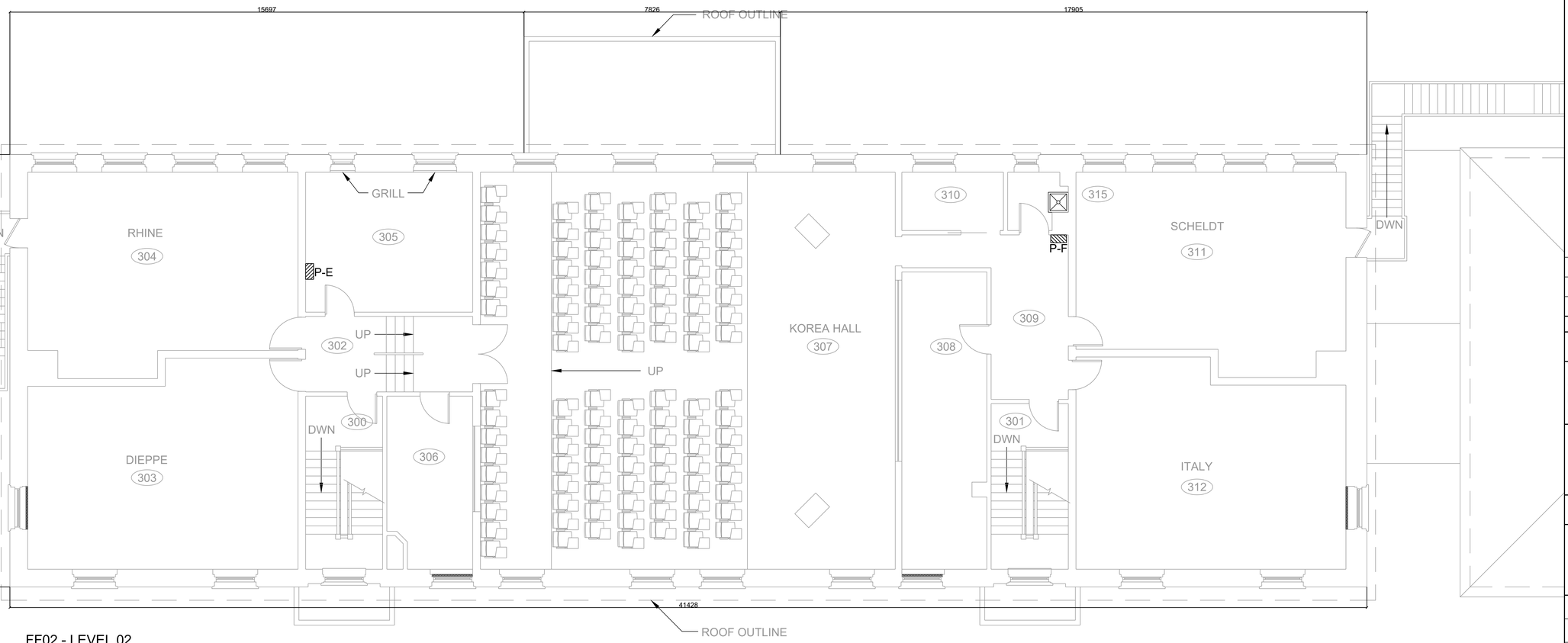
Sheet# of#

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   1.1. P-F

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF02 - LEVEL 02
SCALE: 1:60

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PROVINCE OF ONTARIO

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SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF02 - LEVEL 03
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 523

Canada

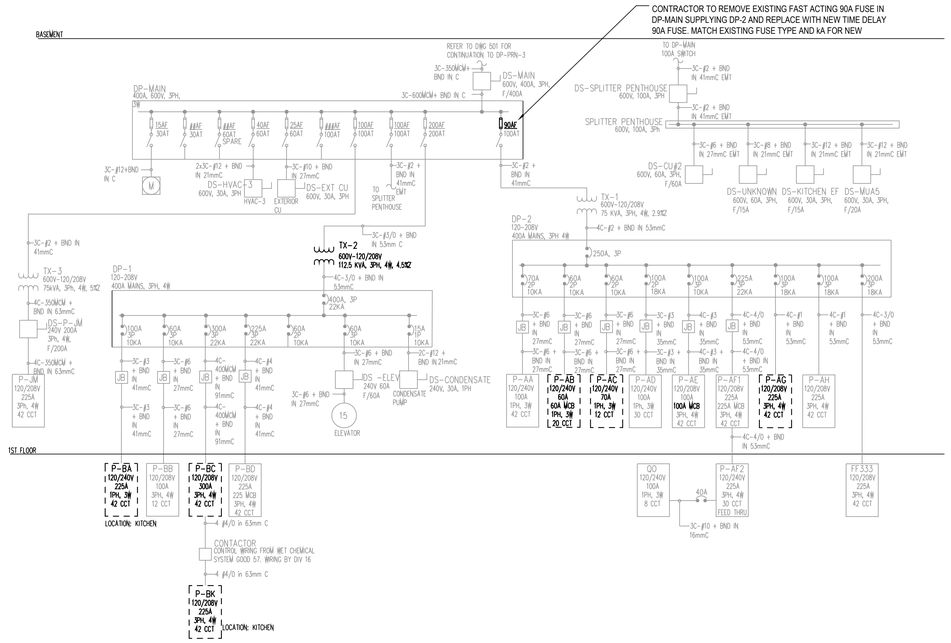
2026/Jun/05, 11:56am brittwage B1 1000 x 707 _E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-93069\1-523.dwg
Sheet# of#

DRAWING NOTES:

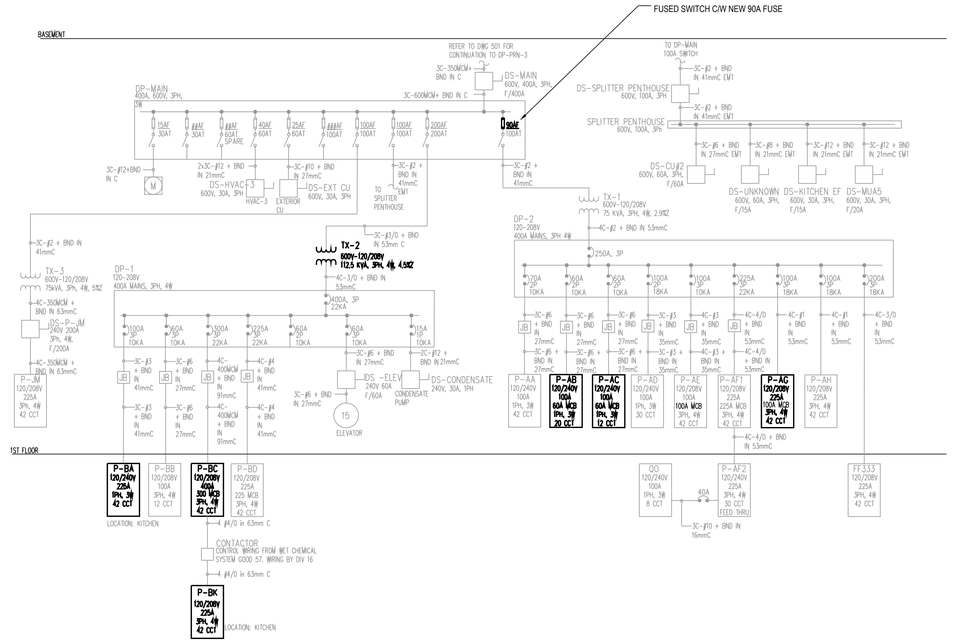
1. PANEL P-AB TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   1.1. 120/240V, 100A MAIN, 60A MCB, 1PH, 3W, 20CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, RECESS MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   1.2. COORDINATE DEMO AND REMEDIATION OF WALLS TO SUIT NEW PANEL DIMENSIONS.
   1.3. 15x 1P 15A, 1x 1P 20A, 2x 2P 20A
2. PANEL P-AC TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   2.1. 120/240V, 100A MAIN, 60A MCB, 1PH, 3W, 12CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   2.2. 9x 1P 15A, 1x 1P 20A, 1x 2P 20A
3. PANEL P-AG TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   3.1. 120/208V, 225A MAIN, 100A MCB, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   3.2. 19x 1P 15A, 1x 2P 15A, 2x 2P 20A, 2x 3P 15A
4. TRANSFORMER TX-2 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   4.1. 112.5kVA TRANSFORMER, 600V-208Y/120V, 220C INSULATION CLASS, 150C TEMP RISE, COPPER WINDINGS, MEETS O REG 509 ENERGY EFFICIENCY STANDARDS, K-13 RATED, NEMA 1 ENCLOSURE, SPRINKLER PROOF WITH DRIP HOOD, FLOOR MOUNTED, CSA LISTED. INSTALL CONDUCTORS TO TRANSFORMER AS PER MANUFACTURERS INSTRUCTIONS.
5. PANEL P-BA TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   5.1. 120/240V, 225A MAIN, 1PH, 3W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   5.2. 21x 1P 15A, 17x 1P 20A, 1x 2P 20A, 1x 2P 30A
6. PANEL P-BC TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   6.1. 120/208V, 400A MAIN, 300A MCB, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 22kA SCCR, RECESS MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   6.2. COORDINATE DEMO AND REMEDIATION OF WALLS TO SUIT NEW PANEL DIMENSIONS.
   6.3. 6x 1P 15A, 1x 1P 20A, 1x 2P 20A 1x 3P 100A, 1x 3P 150A, 1x 3P 200A
7. PANEL P-BK TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   7.1. 120/208V, 225A MAIN, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, 10kA SCCR, RECESS MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   7.2. COORDINATE DEMO AND REMEDIATION OF WALLS TO SUIT NEW PANEL DIMENSIONS.
   7.3. 7x 1P 15A, 4x 2P 30A, 4x 3P 30A, 2x 3P 50A, 1x 3P 60A
7. CONTRACTOR TO PROVIDE AND INSTALL NEW 3P 100A MAIN CIRCUIT BREAKER FOR PANEL P-AE.

THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. DP-MAIN - FEDERAL PIONEER QMOB
2. DP-1 - FEDERAL PIONEER CDP
3. DP-2 - FEDERAL PIONEER CDP
4. P-AA - SQUARE D NC38S
5. P-AB - ITE NLAB 320A/B
6. P-AC - AMALGAMATED ELECTRIC NLAB
7. P-AD - GENERAL ELECTRIC ANLB
8. P-AE - FEDERAL PIONEER BENBLP42B-4CST
9. P-AF1 - FEDERAL PIONEER BENBLP42B-4AB
10. P-AF2 - FEDERAL PIONEER NBLP30B-4LCI
11. QO - SQUARE D QO6L100
12. P-AG - WESTINGHOUSE PL-1
13. P-AH - WESTINGHOUSE PL-1
14. FF-333 - SQUARE D MHC38F
15. P-BA - GENERAL ELECTRIC ANLB2
16. P-BB - GENERAL ELECTRIC ANLB
17. P-BC - FEDERAL PIONEER CDP
18. P-BD - FEDERAL PIONEER BENBLP42B-4CST
19. P-BK - FEDERAL PIONEER NBLP42B-4LCI
20. P-JM - WESTINGHOUSE PL-1



FF03 - SINGLE LINE DIAGRAM - EXISTING
SCALE: N.T.S.



FF03 - SINGLE LINE DIAGRAM - NEW
SCALE: N.T.S.

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LICENSED PROFESSIONAL ENGINEER
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

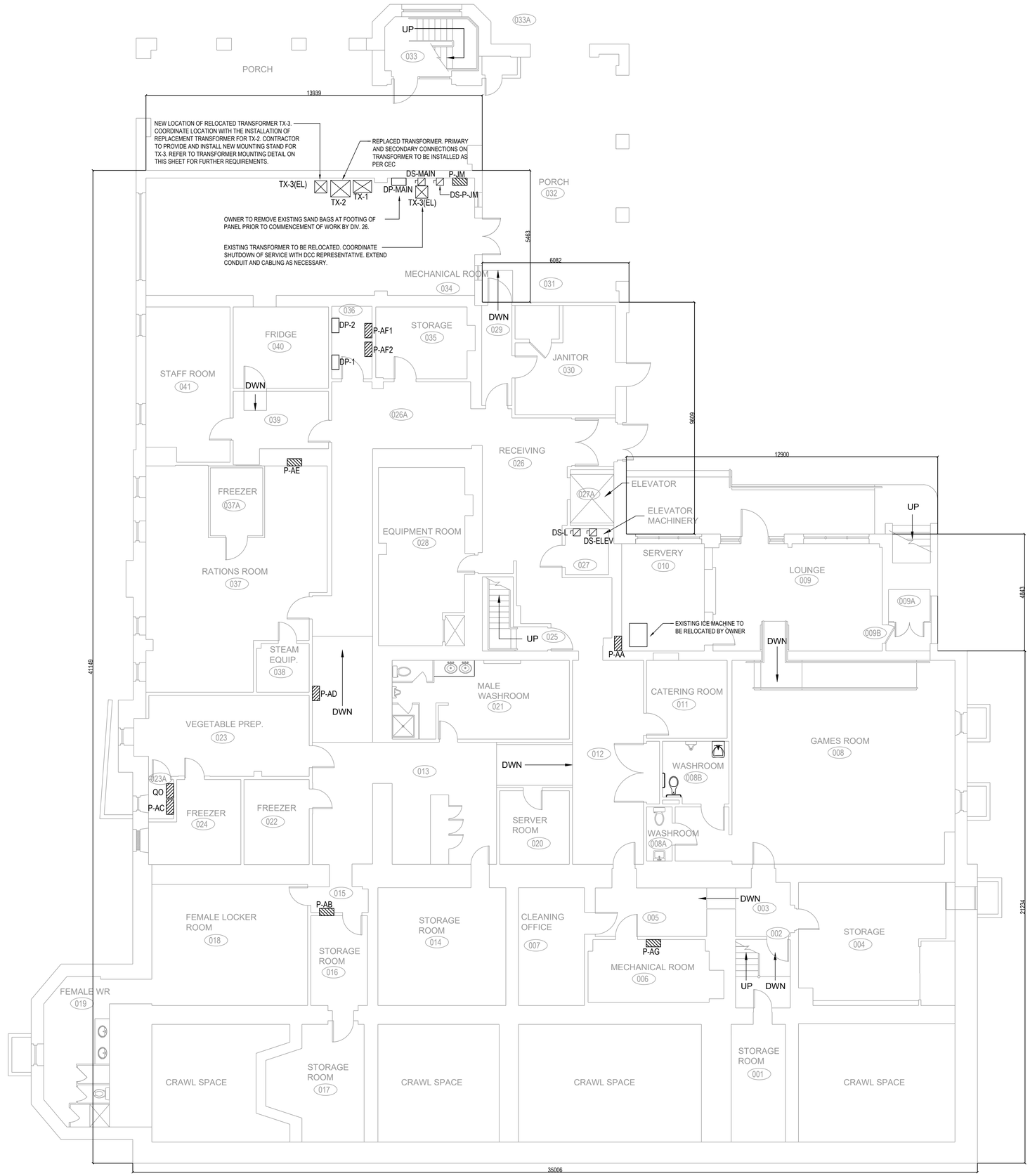
TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF03 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED	REVU	
DESIGNED	ÉTUDIÉ: N.F.		DES O	AGENT CONC
DRAWN	DESSINÉ: B.R.		PROJ MGR	GEST PROJ
CHECKED	VÉRIFIÉ: N.F.		DES MGR	GEST CONC
COORDINATION			FIRE	INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 530

Canada



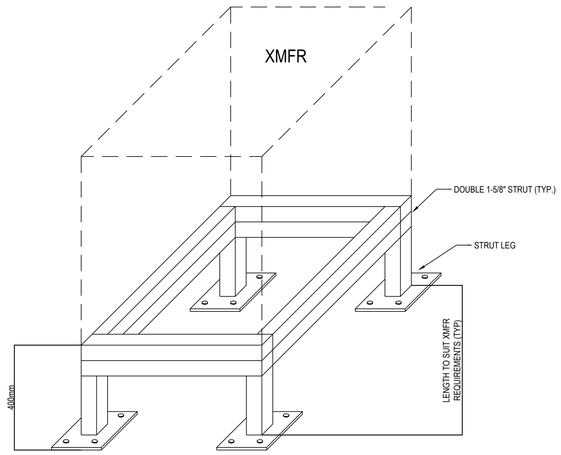
FF03 - BASEMENT
SCALE: 1:75

DRAWINGS NOTES:

1. IDENTIFICATION LABELS ARE MISSING FROM BRANCH BREAKERS. CONTRACTOR TO TRACE CIRCUITS AND PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS IDENTIFYING EACH TRACED CIRCUIT FOR THE FOLLOWING PANELS:
   1.1. DP-MAIN
   1.2. DP-1
   1.3. DP-2
   1.4. P-QO - PROVIDE NEW PRINTED PANEL DIRECTORY
2. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   2.1. P-JM
   2.2. P-QO
3. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   3.1. P-JM
   3.2. P-QO
4. CONTRACTOR TO HEAT SHRINK CONDUCTORS FOR PROPER PHASE IDENTIFICATION ON THE FOLLOWING PANELS:
   4.1. P-JM
5. CONTRACTOR TO REPLACE EXISTING LOCKING MECHANISM ON THE FOLLOWING ELECTRICAL PANELS TO PROVIDE PROPER SECURITY:
   5.1. P-AA
6. MANUFACTURERS INFORMATION LABEL, OUTLINING VOLTAGE & AMPERAGE MISSING FROM THE FOLLOWING PANELS. CONTRACTOR ORDER NEW LABEL FROM MANUFACTURER:
   6.1. P-AA
7. CONTRACTOR TO PROVIDE AND INSTALL NEW SET SCREW CONNECTORS FOR PANEL P-QO.
8. CONTRACTOR TO REMOVE ABANDONED MI CABLE AT PANEL P-AC.
9. TWO WIRES ARE CURRENTLY CONNECTED TO A SINGLE BREAKER IN PANEL P-AB. CONTRACTOR TO TRACE THE CIRCUIT AND PROVIDE A NEW 1P 15A BREAKER FOR THE ADDITIONAL CIRCUIT. NEW BREAKER TO MATCH EXISTING BREAKER SPECIFICATIONS.
10. CONTRACTOR TO CLEAN CONTACTS AND VERIFY TERMINATION TORQUE. PERFORM NEW THERMAL SCAN:
    10.1. DS-MAIN
11. CONTRACTOR TO REPLACE EXISTING DEFECTIVE BREAKER IN PANEL P-AB, NEW BREAKER RATING/SIZE TO MATCH EXISTING (CARRY FOR A 1P 15A BREAKER), ENSURE BREAKER TYPE IS COMPATIBLE WITH EXISTING PANEL. PERFORM A NEW THERMALS SCAN ON COMPLETION OF WORK.
12. CONTRACTOR TO CLEAN CONNECTION FOR CIRCUIT BREAKER IN SPACES 13,15,17 IN PANEL P-AA. PERFORM A THERMAL SCAN OF BREAKER UPON COMPLETION OF WORK.
13. CONTRACTOR TO PROVIDE NEUTRAL LUG KIT FOR OVERSIZED NEUTRAL WIRE CURRENTLY INSTALLED INTO NEUTRAL BAR INSTEAD OF NEUTRAL LUG ON PANEL P-AD.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   1.1. P-AA
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



TRANSFORMER MOUNTING DETAIL
SCALE: N.T.S.

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LICENSED PROFESSIONAL ENGINEER
2026-06-05
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

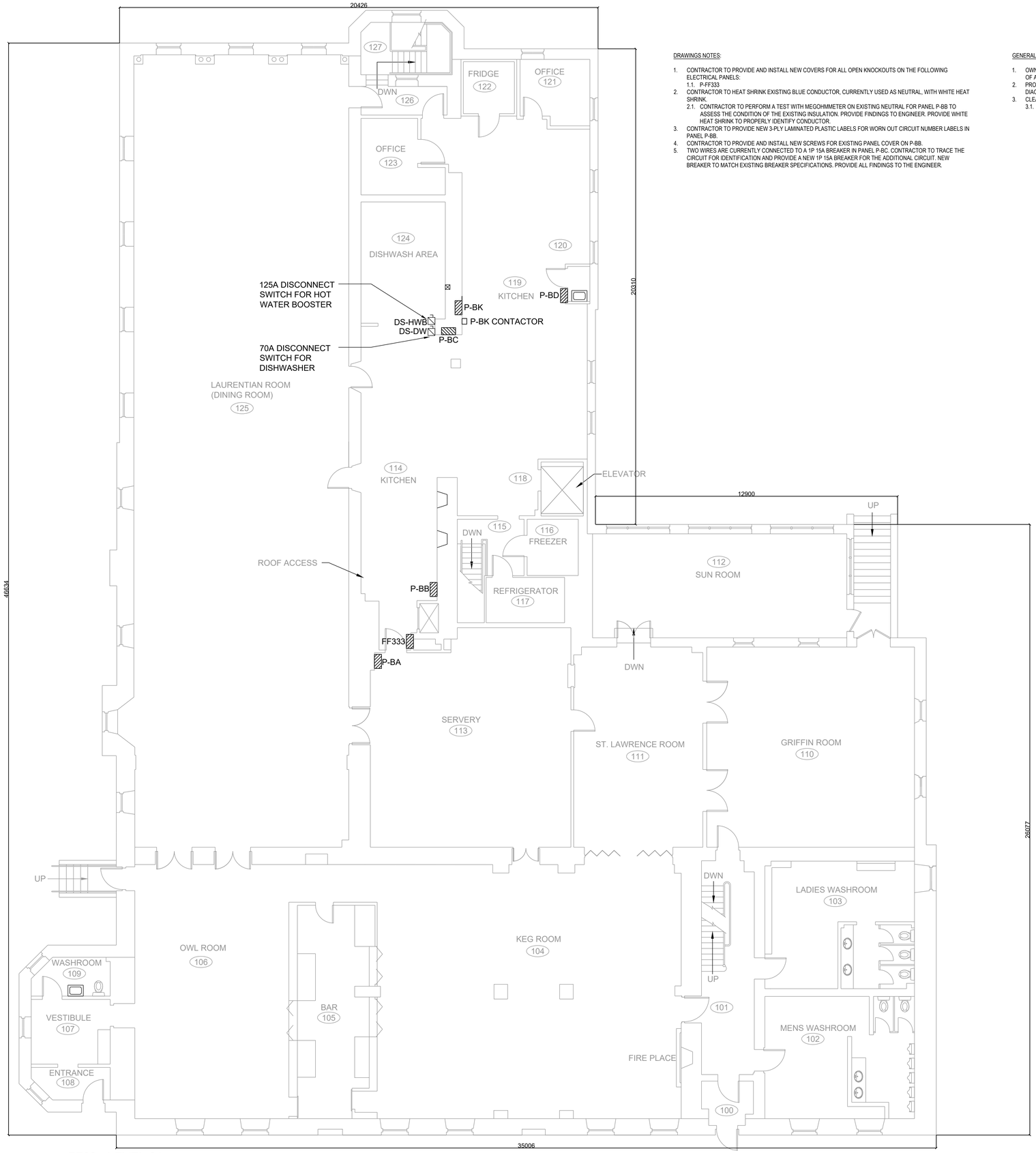
SUBJECT | SUJET
FF03 - BASEMENT FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91-531

Canada

2026/Jun/05, 11:57am brittwage B1 1:100 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-93091-531.dwg



FF03 - LEVEL 01
SCALE: 1:75

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   1.1. P-FF333
2. CONTRACTOR TO HEAT SHRINK EXISTING BLUE CONDUCTOR, CURRENTLY USED AS NEUTRAL, WITH WHITE HEAT SHRINK.
   2.1. CONTRACTOR TO PERFORM A TEST WITH MEGOHMMETER ON EXISTING NEUTRAL FOR PANEL P-BB TO ASSESS THE CONDITION OF THE EXISTING INSULATION. PROVIDE FINDINGS TO ENGINEER. PROVIDE WHITE HEAT SHRINK TO PROPERLY IDENTIFY CONDUCTOR.
3. CONTRACTOR TO PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR WORN OUT CIRCUIT NUMBER LABELS IN PANEL P-BB.
4. CONTRACTOR TO PROVIDE AND INSTALL NEW SCREWS FOR EXISTING PANEL COVER ON P-BB.
5. TWO WIRES ARE CURRENTLY CONNECTED TO A 1P 15A BREAKER IN PANEL P-BC. CONTRACTOR TO TRACE THE CIRCUIT FOR IDENTIFICATION AND PROVIDE A NEW 1P 15A BREAKER FOR THE ADDITIONAL CIRCUIT. NEW BREAKER TO MATCH EXISTING BREAKER SPECIFICATIONS. PROVIDE ALL FINDINGS TO THE ENGINEER.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. P-BB

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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24549
2026-06-05
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF03 - LEVEL 01
FLOOR PLAN

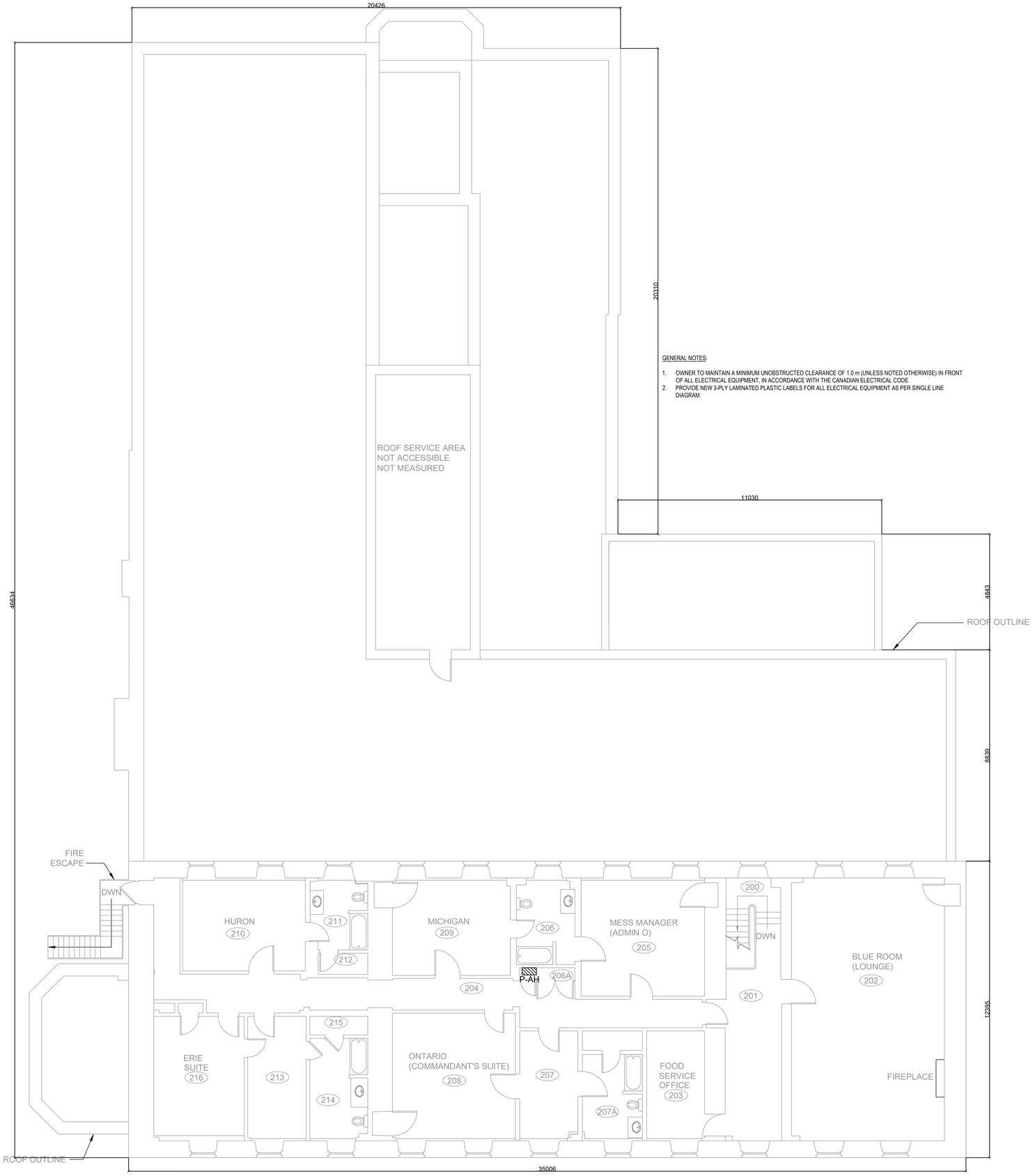
PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91- 532

Canada

2026/Jun/05, 11:56am brittwage B1 1000 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-930691-532.dwg



GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.

FF03 - LEVEL 02
SCALE: 1:75

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N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF03 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

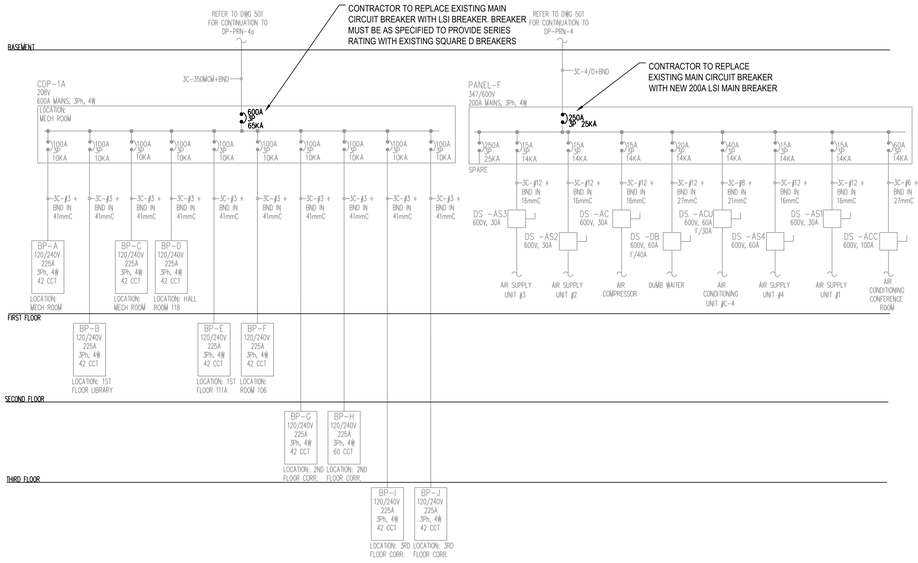
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Canada

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Sheet# of#

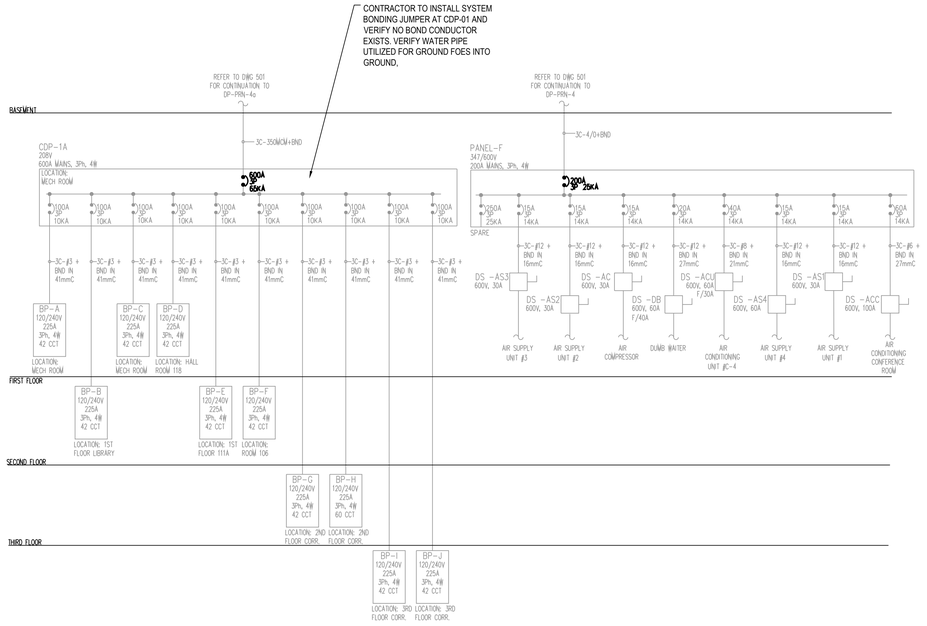
THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. CDP-1A - SQUARE D HCM3691-6MCCU
2. PANEL-F - FEDERAL PIONEER CDP
3. BP-A - SQUARE D QBL-442
4. BP-B - SQUARE D QBL-442
5. BP-C - SQUARE D QBL-442
6. BP-D - SQUARE D QBL-442
7. BP-E - SQUARE D QBL-442
8. BP-F - SQUARE D QBL-442
9. BP-G - SQUARE D QBL-342
10. BP-H - SQUARE D QBL-430
11. BP-I - SQUARE D QBL-442
12. BP-J - SQUARE D QBL-442



FF04 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



FF04 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.

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PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ELECTRIQUE	2026/06/05

SUBJECT | SUJET
FF04 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ N.F.		DES O | AGENT CONC
DRAWN | DESSINÉ B.R.		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.		DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91 - 540

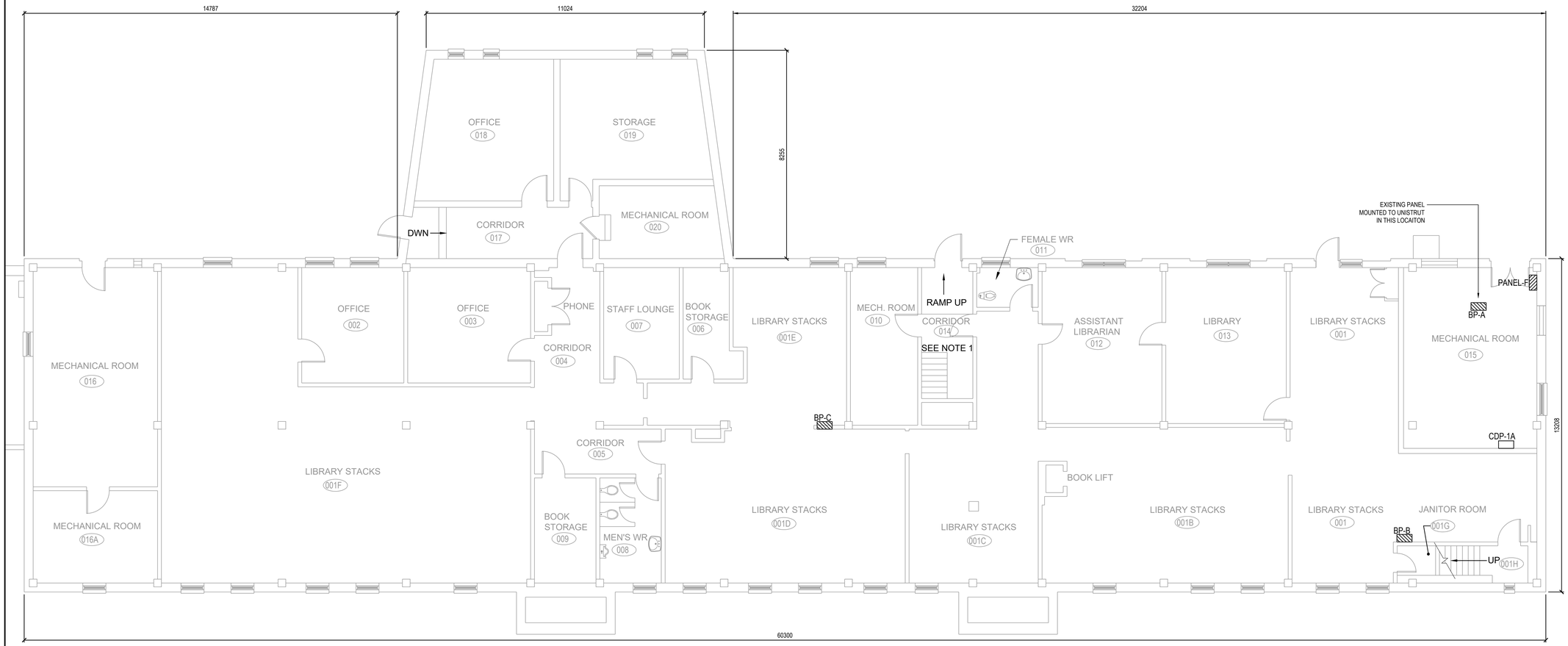
Canada

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   1.1. BP-A
2. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   2.1. BP-B
3. EXISTING #12AWG WIRING SERVING CIRCUIT 37 IN PANEL BP-C TO BE SPLICED AND EXTENDED TO PROVIDE ADDITIONAL SLACK WITHIN PANEL. CARRY FOR 1 METER OF ADDITIONAL WIRING.
4. CONTRACTOR TO PROVIDE AND INSTALL NEW NEUTRAL LUG WITHIN PANEL BP-B.
5. CONTRACTOR TO REPLACE EXISTING UNDERSIZED CONDUIT SERVING BRANCH CIRCUITS AT PANEL BP-B. UPSIZE CONDUIT AS REQUIRED TO MEET 40% MAXIMUM CONDUIT FILL IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. INVESTIGATE CEILING SPACE TO CONFIRM CONTINUATION OF UNDERSIZED CONDUIT. CARRY REMOVAL OF 50' OF EXISTING CONDUIT AND INSTALLING 50' OF 3" CONDUIT.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. BP-A
   3.2. BP-B
4. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



FF04 - BASEMENT
SCALE: 1:75

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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PROVINCE OF ONTARIO

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF04 - BASEMENT
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91- 541

Canada

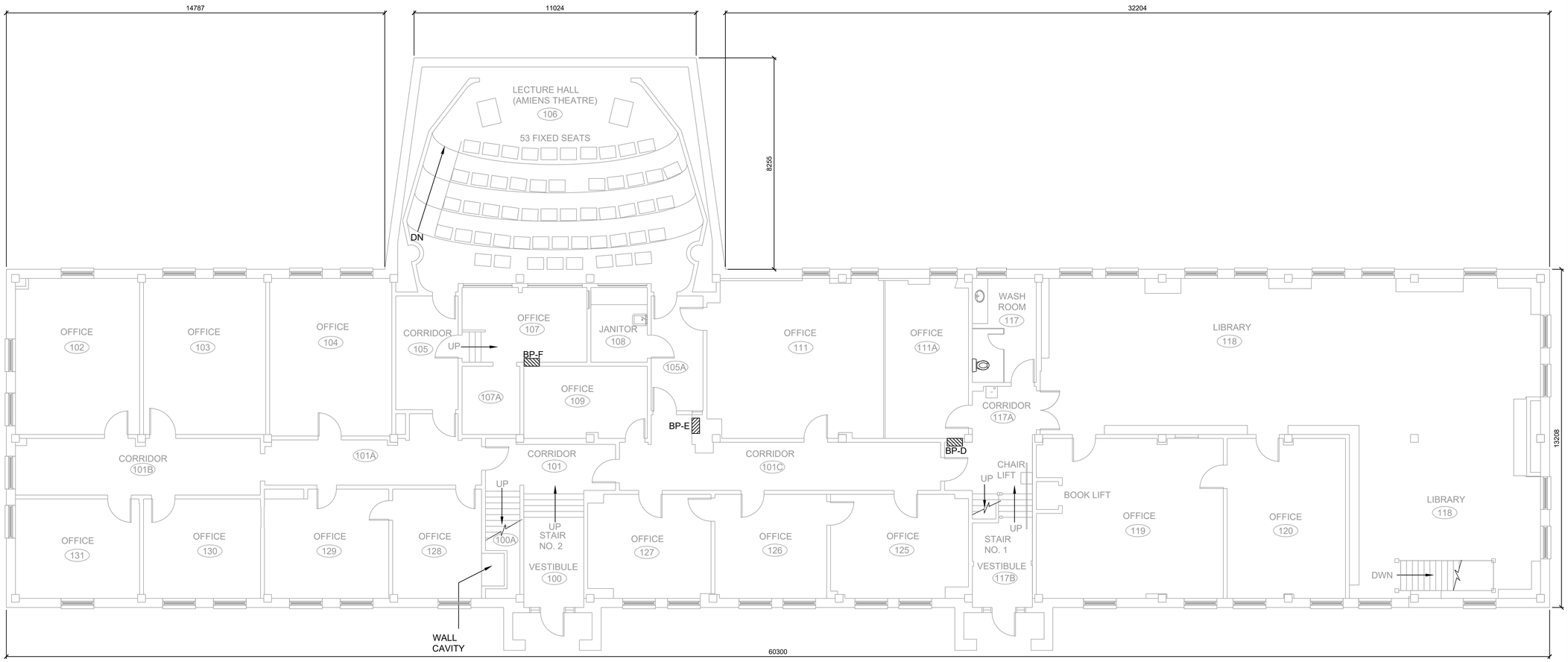
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DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   1.1. BP-F
2. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   2.1. BP-G
3. CONTRACTOR TO PROVIDE NEW SCREWS FOR THE FOLLOWING ELECTRICAL PANEL COVERS:
   3.1. BP-D
4. CONTRACTOR TO CAP EXISTING UN-USED CONDUIT ROUTED FROM PANEL BP-E.
5. CONTRACTOR TO TRIM EXISTING FEEDER CABLES SUPPLYING PANEL BP-E. COORDINATE SHUTDOWN OF ELECTRICAL SERVICES WITH DCC REPRESENTATIVE.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. BP-D



FF04 - LEVEL 01
SCALE: 1:75

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2026-06-05
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF04 - LEVEL 01
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 542

Canada

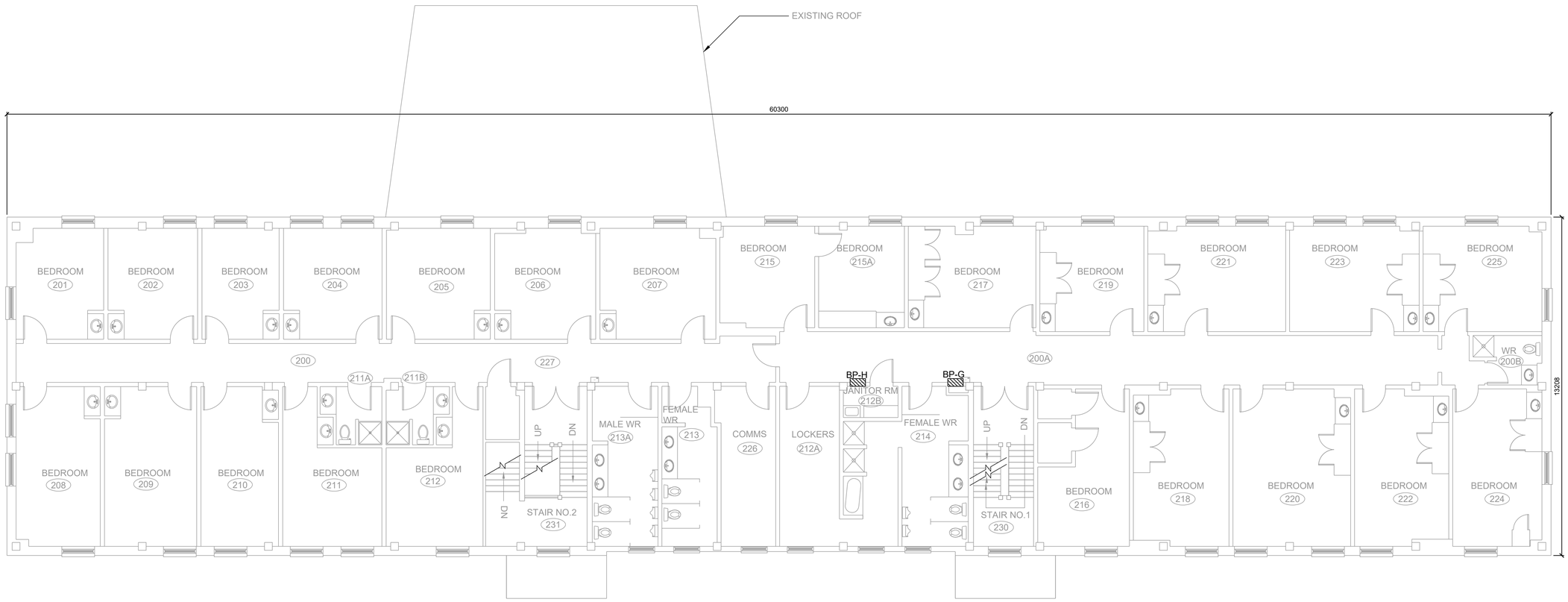
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Sheet# of#

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   1.1. BP-H
2. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   2.1. BP-G
3. CONTRACTOR TO CAP EXISTING UN-USED CONDUIT ROUTED FROM PANEL BP-H.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   1.1. BP-G
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF04 - LEVEL 02
SCALE: 1:75

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TO BE REVIEWED | À ÊTRE RÉVISÉ

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PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF04 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

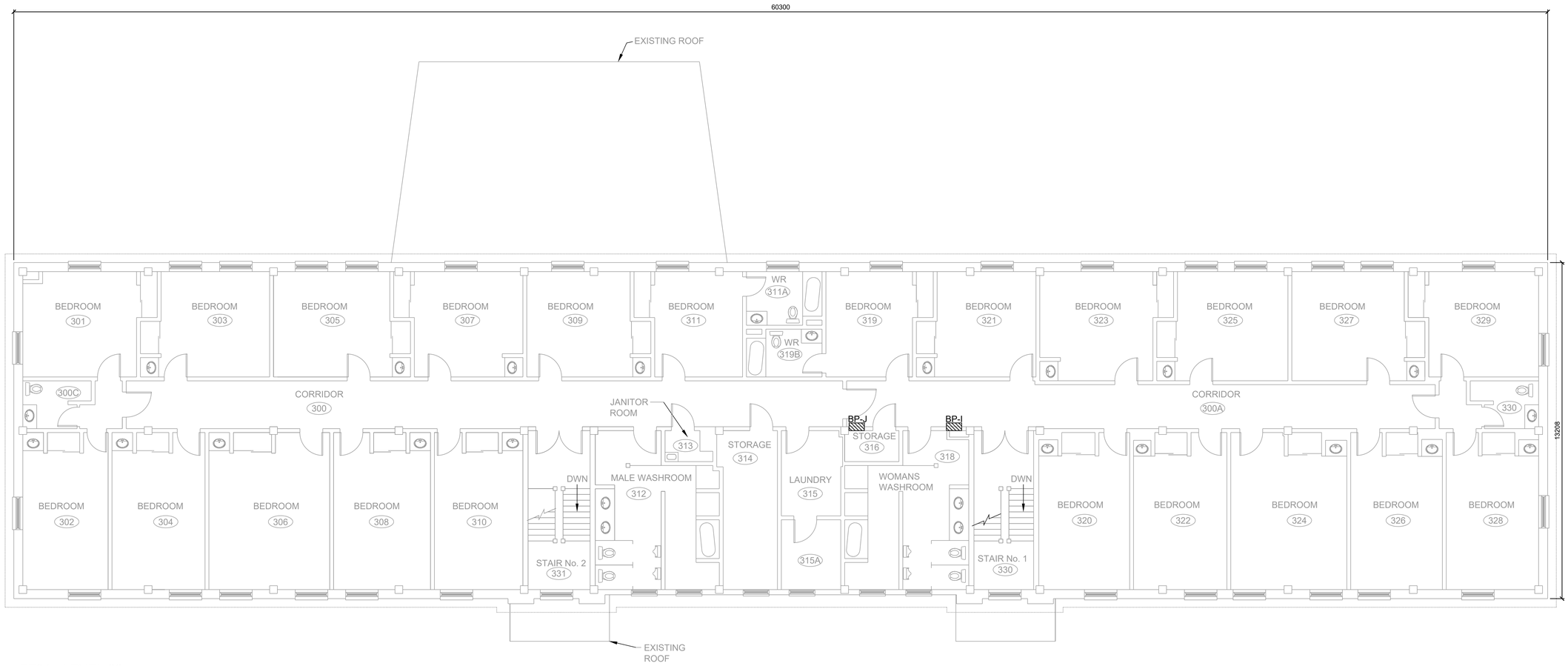
WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 543

Canada

2026/Jun/05, 11:56am brittwidge B1 1000 x 707 E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\24 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-543.dwg

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. BP-I
   3.2. BP-J



FF04 - LEVEL 03
SCALE: 1:75

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF04 - LEVEL 03
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91- 544

Canada

2026/Jun/05, 11:57am brithwaga B1 1000 x 707 E H:\2024 Projects\26549 DCC Arc Flash\01 A DWGs\5 CAD\04 Electrical\01 Drawing Sheets Electrical\K-B33-9306\91-544.dwg

Sheet# of#

DRAWINGS NOTES:

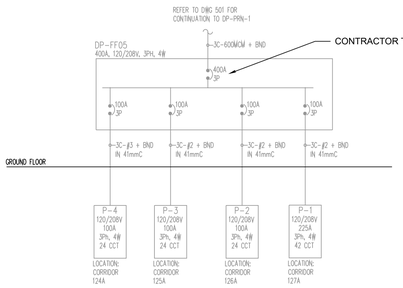
1. CONTRACTOR TO INVESTIGATE AND IDENTIFY BREAKER CAUSING ARCING SOUNDS WITHIN PANELS -1 AND P-2. REPLACE 15A BREAKER.
2. CONTRACTOR TO PROVIDE AND INSTALL NEW COVERS FOR ALL OPEN KNOCKOUTS ON THE FOLLOWING ELECTRICAL PANELS:
   2.1. P-4
3. CONTRACTOR TO HEAT SHRINK CONDUCTORS FOR PROPER PHASE IDENTIFICATION ON THE FOLLOWING PANELS:
   3.1. P-3
   3.2. P-4
5. CONTRACTOR TO PROVIDE AND INSTALL NEW SCREWS FOR EXISTING PANEL COVER ON P-1.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   1.1. P-1
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. CLEAN AND REMOVE DUST AND DEBRIS WITHIN THE FOLLOWING ELECTRICAL PANEL ENCLOSURES:
   3.1. P-2
4. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.

THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

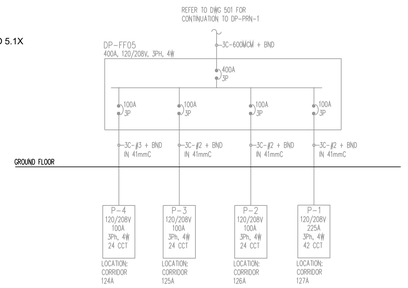
1. P-1 - SQUARE D NQOD442L225CU
2. P-2 - SQUARE D QBL-424
3. P-3 - SQUARE D QBL-424
4. P-4 - SQUARE D QBL-424



CONTRACTOR TO REVISE INSTANTANEOUS TRIP SETTING OF BREAKER FROM 10X TO 5.1X

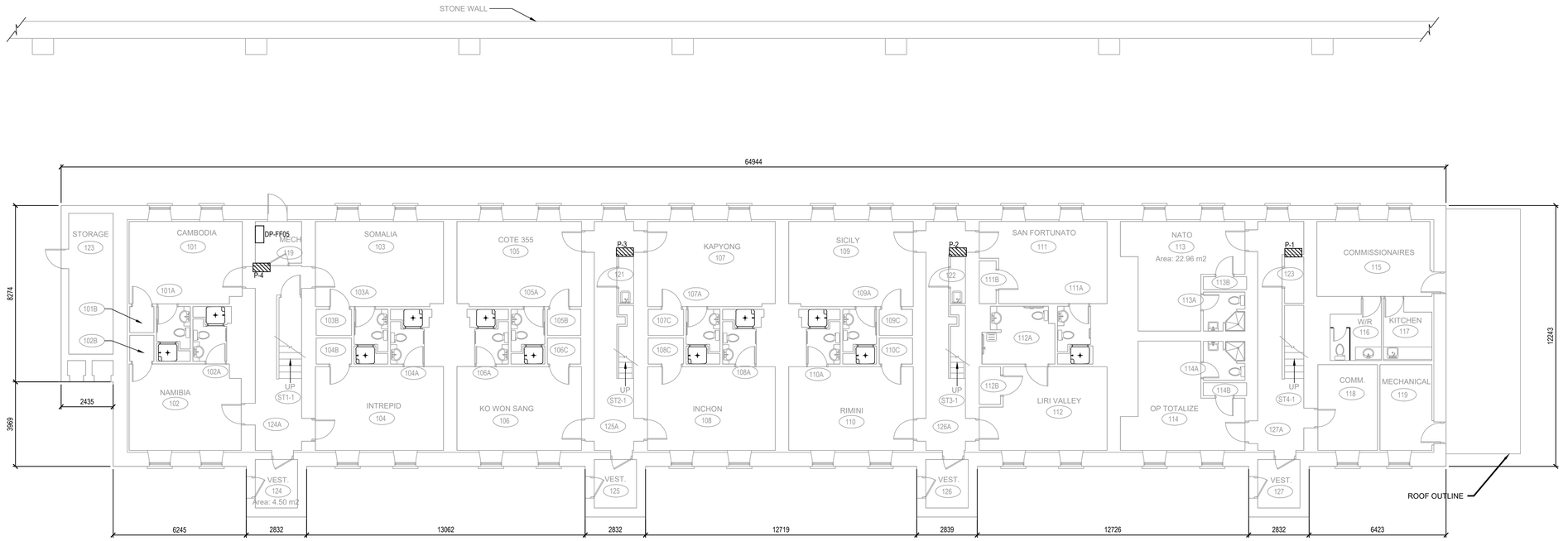
FF05 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



FF05 - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S.



FF05 - LEVEL 01

SCALE: 1:100

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF05 - SINGLE LINE DIAGRAM
LEVEL 01 FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ N.F.	ENG O | O ING		DES O | AGENT CONC
DRAWN | DESSINÉ B.R.	CUSTOMER | CLIENT		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ N.F.	SECT OC | CMDT CSG		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 550

Canada

2026/Jun/05, 11:57am brittwage B1 1000 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-550.dwg

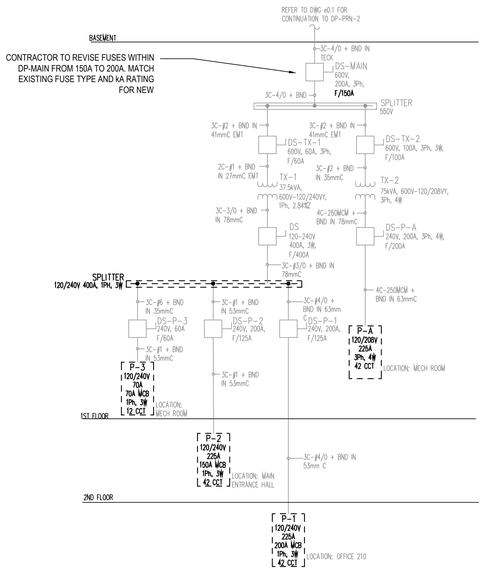
Sheet # of #

DRAWING NOTES:

1. PANEL P-A TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   1.1. 120/208V, 225A MAIN, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   1.2. 13x 1P 15A, 4x 1P 20A, 1x 1P 30A, 1x 2P 20A, 1x 2P 25A, 1x 3P 100A
2. PANEL P-3 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   2.1. 120/240V, 100A MAIN. 70A MCB, 1PH, 3W, 12CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 3R ENCLOSURE, INSULATED BUSHING AT MAIN FEEDER CONDUIT, CSA LISTED.
   2.2. REPLACE EXISTING WOODEN BACKING WITH NEW 21mm TREATED FIRE RATED PLYWOOD BACKING DURING PANEL REPLACEMENT FOR SECURE MOUNTING. CARRY FOR 1 METER X 2 METER OF PLYWOOD BACKING TO BE CUT ON SITE.
   2.3. 6x 1P 15A, 1x 2P 20A, 2x 2P UNKNOWN (CONTRACTOR TO CARRY FOR 2x2P 20A BREAKERS FOR PURPOSE OF **PRICING ONLY**. CONTRACTOR TO CONFIRM BREAKER RATINGS ON SITE AND REPLACE ACCORDINGLY.)
3. 240V SPLITTER TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   3.1. 240V, 400A, 1PH, 3W, 16 GAUGE STEEL ENCLOSURE, FACTORY INSTALLED SPLITTER BLOCKS, BRANCH LUGS RATED FOR 400A, CSA CERTIFIED
4. PANEL P-2 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   4.1. 120/240V, 225A MAIN, 150A MCB, 1PH, 3W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, RECESS MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, INSULATED BUSHING AT MAIN FEEDER CONDUIT, CSA LISTED.
   4.2. COORDINATE DEMO AND REMEDIATION OF WALLS TO SUIT NEW PANEL DIMENSIONS.
   4.3. 27x 1P 15A, 2x 1P 20A, 1x 2P 20A
7. PANEL P-1 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   7.1. 120/240V, 225A MAIN, 200A MCB, 1PH, 3W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, RECESS MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   7.2. COORDINATE DEMO AND REMEDIATION OF WALLS TO SUIT NEW PANEL DIMENSIONS.
   7.3. 29x 1P 15A, 1x 2P 100A

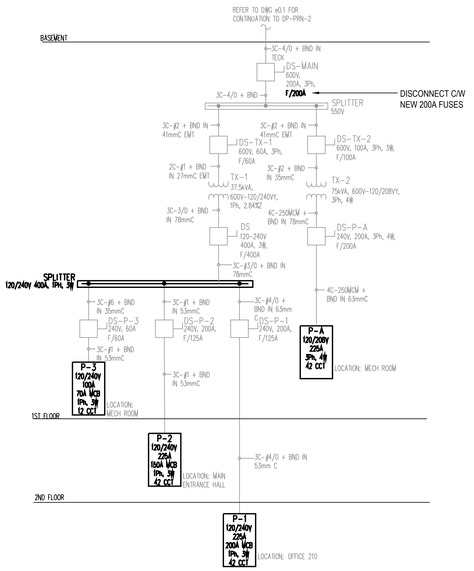
THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. P-A - WESTINGHOUSE PRL-1
2. P-1 - WESTINGHOUSE
3. P-2 - WESTINGHOUSE NQB
4. P-3 - SQUARE D QBN-312



FF07 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



FF07 - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S.

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF07 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED	REVU	
DESIGNED	ÉTUDIÉ: N.F.		DES O	AGENT CONC
DRAWN	DESSINÉ: B.R.		PROJ MGR	GEST PROJ
CHECKED	VÉRIFIÉ: N.F.		DES MGR	GEST CONC
COORDINATION			FIRE	INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 560

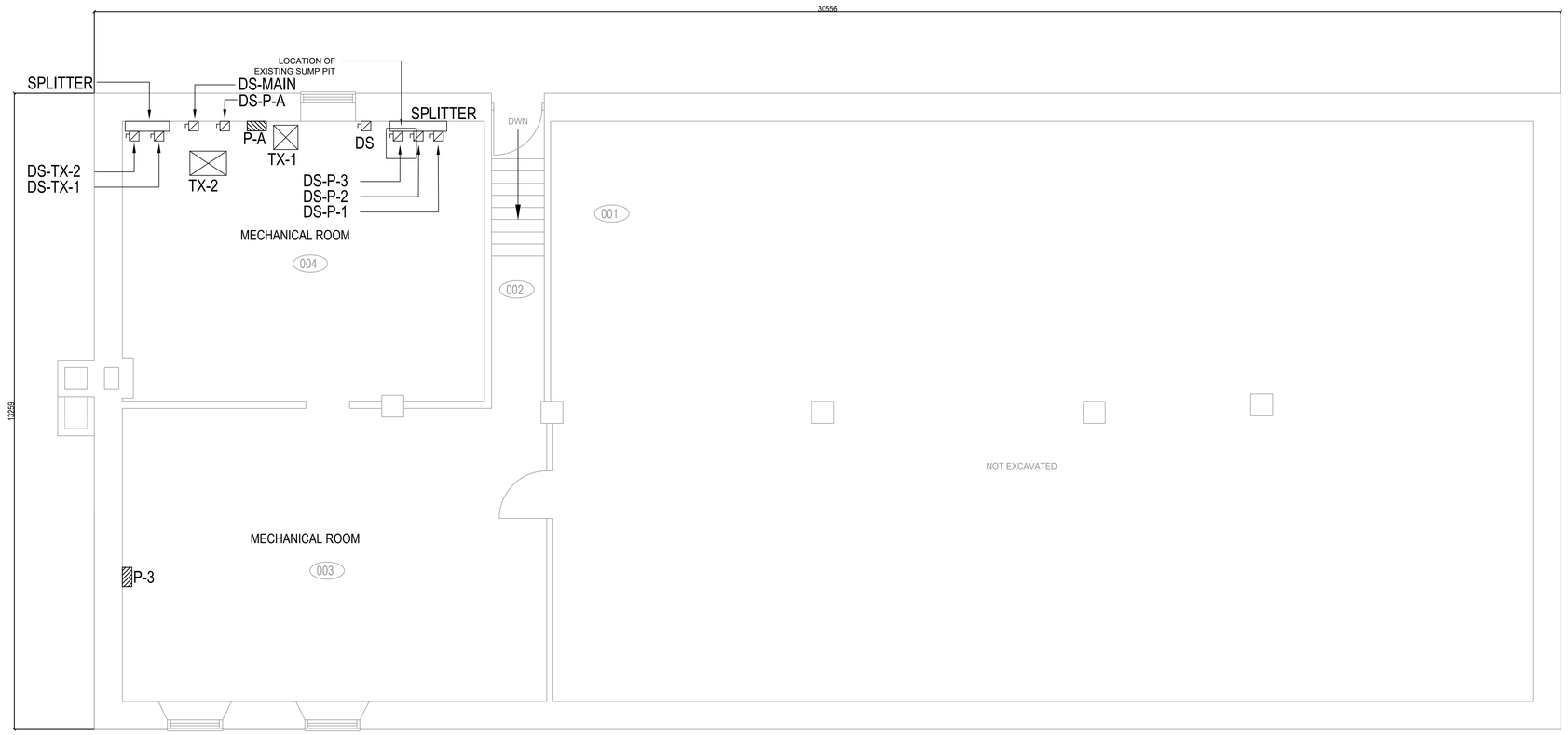
Canada

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   1.1. P-A
2. CONTRACTOR TO PROVIDE AND INSTALL NEW 6mm STAINLESS STEEL CHECKERED PLATE METAL LID FOR EXISTING SUMP PIT IN-FRONT OF ELECTRICAL EQUIPMENT. CARRY FOR DIMENSIONS OF 2m X 2m. CONTRACTOR TO CONFIRM EXACT DIMENSIONS ON SITE PRIOR TO ORDERING.

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



FF07 - BASEMENT
SCALE: 1:50

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N. T. FRAYN
100152208
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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
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KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF07 - BASEMENT
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

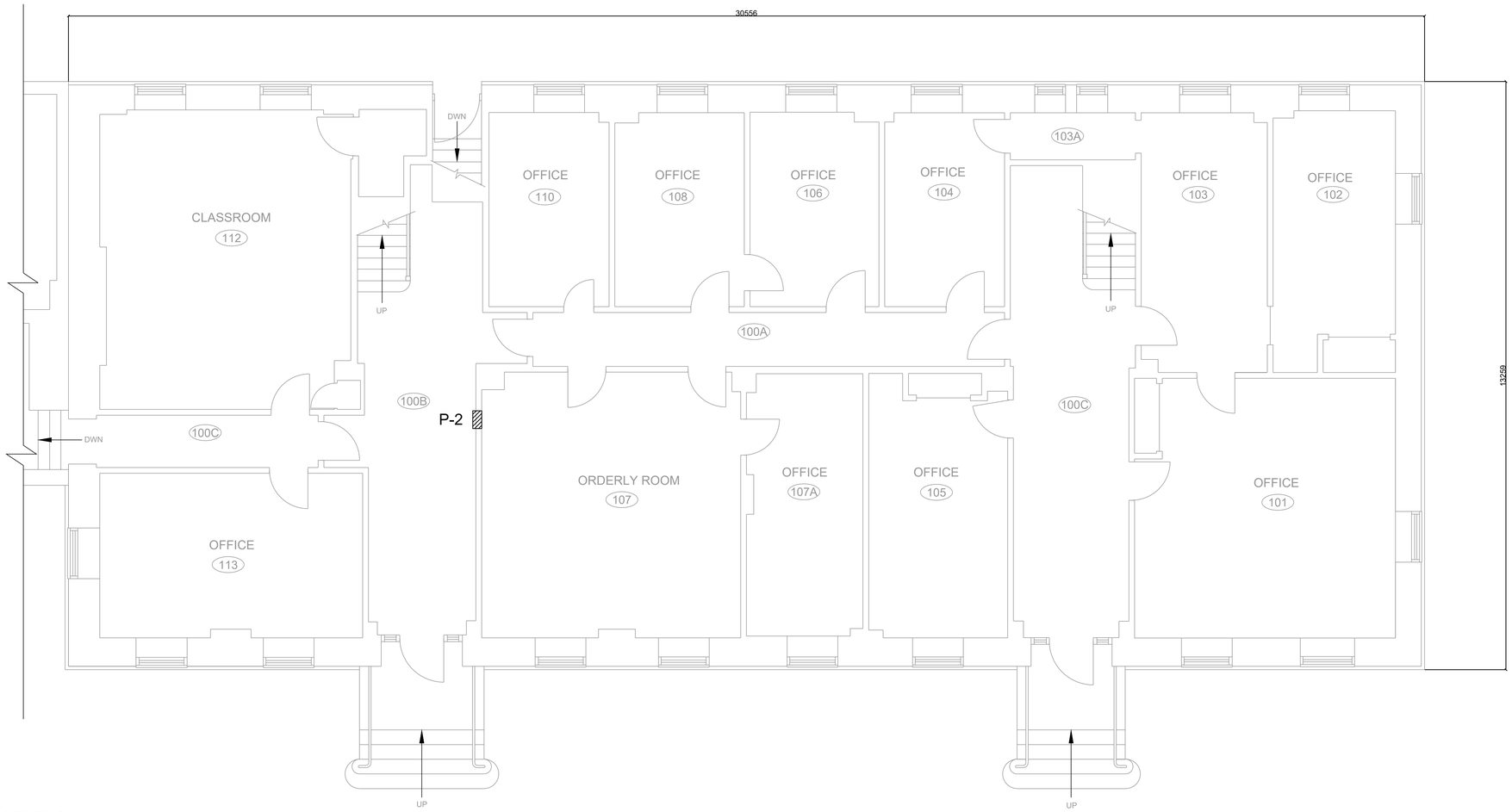
WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 561

Canada

2026/Jun/05, 11:57am brithwaige H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\S CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-561.dwg
B1 1000 x 707_E

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF07 - LEVEL 01
SCALE: 1:50

Government of Canada | Gouvernement du Canada

LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
TO BE REVIEWED | À ÊTRE RÉVISÉ

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LICENSED PROFESSIONAL ENGINEER
24549
2026-06-05
N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF07 - LEVEL 01
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

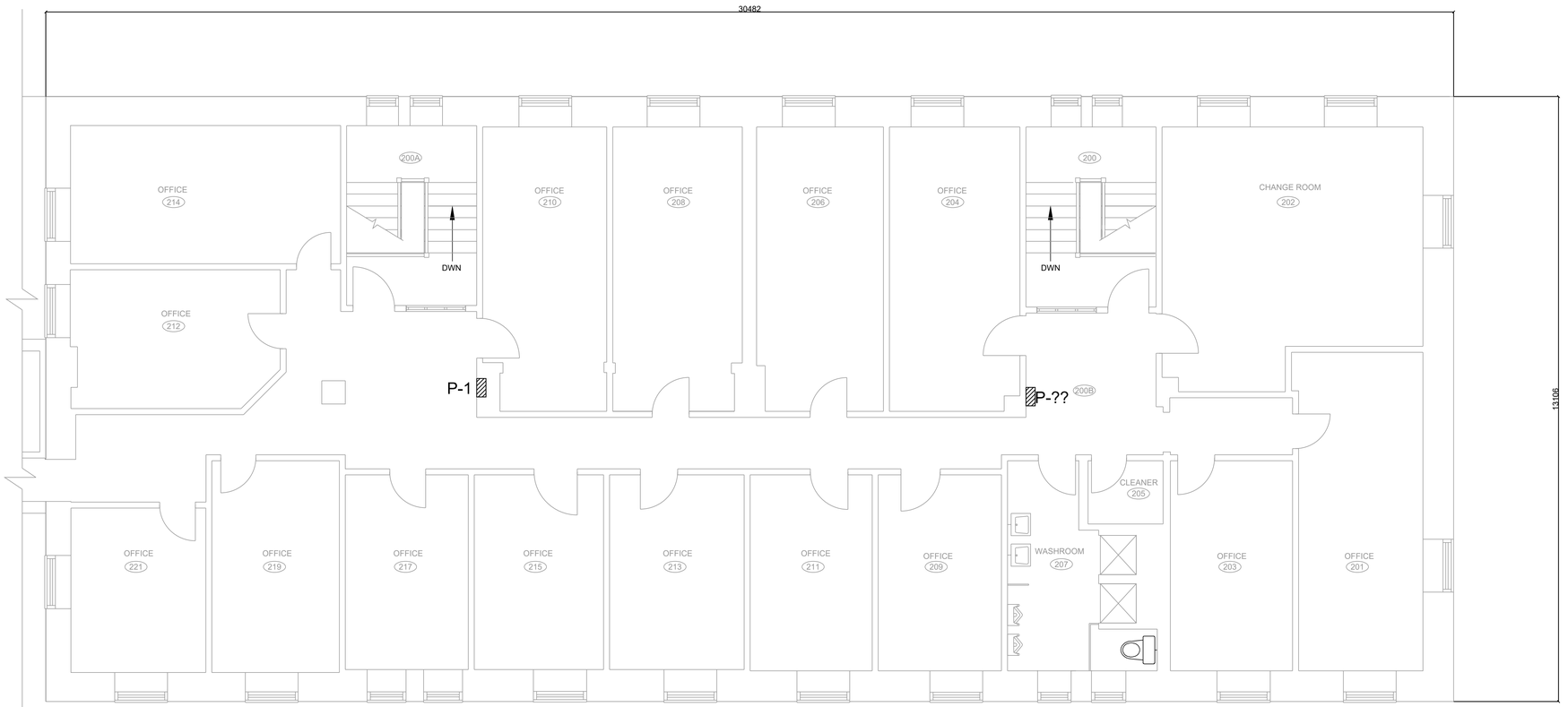
WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 562

Canada

2026/Jun/05, 11:57am brithwaje B1 1000 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-562.dwg

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE. THE FOLLOWING ELECTRICAL PANELS HAVE BEEN IDENTIFIED ON THE ARC FLASH STUDY AND REQUIRE THE REMOVAL OF ANY OWNER STORED ITEMS BY THE OWNER:
   1.1. P-1
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF07 - LEVEL 02
SCALE: 1:50

Government of Canada / Gouvernement du Canada

LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
TO BE REVIEWED | À ÊTRE RÉVISÉ

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LICENSED PROFESSIONAL ENGINEER
24-Oct-25
N. T. FRAYN
100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER	DATE
ELECTRICAL | ÉLECTRIQUE	2026/06/05

SUBJECT | SUJET
FF07 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP	PF NO. | NO. DP
N.700114.23.15	PF500659505

DWG. NO. | NO. DESSIN
K-B35-9306/91- 563

Canada

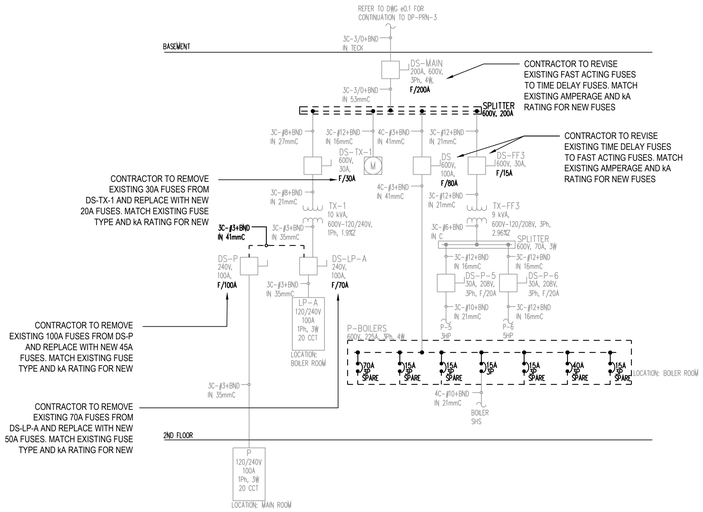
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Sheet# of#

DRAWINGS NOTES:

1. PANEL P-BOILERS TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS AND BREAKER COUNT:
   1.1. 600V, 225A, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   1.2. CONTRACTOR TO TRACE EXISTING CIRCUITS AND PROVIDE DIRECTORY FOR NEW PANEL.
   1.3. 5x 3P 15A, 1x 3P 40A, 1x 3P 70A
2. 600V SPLITTER TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   2.1. 600V, 200A, 3PH, 16 GAUGE STEEL ENCLOSURE, FACTORY INSTALLED SPLITTER BLOCKS, BRANCH LUGS RATED FOR 200A, CSA CERTIFIED.
3. PROVIDE AND INSTALL NEW SPLITTER AND ASSOCIATED SPLITTER MAIN DISCONNECT SWITCH TO MEET THE FOLLOWING SPECIFICATIONS:
   3.1. SPLITTER - 125A, 3W, 16 GAUGE STEEL ENCLOSURE, FACTORY INSTALLED SPLITTER BLOCKS, BRANCH LUGS RATED FOR 125A, CSA CERTIFIED.
   3.2. DISCONNECT SWITCH - 240V, 100A, 1PH, 3W, FUSED DISCONNECT C/W 60A FUSES, NEMA 1 ENCLOSURE, CSA CERTIFIED.

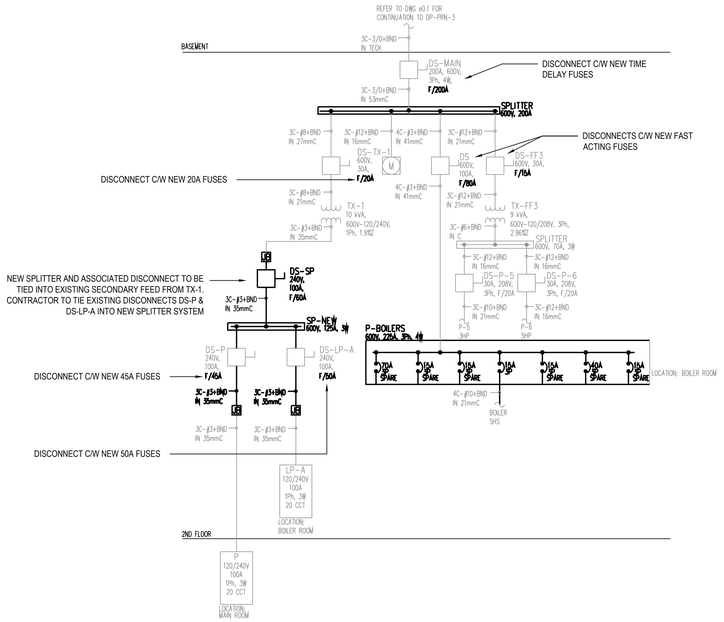
THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

1. LP-A - SQUARE D QBL-320
2. P - SQUARE D QBL-320
3. P-BOILERS - WESTINGHOUSE



FF08 - SINGLE LINE DIAGRAM - EXISTING

SCALE: N.T.S.



FF08 - SINGLE LINE DIAGRAM - NEW

SCALE: N.T.S.

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LICENSED PROFESSIONAL ENGINEER
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100152208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF08 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED	REVU	
DESIGNED	ÉTUDIÉ: N.F.		DES O | AGENT CONC
DRAWN	DESSINÉ: B.R.		PROJ MGR | GEST PROJ
CHECKED	VÉRIFIÉ: N.F.		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 570

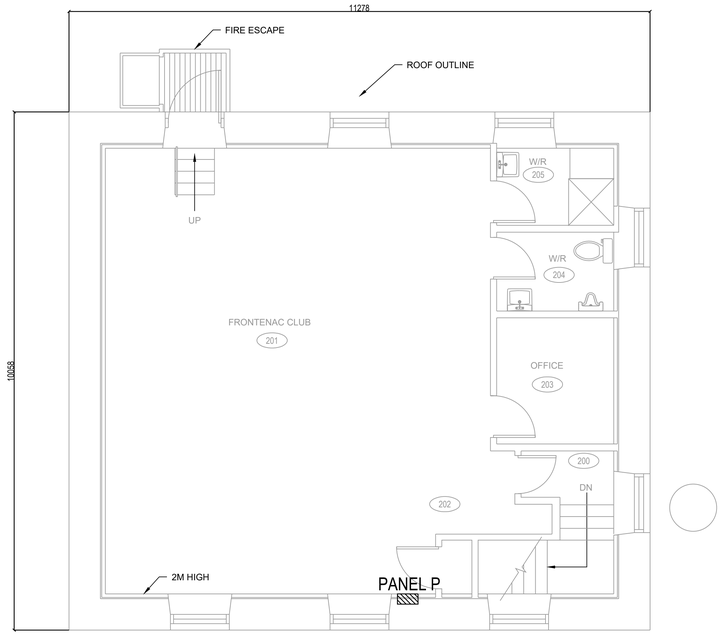
Canada

GENERAL NOTES:

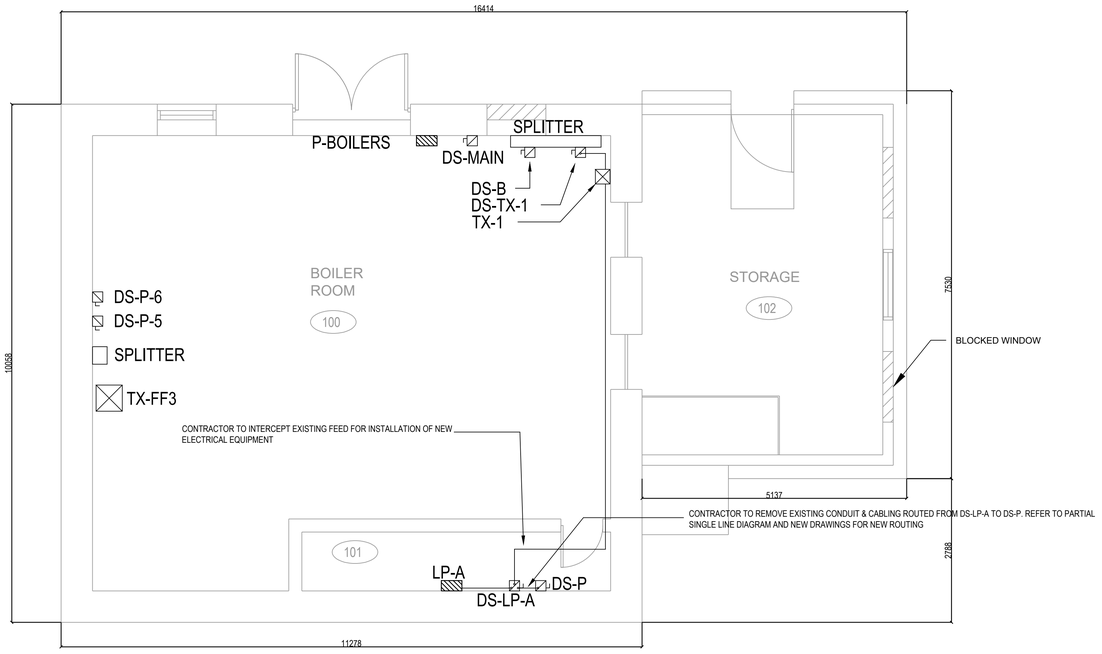
1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.

DRAWINGS NOTES:

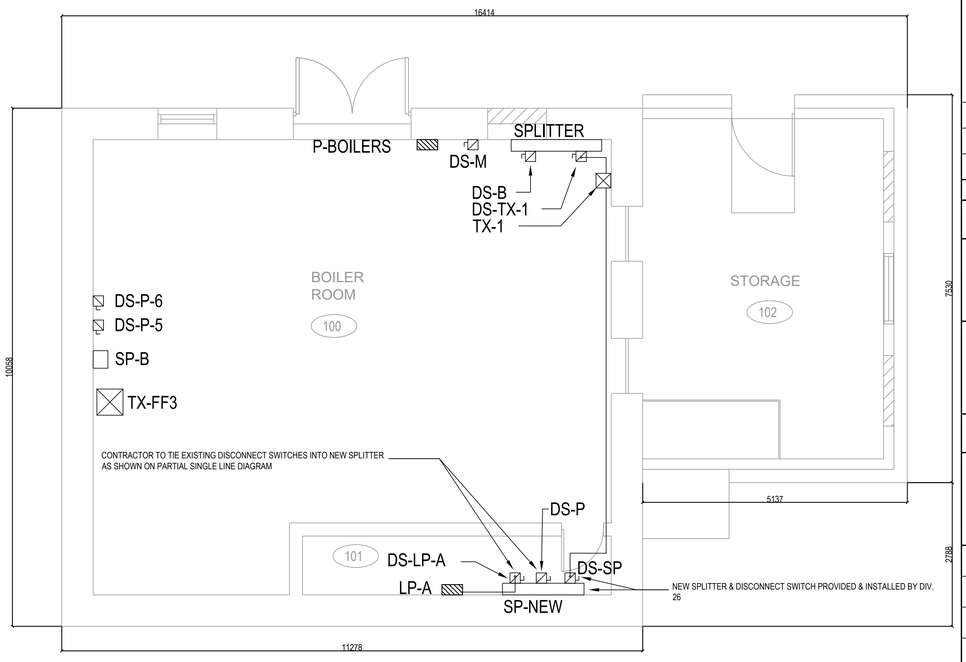
1. CONTRACTOR INSTALL NEW INSULATED BUSHING AT EXISTING 1-1/4" KNOCKOUT FOR ROUTING OF #6 BOND WIRE FOR PANEL P.



FF08 - LEVEL 02 - EXISTING
SCALE: 1:50



FF08 - BASEMENT - EXISTING
SCALE: 1:50



FF08 - BASEMENT - NEW
SCALE: 1:50

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LEVEL OF SECURITY | NIVEAU DE SÉCURITÉ
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LICENSED PROFESSIONAL ENGINEER
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF08 - BASEMENT/LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED	ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN	DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED	VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700144.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91-571

Canada

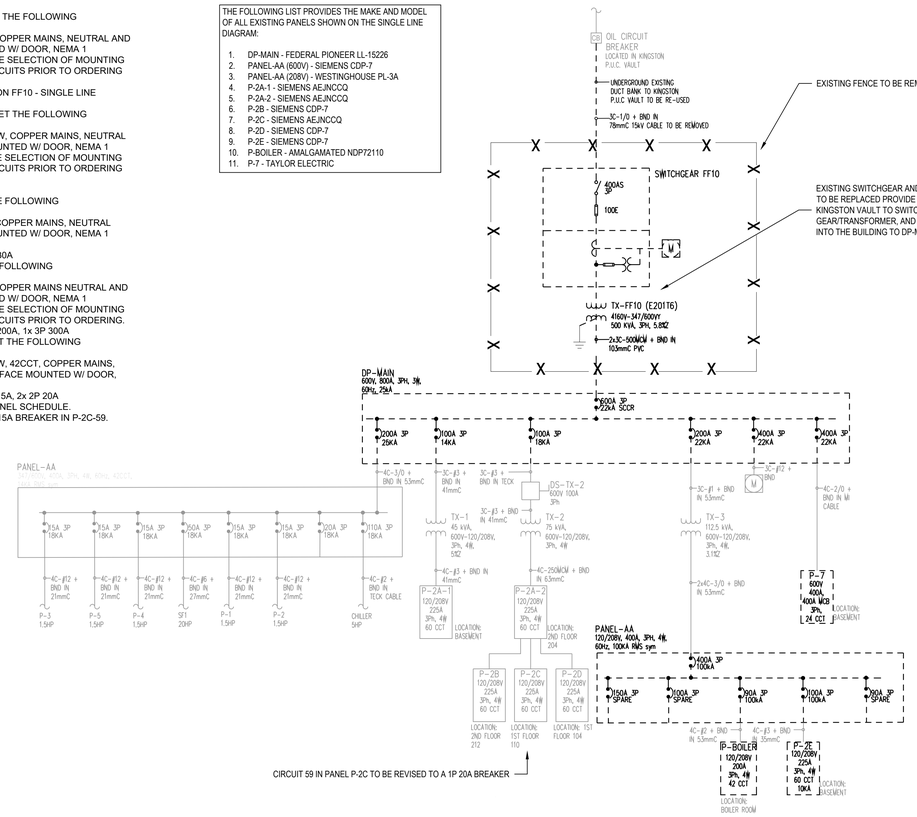
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DRAWING NOTES:

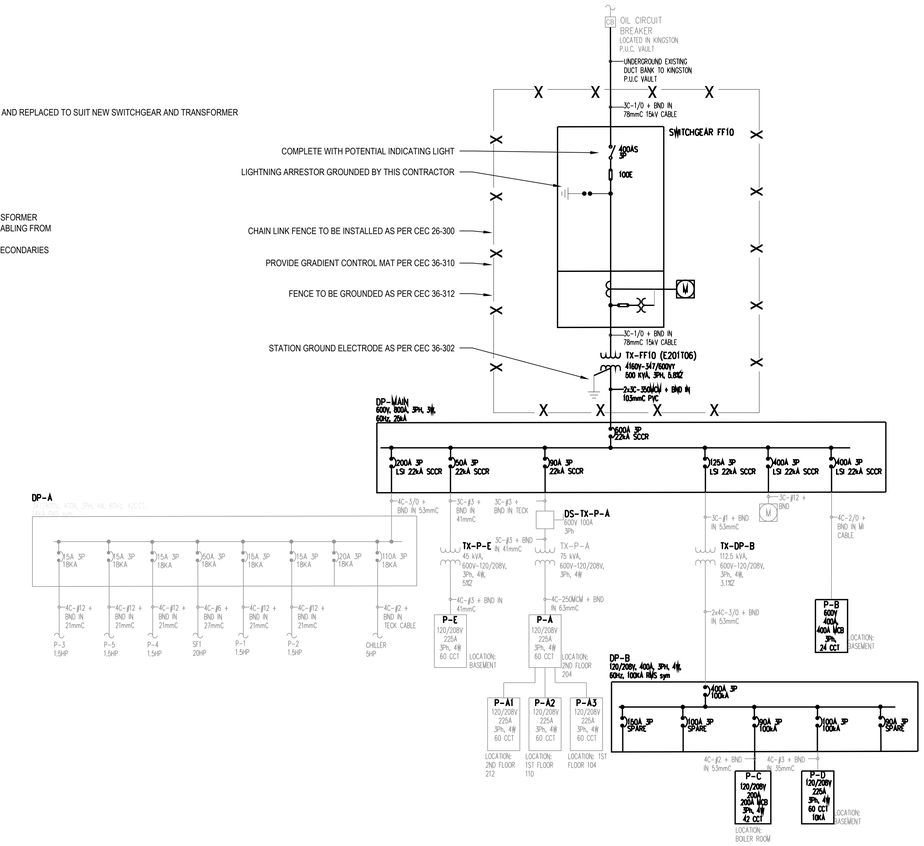
1. PANEL DP-MAIN TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   1.1. 600V, 800A MAIN, 600A MCB, 3PH, 3W, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED. COORDINATE SELECTION OF MOUNTING SPACE DIMENSION WITH EXISTING CIRCUITS PRIOR TO ORDERING OF PANEL.
   1.2. PROVIDE NEW BREAKERS AS SHOWN ON FF10 - SINGLE LINE DIAGRAM - NEW
2. PANEL P-AA(208V) TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   2.1. 120/208V, 400A MAIN, 400A MCB, 3PH, 4W, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.COORDINATE SELECTION OF MOUNTING SPACE DIMENSION WITH EXISTING CIRCUITS PRIOR TO ORDERING OF PANEL.
   2.2. 2x 3P 90A, 2x 3P 100A, 1x 3P 150A
3. PANEL P-2E TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   3.1. 120/208V, 225A MAIN, 3PH, 4W, 60CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   3.2. 42x 1P 15A, 9x 1P 20A, 1x 1P 30A, 1x 2P 30A
4. PANEL P-7 TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   4.1. 600V, 400A MAIN, 400A MCB, 3PH, 4W, COPPER MAINS NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED. COORDINATE SELECTION OF MOUNTING SPACE DIMENSION WITH EXISTING CIRCUITS PRIOR TO ORDERING.
   4.2. 2x 3P 15A, 1x 3P 90A, 2x 3P 100A, 1x 3P 200A, 1x 3P 300A
5. PANEL P-BOILER TO BE REPLACED TO MEET THE FOLLOWING SPECIFICATIONS:
   5.1. 120/208V, 200A MAIN, 200A MCB, 3PH, 4W, 42CCT, COPPER MAINS, NEUTRAL AND GROUND BUSSING, SURFACE MOUNTED W/ DOOR, NEMA 1 ENCLOSURE, CSA LISTED.
   5.2. 10x 1P 15A, 6x 3P 15A, 2x 3P 20A, 2x 2P 15A, 2x 2P 20A
   5.3. TRACE ALL CIRCUITS AND PROVIDE PANEL SCHEDULE.
6. PROVIDE NEW 20A BREAKER TO REPLACE 15A BREAKER IN P-2C-59.

THE FOLLOWING LIST PROVIDES THE MAKE AND MODEL OF ALL EXISTING PANELS SHOWN ON THE SINGLE LINE DIAGRAM:

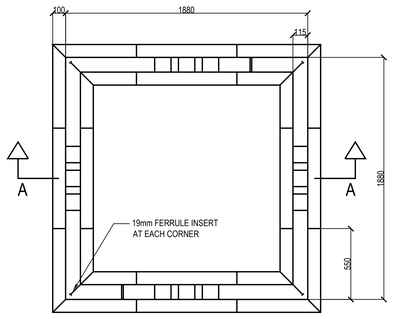
1. DP-MAIN - FEDERAL PIONEER LL-15226
2. PANEL-AA (600V) - SIEMENS CDP-7
3. PANEL-AA (208V) - WESTINGHOUSE PL-3A
4. P-2A-1 - SIEMENS AEJNCCQ
5. P-2A-2 - SIEMENS AEJNCCQ
6. P-2B - SIEMENS CDP-7
7. P-2C - SIEMENS AEJNCCQ
8. P-2D - SIEMENS CDP-7
9. P-2E - SIEMENS CDP-7
10. P-BOILER - AMALGAMATED NDP72110
11. P-7 - TAYLOR ELECTRIC



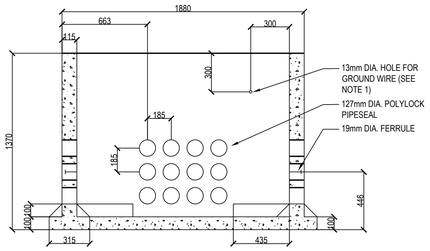
FF10 - SINGLE LINE DIAGRAM - EXISTING
SCALE: N.T.S.



FF10 - SINGLE LINE DIAGRAM - NEW
SCALE: N.T.S.



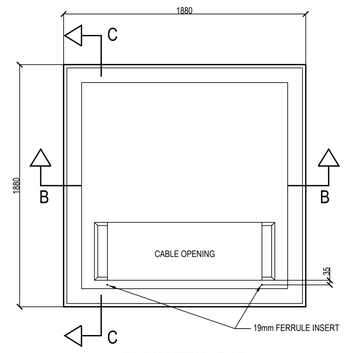
PLAN VIEW - BASE



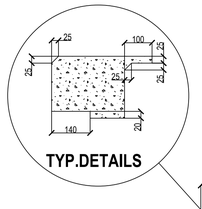
SECTION A-A

NOTES:

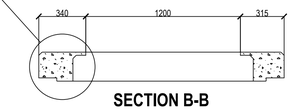
1. HOLES FOR GROUND WIRE TO BE LABELED WITH GROUND SYMBOL USING GREEN PAINT. SYMBOL TO MEASURE 150x150mm.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
3. CONCRETE - 35MPa. AND SHALL MEET REQUIREMENTS OF CSA A23.1-M90 FOR CONCRETE EXPOSED TO DE-ICING CHEMICALS.
4. PAD SHALL BE PROVIDED WITH SWIFT LIFT SYSTEM TO ACCOMODATE INSTALLATION AND REMOVAL.
5. ACCEPTABLE PRODUCTS:
   5.1. BASE: USI MODEL E-10B (SOLID BOTTOM)
   5.2. PAD: USI MODEL E-11 OR EQUIVALENT



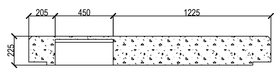
PLAN VIEW - PAD



TYP.DETAILS



SECTION B-B

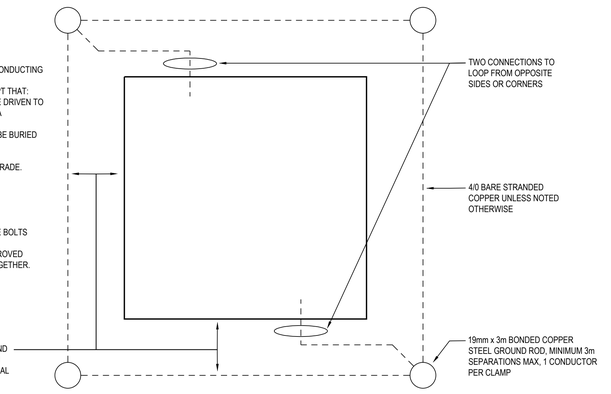


SECTION C-C

TRANSFORMER BASE & PAD DETAIL
SCALE: N.T.S.

NOTES:

1. GROUND RODS SHALL
   1.1. HAVE A CLEAN METAL SURFACE WHICH IS NOT COVERED WITH PAINT, ENAMEL, OR OTHER POOR CONDUCTING MATERIAL.
   1.2. BE DRIVEN TO A DEPTH OF NO LESS THAN 3m REGARDLESS OF THE SIZE OR NUMBER USED, EXCEPT THAT:
      1.2.1. WHERE ROCK BOTTOM IS ENCOUNTERED AT A DEPTH OF 1.2m OR MORE, EACH ROD SHALL BE DRIVEN TO ROCK BOTTOM AND REMAINDER BURIED AT LEAST 600mm BELOW FINISHED GRADE LEVEL IN A HORIZONTAL TRENCH
      1.2.2. WHERE ROCK BOTTOM IS ENCOUNTERED AT A DEPTH OF LESS THAN 1.2m, EACH ROD SHALL BE BURIED AT LEAST 600mm BELOW FINISHED GRADE LEVEL IN A HORIZONTAL TRENCH
   1.3. BE SPACED NO LESS THAN 3m APART.
   1.4. MAXIMUM DEPTH OF 600mm BELOW ROUGH GRADE, MINIMUM DEPTH OF 150mm BELOW FINISHED GRADE.
2. THE GROUNDING CONDUCTOR SHALL BE ATTACHED TO THE GROUNDING ELECTRODE BY MEANS OF:
   2.1. A BOLTED CLAMP
   2.2. A PIPE FITTING PLUG OR INTO THE FITTING
   2.3. COPPER WELDING BY THERMIT PROCESS, BRAZING OR SILVER SOLDER
   2.4. OTHER EQUALLY SUBSTANTIAL MEANS
   2.5. WHERE A BOLTED CLAMP IS USED, THE CLAMP SHALL BE OF COPPER, BRONZE, OR BRASS AND THE BOLTS SHALL BE OF SIMILAR MATERIAL OR STAINLESS STEEL
   2.6. THE GROUNDING SHOULD BE CONTIGUOUS AS MUCH AS POSSIBLE. WHERE NECESSARY, CSA APPROVED PRESSURE WIRE CONNECTOR CLAMPS SHALL BE USED TO ATTACH GROUNDING CONNECTORS TOGETHER.



GROUNDING ELECTRICAL UNDERGROUND STRUCTURES & PADMOUNT EQUIPMENT
SCALE: N.T.S.

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24-06-05
N. T. FRAYN
100515208
PROVINCE OF ONTARIO

NO.	DATE	REVISION	APPR.
2	2026/06/05	ISSUED FOR TENDER	
1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ELECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF10 - SINGLE LINE DIAGRAM

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.			DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.			PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.			DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91 - 580

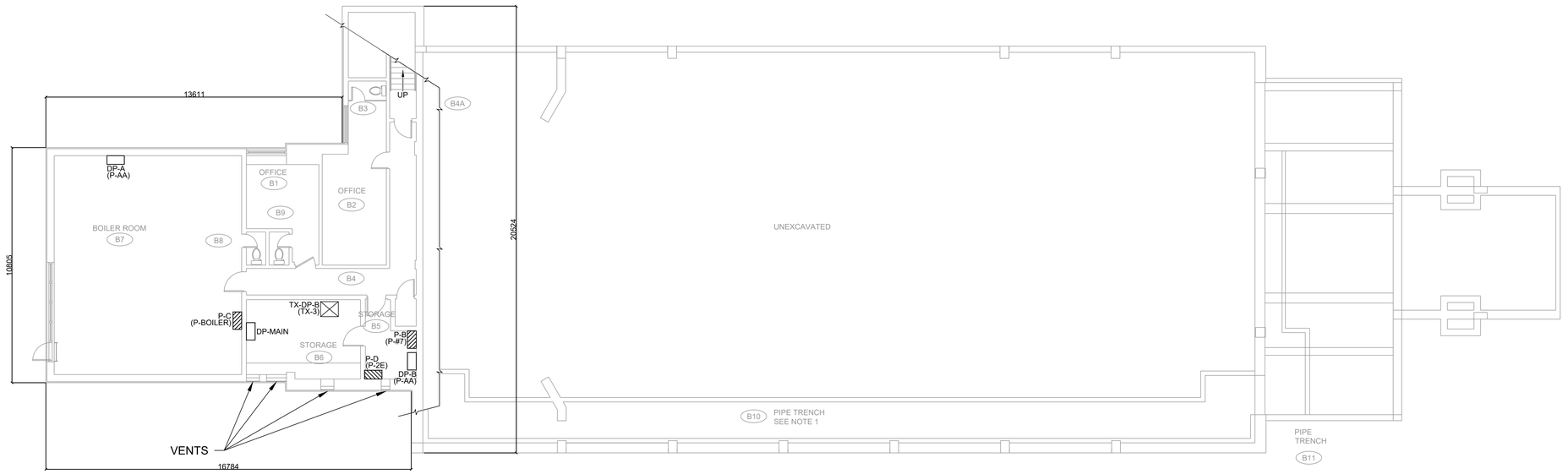
Canada

DRAWINGS NOTES:

1. CONTRACTOR TO PROVIDE STRAPPING TO SECURE CONDUITS ROUTED OUT FROM PANEL AS PER REQUIREMENTS OF THE CEC. ALL CONDUITS TO BE STRAPPED WITHIN 150mm OF PANEL:
   1.1. P-2E
2. THE FOLLOWING PANEL TAGGING SHALL BE PROVIDED TO IDENTIFY BOTH THE NEW AND EXISTING PANEL DESIGNATIONS. NEW 3-PLY LAMINATED PLASTIC LABELS SHALL DISPLAY ONLY THE NEW PANEL TAGGING:
   2.1. P-NEW (P-OLD)

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.
3. PRINT AND FRAME NEW SINGLE LINE DIAGRAM WITHIN ELECTRICAL ROOM.



FF10 - BASEMENT

SCALE: 1:100

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF10 - BASEMENT
FLOOR PLAN

PRODUCTION	REVIEWED	REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING		DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT		PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG		DES MGR | GEST CONC
COORDINATION			FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91- 581

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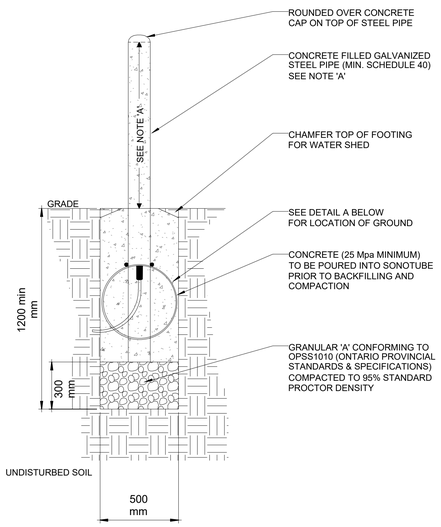
2026/Jun/05, 11:57am brittwage B1 1000 x 707_E H:\2024 Projects\24548 DCC Arc Flash\01 A DWGs\5 CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-581.dwg

DRAWINGS NOTES:

1. CONTRACTOR TO PERFORM A TEST WITH A MEGOHMMETER ON EXISTING MAIN FEEDER FOR PANEL P-2C TO ASSESS THE INTEGRITY OF THE EXISTING INSULATION. REPLACE MAIN FEEDER IF THE TEST DETERMINES DETERIORATION OR DEEMED UNSAFE. CARRY FOR REPLACEMENT OF MAIN FEEDER AS PROVISIONAL COST.
2. THE FOLLOWING PANEL TAGGING SHALL BE PROVIDED TO IDENTIFY BOTH THE NEW AND EXISTING PANEL DESIGNATIONS. NEW 3-PLY LAMINATED PLASTIC LABELS SHALL DISPLAY ONLY THE NEW PANEL TAGGING:
   2.1. P-NEW (P-OLD)

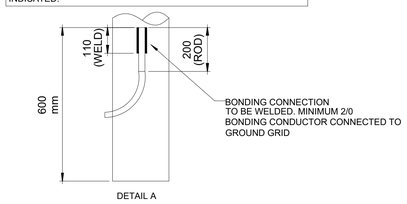
GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



BOLLARDS PROTECTIVE - NOTES:
A. PROTECTIVE BOLLARD PIPE DIMENSIONS:
HEIGHT 1200mm, DIA 150mm.

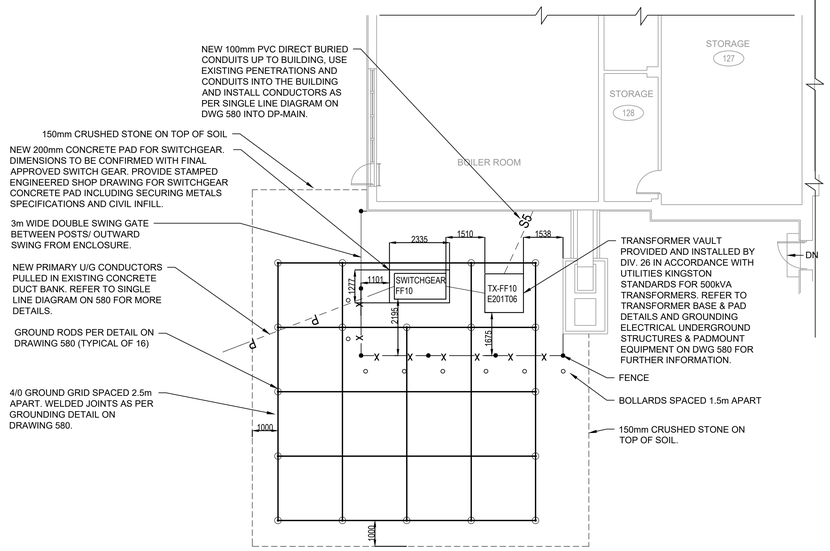
B. ALL DIMENSIONS IN ALL MILLIMETERS UNLESS OTHERWISE INDICATED.



DETAIL A

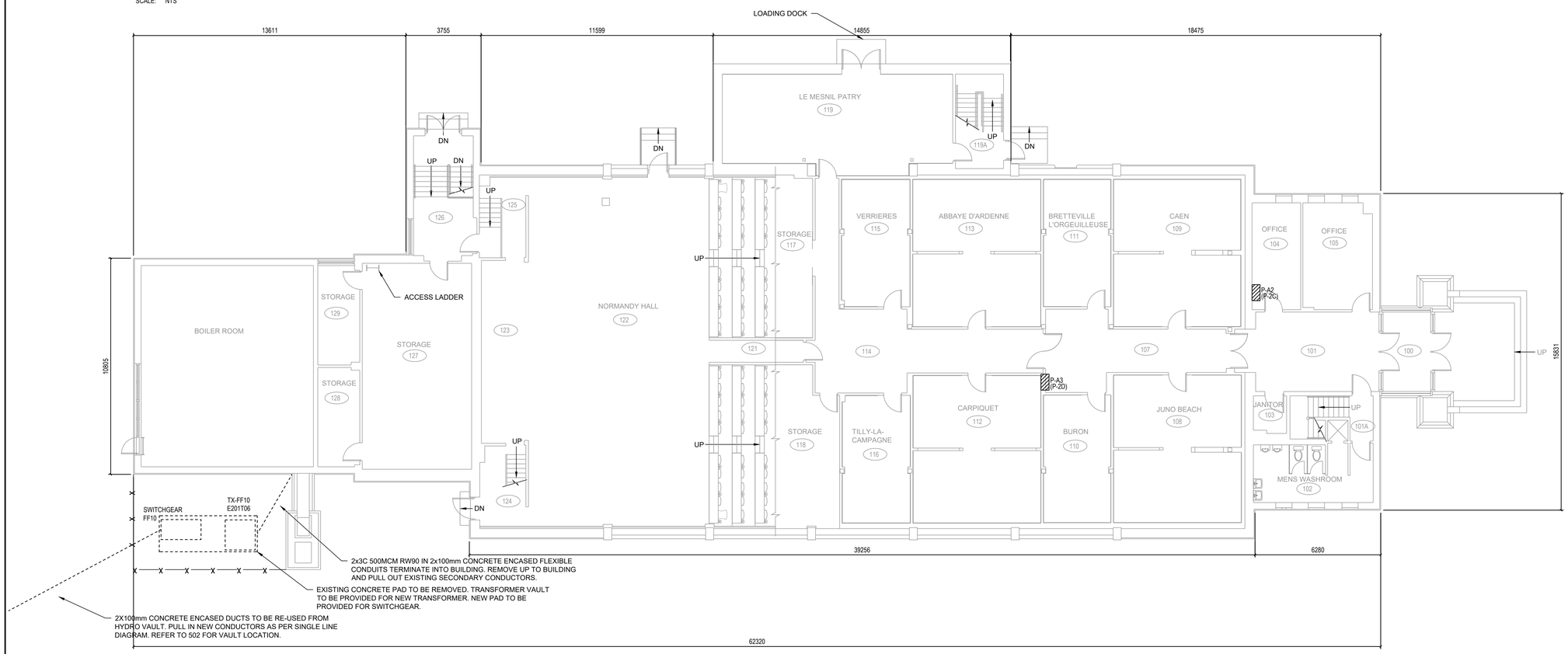
BOLLARD DETAIL

SCALE: NTS



FF10 - LEVEL 01 - NEW

SCALE: 1:100



FF10 - LEVEL 01 - EXISTING

SCALE: 1:100

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1	2026/02/27	ISSUED FOR REVIEW	

SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
388 ONTARIO STREET
KINGSTON
ONTARIO

PROJECT | PROJET
ARC FLASH STUDY
FORT FRONTENAC
KN229976

TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF10 - LEVEL 01
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
DESIGNED | ÉTUDIÉ: N.F.	ENG O | O ING	DES O | AGENT CONC
DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

WBS NO. | NO. OTP: N.700114.23.15
PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91-582

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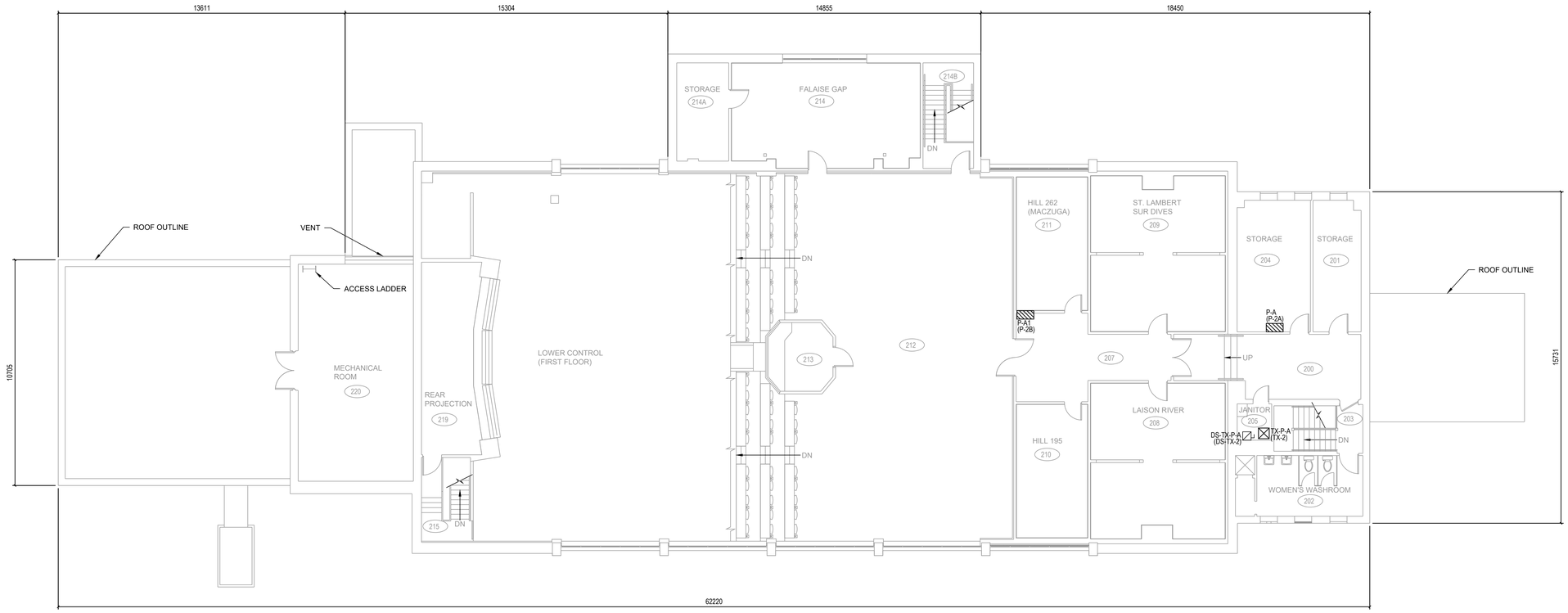
2026/Jun/05, 11:56am brithwaige B1 1000 x 707_E H:\2024 Projects\24549 DCC Arc Flash\01 A DWG\dS CADs\04 Electrical\01 Drawing Sheets Electrical\K-B35-9306\91-582.dwg

DRAWINGS NOTES:

1. CONTRACTOR TO HEAT SHRINK CONDUCTORS FOR PROPER PHASE IDENTIFICATION FOR PANEL P-2B.
2. THE FOLLOWING PANEL TAGGING SHALL BE PROVIDED TO IDENTIFY BOTH THE NEW AND EXISTING PANEL DESIGNATIONS. NEW 3-PLY LAMINATED PLASTIC LABELS SHALL DISPLAY ONLY THE NEW PANEL TAGGING:
   2.1. P-NEW (P-OLD)

GENERAL NOTES:

1. OWNER TO MAINTAIN A MINIMUM UNOBSTRUCTED CLEARANCE OF 1.0 m (UNLESS NOTED OTHERWISE) IN FRONT OF ALL ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
2. PROVIDE NEW 3-PLY LAMINATED PLASTIC LABELS FOR ALL ELECTRICAL EQUIPMENT AS PER SINGLE LINE DIAGRAM.



FF10 - LEVEL 02
SCALE: 1:50

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SCALE | ÉCHELLE

LOCATION | EMPLACEMENT
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PROJECT | PROJET
ARC FLASH STUDY
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TRADE | MÉTIER: ELECTRICAL | ÉLECTRIQUE
DATE: 2026/06/05

SUBJECT | SUJET
FF10 - LEVEL 02
FLOOR PLAN

PRODUCTION	REVIEWED | REVU	
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DRAWN | DESSINÉ: B.R.	CUSTOMER | CLIENT	PROJ MGR | GEST PROJ
CHECKED | VÉRIFIÉ: N.F.	SECT OC | CMDT CSG	DES MGR | GEST CONC
COORDINATION		FIRE | INCENDIE

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PF NO. | NO. DP: PF500659505
DWG. NO. | NO. DESSIN: K-B35-9306/91-583

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Sheet # of #

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