



REPORT

Report Date: February 28, 2020
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Meeting Date: March 31, 2020
[Submit comments to Council](#)

TO: Vancouver City Council

FROM: Chief Building Official

SUBJECT: Amendments to Building and Electrical By-laws to adopt revisions to the BC Building Code and Electrical Safety Regulations and miscellaneous changes

RECOMMENDATION

- A. THAT Council approve, in principle, amendments to the *Building By-law* (No. 12511), that adopt Revisions 2 & 3 to the *BC Building Code* along with various harmonization and clarifying changes;

FURTHER THAT the Director of Legal Services be instructed to bring forward the necessary amending by-law, generally in accordance with Appendix A, for enactment by Council.

- B. THAT Council approve, in principle, amendments to the *Electrical By-law* (No. 5563), that adopt revisions to the BC *Electrical Safety Regulations* including the adoption of the 24th edition of the Canadian Electrical Code, along with miscellaneous amendments, and clarifications to required annual electrical permits;

FURTHER THAT the Director of Legal Services be instructed to bring forward the necessary amending by-law, generally in accordance with Appendix B, for enactment by Council.

REPORT SUMMARY

Proposed amendments to the *Building* and *Electrical By-laws* are recommended by Staff to align with recent changes to the adopted provincial regulations. The proposed changes will:

- Enhance the safety and performance of buildings and construction in the City,
- Preserve the consistency with the corresponding provincial regulations to leverage the benefits of a common construction standard across the local region.

The City has the legal authority to regulate construction and electrical safety and the scope of the proposed change does not increase the burden on building constructors or owners.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

In July 2019, Council enacted the 2019 *Vancouver Building By-law* (No. 12511) to supercede the 2014 *Vancouver Building Bylaw* (No. 10908). This was enacted under the authority granted by Part IX of the *Vancouver Charter*, Section 306(1), Clause (a) which permits Council to make by-laws to regulate the construction of buildings and related matters, and further under Clause (w), to adopt by reference in whole or in part and with any change Council considers appropriate, any code relating to fire safety or energy conservation or affecting the construction, alteration, or demolition of buildings.

Similarly, under Part XI of the *Vancouver Charter*, Council has exercised its authority under Section 314(1), and subject to the provincial *Safety Standards Act*, to enact the *Electrical By-law* (No. 5563). Pursuant to Clause (e), Council has the authority to adopt, in whole or in part, or with such modification as may be provided in the by-law, the rules and provisions of the Canadian Electrical Code promulgated by the Canadian Standards Association with respect to electrical works, and constituting as regulations under the by-law, the rules and provisions so adopted or modified.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

REPORT

Background/Context

In July 2019, Council repealed the 2014 *Building By-law* (No. 10908) and enacted the 2019 *Building By-law* (No. 12511), which adopts the 2018 *BC Building Code* as the base document as modified by unique to Vancouver provisions that advance the priorities, goals, and objectives of the City.

In 2019, following the enactment of the 2019 *Building By-law*, the 2018 *BC Building Code* was amended to include Revision 2 and 3, by Ministerial Orders BA-2019-6 (November 20, 2019) and BA-2019-4 (October 30, 2019) respectively¹.

Furthermore, on July 22, 2019, the province, through Ministerial Order M258/2019, amended the provincial *Electrical Safety Regulations* to adopt the Canadian Electrical Code, Part I, 24th

¹ Chronologically, the Ministerial Order associated with BC Building Code Revision 2 does occur after Revision 3 due to the provincial administrative process and that Revision 2 contains is both significantly larger and more technically complex than Revision 3.

Edition, “Safety Standard for Electrical Installations” (CSA C22.1-18). This replaces the prior 23rd Edition of CSA C22.1-15.

Strategic Analysis

The proposed amendments to the *Building and Electrical By-laws* presented in Appendices A and B of this report are housekeeping and miscellaneous changes intended to incorporate recent provincial updates related to fire and life safety. Staff are recommending acceptance of the proposed changes as this will enhance the safety and performance of buildings and construction in the City, and enable City regulations to remain consistent with the model Codes in use throughout the province.

Staff note that continued consistency with related regional regulations is generally in the City interest so as to leverage economies of scale through a harmonized approach with respect to construction in the local region, and facilitates the shared exchange of knowledge and expertise.

An explanation of the specifics are noted below:

Building By-law

The *Building By-law* is the minimum standard of construction in the City of Vancouver and on July 23, 2019, Council enacted the 2019 *Building By-law* which is based substantially upon the *BC Building Code*. This is consistent with the agreement between the federal government and provincial governments that led to the general adoption the National Building Code as the base document for construction throughout Canada. The intention was to promote the harmonization of the codes to facilitate construction across the country.

Subsequent to the adoption of the 2019 *Building By-law* by Council, the Province of British Columbia has issued two further revisions to the *BC Building Code*. These amendments introduce valuable improvements in the area of fire and life safety, as well as updates to reference standards.

Revision 2 to the *BC Building Code* (BA-2019-6): includes key changes that:

- Clarify minimum occupant safety requirements on occupied roofs,
- Introduces encapsulated mass timber as a third form of construction based on the preliminary 2020 National Building Code of Canada preliminary Code changes,
- Expands carbon monoxide (CO) detection requirements for all types of buildings, and
- Expands on the application and requirements for secondary suites.

Revision 3 to the *BC Building Code* (BA-2019-4): amends the referenced Elevator Code from ASME A17.1-2010/CSA B44-10 to ASME A17.1-2016/CSA B44-16

The proposed changes to the *Building By-law* incorporate the above items, with the notable exception of the encapsulated mass timber, which will be discuss in a forthcoming report to Council.

Further to the preceding, miscellaneous housekeeping amendments will also be included that further harmonize the current *Building By-law* provisions with provincial requirements or that provide clarity in application. This will include, a new option for fixed term occupancies of temporary emergency shelters to reduce the administrative burden of processing permits for

these uses on an annual basis and facilitate emergency shelter options on a longer term basis to adapt to the current housing crisis.

Electrical By-law

In addition to changes to the *BC Building Code*, the province through Technical Safety BC, has also introduced a significant amendment to the provincial *Electrical Safety Regulations* by adoption of the 24th Edition of the Canadian Electrical Code which will supercede the 23rd edition.

The *Vancouver Charter* requires that the City Electrician, who is designated as local safety manager under Section 5 of the *Safety Standards Act*, apply the *Electrical Safety Regulations* of the Province of British Columbia. Staff are therefore recommending that Council accept the proposed revisions to the *Electrical By-law* to ensure that there is no conflict between the provisions of the *Electrical By-law* and the applicable provincial requirements for electrical safety.

The proposed revisions also include miscellaneous changes to the provision governing required annual permits and the fee schedule to maintain consistency with the *Electrical Safety Regulations*, to expand permitting options, and to provide flexibility in applying the provisions of the by-law in unusual circumstances which could otherwise cause unreasonable hardship to an owner.

Implications/Related Issues/Risk

Financial

There are no expected internal or external financial implications for the City as the proposed regulatory changes do not impose any additional processes or substantial construction requirements. Similarly, the scope of the changes is such that this is not expected to lead to significant cost impacts to building constructors or owners.

Human Resources/Labour Relations

There are no expected resourcing implications for the City as the foregoing proposed changes to the Building By-law are minor in scope and fall within the current responsibilities and capacity of the building group.

Environmental

It is not expected that there will be any unusual environmental impacts from the foregoing proposed changes to the *Building By-law*.

Legal

The City has the legal authority under Section 306(1), Clauses (a) & (w) of the *Vancouver Charter* to adopt the *BC Building Code*, in whole or in part or with such modification as may be provided in the by-law to regulate the construction of buildings.

Furthermore, the City has the legal authority under Section 314(1), Clause (e) of the *Vancouver Charter* to adopt the Canadian Electrical Code, in whole or in part or with such modification as

may be provided in the by-law, subject to the *Safety Standards Act* and the regulations under that Act.

The City Electrician is also a local safety manager under the provincial *Safety Standards Act*, and therefore significant variation from the substantive provisions of the *Electrical Safety Regulations* would potentially increase the City's risk exposure.

CONCLUSION

The proposed amendments to the *Building and Electrical By-laws* presented in Appendices A and B of this report are clarity and miscellaneous changes responding to recent revisions to the adopted provincial regulations that form the basis of the applicable City by-laws. Staff are therefore recommending that Council accept the proposed changes as this will not only enhance the safety and performance of buildings and construction in the City, but also enable City regulations to remain consistent with the corresponding provincial regulations. This will allow the City to exercise its authority to establish minimum construction and safety standards for the City and meet its obligation to maintain consistency with other regulatory bodies while ensuring that the scope of the proposed change does not increase the burden on building constructors or owners.

* * * * *

**DRAFT By-law to amend Building By-law No. 12511
Regarding BC Building Code Amendments and Various Housekeeping Amendments**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the indicated provisions of Building By-law 12511.
2. In Article 1.3.3.4. of Division A of Book I, Council:
 - a) In Sentence (3), strikes out Clause (c) and substitutes:

“c) a vertical *fire separation* that has a *fire-resistance rating* of not less than 2 h and extends through all *storeys* and *service spaces* of the connecting construction and superimposed portions of *building area* above the connecting construction, and”, and
 - b) In Sentence (4), strikes out the words “Sentence (3)” and inserts the words “Sentences (3) and (4)”.
3. In Article 1.4.1.2. of Division A of Book I, Council:
 - a) strikes out the definition associated with “**Ancillary residential unit**” and substitutes:

“

Ancillary residential unit means a self-contained *dwelling unit* that:

 - with its principal *dwelling unit* constitute a single real estate entity,
 - is smaller than the principal *dwelling unit*, and
 - is located in:
 - a *building* of only *residential occupancy*, or
 - that portion of a *building* which is *row housing* and is completely separated from other all other parts of the *building* by a continuous vertical *fire separation* that has a *fire-resistance rating* of not less than 1 h.

”, and
 - b) strikes out the definition associated with “**Row housing**” and substitutes:

“

Row housing means a *building* or portion of a *building* of *residential occupancy*, where no *dwelling unit* is located above another principal *dwelling unit* or its *ancillary residential unit*, and there is no common interior or exterior *means of egress*.

”.
4. In Table-1.3.1.2. of Division B of Book I, Council:

a) strikes out the following row:

“

ASME/CSA	ASME A17.1-2010/CSA B44-10	Safety Code for Elevators and Escalators	3.2.6.7.(2) 3.5.2.1.(3) 3.5.4.1.(3) 3.8.3.7.(1) 3.5.4.2.(1) A-3.5.2.1.(1) 3.8.3.7.(1) Table 4.1.5.11. Table 4.1.8.18.
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”, and substitutes:

“

ASME/CSA	ASME A17.1-2016/CSA B44-16	Safety Code for Elevators and Escalators	3.5.2.1.(3) 3.5.4.2.(1) 3.8.3.7.(1)
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”

b) strikes out the following row:

“

BC	B.C. Reg. 101/2004	Elevating Devices Safety Regulation	3.5.2.1.(1) 3.5.2.1.(2) Table 4.1.5.11. Table 4.1.8.18.
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”, and substitutes:

“

BC	B.C. Reg. 101/2004	Elevating Devices Safety Regulation	3.2.6.7.(2) 3.5.2.1.(1) 3.5.2.1.(2) 3.5.4.1.(3) A-3.5.2.1.(1) Table 4.1.5.11. Table 4.1.8.18.
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”

c) strikes out the following row:

“

CSA	CAN/CSA-A82.27-M91	Gypsum Board	3.1.5.14.(6) 3.1.5.15.(4)
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”, and substitutes:

“

CSA	CAN/CSA-A82.27-M91	Gypsum Board	3.1.5.14.(6) 3.1.5.15.(4) 3.1.18.13.(1) 3.1.19.2.(2)
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”

d) inserts the following row in correct alphabetical order:

“

UL	2034-2008	Standard for Single and Multiple Station Carbon Monoxide Alarms	6.9.3.1.(6) 9.32.4.2.(8)
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”
,

e) strikes out the following row:

“

ULC	CAN/ULC-S524-14	Installation of Fire Alarm Systems	3.1.8.11.(3) 3.1.8.14.(3) 3.2.4.5.(1) 3.2.4.19.(4) 3.2.4.20.(8) 3.2.4.20.(13) 9.10.19.4.(3) 9.10.19.6.(2) A-3.2.4.7.(4) A-3.2.4.18.(8) and (9) A-3.2.4.20.(8)
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”, and substitutes:

“

CSA	CAN/ULC-S524-14 or 19	Installation of Fire Alarm Systems	3.1.8.11.(3) 3.1.8.14.(3) 3.2.4.5.(1) 3.2.4.19.(4) 3.2.4.20.(8) 3.2.4.20.(13) 9.10.19.4.(3) 9.10.19.6.(2) A-3.2.4.7.(4) A-3.2.4.18.(8) and (9) A-3.2.4.20.(8)
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”
,

f) strikes out the following row:

“

ULC	CAN/ULC-S526-07	Visible Signal Devices for Fire Alarm Systems, Including Accessories	3.2.4.19.(4) 3.2.4.19.(5) A-3.2.4.19.(2)
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”, and substitutes:

“

ULC	CAN/ULC-S526-16	Visible Signal Devices for Fire Alarm Systems, Including Accessories	3.2.4.19.(4) 3.2.4.19.(5) A-3.2.4.19.(2)
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”
,

g) strikes out the following row:

“

ULC	CAN/ULC-S702-09	Mineral Fibre Thermal Insulation for Buildings	Table 5.9.1.1. A-5.9.1.1.(1) Table 9.23.17.2.-A 9.25.2.2.(1)
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”, and substitutes:

“

ULC	CAN/ULC-S702-09	Mineral Fibre Thermal Insulation for Buildings	3.1.18.3.(4) Table 5.9.1.1. A-5.9.1.1.(1) 9.10.3.1.(3) Table 9.23.17.2.-A 9.25.2.2.(1)
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”, and

h) strikes out the following row:

“

ULC	CAN/ULC-S703-09	Cellulose Fibre Insulation for Buildings	Table 5.9.1.1. 9.25.2.2.(1)
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”, and substitutes:

“

ULC	CAN/ULC-S703-09	Cellulose Fibre Insulation for Buildings	Table 5.9.1.1. 9.10.3.1.(3) 9.25.2.2.(1)
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”.

5. In Article 3.1.2.5. of Division B of Book I, in Sentence (2) Council italicizes the words “community care facility” and “group residence” wherever they appear.
6. In Article 3.1.9.4. of Division B of Book I, in Sentence (2) Council strikes out the words “be sealed at the penetration with a *fire stop*” and substitutes “conform to Sentence (1)”.
7. In Article 3.2.1.1. of Division B of Book I, Council strikes out Sentence (1) and substitutes:

“1) A roof-top enclosure shall not be considered as a *storey* in calculating the *building height* if it is provided for

 - a) elevator machinery,
 - b) a *service room*,
 - c) a stairway used for no purpose other than for access or egress,
 - d) an elevator lobby used for no purpose other than for access or egress, or
 - e) a combination thereof.”.
8. In Article 3.2.2.14. of Division B of Book I, Council:
 - a) In Sentence (1) after the words “elevator machinery” inserts the following words “, an elevator lobby”,
 - b) In Sentence (2) after the words “elevator machinery” inserts the following words “, an elevator lobby”,
 - c) In Sentence (2) after the words “one *storey* high,” inserts the following words “and that does not serve as part of a *means of egress* for an *occupancy* on a roof in accordance with Sentences 3.3.1.3.(4) to (6),”, and

- d) In Sentence (4) after the words “A roof-top enclosure for a stairway” inserts the following words “or an elevator lobby serving an *occupancy* on a roof that serves only one *dwelling unit*”.
9. In Article 3.2.2.50. of Division B of Book I, in Clause (1)(c), following the words “uppermost floor level,” Council adds the words “excluding any floor level within a rooftop enclosure that is not considered as a *storey* in calculating *building height* in accordance with Sentence 3.2.1.1.(1),”.
10. In Article 3.2.2.58. of Division B of Book I, in Clause (1)(c), following the words “uppermost floor level,” Council adds the words “excluding any floor level within a rooftop enclosure that is not considered as a *storey* in calculating *building height* in accordance with Sentence 3.2.1.1.(1),”.
11. In Article 3.2.3.10. of Division B of Book I, in Sentence (1), Council strikes out the words “with all *storeys* constructed as open-air *storeys*”.
12. In Article 3.2.4.18. of Division B of Book I, Council
- a) In Clause (1)(a) after the words” through the *floor area*” inserts the words “and throughout any *occupancy* on a roof”,
 - b) In Clause (1)(b), after the words” through the *floor area*” inserts the words “and throughout any *occupancy* on a roof”, and
 - c) Strikes out Sentence (13) and substitutes
“

13) An audible signal device forming part of a fire alarm system provided so as to sound *alarm signals* that are clearly audible throughout any *occupancy* on a roof or balcony, shall be located
a) in the vicinity of an exterior door providing access to a private residential roof deck or balcony, or
b) on exterior public roofs or balconies.

”.
13. In Article 3.2.4.19. of Division B of Book I, in Sentence (6), Council strikes out the words “Sentences 3.8.2.12.(5) and 3.8.5.3.(4)” and substitutes “Sentence 3.8.2.12.(5)”.
14. In Article 3.2.6.1. of Division B of Book I, Council:
- a) In Clause (2)(d) following the words “(See Note A-32.6.2.(4).),”, strikes out the word “and”, and
 - b) In Clause (2)(e) following the words “2 h *fire separation*” strikes out “.” and substitutes “, and”.
15. In Article 3.2.6.7. of Division B of Book I, in Clause (2)(j), Council strikes out the words “ASME A17.1/CSA B44, “Safety Code for Elevators and Escalators,” ”, and substitutes “the Elevating Devices Safety Regulation”.
16. In Article 3.2.7.10. of Division B of Book I, in Clause (1)(c) after the words “fire and life safety purposes”, Council inserts the words “as a smoke management system”

17. In Subsection 3.3.1. of Division B of Book I, Council strikes out Article 3.3.1.3. and substitutes:

“3.3.1.3. Means of Egress

(See Note 3.3.1.3.)

- 1) *Access to exit* within *floor areas* shall conform to Subsections 3.3.2. to 3.3.5., in addition to the requirements of this Subsection.
- 2) If a podium, terrace, platform or contained open space is provided, egress requirements shall conform to the appropriate requirements of Sentence 3.3.1.5.(1) for rooms and *suites*.
- 3) *Means of egress* shall be provided from every podium, terrace, platform or contained open space used or intended for *occupancy*, to *exits* in conformance with the requirements of Section 3.4.
- 4) *Means of egress* from an *occupancy* on a roof serving only a single *dwelling unit* shall be provided in conformance with Article 3.3.4.4.
- 5) Except as permitted by Sentence (4) and except as required by Sentence (6), a *means of egress* at the roof level, designed in conformance with the requirements for *exits* in Section 3.4., shall be provided from an *occupancy* on a roof.
- 6) At least two separate *means of egress* at the roof level, designed in conformance with the requirements for *exits* in Section 3.4., shall be provided from a roof used or intended for an *occupant load* more than 60.
- 7) For the purposes of Sentences (4) and (5), the occupied area of the *occupancy* on a roof shall be used in place of *floor area*.
- 8) A roof-top enclosure that does not serve as part of a *means of egress* for an *occupancy* on a roof in accordance with Sentence (5) or (6) shall be provided with an *access to exit* that leads to an *exit*
 - a) at the roof level, or
 - b) on the *storey* immediately below the roof.
- 9) A roof-top enclosure which is more than 200 m² in area shall be provided with at least 2 *means of egress*.
- 10) Two points of egress shall be provided for a *service space* referred to in Sentence 3.2.1.1.(8) if
 - a) the area is more than 200 m², or
 - b) the travel distance measured from any point in the *service space* to a point of egress is more than 25 m.
- 11) Except as permitted by Sentences 3.3.4.4.(5) and (6), each *suite* in a *floor area* that contains more than one *suite* shall have
 - a) an exterior *exit* doorway, or
 - b) a doorway
 - i) into a *public corridor*, or
 - ii) to an exterior passageway.
- 12) Except as permitted by this Section and by Sentence 3.4.2.1.(2), at the point where a doorway referred to in Sentence (8) opens onto a *public corridor* or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate *exits*.”.

18. In Article 3.4.2.1. of Division B of Book I, Council strikes out Sentence (5) and substitutes:

“5) *Exits* are not required directly from roof-top enclosures that comply with Sentences 3.3.1.3.(8) and (9) or where they are served by a *means of egress* in conformance with Sentences 3.3.1.3.(4) to (5).”.

19. In Article 3.4.6.8. of Division B of Book I, Council strikes out Sentence (2) and substitutes:

“2) Steps for stairs referred to in Sentence (1) shall

- a) have a rise between successive treads not less than 125 mm and not more than 180 mm,
- b) have a closed riser, and

- c) have
 - i) a riser with either no rakeback or a rakeback of not more than 38 mm, or
 - ii) if a nosing is provided, the underside of the nosing with an angle of not less than 60° from the horizontal.”.

- 20. In Article 3.4.6.16. of Division B of Book I, in Sentence (7), at the end of Subclause (b)(iv), Council adds the word “and”.

- 21. In Article 3.5.4.1. of Division B of Book I, in Clause (3)(a), Council strikes out the words “ASME A17.1/CSA B44, “Safety Code for Elevators and Escalators,” and substitutes “the Elevating Devices Safety Regulation”.

- 22. In Article 3.8.2.2. of Division B of Book I, in Sentence (1) after the words “50% of all pedestrian entrances”, Council inserts the words “, which shall include the principal entrance,”.

- 23. In Article 3.8.3.1. of Division B of Book I, Council:
 - a) Strikes out Clause (1)(b) and substitutes “b) for each *accessible* application listed independent of other *accessible* applications, the applicable provisions of CSA B651, “Accessible Design for the Built Environment,” listed in Table 3.8.3.1.”,
 - b) Renumbers Sentence (2) as Sentence (3), and
 - c) Following Sentence (1), inserts:
 - “2) The design for each *accessible* application listed in Table 3.8.3.1. shall comply entirely with Clause (1)(a) or Clause (1)(b).”.

- 24. In Article 3.8.3.4. of Division B of Book I, in Sentence (2), Council strikes out Clause (b) and substitutes “b) be located adjacent to an *accessible* path of travel”.

- 25. In Article 3.8.3.5. of Division B of Book I, in Sentence (5) after the words “Ramps and landings not at”, Council inserts the words “ground level”.

- 26. In Article 3.8.3.6. of Division B of Book I, in Clause (11)(d), Council strikes out the dimension “1390 mm” and substitutes “1350 mm”.

- 27. In Article 3.8.3.22. of Division B of Book I, in Subclause (1)(g)(iv), after the words “or a shower conforming to Article 3.8.3.16.”, Council adds “, only to the extent of providing the same type of facilities provided in sleeping rooms and bed spaces where *access* is not required”.

- 28. In Article 3.10.1.1. of Division B of Book I, in Table 3.10.1.1., Council strikes out the rows associated with “3.3.1.13. Doors and Hardware” and substitutes the following:

3.3.1.13. Doors and Door Hardware	
(1)	(a),(b) [F10,F12-OS3.7]
	(c) [F10-OS3.7] [F30-OS3.1]

	(d) [F30-OS3.1]
(2)	[F30-OS3.1] [F10-OS3.7]
(3)	[F10-OS3.7]
(4)	[F10-OS3.7]
(5)	[F10-OS3.7]
	[F73-OA1]
(8)	[F12-OS3.7]
(9)	[F12-OS3.7]
(10)	[F12-OS3.7]
(11)	[F30-OS3.1]

29. In Article 4.1.8.10. of Division B of Book I, Council:

- a) In Sentence (4), after the words “(See Note A-4.1.8.10.(4))” inserts the words “and (5)”,
- b) Renumbers Sentences (5), (6), and (7) as (6), (7), and (8) respectively, and
- c) After Sentence (4), inserts:

“5) For *buildings* constructed with more than 4 *storeys* of continuous wood construction and where $I_{Fa}S_a(0.2)$ is equal to or greater than 0.35, timber SFRS consisting of moderately ductile cross-laminated timber shear walls, platform-type construction, or limited ductility cross-laminated timber shear walls, platform-type construction, as defined in Table 4.1.8.9. within the continuous wood construction shall not have Type 4, 5, 6, 8, 9 or 10 irregularities as described in Table 4.1.8.6. (See Note A-4.1.8.10.(4) and (5).)”.

30. In Article 4.5.1.1. of Division B of Book I, in Table 4.5.1.1., Council strikes out the rows associated with Article 4.1.8.10., and substitutes:

4.1.8.10. Additional System Restrictions	
(1)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(2)	(a) [F20-OP2.3] [F22-OP2.4]
	(b) [F20-OP2.3] [F22-OP2.4]
	(c) [F20-OP2.3] [F22-OP2.4]
	(d) [F20-OP2.3] [F22-OP2.4]
(3)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(4)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(5)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
(7)	[F22-OS2.3, OS2.4]
	[F22-OP2.3, OP2.4]
(8)	[F22-OS2.1]

[F20-OP2.1] [F22-OP2.4]

”

31. In Article 6.2.1.2. of Division B of Book I, at the end of Sentence (1), Council inserts the words “(See Note A-6.2.1.2.(1).)”.
32. In Article 6.3.2.9 of Division B of Book I, in Sentence (2), Council strikes out Clause (a) and substitutes “a) **reserved**, and”.
33. In Subsection 6.9.3. of Division B of Book I, Council strikes out Article 6.9.3.1. and substitutes:

“1) This Article applies to every *building* that contains an *assembly occupancy*, a *care occupancy* with individual *suites* or containing sleeping rooms or bed spaces not within a *suite*, a *residential occupancy*, a *business and personal services occupancy*, or a *mercantile occupancy*, and that

- a) is served by or contains a fuel-burning *appliance*, or
- b) contains a *storage garage*.

2) Carbon monoxide (CO) alarms installed in a *residential occupancy* or a *care occupancy* as required by this Article shall

- a) conform to CAN/CSA-6.19, “Residential Carbon Monoxide Alarming Devices,”
- b) be equipped with an integral alarm that satisfies the audibility requirements of CAN/CSA-6.19, “Residential Carbon Monoxide Alarming Devices,”
- c) have no disconnect switch between the overcurrent device and the CO alarm, where the CO alarm is powered by the electrical system serving the *suite* (see Note A-6.9.3.1.(2)(c)), and
- d) be installed as recommended by the manufacturer.

3) Except as permitted by Sentence (9), where a fuel-burning *appliance* is installed in a *suite of residential occupancy* or in a *suite of care occupancy*, a CO alarm shall be installed

- a) inside each sleeping room or bed space, or
- b) outside each sleeping room or bed space, within 5 m of each door serving a sleeping room or bed space, measured following corridors and doorways.

4) Except as permitted by Sentence (9), where a fuel-burning *appliance* serves a *residential occupancy* or a *care occupancy* and is installed in a *service room* that is not in a *suite of residential occupancy* nor in a *suite of care occupancy*, a CO alarm shall be installed

- a) either inside each sleeping room or bed space, or if outside, within 5 m of each door serving a sleeping room or bed space, measured following corridors and doorways, in every *suite of residential occupancy* or *suite of care occupancy* that shares a wall or floor/ceiling assembly with the *service room*, and
- b) in the *service room*.

5) Except as permitted by Sentence (9), for each *suite of residential occupancy* or *suite of care occupancy* that shares a wall or floor/ceiling assembly with a *storage garage* or that is adjacent to an attic or crawl space to which the *storage garage* is also adjacent, a CO alarm shall be installed

- a) inside each sleeping room or bed space, or
- b) outside each sleeping room or bed space, within 5 m of each bedroom door serving a sleeping room or bed space, measured following corridors and doorways.

6) CO alarms installed in an *assembly occupancy*, a *business and personal services occupancy*, or a *mercantile occupancy* as required by this Article shall conform to

- a) CAN/CSA-6.19, “Residential Carbon Monoxide Alarming Devices,” notwithstanding the scope of that

standard,

b) UL 2034, "Standard for Single and Multiple Station Carbon Monoxide Alarms," notwithstanding the scope of that standard, or

c) good engineering practice.

(See Note A-6.9.3.1.(6).)

7) Except as permitted by Sentence (9), where a fuel-burning *appliance* serves an *assembly occupancy*, *business and personal services occupancy*, or *mercantile occupancy*, a CO alarm shall be,

a) where the fuel-burning *appliance* is part of a system that could circulate or distribute CO to a *suite* of *assembly occupancy*, *business and personal services occupancy* or *mercantile occupancy*, installed

i) on each *storey* of each *suite* that may be exposed, and

ii) in a *suite* containing an *assembly major occupancy*, each classroom and dedicated gathering room or space, and

b) installed in the room or space in which the fuel-burning *appliance* is located.

(See Note A-6.9.3.1.(7).)

8) Except as permitted by Sentence (9), for each *suite* of *assembly occupancy*, *business and personal services occupancy*, or *mercantile occupancy* that shares a wall or floor/ceiling assembly with either a *storage garage* or a *service room* containing a fuel-burning *appliance*, or that is adjacent to either an attic or crawl space to which the *storage garage* or a *service room* containing a fuel-burning *appliance* is also adjacent, a CO alarm shall be installed

a) on each *storey* of the adjacent *suite*,

b) where the adjacent *suite* contains an *assembly major occupancy*, each classroom and dedicated room or space, and

c) in each *service room* containing a fuel-burning *appliance*.

(See Note A-6.9.3.1.(8).)

9) CO detectors are permitted to be installed in lieu of CO alarms required by this Article provided the CO detectors

a) sound audible signals within the location they serve, as described in Sentences (3) to (5), (7) and (8),

b) are installed in conformance with CAN/ULC-S524, "Installation of Fire Alarm Systems," and

c) form part of the fire alarm system."

34. In Article 9.5.3.1. of Division B of Book I, below the Article title, Council adds the words "(See Note A-9.5.3.1.)".

35. In Article 9.7.4.2. of Division B of Book I, in Sentence (2), Council strikes out Clause (b) and substitutes:

"b) is designed

i) with a clear width in conformance with Sentence 3.8.3.6.(2),

ii) to not open onto a step,

iii) with door-operating devices in conformance with Sentence 3.8.3.6.(4),

iv) with a clear and level space for power operated doors in conformance with Clause 3.8.3.6.(4)(c) or for other doors, with a clear and level space in conformance with Sentence 3.8.3.6.(11), and

v) with a door closure in conformance with Sentence 3.8.3.6.(10), or".

36. In Section 9.8. of Division B of Book I, in the Section title, Council inserts the words "Landings," after the words "Stairs, Ramps,".

37. In Article 9.8.1.2. of Division B of Book I, in Sentence (1) after the words “that serve a single *dwelling unit*” Council inserts the words “or a principal dwelling unit with *ancillary residential unit*, including their common spaces”.
38. In Article 9.8.2.2. of Division B of Book I, in Sentence (1), Council inserts the words “and Note A-9.5.3.1.” after the words “See Note A-3.4.3.4.”.
39. In Article 9.8.4.1. of Division B of Book I, in Table 9.8.4.1., Council strikes out the associated table notes and substitutes:
- “Notes to Table 9.8.4.1.:
- (1) Private stairs are exterior and interior stairs that serve
 - a) single *dwelling units*,
 - b) deleted or
 - c) garages that serve houses described in Clause (a) or (b).
 - (2) Public stairs are all stairs not described as service stairs or private stairs.”.
40. In Article 9.8.4.2. of Division B of Book I, in Table 9.8.4.2., Council strikes out the associated table notes and substitutes:
- “Notes to Table 9.8.4.2.:
- (1) Private stairs are exterior and interior stairs that serve
 - a) single *dwelling units*,
 - b) deleted or
 - c) garages that serve houses described in Clause (a) or (b).
 - (2) Public stairs are all stairs not described as service stairs or private stairs.”.
41. In Article 9.8.5.3. of Division B of Book I, at the end of the Article, Council inserts:
- “2) Deleted.”.**
42. In Article 9.8.6.2. of Division B of Book I, in Clause (4)(b), Council strikes out the words “serving a single *dwelling unit*”, and substitutes “described in Clause (a)”.
43. In Article 9.9.3.3. of Division B of Book I, at the end of the Article, Council inserts:
- “2) Deleted.”.**
44. In Article 9.9.3.4. of Division B of Book I, at the end of the Article, Council inserts:
- “2) Deleted.”.**
45. In Article 9.9.4.2. of Division B of Book I, Council strikes out Sentence (2) and substitutes:
- “2) Deleted.”.**
46. In Article 9.9.6.2. of Division B of Book I, Council:
- a) In Sentence (3), following the words “Doorways serving”, inserts the word “only”, and

b) After Sentence (3) inserts:

“4) Deleted.”

47. In Article 9.9.6.3. of Division B of Book I, in Sentence (3) following the words “Doorways serving”, Council inserts the word “only”.

48. In Article 9.9.7.1. of Division B of Book I, Council:

a) In Sentence (1), strikes out the words “An *access to exit*” and substitutes “Except as required by Sentences (2) and (3), an *access to exit*”,

b) Strikes out Sentences (2) & (3) and substitutes:

“2) Except as required by Sentence (3), *means of egress* at the roof level, designed in conformance with the requirements for *exits*, shall be provided from an *occupancy* on a roof serving more than a single *dwelling unit*.

3) Where a roof is intended for an *occupant load* of more than 60 persons, at least 2 separate *means of egress* at the roof level, designed in conformance with the requirements for *exits* and located remote from each other, shall be provided.”.

49. In Article 9.9.9.2. of Division B of Book I, at the end of the Article, Council inserts:

“2) Deleted.”

50. In Article 9.9.9.3. of Division B of Book I, at the end of the Article, Council inserts:

“
2) Deleted.
3) Deleted.
”.

51. In Article 9.10.3.1. of Division B of Book I, at the end of the Article, Council inserts:

“
2) Deleted.
3) Deleted.
”.

52. In Article 9.10.4.4. of Division B of Book I, Council strikes out Sentence (1) and substitutes:

“1) A roof-top enclosure shall not be considered as a *storey* in calculating the *building height* if the roof-top enclosure is provided for
a) elevator machinery,
b) a *service room*,
c) a stairway used for no purpose other than for access or egress,
d) an elevator lobby used for no purpose other than for access or egress, or
e) a combination thereof.”.

53. In Article 9.10.8.8. of Division B of Book I, Council strikes out Sentence (3) and substitutes:

- “3) No *fire-resistance rating* is required for floors of exterior passageways serving
- a) reserved,
 - b) a single *dwelling unit* where no *suite* is located above or below the *dwelling unit* (see also Sentence 9.9.9.3.(2)).”.

54. In Article 9.10.8.10. of Division B of Book I, in Sentence (1), Council strikes out Clause (b) and substitutes “b) **deleted**, or”.

55. In Subsection 9.10.9. of Division B of Book I, Council strikes out Article 9.10.9.1. and substitutes:

“1) This Subsection applies to

 - a) *fire separations* required between rooms and spaces in *buildings*, except between rooms and spaces within a *dwelling unit*, and
 - b) reserved.”.

56. In Article 9.10.9.2. of Division B of Book I, Council strikes out Sentence (4) and substitutes:

“4) All gypsum board joints in the assemblies described in Sentence (1) shall conform to CSA A82.31-M, “Gypsum Board Application,” and penetrations in these assemblies shall be sealed using flexible sealant or tape to maintain the integrity over the entire surface.”.

57. In Article 9.10.9.3. of Division B of Book I, Council strikes out Sentence (2) and substitutes “**2) Deleted.**”.

58. In Article 9.10.9.6. of Division B of Book I, at the end of the Article, Council adds:

“4) All gypsum board joints in the assemblies described in Sentence (1) shall conform to CSA A82.31-M, “Gypsum Board Application,” and penetrations in these assemblies shall be sealed using flexible sealant or tape to maintain the integrity over the entire surface.”.

59. In Article 9.10.9.14. of Division B of Book I, Council:

 - a) Strikes out Sentence (3) and substitutes “**3) Dwelling units** that contain 2 or more *storeys* including *basements* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 1 h. (See Note A-3.3.4.4.(1).)”, and
 - b) Strikes out Sentence (4) and substitutes “**4) Deleted.**”.

60. In Article 9.10.9.15. of Division B of Book I, Council strikes out Sentence (4) and substitutes “**4) Deleted.**”.

61. In Article 9.10.10.4. of Division B of Book I, in Sentence (2), Council strikes out Clauses (a) and (b) and substitutes:

“a) where the *appliances* serve

 - i) not more than one room or *suite*, or
 - ii) a *building* with a *building area* of not more than 400 m² and a *building height* of not more than 2 *storeys*, or

b) where the *appliances*

- i) serve a principal *dwelling unit*, ancillary residential unit, or their common spaces, and
- ii) are located in a *service room* separated from the *dwelling units* or their common spaces by a *fire separation* having a *fire-resistance rating* not less than the *fire-resistance rating* required for the *fire separation* between the *dwelling units* or common spaces.”.

62. In Article 9.10.11.2. of Division B of Book I, in Sentence (1), Council strikes out Sentence (1) and substitutes:

“1) A *party wall* on a property line of a *building of residential occupancy* need not be constructed as a *firewall*, provided it is constructed as a *fire separation* having not less than a 1 h *fire-resistance rating*, where the *party wall* separates

- a) two *dwelling units* where there is no *dwelling unit* above another *dwelling unit*,
- b) a *dwelling unit* and a house with a *secondary suite* including their common spaces, or
- c) two houses with a *secondary suite* including their common spaces.”.

63. In Article 9.10.15.1. of Division B of Book I, Council strikes out Sentence (1) and substitutes the following:

“1) This Subsection applies to

a) residential *buildings* containing not more than two principal *dwelling units* where no principal *dwelling unit*, including their contained *ancillary residential unit*, is above another.,

b) ~~deleted~~, and

c) accessory *buildings* that serve a *building* described in Clause (a).

(See Note A-9.10.15.1.(1).)”.

64. In Article 9.10.16.3. of Division B of Book I, in Clause (3)(d), Council strikes out the words “(See Note A-3.1.11.7.(7).)” and substitutes “(See Note A-3.1.11.7.(8).)”.

65. In Subsection 9.10.19. of Division B of Book I, Council:

a) In Article 9.10.19.1., strikes out Clause (1)(c) and substitutes “c) ~~deleted~~.”, and

b) Strikes out Article 9.10.19.5. and substitutes:

“9.10.19.5. Interconnection of Smoke Alarms

1) Where more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be interconnected so that the actuation of one alarm will cause all alarms within the *dwelling unit* to sound.

2) Deleted.

3) Deleted.

”.

66. In Article 9.10.20.1. of Division B of Book I, Council strikes out Clause (3)(b) and substitutes “b) ~~deleted~~.”.

67. In Article 9.11.1.1. of Division B of Book I, Council strikes out Sentence (2) and substitutes:

“2) Deleted.”.

68. In Article 9.13.4.2. of Division B of Book I, Council strikes out Sentence (4) and substitutes:
“
“4) Locations requiring radon rough-ins shall be determined in accordance with Article 1.1.3.3. of Division B.
5) *Buildings* described in Clause 9.16.2.1.(2)(b) need not conform to Sentence (3).”.
69. In Article 9.32.1.1. of Division B of Book I, in Sentence (1) Council strikes out the word “This” and substitutes “Except as required by Article 9.32.4.2., this”.
70. In Article 9.32.3.4. of Division B of Book I, in Clause (6)(a), Council strikes out Subclause (ii) and substitutes “ii) is a laneway house with an aggregate floor area of not more than 168 m²,”.
71. In Article 9.32.4.2. of Division B of Book I, Council:
- a) Strikes out Sentence (1) and substitutes:
“1) This Article applies to every *building* that contains a *residential occupancy*, a *business and personal services occupancy*, or a *mercantile occupancy* and that
a) is served by a fuel-burning *appliance*,
b) may be exposed to migration of carbon monoxide from a fuel-burning *appliance*, or
c) contains a *storage garage*.”.
 - b) In Sentence (2):
 - i) After the words “Carbon monoxide (CO) alarms”, adds the words “installed in a *residential occupancy*”, and
 - ii) In Clause (d) strikes out the words “mechanically fixed at a height”, and substitutes “installed as”,
 - c) In Sentence (3), after the words “Where a room” adds the words “in a *residential occupancy*”,
 - d) In Sentence (5), after the words “Where a fuel-burning *appliance* is installed” adds the words “in a *residential occupancy* and is located”, and
 - e) At the end of the Article, adds:
“7) CO alarms installed in a *business and personal services occupancy*, or a *mercantile occupancy* as required by this Article shall conform to
a) CAN/CSA-6.19, “Residential Carbon Monoxide Alarming Devices,” notwithstanding the scope of that standard,
b) NFPA 720, “Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment,” or
c) good engineering practice.
(See Note A-6.9.3.1.(6) in Appendix A)
 - 8) Except as permitted by Sentence (9), where a fuel-burning *appliance* serves a *business and personal services occupancy*, or *mercantile occupancy*, a CO alarm shall be installed in
a) each *suite* served by the fuel-fired *appliance*, and
b) the room or space in which the fuel-burning *appliance* is located.

9) For each *suite of business and personal services occupancy, or mercantile occupancy* that shares a wall or floor/ceiling assembly with a *storage garage*, that is adjacent to an attic or crawl space to which the *storage garage* is also adjacent, or that may be exposed to migration of carbon monoxide from a *storage garage*, a CO alarm shall be installed in each *suite*.”.

72. In Subsection 9.33.4 of Division B of Book I, Council strikes out Article 9.3.3.4.3. and substitutes:

“9.33.4.3. Heating System Control

1) Where a single heating system serves a house with a *secondary suite*, individual temperature controls shall be provided in each *dwelling unit* served by the system. (See Note A-9.33.4.3.(1)).”.

73. In Article 9.33.1.1. of Division B of Book I, Council:

a) Strikes out Sentence (1) and substitutes:

“1) This Section applies to the design and installation of
a) heating systems, including requirements for combustion air, and air-conditioning systems serving only one *dwelling unit*, and
b) reserved.”, and

b) Strikes out Sentence (3) and substitutes “**3) Deleted.**”

74. In Article 9.33.3.1. of Division B of Book I, Council strikes out Clause (1)(c) and substitutes “c) **deleted**, and”.

75. In Article 9.33.4.4. of Division B of Book I, following Sentence (1), Council adds the following new Sentence:

“2) **Deleted.**”

76. In Article 9.34.2.7. of Division B of Book I, in Table 9.34.2.7. after the row:

Service rooms and laundry areas	200	20
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”, Council inserts:

Rooms for storage of combustible refuse	200	20
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”.

77. Council strikes out Section 9.37. of Division B of Book I and substitutes:

Section 9.37 Ancillary Residential Units

9.37.1. General

9.37.1.1. Application

(See Note 9.37.1.1)

1) This Section applies to the construction of an *ancillary residential unit* in a *building* containing not more than 2 principal *dwelling units* or a *row house*. (See Note A-9.37.1.1.(1).)

9.37.1.2. Construction Requirements

1) An *ancillary residential unit*, and those parts of a *building* serving only the *principal dwelling unit*, its *ancillary residential unit* and their common spaces, shall conform to the requirements of this By-law except as permitted in this Section.

(See Note A-9.37.1.2.)

9.37.2. Specific Requirements

9.37.2.1. Heights of Rooms or Spaces

1) Except as permitted by Sentences (3), the minimum height of rooms or spaces in an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit* over the required minimum area as indicated in Table 9.5.3.1. shall be not less than 2.0 m.

2) It shall be possible to travel from the required area of one room to the required areas of all other rooms within an *ancillary residential unit* without reduction of the room height as required in Sentence (1).

3) The clear height over stairs, ramps and landings serving an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit* shall not be less than 1 950 mm.

4) The clear height in *public corridors* and *exit corridors* that serve only a *principal dwelling unit*, its associated *ancillary residential unit* and their common spaces, shall be not less than 2 m.

9.37.2.2. Deleted.

9.37.2.3. Stairs

1) *Exit stairs* serving a *principal dwelling unit*, its *ancillary residential unit* or their common spaces shall have a minimum width, measured between wall faces or guards, of not less than 860 mm. (See Note A-9.37.2.3.(1).)

2) Stairs within an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit* may be considered private stairs for the purposes of determining the dimensional requirements of Subsection 9.8.4.

3) Stairs within an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit* may include one set of winders between floor levels as described in 9.8.4.6.

9.37.2.4. Landings

1) Landings for exterior stairs serving an *ancillary residential unit* need not exceed 900 mm in length.

2) A landing may be omitted at the top of an exterior *flight* serving a secondary entrance to an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit*, provided

a) the stair does not contain more than 3 risers,

b) the principal door swings away from the stair, and

c) only a storm or screen door, if any, swings over the stair and is equipped with hardware to hold it open.

9.37.2.5. Handrails and Guards

1) Handrails and *guards* serving an *ancillary residential unit* or the common spaces serving a *principal dwelling unit* and its associated *ancillary residential unit* shall conform to the requirements of Subsections 9.8.7. to 9.8.9. as if serving only one *dwelling unit*.

9.37.2.6. Means of Egress

1) The width of every *public corridor* and *exit corridor* that serves a *principal dwelling unit* and its *ancillary residential unit* shall be not less than 860 mm. (See Note A-9.37.2.6.(1).)

9.37.2.7. Fire Separations for Exits

- 1) Except as permitted by Sentence (2), every *exit* other than an *exit* doorway shall be separated from adjacent *floor areas* by a *fire separation*
 - a) having a *fire-resistance rating* of 45 min, or
 - b) having a *fire-resistance rating* of not less than 30 min where the *dwelling units* are equipped with *smoke alarms* as referenced in Article 9.37.2.19.
- 2) A *fire-resistance rating* is not required for a *fire separation* that separates an *exit* from adjacent *floor areas* where the *building* is *sprinklered*.

9.37.2.8. Openings Near Unenclosed Exit Stairs and Ramps

- 1) Where an unenclosed exterior *exit* stair or ramp provides the only *means of egress* from a *dwelling unit* in a *building* that contains an *ancillary residential unit* and the stair is exposed to the hazards of fire from *unprotected openings* in the exterior wall of another *fire compartment*, the openings shall be protected in conformance with Articles 9.10.13.5. to 9.10.13.7. or 3.2.3.13.(5) (See Note A-9.37.2.8.(1).)

9.37.2.9. Doors in a Means of Egress

- 1) Every *exit* door or door that opens into or is located within a *public corridor* or other facility that provides *access to exit* from a principal *dwelling unit* and its *ancillary residential unit* shall
 - a) be not less than 1980 mm high,
 - b) have a clear opening width of not less than 800 mm, and
 - c) be permitted to swing inward.

9.37.2.10. Travel Limit to Exits or Egress Doors

- 1) In an *ancillary residential unit*, the travel limit from a floor level in the *dwelling unit* to an *exit* or egress door may exceed 1 *storey* provided the floor level within the *dwelling unit* is served by an operable window conforming to Article 9.9.10.1. and is located so that the window could provide egress from the *ancillary residential unit* if the other *dwelling unit* becomes inaccessible to the occupants due to a fire which originates in the *dwelling unit*.

9.37.2.11. Shared Egress Facilities

- 1) Except as provided in Article 9.9.7.3., where an egress door from a *dwelling unit* opens onto a *public corridor* or exterior passageway, it shall be possible from the location where the egress door opens onto the *public corridor* or exterior passageway to go in opposite directions to 2 separate *exits* unless the *dwelling unit* is served by a second and separate *means of egress* or an opening window conforming to Article 9.9.10.1.
- 2) Each *dwelling unit* in an unsprinklered *building* shall be provided with a second and separate *means of egress* or an opening window conforming to Article 9.9.10.1. where the principal egress door from the *dwelling unit* opens onto
 - a) an *exit* stairway that serves more than one *suite*,
 - b) a *public corridor* serving more than one *suite* and served by a single *exit* stairway or ramp,
 - c) an exterior passageway serving more than one *suite* and served by a single *exit* stairway or ramp, or
 - d) a balcony serving more than one *suite* and served by a single *exit* stairway or ramp.
- 3) Where a *dwelling unit* is located above another *floor area* other than the principal *dwelling unit* to which it is associated or their common spaces, the *dwelling unit* shall be provided with a second and separate *means of egress* or an operable window conforming with Clause 9.9.9.1.(2)(a) and (b).

9.37.2.12. Exit Signs

- 1) *Exit* signs are not required within an *ancillary residential suite*.

9.37.2.13. Structural Fire Resistance

- 1) Table 9.10.8.1., Fire-Resistance Ratings for Structural Members and Assemblies, does not apply to an *ancillary residential unit*. (See Note A-9.37.2.13.)

9.37.2.14. Combustible Drain, Waste and Vent Piping

(See Note A-9.37.2.14.)

- 1) *Combustible* drain, waste and vent piping is permitted to be located within or penetrate a *fire separation* required to have a *fire-resistance rating* provided
 - a) except for the permitted penetration in Clause (b), the *combustible* piping is located within an assembly protected by a membrane of a minimum 12.7 mm gypsum board,
 - b) piping and tubing is tightly fitted, cast in place, or firestopped to ensure the integrity of the fire separation, and
 - c) the *combustible* piping does not penetrate the gypsum board protection membrane on the underside of a horizontal assembly.
- 2) *Combustible* drain, waste and vent piping enclosed in an assembly or protected as described in Sentence (1) is permitted on both sides of a *fire separation*.

9.37.2.15. Separation of Ancillary Residential Units

(See Note A-9.37.2.15.)

- 1) A principal *dwelling unit* and its *ancillary residential unit* shall be separated from each other by
 - a) wall or partition assemblies with
 - i) not less than one layer of 1/2" type C or 5/8" type X wall board on wood or steel studs on each side,
 - ii) resilient channel installed on at least one side, and
 - iii) *noncombustible* insulation of at least 3-1/2" depth throughout, and
 - b) floor assemblies with
 - i) not less than one layer of 1/2" type C or 5/8" type X wall board,
 - ii) with resilient channel, and
 - iii) at least 3-1/2" of *noncombustible* insulation.
- 2) Openings in a separation required by Sentence (1) shall be protected by *closures* with a minimum 20 min *fire-protection rating*, or 45 mm thick solid core wood doors in accordance with 9.10.13.2.

9.37.2.16. Separation of Public Corridors

- 1) A *public corridor* serving only a principal *dwelling unit* and its *ancillary residential unit* shall be separated from the *dwelling units* by
 - a) wall or partition assemblies consisting of
 - i) not less than one layer of 1/2" type C or 5/8" type X wall board on wood or steel studs on each side, and
 - ii) *noncombustible* insulation of at least 3-1/2" depth throughout, and
 - b) floor assemblies consisting of
 - i) not less than one layer of 1/2" type C or 5/8" type X wall board, and
 - ii) at least 3-1/2" of *noncombustible* insulation.
- 2) Openings in a separation required by Sentence (1) shall be protected by *closures* with a minimum 20 min *fire-protection rating*, or 45 mm thick solid core wood doors in accordance with 9.10.13.2.

9.37.2.17. Ventilation, Air Ducts and Fire Dampers

(See Note A-9.37.2.17.)

- 1) Except as provided in Sentences (2) to (4) and notwithstanding Sentences 9.32.1.1.(1) and 9.33.1.1.(1), Sections 9.32 and 9.33 applies to a *building* that contains an *ancillary residential suite*.
- 2) In a residential *building* containing not more than two principal *dwelling units*, heating-season ventilation need not be provided for
 - a) *exits*,
 - b) *public corridors*, and
 - c) ancillary spaces that are not within a *dwelling unit*, except where that space contains an exhaust device.

3) Where a heating or ventilation duct system serves more than one *dwelling unit* and there is potential for smoke migration between the *dwelling units*, the system shall be designed and installed to prevent the circulation of smoke to adjacent *dwelling units* upon a signal from a duct-type *smoke detector* or *smoke alarm*

4) Ducts penetrating *fire separations* need not be equipped with *fire dampers* in conformance with Article 3.1.8.9. provided

a) they are *noncombustible* with all openings in the duct system serving only one *fire compartment*, or
b) they are of continuous solid steel ducting from an HRV located within the *dwelling unit* that it serves to the exterior.

5) Where a heating or air-conditioning system serves more than one *dwelling unit*, access required by Sentence 9.33.4.4.(1) from more than one *dwelling unit*, common space or ancillary space is not required.

9.37.2.18. Spatial Separation

1) Spatial separation shall conform to the applicable requirements of Subsection 9.10.14 or 9.10.15.

9.37.2.19. Smoke Alarms

(See Note A-9.37.2.19.)

1) The installation of *smoke alarms* shall conform to Subsection 9.10.19.

2) *Smoke alarms* shall be installed in each principal *dwelling unit* and each *ancillary residential unit*, and shall be of the photo-electric type hard-wired so that the activation of any smoke alarm will cause the smoke alarms in the principal *dwelling unit* and its *ancillary residential unit* to sound.

9.37.2.20. Sound Control

1) The assemblies separating the primary *dwelling unit* and its contained *ancillary residential suites* need not comply with the sound control requirements of Section 9.11. (See Note A-9.37.2.20.(1).)

9.37.2.21. Attic Space Access

1) An *attic space* access hatchway not less than 0.32 m² in an area with no dimension less than 500 mm may serve a principle dwelling unit and its contained ancillary residential suites.

9.37.2.22. Garages and Carports

1) Section 9.35 is applicable to garages and carports serving a *building* that contains an *ancillary residential suite*.

9.37.2.23. Accessibility and Adaptability

1) *Ancillary residential units* shall be designed in conformance with Section 3.8.

9.37.2.24. Fire Sprinklers

1) Where a *building* is permitted to be sprinklered to NFPA 13D by Article 3.2.5.12., the sprinkler system serving an *ancillary residential unit* is permitted to be designed in accordance with NFPA 13D, provided the floor area of the *ancillary residential unit* is not superimposed above or below

a) principal *dwelling unit* other than the principal *dwelling unit* with which it is associated,
b) another *ancillary residential unit*, or
c) another *major occupancy*.

2) The sprinkler system referred to in Sentence (1) shall be supplied from the *Principal Dwelling Unit*.

”

78. In Article 11.2.1.2. of Division B of Book I, Council strikes out Sentence (7) and substitutes:

“

7) Where a there is a temporary change of *major occupancy* in a *building* for a temporary emergency shelter or an *arts and culture indoor event*, the upgrade requirements shall be based solely on Section 11.6.

”.

79. In Article 11.4.3.1. of Division B of Book I, Council strikes out Table 11.4.3.1. and substitutes:

“

**Table 11.4.3.1.
Fire Safety Requirements for Ancillary Residential Suite Conversions
Forming Part of Article 11.4.3.1.**

Item	Item Details	Alternative Compliance Measure
Spatial Separation	Existing windows and doors	Original openings may remain and new openings to conform to Part 9
Fire Containment within a Principal Dwelling Unit	Separation between a principal <i>dwelling unit</i> and its contained <i>ancillary residential units</i>	Existing lath and plaster in good condition or 13 mm gypsum wall board on wood studs at maximum 450 mm on centre. Where possible, stud cavity to be filled with minimum 90 mm (3 ½") mineral wool insulation. Caulk joints where floor and ceiling meet wall GWB. Use resilient acoustic channels where possible.
	Ducts common to both units through <i>suite</i> separations	<i>Fire dampers</i> not required if sheet metal ducting extends a minimum of 1800 mm (6'-0") beyond the suite separation and the opening is firecaulked. Acoustic insulation is to be used within the common duct extending a minimum of 1500 mm (60") from either side of the suite separation.
	Plumbing and sprinkler plastic piping that penetrate <i>fire separations</i>	Shall be tightly fitted, cast in place, or caulked as per product listing.
	<i>Suite</i> entry doors between the principal <i>dwelling unit</i> and its contained <i>ancillary residential unit</i>	Existing solid core doors and frames with or without wired glass in good condition. Doors to be provided with positive latching hardware and self-closing devices.
Resistance to Forced Entry	Solid Blocking	Solid blocking may be omitted for doors described in Sentence 9.7.5.2.(9) where the interior wall finish adjacent the door is in place prior to the construction of an <i>ancillary residential suite</i> .
Exits and Exit Exposure	Egress from each <i>dwelling unit</i>	In combination with the Egress Windows requirement of Sentence 9.9.10.1., at least one conforming <i>exit</i> is required from the principal dwelling and one from the <i>ancillary residential suite</i> .
	Windows and doors adjacent to <i>exits</i>	No requirements where the <i>suite</i> is <i>sprinklered</i> , provided with a <i>closure</i> or provided with intervening construction extending out by at least 600 mm.
Fire Department Access	Access Path	Existing path designated for fire department is permitted to be minimum 860 mm
Flame-spread Rating	<i>Exits</i>	≤150
	Remainder of <i>building</i>	No requirement
Sprinklers		Sprinklers are not required provided the value of the alteration is less than or equal to 50% of the replacement ⁽¹⁾ value of the <i>existing building</i> .
Heating Systems	Furnace room enclosure	No separation required but provide proper combustion air and required clearances from all equipment ⁽²⁾
Smoke Alarms	Entire <i>building</i>	Interconnected <i>smoke alarms</i> to be intalled on each storey including basements, in each sleeping room and in a location between the sleeping room and the remainder of the storey and if the sleeping room is served by a hallway, the smoke alarm to be located in the hallway. Installed by permanent connections to an electrical circuit in conformance with Subsection 9.10.19. Division B. Provided with battery backup and manual silencing devices which will silence the alarm in

		conformance with Article 9.10.19.6. of Division B. Carbon Monoxide detectors to be provided in accordance with the 9.32.4.2. ⁽³⁾
Stairs and Handrails	Entire <i>building</i>	Existing stairs to comply with Section 9.8, excepting the following dimensions: tread depth 235-355 mm, rise 125-200 mm and run 210-355 mm, unless considered to present an <i>unsafe condition</i> as determined by the <i>Chief Building Official</i> . All existing stairs to have at least one handrail in conformance with Subsection 9.8.7
Guardrail Protection	Entire <i>building</i>	Existing <i>guards</i> may be retained provided they are structurally sound, non-climbable and ≥900 mm high.
Existing Headroom	Entire <i>building</i>	May be reduced to 1 950 mm over 80% of the <i>suite</i> area and all egress routes. The minimum clear height under the remaining <i>suite floor area</i> shall be not less than 1 850 mm, except <i>public corridors</i> and <i>exits</i> which shall be not less than 2 000 mm.
	Doorways Opening Sizes	Other than, <i>exit</i> doors, and doors serving <i>public corridors</i> and <i>exit</i> corridors that serve principle <i>dwelling units</i> in a <i>building</i> contained an <i>ancillary residential units</i> , doorway openings shall be designed to accommodate swing-type and folding doors not less than 1 980 mm high, except doorway openings within an <i>ancillary residential unit</i> which may be reduced to not less than 1 890 mm high.
<i>Unsafe Conditions</i>	Entire <i>building</i>	Any condition within or around the <i>building</i> which could cause undue hazard or risk to persons to be corrected as directed by the <i>Chief Building Official</i> .
Sound Separation	Between the principal <i>dwelling unit</i> and its contained <i>ancillary residential unit</i>	Not required. Fill cavity spaces of <i>suite</i> separation with mineral wool in walls and floor assemblies of new construction.

Notes to Table 11.4.3.1.:

⁽¹⁾ See Note A-11.2.1.4.(3)(a).

⁽²⁾ The Gas Code places restrictions on locating gas furnaces adjacent to sleeping rooms or bathrooms.

⁽³⁾ See Note A-11.4.3.1.(1) Interconnected Smoke Alarms and Carbon Monoxide Detectors

80. In Article 11.4.7.1. of Division B of Book I, in Sentence (2), Council:

- a) In Clause (a) after the words “Subsection 3.2.3.”, inserts the words “, 9.10.14. or 9.10.15. as applicable”, and
- b) renumbers the second Clause (b) as Clause (c).

81. In Article 11.5.1.1. of Division B of Book I, in Sentence (2), Table 11.5.1.1., Council:

- a) Strikes out:

“

27	<p>Illumination of <i>Exit</i> Signs Sentences 3.4.5.1.(3) and 3.4.5.1.(4); Sentences 9.9.11.3.(2) to 9.9.11.3.(6) <i>Exit</i> signs are required to be illuminated</p>	<p>Where <i>exit</i> signage may compromise historic appearances, or authenticity of displays, <i>exit</i> signs may be installed to light only on an emergency condition, such as by the fire alarm system or due to power failure.</p>
----	--	--

	continuously while the <i>building</i> is occupied.	
--	---	--

”, and substitutes:

“

27	Illumination of Exit Signs Sentences 3.4.5.1.(3) and 3.4.5.1.(4); Sentences 9.9.11.3.(3) to 9.9.11.3.(4) <i>Exit signs are required to be illuminated continuously while the building is occupied.</i>	Where <i>exit</i> signage may compromise historic appearances, or authenticity of displays, <i>exit</i> signs may be installed to light only on an emergency condition, such as by the fire alarm system or due to power failure.
----	--	---

”

b) Strikes out:

“

33	Height and Area of Rooms Subsection 3.7.1.; Section 9.5. The height and area of rooms are required to comply to minimum dimension requirements.	Existing rooms are not required to comply to the minimum dimension requirements of Subsection 3.7.1. or Section 9.5.
----	--	--

”, and substitutes:

“

33	Height and Area of Rooms Subsection 3.7.1.; Section 9.5. The height and area of rooms are required to comply to minimum dimension requirements.	Existing rooms are not required to comply to the minimum dimension requirements of Subsection 3.7.1. or Subsection 9.5.3.
----	--	---

”, and

c) Strikes out:

“

37	Mechanical Systems Part 6 and Part 7	Existing mechanical systems in buildings are not required to fully comply to the requirements of Parts 6 or 7 provided: (a) it is not an <i>unsafe condition</i> , and (b) it is <i>acceptable</i> to the <i>Chief Building Official</i> .
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” and substitutes:

“

37	Mechanical and Plumbing Systems Part 6 and Part 7	Existing mechanical systems in buildings are not required to fully comply to the requirements of Parts 6 or 7 provided: (a) it is not an <i>unsafe condition</i> , and (b) it is <i>acceptable</i> to the <i>Chief Building Official</i> .
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”

82. In Article 11.6.1.1. of Division B of Book I, Council strikes out Clause (2)(c) and substitutes:

“c) in relation to emergency shelters, no more than one year or a fixed term acceptable to the *Chief Building Official*.”

83. In Article 11.6.3.2. of Division B of Book I, Council strikes out Sentence (1), and substitutes:

“
 1) Notwithstanding the provisions of this By-law, a temporary emergency shelter is permitted in an *existing building*, except that there shall be

- a) no cooking in the *building*, other than food re-heated by microwave,
- b) no less than one staff for each 20 shelter spaces on duty at all times,
- c) no more than one shelter bed for every 3.7 m² of *floor area* or, if bunk beds are provided, no more than two shelter beds for every 3.7 m² of *floor area*,
- d) aisles no less than 900 mm wide on both sides of every shelter bed,
- e) at least 2 *means of egress*,
- f) *exit* signs on all *exit* doors,
- g) additional directional *exit* signs, in any circumstance where *exit* signs over *exit* doors are not visible from any location in the shelter,
- h) *exit* signs which comply with Subsection 3.4.5.,
- i) *smoke alarms* conforming to Article 3.2.4.20. installed throughout the entire *building*,
- j) at least one water closet for every 20 shelter spaces,
- k) at least one lavatory for every 5 water closets, and
- l) all staff shall have training in first aid and emergency evacuations.

2) A fixed term transitional housing or emergency shelter complying with the requirements of this Sentence is permitted to remain for not more than 3 years provided

- a) the *building* is constructed as a
 - i) temporary emergency shelter complying with the requirements of Sentence (1), or
 - ii) factory constructed building complying with CSA Z240 MH except as required by 1.1.1.1.(2)(g) of Division A,
- b) the *building* is *sprinklered* with quick response or residential sprinklers,
- c) the *building* is provided with a single stage fire alarm system, and
- d) the *owner* provides an operating agreement stating the intended fixed term of occupancy, maximum occupant load, and minimum operating staff level, as acceptable to the Chief Building Official.

”.

84. In the Notes to Part 11 of Division B of Book I, in Note A-11.2.1.2. in Flowchart No. 3, Council strikes out the Non-structural Upgrade Level “N4” associated with a “Major Horizontal Addition”, and substitutes “N3”.

85. In Article 1.6.4.5. of Division C of Books I & II, Council:

- a) In Sentence (1), strikes out the words “for the administrative” and substitutes “to reflect”,
- b) In Sentence (3), strikes out the words “administrative costs” and substitutes “refund”,
- c) In Subclause (3)(b)(i), after the words “at the end of this Part”, Council inserts the words “as if it were a revision or reinspection”, and
- d) In Subclause (3)(b)(ii), after the words “currently in force and effect”, Council inserts the words “as if it were a revision or reinspection”.

86. In Article 1.6.8.1. of Division C of Book I and II, Council strikes out Sentence (1) and substitutes the following

“ 1) In this Subsection, “temporary” means for a period of time no exceeding twelve consecutive months or a fixed term of occupancy not to exceed 3 years where acceptable to the Chief Building Official.

”.

87. In Subsection 1.8.8. of Division C of Book I, Council strikes out Article 1.8.8.5. in its entirety.
88. In Article 1.10.1.5. of Division C of Book I, Council:
- a. In Sentence (1), Council strikes out the words “Sentence (2)” and substitutes “Sentences (2) and (3)”, and
 - b. At the end of this Article, inserts:
“
3) Not more than one laneway house may be assigned a *suite* number that is subordinate to the principal residential *building* in accordance with Article 1.10.1.4., provided
a) that the laneway house along with the principal residential *building* shall consist of a single real-estate entity that is not subdivided into separate strata lots pursuant to the “Strata Property Act”,
b) suite numbers are assigned between the affected *buildings* in a simple and logical manner that makes the location and relationship of each *suite* self-evident as if the laneway house formed a part of the principal residential *building*, and
c) sufficient and clear signage is provided and visible on approach so as to make clear the sequence of suite number assignment.
”
89. In Article 2.2.2.1 . of Division C of Book I, in Sentence (2), Council
- a) In Clause (g), strikes out “and” at the end of the Clause,
 - b) In Clause (h), strikes out “.” at the end of the Clause and substitutes “, and”, and
 - c) Adds the following:
“i) **Deleted.**”
90. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.
91. This By-law is to come into force and take effect on July 1, 2020.

**DRAFT By-law to amend Electrical By-law No. 5563
Regarding Various Miscellaneous and Housekeeping Amendments**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

1. This by-law amends the indicated provisions of Electrical By-law 5563.
2. In Sections 5.8, 5.9, and 5.10, Council strikes out the words “90 days” wherever they appear and substitutes “180 days”.
3. In Section 5.11, Council:
 - a) In Clause (c), strikes out the word “or” at the end of the Clause,
 - b) In Clause (d), inserts the word “or” at the end of the Clause, and
 - c) After Clause (d), inserts a new Clause as follows:

“(e) for installation, construction, alteration, repair or maintenance of any temporary electrical equipment;”.
4. In Section 5.12, Council adds “, and may issue an annual permit where one person, firm, or corporation has more than one site” after “from the date of issuance”.
5. In Section 5.20, Council:
 - a) Strikes out the words “An applicant” and substitutes “A permit holder”,
 - b) Strikes out the word “proportion” wherever it appears and substitutes “portion”, and
 - c) At the end of the Section, inserts the words “A refund will only be considered if applied for within 180 days of the permit being issued, and such refund is subject to the deduction of the administrative fees as set out in Schedule A.”.
6. At the end of Section 5.22, Council inserts the words “Each application to amend the permit shall be accompanied by the permit amendment review fee as set out in Schedule A, in addition to the fee payable based on section 5.23.”.
7. Council inserts the following new sections in the proper numerical order:
 - “5.25 Despite Schedule A, during the permit application intake and review process, the City Electrician may reduce the fees for a permit where the City Electrician considers it necessary and desirable..
 - 5.26 Permit applications must be completed within six months after the date of receipt of the application by the City Electrician, and if an applicant has failed to meet this requirement, the application will lapse and the City Electrician may deem the application to be expired. An expired application may not be renewed. To obtain a

permit, the applicant must re-apply and pay the necessary fees for a new application in accordance with Schedule A of this By-law.

5.27 If a permit application has expired as outlined in Section 5.26. or is withdrawn, the Director of Finance may refund to the applicant a portion of the fee, as recommended by the City Electrician, subject to the deduction of the administrative fees as set out in Schedule A.

5.28 In the unusual circumstance where, in the opinion of the City Electrician, the final installation value of a permit is substantially less than the declared value that was used to calculate the fee pursuant to Section 1 of Schedule A, the permit holder may apply in writing to the City Electrician for an amendment of the installation value and a refund of a portion of the fee paid, and where the City Electrician recommends the refund, the Director of Finance may refund a portion of the fee paid.”.

8. Council inserts the following new section in the proper numerical order:

“6.14 The field safety representative who is required to sign a declaration under Section 6.12 must not sign the declaration unless the field safety representative has physically inspected the electrical work that is the subject of the declaration, and has confirmed both of the following in the declaration:

(a) that the field safety representative has personally inspected the electrical work; and

(b) that the field safety representative believes, based on their inspection, that the electrical work complies with:

(i) the Safety Standards Act and its regulations, and

(ii) this By-law.”.

”.

9. In Section 7.1, Council:

a) Strikes out the word “23rd” and substitutes “24th”, and

b) Strikes out the word “2015” and substitutes “2018”.

10. In Section 7.3.5., Council strikes out the word “principle” wherever it appears and substitutes “principal”.

11. In Schedule A, Council:

a) In Section 2:

i) inserts the following:

“(b) for installation, construction, alteration, repair or maintenance of temporary electrical equipment (equipment such as electric crane or hoist; security alarm or camera; generator; transformer; motor; etc.)”, and

\$212.00

ii) renumbers (b) and (c) as (c) and (d), respectively;

”

b) Strikes out Section 3, and substitutes:

“

3. The fee for an annual permit for any one building or site shall be as follows:

(a) For section 5.14(b), or section 5.14(b) in combination with section 5.14(a), (c), and/or (d):

Total service supply or power supply rating up to and including the first 500 kVA	\$439.00
For 15 kVA or part thereof exceeding the first 500 kVA	\$9.30
Subject to a maximum fee of	\$5,500.00

(b) For section 5.14(c), or section 5.14(c) in combination with section 5.14(a) and/or section 5.14(d), when the supply rating is 500 kVA or less

\$439.00

(c) For section 5.14(a) and/or section 5.14(d)

\$212.00

”

c) Strikes out Section 8, and substitutes:

“

8. The City Electrician may charge the following fees for an Electrical Permit for a temporary special event

(a) For equipment 5 kW or less

\$107.00

(b) For equipment more than 5 kW but not exceeding 750 V

for up to 14 days	\$212.00
for 15 to 30 days	\$424.00
for 31 to 60 days	\$638.00
for 61 to 90 days	\$1,060.00

(c) For equipment supplied from a High Voltage power source

\$1,280.00”, and

d) At the end of Schedule A, inserts the following:

“

- 11.** The fee for an interim permit pursuant to Section 5.16 shall be \$182.00

- 12.** The administration fees pursuant to Section 5.20 and 5.27 shall be
 - a) the first \$79.30 of the permit fee when no plan review performed
 - b) the first \$212.00 of the permit fee when plan review performed

- 13.** The fee for a permit amendment review pursuant to Section 5.22 shall be \$79.30”.
