



ADMINISTRATIVE REPORT

Report Date: October 24, 2017
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VanRIMS No.: 08-2000-20
Meeting Date: November 1, 2017

TO: Standing Committee on Policy and Strategic Priorities
FROM: Chief Building Official
SUBJECT: Miscellaneous Building By-law Housekeeping and Residential Safety Improvements

RECOMMENDATION

- A. THAT Council approve in principle the adoption of Revisions 10 and 11 to the 2012 British Columbia Building Code, being Ministerial Orders M066 and M158 as amendments to the Building By-law, with the necessary modifications to incorporate those revisions with the "Unique to Vancouver" provisions in the Building By-law as attached in Appendix A.
- B. THAT Council instruct the Director of Legal Services to bring forward the necessary by-law amendments for enactment by Council, generally in accordance with Recommendation A.

REPORT SUMMARY

This report recommends amendment of the existing provisions of the City of Vancouver Building By-law as follows:

- Adopt the February 21, 2017 Revision of the British Columbia Building Code (revision 10) as amended;
- Adoption of the April 7, 2017 Revision of the British Columbia Building Code (revision 11) as amended;
- Clarifications related to the intended method of application of the existing Gender Neutral Washroom provisions; and
- General housekeeping and administrative changes reflecting current policy and minor amendments to "Unique to Vancouver" provisions.

In addition to the foregoing, new requirements will be added to the Building By-law as follows:

- Residential entry doors of ground oriented housing will be provided with door frame reinforcement. This will consist of the addition of a reinforcing plate behind the door frame.
- Exterior lighting requirements to conform with development requirements.

The proposed amendment to the Building By-law will enable the City to continue to demonstrate building regulatory leadership while at the same time advance strategic City goals, such as: excellent and efficient public service; green buildings, affordability, livability, inclusivity, safety, and security.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

In April 2014, Council enacted the Building By-law No. 10908 and Building By-law No. 9419 regulating the construction of buildings and related matters in the City of Vancouver.

This was enacted under the authority granted by section 306 of the Vancouver Charter, permitting Council to make By-laws to regulate the construction of buildings, and under section 306(w), by which Council may 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.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Development, Buildings and Licensing recommend approval of Recommendations A and B.

REPORT

Background/Context

Under the authority of the Vancouver Charter, Council has enacted the Building By-law which adopted the 2012 British Columbia Building Code (BCBC) as the base document used in the developing the Building By-law and includes "Unique to Vancouver" provisions reflective of local concerns and objectives. This model of adoption and amendment is consistent with the model used by the province in developing the BCBC, which is in turn derived from the National Building Code of Canada (NBCC) and the inclusion of specific provincial enactments to form the 2012 BCBC.

This mechanism allows Vancouver to respond to local concerns, and provide leadership in establishing construction policy related to changes in development objectives, and construction methods and technologies.

It is intended that the proposed series of amendments support Vancouver's leadership position in occupant life safety and security.

Strategic Analysis

The “Unique to Vancouver” (UTV) amendments that form the proposed 2017 amendment to the Building By-law are discussed below and may be broadly grouped as follows:

1. Adoption of new Provincial requirements with UTV amendments;
2. Residential Security Amendments;
3. Clarification of existing Gender Neutral Washroom requirements; and
4. Housekeeping, Clarification, and Errata.

1. Adoption of New Provincial Requirements with “Unique to Vancouver” Amendments

The majority of UTV provisions are unaffected by the Provincial revisions as they are clarifications and updates to existing provisions. Those changes which have impacted UTV requirements have been either omitted or modified to retain the original intent of the UTV requirements.

Significant BCBC revision and corresponding proposed VBBL updates are as follows:

Subject	Proposed Amendment
NFPA 13R	NFPA 13R reference updated to 2013 edition. (ref: M066)
Energy Step Code	Not adopted at this time in favour of the Unique to Vancouver - Part 10 Energy requirements to take effect in March 2018. These are broadly expected to achieve the technical requirements of Step 2 of the BCBC requirements. (ref: M158)
Letters of Professional Responsibility	Adoption of BCBC update to letters of professional responsibility with amendments per AIBC and APEGBC bulletin. (Ministerial Order - M158)

Table 1.: Summary of Significant BCBC Changes

2. Adoption of New Residential Security improvements

A review by Vancouver Police has identified that there is a substantial number of break and entries into ground oriented housing. Vancouver Police records 2121 residential break and entries in 2016, comprising of 37.4% of all break and enters crimes.

The impact of break and enters is substantial. In addition to being a potential source of financial and psychological strain on homeowners, this ties up significant Police resources, and has other downstream impacts both for homeowners, insurers, and the City.

Stats Canada assesses the overall impact of crime based on a weighted index considering both the quantity and severity of crime. The 2016 Crime Severity Index (CSI) show police reported residential break and entry, comprising the most significant portion of the index in Vancouver due to the number of such crimes.

The overall financial impact of these crimes is illustrated in a report from the Federal Department of Justice. The report estimates that the national cost of break and enters is about \$1.02 billion¹ of an estimated \$35.83 billion for all crimes nationally.

To reduce risk and deter crime, it is proposed that the Building By-law mandate the reinforcement of door frames to deter residential break and entry. The reinforcement is simple and consists of a steel plate designed to absorb and distribute the force of impact across the door frame.

The installation of this hardware does not require any specific skill set, and has small time and cost implications for residential builders. The estimated cost for the hardware is less than \$50, and involves only a few more screws at the time the door frame is installed. By comparison, the insurers contacted by VPD have indicated that the cost per insurance claim related to break and entry tend to vary from \$500 to \$1500 for the insurer, and does not consider costs to the owners financially, or to their time and other resources.

Given the near negligible cost implications in the context of the present residential housing construction costs, it is city staff's assessment that the potential benefits to home owners, insurers, and the City would considerably outweigh the upfront costs of the requirements.

3. Clarification of Existing Gender Neutral Washroom requirements

In June 2016, Council directed staff to create an implementation team to develop a Trans*, Gender Variant and Two-Spirit Inclusion action plan for the city and implement a series of Quick Starts were identified as part of an initial report to Council by an external consultant group.

It is proposed that clarification material addressing the intended application of the Gender Neutral Washrooms requirements of the Building By-law be added in Appendix A of the Building By-law as part of these Quick Start goals in order to:

- Bring greater awareness to the design community for to the need for inclusivity, and
- Provide greater clarity to building owners, builders, and design professionals.

Representatives of the building industry have from time to time expressed that there is a lack of clarity in how to implement the existing gender neutral washroom requirements introduced into the Building By-law.

Staff believe that the inclusion of this material will help designers utilize these provisions more effectively, which will in time lead to greater inclusion of trans*, gender variant and two-spirit community members in to a greater variety of spaces, buildings, and facilities.

¹ In 1999 dollars, ref: A. Leung, "The Cost of Pain and Suffering from Crime in Canada", Department of Justice Canada - Research and Statistics Division, (2004)

4. Housekeeping, Clarification, and Errata of existing requirements

City Staff have identified suitable clarification and errata amendments to the text of the Building By-law included in Appendix A. These amendments are consistent with existing Council direction or are administrative in nature, and clarify the intended manner by which the existing by-law text should be interpreted.

Key proposed amendments to improve clarity include:

Subject	Proposed Amendment
High Risk Underground Occupancies	Added appendix notes to clarify that use of deep basements (more than 1 storey below grade) to occupancies that present a significant risk to fire and life safety as a consequence of the high occupant loads or hazardous uses may require additional review and consideration.
Sprinkler Protection of In-fill housing	Permit the use of NFPA 13D (1 and 2 Family Dwellings) with enhancements in lieu of NFPA 13R (Residential up to 4 storeys) for in-fill housing.
FD Access Path of Travel	Update the existing requirements to coordinate with Zoning and Development By-law requirements and accommodate in-fill housing and reduced sideyard widths on residential lots.
Exterior Lighting	To limit the design of exterior lighting and fixtures to comply with existing Council direction with respect to landscape development requirements for bird friendly designs and energy efficiency, and limit the potential for light pollution to adjacent properties.

Table 2.: Summary of Key Clarity Amendments

Public/Civic Agency Input (if applicable)

Given the non-contentious nature of the proposed amendment, an informal consultation process with respect to the proposed new security regulation has been conducted. The proposed amendment was circulated to the design community through the umbrella organizations involved in the design and construction of buildings throughout the city and affected groups for comment. This includes:

- Architectural Institute of British Columbia
- Association of Professional Engineers and Geoscientists of British Columbia
- Urban Development Institute
- Greater Vancouver Home Builders Association
- Insurers (through VPD)

The feedback received from these organizations related to the proposed amendment has been accepting of the proposal. Comments raised to date have been incorporated into the text of the proposed amendments in Appendix A.

Implications/Related Issues/Risk (if applicable)

Financial

There are no financial implications.

Legal

The proposed housekeeping amendments and new security amendments fall within the authority granted to the City under the Vancouver Charter including under section 306. This permits Council to enact any change Council considers appropriate, or vary from any adopted code related to fire safety or energy conservation or affecting the construction, alteration, or demolition of buildings.

CONCLUSION

Amendments are proposed to the Building By-law that will advance City goals of public safety. The proposed amendments will adopt recent Provincial Building Code revision as amended to reflect the "Unique to Vancouver" provisions of the Building By-law as previously adopted by Council. In addition, the proposed amendments will include cost effective changes to improve security and minor changes for housekeeping and clarification. This will include clarification to existing Gender Neutral washroom requirements in support of the City's Trans*, Gender Variant and Two-Spirit Inclusion action plan.

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BY-LAW NO. _____

**A By-law to amend Building By-law No. 10908
in relation to Residential Security Improvements and miscellaneous Housekeeping
amendments.**

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 10908.
2. In Book I, Division A, Part 1, Article 1.1.1.1., in Sentence 1.1.1.1.(2), Council strikes out Clause (i) and substitutes "i) [Deleted]".
3. In Book I, Division A, Part 1, Article 1.4.1.1., Council adds the following definition in alphabetical sequence:

"
Ancillary Residential Building meaning a *building* entirely of *residential occupancy*, constructed on the same parcel and smaller than the primary *residential building* and containing not more than one *dwelling unit* and its subsidiary uses, such as a *laneway house*
".

4. In Book I, Division A, Part 1, Article 1.4.2.1., Council adds the following abbreviation in alphabetical sequence:

"
kWh Kilowatt hour(s)
".

5. In Book I, Division B, Part 3, Article 1.3.1.2., in Table T-1.3.1.2., Council:
 - a) strikes out the row

CCBFC	NRCC 54435-2011	National Energy Code of Canada for Buildings	10.2.1.1.
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"
,
and substitutes the following
"

CCBFC	NRCC 54435-2011	National Energy Code of Canada for Buildings	10.2.2.3.
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- b) strikes out the row

CSA	CAN/CSA-C282-09	Emergency Electrical Power Supply for Buildings	3.2.7.5.(1)
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"
,
and substitutes the following
"

CSA	CAN/CSA-C282-2015	Emergency Electrical Power Supply for Buildings	3.2.7.5.(1)
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- c) strikes out the row

CSA	Z32-09	Electrical Safety and Essential Electrical Systems in Health Care Facilities	3.2.7.3.(4) 3.2.7.6.(1)
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" ,
and substitutes the following
"

CSA	Z32-2015	Electrical Safety and Essential Electrical Systems in Health Care Facilities	3.2.7.3.(4) 3.2.7.6.(1)
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d) strikes out the row
"

NFPA	13R-2010	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	3.2.5.12.(2)
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" ,
and substitutes the following
"

CCBFC	13R-2013	Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies	3.2.5.12.(2)
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e) strikes out the row
"

ULC	CAN/ULC-S524-06	Installation of Fire Alarm Systems	3.1.8.12.(2) 3.1.8.12.(3) 3.2.4.5.(1) 3.2.4.20.(4) 3.2.4.21.(7) 3.2.4.21.(12) 9.10.19.4.(3) 9.10.19.6.(2)
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" ,
and substitutes the following
"

ULC	CAN/ULC-S524-2014	Installation of Fire Alarm Systems	3.1.8.12.(2) 3.1.8.12.(3) 3.2.4.5.(1) 3.2.4.20.(4) 3.2.4.21.(7) 3.2.4.21.(12) 9.10.19.4.(3) 9.10.19.6.(2)
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" , and

f) strikes out the row
"

ULC	CAN/ULC-S537-04	Verification of Fire Alarm Systems	3.2.4.5.(2)
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" ,
and substitutes the following

ULC	CAN/ULC-S537-2013	Verification of Fire Alarm Systems	3.2.4.5.(2)
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6. In Book I, Division B, Part 3, Sentence 3.1.3.2.(2), Council strikes out the words "Subsection 11.4.7." and substitutes "Subsection 11.4.5."
7. In Book I, Division B, Part 3, Sentence 3.1.4.3.(2), Council adds the words " and Article 3.6.4.3." after the words "Except as permitted by Sentence (3)".
8. In Book I, Division B, Part 3, Sentence 3.2.4.1.(4), Council strikes out Clause 3.2.4.1.(4)(f) and substitutes the following:
 "(f) a school, college, *child care facility*, including a daycare facility for children, with an *occupant load* more than 40,"
9. In Book I, Division B, Part 3, Sentence 3.2.5.5.(3), Council strikes out Sentence (3) and substitutes the following:
 "3) Paths of travel for firefighters shall not be more than
 a) 45 m from the access route to the entrance door of each *dwelling unit* for *sprinklered buildings* of *residential occupancy* provided each *dwelling unit* has direct access to an exterior *exit* facility leading to adjacent ground level,
 b) 55 m from the access route to the entrance door of each *dwelling unit* provided that
 i) the *building* is sprinklered to NFPA 13R if Article 3.2.5.12. otherwise permits NFPA 13D, or to NFPA 13 if Article 3.2.5.12. otherwise permits 13R,
 ii) each *dwelling unit* has direct access to an exterior *exit* facility leading to adjacent ground level,
 iii) a strobe light is installed outside the principal entrance of the *dwelling unit*, and is connected to an internal *smoke alarm* within the *dwelling unit*,
 iv) *sprinkler systems* are monitored by the fire alarm system and by an off-site monitoring service,
 v) [Deleted.]
 vi) lighting and emergency lighting is provided along the path of travel for firefighters with a minimum illumination level of 1 lx, and average illumination of not less than 10 lx, and
 vii) the fire alarm system has a graphic annunciator.
 c) 65 m from the access route to the entrance door of each *dwelling unit* provided each *dwelling unit* has direct access to an exterior *exit* facility leading to adjacent ground level, where the *dwelling unit* may contain a *secondary suite* or the *dwelling unit* has not more than one *dwelling unit* on top, if
 i) the requirements of Subclauses (b)(i) to (b)(vii) are met,
 ii) a 64 mm diameter fire department hose connection is located adjacent to the path of travel for firefighters located not more than 45 m measured from the hose connection to the principal entrance of each of the *dwelling units*,

- iii) the location of the fire department hose connections required by Subclause (c)(ii) is indicated on the fire alarm system graphic annunciator, and
- iv) the building is sprinklered to NFPA 13, and
- d) 45 m from the access route to the entrance door, for non-residential portions of a *building*, which are cut off from and have no internal access to the remainder of the *building*.

(See Appendix A.)”

10. In Book I, Division B, Part 3, Article 3.2.5.6., Council strikes out Sentence (3) and substitutes the following:
“2) The unobstructed path of travel for firefighters from the curb to the main entrance or suite entrance door as required in Sentences 3.2.5.5.(1) to 3.2.5.5.(3) and every access opening as required in Articles 3.2.5.1. and 3.2.5.2. shall be
 - a) no less than
 - i) [Deleted.]
 - ii) 1.2 m in width, or
 - iii) 900 mm in width where serving one *dwelling unit*, *one-family dwelling*, or *one-family dwelling with secondary suite*, and
 - b) surfaced with concrete, asphalt or similar material.”
11. In Book I, Division B, Part 3, Sentence 3.2.5.12.(2), Council strikes out the words “Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height” and substitutes “Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies”.
12. In Book I, Division B, Part 3, Sentence 3.2.5.12.(3), Council strikes out Sentence (3) and substitutes the following:
“3) Instead of the requirements of Sentence (1), NFPA 13D, “Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,” is permitted to be used for the design, *construction*, installation and testing of an automatic *sprinkler system* installed
 - a) in a *one or two family dwelling* including their *secondary suites* or *lock-off units*, where
 - i) each *dwelling unit* has its own sprinkler water supply,
 - ii) a one tank-type water closet is supplied with water from the sprinkler head which is located farthest from the main water supply,
 - iii) sprinkler coverage is provided in each bathroom, clothes closet, linen closet, and pantry, notwithstanding the exceptions set out in NFPA 13D,
 - iv) sprinklers are provided in each attached garage or carport, notwithstanding the exceptions set out in NFPA 13D,
 - v) the path of travel for firefighters complies with Clauses 3.2.5.5.(3)(a), and
 - vi) each *dwelling unit* has direct access to an exterior *exit* facility leading to adjacent ground level;
 - b) in a *building of care occupancy*, provided
 - i) it contains not more than 2 *suites* of *care occupancy*,
 - ii) it has not more than 5 residents throughout, and”

- iii) a 30-minute water supply demand can be met;
 - c) in a *building of residential occupancy* throughout that contains only *row housing* where
 - i) all vertical *suite* separations are constructed as a *fire separation* having no less than a 1 h *fire-resistance rating*,
 - ii) the *fire separation* described in Subclause (c)(ii) provides continuous protection from the top of the footing to the underside of the roof deck and any space between the top of the wall and the roof deck is tightly fitted with mineral wool or *noncombustible* material,
 - iii) each *dwelling unit* has its own sprinkler water supply, and
 - iv) one tank-type water closet is supplied with water from the sprinkler head which is located farthest from the main water supply; or
 - d) in an *ancillary residential building* where
 - i) each bathroom, clothes closet, linen closet, and pantry must have sprinkler coverage, notwithstanding the exemptions set out in NFPA 13D,
 - ii) sprinklers are provided in each attached garage or carport, notwithstanding the exemptions set out in NFPA 13D, and
 - ii) a one tank-type water closet is supplied with water from the sprinkler head which is located farthest from the main water supply.
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13. In Book I, Division B, Part 3, Sentence 3.6.4.3.(1), Council strikes out the words "3.1.5.15.(1)", and Council adds the following "3.1.4.3.(1), 3.1.5.15.(1),"
14. In Book I, Division B, Part 3, Subsection 3.7.2., Council
- a) Amends Article 3.7.2.9., by
 - i) adding the words " and Showers", at the end of the Article heading, and
 - ii) adding to the end of Article 3.7.2.9., the following:
"2) A shower door that swings on a vertical axis shall be capable of opening outwards from a shower stall forming part of a site constructed fixture.", and
 - b) Amends Article 3.7.2.11., by adding the words "(See Appendix A.)", at the end of the Article.
15. In Book I, Division B, Part 3, Clause 3.8.2.3.(1)(b), Council strikes out the words "3.8.2.35." and substitutes "3.8.3.5."
16. In Book I, Division B, Part 6, Subsection 6.2.2.1 at the end of Article 6.2.2.1., Council adds the following:
- "4) For *suites* in *buildings* of 6 storeys or less in *building height* and required to conform to Part 10, the outdoor air required by Sentence (3) shall be supplied directly to each *suite* by mechanical ventilation ducting."
17. In Book I, Division B, Part 6, Article 6.2.2.2., in Sentence 6.2.2.2.(1) after the words "Except as permitted by Sentence (2)", council adds the words "and except as required by 6.2.2.1.(4)"

18. In Book I, Division B, Part 9, at the end of Article 9.7.5.2., Council adds the following:

- " 10) Except as permitted by Sentence (11), a door frame reinforcement plate shall be installed between the jack stud and door frame, and shall be:
- a) constructed of minimum 18 gauge steel plate;
 - b) provided with an integral metal tongue that is:
 - i) at right angles to the plate located and designed so as to resist the inwards movement of the door when the deadbolt is engaged, and
 - ii) inset into the door frame to a minimum 15.9 mm depth; and
 - c) screwed into the door frame or adjacent jack stud with wood screws that are:
 - i) are not smaller than No. 10,
 - ii) penetrate at least 50 mm into wood studs,
 - iii) have at least two points of attachment on each side of the deadbolt, and
 - iv) are located at least 38 mm away from the deadbolt throw.
- (see Appendix A)

- 11) Strikeplates required by Clause 9.7.5.2.(7)(a) and installed in a wood door frame without the reinforcement plate of Sentence (10), shall be:
- a) constructed from minimum 18 gauge steel plate;
 - b) provided with an integral door reinforcement by means of a minimum 13 mm long metal tongue inset into the frame at right angles to the strike plate and arranged so as to resist forced entry when the deadbolt is engaged; and
 - c) attached to the door frame by means of wood screws penetrating at least 30 mm into the wood at least two points of attachment on each side of the deadbolt, at least 38 mm away from the deadbolt throw.
- (see Appendix A)

"

19. In Book I, Division B, Part 9, Sentence 9.10.13.2.(1), Council adds the words ", between a *secondary suite* or *lock-off unit* and its primary *dwelling unit*," after the words "where a minimum fire-protection rating of 20 min is permitted".

20. In Book I, Division B, Part 9, Sentence 9.10.18.2.(1), Council strikes out the words "(3) and (4)" and substitutes the following "(3), (4), and (5)".

21. In Book I, Division B, Part 9, Article 9.10.20.3., Council strikes out Sentence (3) to (7) and substitute the following:

- "3) Despite the provisions of Sentence (1), an unobstructed path of travel for firefighters shall be provided to an *ancillary residential building* and the path of travel shall:
- a) lead continuously from the *street* to the *lane*,
 - b) have a travel distance of no more than 45 m from the *street* to the principal entrance of the *ancillary residential building*,
 - c) be at least 900 mm wide,
 - d) have an overhead clearance of at least 2 m, and
 - e) consist of concrete, asphalt, or similar material.

- 4) An *ancillary residential building* shall have a strobe light installed and maintained outside the principal entrance, connected to an internal *smoke alarm* within the *ancillary residential building*.
- 5) Despite Clause 9.10.20.3.(3)(b), the path of travel for firefighters towards not more than one *ancillary residential building* on a parcel may exceed 45 m to a maximum of 70 m provided the principal entrance to that *ancillary residential building* is visible from the *street*.
- 6) If the principal *building* and the *ancillary residential building* are adjacent to a *lane*, the path of foot travel for firefighters to the *ancillary residential building* may be through the *lane* if
- a) the travel distance from the *street* to the principal entrance of the *ancillary residential building* is no more than 70 m,
 - b) the path has an overhead clearance of at least 3 m,
 - c) the path consists of concrete, asphalt, or similar material, and
 - d) the principal entrance of the *ancillary residential building* is visible from the *street*.
- 7) Two adjacent parcels may have a single shared path of travel for firefighters over the common property line and the adjacent specified area to access both, provided
- (a) each parcel contains an *ancillary residential building*,
 - (b) each parcel is subject to a covenant registered on title which prohibits *construction* upon or obstruction of the common property line and of a specified area adjacent to the property line; and
 - (c) the path of travel meets the requirements of Sentences (3), (4) and (5).
- "

22. In Book I, Division B, Part 9, at the end of Subsection 9.31.2., Council adds the following:

"9.31.2.4. Site Constructed Fixtures

- 1) A shower door that swings on a vertical axis shall be capable of opening outwards from a shower stall forming part of a site constructed fixture."

23. In Book I, Division B, Part 10, Sentence 10.2.2.5.(1), Council strikes out the words "designed and constructed in accordance with Table 10.2.2.5.(1), and be simulated in accordance with" and substitutes the following "designed and constructed in accordance with Table 10.2.2.5.(1), or be simulated in accordance with".

24. In Book I, Division B, Part 10, Article 10.2.2.10. is amended as follows:

- a) In Sentence (1), Council strikes out the words "Except for a *building* designed in accordance with Articles 10.2.2.1. or 10.2.2.2., where a residential *building* or a portion of a multi-use *building* contains more than 20 residential *suites*, the *building* shall be designed with", and substitutes "Where a portion of a residential *building* or a portion of a multi-use *building* located above a garage or on adjacent grade contains more than 20 residential *suites*, the residential portion of the *building* shall be designed with",

- b) At the end of Sentence (1), Council adds the following words "(see Appendix A)", and

c) at the end of the Article 10.2.2.10., Council adds the following:

- “
- 2) Except as permitted by Sentence (3) and except for exterior lighting along paths of pedestrian and vehicular travel, fire department access, and signage and equipment lighting, the permanent ancillary exterior lighting of a *building* of *residential occupancy* that is required to conform to this Article shall
 - a) be provided with fixtures that are fully shielded or full cut-off optics that:
 - i) do not emit light upwards or horizontally beyond the property line, and
 - ii) limit backlighting of *building* walls, roofs, or reflective surfaces to not more than 4 lux at any given point;
 - b) minimize lighting of adjacent properties;
 - c) not exceed an illumination level of 1 lux average on any reflective surface; and
 - c) conform with the exterior lighting power requirements of ASHRAE 90.1 or NECB.
 - 3) Exterior directional lighting designed with integral automatic motion sensing devices need not comply with the requirements of Sentence (2) provided it shuts off within 5 minutes.

(See Appendix A)”

25. In Book I, Division B, Part 10, Sentence 10.2.2.11.(3), after the words “In a *building* required to comply with this Article” Council adds the following “ except *row housing* that have no natural gas appliances”.

26. In Book I, Division B, Part 10, Article 10.2.2.15., following Sentence (2), Council adds the following:

“3) In a *building* required to comply with this Article, domestic gas fired fireplaces must be on a timer.

4) Where exterior fireplaces are provided as an ancillary equipment to a *building* required to comply with this Article, then the exterior fireplaces shall be considered as part of the *building* for the purposes of this Part (see Appendix A).”

27. In Book I, Division B, Part 10, Sentence 10.3.1.3.(1), in Note (3) to Table T-10.3.1.3.(1), Council strikes out the words “cannot accommodate or be updated” and substitutes “cannot accommodate and cannot be updated”.

28. In Book I, Division B, Part 10, Sentence 10.4.3.2.(1), after the words “an electrical room”, Council adds the following “or space provided to facilitate the installation of power supply to the electric vehicle supply equipment”.

29. In Book I, Division B, Part 11, Article 11.2.1.4., Council:

- a) Adds the following words “(see Appendix A)”, at the end of Clause 11.2.1.4.(1)(d),
- b) Adds the following words “(see Appendix A)”, at the end of Sentence 11.2.1.4.(3), and
- a) Strikes out the words “50 per cent of the replacement value of the *existing building*”, and substitutes the following “50 per cent of the replacement value⁽³⁾ of the *existing building*”, in the first row associated with the

subheading "Sprinklers", under column titled "Alternative Acceptable Solution"

- b) Adds a footnote as follows "(3) see Appendix note A-11.2.1.4.(1)(d)", at the end of Table 11.4.3.1. in numerical sequence

30. In Book I, Division B, Part 11, Article 11.2.1.3., in Table 11.2.1.3. Council strikes out the row

"

1	Spr R ⁽³⁾	Spr R	Spr R	Spr R	Spr R
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" , and

substitutes the following

"

0-1	Spr R ⁽³⁾	Spr R	Spr R	Spr R	Spr R
-----	----------------------	-------	-------	-------	-------

"

31. In Book I, Division B, Part 11, Article 11.4.7.1., in Sentence (1) following the words "An existing building", Council adds the words " or parcel"

32. In Book I, Division C, Part 1, Council repeals Schedule B and substitutes the Schedule B attached to this By-law as Appendix I.

33. In Book I, Division C, Part 1, Council repeals Schedule C-A and substitutes the Schedule C-A attached to this By-law as Appendix 2.

34. In Book I, Appendix A to Division B, after Appendix Note A-3.2.2.7.(2), Council adds the following new Appendix Note

"A-3.2.2.15.(2) Storeys below Ground Occupancies located below grade represent an unusual level of challenge for both occupant egress and emergency response since the availability of paths of travel to enter or leave the underground space is usually limited. This may subject occupants to a greater risk of exposure to untenable conditions during evacuation. Similarly, emergency responders must share limited means of egress with occupants which could further impact occupant evacuation, impede an effective response, or expose first responders to unsafe conditions.

It is not the intent of the Building By-law to limit the inclusion of occupancies below grade where they can be shown to demonstrate an appropriate level of fire and life safety. Rather the intent of this requirement is to cause a conscientious review of certain underground occupancies to ensure that they are sufficiently protected, and that the arrangement can provide an acceptable level of emergency response for a variety of conditions. The measures described in Sentence 3.2.2.15.(2) provide a minimum for fire safety under many circumstances, but may not be sufficient to address all potential uses or occupancies below grade. It should be confirmed that the proposed use and building design is acceptable to the Chief Building Official."

35. In Book I, Appendix A to Division B, in Appendix Note A-3.2.5.12.(7) and A-3.2.5.13.(1) Council strikes out "Installation of Sprinkler Systems in Residential Occupancies up to

and Including Four Stories in Height” wherever it appears and substitutes “Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies”.

36. In Book I, Appendix A to Division B, Council strikes out Appendix Note A-3.7.2.2.(1) and substitutes the following:

“A-3.7.2.2.(1) Water Closets Other than where gender neutral washrooms (see 3.7.2.11.) are provided, Sentence 3.7.2.2.(1) assumes that there will be a sufficient number of persons in the building to justify the provision of separate water closet facilities for both males and females. In some circumstances overall low occupant loads would not require more than one water closet for males and one water closet for females and yet the building has more than one storey. It is deemed that rooms each containing a single water closet available for both males and females would satisfy the intent of the By-law. The total number of water closets must be adequate for the total number of occupants. In the case of universal and gender neutral washroom facilities, the acceptable number of water closets should be based upon the equivalent number of fixtures that would otherwise be provided.

Requirements for barrier free accessibility also need to be considered. If the entrance storey is accessible and the upper storeys are not required to be accessible, a room in the accessible storey must meet the requirements of Section 3.8. and can serve both males and females. If provided, a nonaccessible room, designed to serve both males and females, in each nonaccessible upper storey would be acceptable. Sentence 3.7.2.2.(4) permits a single water closet to serve both males and females if the total occupant load is low.”.

37. In Book I, Appendix A to Division B, following Appendix Note A-3.7.2.10.(10)(h)., Council adds the following Appendix Note:

“A-3.7.2.11. Gender Neutral Washroom Requirements The gender neutral washroom requirements of the Building Bylaw introduce a new option for owners, operators, and employers to provide washroom facilities that do not impose unreasonable restrictions on persons who wish to use the washroom facility. The requirements of the Building Bylaw represent the minimum level of performance necessary to achieve the goals of personal security and functionality for all persons.

The intent of the gender neutral washroom is that they may replace washrooms that would otherwise be required by the Building By-law. Where gender neutral washrooms are provided, these are to be assigned proportionally as male or female, for the purposes of determining the building washroom capacity under Section 3.7 of the Building By-law. It is not intended that the gender neutral washrooms be assigned solely as contributing to the male or female washroom capacity exclusively, nor were these to be considered supplemental to the minimum washroom requirements of the building.

Signage for gender neutral washrooms are to reflect the intended use not only by persons outside the gender binary, but also by people with disabilities, the elderly, and anyone else who may require the assistance from someone of another gender. As such, signage denoting this use is recommended to be neutral in tone and nature. Likewise,

the iconography associated with these signs is also suggested to be indicative of the facility usage and function, and not of the individual who may use the facility.

The provision of regulations for gender neutral washrooms does not mean the elimination of gender-type washrooms. Typed washrooms, such as men's or women's multi-stall washrooms, and universal single-user washrooms may remain. It is up to each person to self-determine which washroom is most appropriate for them based on their gender identity. Further clarifying text may be added to washroom signage to signal that all persons are welcome."

38. In Book I, Appendix A to Division B, following Appendix Note A-6.2.1.8.(1) Council adds the following Appendix Note:

"A-6.2.2.1.(4) Ventilation Air Supplied to Suites

The indirect supply of required outdoor ventilation air to normally occupied spaces through corridor pressurization or other indirect systems is not permitted."

39. In Book I, Appendix A to Division B, following Appendix Note A-9.7.5.2.(8) Council adds the following Appendix Note:

"A-9.7.5.2.(10) & (11) Resistance to Forced Entry Statistical evidence by Vancouver Police has identified that a frequently exploited point of entry in break-ins exists at the residential entry doors due to inherent weaknesses in wood door frame materials, and the location of strikeplate screws located along the grain and near to the deadbolt throw, which contribute to inability for the frame to resist forced entry.

The installation of a metal frame reinforcement plate (see Figures A-9.7.5.2.(10)-A & - B below) directly attached to the backside of a door frame before installation with increased spacing for the points of attachment would significantly increase the resistance of the door to forced entry. This will result reduced incidence of crime and significantly reduce potential costs to owners.

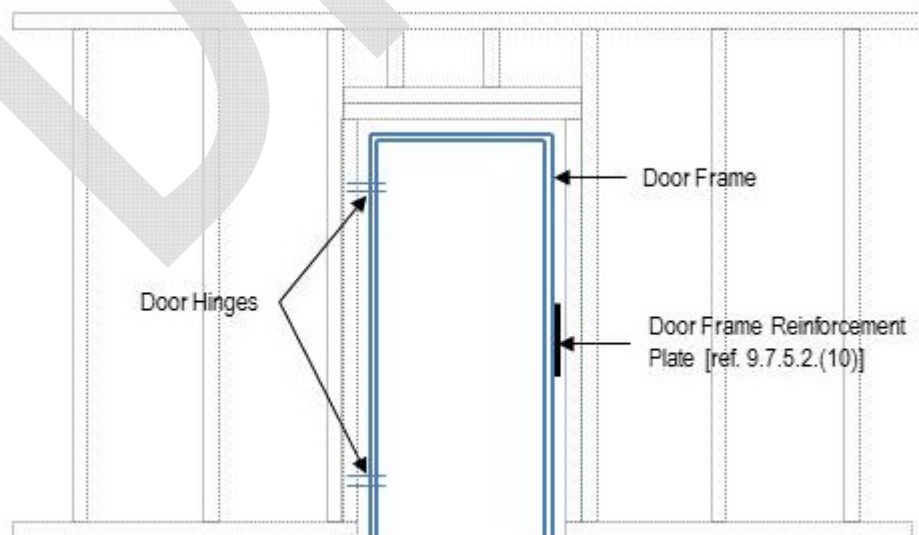


Figure A-9.7.5.2.(10)-A

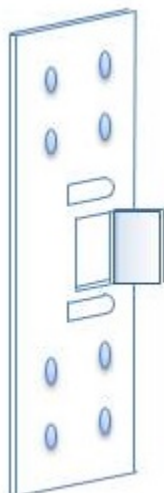


Figure A-9.7.5.2.(10)-B Frame Reinforcement (Example)

40. In Book I, Appendix A to Division B, following Appendix Note A-9.35.2.2.(1) Council adds the following Appendix Notes:

A-10.2.2.2.(1) Lighting Controls in Residential Buildings The objective of Sentence 10.2.2.2.(1) is to require a master switch that will permit non-essential lighting to be turned off when an occupant leaves the premises. As this was only intended to consider residential portions of a building, it is considered acceptable to consider each portion of the building structure located above the parkade slab constructed to Article 3.2.1.2. on an individual basis given that the cost-effectiveness of such energy saving features would not be as significant for smaller structures with proportionally larger exterior wall and roof surface areas relative to their volume.

A-10.2.2.15.(4) Exterior Fireplaces Exterior fireplaces connected to building services are to be considered a part of that building for the purposes of meeting the energy targets of Part 10 of the Building By-law. The expectation is that buildings incorporating such features are to be designed under the modelling path."

41. In Book I, Attribution Tables of Division B, Table 6.4.1.1., under the heading "6.2.2.1. Required Ventilation", Council adds the following row in numerical sequence:

"

(4)	[F50-OH1.1]
-----	-------------

"

42. In Book I, Attribution Tables of Division B, Table 9.38.1.1., under the heading "9.7.5.2. Resistance to Forced Entry for Doors" Council:

- a) Strikes out the Heading "9.7.5.2. Resistance to Forced Entry for Doors" and substitutes the following "9.7.5.2. Resistance to Forced Entry", and

- b) Under the Heading "9.7.5.2. Resistance to Forced Entry for Doors" adds the following rows in numerical sequence:

"

(10)	[F34-OS4.1]
(11)	[F34-OS4.1]

"

43. In Book I, Appendix A to Division B, following Appendix Note A-11.2.1.3., Council adds the following Appendix Note:

"A-11.2.1.4.(1)(d) The term "replacement value" is used in several places in Part 11, as a baseline for determining of the applicability of specific upgrade requirements. The term refers to an assessed cost to replace the structure in its current state, the net asset value. This is similar to what would be considered the 'book value' in financial terms, in that it considers the depreciated cost of the asset. This is not intended to be an assessment of the construction, planning, and ancillary costs that could be incurred if the structure in question was built as new construction."

44. In Book I, Appendix A to Division C, Appendix Note A-2.2.7.3., under the Heading "3.2.4. Fire Suppression", in the text associated with Subheading "Scenario 2", Council:

- a) Adds the words " (where *acceptable* to the Chief Building Official)" after the Subheading "Scenario 2", and
- b) Strikes out the third bullet and its associated text and substitutes the following:
 - "• The engineer of record submits Schedule B with the BP application for overall coordination of the sprinkler design. Schedule B can be annotated "For Performance Specification Only."

45. In Book II, Division B, Part 1, Article 1.3.1.2., in Table 1.3.1.2. Council adds the following in Alphabetical order:

"

NSF/ANSI	61 - 2011	Drinking Water System Components - Health Effects	2.2.6.10.
NSF/ANSI	372 - 2016	Drinking Water System Components - Lead Content	2.2.6.11., 2.2.6.12., 2.2.6.13.

"

46. In Book II, Division B, Part 2, Article 2.2.6.10., in Sentence (1), Council

- a) Strikes out Clauses (a) and (b), and
 - b) Substitutes the following:
 - "a) ASTM A 312/A 312M, "Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes,"
 - b) ASME B36.19M, "Stainless Steel Pipe," and
 - c) NSF/ANSI 61 "Drinking Water System Components - Health Effects."
- "

47. In Book II, Division B, Part 2, Article 2.2.6.11., in Sentence (1), Council

- a) Strikes out Clauses (a) and (b), and

- b) Substitutes the following:
"a) ASTM A 403/A 403M, "Wrought Austenitic Stainless Steel Piping Fittings,"
b) ASME B16.9 "Factory-Made Wrought Butt Welding Fittings," and
c) NSF/ANSI 372 "Drinking Water System Components - Lead Content."
".
48. In Book II, Division B, Part 2, Article 2.2.6.12., Council strikes out Sentence (1) and substitutes the following:

"1) Stainless steel pipe flanges shall conform to
a) ASME B16.5, "Pipe Flanges and Flanged Fittings: NPS ½ Through NPS 24 Metric/Inch Standard,"
b) NSF/ANSI 372 "Drinking Water System Components - Lead Content,"
and
c) shall comply with
i) ASTM A 182/A 182M, "Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service," or
ii) ANSI/AWWA C228, "Stainless-Steel Pipe Flanges for Water Service – Sizes 2 In. Through 72 In. (50 mm Through 1,800 mm)."
".
49. In Book II, Division B, Part 2, Article 2.2.6.13., Council strikes out Sentence (1) and substitutes the following:

"1) Stainless steel threaded fittings shall be schedule 40s or greater conforming to NSF/ANSI 372 "Drinking Water System Components - Lead Content," and
a) ASTM A 182/A 182M, "Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service,"
or
b) ASTM A 351/A 351M, "Castings, Austenitic, for Pressure-Containing Parts."
".
50. In Book II, Division B, Part 2, Article 2.2.10.6., Council strikes out Sentence (3) and substitutes the following:

"3) Supply fittings complying with Sentence (1) shall have a maximum flow rate in compliance with Book I Division B Article 10.3.1.2.".
51. In Book II, Division B, Part 2, Article 2.6.2.1., Council strikes out Sentences (3) and (4), and substitutes the following:

"3) *Backflow preventers* shall be selected, installed, maintained and field tested in conformance with the Water Works By-Law.".
52. In Book II, Division B, Appendix A, following Appendix Note A-2.2.6.7.(3), Council adds the following:

"A-2.2.10.4.(1) **Fittings in Pressure Piping Applications** Piping used in pressure applications are to be grooved and constructed using tools specifically

designed for that piping material. It is important that all groove profiles are to meet the fitting manufacturer's guidelines and conform to CSA-B242 "Groove and Shoulder-Type Mechanical Pipe Couplings." Overly shallow roll grooved or cut connections may result in reduced working pressures at the joint or the failure of the connection due to insufficient engagement of the coupling or from slippage at the joint. Conversely, grooves or cuts that are overly deep may result in failures of the pipe stemming from corrosion or stress concentrations at the joints.



Note: Image is exaggerated for clarity

Figure A-2.2.10.4.(1)
Insufficient Key Engagement of Fitting in Roll Grooved Connection

53. 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.
54. This By-law is to come into force and take effect on January 1, 2018, excepting that Part 10 amendments that are to come into force and take effect on March 1, 2018.

ENACTED by Council this _____ day of _____, 2017

Mayor

City Clerk

Appendix I
BUILDING BY-LAW 2014 – CITY OF VANCOUVER

SCHEDULE B

Forming Part of Subsection 2.2.7, Div. C of the
Building By-law

Building Permit No. _____
(for Building Official's use)

**ASSURANCE OF PROFESSIONAL DESIGN AND
COMMITMENT FOR FIELD REVIEW**

- Notes:
- (i) This letter must be submitted prior to the commencement of *construction* activities of the components identified below.
A separate letter must be submitted by each *registered professional of record*.
 - (ii) This letter is endorsed by: Architectural Institute of B.C., Association of Professional Engineers and Geoscientists of B.C.
 - (iii) In this letter the words in italics have the same meaning as in the Building By-law.

To: *The Chief Building Official*

Re: _____
Name of Project (Print)

Address of Project (Print)

The undersigned hereby gives assurance that the design of the
(Initial those of the items listed below that apply to this *registered professional of record*. All the disciplines will not necessarily be employed on every project.)

- _____ ARCHITECTURAL
- _____ STRUCTURAL
- _____ MECHANICAL
- _____ PLUMBING
- _____ FIRE SUPPRESSION SYSTEMS
- _____ ELECTRICAL
- _____ GEOTECHNICAL — temporary
- _____ GEOTECHNICAL — permanent

(Professional's Seal and Signature)

Date

components of the plans and supporting documents prepared by this *registered professional* in support of the application for the *building permit* as outlined below substantially comply with the Building By-law and other applicable enactments respecting safety except for *construction* safety aspects.

The undersigned hereby undertakes to be responsible for *field reviews* of the above referenced components during *construction* as indicated on the "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS" below.

CRP's Initials

BUILDING BY-LAW 2014 – CITY OF VANCOUVER

Schedule B - *Continued*

Building Permit No.
(for Building Official's use)

Project Address

Discipline

The undersigned also undertakes to notify the *Chief Building Official* in writing as soon as possible if the undersigned's contract for *field review* is terminated at any time during *construction*.

I certify that I am a *registered professional* as defined in the Building By-law.

Registered Professional's Name (Print)

Address (Print)

Phone No.

(Professional's Seal and Signature)

Date

(If the *Registered Professional of Record* is a member of a firm, complete the following.)

I am a member of the firm _____
and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *registered professional of record*, who is a *registered professional*. The Building By-law defines a *registered professional* to mean

- (a) a person who is registered or licensed to practise as an architect under the Architects Act, or
- (b) a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Act.

CRP's Initials

BUILDING BY-LAW 2014 – CITY OF VANCOUVER

Schedule B - *Continued*

Building Permit No.
(for Building Official's use)

Project Address

Discipline

SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

(Initial applicable discipline below and cross out and initial only those items not applicable to the project.)

ARCHITECTURAL

- 1.1 Fire resisting assemblies
- 1.2 *Fire separations* and their continuity
- 1.3 *Closures*, including tightness and operation
- 1.4 Egress systems, including *access to exit* within *suites* and *floor areas*
- 1.5 Performance and physical safety features (guardrails, handrails, etc.)
- 1.6 Structural capacity of architectural components, including anchorage and seismic restraint
- 1.7 Sound control
- 1.8 Landscaping, screening and site grading
- 1.9 Provisions for firefighting access
- 1.10 Access requirements for *persons with disabilities*
- 1.11 Elevating devices
- 1.12 Functional testing of architecturally related fire emergency systems and devices
- 1.13 Development Permit and conditions therein
- 1.14 Interior signage, including acceptable materials, dimensions and locations
- 1.15 Review of all applicable shop drawings
- 1.16 Interior and exterior finishes
- 1.17 Dampproofing and/or waterproofing of walls and slabs below *grade*
- 1.18 Roofing and flashings
- 1.19 Wall cladding systems
- 1.20 Condensation control and cavity ventilation
- 1.21 Exterior glazing
- 1.22 Integration of building envelope components
- 1.23 Environmental separation requirements (Part 5)
- 1.24 Building envelope, Part 10 requirements - ASHRAE 90.1 or NECB requirements
- 1.25 Building envelope, testing, confirmation or both as per Part 10 requirements

(Professional's Seal and Signature)

Date

STRUCTURAL

- 2.1 Structural capacity of structural components of the *building*, including anchorage and seismic restraint
- 2.2 Structural aspects of *deep foundations*
- 2.3 Review of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction

MECHANICAL

- 3.1 HVAC systems and devices, including high *building* requirements where applicable
- 3.2 *Fire dampers* at required *fire separations*
- 3.3 Continuity of *fire separations* at HVAC penetrations
- 3.4 Functional testing of mechanically related fire emergency systems and devices
- 3.5 Maintenance manuals for mechanical systems
- 3.6 Structural capacity of mechanical components, including anchorage and seismic restraint
- 3.7 Review of all applicable shop drawings
- 3.8 Mechanical systems, Part 10 - ASHRAE 90.1 or NECB requirements
- 3.9 Mechanical systems, - testing, confirmation or both as per Part 10 requirements

CRP's Initials

BUILDING BY-LAW 2014 – CITY OF VANCOUVER

Schedule B - *Continued*

Building Permit No.
(for Building Official's use)

Project Address

Discipline

PLUMBING

- 4.1 Roof *drainage systems*
- 4.2 Site and foundation *drainage systems*
- 4.3 *Plumbing systems* and devices
- 4.4 Continuity of *fire separations* at plumbing penetrations
- 4.5 Functional testing of plumbing related fire emergency systems and devices
- 4.6 Maintenance manuals for *plumbing systems*
- 4.7 Structural capacity of plumbing components, including anchorage and seismic restraint
- 4.8 Review of all applicable shop drawings
- 4.9 Plumbing systems, Part 10 - ASHRAE 90.1 or NECB requirements
- 4.10 Plumbing systems, testing, confirmation, or both as per Part 10 requirements

FIRE SUPPRESSION SYSTEMS

- 5.1 Suppression system classification for type of *occupancy*
- 5.2 Design coverage, including concealed or special areas
- 5.3 Compatibility and location of electrical supervision, ancillary alarm and control devices
- 5.4 Evaluation of the capacity of city (municipal) water supply versus system demands and domestic demand, including pumping devices where necessary
- 5.5 Qualification of welder, quality of welds and material
- 5.6 Review of all applicable shop drawings
- 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per NFPA Standards
- 5.8 Maintenance program and manual for suppression systems
- 5.9 Structural capacity of sprinkler components, including anchorage and seismic restraint
- 5.10 For partial systems — confirm sprinklers are installed in all areas where required
- 5.11 Fire Department connections and hydrant locations
- 5.12 Fire hose standpipes
- 5.13 Freeze protection measures for fire suppression systems
- 5.14 Functional testing of fire suppression systems and devices

ELECTRICAL

- 6.1 Electrical systems and devices, including high building requirements where applicable
- 6.2 Continuity of *fire separations* at electrical penetrations
- 6.3 Functional testing of electrical related fire emergency systems and devices
- 6.4 Electrical systems and devices maintenance manuals
- 6.5 Structural capacity of electrical components, including anchorage and seismic restraint
- 6.6 Clearances from *buildings* of all electrical utility equipment
- 6.7 Fire protection of wiring for emergency systems
- 6.8 Review of all applicable shop drawings
- 6.9 Electrical systems, Part 10- ASHRAE 90.1 or NECB requirements
- 6.10 Electrical systems, testing, confirmation, or both as per Part 10 requirements

GEOTECHNICAL — Temporary

- 7.1 *Excavation*
- 7.2 Shoring
- 7.3 Underpinning
- 7.4 Temporary construction dewatering

GEOTECHNICAL — Permanent

- 8.1 Bearing capacity of the soil
- 8.2 Geotechnical aspects of *deep foundations*
- 8.3 Compaction of engineered fill
- 8.4 Structural considerations of soil, including slope stability and seismic loading
- 8.5 Backfill
- 8.6 Permanent dewatering
- 8.7 Permanent underpinning

(Professional's Seal and Signature)

Date

CRP's Initials

Appendix 2
BUILDING BY-LAW 2014 – CITY OF VANCOUVER

SCHEDULE C-A

Forming Part of Subsection 2.2.7, Division C of the
Building By-law

Building Permit No. _____

**ASSURANCE OF COORDINATION OF
PROFESSIONAL FIELD REVIEW**

- Notes:
- (i) This letter must be submitted after completion of the project but before the *occupancy permit* is issued, or a final inspection is made, by the *Chief Building Official*.
 - (ii) This letter is endorsed by: Architectural Institute of B.C., Association of Professional Engineers and Geoscientists of B.C.
 - (iii) In this letter the words in italics have the same meaning as in the Building By-law.

To: *The Chief Building Official*

Re: _____
Name of Project (Print)

Address of Project (Print)

Legal Description of Project (Print)

(The *coordinating registered professional* shall complete the following:)

Name (Print)

Address (Print)

Phone No.

(Professional's Seal and Signature)

Date

I hereby give assurance that

- (a) I have fulfilled my obligations for coordination of *field review* of the *registered professionals* required for the project as outlined in Subsection 2.2.7, Division C of the Building By-law and in the previously submitted Schedule A, "CONFIRMATION OF COMMITMENT BY OWNER AND BY COORDINATING REGISTERED PROFESSIONAL,"
- (b) I have coordinated the functional testing of the fire protection and life safety systems to ascertain that they substantially comply in all material respects with
 - (i) the applicable requirements of the Building By-law and other applicable enactments respecting safety, not including construction safety aspects, and
 - (ii) the plans and supporting documents submitted in support of the application for the *building permit*,
- (c) I have coordinated the design work and field reviews to ascertain that the project substantially complies in all material respects with
 - (i) the applicable requirements of Part 10, and
 - (ii) the plans and supporting documents submitted in support of the application for the building permit,
- (d) I am a *registered professional* as defined in the Building By-law.

(If the *registered professional* is a member of a firm, complete the following:)

I am a member of the firm _____
and I sign this letter on behalf of the firm. (Print name of firm)

Note: The above letter must be signed by a *coordinating registered professional*, who is also a *registered professional*. The Building By-law defines a *registered professional* to mean

- (a) a person who is registered or licensed to practise as an architect under the Architects Act, or
- (b) a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Act.