

ELECTRICAL LEGEND

SYMBOL	SYMBOL MEANING
[Symbol]	RECESSED PANEL
[Symbol]	SURFACE MOUNTED PANEL
[Symbol]	DUPLEX RECEPTACLE, 120V, 15A
[Symbol]	DUPLEX RECEPTACLE, 120V, 15A MOUNTED ABOVE COUNTER
[Symbol]	GROUND FAULT INTERRUPTOR RECEPTACLE MOUNTED ABOVE COUNTER
[Symbol]	SPLIT RECEPTACLE MOUNTED ABOVE COUNTER
[Symbol]	CEILING MOUNTED RECEPTACLE
[Symbol]	STOVE RECEPTACLE, CSA 14-50R
[Symbol]	DRYER RECEPTACLE, CSA 14-30R
[Symbol]	SWITCHED RECEPTACLE
[Symbol]	WEATHERPROOF RECEPTACLE
[Symbol]	WELDING RECEPTACLE
[Symbol]	DIRECT CONNECTION TO EQUIPMENT VOLTAGE/PHASE/FREQUENCY AS NOTED
[Symbol]	MOTOR LOAD VOLTAGE/PHASE/FREQUENCY AS NOTED
[Symbol]	TELEPHONE OUTLET
[Symbol]	DATA OUTLET
[Symbol]	TELEVISION OUTLET
[Symbol]	CARBON MONOXIDE DETECTOR
[Symbol]	DISCONNECT

0 ISSUED FOR PERMIT AND TENDER 2025.01.14 DRM

NO.	DESCRIPTION	DATE	BY

REVISIONS

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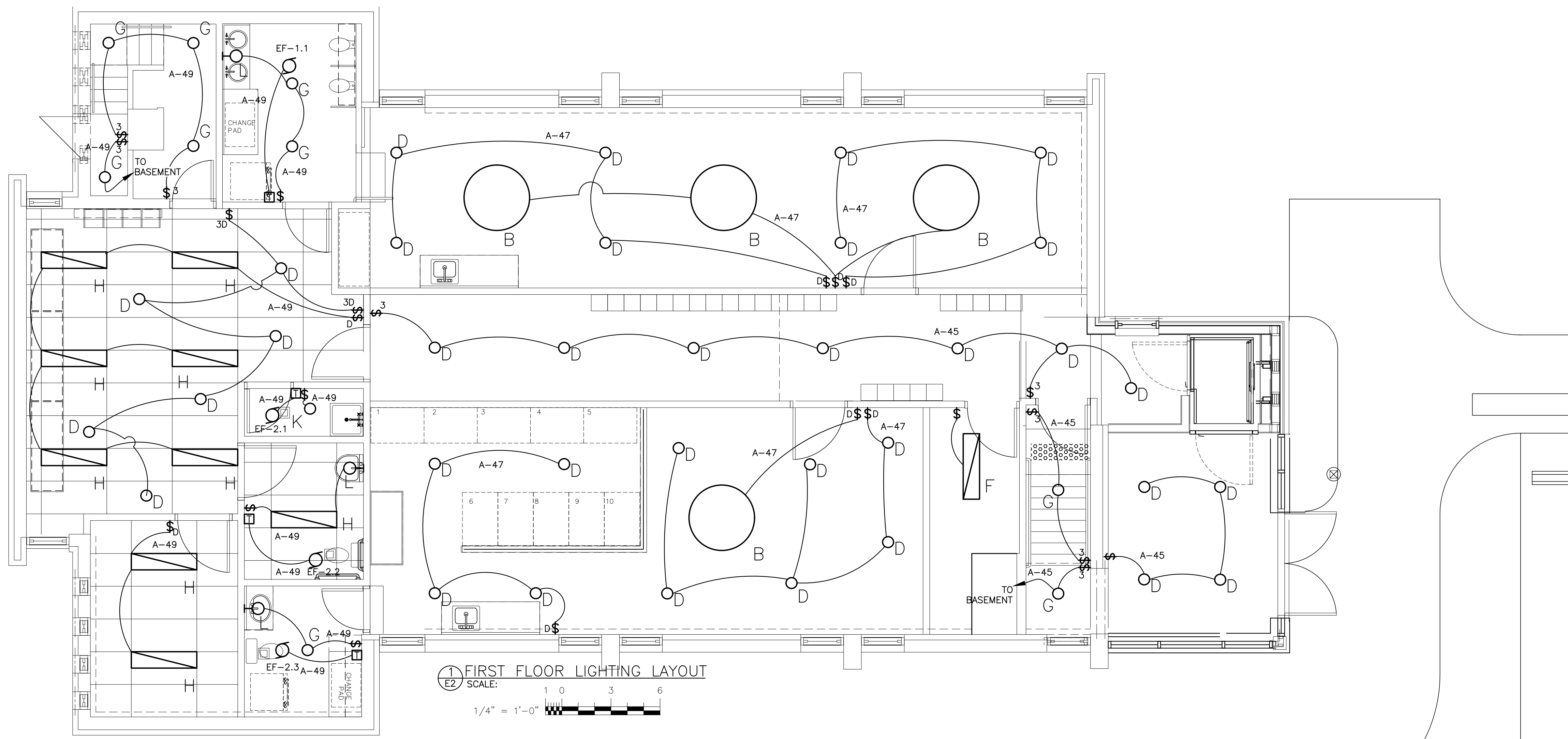
KIRKLAND ENGINEERING LTD.

PROJECT
**SAINT ALBANS NURSERY
 TWO CHILD CARE
 RENOVATIONS**
 567 Monaghan Road
 Peterborough, ON.

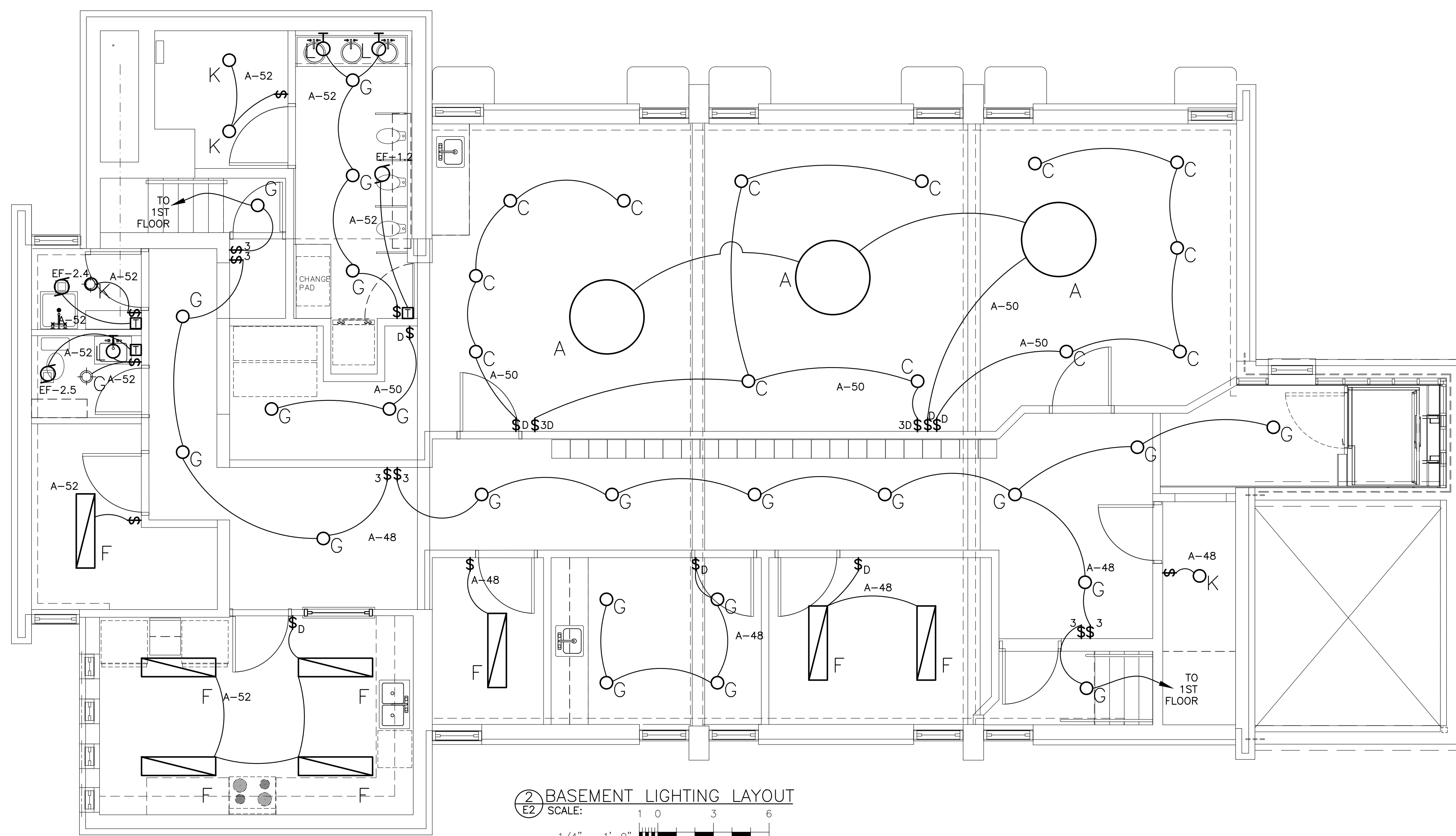
TITLE
POWER

DESIGN	DRM	SCALE 1/4" = 1'-0"
DRAWN	AJM	DWG NO.
CHECKED	DRM	E1
APPROVED	DRM	
PROJECT	7465	

CADD FILE NO. 7465E1



1 FIRST FLOOR LIGHTING LAYOUT
 SCALE: 1/4" = 1'-0"



2 BASEMENT LIGHTING LAYOUT
 SCALE: 1/4" = 1'-0"

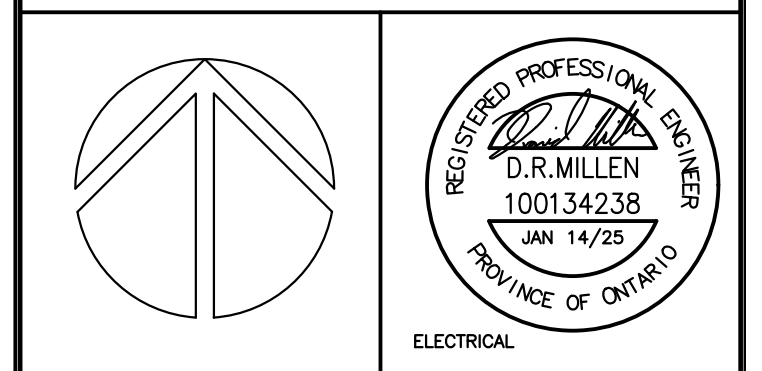
SWITCH LEGEND	
\$	TOGGLE SWITCH
\$3	3-WAY TOGGLE SWITCH
\$D	DIMMER SWITCH
\$F	FAN SWITCH
\$M	MANUAL SWITCH
□	5 BUTTON TIMER

LIGHT FIXTURE SCHEDULE			
FIXTURE TYPE	DESCRIPTION	MANUFACTURER	MODEL NO.
A	48" DISC PENDANT TO BE CEILING MOUNTED, 9800 LUMENS, 80 WATTS, 3000K, 0-10V DIMMING, SURFACE MOUNT, MATTE WHITE FINISH.	SPEC LUME	LD4805LEDLX98L30KDS10X /SMMWF090
B	48" DISC PENDANT TO BE CABLE MOUNTED, 9800 LUMENS, 80 WATTS, 3000K, 0-10V DIMMING, CABLE MOUNT, MATTE WHITE FINISH.	SPEC LUME	LD4805LEDLX98L30KDS10X /CD4X18MWF090
C	6" DIAMETER SPHERE LED, 680 LUMENS, 10 WATTS, 3000K, ELY 100-10% DIMMING, CEILING MOUNTED, WHITE FINISH.	NIVEOUS	FM-W52306-WT
D	7" DIAMETER SPHERE LED PENDANT, 588 LUMENS, 10 WATTS, 3000K, ELY 100-10% OR 0-10V DIMMING, HANGING 18" FROM CEILING HEIGHT, WHITE FINISH.	NIVEOUS	PD-52307-WT
F	1'x4' LED SURFACE MOUNTED LIGHT, 3200 LUMENS, 80 CRI, 3500K, PRISMATIC A12, 120V. WITH SURFACE MOUNT KIT	LITHONIA OR APPROVED EQUAL	CPX 1X4 AL07 80CRI SWW7 SWL, MVOLT WITH 1X4SMKSH
G	6" ROUND RECESSED LED DOWNLIGHT FOR WET LOCATION, 970 LUMEN 13 W 3500K, 120V, MATTE WHITE, 120V	LITHONIA OR APPROVED EQUAL	WF6 SSW5 90CRI MW M6
H	1'x4' LED TROFFER LIGHT, 3200 LUMENS, 80 CRI, 3500K, PRISMATIC A12, 120V.	LITHONIA OR APPROVED EQUAL	CPX 1X4 AL07 80CRI SSW7 SWL, MVOLT
K	MEDIUM BULB BASE FIXTURE WITH CAGE	x	X
L	24" LONG LED VANITY WALL BRACKET C/W ACRYLIC DIFFUSER AND BRUSHED NICKLE FINISH, 27W LIGHTING, 3500K, 1550 LUMENS, 120V OPERATION.	LITHONIA OR APPROVED EQUAL	FMVCSLS 24IN MVOLT 30K35K40K 90CRI BN M6

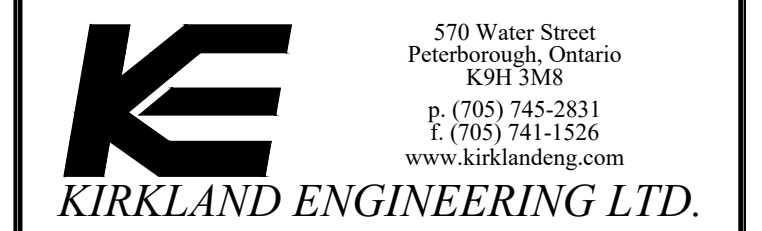
NOTES:
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NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR PERMIT AND TENDER	2025.01.14	DRM

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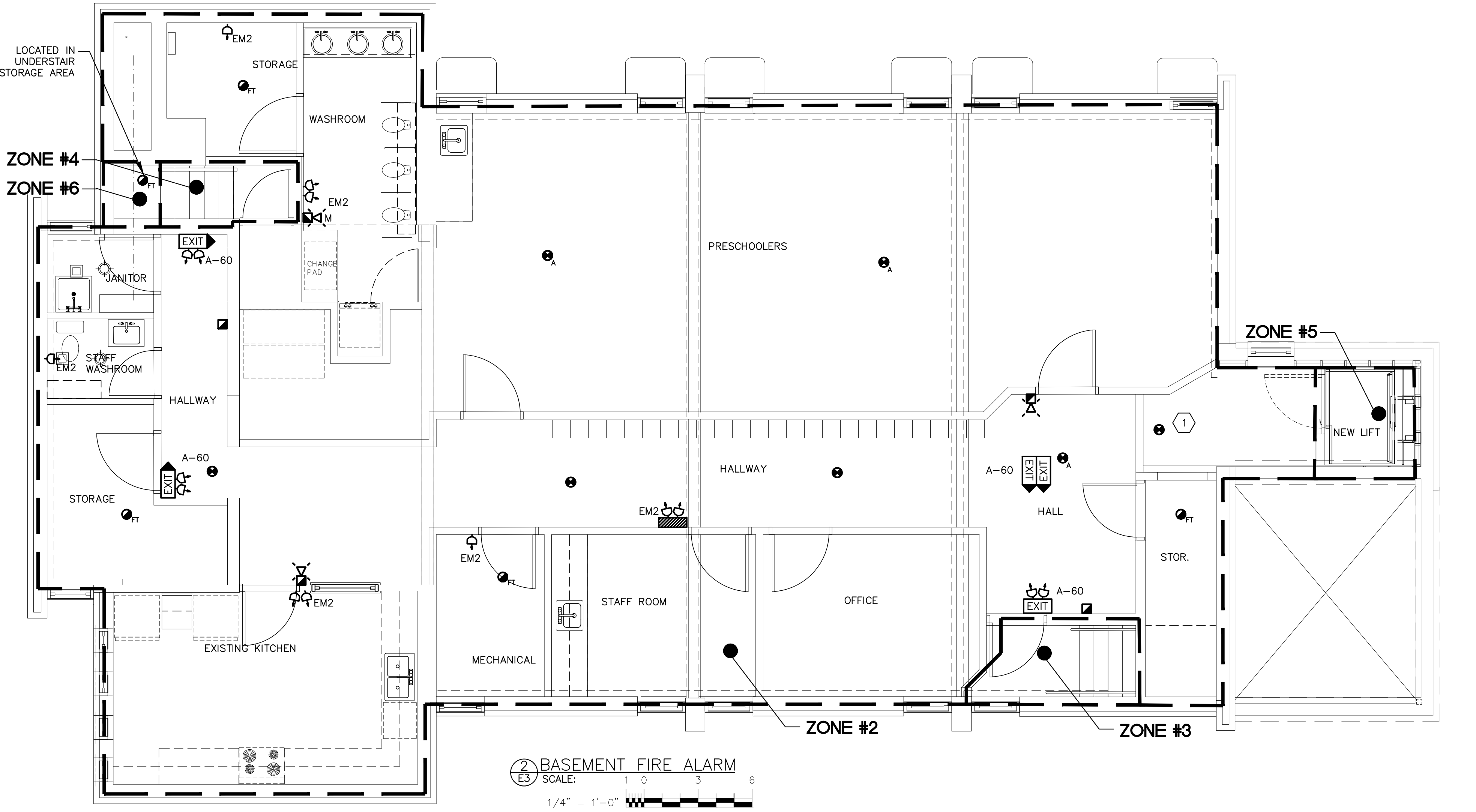
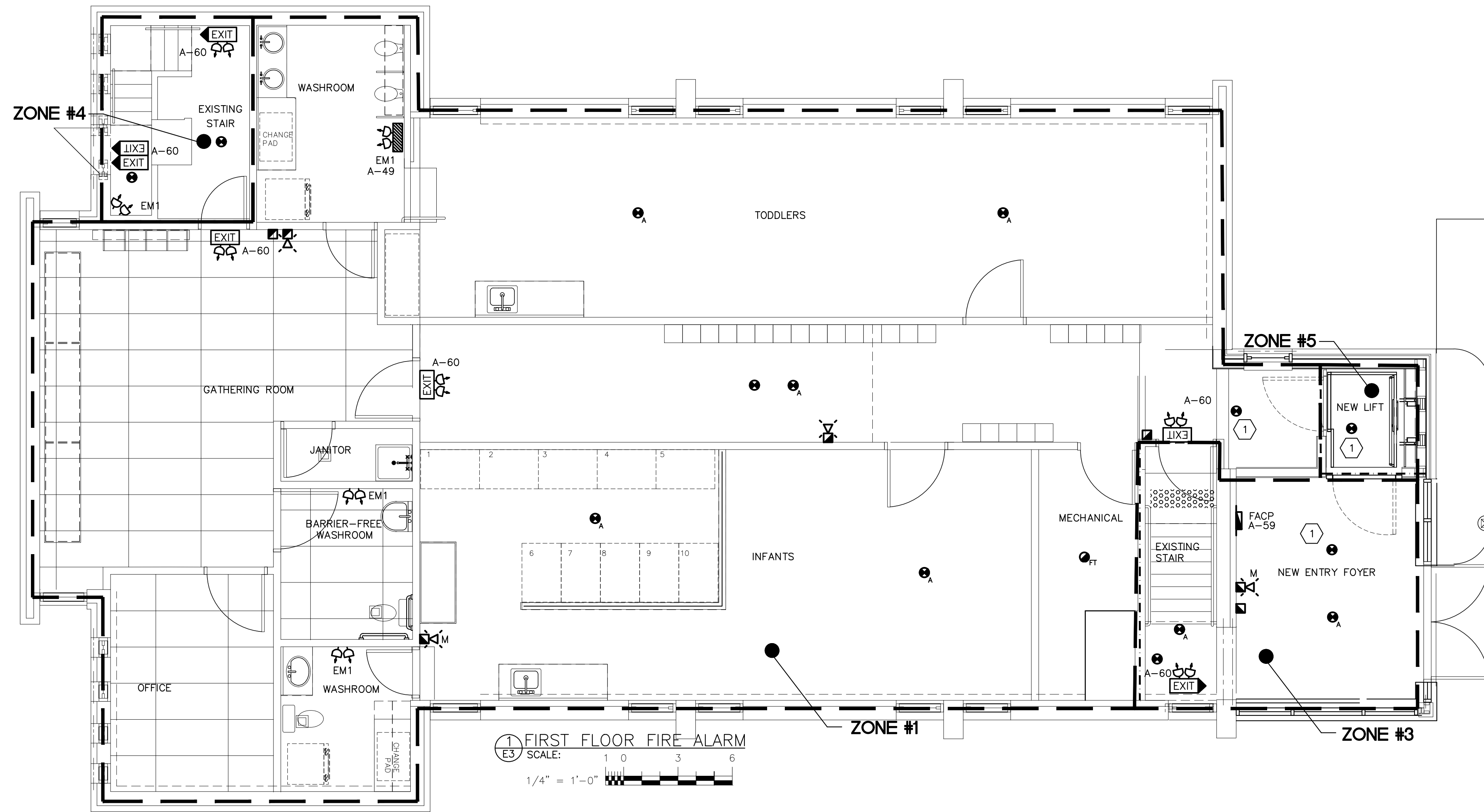
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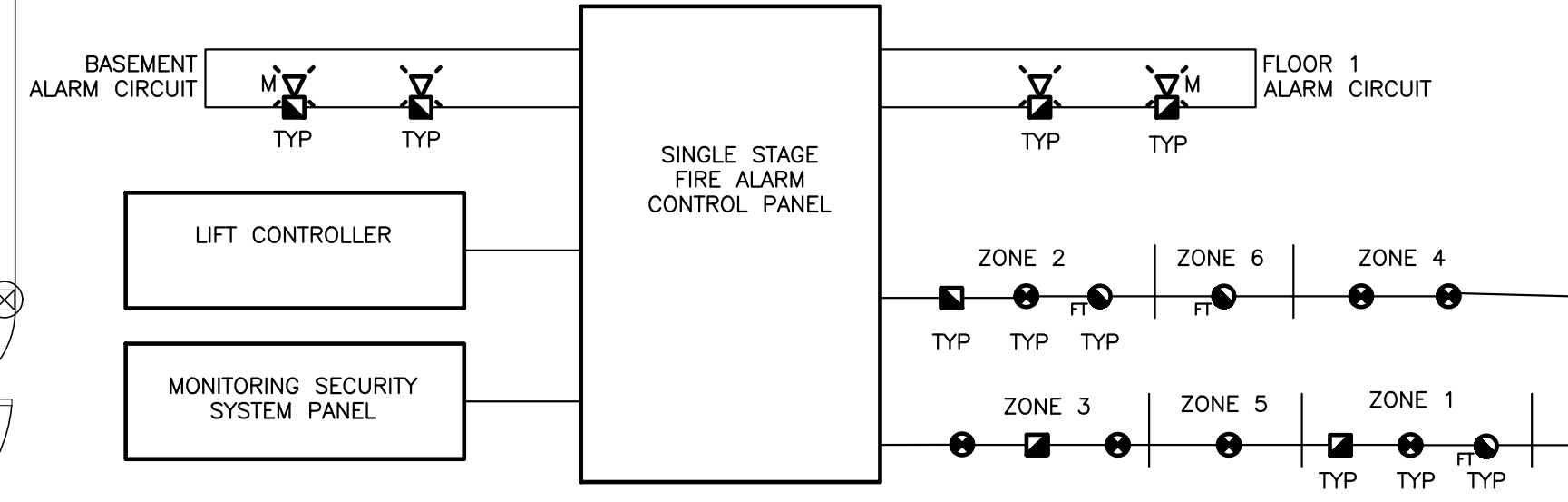
PROJECT
**SAINT ALBANS NURSERY
 TWO CHILDCARE
 RENOVATIONS**
 567 Monaghan Road
 Peterborough, ON.

TITLE
LIGHTING

DESIGN	DRM	SCALE 1/4" = 1'-0"
DRAWN	AJM	DWG NO.
CHECKED	DRM	E2
APPROVED	DRM	
PROJECT	7465	



EMERGENCY LIGHTING & EXIT SCHEDULE			
SYMBOL	DESCRIPTION	MANUFACTURER	MODEL No.
	EMERGENCY LIGHTING UNIT, 100W, 12VDC, 10 YEAR BATTERY, AUTO-TEST FEATURE, C/W 2 X 12V, 4W LED MR16 HEADS AND MOUNTING SHELF. WHITE FINISH.	LUMACELL OR APPROVED EQUAL	RG12S1002LD10AT C/W 440.0616-L
	EMERGENCY LIGHTING UNIT, 100W, 12VDC, 10 YEAR BATTERY, AUTO-TEST FEATURE C/W MOUNTING SHELF. WHITE FINISH.	LUMACELL OR APPROVED EQUAL	RG12S100AT C/W 440.0616-L
	DUAL REMOTE HEAD, 12VDC, 4W, MICRO PAR 18, MR16 LED. WHITE FINISH.	LUMACELL OR APPROVED EQUAL	MQM2-LD10
	SINGLE REMOTE HEAD, 12VDC, 4W, MICRO PAR 18, MR16 LED. WHITE FINISH.	LUMACELL OR APPROVED EQUAL	MQM1-LD10
	SELF POWERED RUNNING MAN EXIT SIGN, SINGLE OR DOUBLE FACE AS INDICATED, ARROWS AS INDICATED, LED LAMPS FOR 120VAC, CSA-C860-96 LISTED & CERTIFIED	LUMACELL OR APPROVED EQUAL	LA SERIES



- F/A RISER NOTES:**
- PROVIDE AND INSTALL FIRE ALARM FAULT ISOLATION MODULES WHEN ENTERING AND EXITING A FIRE ALARM ZONE ON A DATA COMMUNICATION LINK THAT SERVES FIRE ALARM DEVICES IN MORE THAN ONE ZONE IN ACCORDANCE WITH CAN/ULC-S524-06.
 - PROVIDE SIGNAL BOOSTER PANELS AS REQUIRED.
 - DASHED LINES ON RISER DIAGRAM INDICATE MORE DEVICES PRESENT THAN SHOWN. REFER TO FLOOR DRAWINGS FOR DEVICE COUNTS.
 - ENSURE STROBES ARE SYNCHRONIZED THROUGHOUT FLOOR SPACES.

FIRE ALARM ZONE SCHEDULE		
Zone	Type	Description
1	ALARM	1ST FLOOR
2	ALARM	BASEMENT FLOOR
3	ALARM	FRONT STAIR
4	ALARM	BACK STAIR
5	ALARM	LIFT SHAFT
6	ALARM	UNDERSTAIR STORAGE
12-Jul	SPARE	

3 FIRE ALARM RISER DIAGRAM
 SCALE: N.T.S.

- NOTES:**
- SMOKE ALARMS TO BE SMOKE/CO/STROBE TYPE 120V INTERCONNECTED SMOKE ALARMS HARD WIRED TO BATHROOM LIGHT CIRCUIT (CIRCUIT A-49) AND INTERCONNECTED SUCH THAT ACTIVATION OF ONE SMOKE ALARM WILL CAUSE ALL SMOKE ALARMS WITHIN TO SOUND.
 - FEED BATTERY LIGHT PACK FROM LIGHTING CIRCUIT.
 - EXIT SIGNS FED FROM DEDICATED CIRCUIT A-60.

DRAWING NOTES:

- PROVIDE RELAY BASE FOR ELEVATOR RECALL RUN WIRE TO ELEVATOR CONTROLLER.

FIRE ALARM DEVICE LEGEND	
SYMBOL	DESCRIPTION
	SURFACE MOUNTED FIRE ALARM PANEL
	SMOKE DETECTOR
	HEAT DETECTOR
	SMOKE ALARM (STAND ALONE)
	CARBON MONOXIDE DETECTOR
	PULL STATION
	FIRE ALARM BELL
	FIRE ALARM STROBE
	FIRE ALARM AND STROBE COMBO
	FIRE ALARM MINI HORN AND STROBE COMBO C/W SILENCE BUTTON

NO.	DESCRIPTION	DATE	BY
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PROJECT
**SAINT ALBANS NURSERY
 TWO CHILDCARE
 RENOVATIONS**
 567 Monaghan Road
 Peterborough, ON.

TITLE
**LIFE SAFETY AND
 FIRE ALARM**

DESIGN	DRM	SCALE 1/4" = 1'-0"
DRAWN	AJM	DWG NO.
CHECKED	DRM	E3
APPROVED	DRM	
PROJECT	7465	

SPECIFICATION

1. GENERAL CONDITIONS

1. DO ALL WORK IN ACCORDANCE WITH ONTARIO ELECTRICAL SAFETY CODE, CURRENT EDITION, BASED UPON THE CANADIAN ELECTRICAL CODE, PART I, CSA STANDARD C22.1, AND ALL BULLETINS TO DATE.

2. SCOPE OF WORK

2.1 PROVIDE ALL MATERIALS EQUIPMENT AND LABOUR TO PROVIDE A COMPLETE OPERATING INSTALLATION AS DESIGNATED IN THIS SPECIFICATION AND AS INDICATED ON THE DRAWINGS EXCEPT WHERE OTHERWISE NOTED.
 2.2 THE SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO, SUPPLY AND INSTALLATION OF THE FOLLOWING ITEMS:
 2.2.1 POWER DISTRIBUTION.
 2.2.2 LIGHTING.
 2.2.3 EMERGENCY LIGHTING AND EXIT SIGNAGE.
 2.2.4 FEEDERS AND OVER CURRENT PROTECTION FOR MECHANICAL EQUIPMENT.
 2.2.5 EMPTY RACEWAY SYSTEM FOR TELEPHONE AND CABLE TV SYSTEMS
 2.2.6 FIRE ALARM SYSTEM

3. GENERAL

3.1 ALL MATERIALS SHALL BE CSA APPROVED, NEW AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

4. IDENTIFICATION

4.1 WIRES TO BE COLORED AS FOLLOWS: 120V AC NEUTRAL WHITE
 12V DC BLUE.
 120V AC SWITCHED, BLACK OR RED.
 120V AC LINE, BLACK.

4.2 PROVIDE LAMICOID LABELS FOR NEW OR REVISED BREAKER PANELS, SPLITTERS AND DISCONNECTS.
 4.3 PROVIDE TYPED CIRCUIT LISTING FOR NEW OR REVISED BREAKER PANELS.

5. EXAMINATION OF SITE

5.1 PRIOR TO SUBMITTING TENDERS, THIS CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL EXISTING CONDITIONS.
 5.2 ALLOW FOR ALL COSTS ASSOCIATED WITH COMPLETING THE WORK OF DIVISION 16 IN ACCORDANCE WITH EXISTING SITE AND BUILDING CONDITIONS.
 5.3 NO ALLOWANCE FOR EXTRA PAYMENTS TO THE CONTRACTOR WILL BE MADE BY THE OWNER FOR FAILING TO VISIT AND EXAMINE SITE CONDITIONS.

6. INSURANCE

6.1 SUB-CONTRACTOR SHALL MAINTAIN SUCH INSURANCE AS WILL FULLY PROTECT BOTH THE OWNER AND THE SUB-CONTRACTOR FROM ANY AND ALL CLAIMS UNDER THE WORKMEN'S COMPENSATION ACT, ALSO ALL INSURANCE AS NOTED WITHIN ARCHITECTURAL GENERAL CONDITIONS.

7. AS-BUILT DRAWINGS

7.1 MAINTAIN A SEPARATE SET OF WHITE PRINTS ON THE SITE AND NOTE ALL CHANGES AND DEVIATIONS FROM THE ORIGINAL DESIGN. TWO SETS OF THESE DRAWINGS SHOWING ALL AS-BUILT CONDITIONS SHALL BE FORWARDED TO THE ARCHITECT AT THE COMPLETION OF THIS CONTRACT AND BEFORE APPLYING FOR FINAL PAYMENT.

8. REVISIONS AND EXTRAS

8.1 ADDITIONAL MONEY OVER THE CONTRACT PRICE SHALL NOT BE PAID UNLESS AN APPROVED CHANGE ORDER IS ISSUED BY THE ARCHITECT. CLAIMS FOR EXTRAS SHALL BE SUBMITTED WITH A COMPLETE BREAKDOWN OF MATERIAL, LABOUR, HOURLY RATES, ETC.

9. CLEAN UP

9.1 BE RESPONSIBLE TO KEEP THE AREA CLEAN AT ALL TIMES AND TO PERIODICALLY REMOVE ALL DEBRIS.

10. CUTTING AND PATCHING

10.1 ALL CUTTING AND PATCHING REQUIRED FOR THE WORK OF THIS DIVISION SHALL BE CARRIED OUT BY THIS DIVISION. NO CHASING BLOCK WORK WILL BE ALLOWED. CUTTING AND DRILLING SHALL BE PERFORMED IN A MANNER SO AS TO CAUSE LITTLE DAMAGE. BE RESPONSIBLE AND PAY FOR ANY DAMAGE TO THE BUILDING INCURRED BY WORK OF THIS DIVISION.

11. COORDINATION

11.1 BE RESPONSIBLE TO COORDINATE THE INSTALLATION OF EQUIPMENT, CONDUIT WORK, LIGHTING FIXTURES, ETC. WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE PRIOR TO THE ACTUAL INSTALLATION.

12. RESPONSIBILITY

12.1 BE RESPONSIBLE FOR ELECTRICAL WORK UNTIL THE COMPLETION AND FINAL ACCEPTANCE, FOR REPLACING ANY ITEM THAT MAY BE DEFECTIVE, DAMAGED, LOST OR STOLEN WITHOUT ADDITIONAL COST TO THE OWNER OR DELAY TO THE COMPLETION OF THE PROJECT.

13. WIRING MATERIALS AND METHODS

13.1 USE MATERIALS AND METHODS APPROVED BY ONTARIO ELECTRICAL CODE FOR USE IN NON-COMBUSTIBLE CONSTRUCTION.
 13.2 ALL BUILDING WIRE SHALL BE COPPER TYPE RW90-XLPE WHERE APPROPRIATE EXCEPT WHERE OTHERWISE NOTED.
 13.3 USE MINIMUM OF #12 AWG FOR BRANCH CIRCUIT WIRING.
 13.4 ARMORED CABLE TYPE AC90 (BX) WITH INTERLOCKING ARMOUR FABRICATED FROM ALUMINUM STRIP C/W COPPER INSULATED CONDUCTORS, SIZE AS INDICATED, TO BE USED IN CONCEALED WALL AND CEILING CAVITIES.

14. SHOP DRAWINGS AND PRODUCT DATA

14.1 'SHOP DRAWINGS' MEANS DRAWINGS, DIAGRAMS, ILLUSTRATIONS, SCHEDULES, PERFORMANCE, CHARTS, BROCHURES, AND OTHER DATA WHICH ARE TO BE PROVIDED BY CONTRACTOR TO ILLUSTRATE DETAILS OF A PORTION OF THE WORK.
 14.2 INDICATE MATERIALS METHODS OF CONSTRUCTION AND ATTACHMENT OR ANCHORAGE, NECESSARY FOR COMPLETION OF WORK.
 14.3 ADJUSTMENTS MADE ON SHOP DRAWINGS BY OWNER OR ENGINEER ARE NOT INTENDED TO CHANGE CONTRACT PRICE.
 14.4 MAKE CHANGES IN SHOP DRAWINGS AS OWNER OR ENGINEER MAY REQUIRE.
 14.5 SUBMIT 6 HARD COPIES, OR 1 HIGH QUALITY ELECTRONIC COPY OF PRODUCT DATA SHEETS OR BROCHURES FOR LIGHTING FIXTURES, EMERGENCY LIGHTING, EXIT SIGNS, MAIN SERVICE BOARD, MOTOR STARTERS, FIRE ALARM EQUIPMENT AND POWER DISTRIBUTION EQUIPMENT.
 14.6 PROVIDE 2 MAINTENANCE MANUALS COMPLETE WITH WARRANTY, CERTIFICATE OF INSPECTION BY ESA, FIRE ALARM VERIFICATION REPORT, AND COPY OF ALL PRODUCT LITERATURE AND MAINTENANCE INFORMATION.

15. SYSTEMS DEMONSTRATION

15.1 PRIOR TO FINAL INSPECTION DEMONSTRATE OPERATION OF EACH SYSTEM TO OWNER AND ENGINEER.
 15.2 INSTRUCT PERSONNEL IN OPERATION ADJUSTMENT AND MAINTENANCE OF EQUIPMENT AND SYSTEMS, USING PROVIDED OPERATION AND MAINTENANCE DATA AS BASIS FOR INSTRUCTION.

16. PERMITS, FEES AND INSPECTION

16.1 SUBMIT TO ELECTRICAL SAFETY AUTHORITY NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.
 16.2 PAY ASSOCIATED FEES, INCLUDING EQUIPMENT APPROVAL INSPECTION FEE.
 16.3 OWNER WILL PROVIDE DRAWINGS AND SPECIFICATIONS REQUIRED BY ELECTRICAL SAFETY AUTHORITY AT NO COST.
 16.4 NOTIFY ENGINEER OF CHANGES REQUIRED BY ELECTRICAL SAFETY AUTHORITY PRIOR TO MAKING CHANGES.
 16.5 FURNISH CERTIFICATES OF ACCEPTANCE FROM ELECTRICAL SAFETY AUTHORITY AND AUTHORITIES HAVING JURISDICTION OF COMPLETION OF WORK TO ENGINEER.

17. THIRD PARTY TESTING

17.1 THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THIRD PARTY TESTING OF THE LIGHTING SYSTEM IN ACCORDANCE WITH ASHRAE STANDARD 90.1-2010, SECTION 9.4.4 FUNCTIONAL TESTING. THE PARTY RESPONSIBLE FOR THE FUNCTIONAL TESTING SHALL NOT BE DIRECTLY INVOLVED IN EITHER THE DESIGN OR CONSTRUCTION OF THE PROJECT AND SHALL PROVIDE DOCUMENTATION CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET OR EXCEED ALL DOCUMENTED PERFORMANCE CRITERIA.
 17.2 LIGHTING CONTROL DEVICES AND CONTROL SYSTEMS SHALL BE TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 17.3 WHEN SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS OR PHOTOSENSORS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
 17.2.1 CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE, LIGHTS TURN OFF ONLY AFTER SPACE IS VACATED, WHERE AN AUTO-ON MODE HAS BEEN SELECTED, LIGHTS DO NOT TURN ON UNLESS SPACE IS OCCUPIED.
 17.2.2 CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED CORRECTLY TO TURN THE LIGHTS OFF.
 17.2.3 WHERE DAYLIGHT HARVESTING CAPABILITY HAS BEEN INSTALLED, CONFIRM THAT PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT LEVELS BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

18. WARRANTY

18.1 AFTER THE WORK IS COMPLETED, GIVE A WRITTEN GUARANTEE FOR ONE YEAR COVERING WORKMANSHIP AND MATERIALS. REPAIR OR REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY DEFECTS DUE TO WORKMANSHIP OR MATERIALS WHICH IN THE OWNER'S OPINION, ARE NOT DUE TO MISUSE OR NEGLECT.

19. CONDUITS AND RACEWAYS

19.1 RIGID GALVANIZED STEEL CONDUIT TO BE USED WHERE SUBJECT TO MECHANICAL DAMAGE.
 19.2 ELECTRICAL METALLIC TUBING (EMT) WITH COUPLINGS TO BE USED EXCEPT WHERE EMBEDDED IN CONCRETE OR SUBJECT TO UNDUE MOISTURE OR MECHANICAL DAMAGE.
 19.3 RIGID PVC CONDUIT WHERE EMBEDDED IN CONCRETE OR BELOW GRADE.
 19.4 FLEXIBLE ALUMINUM CONDUIT WITH WEATHERPROOF COVERING TO BE USED WHERE SUBJECT TO VIBRATION OR STRAIN RELIEF.
 19.5 CONDUITS IN FINISHED AREA SHALL BE CONCEALED.
 19.6 CONDUITS SHALL BE MINIMUM 1/2".

20. INSTALLATION OF OUTLETS

20.1 THE DRAWINGS SHOW APPROXIMATE LOCATION OF OUTLETS, EXACT LOCATION SHALL BE COORDINATED ON THE SITE WITH OTHER TRADES, ARCHITECTURAL DRAWINGS, ETC. OUTLETS INACCURATELY LOCATED SHALL BE READJUSTED OR RELOCATED AT THE CONTRACTOR'S EXPENSE. UNLESS OTHERWISE NOTED ON THE DRAWING LOCATE OUTLETS AS FOLLOWS:
 20.1.1 RECEPTACLES, TELEPHONE AND DATA OUTLETS (15.7") 400mm ABOVE FINISHED FLOOR.
 20.1.2 OUTLETS OVER COUNTER (45") 1143mm ABOVE FLOOR OR CO-ORDINATION.
 20.1.3 OUTLETS IN MECHANICAL, ELECTRICAL AND TELEPHONE ROOMS (48") 1220mm ABOVE FLOOR.
 20.1.4 LIGHT SWITCHES NOT LESS THAN (35.4") 900mm AND NOT MORE THAN (43") 1100mm ABOVE FLOOR.
 20.2 RACEWAYS SHALL BE EMT UNLESS OTHERWISE NOTED.
 20.3 SUPPORT OUTLET BOXES, JUNCTION BOXES, CONDUIT AND THE LIKE.

21. RECEPTACLES

21.1 WHITE DUPLEX RECEPTACLES CSA TYPE 5-15R, 125V OR CSA 5-20A 20A, T-SLOT, U GROUND.
 21.2 WHITE COVER PLATES.
 21.3 IF RECEPTACLE IS SURFACE MOUNTED USE CAST BOX AND STAINLESS STEEL COVER PLATE.

22. EXCAVATION, BACKFILL AND CONCRETE WORK

22.1 WHERE REQUIRED FOR UNDERGROUND SERVICE (POWER OR TELEPHONE) THE EXCAVATION, BACKFILL AND CONCRETE WORK SHALL BE BY THE GENERAL CONTRACTOR. THE ELECTRICAL TRADE SHALL SUPERVISE THE PROCESSING OF CONCRETE AROUND DUCT BANK, TO ENSURE THEY ARE FREE FROM VOIDS SHALL ADVISE THE GENERAL CONTRACTOR OF THIS WORK FOR INCLUSION IN THE GENERAL CONTRACTOR'S TENDER PRICE.

23. MECHANICAL EQUIPMENT

23.1 PROVIDE ALL CONDUIT, WIRING, SPLITTERS, OUTLET BOXES AND DISCONNECT SWITCHES AS SHOWN. ALL MOTORS, STARTERS AND CONTROL WIRING PROVIDED BY MECHANICAL DIVISION UNLESS OTHERWISE NOTED. INSTALL ALL STARTERS AND WIRE COMPLETE. ALL EXTERIOR DISCONNECTS TO BE WEATHERPROOF.
 23.2 THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL MOTOR CONNECTION FOR PROPER PHASE ROTATION, WHERE APPLICABLE.

24. SWITCHES

24.1 20A, 120V, SINGLE POLE SWITCHES
 24.2 WHITE TOGGLE
 24.3 WHITE COVER PLATES.
 24.4 IF SWITCH IS SURFACE MOUNTED USE CAST BOX.

25. EQUIPMENT FOR EMERGENCY LIGHTING

25.1 SUPPLY VOLTAGE: 120V AC
 25.2 OUTPUT VOLTAGE: 12V DC.
 25.3 OPERATIONS TIME: 30 MINUTES MINIMUM
 25.4 CABINET: SUITABLE FOR DIRECT OR SHELF MOUNTING TO WALL C/W KNOCKOUTS FOR CONDUIT, REMOVABLE OR HINGED FRONT PANEL FOR EASY ACCESS TO BATTERIES.

26. TELEPHONE CABLE T.V./COMPUTER RACEWAY SYSTEM, (ETC.)

26.1 PROVIDE EMPTY CONDUIT SYSTEMS FOR TELEPHONE AS SHOWN ON THE DRAWINGS.
 26.2 WHERE CONDUITS NOT SHOWN ON DRAWINGS PROVIDE CONDUITS FROM OUTLET BOX TO ACCESSIBLE CEILING SPACE.
 26.3 THIS CONTRACTOR SHALL PROVIDE AND/OR COORDINATE THE SIZE, TYPE AND LOCATION OF THE INCOMING TELEPHONE CONDUIT WITH THE TELEPHONE COMPANY OR THE BUILDING OWNER.
 26.4 RACEWAYS (OTHER THAN INCOMING) SHALL BE EMT.
 26.5 A MAXIMUM OF 2 LONG RADIUS 90 DEGREE BENDS SHALL BE PROVIDED BETWEEN PULL BOXES.
 26.6 A WIRE SHALL BE PULLED AND LEFT IN EACH CONDUIT RUN TO FACILITATOR THE FUTURE PULLING OF WIRES.
 26.7 PROVIDE NECESSARY BOXES AND ASSOCIATED COVER PLATES AS REQUIRED FOR THE ABOVE SYSTEMS.

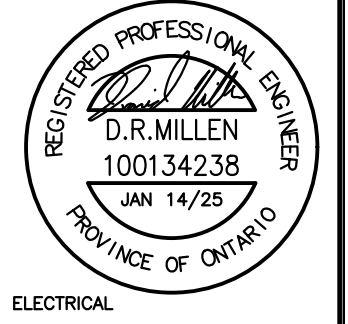
28. FIRE ALARM

28.1 PROVIDE ALL MATERIAL EQUIPMENT AND LABOUR REQUIRED FOR A COMPLETE AND ADEQUATE INSTALLATION OF THE FIRE ALARM SYSTEM AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN. MATCH EXISTING SYSTEM.
 28.2 SHOP DRAWINGS FOR THE COMPLETE SYSTEM, INCLUDING LAYOUT OF EQUIPMENT, ZONING AND COMPLETE WIRING DIAGRAMS FOR CONNECTIONS AND DEVICES, AND METHODS OR OPERATION SHALL BE SUBMITTED.
 28.3 ALL COMPONENTS OF THE SYSTEM, ITS INSTALLATION AND THE SYSTEM AS A WHOLE SHALL BE ULC LISTED AND LABELED AND SHALL MEET THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION OF THE APPLICATION. THE ENTIRE INSTALLATION SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN. ULC S524 AND SHALL BE VERIFIED IN ACCORDANCE WITH CAN. ULC S537.
 28.4 BREAKER FOR FIRE ALARM CONTROL PANEL AND BOOSTER PANELS TO BE LOCKABLE AND CLEARLY IDENTIFIED BY PAINTING IT RED.
 28.5 PROVIDE SEPARATE CIRCUITS FROM CONTROL PANEL TO EACH ZONE OF INITIATING DEVICES.
 28.6 SINGLE STAGE OPERATION.
 28.7 ACTUATION OF ANY SINGLE OPERATION DEVICE TO INITIATE BUILDING EVACUATION ALARM DEVICES TO OPERATE IN TEMPORAL CODE, CONFIRM WITH LOCAL AUTHORITY.
 28.8 ZONE OF ALARM DEVICE TO BE INDICATED ON CONTROL PANEL.
 28.9 POWER SUPPLY IS 120VAC, 60hz INPUT, 24VDC OUTPUT FROM RECTIFIER TO OPERATE ALARM AND SIGNAL CIRCUITS WITH STANDBY POWER GELL CELL BATTERIES. MINIMUM EXPECTED LIFE OF FOUR YEARS, SIZED IN ACCORDANCE WITH NBC.
 28.10 PROVIDE FIRE ALARM SYSTEM RISER DIAGRAM IN CONTROL PANEL.
 28.11 ARRANGE AND PAY FOR ON-SITE LECTURE AND DEMONSTRATION BY FIRE ALARM EQUIPMENT MANUFACTURER TO TRAIN OPERATIONAL PERSONNEL IN USE AND MAINTENANCE OF FIRE ALARM SYSTEM.
 28.12 COORDINATE WITH MANUFACTURER TO PROVIDE STROBE LIGHT SYNCHRONIZATION MODULES AS REQUIRED.
 28.13 PROVIDE SUFFICIENT OUTPUT MODULES IN FIRE ALARM CONTROL PANEL.
 28.14 PROVIDE OUTPUT POWER BOOSTERS AS REQUIRED. COORDINATE WITH MANUFACTURER.
 28.15 ALL FIRE ALARM JUNCTION BOXES SHALL BE PAINTED RED.

0	ISSUED FOR PERMIT AND TENDER	2025.01.14	DRM
NO.	DESCRIPTION	DATE	BY

REVISIONS

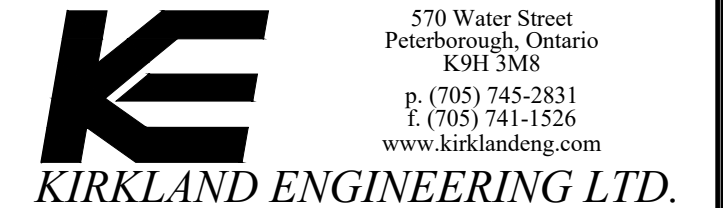
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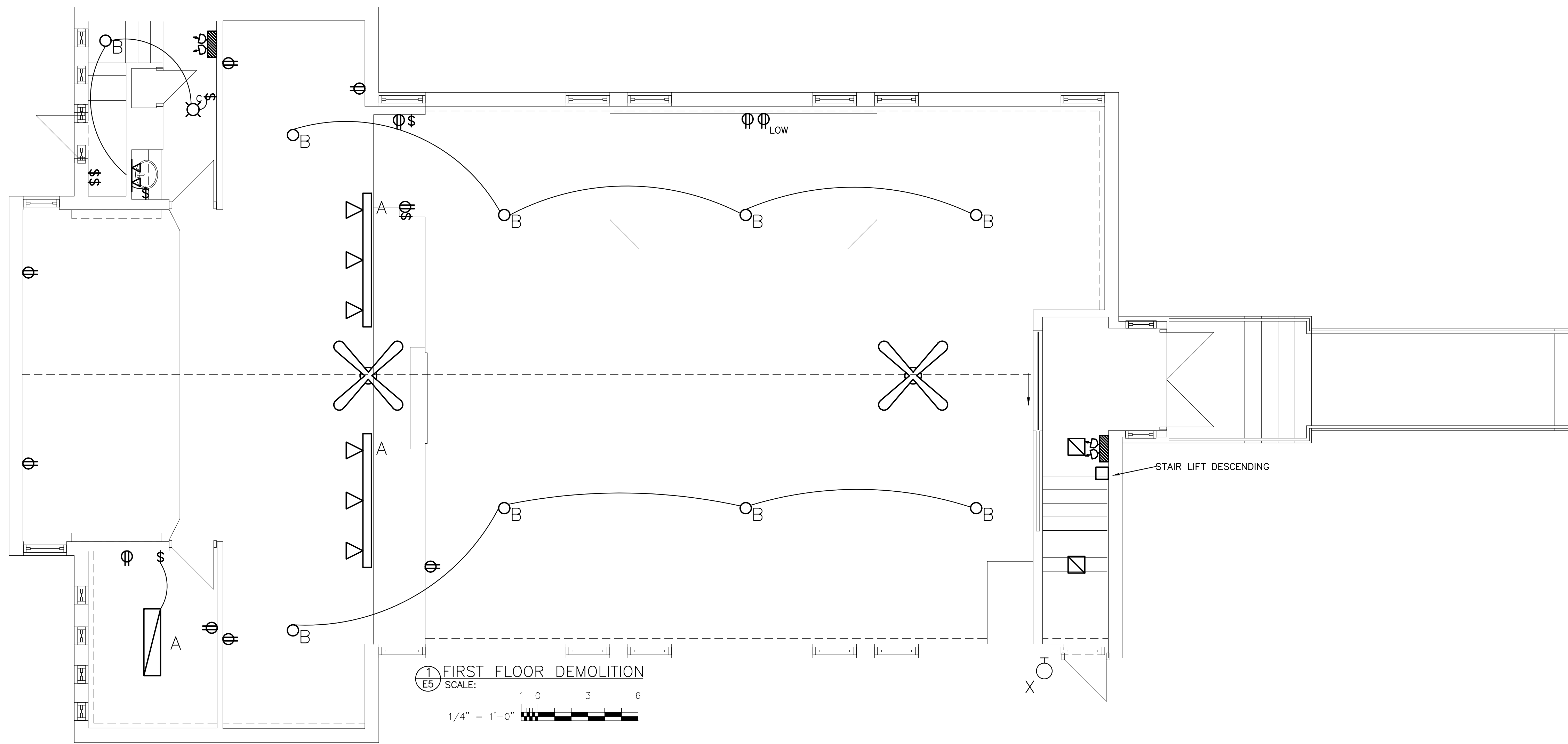
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PROJECT
**SAINT ALBANS NURSERY
 TWO CHILDCARE
 RENOVATIONS**
 567 Monaghan Road
 Peterborough, ON.

**TITLE
 SPECIFICATIONS**

DESIGN	DRM	SCALE N.T.S.
DRAWN	AJM	DWG NO.
CHECKED	DRM	E4
APPROVED	DRM	
PROJECT	7465	

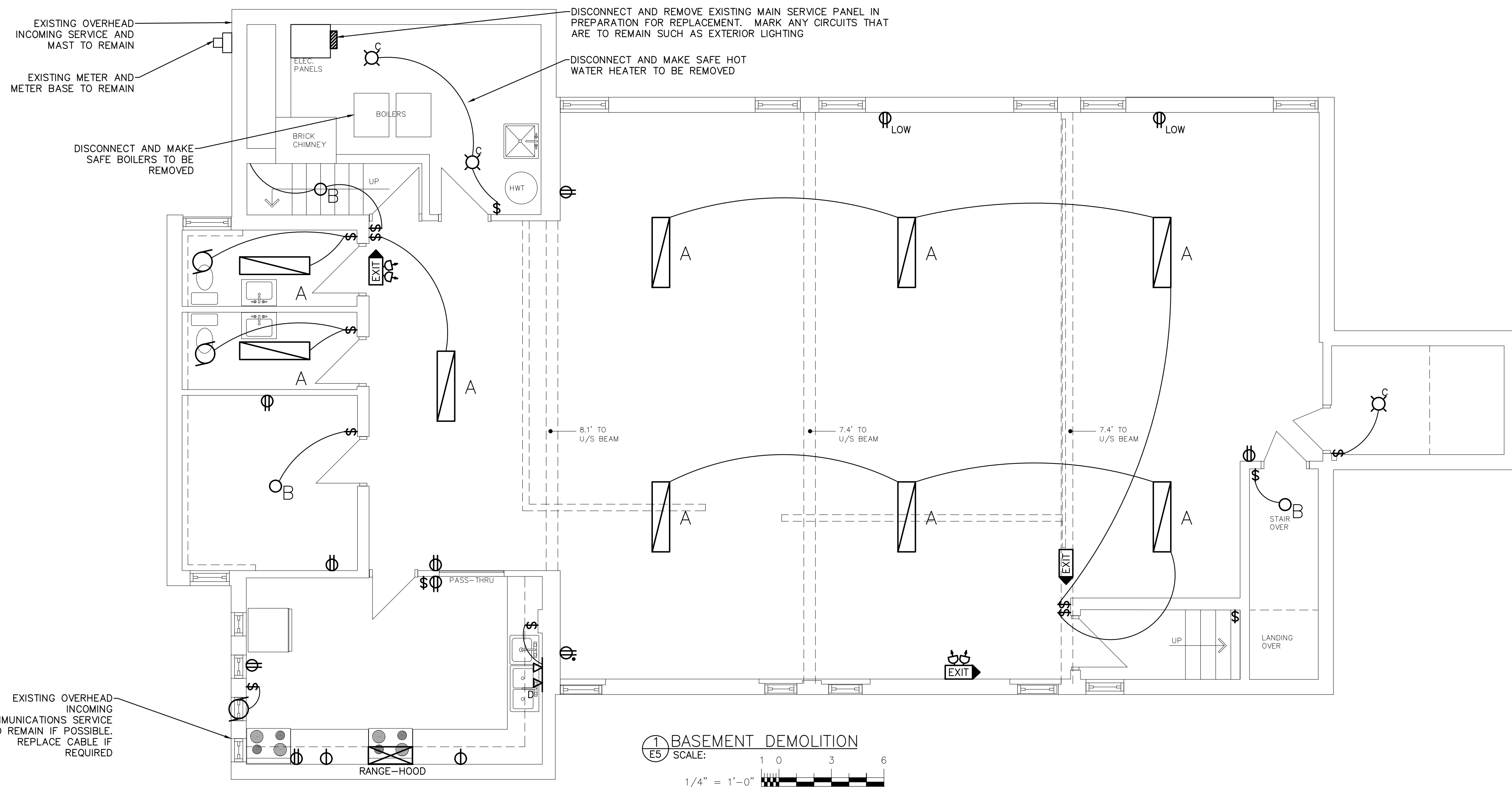


EMERGENCY LIGHTING LEGEND	
	BATTERY PACK
	EMERGENCY LIGHTS
	EXIT SIGN LEFT SELF POWERED
	EXIT SIGN RIGHT SELF POWERED
	EXIT SIGN SELF POWERED

DEMOLITION LEGEND	
E	EXISTING TO REMAIN
R	EXISTING TO RELOCATE
X	EXISTING TO REMOVE

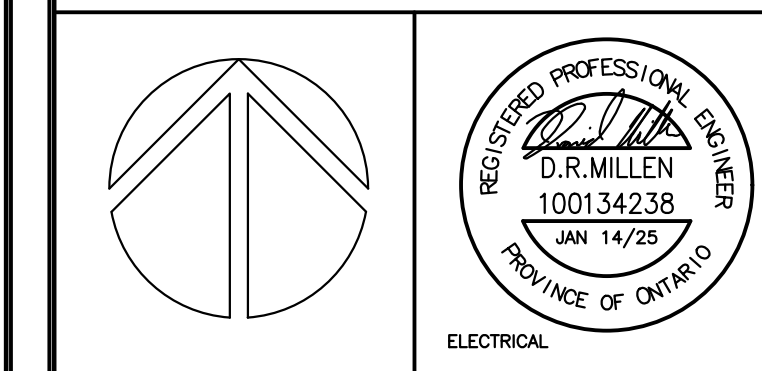
ELECTRICAL LEGEND	
SYMBOL	SYMBOL MEANING
	RECESSED PANEL
	SURFACED MOUNTED PANEL
	DUPLEX RECEPTACLE, 120V, 15A
	DUPLEX RECEPTACLE, 120V, 15A MOUNTED ABOVE COUNTER
	GROUND FAULT INTERRUPTOR RECEPTACLE MOUNTED ABOVE COUNTER
	SPLIT RECEPTACLE MOUNTED ABOVE COUNTER
	CEILING MOUNTED RECEPTACLE
	STOVE RECEPTACLE, CSA 14-50R
	DRYER RECEPTACLE, CSA 14-30R
	SWITCHED RECEPTACLE
	WEATHERPROOF RECEPTACLE
	WELDING RECEPTACLE
	DIRECT CONNECTION TO EQUIPMENT VOLTAGE/PHASE/FREQUENCY AS NOTED
	MOTOR LOAD VOLTAGE/PHASE/FREQUENCY AS NOTED
	TELEPHONE OUTLET
	DATA OUTLET
	TELEVISION OUTLET
	CARBON MONOXIDE DETECTOR
	DISCONNECT

- NOTES:**
- DISCONNECT EXISTING ELECTRICAL ITEMS INCLUDING RECEPTACLES, LIGHTING, LIGHTING CONTROLS, AND POWER FOR MECHANICAL EQUIPMENT UNLESS NOTED OTHERWISE.
 - REMOVE EXISTING WIRE WHERE PRACTICAL BACK TO PANEL.
 - REMOVE EXISTING COMMUNICATIONS DEVICES AND CABLE BACK TO SOURCE.
 - DRAWINGS ARE FOR REFERENCE ONLY AND ARE NOT COMPLETE CONTRACTOR TO VERIFY ON SITE.
 - EXTERIOR LIGHTING TO REMAIN UNLESS NOTED OTHERWISE.



NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR PERMIT AND TENDER	2025.01.14	DRM

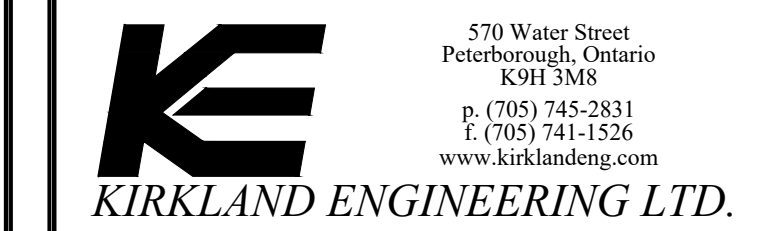
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PROJECT
SAINT ALBANS NURSERY RENOVATIONS
567 Monaghan Road
Peterborough, ON.

TITLE
DEMOLITION

DESIGN	DRM	SCALE 1/4" = 1'-0"
DRAWN	AJM	DWG NO.
CHECKED	DRM	E5
APPROVED	DRM	
PROJECT	7465	