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SITE INSTRUCTION

PROJECT: HAMPTON MANOR

PROJECT NO #: 14-016

25 BAKER HILL BLVD

CONTRACT: Electrical

STOUFFVILLE, ONTARIO

DATE July 10, 2018

SITE INSTRUCTION NO.: E-26

THIS SITE INSTRUCTION IS NOT TO BE CONSTRUED AS A CHANGE IN THE CONTRACT PRICE, BUT IS ISSUED FOR CLARIFICATION ONLY. IF A CHANGE IN CONTRACT PRICE IS PERCEIVED, PROVIDE AN ITEMIZED BREAKDOWN OF ANY EXTRAS OR CREDITS WITHIN SEVEN (7) WORKING DAYS.

PURPOSE: To suit mechanical SI M-20 & SI M-21.

1.0 Reference Drawings E-3B (Ground floor B - Electrical) Issued

1.1 Relocate:

Exhaust fan F-2 and FCU #11 as per mechanical drawings.

2.0 Reference Drawings E-11 (Single Line Diagram - Electrical) Issued

2.1 Revise:

Fusible disconnect switch and feeder size for storm pump P-9 as shown.

PREPARED BY:

Susan Pan

Sugan Pan

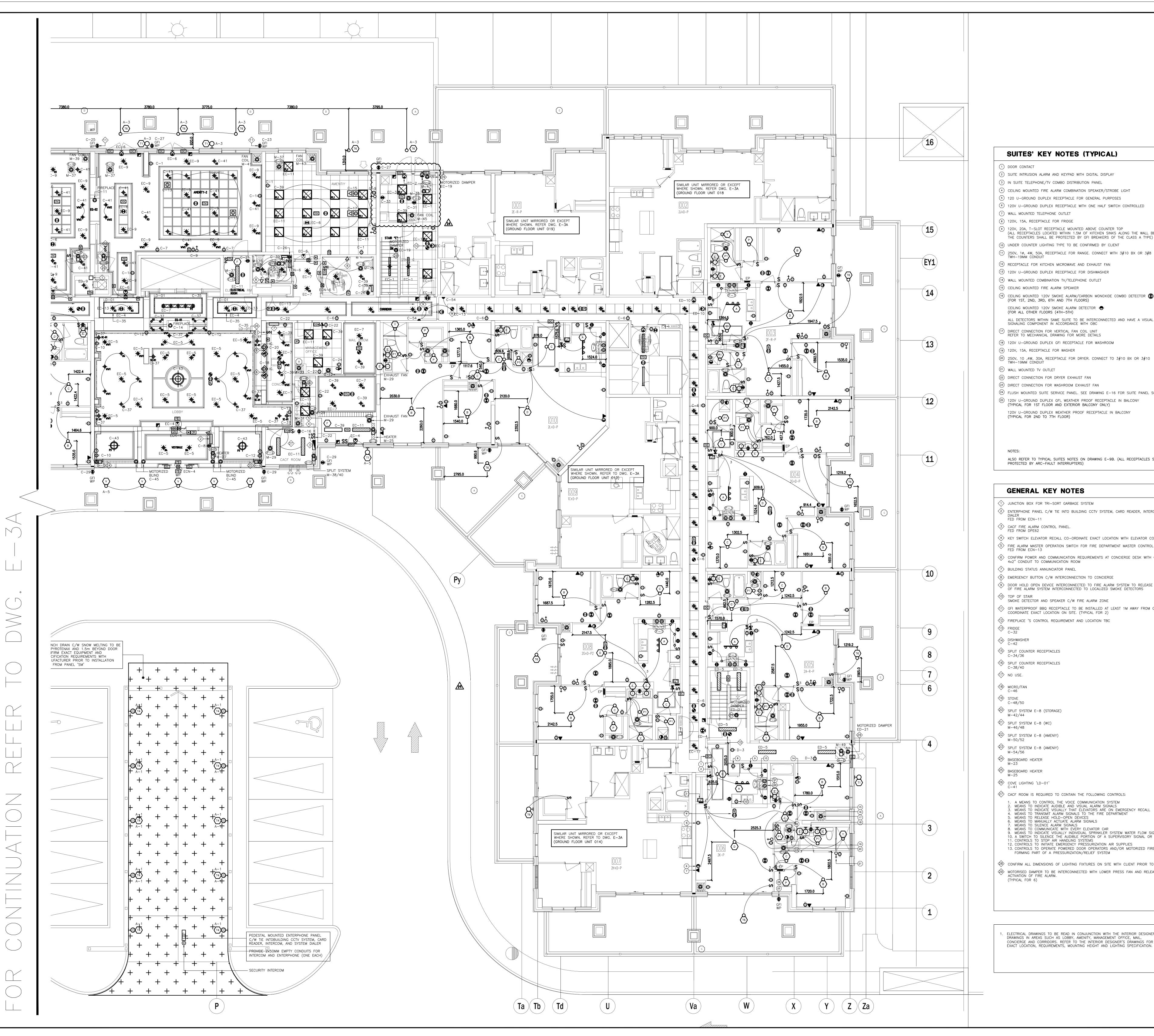
Electrical Department

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FOR DISTRIBUTION TO ALL AFFECTED PARTIES.



SUITES' KEY NOTES (TYPICAL)

(1) DOOR CONTACT

(2) SUITE INTRUSION ALARM AND KEYPAD WITH DIGITAL DISPLAY

(3) IN SUITE TELEPHONE/TV COMBO DISTRIBUTION PANEL

(4) CEILING MOUNTED FIRE ALARM COMBINATION SPEAKER/STROBE LIGHT (5) 120 U-GROUND DUPLEX RECEPTACLE FOR GENERAL PURPOSES

(6) 120V U-GROUND DUPLEX RECEPTACLE WITH ONE HALF SWITCH CONTROLLED

(8) 120V, 15A, RECEPTACLE FOR FRIDGE

(9) 120V, 20A, T-SLOT RECEPTACLE MOUNTED ABOVE COUNTER TOP (ALL RECEPTACLES LOCATED WITHIN 1.5M OF KITCHEN SINKS ALONG THE WALL BEHIND THE COUNTERS SHALL BE PROTECTED BY GFI BREAKERS OF THE CLASS A TYPE)

(10) UNDER COUNTER LIGHTING TYPE TO BE CONFIRMED BY CLIENT

(12) RECEPTACLE FOR KITCHEN MICROWAVE AND EXHAUST FAN

(13) 120V U-GROUND DUPLEX RECEPTACLE FOR DISHWASHER

(14) WALL MOUNTED COMBINATION TV/TELEPHONE OUTLET (15) CEILING MOUNTED FIRE ALARM SPEAKER

(FOR 1ST, 2ND, 3RD, 6TH AND 7TH FLOORS)

CEILING MOUNTED 120V SMOKE ALARM DETECTOR 🛑 (FOR ALL OTHER FLOORS (4TH-5TH) ALL DETECTORS WITHIN SAME SUITE TO BE INTERCONNECTED AND HAVE A VISUAL

SIGNALING COMPONENT IN ACCORDANCE WITH OBC 7) DIRECT CONNECTION FOR VERTICAL FAN COIL UNIT REFER TO MECHANICAL DRAWING FOR MORE DETAILS

(18) 120V U-GROUND DUPLEX GFI RECEPTACLE FOR WASHROOM

(19) 120V, 15A, RECEPTACLE FOR WASHER

(20) 250V, 10 ,4W, 30A, RECEPTACLE FOR DRYER. CONNECT TO 3#10 BX OR 3#10 TWH-19MM CONDUIT

(21) WALL MOUNTED TV OUTLET

(22) DIRECT CONNECTION FOR DRYER EXHAUST FAN (23) DIRECT CONNECTION FOR WASHROOM EXHAUST FAN

(24) FLUSH MOUNTED SUITE SERVICE PANEL. SEE DRAWING E-16 FOR SUITE PANEL SCHEDULE

25 120V U-GROUND DUPLEX GFI, WEATHER PROOF RECEPTACLE IN BALCONY (TYPICAL FOR 1ST FLOOR AND EXTERIOR BALCONY ONLY)

120V U-GROUND DUPLEX WEATHER PROOF RECEPTACLE IN BALCONY (TYPICAL FOR 2ND TO 7TH FLOOR)

ALSO REFER TO TYPICAL SUITES NOTES ON DRAWING E-9B. (ALL RECEPTACLES SHALL BE PROTECTED BY ARC-FAULT INTERRUPTERS)

GENERAL KEY NOTES

(1) JUNCTION BOX FOR TRI-SORT GARBAGE SYSTEM $\langle 2
angle$ enterphone panel c/w tie into building cctv system, card reader, intercom, and system

3 CACF FIRE ALARM CONTROL PANEL.

(4) KEY SWITCH ELEVATOR RECALL CO-ORDINATE EXACT LOCATION WITH ELEVATOR CONTRACTOR

5 FIRE ALARM MASTER OPERATION SWITCH FOR FIRE DEPARTMENT MASTER CONTROL FED FROM ECN-13

 $\langle \widehat{\mathfrak{b}}
angle$ confirm power and communication requirements at concierge desk with client. Provide 4x2" CONDUIT TO COMMUNICATION ROOM

7 BUILDING STATUS ANNUNCIATOR PANEL

 $\langle 8
angle$ emergency button c/w interconnection to concierge

DOOR HOLD OPEN DEVICE INTERCONNECTED TO FIRE ALARM SYSTEM TO RELEASE UPON ACTIVATION OF FIRE ALARM SYSTEM INTERCONNECTED TO LOCALIZED SMOKE DETECTORS

SMOKE DETECTOR AND SPEAKER C/W FIRE ALARM ZONE

(1) GFI WATERPROOF BBQ RECEPTACLE TO BE INSTALLED AT LEAST 1M AWAY FROM GAS CONNECTION. COORDINATE EXACT LOCATION ON SITE. (TYPICAL FOR 2)

12 FIREPLACE 'S CONTROL REQUIREMENT AND LOCATION TBC

5 SPLIT COUNTER RECEPTACLES C-34/36

(6) SPLIT COUNTER RECEPTACLES

SPLIT SYSTEM E-8 (STORAGE)

M-42/44

⟨2⟩ SPLIT SYSTEM E-8 (AMENIY) M-50/52

\$\frac{2}{3}\$ SPLIT SYSTEM E-8 (AMENIY) M-54/56

⟨6⟩ COVE LIGHTING 'LD-01'

⟨₹⟩ CACF ROOM IS REQUIRED TO CONTAIN THE FOLLOWING CONTROLS:

 A MEANS TO CONTROL THE VOICE COMMUNICATION SYSTEM
 MEANS TO INDICATE AUDIBLE AND VISUAL ALARM SIGNALS . MEANS TO INDICATE VISUALLY THAT ELEVATORS ARE ON EMERGENCY RECALL

4. MEANS TO TRANSMIT ALARM SIGNALS TO THE FIRE DEPARTMENT 5. MEANS TO RELEASE HOLD-OPEN DEVICES 6. MEANS TO MANUALLY ACTUATE ALARM SIGNALS 7. MEANS TO SILENCE ALARM SIGNALS
8. MEANS TO COMMUNICATE WITH EVERY ELEVATOR CAR

9. MEANS TO INDICATE VISUALLY INDIVIDUAL SPRINKLER SYSTEM WATER FLOW SIGNALS 10. A SWITCH TO SILENCE THE AUDIBLE PORTION OF A SUPERVISORY SIGNAL OR A TROUBLE SIGNAL 11. CONTROLS TO STOP AIR HANDLING SYSTEMS 12. CONTROLS TO INITIATE EMERGENCY PRESSURIZATION AIR SUPPLIES 13. CONTROLS TO OPERATE POWERED DOOR OPERATORS AND/OR MOTORIZED FIRE DAMPERS

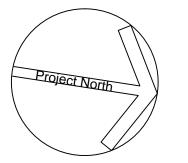
(28) CONFIRM ALL DIMENSIONS OF LIGHTING FIXTURES ON SITE WITH CLIENT PRIOR TO ROUGH-IN. MOTORISED DAMPER TO BE INTERCONNECTED WITH LOWER PRESS FAN AND RELEASED UPON THE ACTIVATION OF FIRE ALARM. (TYPICAL FOR 6)

ELECTRICAL DRAWINGS TO BE READ IN CONJUNCTION WITH THE INTERIOR DESIGNER'S DRAWINGS IN AREAS SUCH AS LOBBY, AMENITY, MANAGEMENT OFFICE, MAIL, CONCIERGE AND CORRIDORS. REFER TO THE INTERIOR DESIGNER'S DRAWINGS FOR EXACT LOCATION, REQUIREMENTS, MOUNTING HEIGHT AND LIGHTING SPECIFICATION.

14	SP	REVISED AS PER SI E-26	2018-07-	
13	SP	REVISED AS PER SI E-21	2018-03-	
12	SP	REVISED AS PER SI E-18	2018-03-	
11	СМ	REVISED AS PER SI E-17	2017-12-	
10	СМ	REVISED AS PER SI E-15	2017-11-	
09	СМ	REVISED AS PER SI E-10	2017-09-	
08	СМ	REVISED AS PER SI E-4	2017-08-	
07	СМ	REVISED AS PER SI E-3	2017-08-	
06	СМ	ISSUED FOR CONSTRUCTION	2017-08-	
05	СМ	PROGRESS FOR CONSTRUCTION	2017-07-	
04	СМ	ISSUED FOR PERMIT	2016-12-	
03	СМ	REVISED AS PER ADD E-1	2016-12-	
02	СМ	REVISED AS PER ESA COMMENTS AND FOR CLARIFICATION	2016-05-	
01	СМ	ISSUED FOR TENDER	2016-03-	
NO.	BY	DESCRIPTION	DATE	
REVISIONS				

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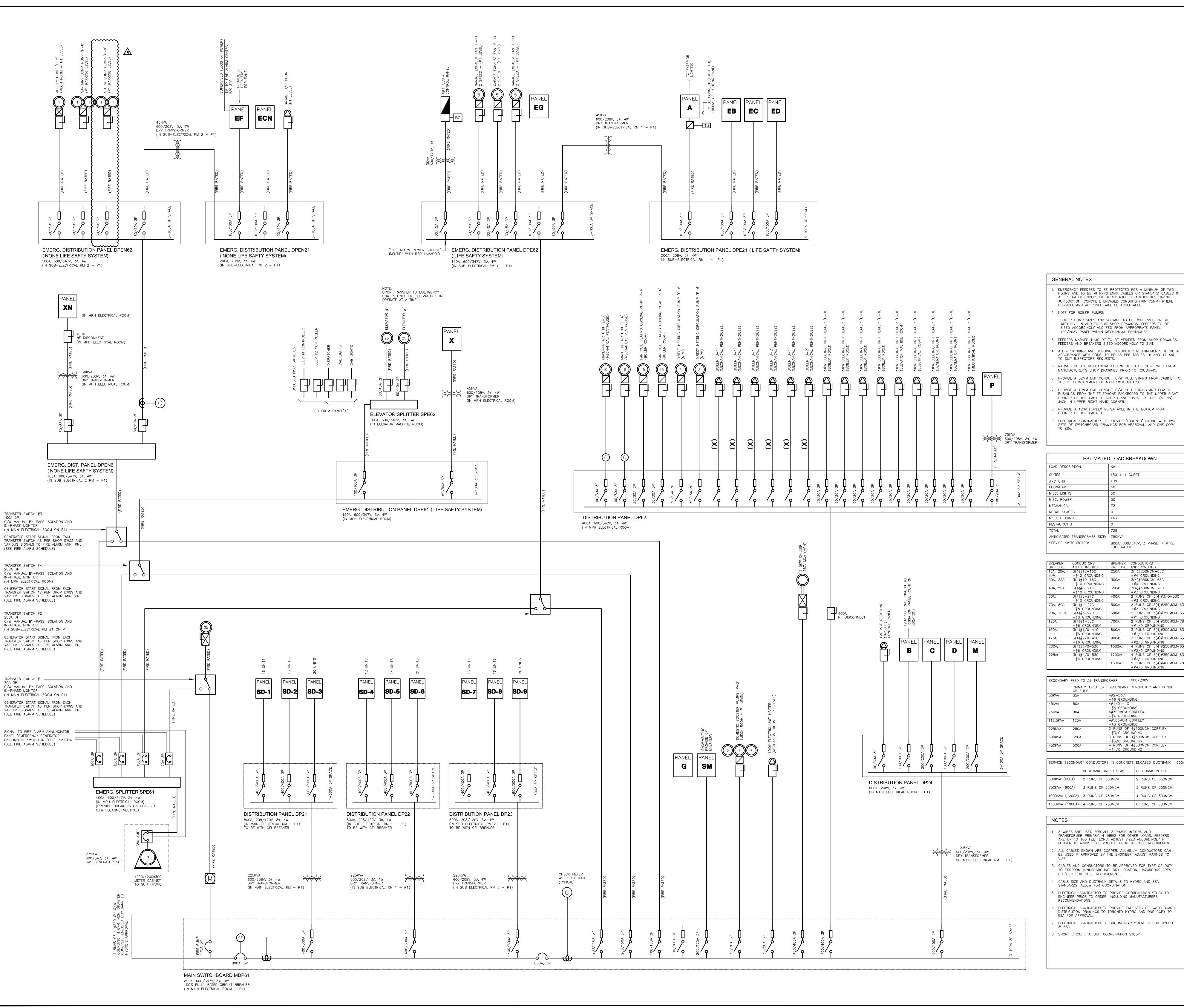
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GROUND FLOOR PLAN - B **ELECTRICAL**

PROPOSED RESIDENTIAL DEVELOPMENT 25 BAKER HILL BLVD.

> ROYAL PINE HOMES STOUFFVILLE, ONTARIO

1:75 DRAWING PROJECT SEPT. 2015



- EMERGENCY FEEDERS TO BE PROTECTED FOR A MINIMUM OF TWO HOURS AND TO BE MI PYROTENAX CABLES OR STANDARD CABLES IN A FIRE RATED ENCLOSURE ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. CONCRETE ENCASED CONDUITS (MIN 75MM) WHERE POSSIBLE AND APPROVED WILL BE ACCEPTABLÈ.
- BOILER PUMP SIZES AND VOLTAGE TO BE CONFIRMED ON SITE WITH DIV. 15 AND TO SUIT SHOP DRAWINGS. FEEDERS TO BE SIZED ACCORDINGLY AND FED FROM APPROPRIATE PANEL,
- 120/208V PANEL WITHIN MECHANICAL PENTHOUSE. FEEDERS MARKED THUS 'X' TO BE VERIFIED FROM SHOP DRAWINGS.
- FEEDERS AND BREAKERS SIZED ACCORDINGLY TO SUIT. ALL GROUNDING AND BONDING CONDUCTOR REQUIREMENTS TO BE IN ACCORDANCE WITH CODE. TO BE AS PER TABLES 16 AND 17 AND TO SUIT INSPECTORS REQUESTS.
- 5. RATINGS OF ALL MECHANICAL EQUIPMENT TO BE CONFIRMED FROM MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGH—IN.
- PROVIDE A 19MM EMT CONDUIT C/W PULL STRING AND PLASTIC BUSHINGS FROM THE TELEPHONE BACKBOARD TO THE UPPER RIGHT
- CORNER OF THE CABINET. SUPPLY AND INSTALL A RJ11 (4-PIN)
 JACK IN UPPER RIGHT HAND CORNER. B. PROVIDE A 120V DUPLEX RECEPTACLE IN THE BOTTOM RIGHT CORNER OF THE CABINET.
- 9. ELECTRICAL CONTRACTOR TO PROVIDE 'TORONTO' HYDRO WITH TWO SETS OF SWITCHBOARD DRAWINGS FOR APPROVAL. AND ONE COPY TO ESA.

ESTIMATED LOAD BREAKDOWN		
LOAD DESCRIPTION	KW	
SUITES	150 + 1 GUEST	
A/C UNIT	108	
ELEVATORS	50	
MISC. LIGHTS	50	
MISC. POWER	50	
MECHANICAL	72	
RETAIL SPACES	0	
MISC. HEATING	143	
RESTAURANTS	0	
TOTAL	729	
ANTICIPATED TRANSFORMER SIZE:	750KVA	
SERVICE SWITCHBOARD:	800A, 600/347V, 3 PHASE, 4 WIRE FULL RATED	

BREAKER	CONDUCTORS	BREAKER	CONDUCTORS
OR FUSE	AND CONDUITS	OR FUSE	AND CONDUITS
15A, 20A,	3(4)#12-16C	250A:	3(4)#250MCM-63C
25A:	+#12 GROUNDING		+#4 GROUNDING
30A, 35A:	3(4)#10-16C	300A:	3(4)#350MCM-63C
	+#10 GROUNDING		+#4 GROUNDING
40A, 50A:	3(4)#8-21C	350A:	3(4)#500MCM-78C
	+#10 GROUNDING		+#3 GROUNDING
60A:	3(4)#6-27C	400A:	2 RUNS OF 3(4)#3/0-53C
	+#10 GROUNDING		+#3 GROUNDING
70A, 80A:	3(4)#4-27C	500A:	2 RUNS OF 3(4)#250MCM-630
	+#8 GROUNDING		+#2 GROUNDING
90A, 100A:	3(4)#3-27C	600A:	2 RUNS OF 3(4)#350MCM-630
	+#8 GROUNDING		+#1 GROUNDING
125A:	3(4)#1-35C		2 RUNS OF 3(4)#500MCM-780
	+#6 GROUNDING		+#1/0 GROUNDING
150A:	3(4)#1/0-41C	800A:	3 RUNS OF 3(4)#300MCM-630
	+#6 GROUNDING		+#1/0 GROUNDING
175A:	3(4)#2/0-41C		3 RUNS OF 3(4)#300MCM-630
	+#6 GROUNDING		+#2/0 GROUNDING
200A:	3(4)#3/0-53C	1000A:	4 RUNS OF 3(4)#250MCM-630
	+#6 GROUNDING		+#2/0 GROUNDING
225A:	3(4)#4/0-53C	1200A:	4 RUNS OF 3(4)#350MCM-630
	+#4 GROUNDING		+#3/0 GROUNDING
		1600A:	5 RUNS OF 3(4)#400MCM-780
			+#4/0 GROUNDING

SECONDARY	FEED TO 30 TRANSF	ORMER 600/208V
	PRIMARY BREAKER OR FUSE	SECONDARY CONDUCTOR AND CONDUIT
30KVA	35A	4#2-53C
		+#6 GROUNDING
45KVA	50A	4#1/0-41C
		+#6 GROUNDING
75KVA	90A	4#300MCM CORFLEX
		+#4 GROUNDING
112.5KVA	125A	4#500MCM CORFLEX
		+#3 GROUNDING
225KVA	250A	2 RUNS OF 4#500MCM CORFLEX
		+#3/0 GROUNDING
300KVA	350A	3 RUNS OF 4#500MCM CORFLEX
		+#3/0 GROUNDING
450KVA	500A	4 RUNS OF 4#500MCM CORFLEX
		+#4/0 GROUNDING

SERVICE SECONDAR	RY CONDUCTORS IN CONCRETE	ENCASED DUCTBANK	60
	DUCTBANK UNDER SLAB	DUCTBANK IN SOIL	
500KVA (600A)	2 RUNS OF 350MCM	2 RUNS OF 350MCM	
750KVA (900A)	3 RUNS OF 350MCM	3 RUNS OF 500MCM	
1000KVA (1200A)	3 RUNS OF 750MCM	4 RUNS OF 500MCM	
1500KVA (1800A)	4 RUNS OF 750MCM	6 RUNS OF 500MCM	

- . 3 WIRES ARE USED FOR ALL 3 PHASE MOTORS AND TRANSFORMER PRIMARY, 4 WIRES FOR OTHER LOADS. FEEDERS ARE UP TO 100 FEET LONG. ADJUST SIZES ACCORDINGLY IF LONGER TO ADJUST THE VOLTAGE DROP TO CODE REQUIREMENT. ALL CABLES SHOWN ARE COPPER. ALUMINUM CONDUCTORS CAN BE USED IF APPROVED BY THE ENGINEER. ADJUST RATINGS TO
- CABLES AND CONDUCTORS TO BE APPROVED FOR TYPE OF DUTY TO PERFORM (UNDERGROUND, DRY LOCATION, HAZARDOUS AREA, ETC.) TO SUIT CODE REQUIREMENT.
- CABLE SIZE AND DUCTBANK DETAILS TO HYDRO AND ESA STANDARDS, ALLOW FOR COORDINATION 5. ELECTRICAL CONTRACTOR TO PROVIDE COORDINATION STUDY TO ENGINEER PRIOR TO ORDER, INCLUDING MANUFACTURERS
- . ELECTRICAL CONTRACTOR TO GROUNDING SYSTEM TO SUIT HYDRO 8. SHORT CIRCUIT: TO SUIT COORDINATION STUDY

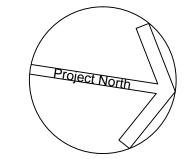
09	SP	REVISED AS PER SI E-26	2018-07-10
08	СМ	REVISED AS PER SI E-16	2017-12-16
07	СМ	REVISED AS PER SI E-13	2017-10-18
06	СМ	REVISED AS PER SI E-5	2017-08-23
05	СМ	ISSUED FOR CONSTRUCTION	2017-08-09
04	СМ	PROGRESS FOR CONSTRUCTION	2017-07-18
03	СМ	ISSUED FOR PERMIT	2016-12-28
02	СМ	REVISED AS PER ESA COMMENTS AND FOR CLARIFICATION	2016-05-19
01	СМ	ISSUED FOR TENDER	2016-03-15

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DESCRIPTION

REVISIONS

DATE







SINGLE LINE DIAGRAM

ELECTRICAL

PROJECT

PROPOSED RESIDENTIAL DEVELOPMENT 25 BAKER HILL BLVD.

> ROYAL PINE HOMES STOUFFVILLE, ONTARIO

N.T.S. DRAWING PROJECT SEPT. 2015